Vector Reference Guide

Action syntax & Enter syntax

Document Revision History

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This document was set up for two sided printing. So conserve trees and print on both sides

What's new in software version 3.17?

Display	
Command line	Blind mode and ScrollWin indications appear on an orange field.
Cue sheet	The new Param Time field, displayed on the cue sheet, shows the fade progress of the parameter with the longest fade-in time.
Desktop	Create Desktop displays and populate them with short cuts f r quick operation of many console functions. See "Desktop" page 40.
Device headers	A title bar graphically separates device types in the live display. See "Device headers" page 52.
Full screen view	When switching to Full Screen view an info message with instructions for exiting the Full Screen v ew, s displayed. See"To switch to full screen view on page 32.
Grid editing	These values can be dite dire tly in the grid format: • QList modes and text • Cue propertie can b edited directly on the cue sheet • Library properties • Time ine values See "Editing objects on the grid display" page 329
Menus	con in the menus have been upgraded. See "Menus and toolbars" page 49.
Parked dimmer display	There is a dedicated display for parked dimmers.
Scrolling	You can use the mouse to scroll views even if they are not active. See, "To scroll in panes" on page 40.
Touch screen b ghtness	Control the light level on the integral touch screens. See, "To control the light level on the integral touch screens" on page 6.
Workspace	Workspaces are additional display screens that provide additional display areas. Workspaces are accessed via tabs in the general window pane. Each window can contain up to 7 workspace tabs. See "Workspaces" page 47.
Workspace tree	The Workspace tree opens automatically each time a new tab is added to a pane. See "Adding tabs to panes" page 30.

Editing	
Chasers with animated gifs	The **CREATE CHASER** tool on the Matrix screen, automatically programs chasers for animated gif files "To automatically program chasers" on page 293.
Highlight/Lowlight	Cycle through fixtures without exiting highlight/lowlight mode. See "About highlight/lowlight" page 321.
Updating cues during their fade	A set of rules govern how cues updates behave during fade See "Updating cues during their fade" page 148.
Releasing parameter time for Enter syntax	The procedure used to release parameter fade times has been improved. See, "To release parameter fade times" on page 168
Media Server	
Arkaos	Support for Arkaos. See "Arkaos media server" pa e 3 3.
Hippo version 3	Support for Hippotizer V3. See "Hippotizer V3 media server" page 357.
Catalyst	Improved support for Catalyst V4. See "Cataly t media server" page 359.
MIDI	
MIDI	MIDI tables have been expanded. • MIDI functionality has been improved to include more MIDI notes. See "MIDI tables" page 397.
MSC	MIDI Show Control (MSC) functionality has been improved. See "MIDI Show Control (MSC)" page 392. **Note:** MSC (and SMPTE) require a hardware upgrade.
Patch	
DMX i put patch	New procedure to clear the DMX input patch. "To clear the DMX input patch" on page 371.
Matrix	Drag and drop a range of fixture to selected matrix cells. "To map fixtures to selected matrix cells" on page 289.
Parked display	Park now has a dedicated display. See, Figure 50.

Playback input patch	Operate Vector playback devices through an external console. See .

Playback

Flash indications	• The playback device's LED blinks while its flash is active. • The flash level is displayed in orange in the Playback display Fader Level field. See .
Goto time	Specify time-in when fading to a selected cue on the mast r playback and other playback devices. .
Latch flash key	The flash key can be locked for continual flash g until it is released. See
Master playback indication	The master playback display has g een bars to differentiate it from the other playbacks. See .
Playback selection	Select multiple play ck for global control. See .
Playback wing displays	• Each layb ck key has its own field. See . T ere are three options for the QList field display: QList number and name, Qlist number only, Qlist name only.

Show file conversion

Sabre & 4D file names	The names of show files that were converted from Sabre and 4D consoles, specify the source of the converted file. See .

System Settings

Art-Net	When Art-Net is enabled, the IP Subnet setting defaults to 0. See .
Operation mode and syntax settings	Compulite mode and Action syntax are automatically set when loading shows converted from Sabre or 4D.
System Settings tabs	The Communication tab has been replaced by three new tabs: DMX Protocol, Network, and MIDI/SMPTE. See ,

| Timing | Default system time is automatically entered in the Time field if the **CUT** button is disabled. |
| | See . |

Topo	
Topo display	• The zoom and show/hide grid tools are always available on Topo views.
	• Change stage element text.
	• Show/hide stage element text.
	• Show/hide the fixture name for fixtures hung on st ge el ments.
	• New icon for a stage element.
	See .

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Introduction

Getting started

Ease of use has been the watchword for Vector 's development team. However, as Vector controls complex lighting rigs as well as simpler rigs, console operation may also be complex sometimes. The purpose of this guide is to help you become a skilled Vector programmer.

Experienced Compulite programmers will find much in Vector that is familiar. We recommend that you use the Quick Start Guide to familiarize yourself with Vector's unique capabilities

New and experienced users will find the General Information chapter useful. The Gen ral nformation chapter describes the user interface, windows use, color code conventions, and st ndard procedures' syntax that is common to many show elements.

This guide generally follows your work flow, from patching through programming cues to playback.

Text conventions

- Vector offers two programming syntaxes for pro dures: Action syntax and Enter syntax. both programming syntaxes appear in this Referen e Guide.
  Action syntax procedures are preceded by: **A** ,
  Enter syntax procedures are preceded by **E** .
  Some procedures are common to both Action and Enter syntax and have no graphic indicators.
  Some procedures show the icon **A** **E** that are mostly the same for both syntaxes, but have a slight variation that is pointed out in the procedure itself.
- The actual keys on the console panel are referred to as **KEYS**. Panel **KEYS** are in **BOLD CAPS**.
- The keys on th ouch screens are referred to as *BUTTONS*. Touch screen *BUTTONS* are *BOLD, ITALIC ZED CAP* .
- Command l e refers to area at the bottom of the screen where the command chain is displayed and err r messages appear. Command line text is in *italics*.
- Dialog box captions, window titles, and field names appear in this font.
- # refers to numbers entered on the numeric keypad.
- In operation sequences, optional keys or buttons appear in parentheses. Example: **SPOT # (→#) @ 65**.
- Key presses are separated by commas when operation sequences are written in a single line. Example: **SPOT**, **#**,**→**,**#**, **ACTIVE**
- When + appears between key or button names, it means: Press THIS (and) THAT at the same time. Example: **SHIFT** + **FREE**. Generally used only in conjunction with shift pairs.
- The term Tap is used for touch or click when referring to the touch screen buttons.
- Fixture is used for any lighting device.

- Channel is a one parameter (usually dimmer) lighting device.

- Spot is a multiparameter lighting device.

- PBD stands for playback device.

- MPB stands for master playback device.

- SKs refers to Soft Keys.

- Desk, console, and system are used interchangeably.

- Cells refer to the smallest information unit, such as one parameter of a moving device, displayed in grid format.

Notes: The screen captures appearing in this guide may not look exactly like the   ens on your Vector. In the interest of visual clarity, a different skin was used for the guides's il ustra ions. The content of the illustrations is identical to the content seen on Vector.

Chapter 1   Setting up Vector

This chapter contains the following sections:

Vector's back panel

Figure 1: Ve tor Red back panel
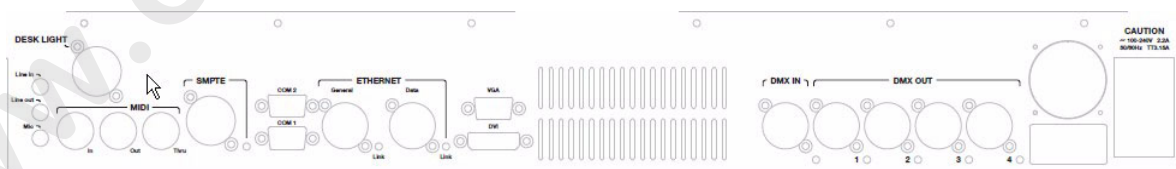
Figure 2: Vector Violet back panel

Setting up Vector

1 Place the console on a clean, stable, and level surface.

2 Make sure the voltage selection switch, located on the power supply is correctly set to 230V AC or 110V AC.

3 Connect the Vector to the mains supply using the cable upplied.

4 Connect any peripherals to their connectors on the r r p nel. All connectors are labelled with names and standard icons.
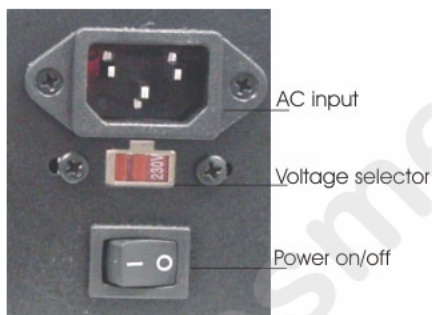
Figure 3: Detail Ve tor rear panel - AC input connector

To power p V ctor

1 Switc on the power, using the switch located on the power supply on Vector's back panel. The soft switch located on the front of the console is lit.

2 Open the door, on the front of the console, protecting the soft switch and press the soft switch once. Wait for Vector to complete boot up.

3 Connect the DMX cables to the appropriate ports.

IMPORTANT! MAKE SURE the voltage selector is set to the voltage that is correct for your mains power supply.

Connecting external screens

External touch screen displays can be connected on the USB and Comm connectors.
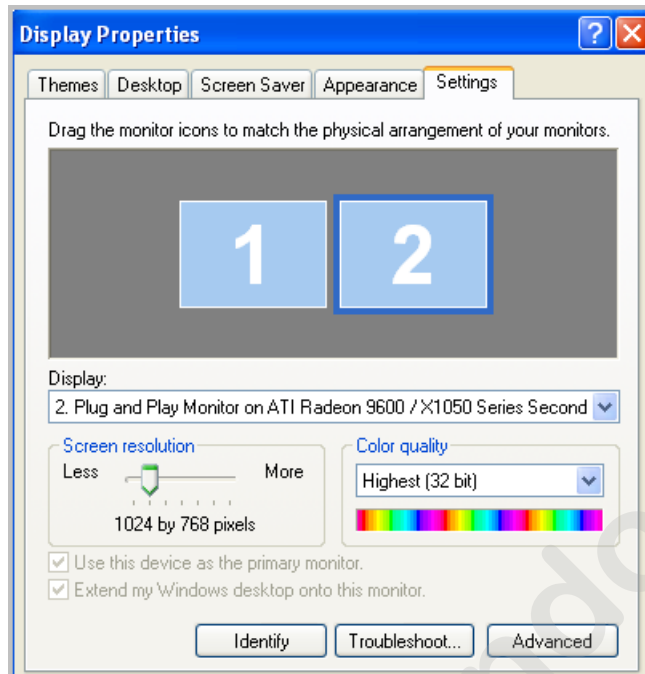
Figure 4: Display Properties dialog box

Console	Touch screens	External screens
Vector Red	2, 3, 4.	1, 5, 6
Vector Blue	2, 3	1, 4, 5
Vector Green	2	1
Vector Orange	1	2
Vector Ultr Violet	1,3	2
V tor Violet	3	1,2

Newly connected displays show the Vector logo. You must open a new window for the new display. See "Opening new windows" page 31.

To connect external displays

1 Go to Tools menu▸Settings.

The System Settings dialog box opens.

2 Tap the Hardware tab.

3 Tap Display Settings.

4 Tap *IDENTIFY* to see how the monitors are numbered.

5   Right click on a number for the external monitor and, from the fly-out menu, click **ATTACHED**.

6   Tap **APPLY**.

To orient the mouse and the display screens

Click on and drag the numbered screens, so they represent the physical order of the displays.

Calibrating touch screens and adjusting brightness

You may find that occasionally the touch screens require calibration.

To calibrate the touch screens

1   Open the System Settings dialog box through the Tools menu

2   Tap the Hardware tab.

3   Tap Touch Screen Calibration.

4   Tap the center of the x that appears in the upper eft c rner of the display.

5   Tap the center of the x that appears in the l w r right corner of the display.

6   Continue steps 4 - 5 for each screen.

OR

1   Press **SCROLL WIN** to enable wind ws mode.

2   Press **@** to open the Start menu.

3   On the task bar, doub   click on the Pointer Device Settings icon.

The Pointer Dev ce P operties dialog box opens. if the icon is not visible, click the arrows to expand the   sk bar.

4   In the Point r Device Properties dialog box, select a display from the Installed Devices list.

F gure 5: Pointer Device Settings icon

5   Tap **CALIBRATE**.

6   Tap the center of the x that appears in the upper left corner of the display.

7   Tap the center of the x that appears in the lower right corner of the display.

8   Repeat steps 4 - 7 for each screen.

9   Tap **OK**.

To control the light level on the integral touch screens

1   Press **SETUP**.

The tool bar is now in setup mode.

2   Tap **DESK LIGHT**.

3 Use wheel 4 (Vector Touch Screen Backlight) to adjust the light level.

Adjusting desk lights and LCD displays

You can dim the brightness for the desk lights, located in the screen handles, and auxiliary lights. The brightness and backlight for the master playback LCD backlight is also adjustable.

To dim the desk lights

1 Press **SETUP**.

2 On the Editor toolbar, tap *DESK LIGHTS*.

3 Use the *DESK LIGHT* wheel (wheel 1) or **FULL**, **ON**, or **ZR** to adjust the intensity.

To adjust the auxiliary lights

There are manual adjustment knobs on the back panel next to the auxiliary light connectors.

To adjust the master playback LCD display

1 Press **SETUP**.

2 On the Editor toolbar, tap *DESK LIGHTS*

3 Use the *LCD BRIGHTNESS* wheel to set the brightness.

4 Use the *LCD BACKLIGHT* wheel to adjust contrast.

Connecting external devices

External pointing devices, such as a mouse, joystick or trackball, can be connected to the back panel USB or PS-2 connectors. It is recommended to have an external pointing device connected. Some functions are easier using a mouse.

Vector comes equipped with a mini keyboard in the slide out tray under the panel. Keyboards are connected at the USB ports or the PS-2 keyboard port on Vector's back panel.

Settings

General system defaults for Vector shows are defined in the System Settings dialog box. You can customize any of these settings. See "About system settings" page 333.

General window settings can be changed through Start menu ▶ Control Panel ▶ Display.

Set the Vector's clock through: Start menu ▶ Control Panel ▶ Date/Time.

Language options

Vector's menus, tool tips, and dialog boxes can be localized so Vector speaks your language. For information on localization contact your local Compulite distributor.

Software installation and upgrade

Vector application software is installed in drive C:\ and D:\. Drive C:\ contains windows sy tem files and the Windows XP installation. These files are locked and may not be changed.   rive D:\ contains Vector's system files, show files, layout files, and visualizers.

These instructions assume:

1. Vector is running.
2. An alphanumeric keyboard is connected.
3. An external mouse is connected.

Before installing new software, we recommend saving back up cop es of your shows and any customized devices.

To upgrade software

1 Access the Task Bar by pressing the Star key on the Vector Keyboard.

2 Right click the RT Interface icon 🖰 nd select Exit RT Interface.

IMPORTANT! After this step, you will not be able to use the track ball as a mouse. Continue with an external mouse.

3 Exit the Vector application.

4 Remove th Compulite Vector program using the Add/Remove Program tool in window's Control Panel.

5 Del e the Compulite Vector folder in C:/Program Files.

6 Pro   ed to install the new software using the new software package downloaded from   ompulite's FTP site.

7 Extract the "Vector.xxx.zip" folder to D:\Vector Data.\Vector Installations.

8 Run the Setup.exe file to start the installation wizard.

9 Tap *NEXT* on first Screen.

10 On Setup Type choose the type of installation.

   Example: If you have a RED Vector choose Red Vector.

11 Continue tapping *NEXT* until you get the Installation progress message.

12 When it becomes available, press *FINISH* on the Compulite Vector Setup wizard.

   The new Vector Console program is now installed.

13 Run the program from the Start Menu.

When the application starts it automatically performs a real time software update.

14 When the update is complete, the run time status is displayed as a green check mark in the status bar.

15 Refresh windows by clicking the View▶Refresh.

16 When the console is running, verify that the IP address is correct and your defaults in the System Settings Dialog box are correct.

To shutdown Vector

1 Press the soft switch located on the front of the console.

2 Tap Turn Off in the Turn Off Computer box.

Vector shuts down.

IMPORTANT! It is strongly recommended to use a UPS (minimum 60 VA) to protect the console and your work.

Chapter 2   General Information

This chapter contains the following sections:

Vector operation modes and programming syntax

Vector has two operation modes:

- Tracking mod
- Compulite m de

Vector   rs two syntaxes for programming procedures.

- Ac ion syntax
- Enter (Broadway style) syntax

The operation mode and programming syntax are set in the System Settings dialog box ▶ Behavior tab. See <u>"About system settings" page 333</u>

T acking mode

In tracking mode, Vector stores only the changes or moves from one cue to the next. Parameter levels that do not change are tracked through cues following the cue where the level was originally set. Levels that are being tracked are not stored again in each cue. Thus there are two types of parameter values:

- Hard values (new or changed values) - values that are stored in the current cue.
- Tracked values - unchanged values that are tracked from an earlier cue.

After storing a cue, the editor is released.

This table shows the total output and the levels that are recorded in each cue:

	Console output (lighting state)			Information recorded in each cue		
Channel	1	2	3	1	2	3
Cue 1	50	FL	40	50	FL	40
Cue 2	25	FL	FL	25		FL
Cue 3	25	80	FL		80	

Note that only the new or changed values are stored in each cue.

Sometimes you want to cancel all tracking values, for instance, when starting a new scene. Block cues are used to reset the tracking, Block cues must be specifically programmed. See "Programming and update options in tracking operation" page 157

The benefits of tracking mode are:

- Tracking changes throughout a series of cues.
  Example: Assume that in cue 1 you set the bac ligh wash at 60%. The hard value is stored in cue 1 and this level does not change during the en re scene, therefore the level in cue 1 tracks through all the cues in the scene. After programm ng all the cues, you see that the back light level is too low. Change the level only i cue 1; the new value is tracked through all the subsequent cues.

- Running simultaneous cues.
  Example: The scene is an interior night scene with room practicals on. As dawn breaks and natural light fills the room the characters switch off the practicals. How does tracking mode help you set up this cue progression? Program one cue that is running a slow fade for the general interior lighting Program other cues that snap off the practicals. Assume that the slow fade is cue 10 and the practicals off cues are 11 and 12. While the fade to cue 10 is still running, yo can give go commands to cues 11 and 12 without interrupting cue 10's fade.

Vector autom tically maintains the cue state when playing back cues out of sequence, as often happens du ing rehearsals.

Compulit mode

Compulite mode is a cue only mode, where all fixtures and values that comprise the lighting state are stored in each cue.

The editor is not released after storing a cue. You can continue programming cues based on the editor group or reset the editor. See "Resetting the editor" page 102.

Programming syntax

Action syntax - A	*Enter syntax -* E
Output convention	
• Parameter levels that are set using **@**, are immediately output. • Parameter levels set using the wheels, **FULL**, **ZERO**, or **ON** are immediately output.	• Parameter levels that are set using **@**, are not output until **ENTER** is pressed. • Parameter levels set using the wheels, **U L**, **ZERO**, or **ON** are immediately output.
Procedure syntax	

Generally, action syntax is:
 	
A
 	
1. Select items.
2. Select the object.
3. Press **STORE**.
 	
Example: Store a group.
 	
1. Select fixtures (the items).
2. Press **GROUP** and choose a group n mb (the object).
3. Press **STORE** (the operation).
 	
   The group is stored.
	Generally, enter syntax is:
	
	E
	
	1. Select items
	2. Select th op tion.
	3. Select th object.
	4. P ess **NTER**.
	
	Example: Store a group.
	
	1. Select fixtures (the items).
	2. Press **STORE** (the operation).
	3. Press **GROUP** and choose a group number (the object).
	4. Press **ENTER**.
	
	   The group is stored.

The user interface

Ve tor use a combination of command line and graphical user interface.

K yp esses and button taps appear in the command line, showing a clear progression of the current programming sequence.

Many operations can be done using the touch screen buttons, menus, tool bars, file trees, and dialog boxes on Vector's graphical user interface (GUI). Your pointing device can be an external mouse, connected at the mouse port on the back panel, or the trackball set to mouse function. The display is completely flexible. You can set up the GUI to display what you need at each stage of your work.

Using the trackball for mousing

Vector's dual mode trackball is used for setting pan/tilt values and as a mouse. The keys located at the lower left of the trackball function as right and left mouse buttons.

- Arrow up
- Arrow right
- Arrow left
- Arrow down
- Trackball / mouse
- Tilt lock /Left mouse button
- Pan lock / Right mouse button
- Intensity / scroll wheel
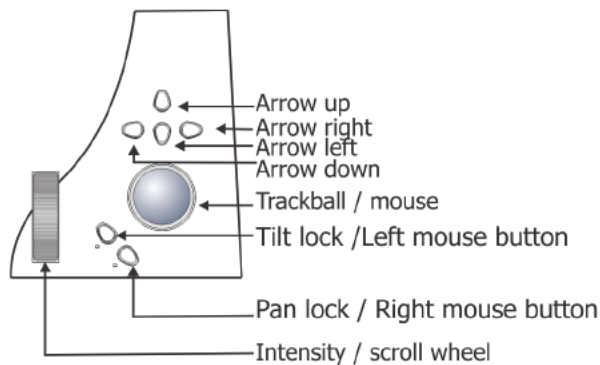
To set the trackball for pan and tilt editing

The default trackball mode controls pan and tilt.

Make sure **MOUSE** is not enabled.

To set the trackball for mousing

Press **MOUSE**.

The **MOUSE** LED flashes. The trackball is illum nat d and available as a pointer device.

Scrolling and navigating grids

Playback and live displays are shown in gri form t. Soft key displays can also be toggled to show information in grid form. The vertical whe l, which by default controls dimmer intensity, can also be used as a scroll wheel in grid display .

The extreme right encoder can   o be used to as a scroll wheel in grid and soft key displays.

To use the wheel for scrolling

Press **SCROLL WIN**.

The **S RO L WIN** LED flashes. *Windows Mode Active!* is displayed in the command line.

To naviga e in grids

1 Press **SCROLL WIN**.

2 Use the arrow keys above the trackball to move from cell to cell.

Using console keys in window mode

When the **SCROLL WIN** key is active, the console number pad and other console keys can be used to enter numbers and traverse dialog box fields. Console keys that are active in scroll win mode are:

Console key	Keyboard equivalent	Console key	Keyboard equivalent
+	plus sign	**CE**	Backspace
—	minus sign	**DELETE**	Delete
/	slash	**EFFECT**	Ctrl
●	dot, decimal point	**ENTER**	Enter
→	Tab	**NEXT**	Page Up
@	Open Start menu	**SHIFT**	Shift
0 - 9	numbers 0 -9	**PREVIOUS**	Page Down
arrow keys	arrow keys		

SCROLL WIN is automatically enabled when workin in d log boxes. **SCROLL WIN** is automatically released when exiting a dialog box.

> **IMPORTANT!** When **SCROLL WIN** is enabled, the numeric keypad is disabled for fixture editing and the wheel cannot control intensity. The message *Windows Mode Active!!!* overlays the command lin

Command line and system status

The command lin is the area where commands, entered using the console keys or touch buttons, are displayed Each screen has a command line.

The command line shows:

- The active command sequence
- Real time connection status
- System clock
- General master status

Command sequence   RT status   GM status

`>>Spot 1  Dimmer @30 (+16)%`   `00:00:00.0` ✔ `12:55:28` `GM: 100 %`

SMPTE/TimeLine   Clock

Figure 6: Main screen command line

Progress bar

A progress bar is displayed on the command line for operations that may take some time. The progress bar is displayed when:

- Opening shows
- Saving shows
- Automatic saves are in progress
- Uploading data to the real time processor
- Uploading software to the real time processor

The bar shows the operation in progress. It appears to the left of the real time connecti n status.

Numeric entry default

The command line can be set for a numeric default selection; the first umbe pressed is recognized as a default selection. Example: The default is *Channel*. Pressing **5**, on the numeric keypad, selects channel 5. It is unnecessary to press **CHANNEL** before entering he number selection.

The default command line options are:

- Spot
- Channel
- Group
- Cue
- Dim

To set the command line numeric default

Example: Set the comm nd line default to Spot.

Press **SPOT** twice. *pot* is now the numeric selection default. When selecting spots, choose only the po number.

Clearing the command line

You c n reset the entire command line to its idle state or regressively clear the entries in the co mand line.

To clear each entry (backspace)

Press **CLEAR**. The last entry is cleared. Continue pressing **CLEAR**. Each press clears the last entry in the command line.

To reset the command line

Press **SHIFT** + **CLEAR**. All the entries in the command line are cleared and the command line is reset to idle.

Note: This does not clear the last selection from wheel control.

System indications bar

The Indications bar shows system status information. You can choose to show or hide the Indications bar.

The system indications bar shows:

- Console operation mode (Tracking or Compulite)

- Procedure syntax (Action or Enter)

- MIDI (enabled or disabled)

- MSC (enabled or disabled)

- Active snap

- Active editor

- QList on the master playback

- Last stored cue

- Master/slave status (if configured for master/slave operation)

- SMPTE/TimeLine clock (when SMPTE is enabled)
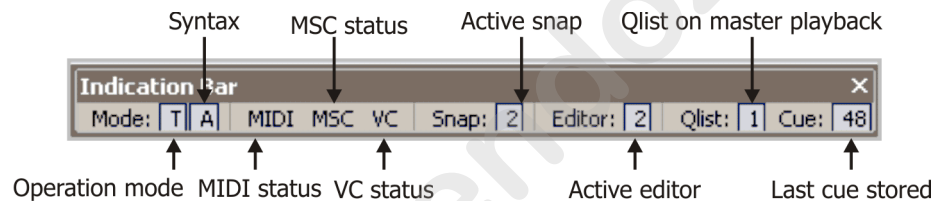
Figure 7: The Indications bar shows general system status information and active show objects

To show or hide the Indications bar

1 Open the View menu.

2 Tap Indications Bar

This setting is saved with your display layout.

Editors

Vector has 7 live editors. The editors can simultaneously contain fixture selections and parameter levels. Fixtures may be active in more than one editor at the same time.

- Parameter levels, in the active editor, are displayed on a white field.

- Parameter levels, in the editors that are not active, are displayed on a dark field.

Pressing **RESET** resets only the active editor.

The active editor is displayed in the (System) Indications bar.

To switch active editors

1 Press **EDITOR**.

2 Press a number (1 - 7), on the keypad.

3 Press **ENTER**.

The selected editor is now active. All editing is done only in the active editor.

Universal procedures

Selecting objects, copying and pasting objects, adding text tags to objects, deleting objects and editing objects, (such as cues, QLists, groups, snaps, libraries, and macros) follow the s me b sic procedure and invoke the same dialog boxes.

More detailed explanations appear in sections dealing with specific objects.

Selecting objects

You can select cues, QLists, snaps, groups, libraries, macros, channels, or spots using a key sequence or soft keys.

To select objects using console keys

Press the object key (**CUE**, **QLIST**, **SNAP**, **MACR** etc.) and enter in its number on the keypad.

To select objects using soft keys

Activate the appropriate soft key t b and tap the object's number.

Adding text tags to objects

All show objects can be label ed with meaningful text tags.

A

To add te t tags to objects

1 Se ect the object.

2 P ess **TEXT**.

The Text dialog box opens.

3 Use the keyboard to type the name.

4 Press **STORE** or tap *OK*.

The dialog box closes.

OR

Immediately after storing the object, press **TEXT** and follow steps 3 and 4.

E

To add text tags to objects

1 Press **TEXT**.

2 Select the object.

3 Press **ENTER**.

The Text dialog box opens.

4 Use the keyboard to type the name.

5 Press **ENTER** or tap *OK*.

The dialog box closes.

OR

Immediately after storing the object, press **TEXT** and follow steps 4 and 5.

Deleting objects

The same procedure is used to delete cues, groups, snaps   d al other show elements.

A warning/confirmation box is always displayed for his peration.

Figure 8: Delete operations always require confirmation

A

To delete obje ts

1 Selec the object.

2 Press **DELETE**.

The Delete warning and confirmation box opens.

3 Tap *DELETE* to confirm the operation.

Tap *CANCEL* to exit the operation without deleting the object.

E

To delete objects

1 Press **DELETE**.

2 Select the object.

3 Press **ENTER**.

The Delete warning and confirmation box opens.

4 Tap *DELETE* or **ENTER** to confirm the operation.

Tap *CANCEL* to exit the operation without deleting the object.

Examining objects

Lists of objects and specific objects can be viewed.

To view a list of objects

Example: View a list of groups

AE

Toggle the group soft keys to grid view by tapping ⊞. A list of groups is d splayed in the active pane.

OR

A

Press **GROUP** and press **EXAM**.

E

Press **EXAM** and press **GROUP**.

To examine a specific object

Example: Examine group 5.

AE

1 View the groups in grid f rm t.

If the group tab is in oft k y format, toggle to grid view.

2 Double click on group 5.

The content of the group are displayed in the active pane designated exam pane.

A

1 Sel ct group 5.

2 Pr ss **EXAM**.

he contents of the group are displayed in the active pane or the designated exam pane.

E

1 Press **EXAM**.

2 Select group 5.

3 Press **ENTER**. The contents of the group are displayed in the active pane or the designated exam pane.

Copying, cutting, and pasting, objects

The copy, paste, and cut functions work similarly to these functions in personal computers.

A copied or cut object is placed on the internal clipboard. It can be pasted multiple times. The object remains on the clipboard until replaced by copying or cutting another object.

Pasted objects that were put on the clipboard using **COPY** are tagged *Copy of (source object)*. You can, of course, change the text tag. Pasted objects that were put on the clipboard using **CUT** retain their original text.

The **COPY** key's LED shows the clipboard status:

- LED on - There is an object on the clipboard.
- LED off - There is nothing on the clipboard.

To copy and paste objects

1 Select the source object.

2 Press **COPY**.

3 Select the target object.

4 Press **PASTE**.

To clear the clipboard

SHIFT + **RESET** clears the clipboard.

When the clipboard is empty, the **OPY** key's LED is off.

Storing changes and updating objects

When storing changes to ues, groups, snaps, and libraries, the Store Options dialog box opens directly after pressing **STORE** This dialog box acts as a warning, letting you know that the object exists, and provide stor options.
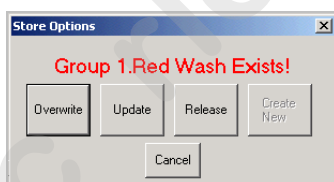
Figure 9: The Store Options dialog box

The store options are:

- Overwrite - The object is replaced with the active editor.
- Update - Opens the Update dialog box.
- Release - Used to remove fixtures from groups and libraries.
- Create New - Creates a new QList. The new QList number is the last QList incremented by 1. This option is only available when editing cues. See

Note: When editing cues, press **UPDATE** instead of **STORE**. See

A

To store changes to objects

Example: Store changes to a group.

1   Press **CHANNEL** or **SPOT** and select fixtures.

2   Select the target group.

3   Press **STORE**.

The Object Exists dialog box opens.

4   Tap *OVERWRITE*, *UPDATE*, or *RELEASE*.

E

To store changes to objects

Example: Store changes to a cue.

1   Select fixtures and assign values.

2   Press **ENTER**.

3   Select the target cue.

4   Press **STORE**.

The Object Exists dialog box opens.

5   Tap *OVERWRITE*, *UPDATE*, or *RE EASE*.

Using undo and redo

The undo feature provides a regres ive restoration of previous editor values. It also restores deleted objects, such as cues, snap , libr ries, etc.

When restoring a range of deleted objects, the Object Exists dialog box offers three options.

Options	*What it does*
RETURN & OVERWRITE	Overwrites all objects
RETURN & SKIP NEW	Does not overwrite the existing objects, but restores those whose object number has not been used.
REMOVE CURRENT FROM UNDO	Delete this operation from the undo list.

To restore a previous editor value or restore a deleted object

Press **UNDO**.

To restore a range of deleted objects

1   Press **UNDO**.

The Object Exists dialog box opens.

2   Choose one of the three options.

3 Click *OK*.

The deleted objects are restored.

To redo an undo

Press **SHIFT** + **UNDO**.

Vector default fade times

You can set default fade times for a number of operations.

See "Timing" page 338

Getting Help

Vector has on line help for both Action syntax and Enter (B oadw y style) syntax.

To open help

1 Open the Help menu.

2 Tap Context.

The on-line help file opens. Browse according to topic, index entries, or search.

Note: Choose the help for the syntax that you are using.

Chapter 3   Displays and Menus

This chapter contains the following sections:

Basic display layouts

On start up the touch screens open with basic display layouts. The layouts are completely customizable and you can change the layouts to suit your show and work habits. We recommend that you familiarize yourself with the layouts supplied before changing them.

Figure 10 Main Screen - basic layout

Screen element	What does it show?
Window title bar	• The show file name is displayed on the right. • Minimize, maximize, and close window controls are displayed on the left. The title bar can be hidden to maximize display real estate. See "Full screen view" page 32.
Menu bar	Seven menus are available on the menu bar. Tap a menu to view the options offered. The menu bar appears on all display screens. Th men bar can be hidden to maximize display real estate. See "Men s and toolbars" page 49.
Display navigation	• Standard display controls: go to previous view, g to last view, go up on level. • Vector icons to: open the Workspace tree, show/hide the Window title bar, toggle soft key display form ts a d lock the display.
Tabs for soft keys	• Tabs, which are added to panes di play soft keys for show objects and playback components. The obj ct category is set using the Work-space tree. • Soft keys access most p gramming and components. Use the pane splitter to pile soft k ys on top of each other. When piled, a tab is automatically creat d for each set of soft keys. Soft key elements are set using the W rkspace tree. The soft key view can be toggled to show soft keys or a list of the relevant elements. See "Setting up Soft Keys" pag 38.
Tabs for playback displays	Cur en status of output on the playback wings (faders and QKeys), AB cros fader, and the master playback. See "Playback displays" page 208.
Editor tool bar	Ve tor's system tool bar is context sensitive, changing according to the current function. See "Editor Toolbar" page 58.
Wheel Assignm nts	The wheel display is context sensitive showing the parameters for the selected moving device. Wheels are also used for programming effects and fade rate control. See "Wheel Assignments" page 59.
Live d plays	Patched fixtures and their current output is displayed in a grid format. The live display grid setup can be modified in the Grid Properties dialog box. See "Grid properties" page 59.

Screen element	What does it show?
Command line	The command line is the area where commands, entered using the console keys or touch buttons, are displayed. Each screen has a command line. See "Command line and system status" page 15
Indications bar	The Indications bar shows system status information. You can choose to show or hide the Indications bar. See "System indications bar" page 17.
Status bar	The status bar appears on the main screen only. The status bar show : ■ Real time connection verification ■ System clock ■ General master status

Setting up and saving display layouts

Each screen has one general window, containing:

■ One window pane

■ A title bar with the window control icons (sh ink, maximize, minimize, close)

■ Menu bar

The tools for customizing the displ ys ar found in the Windows menu. See "Window menu and display toolbar" page 57.

Locking windows

It is recommended o lock the windows to prevent accidentally moving or resizing display elements.

To lock the windows

Go to the Windows menu: Windows ▶ Lock all.

OR

If the Window Set Up tool bar is displayed, tap ⬜ .

Tip! Always display the lock icon to verify window lock status at a glance

🔒 Locked

🔓 Unlocked

Setting up the display

Opening new view panes

A window can be split into multiple view panes. View panes can contain multiple tabs. The splitter mechanism is used to segment the display area and create new view panes.

There are three options for segmenting the display area:

- Split horizontally - split the active pane horizontally.

- Split vertically - split the active pane vertically.

- Add a tab to an existing pane - open a new tab in the active pane.
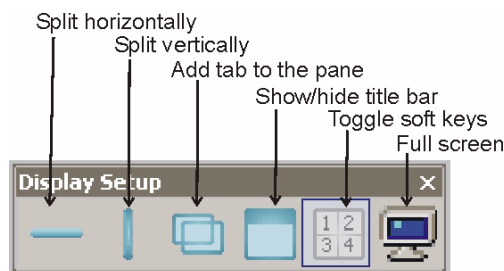
Figure 11: Window (Display) Setup tool bar

Display shortcut menu

The display shortcut menu offers window an   pane control options.
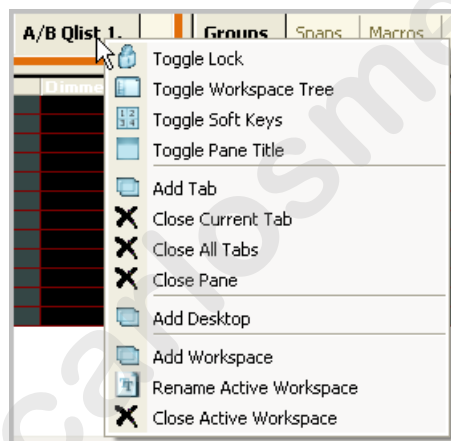
Figure 12: Display shortcut menu

Option	*What it does*
Toggle Lock	Lock/unlock window display.
Toggle Workspace tree	Display/hide the Workspace tree
Toggle soft keys	View soft keys or grid
Toggle pane title	Display/hide the active pane's title bar.
Add tab	Add a tab to the active pane.
Close current tab	Delete the active tab from the pane.

Option	What it does
Close all tabs	Close all tabs in the active pane.
Close pane	Remove the active pane from the display.
Add Desktop	Add a Desktop that can be populated with shortcuts for various console functions.
Add Workspace	Add a Workspace to the window. Each window can contain up to 7 Workspaces.
Rename active Workspace	Change the name of the Workspace that is currently disp ayed.
Close Active Workspace	Close the Workspace that is currently displayed.

To access the display shortcut menu

Right click in any pane on the display.

Identifying the active pane

The splitters affect the active pane. The active pane has ligh red (orange) frame. If the title bar is displayed, the active pane's title bar is dark red. Only ne pane can be active at a time.

Paging and close controls for each pane appear on i s title bar. A pane's title bar can be shown or hidden.

To activate a pane

Tap the pane or its tab.

To show/hide the pane titl bar

Open the Window menu; Window ▶ Show title bar or press .

Adding tabs to panes

Multiple tab can be added to each pane.

Note: The Workspace tree opens automatically each time a new tab is added to a pane.

To add tabs

1   Tab a pane to make it active.

2   Open the Window menu and choose Add Tab.

A tab is added to the active pane and the Workspace tree opens.

3   Choose the tab's contents from the Workspace tree.

OR

1   Right click anywhere in the active pane.

2   Choose Add Tab.

A tab is added to the active pane and the Workspace tree opens.

3 Choose the tab's contents from the Workspace tree.

Setting a default exam pane

The Exam display allows you to view lists of objects, contents of QLists, and cue contents. Exam displays open on the active pane. However, some panes, such as the Editor tool bar and Wheel Assignments, do not support exam displays.

You can set up a pane or a tab in a pane as the default exam display; whenever you request an exam, the exam is always displayed in the same place.

To set the default exam view

Go to the menu bar. Tap Window▶Exam▶Use this view as default.

To activate the default exam view for all exams

Go to the menu bar. Tap Window▶Exam▶Always open exams on default view.

Opening new windows

If you have added monitors to Vector, you must open a new window and set up the display. New windows open, in reduced size, on the main screen

To open and dock a new window

1 Go to the Window menu and tap New.

A new window opens on the main display screen.

2 Using the mouse, a stylus, or the trackball (set to the mouse option) drag the new window to one of the display screens.

3 When the window is located on the display screen, maximize it.

Dragging a tab to a new location

You can change the order of tabs in each pane.

To change tab order

1 If the display is locked, unlock it by clicking [lock icon] or through the display short cut menu (right click in the pane and click Toggle Lock).

2 Point at the tab you want move, click and hold the mouse button.

3 Drag the tab to a new location within the pane and then release the mouse button.

Don't forget to lock the display again!

Navigating displays

The display navigation tool bar is always available and appears in the menu bar between the **Attachment** menu and the **Help** menu.

Return to previous screen
Go to next screen
Go up one level in the workspace tree
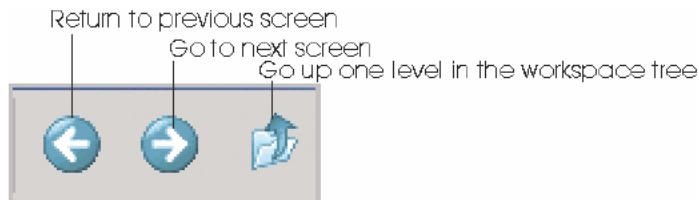
Figure 13: The navigation toolbar

Full screen view

To take advantage of the maximum display real estate, hide the window's title b r and menu bar (elements that belong to the general window) by setting the window display o **Full Screen** view.

Note: The window control icons are displayed with the titl bar If the title bar is hidden, the window controls are not available.

When the full screen display is enabled, the **Windo** (**Display**) **Setup** toolbar is automatically displayed. This allows you to return the menu bar

To switch to full screen view

1 Go to the **Window** menu.

2 Tap .

An info message is d splayed.

The window title bar hidden and an info message, with instructions for exiting the full screen view, is disp ayed.
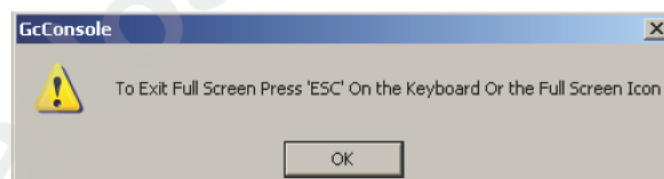
To exit full screen view

Tap on the **Window** (**Display**) **Setup** toolbar.

The window title bar is displayed.

OR

If you have closed the toolbar:

1 Click one of the panes.

2 Press **Esc** on the keyboard.

The window title bar is displayed.

Note: This must be done for each monitor.

Saving and loading display layouts

Display layouts are saved in dedicated files. The extension for layout files is *.cfg

There are three default folders that contain display layouts:

- D:\Program Files\Compulite Vector\WorkDir\Show\Layout - This is the default location for saving layouts for the current show. When saving a show, the screen layout is automatically saved with same file name as the show. The layout file is saved in the default location. The contents of this folder are overwritten when starting a new show.

- D:\Program Files\Compulite Vector\Config\Layout - The layouts stored here are system you s. These are the basic layouts included in the Vector software. If you store your own system layouts, give them a unique name so they are not overwritten when upgrading software.

- D:\Program Files\Compulite Vector\My Layouts - The contents of this folder are never over-written. Copy display layouts that you want to save and reuse to this fo der.

To save a display layout

1   Tap Window ▸ Layout ▸ chose Save System Layout or ave Show Layout.

The Save As dialog box opens to the default fold r

2   Optional - browse to a different folder

3   Type a name in the File Name field.

4   Tap *SAVE*.

The display layout is saved.

To load a display layout

1   Tap Window ▸ Layou ▸ c ose Load System Layout or Load Show Layout.

The Open dial g box opens.

2   Select a lay t fr m the list of *.cfg files.

3   Tap *PEN*

The layo t is loaded.

T p B k up saved layouts by copying the files to a different location on the hard disk.

Dialog boxes

Many of Vector's features are controlled through dialog boxes. Dialog boxes always open in their last position. If a Vector dialog box has been moved to an area where it is invisible or cannot be grabbed, you can reset its position.

To reset dialog box position

Open the Windows menu and choose Reset Dialog Position.

Note: This does not reset Windows' dialog boxes, such as the Open and Save dialog boxes.

Each time a dialog box opens, Vector automatically enables **SCROLL WIN** so you can use the console number pad and other console keys to enter numbers and traverse dialog box fields. Exiting a dialog box automatically disables **SCROLL WIN**.

Workspace Tree

The Workspace tree is a browser containing a navigable tree. Tapping an object in the Work pace tree displays the selected item in the active pane.

The browser works like a file manager tree: a plus sign (+) indicates sub nodes under the m in node. To expand a node, tap the plus sign (+). To collapse node, tap the minus sign (-).
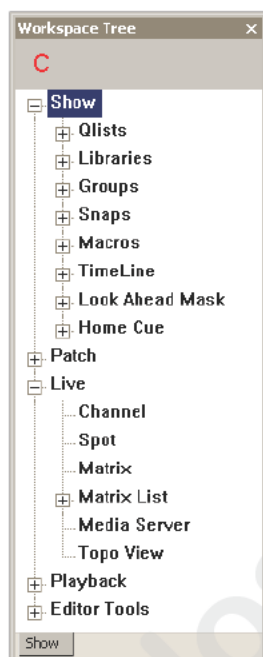
Figure 14: The W rkspace tree

Display can grid style, soft key format, or unique formats like those for playback displays and other hing specific to lighting consoles.

he g id properties can be changed in the Grid Properties dialog box. See "Grid properties" page 59.

To display the Workspace tree
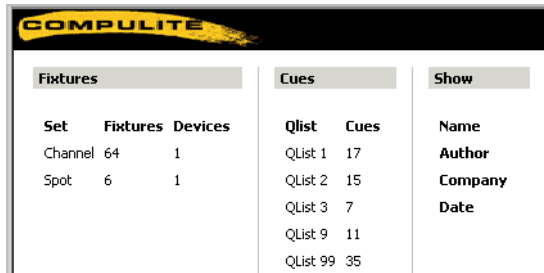
Tap .

To collapse all nodes

Tap C .

Show node

Tap Show to view general show information.

Fixtures			Cues		Show
Set	Fixtures	Devices	Qlist	Cues	Name
Channel	64	1	QList 1	17	Author
Spot	6	1	QList 2	15	Company
			QList 3	7	Date
			QList 9	11	
			QList 99	35	

Figure 15: Show information

Expand Show to view nodes:

- QLists
- Snaps
- LookAhead Mask

- Libraries
- Macros
- Home Cue

- Groups
- Time Line
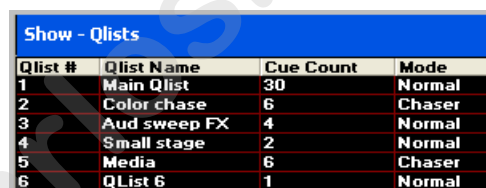
Each expansion shows more and more detail.

To view cue sheets

Example: View QList1 and examine cue 1

1 Expand Show.

2 Tap QLists.

A list of QLists is di played in the active pane.

Qlist #	Qlist Name	Cue Count	Mode
1	Main Qlist	30	Normal
2	Color chase	6	Chaser
3	Aud sweep FX	4	Normal
4	Small stage	2	Normal
5	Media	6	Chaser
6	QList 6	1	Normal

3 Expand QLists.

4 Tap QList 1.

A list of cues in QList 1 and cue information is displayed in the active pane.

Show - Qlists - 1.QList 1

◄	List	TSheet				
Cue #	Cue Name	Time In	Time Out	Wait	Delay In	
1	Preset	2	10	Manual	
4	Sound cue	2	2	Manual	
7	Piano solo	16	16	Follow-On	
10	Dancers ent	6	6	Manual	
13	Gong	Cut	2	Manual	
16	Set flies in	2	2	Manual	

5 Expand QList 1 and tap Cue 1. The fixtures in cue 1 are displayed with their parameter values.

6 Expand **Cue 1** and tap a fixture set tab (**All**, **Channel**, **Spot**, **Matrix**, or **Media Server**).

The cue's parameter levels for the selected fixture set are displayed.

See .

Patch node

Tap **Patch** to view the number of fixtures and types of devices used in the current show.

Expand **Patch** to view nodes:

- Devices
- DMX Out
- Park

- Sets
- DMX In

Live node

Node	Function
Channel	Displays the channels in the show and th i cur ent output.
Spot	Displays the spot in the show and t eir urr nt output.
Matrix	Displays the matrix programmer
Matrix List	Displays a list of all matrix s def ned in the **Patch Manager**.
Media Server	Displays the media s rvers in the show and their current output.
Topo View	Displays the topo m p as defined in the **Patch Manager**.

Tip! Use a large display pane for live channel and spot displays.

Playback node

Node	Sub Nodes	Function
Wing 1	Playback Faders 1 - 10	Shows cue assignments and other information pertaining to playback wing 1. Selecting one of the playback devices, displays only the selected device.
Wing 2	Playback Faders 11 - 20	Shows cue assignments and other information pertaining to playback wing 2. Selecting one of the playback devices, displays only the selected device.
QKeys 1	QKeys 1 - 10	Shows cue assignments and other information pertaining to QKeys 1 - 10. Selecting one of the QKeys, displays only the selected QKey.

Node	Sub Nodes	Function
QKeys 2	QKeys 11-20	Shows cue assignments and other information pertaining to QKeys 11 - 20. Selecting one of the QKeys, displays only the selected QKey.
A/B		Shows cue assignments and other information pertaining to the A/B playback. The display has side headers and includes fade progress bars.
	Cue Sheet	Shows the cue sheet for the QList loaded on A/B. The display format has top headers and fade progress bars.
Master		Shows cue assignments and other information p tain ng to the Master playback.
	Cue Sheet	Shows the cue sheet for the QList loaded on the master playback device. The display format has top h ders and fade progress bars.
	Attachment	Attach and delete attachments o cues sequencing on the master playback. Add text not s to n attachment.
Note: You can toggle between Qkeys and PB wing displays by pressing **PB/QKEY**.		

Tip! Reserve a pane dedicated to the m   ter p ayback. Another pane can be reserved for a cue sheet that shows the list of cue and other cue information for the QList running on the master playback.

Editor Tools node

Node	Function
Context	The contents of a Context Sensitive (CS) tab change according to the current selection type. These soft keys can then be used to make selections. Example: Press **CHANNEL**. The CS soft keys are set to channel. Tap soft keys to select channels.
Wheel Assignments	Show/hide the Wheel Assignments display.
Editor Toolbar	Show/hide the Editor toolbar
Attachment Viewer	Attach and delete attachments to show objects. Add text notes to an attachment. See "Attachment viewers" page 347.

Node	Function
Camera Viewer	View images seen by the camera connected to Vector on the USB port or via IP address. See "Receiving video transmission" page 349.
Scheduler	Show/hide the Scheduler. See "Scheduler" page 386.
Desktop List	Show/hide the Desktop selected from the list. See "Desktop" page 40.

Setting up Soft Keys

Soft keys are used to access programming and playback componen s, su   as libraries or snaps. Each display pane can contain many soft key tabs. Tabs can be d fine as soft keys for libraries, QLists, groups, snaps, macros, or any object that appears in the Wo kspace tree. Each tab has multiple pages.

Soft keys also provide rapid store sequences. See "Using soft keys to store cues" page 132.

Soft Key pane with no tabs

Soft key pane with three tabs
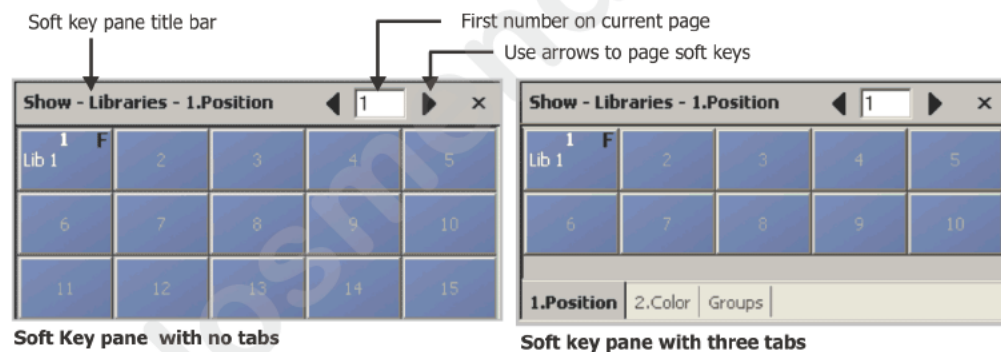
Figure 16: S ft keys

To open a n w tab

1   Go to the Window menu and tap ▢ .

A new tab is added to the active pane and the Workspace tree opens.

2   In the Workspace tree, tap an item to choose the tab's contents.

To set a tab's contents

Example: Set a tab for groups.

1   Tap the tab to make sure it is the active tab.

2   Open the Workspace tree.

3   Tap the Group node.

If the grid view is active, tap ▦ to display soft keys.

4   Go to the next tab and repeat step 3 until all of the soft keys are set.

Paging soft keys

The number of soft keys displayed depends on the size of the pane.

To page soft keys

Press **SCROLL/WIN** and page using **NEXT** and **PREVIOUS**.

OR

Press **SCROLL/WIN** and scroll using the dimmer (vertical) wheel.

OR

Use PageUp and PageDown on the keyboard.

OR

If the pane's title bar is displayed, page using the arrow controls in the ti le ba . Using the pane header arrows, the soft key display jumps according to the size of the pane.

To jump to a specific soft key

Example: Jump to soft key 120.

1   With the pane's title bar open, click in th soft ey n mber field.

See, Figure 16.

2   Enter 120 using the external keyboa

Or

Press **SCROLL WIN** and use Vector's keypad to select 120.

3   Press **ENTER**.

The display jumps to the selected soft key.

ATTENTION! When u ing the external keyboard to enter the soft key number, the pane's title bar must e op n to show the soft key number field.

Soft key and grid format displays

The soft ey display can toggled show the soft keys or display the information in grid style on the active tab.

Figure 17: Soft key display

Figure 18: Grid display

To toggle the display between soft keys and grid format

Tap ⊞, on the menu bar or under the Window menu to toggle the two views.

Note: To view more details, double click on an item in the grid.

To scroll in panes

You can use the mouse to scroll in panes even if they are not active.

Make sure mouse is active (LED on), hover on any pane and scroll as usual.

Context sensitive soft keys

Use the Context option in the Editor tool bar node to set up a tab that responds to the cu rent selection. When using a Context soft key display, the active objects appear on an range field in the soft key display. See "Editor Tools node" page 37.

Desktop

Desktop is a special display area that functions just li e th desktop on your pc. Populate it with icons for one click or hot key operation.

The icons and text can be changed for all obj cts populating the Desktop.
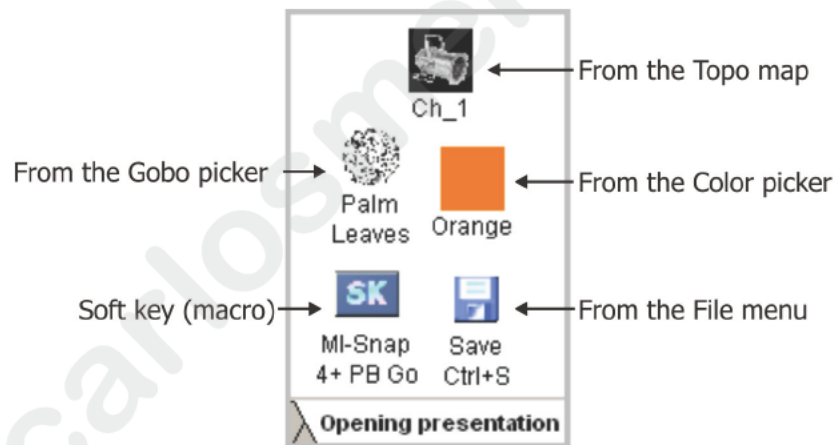
Fig e 19: Desktop populated with icons

Desktop panes and icons populating the desktop can be customized through the Desktop and icon right click menus.

Setting up a Desktop

41

ATTENTION! When populating the Desktop, the display must be unlocked:

(when unlocked the Desktop pane has a cyan colored frame)

When finished, be sure to lock the display:

The Desktop icons function only if the display is locked!

View manipulation on the desktop is through the Desktop tool bar.

Zoom in

Zoom out

Hand tool

Fit to screen

Enable/Disable Hot Keys
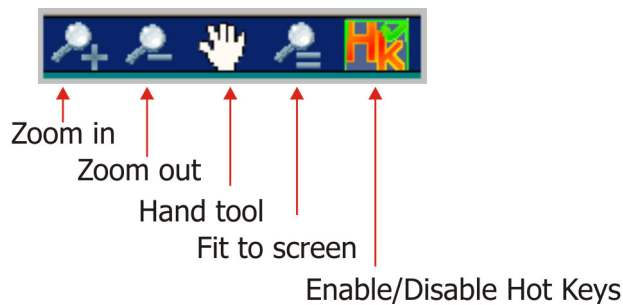
Figure 20: Desktop navigation tools

To set up a Desktop

1   Open the Workspace tree and expand the De ktop List node.

2   Activate a pane and right click anywhere in the pane.

The display control shortcut menu opens.
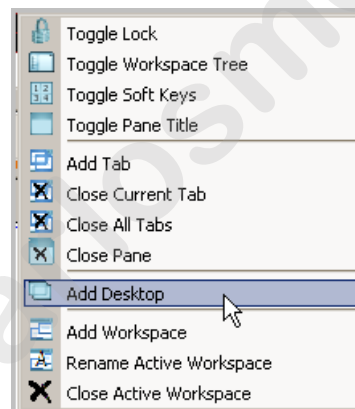
Figure 21: The display shortcut menu

3   Tap Add Desktop.

In the Workspace tree, a Desktop is added to the Desktop List.

4   In the Workspace tree, tap the new Desktop.

A new tab, labeled Desktop #, is added to the active pane.

To rename a Desktop

1   In the Workspace tree, tap the Desktop List node.
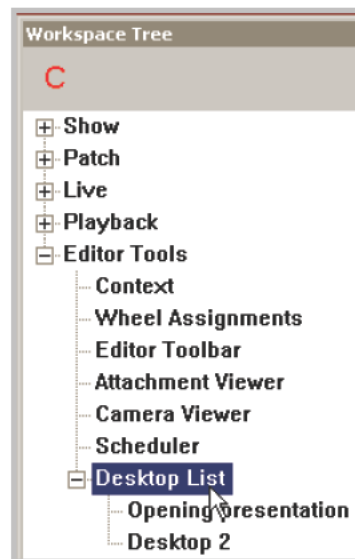
The active pane shows the Desktops in grid format.

2 Double tap in the Name column of the new Desktop.

3 Type the Desktop's name.

This name is displayed on th Desktop's tab.

To delete a Desktop

1 Make sure that the D sktop you are deleting is active.

2 Right click anywher in the Desktop.

The Deskt p right click menu opens.
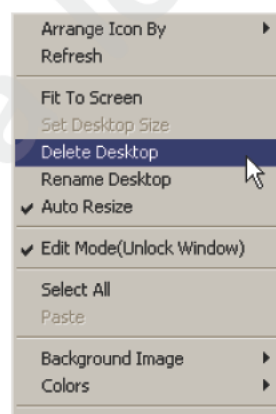
Figure 22: Desktop right click menu

3 Choose Delete.

4 The Desktop is deleted.

OR

1 Open the Workspace tree, tap the Desktop List node.

The active pane shows the Desktops in grid format.

2 Right click in any column in the Desktop row.

3 Choose Delete.

4 The selected Desktop is deleted and no longer appears in the Desktop List.

To customize the Desktop appearance

Right click anywhere on the Desktop and choose an option from the menu.

Menu Item	Description
Arrange Icon By ▶	Arrange icons (flyout menu)
Refresh	Refresh after Desktop changes
Fit To Screen	Fit to screen
Set Desktop Size	Set Desktop size
Delete Desktop	Delete active Desktop
Rename Desktop	Rename Desktop
✔ Auto Resize	Auto Resize
✔ Edit Mode(Unlock Window)	Toggle the display lock
Select All	Select all icons on the Desktop
Paste	Paste objects from the clipboard
Background Image ▶	Change the Desktop background
Colors ▶	Change the background color, icons' text and background color

Figure 23: Desktop right click m nu

Populating the Desktop

The Desktop is populated by dragging and dropping:

- Object soft key
- Menus
- Menu i ems
- T ol r objects

Pic r items

ATTENTION! To populate a Desktop, the display must be unlocked. Either click the lock icon or Edit mode must be enabled in the Desktop right click menu.

To populate a Desktop

Example: Place a shortcut to macro 999 on the Desktop.

1 Display the macro soft keys.

2 Right click the soft key for macro 999 twice and hold down the right mouse button.

3 Drag the soft key onto the Desktop and release.

Now you can trigger macro 999 by tapping its icon or using its hot key (See, "To create hot keys" on page 46).

4   Repeat steps 1 through 3 for as many items as required.

Note: To drag a soft key, it is always necessary to right click twice in order to grab it.

Example: Place a shortcut to a picker item on the Desktop.

1   Open the picker.

2   Right click on the image required and hold down the right mouse button.

3   Drag the image onto the Desktop and release.

4   Repeat steps 1 through 3 for as many items as required.

5   When finished, close the picker.

Editing Desktop icons

The Desktop icon right click menu provides tools for editing icons.
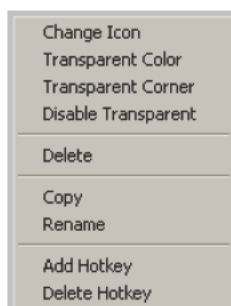
Figure 24: Right click a Desktop icon to open this menu

Change icon	Automatically opens a folder in Windows Explorer where you can find many *.ico and *.bmp files to use as icons in the Desktop.
Transparent color	choose one color, used in the icon, to make transparent. Improves visibility of icons.
Transparent corner	Make the color in the corner of the icon transparent.
Disable transparent	Remove the transparency for the selected icon(s).
Delete	Delete the selected icon(s).
Copy	Copy the selected icon(s).
Rename	Change the text tag for the selected icon.
Add Hot Key	Open the Add Hot Key dialog box to set a hot key for the selected icon(s).
Delete Hot Key	Delete the hot key for the selected icon(s).

ATTENTION! To change icons or text, the display must be unlocked. Either click the lock icon or Edit mode must be enabled in the Desktop right click menu.

To change an change an object's icon and text tag

1 Right click the icon and, from the shortcut menu, choose Change Icon.

2 Browse to the folder where icons are stored and select an icon.

3 Click *OK*.

4 Right click the icon and, from the shortcut menu, choose Rename.

The text field is now selected

5 Type the new name.

To change the icon for more than one object

Example: Change the icon for all the soft key groups appearing on the Deskt p.

1 Select multiple icons by holding down Ctrl and clicking each icon

Or

Hold down the left mouse button and drag a rectangle around th icons.

2 Right click one of the selected icons and, from the sho tcut menu, choose Change Icon.

3 Browse to the folder where icons are stored and lect n icon.

4 Click *OK*.

The icon is applied to the selected objects

5 Remember to lock the display by cl cking the lock icon on the toolbar or right click in the desktop and, in the shortcut menu, c ick Edit Mode to remove the check and lock the display.

To use transparency for improved visibility

1 Right click an icon or elect a group of icons.

The icon shortcut menu opens.

2 Choose Transparent Color.

The Color dialog box opens.

3 Tap the color.

4 Tap *OK*.

The selected color is now transparent on the Desktop icon.

OR

1 Right click an icon or select a group of icons.

The icon shortcut menu opens.
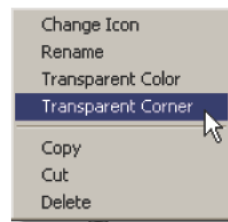
2   Choose Transparent Corner.

3   The color that appears in the corner of the icon is now transparent.

Setting up hot keys

You can set up hot keys that will operate the Desktop icons with one press on the keyboard. Hot key status is saved with the show.

> **ATTENTION!** Hot keys will not work hot keys are not enabled - or if the display is not locked.

To .enable or disable hot keys

On the Desktop tool bar, click the hot key icon (enabled) (disabled). Also make sure the display is locked .

To create hot keys

1   Make sure that hot keys are enabled.

2   Right click an icon.

The icon shortcut menu opens.

3   Choose Add H tK y

The Add H tKe dialog box opens.
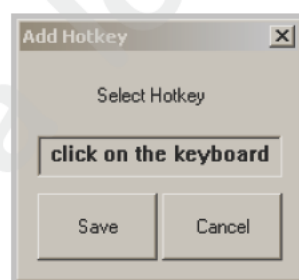
Figure 25: Add HotKey dialog box

4   Enter a hot key string by typing on the keyboard.

One capital letter, one small letters, one number, or combinations using CRTL can be used.

5   Tap *SAVE*.

The dialog box closes. The hotkey is displayed, in parentheses, as a prefix to the icon's name. Example: The palm leaves gobo hot key is (p).

HotKey ──▶(p)Palm
           Leaves
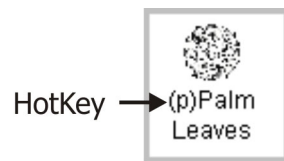
To delete a hot key

1   Right click an icon.

The icon shortcut menu opens.

2   Choose Delete HotKey.

The hot key is deleted and the is no longer displayed with the icon.

ATTENTION! Hot keys are global; they are valid for all Desktops.

To use hot keys

Type the hot key on the keyboard.

OR

You can operate more than one hot key at the same time

1   Press and hold the left house button.

2   Drag a rectangle around a group of icon on the Desktop.

3   Release the mouse button.

4   All hot keys within the rectangl are triggered.

Workspaces

Workspaces are dditional display screens that provide more work areas. You can create a dedi-
cated work   ace for playback information, live displays, etc.

Each main window can contain more than one workspace. Workspaces are accessed by tabs located
ab ve the ommand line, so switching is very simple.

Work paces are saved as part of the layout or they can be saved separately and loaded for re-use.
The Workspace display file extension is: csl.

The default Workspace is called Main and is the first workspace tab. Workspace tabs can be
renamed and their order can be changed.
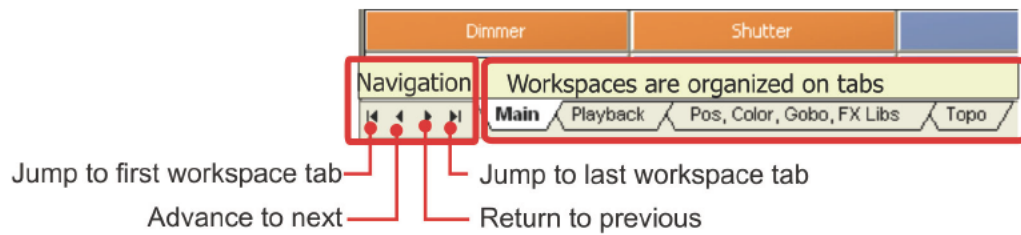
Figure 26: View tabs and their navigation controls

When requesting an exam the current Workspace is swapped with the one containing the def ult exam pane.

To add and configure Workspaces

1 Right click anywhere in a window and, choose Add Workspace from he right click menu.
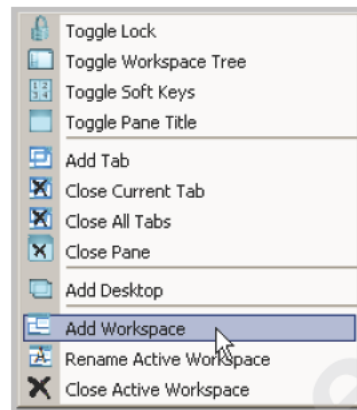
Figure 27: View controls r ght click menu

Or

Go to the Window menu ▶ Window Options and choose Workspace.

A Worksp c is dded to the window. Its tab appears to the right of the last tab.

2 Righ click th new tab.

The display control, right click menu opens.

3 hoose Rename View.

4 Type a new name for the Workspace and press ENTER.

5 Using the tools in the Window menu divide the workspace into panes and add tabs, as necessary

6 Open the Workspace tree and set up the view as is suitable.

Example: If you have created a Live workspace, you will probably want to show the live fixture displays, the master playback display, and the playback wing display.

7 Optional - Save this as a display layout.

See, "To save a display layout" on page 33.

To change the order of the Workspace tabs

1 Make sure the display is not locked.

2   Drag the tab to a new position.

To save a Workspace

1   Go to the Window menu ▶ Layout ▶ chose Save Workspace.

      The Save As dialog box opens to the default folder.

2   Optional - browse to a different folder

3   Type a name in the File Name field.

4   Tap *SAVE*.

      The Workspace is saved. The Workspace file extension is: csl.

To load a Workspace display

1   Tap Window ▶ Layout ▶ chose Load Workspace.

      The Open dialog box opens.

2   Select a Workspace from the list of *.csl files.

3   Tap *OPEN*.

      The Workspace is loaded.

Menus and toolbars

Vector's menus contain save file and open file functions, show/hide options for tool bars, access to setup dialog boxes, and tool bars

Showing a toolbar, floats the t olbar on the display. You can move and dock this toolbar. You can customize the toolbar di plays to permanently show frequently used icons.

To dock a floating t olbar

Grab the toolbar with the mouse, a stylus, or your finger and drag it under the menu bar.

    Wh n correctly docked, a row opens under the menu bar to accommodate the entire t lbar.

To add icons to the default display

1   Tap the Tools menu.

2   Tap Customize.

3   In the Commands tab, tap a category.

4   Drag an icon from the commands pane to the toolbar area.

5   Tap close to close the Customize dialog box.

File menu

The File menu contains the standard items that are found in this type of menu, in many software applications.

Menu items	Function
New Show	Open an empty show file. All current data, including patch, are erased.
Open Show	The Open File dialog box is displayed. Browse and open files as in all windows programs. **To open a Sabre or 4D show file** Select the appropriate file type in the Files of Type combo box. See <u>"File conversion" page 242</u>.
Import	Import selected objects or patch information from saved shows. See <u>"Importing objects and patch" page 240</u>
Save	Save the open file. If the show has been saved previously, it is saved under the same name. If the show is a new show, the Save dialog box opens.
Save As	Open the Save As dialog box save a show file under a new name. It is recommended to use this opt on when saving show files to organize saved versions.
Print	Open the Print dialog box.
Print Preview	Not implemented.
Print Setup	Open the Print Setup dialog box.
Last used files	A list of the recently used show files.
Exit	Close the application.

View menu and toolbar

The View Setting tool bar allows you to customize the column width, header displays, and behavior of each display grid. The settings applied using this menu are saved with the display layout. See, "To save a display layout" on page 33.

View	
View Setup Toolbar	Show / hide View tool bar
✓ Indication Bar	Show / hide Indications bar
Headers Per Device	Show / hide device separators
Fit Columns Width by Title	Set column width according to parameter names
Fit Columns Width by Value	Set column width according to parameter values
Fit Columns Width by Title and Value	Set column width to accommodate name and values
Fit Columns Width to Screen	Set column width according to the available space in the pane
View Properties	Open the Grid Properties dialog box
Show/Hide Headers	Show / hide field names in the live channel display
Jump to Fixture	Jump to the selected fixture
Jump to Parameter	Jump to the selected parameter
Interactive Fixture Selection	Allow fixture selection on the touch screen
Refresh	Refresh the display

Indications bar

The Indicati ns bar shows system status information. You can choose to show or hide the Indications bar.

Whatever is enabled in Settings ▶ Communication tab is displayed in the indications row. This i cludes:

- MIDI
- MSC
- VC's
- Art-Net
- DMX Input

Syntax   MSC status   Active snap   Qlist on master playback

Operation mode   MIDI status   VC status   Active editor   Last cue stored
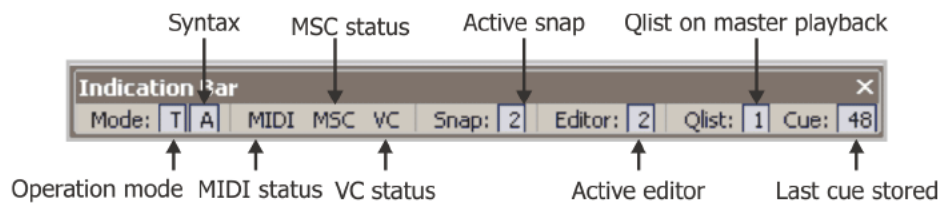
Figure 28: Indications Bar

To display the Indications bar

1 Open the View menu.

2 Tap Indications Bar.

The Indications bar is now displayed.

3 Drag it to dock at any convenient place.

This is saved with your display layout.

4 Repeat steps 1 and 2 to hide the

Device headers

In the live display, a device title bar (header) separates groups of devices by type. Example: There are 24 patched VL 3000Spot fixtures (spots 1 → 24) and 12 patched VL3000Wash (spots 25 → 36). A device header is placed between spots 24 and 25

Grid columns are common to the entire display. If a particular type of device does not contain certain parameters, the column for that parameter is left blank. Example: Varilite 3000Spot and Varilite 3000Wash are used in the show. Of course, the VL 3000Spot has gobo parameters and the VL3000Wash does not, so the gobo parameter column shows no values in the VL3000Wash section of the live display. Scrolling is also common to the entire display.

Device headers

Fixture #	Fixture	Pan	Tilt
VL3000 Wash			
Fixture #	Fixture	Pan	Tilt
1	3W_1	50%	50%
2	3W_2	50%	50%
3	3W_3	50%	50%
4	3W_4	50%	50%
VL3000 Spot			
Fixture #	Fixture	Pan	Tilt
5	3S_1	50%	50%
6	3S_2	50%	50%
7	3S_3	50%	50%

Figure 29: Live spot display with headers separating types of devices

To show device headers

Open the View menu and choose Headers Per Device.

Column width

53

Adapt the column with according to:

- Title
- Value
- Value and title
- Screen

To change the column width

Tap View to open the view menu and choose one of the column width options.

Jump to display

Use the Jump items to automatically show the fixture or parameter as they ar   selected:

- Fixture
- Parameter

To activate the jump feature

Tap View to open the view menu and choose Fi   ure   r Parameter.

Interactive selection feature

Interactive Fixture Selection allows you to sel ct fixtures by tapping or clicking on their number in the live display.

To activate the selection feature

Tap View to open the view menu and choose Interactive Fixture Selection.

Tools menu

The **Tools** menu is the gateway to many dialog boxes and customization options.

Patch Manager	Open the Patch Manager
Generate Groups and Libs	Open Generate Groups & Libs dialog box
Settings	Open the Settings dialog box
Device Builder	Open the Device Builder
Software Update	Open the Updates folder
RT Status	View Real Time software information
Advanced ▶	Advanced Function real-time flyout menu
Grid Options…	Open the Grid Options dialog box
Customize Menus	Open the Customize Menus dialog box

Format menu and toolbar

The Format menu items control how parameter values are displayed in the live fixture displays and what information is displayed.

Format Toolbar	Show/hide the format toolbar
Text	Show parameter text tags
Decimal Value	Display parameter values in decimal format
Percent Value	Display parameter values in percent format
Hex Value	Display parameter values in hexadecimal format
Time	Show cell time and delay settings
Playback Source	Show output source
Library	Show library types settings
Effect	Show effect name
Profile	Show profile name
Auto Hide Options ▶	Hide active format options

There are two basic typs of information that you can display in the parameter cell:

- Parameter alue can be displayed in decimal, percent, or hexadecimal format
- Param er text. Example: The value for a step in gobo wheel 1 appears as "Stars" on the live spot isplay.

In dditi n to parameter values or text, the live display can show various attributes:

- Time, if a unique fade time was set for the parameter
- The name of the playback device (PB) that is responsible of the output
- Library flags
- Profile flags
- Effect flags

Time, playback source, library, effect, and profile attributes can be displayed on separate rows in the live display. You can also hide all or some of the parameter value attributes.
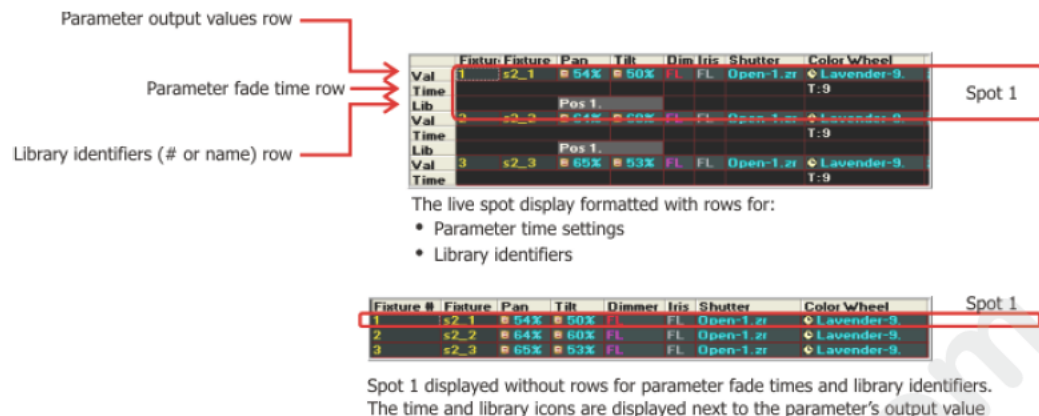
Figure 30: Parameter attributes in the live spot display

To display parameter value attributes

1   Tap Format.

2   Tap one of the format options.

To hide attributes

1   Tap Format.

2   Tap Auto Hide.

A list of the attributes is displayed.

3   Choose one of the attributes.

4   Repeat to hide additional attri ute .

LiveMode menu and tool bar

The items in this menu contro which fixtures are shown in the live displays

Live Mode	
Live Mode Toolbar	Show/hide toolbar
Show All	Show all fixtures
Active In Editor	Show only fixtures active in the editor
Active On Stage	Show all fixtures output from the editor or playback device
Patched	Show all patched fixtures
Used In Show	Show all fixtures used in show
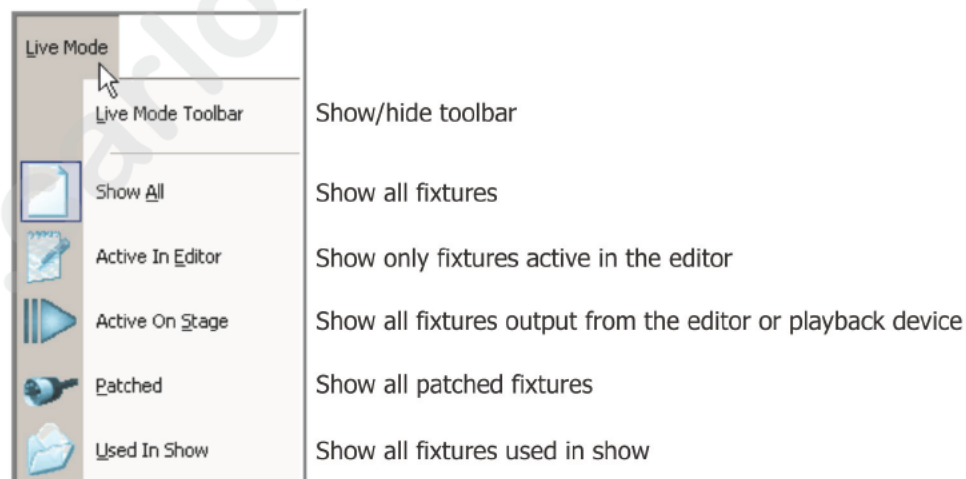
Window menu and display toolbar

The items in this menu are used to setup the display panes, save and load layouts, and lock displays.

Window Setup Toolbar	Show/Hide the tool bar
Show/Hide Window Title	Show/hide the Window title bar
Split Pane Horizontally	Split the active pane horizontally
Split Pane Vertically	Split the active pane vertically
Add Tab	Add a tab to the active pane
Show/Hide Pane Titlebar	Show/hide the pane's title bar
Toggle Soft Keys	Toggle between graphic soft key display and grid display
Window Options	Add a new window or workspace
Reset Dialog & Toolbar Position	Return dialog box to its default position
Lock All Windows	Lock the display or unlock it for editing
Exam...	Choose the default pane for exams
Layout	Save or load display system and show layouts and Workspace displays
Full Screen	Switch to full screen mode

Attachment menu

Media and te t file can be attached to show objects, such as cues, macros, snaps, groups, and libraries. See "Fi e attachments" page 347

Note Mode	Add a note to the attachment
Add Attachment	Add attachment to selected object
Delete Attachment	Delete attachment from selected object
Select Video Source	Configure Vector to communicate with a camera connected at Vector's USB port or, via an IP address, a camera on the general network.

Editor Toolbar

The Editor toolbar contains buttons used when programming a show. The Editor toolbar is context sensitive; the buttons change according to the current editing function.

13 buttons per row are displayed on the toolbar. There are two arrow keys at the end of a toolbar row for paging the buttons, if necessary.

Library	Look Ahead Mask	Playback		Blind PB Preview Edit	PlayBack Edit	Editor Fade	Try Cue

Edit Cue	Load Cue	Load State	Library	Edit Library	Patch	Look Ahead Mask		Blind PB Preview Edit	PlayBack Edit	Editor Fade	Flash	Try Cue

Figure 31: Editor tool bar default (idle) mode

Editor tool bar modes

- Cue mode   See "Cue mode on the Editor tool bar" page 157
- Delta   See "Delta mode on the Edit r ool bar" page 153
- Dimmer (patch) mode   See "Dim (patch) mode on the ditor toolbar" page 78
- Every (selection) mode   See "Every (selection) mode on the Editor tool bar" page 93
- Fan   See "Fan toolbar" pa e 176
- Fixture (selection) mode   See "Selection m de on the Editor toolbar" page 93
- Library mode   See "Library mode on the Editor tool bar" page 252
- Loop mode   See "Loop m de on the Editor tool bar" page 172
- Macro   See "Macro mode on the Editor tool bar" page 299
- Pan/tilt   Se "Pan/Tilt mode on the Editor tool bar" page 114
- Playback   S e "Playback selection" page 202.
- Parameter mode   See "Parameter mode on the Editor tool bar" page 107
- Profile mode   See "Profile mode on the Editor tool bar" page 320
- Rate   See "Rate mode on the Editor tool bar" page 223
- Store op ions mod   See "Store options mode on the Editor tool bar" page 134
- Time mode   See "Time mode on the Editor tool bar" page 164
- Time l e mode   See "Time line mode on the Editor tool bar" page 380

To sh w the Editor tool bar

Open the Workspace tree.

2 Expand the Editor Tools node.

3 Tap Editor Tool Bar.

4 Optional: adjust the number of rows displayed by dragging the tool bar's upper edge up or down.

Wheel Assignments

The Wheel Assignments display shows the parameters, for the selected fixtures, in their wheel banks assignments. It is most convenient to open the Wheel Assignments on the main screen, so it is positioned above the physical wheels.

Gobo 1	Gobo 1 Rot	Gobo Fnc	Gb 1 Rot Func	FX Wheel
Gobo 2	Gobo 2 Rot	Gobo 2 Func	Gb 2 Rot Func	FX Rotation
FX Func	FX Rot Func			

Figure 32: The Wheel Assignments display

To open the Wheel Assignments display

1 Open the Workspace tree and expand the Tools node.

2 Tap Wheel Assignments.

3 Optional: adjust the number of rows displayed by the upp r edge dragging up or down.

Playback displays

See .

Grid properties

Grid properties include:

- Text that appears in the g id headers
- Which inform tion s displayed
- The ord r in which the headers appear
- Font and font color
- Backg ound color
- Row and column weight
- Row and column line color

Grid properties can be changed in the Grid Properties dialog box. The options available in the dialog box correspond to the active display pane. Example: The active pane is live spots. The Show fields tab contains items relevant to the spot display.
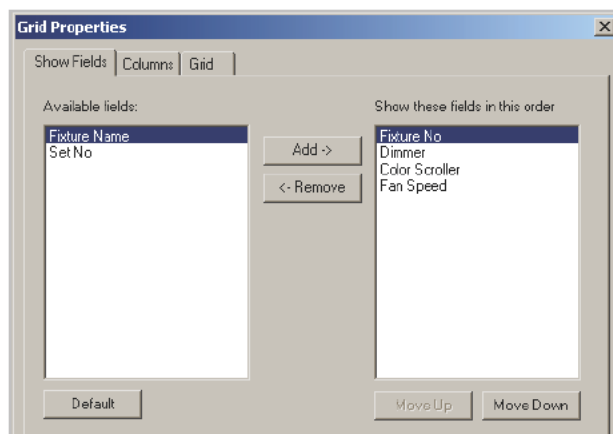
Figure 33: The Grid Properties dialog box

Tab	What you can do
Show Fields	The Available Fields appear in the left list box. The Show Fields list box, the right list box, contains the fields that are displayed a d th o der in which they are displayed.
Columns	Edit the text that appears in the column head rs.
Grid	Customize fonts, font color, backgrou d color, grid line weights and line color for specific display panes.

To open the Grid Properties dialog box

1 Position the pointer on one of   grid headers and right click.

2 Tap Properties.

3 The Grid Properti s di log box opens.

OR

View menu ▶   Properties

To add fi ds to headers

In the   how Fields tab, select an item in the Available fields list box and tap **ADD**.

To r move fields from headers

In the Show Fields tab, select the field from in the Show Fields list box and tap **REMOVE**.

To change the order of the fields

Select an item in the Show Fields list box and tap **MOVE UP** or **MOVE DOWN** until the item is in the desired position.

Customizing column headers

The fields in the Columns tab are used to edit the text that appears in the grid headers. The number of characters in the header affects the width of the header and the amount of information displayed in one display pane, without having to scroll.
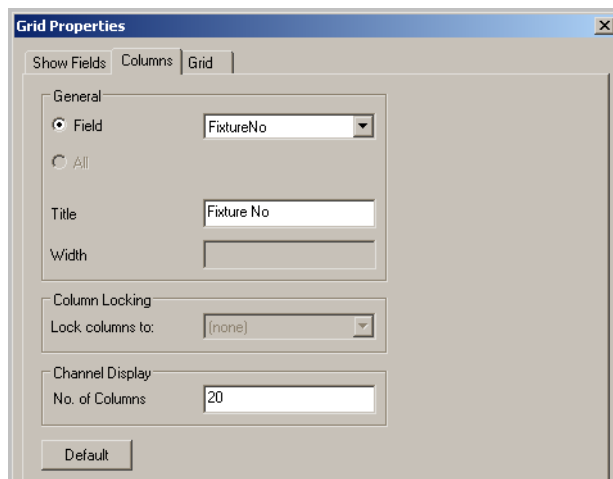
Figure 34: Columns tab in the Grid Properties dialog box

Sections	*Controls*	*What it does*
General	Field (radio button)	Select a pa ameter name from the drop down list.
	All (radio button)	Wh n All is selected, the Width field is enabled.
	Title	Type the parameter name as you want it to appear in the header.
	Width	For spots only. Preset an absolute width for grid columns.
Column Locking	Lock column to	Locking columns together fixes the columns in place and excludes them from horizontal scrolling. Example: Fixture name and number are usually locked, so are always displayed.
Channel Display	No. of Columns	Set the number of columns per row for the live channel display. This determines how many channels are displayed.

Customizing grid appearance for specific display panes

In the Grid tab, you can customize the look for specific display panes.

To customize grid properties

Example: Customize the grid look for the master playback pane.

1 Point to one of the headings in the master playback pane and right click.

2 Choose Properties from the fly out menu.

The Grid Properties dialog box opens.

3 Go to the Grid tab.

4   Tap Custom to enable the fields.

5   Set the fields.

6   Tap *OK* to save and exit.

These settings will be saved with your layout.

To return to default grid properties

1   Point at one of the headings in the master playback pane and right click.

2   Choose Properties from the fly out menu.

The Grid Properties dialog box opens.

3   Go to the Grid tab.

4   Tap Custom to disable.

All fields return to their factory default settings.

Tap *OK* to save and exit.

Chapter 4   Patching

At start up, Vector's patch configuration is empty. The system must be configured for the types of devices and the number of fixtures that will be used in the show. Opening a new show file also resets the patch to empty.

This chapter contains the following sections:

Patch Manager

Determining the type and number of fixtures used in the show and patching these fixtures is done in the Patc Manager.

Th   atch Manager's features include all patch and configuration activities:

- Determining the type of fixtures used in the show.
- The number of fixtures.
- Assigning fixture numbers used when programming.
- The pan and tilt orientation for moving devices.
- Patching fixtures to DMX addresses.

The patch schedule is arranged in spreadsheet (grid) style.

Fixtures are organized into sets. Each set has its own grid.

To open the Patch Manager

Tap Tools menu ▸ Patch Manager.

Patch manager toolbar

Tapping an icon on the Patch Manager toolbar opens the dialog box or wizard for the selected function.
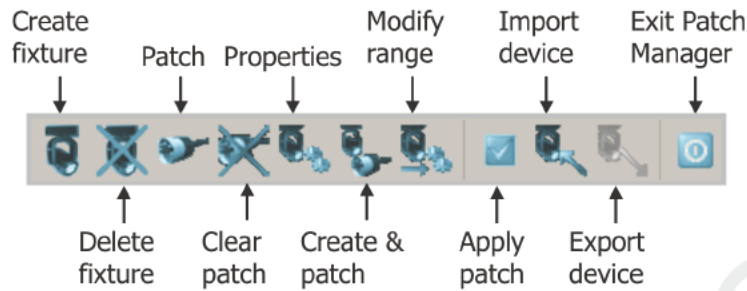
Figure 35: The patch manager tool bar

Patch manager workspace tree

The nodes in the Patch Manager workspace change t   information displayed in the main pane.
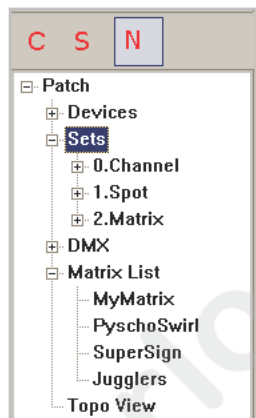
Figure 36 Patch manager Workspace tree

Node	Sub Node	Function
Devices	Available devices	• Tap **+** to expand and view the imported devices. • Tap a specific device to view the device's parameters and a grid showing the device set up. • Tap a parameter to view the set up for that parameter.
Sets	Spot Channel Matrix Media Server	• Tap Channel, Spot, Matrix, or Media Server to view the patch schedule for that set. • Tap **+** to expand and view the fixtures in each e Tap ping a fixture displays a grid showing the cue where the fixture is used.
DMX	Ports (universes) 1 - 16	• Tap **+** to expand and view a list of DMX ports. • Tapping a specific port shows its p tch schedule.
Matrix List	User defined matrixes	• Define matrixes and sele t a matrix for mapping.
Topo View		• Display Topo map. See, Chapter 13, "Topo"

The Patch Manager workspace tree has th ee operation modes	
COLLAPSE (**C**)	Tap to collapse the ent e tree to display only the main nodes.
SELECTION (**S)**	Tap when expand ng nodes or to select more than one node. This is generally u ed when working with TOPO or matrix. It allows you to make select ns without changing the main display.
NAVIGATION (**N)**	Tap to display the grid for the selected node.

Working in the Patch Manager

The Patch Manager work flow is:

1. Import devices.

2. Create fixtures.

3. Patch fixtures.

4. Apply the patch.

5. Exit the patch manager.

Importing devices

You must import the devices that you intend to use in your show. Devices are imported from a list of devices accessed via the **IMPORT DEVICE** button, which is available in the Import Device and the Create & Patch dialog boxes.

Devices are organized in subdirectories according to manufacturer. As in most GUI file systems, press and hold CTRL while clicking on devices to select more than one device.

To import a device

1 Tap [icon].

A dialog box containing a list of devices opens.

2 Double click the device file.

Or

Tap the device file and tap **OPEN**.

The device is imported to Vector's **Patch Manager**. It appears under the **Device** folder in the workspace tree.

3 Repeat this procedure to add more devices to the Patch **Manager**'s **Device** folder.

Note: To select more than one device, hold down Cntrl and cli k on more devices. When your selection is complete, tap **OPEN**.

Creating fixtures and patching DMX addresses

Patching fixtures is a two-step procedure:

1. Creating fixtures

2. Patching fixtures to DMX addresses

There are separate dialog boxes for creating fixtures and patching fixtures. There is also a wizard for creating and patching.
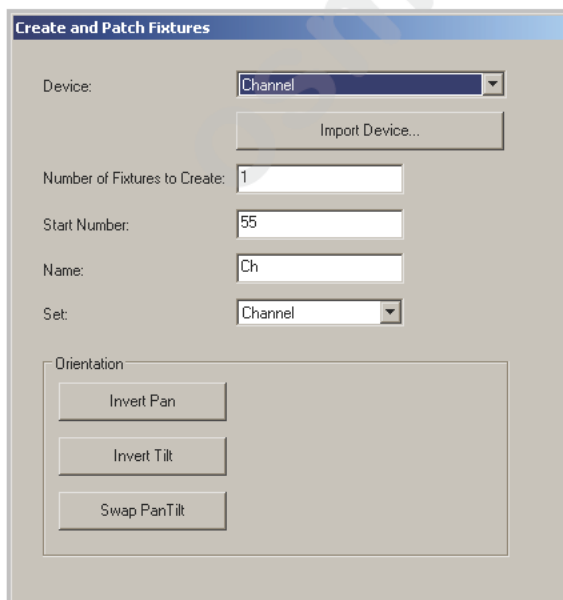
Figure 37: Creating fixtures in the Create & Patch wizard
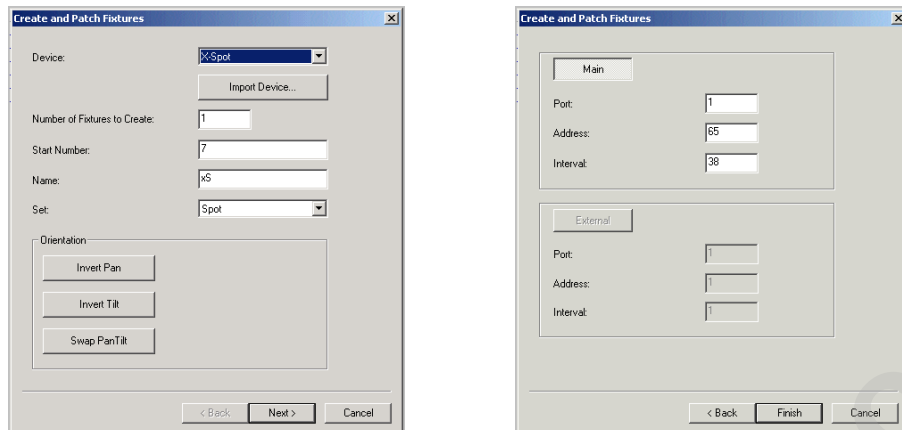
Figure 38: Create and patch fixtures wizard

Create fixture fields	*Field Information*
Device	The drop down list shows the devic s imported to the patch manager.
Number of fixtures to create	Choose the number of fixtures fo the selected device.
Start number	Assign the first fixture numbe for the selected device. Vector automatically assigns sequential number according to the number of fixtures as defined in the Create numbe of fixtures field.
Name	Type a nam for the device. The name is displayed in the live editor display if Fixture N me i included in the live display grid properties.
Set	Set orga ize the fixtures into generic groups: • Set 0 - Channel Set 1 - Spot • Set 2 - Matrix • Set 3- Media server
O ienta ion	Change the pan/tilt orientation for the fixtures created here.

Figure 39: Patching DMX channels in the Create & Patch wiza d

Patch fixture fields	Field Information
Main	This is the default.
Port	Enter the DMX univer (por) number for the fixture(s). The default is the first universe contai ing a ailable DMX channels.
Address	Vector automatical y displays the next available address. Vector aut atica ly calculates the DMX length starting from the address in this field Example: If the address is 5, patching fixtures that use 10 DMX channels assigns DMX addresses 5 through 14 to the first fixture, 15 through 24 to the second fixture, etc.
Interval	When in the channel set, the default is 1. When in the spot set, the default interval is the DMX length of the device.
External	Check this to patch an external dimmer. **IMPORTANT!** For scrollers: The dimmer is Main. The scroller is External. For yokes: The yoke is Main. The dimmer is External.

To create and patch fixtures

Example: Create 12 fixtures for VL2402 devices. The fixtures start number is 24. Patch the 12 fixtures to DMX universe 3, starting at DMX channel 1.

1 Tap [icon]. The Create and Patch dialog box opens.

2 Select VL2402 from the device drop down list.

3 Enter 12 fixtures in the Create Number of Fixtures field.

4 Enter 24 in the Start Number field.

5 Type a name for the device in the Name field. This name will appear in the live display.

6 Tap *NEXT*.

7 Enter 3, the DMX universe number, in the Port field.

8 Enter 1, the DMX start address, in the DMX address field.

9 Optional - change the patch interval in the Patch interval field. The default interval is the length of the device.

10 Tap *FINISH*. The dialog closes.

The fixtures and their patch information appear in the spot set grid.

To leave intervals between DMX addresses

Example: Allow 5 DMX addresses between each fixture.

Stand on the Patch interval field and enter the number 5.

To patch more than 1 DMX address to a fixture (soft   tch)

Example: Add Port 1, DMX address 55 to fixture 1, which   patched to Port 1 DMX 1. If DMX 55 is in use, you first must clear it.

1 In the Patch Manager workspace tree, sel ct th channel set under the Set node.

2 Right click on the cell for fixture 1.

A fly out menu opens.
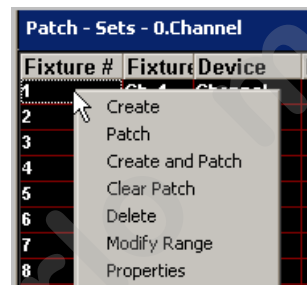
Figu   40: Fixture cell flyout menu

3 Choose Properties.

The Fixture Properties dialog box opens.

4 Tap the Patches tab.

5 Tap *NEW*.

6 Enter the connector and address that will be added to the current patch. In this example, enter 55 in the DMX address field.
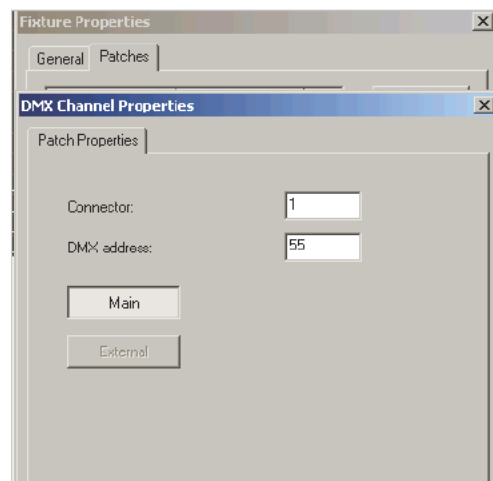
Figure 41: Adding a DMX address in the Fixtures Properties dialog box

7 Tap **OK**.

8 Tap **OK**.

The additional DMX address can be seen in the channel set spread sheet.

Figure 42: Channel patch display

Creating and patching fixtures with scrollers

Fixtures with scrollers can belong to either the channel set or the spot set.

Scrollers are usually part of the channel set and appear in the live channel display. The frame value is displayed in the color row. Scrollers that are part of the spot set appear in the spot display. The frame value is displayed in a color parameter row. In both cases, it is necessary to select only the spot or channel number to access the dimmer and the scroller.

Scrollers in the channel set - live display

Scrollers in the spot set - live display

Figure 43: Scrollers as channels and spots

To create and patch scroller fixtures

Example: Create 12 fixtures for 16 frame scrollers. The fixtures start number is 1. Patch the 12 fixtures to DMX universe 1, starting at DMX channel 1. Patch the scrollers to DMX universe 3 starting at DMX channel 1.

1 Tap .

The Create and Patch dialog box opens.

2 Tap **IMPORT DEVICE**.

The Import Device dialog box opens.

3 Expand the Generic node and select Ch+Scroller 16F from the device drop down list.

4 Enter 12 fixtures in the Create Number of Fixtures field.

5 Enter 1 in the Start Number field.

6 Type a name for the device in the Name field.

This name will appear in the live display.

7 Tap **NEXT**.

8 Enter 1, the DMX universe number, in the Port fi ld

9 Enter 1, the DMX start address, in the Addr ss fi ld

10 Tap **EXTERNAL**.

The external Port, Address, and Interval f elds are now active.

11 Enter 3, the DMX universe numb r, in he Port field.

12 Enter 1, the DMX start address, in he Address field.

13 Tap **FINISH**.

The fixtures and their p tch information appear in the channel set grid.

Figure 44: Patched fixtures with scrollers

Creating fixtures for selections in fixture mode

Patching fixture sets using consecutive fixture numbers allows you to select fixtures, when programming your show, without specifying the fixture type. See .

An example of fixtures patched with no overlap is:

Fixture set	Fixture numbers
Channel	1 to 100
Spot	201 to 300
Matrix	401 to 512
Media server	513 to 1024

Applying the patch and exiting the patch manager

Apply the patch when you want to save the patch, update the show, and continue worki g in the patch manager. Neglecting to apply the changes in the patch while continuing to work in the patch manager may cause anomalies. For instance, you have cleared the patch for a number of fixtures and now attempt to patch using the DMX addresses you just cleared If you have not applied the patch after clearing, the system generates the message: *Patch Exist* . App ying the patch after the clear operation prevents this.

To apply the patch

Tap ☑ .

To exit the Patch Manager

1 Tap ⓞ .

   You are prompted to save the p tch data.

2 Tap *YES* to save chang

   Tap *NO* to exit withou saving.

Note: If you chose *YES*, exiting the patch manager automatically applies the patch.

Editing the patch

Edit the patch to:

- Add or delete fixtures
- Change DMX addresses
- Renumber or rename fixtures
- Change the pan/tilt orientation
- Change a device setup
- Change DMX channel properties

All of these features can be accessed via the icons on the Patch Manager tool bar. See .

They can also be accessed through a shortcut menu.

To open the shortcut menu

1 In the Patch Manager workspace tree, expand the Set node.

2 Choose a set.

The main patch display shows a spread sheet for the selected set.

3 Right click on a fixture cell.

A shortcut menu opens.

Patch - Sets - 0.Channel

Fixture #	Fixture	Device	
1			
2	Create		
3	Patch		
4	Create and Patch		
5	Clear Patch		
6	Delete		
7	Modify Range		
8	Properties		
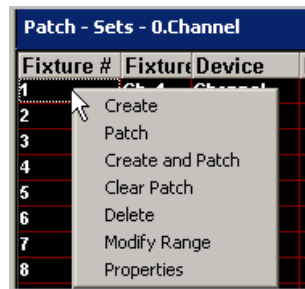
Figure 45: Fixture cell flyout menu

4 Choose one of the options.

The appropriate dialog opens.

Deleting fixtures and clearing patch assignments

You may want to repatch fixtures.

IMPORTANT! Always clear patch a signments before reassigning DMX addresses.

To delete fixtures

1 Select the appropriat set.

2 Tap [icon]

Or

Righ click on the fixture cell and choose Delete from the shortcut menu.

The Delete Fixture dialog box opens.

3 Enter the fixtures' numbers in the From No. and To No. fields.

4 Tap *OK* to update and close the dialog box.

Or

Press *APPLY* to update the show and keep the dialog box open.

To clear patch assignments

1 Select the appropriate set.

2 Tap [icon].

Or

Right click on the fixture cell and choose Clear Patch from the shortcut menu.

The Clear Patch dialog box opens.

3 Enter the fixtures' desk numbers in the From No. and To No. fields.

4 Tap **OK** to update and close the dialog box.

Or

Tap **APPLY** to update the live functioning and keep the dialog box open.

Editing fixture properties

Use the Modify Fixtures wizard to:

- Renumber fixtures

- Rename fixtures

- Change the pan/tilt orientation. Pan/tilt orientation is also available on t e Ed tor toolbar in spot mode.

Figure 46: M dify Fixtures wizard

Modify fixt re fields	Field Information
Set	This field is disabled. Make sure this shows the appropriate set. If not, exit the wizard and choose the correct set.
Fixture no.	Select a range of fixtures for modification.
Device	The drop down list contains the devices imported to the patch manager.
Renumber starting from	Type the new numbering. Not implemented yet.

Modify fixture fields	Field Information
Rename to	Type a new name for the selected fixtures. The name is displayed in the live spot or channel display if Fixture Name is included in the live display grid properties.
Set	This field is disabled. Make sure this shows the appropriate set. If not, exit the wizard and choose the right set.
Orientation	Change the pan/tilt orientation for the fixtures.

To rename fixtures

1   Select the set.

2   Tap 　.

> *Or*

 Right click on the fixture cell and choose Modify Range from the shortcut menu.

The Modify Fixtures wizard opens.

> **Note:** If editing a range of fixtures, select the first ixture in the range. This fixture number will appear in the Fixture no field.

3   Enter the range of fixtures in the Fixtu   no. field.

4   Tap *NEXT*.

5   Type a name in the Rename T   field

6   Tap *FINISH*.

To adjust pan and tilt orie   tation in the patch manager

1   Select the spot set

2   Tap 　

> *Or*

 Right click on the fixture cell and choose Modify Range from the shortcut menu.

The Modify Fixtures wizard opens.

3   Enter the range of fixtures in the Fixture no. field.

4   Tap *NEXT*.

5   Choose:

> ■*INVERT PAN*

> ■*INVERT TILT*

> ■*SWAP PAN/TILT*

6   Tap *FINISH*.

To adjust pan and tilt orientation in the editor

1 Select the spots.

2 On the Editor toolbar, tap **PAN/TILT PATCH**.

3 Tap:

- ■**INVERT PAN**

- ■**INVERT TILT**

- ■**SWAP PAN/TILT**

4 Press **STORE**.

5 Press **ENTER**.

Editing DMX channel properties

Editing DMX channels is done in the DMX Channel Properties   alog box.
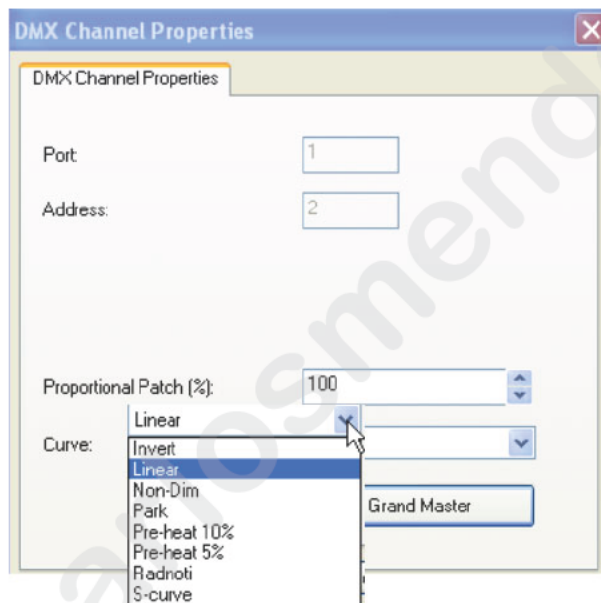
The Port and Address fields show the DMX address for the selected DMX channel

Set the proportional patch level

Choose the dimmer curve from the drop down menu

Enable or disable grand master control over the selected DMX channel

F gure 47: DMX Channel Properties dialog box

Dimme curves

The dimmer curve is the dimmer behavior when fading from 0%-100%. There are 5 dimmer curves available.

Curve Type	Description	System	Output
Linear	Dimmer behavior default.	10%	10%
Inverted	Output is inverted	10%	90%
Non-dim	Output is either 0 or FL	< 50%	0
		> 50%	FL

Park	Dimmer output level is always at the parked level. Dimmers can only be parked at 100%.	—	100%
Preheat 10%	The dimmer is always maintained at 10%.	—	10%
Preheat 5%	The dimmer is always maintained at 5%.	—	5%
S-Curve	Softer rise than the linear curve.	10%	10%

To change DMX channel properties

1 Display the DMX universe (port) grid.

2 Right click on the DMX channel you want to modify.

If editing more than one DMX channel, right click on the first channel in t e r nge.

3 If editing one DMX channel, choose Properties from the fly out me u.

If editing more than one channel, choose Modify Range.

4 Make sure the address number in the Address field is correct

If editing a range of channels, enter the last channel number in the To field.

5 To change the proportional patch, use the Propor ional patch spin box to set the value.

To change the curve, select a curve from the Curve combobox.

To disable grand master (GM) control ove the selected DMX channel(s), uncheck the GM check box.

6 Tap *OK*.

The dialog box closes.

7 Tap to apply the cha ges.

Changing a device setup

To change a d vice s par meter set up and wheel assignments, open the Device Builder from the Patch Manager.

To op the Device Builder

1 In the Patch Manager workspace tree, tap Devices.

2 Right click on the device being modified and choose Properties from the fly out menu. The Device Builder opens.

3 Change the device setup and save the device.

4 Optional: to make the device generally available, save it in the device library:

Tap *SAVE IN LIBRARY* ▶ Browse to your device library ▶ Tap *OK*.

ATTENTION! Devices modified in the Device Builder via the Patch manager are saved only in the current show.

Patch and test functions in the editor

Patch functions that can be done in the live editor, without opening the patch manager are:

- Patching fixtures to DMX channels
- Clearing patch
- Parking dimmers
- Testing dimmers and DMX channels

Patching to DMX addresses in the editor

Pressing **DIM** on the console puts the toolbar in patch mode.

Figure 48: Dim (patch) mode on the Editor toolbar

The Editor toolbar buttons in dim mode are:

- ■ **CLEAR PATCH**
- ■ **EXTERNAL PARAMETER** (patch address for a ext rna dimmer)
- ■ **PARK**
- ■ **PROPORTIONAL LEVEL**
- ■ **CLEAR PROPORTIONAL LEVEL**

When patching in live mode it is useful o view the patch sheet. Open the patch sheet through the Workspace. See "Patch manage work pace tree" page 64.

Fixtures that have no patch assi nments are flagged in the live display.

Fixture	Fixture #	Pan	Tilt	Dimmer	Color
S_1	1	50%	50%		O.W.-1.2%
S_2	2	50%	50%		O.W.-1.2%
S_3	3	50%	50%		O.W.-1.2%
S_4	4	50%	50%		O.W.-1.2%

F gure 49: Fixtures flagged as not patched

To patch channels or spots

Example: Patch channel fixture 5 to DMX address port 2 dimmer 24.

1   Select channel 5.

2   Press **DIM**.

3   Press **2** (the port) **/** (slash) **24** (dimmer) or use the direct dimmer number, in this example, 536.

4   Press **STORE**.

The command line shows *Assigned* when the operation is successful.

OR

1　Press **DIM**.

2　Enter the dimmer number on the numeric keypad.

3　Press **CHANNEL** and **5**.

4　Press **STORE**.

To patch more than 1 DMX address to a channel (soft patch)

Example: Patch Port 2, DMX addresses 12 - 24 to channel 1. If DMX 12 - 24 are p　ched to other channels, you first must clear these assignments.

1　Press **DIM**.

2　Select the DMX addresses: **2/12 ➜ 2/24**.

3　Press **CHANNEL** and enter **1** on the numeric keypad.

4　Press **STORE**.

To clear patching

Example: Clear the patch assignment for chann　l 5 whi　h is patched to port 1, DMX offset 5.

1　Select channel 5.

2　Press **DIM**.

3　Press **DELETE**. The Delete dialog box opens.

4　Press **DELETE** again. or tap *DE　ETE* in the dialog box.

The command line shows *Released* when the operation is successful.

OR

1　Select channel 5.

2　Press **DIM**.

3　Tap *CLEAR PATCH* (on the Editor tool bar).

T　e D　lete dialog box opens.

4　Pr　ss **DELETE**.

R

1　Press **DIM**.

2　Tap *CLEAR PATCH* (on the Editor tool bar).

The Delete dialog box opens.

3　Tap *DELETE*.

To patch external dimmers

Example: Channel 8, patched to DMX channel 8, is a fixture with a scroller. Patch the external dimmer number, for the scroller, to DMX channel 108.

1　Press **DIM** and select the dimmer number, 108.

2 Tap *EXTERNAL PARAMETER*.

3 Select fixture channel 8.

4 Press **STORE**.

To set proportional dimmer levels

1 Press **DIM**.

2 Enter the DMX address on the numeric keypad.

3 Tap *PROPORTIONAL PATCH*.

4 Press **@** and enter the proportional level on the numeric keypad or use the whe l lab lled Proportional Level.

5 Press **STORE**.

OR

1 Select a fixture.

2 Press **DIM**.

3 Tap *PROPORTIONAL PATCH*.

4 Press **@** and enter the proportional level o the ume ic keypad or use the wheel labelled Proportional Level.

5 Press **STORE**.

To clear proportional patch

1 Press **DIM** and chose the dimm number using the numeric keypad.

2 Tap *CLEAR PROPORT ONAL LEVEL*.

3 Press **STORE**.

E

To patch fixture

Examp e: Patch channel fixture 5 to DMX address port 2 dimmer 24.

1 P ss **DIM**.

2 Enter the dimmer number on the numeric keypad.

3 Press **CHANNEL** and **5**.

4 Press **ENTER**.

OR

1 Select channel 5.

2 Press **DIM**.

3 Press **2** (the port) **/** (slash) **24** (dimmer) or use the direct dimmer number, in this example, 536.

4 Press **ENTER**.

To patch more than 1 DMX address to a channel (soft patch)

Example: Patch Port 2, DMX addresses 12 - 24 to channel 1. If DMX 12 - 24 are patched to other channels, you first must clear these assignments.

1 Press **DIM**

2 Select the DMX addresses: **2/12 ➜ 2/24**.

3 Press **CHANNEL** and enter **1** on the numeric keypad.

4 Press **ENTER**.

To clear patching

Example 1: Clear the patch assignment for channel 5 which is patched to port 1 DMX offset 5.

1 Press **DELETE**.

2 Select channel 5.

3 Press **DIM**.

4 Press **ENTER**.

The Delete dialog box opens.

5 Press **ENTER** again or tap *DELETE* in the dialog box

OR

1 Press **DELETE**.

2 Press **DIM**.

3 Select the dimmer by pressing **1 5**.

4 Press **ENTER**.

The Delete dialog box pens.

5 Press **ENTER** ag in o tap *DELETE* in the dialog box.

OR

1 Press **DIM**

2 Sele the dimmer by pressing **1/5**.

3 Press *CLEAR PATCH*. The Delete dialog box opens.

4 Press **ENTER** or tap *DELETE* in the dialog box.

To patch external dimmers

Example: Channel 8, patched to DMX channel 8, is a fixture with a scroller. Patch the external dimmer number, for the scroller, to DMX channel 108.

1 Press **DIM** and select the dimmer number, 108.

2 Tap *EXTERNAL PARAMETER*.

3 Select fixture channel 8.

4 Press **ENTER**.

To set proportional dimmer level

1 Press **DIM**.

2 Enter the DMX address on the numeric keypad.

3 Tap *PROPORTIONAL LEVEL*.

4 Press **@** and enter the proportional level on the numeric keypad or use the wheel labelled Proportional Level.

5 Press **ENTER**.

OR

1 Select a fixture.

2 Press **DIM**.

3 Tap *PROPORTIONAL PATCH*.

4 Press **@** and enter the proportional level on the numeric keypad or use the wheel labelled Proportional Level.

5 Press **ENTER**.

To clear proportional patch

1 Press **DIM** and chose the dimmer number u ing the numeric keypad.

2 Tap *CLEAR PROPORTIONAL LEVEL*

3 Press **ENTER**.

Test fixtures, dimmers, and DMX offsets

Test channels, dimmers, and DMX ffsets when in editor mode.

> **ATTENTION!** When a d mmer is selected, the trackball can control the dimmer intensity.

A

To test dimmers

1 **DIM #** to select a dimmer.

2 Press **@ ##**, **ZERO**, **FULL**, or **ON** to set the test level.

3 Press **NEXT** or **PREVIOUS**.

The current selection fades to zero and the next (or previous DMX offset) fades to the set level.

To test DMX offset

1 Press **DIM** and select the dimmer number using #/# format.

The first number is the DMX universe and the second number is the offset. Example: 2/4 is DMX port 2, dimmer 4.

2 Set a level using **@** or **ZERO** or **FULL** or **ON**.

3 Press **NEXT** or **PREVIOUS**.

The current selection fades to zero and the next (or previous DMX offset) fades to the set level.

Note: When reaching the last offset for the DMX port, Vector automatically test the first offset in the next port.

To test channels or spots

1 Select the spot or channel.

2 Set a dimmer level using **@ ##**, **ZERO**, **FULL**, or **ON**.

3 Press **NEXT** or **PREVIOUS**.

E

To test dimmers

1 **DIM #** to select a dimmer.

2 Press **@ ##**, **ZERO**, **FULL**, or **ON** to set the test level

3 Press **ENTER**.

Skip this step if you used the trackball to set he immer level.

4 Press **NEXT** or **PREVIOUS**.

The current selection fades to zero and th next (or previous DMX offset) fades to the set level.

To test DMX offset

1 Press **DIM** and select the d mmer number using #/# format.

The first number is the DMX universe and the second number is the offset. Example: 2/4 is DMX port 2 dimmer 4.

2 Set a level using **@** or **ZERO** or **FULL** or **ON** or the Dimmer Test wheel.

3 Pres **EN ER**.

4 Press **NEXT** or **PREVIOUS**.

The current selection fades to zero and the next (or previous DMX offset) fades to the set level.

Note: When reaching the last offset for the DMX port, Vector automatically test the first offset in the next port.

To test channels or spots

1 Select the spot or channel.

2 Set a dimmer level using **@ ##**, **ZERO**, **FULL**, or **ON**.

3 Press **NEXT** or **PREVIOUS**.

> **Tip!** After pressing **RESET** you can still select the next or previous dimmer by pressing **DIM NEXT** or **PREV**

To exit test mode

Press **CLEAR**, **RELEASE**, or **RESET** or move the intensity wheel. The last channel, spot, dimmer, or offset tested, returns to its previous level.

To restore dimmer selection

Press **DIM** and ● to restore the last dimmer selection.

Identify fixtures and dimmers using Flash

The flash feature is an easy way to identify fixtures or dimmers.

To flash fixtures or dimmers

1. Select a single dimmer or fixture or select a range of d mmer or fixtures.
2. Tap *FLASH* on the Editor tool bar.

   The selected dimmers or fixtures blink betw en 0% and 80%.

Examining the patch

You can examine the patch for all chann l and spots or individual channels and spots.

To examine the channel patc

1. Press **CHANNEL**.
2. Press **EXAM**. A list of the channels and their patch information is displayed.

OR

1. Press **CHANNEL** and select the channel number.
2. Pre s **EXAM**. The patch information for the selected channel is displayed.

To exam ne the spot patch

1. Press **SPOT**.
2. Press **EXAM**. A list of the channels and their patch information is displayed.

OR

1. Press **SPOT** and select the channel number.
2. Press **EXAM**. The patch information for the selected channel is displayed.

To examine the patch by sets

1. Press **SET** and select the channel number.
2. Press **EXAM**. The patch information for the selected set is displayed.

Using park

Dimmers, spots, spot parameters, channels and cues can be parked at a specified level. Parked items remain at the specified level and do not respond to level changes in the editor or to the general master.

Park levels must be set using **FL**, **ZERO**, or **@** and a numerical entry.

> **Note:** The black out key (**B.O**.) also blacks out parked items.

There are two ways to view parked dimmers:

- In the live fixture display - Parked dimmers are designated by an icon alongside th fixtu e number.

- Through the Workspace - Parked dimmers and their parked values are di played

Parked dimmer icon

| Fixture No | 🔲 41 | 🔲 42 |
| Dimmer | | |
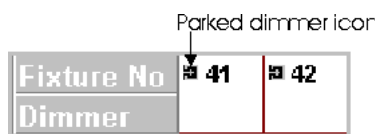
Figure 50: Parked dimmers on the live fixture display

Patch - Park

Address	Dimmer Nu	Fixture	Parameter	Fixt Park Value	Dimmer Park Valu
1/5	5	5.Ch_5	Dimmer	35%	
1/8	8	8.Ch_8	Dimmer	25%	**Parked value**
1/9	9	9.Ch_9	Dimmer	35%	
1/10	10	10.Ch_10	Dimmer	45%	

Figure 51: Parked dimmer exam via th   Workspace tree ▶ Park node

A

To park dimmers or DMX offsets

1 Press **DIM**

2 Enter the dimmer number (or DMX offset) on the numeric keypad.

3 Tap *PARK* (on the Editor tool bar).

4 Press **@** and enter a level.

To r lease all parked dimmers or DMX offsets

DIM, **PARK**, **RELEASE**

To release selected parked dimmers

RELEASE, PARK, **DIM**, #, **ENTER**

To park a channel

Example: Park channel 8 at 25%.

1 Select channel 8.

2 Press **PARK**.

3 Press **@** and **25**.

4 Press **STORE**.

Channel 8 is now parked at 25% intensity.

To release specific parked channels

CHANNEL # (→ #), **PARK**, **RELEASE**

To park a spot's dimmer parameter

1 Select spots.

2 Press **FULL** or **ON**.

3 Press **PARK**.

To park a parameter

1 Select the spot.

2 Select a parameter.

3 Press **PARK**.

4 Set the parameter's parked level.

To park all parameters

1 Select spots.

2 Press **@**.

3 Press **FULL** or **ON**.

4 Press **PARK**.

To park multiple parameters

Example: Park all he parameters for a range of spots.

1 Select t e sp s.

2 Set arameter values.

3 Pr s **SHIFT** + **PARK**.

4 Press **STORE**.

To release all parked spots

SPOT, **PARK**, **RELEASE**

To release specific parked spots

SPOT # (→ #), **PARK**, **RELEASE**

To release specific parked parameters

SPOT # (→ #), parameter type and parameter, **PARK**, **RELEASE**

To view parked dimmers and fixtures

1 Press **DIM**.

The Editor tool bar is now in dim mode.

2 Tap *PARK*.

3 Press **EXAM**.

The parked dimmers are flagged with an icon.

OR

Open the Workspace tree, expand the Patch node, and choose Park.

See,

E

To park dimmers or DMX offsets

1 Press **PARK**.

2 Press **DIM**.

3 Enter the dimmer number (or DMX offset) on the n mer keypad.

4 Press **@** and enter a level.

5 Press **ENTER**.

To release all parked dimmers or DMX offsets

RELEASE, PARK, **DIM**, **ENTER**

To release selected parked dimmers

RELEASE, PARK, DIM, #, **ENTER**

To park a channel

Example: Park hannel 8 at 25%.

1 Pr ss **PARK**.

2 S lect channel 8.

3 P ess **@** and **25**.

Press **ENTER**.

Channel 8 is now parked at 25% intensity.

To release all parked channels

RELEASE, PARK, **CHANNEL, ENTER**

To release specific parked channels

RELEASE, PARK, **CHANNEL # (→ #), ENTER**

To park a spot's dimmer parameter

1 Press **PARK**.

2 Select spots.

3 Press **FULL** or **ON**.

4 Press **ENTER**.

To park a parameter

1 Press **PARK**.

2 Select the spot.

3 Select a parameter and set its level.

4 Press **ENTER**.

To park a spot's dimmer parameter

1 Select spots.

2 Press **PARK**.

3 Press **@**.

4 Press **FULL** or **ON**.

5 Press **ENTER**.

To park multiple parameters

Example: Park all the parameters for a ra ge of pots.

1 Select the spots.

2 Set parameter values.

3 Press **SHIFT** + **PARK**.

4 Press **ENTER**.

To release all parked sp ts

RELEASE, PARK SPOT, ENTER

To releas specific parked spots

RELE SE, PARK, **SPOT # (→ #), ENTER**

To r lease specific parked parameters

RELEASE, PARK, SPOT # (→ #), parameter type and parameter, **ENTER**

To view parked dimmers

1 Press **EXAM**.

2 Press **DIM**.

The Editor tool bar is now in dim mode.

3 Tap *PARK*.

4 Press **ENTER**.

The parked dimmers are flagged with an icon.

Examining patch information

You can examine:

- Patch information for specific fixtures
- Each DMX universe
- Parked dimmers

A **E**

To exam patch information for a specific fixture

1 Open the Workspace tree.

2 Expand the Patch node.

3 Expand the Sets node.

4 Expand the appropriate set.

5 Choose the fixture.

   The fixture's patch information is displayed in the activ   pane or the default exam tab.

A

To exam patch information for a specific fixtu e

1 Press **CHANNEL** or **SPOT**.

2 Enter the fixture number on the nume ic keypad.

3 Press **DIM**.

4 Press **EXAM**.

E

To exam patch informat on for a specific fixture

1 Press **EXAM**

2 Press **CHANNEL** or **SPOT**.

3 E ter he fixture number on the numeric keypad.

4 Pr ss **DIM**.

5 Press **ENTER**.

To examine the patch for a DMX universe

1 Open the Workspace tree.

2 Expand the Patch node.

3 Expand the DMX node.

4 Choose the DMX universe.

   The patch information is displayed in the active pane or the default exam tab.

A **E**

To view parked dimmers

1 Open the Workspace tree.

2 Expand the Patch node.

3 Tap DMX.

4 The DMX address exam opens.

5 Tap the Park tab to view parked dimmers.

Parked dimmer levels are displayed here.

A

To view parked dimmers

1 Press **DIM**.

2 Tap *PARK*.

3 Press **EXAM**.

The parked dimmer exam looks like this:

Parked dimmer icon

Fixture No	41	42
Dimmer		

Chapter 5   Selecting and Controlling Fixtures

This chapter includes the following sections:

- Selecting fixtures (see page 91)
- Working with groups (see page 96)
- Resetting the editor (see page 102)
- Spot ignition (see page 102)
- Selecting parameters and controlling parameter values (see page 103)
- Selecting fixtures using Active (see page 118)

Selecting fixtures

Fixtures must be selected, so they are available for editing. Fixtures that have been assigned values in the editor can then be stored as cues.

Selection options are available through th tou h screen buttons, on the Editor tool bar, and through dedicated console keys. When the Inte activ Fixture Selection option (under the View menu) is enabled, fixtures can be selected by t pping directly on the live fixture display.

Console keys used for fix ure selection	
Key	*What it does*
SPOT	S t the keypad for spot selection.
CHANNEL	Set the keypad for channel selection.
MATRIX	Set the keypad for matrix or media server selection. If both matrix and media server are patched, this key defaults to **MATRIX**. **Tip!** If both matrix and media server are patched, program a macro (**SHIFT** + **SET 3/**) for one press access to the media server set. See "Storing macros" page 299.
MEDIA SERVER	Set the keypad for matrix or media server selection. **MEDIA SERVER** shares the **MATRIX** key and is accessed using **SHIFT**. **Note:** If there is no matrix patched the **MATRIX** key defaults to **MEDIA SERVER**.

Console keys used for fixture selection	
Key	**What it does**
SET	Select fixtures using the set organizer.
	Example: **SET 0/ 1 → 12**, selects channels 1 through 12.
	Example: **SET 1/ 1 → 12**, selects spots 1 through 12.
	Example: **SET 2/ 100 → 200**, selects fixtures in a matrix.
	Example: **SET 3/ 1 → 12**, selects media server fixtures.
	SET shares the **GROUP** key and is accessed using **SHIFT**.
0 - 9	Use for numeric entries.
→	'Thru' for range selections.
—	Use to remove a fixture from a range selection.
	Example: **CHANNEL 1 → 5 — 4**, selects channels 1 2, 3, 5.
+	Functions as an "and" key when used between fixture selections.
	Example: **CHANNEL 1 + 3 + 7 + 11**, l cts hannels 1, 3, 7, and 11.
● or wheel	Makes the last selection availab Ex mple: Before pressing **RESET**, the selection was spots 1, 3, 6, and 8.
	Press **SPOT** ● or move a p rameter wheel to access the last fixture selection.
Fixture	**Note:** This is not a key on he console panel.
	When fixture set numbe s are consecutive (not overlapping), the command line numeric de ult is automatically set to *Fixture*.
	Example Channels are numbered 1 → 100. Spots are numbered 101 → 164. Sele t **98** and channel 98 is selected; select **124** and spot 124 is selected.

To select sin le fixture

SPOT, **1**. *Sp t 1* is displayed in the command line. All spot 1 parameters can now be assigned paramet r values using the parameter wheels or console keys.

CHANNEL, **1**. *Channel 1* is displayed in the command line. The channel's dimmer and, if present, scroller can now be assigned values using the wheels or console keys.

To select a sequential range of fixtures

SPOT, **1**, **→**, **24**. Selects all the spots in the range.

To select a non-sequential range of fixtures

SPOT, **1**, **+**, **6**, **+**, **9**. Selects spots 1, 6, and 9.

To clear a selection

Press **RESET**.

Clears the editor, but the last selection is still available on the wheels and the fixture names appear in yellow in the Live display.

OR

Press **SHIFT** + ●.

The fixture selection and command line are cleared, but the editor values remain. The command line defaults to the numeric default setting.

Note: To completely reset Vector, press **SHIFT** + **RESET**. Until this is done the last selection is always available on the wheels.

Quick selection options

In selection mode, the Editor tool bar offers quick selection options for frequently used selection types.

Figure 52: Selection mode on the Editor toolbar

Button	**What it does**	**Console key equivalents**
LAST SELECTION	Re-selects the last selection	● or wheel
ALL EDITOR	Selects the entire editor output.	**ACTIVE**
EVERY	Opens additional selection filters.	
USED IN SHOW	Selects all the patched fixtures that have been used in cues.	

Filtering selections

The Editor tool bar provides selection filters. Pressing *EVERY* opens the selection filter options.

Figure 53: Every (selection) mode on the Editor tool bar

BUTTON	What it does	Console key equivalents
EVERY	Opens filter options.	none
ODDS	Selects every other fixture, within the designated range, starting with the first fixture. Example1: The range 1 thru 8 is selected. Tapping ODDS selects 1, 3, 5, and 7. Example 2: The range 2 thru 8 is selected. Tapping ODDS selects 2, 4, 6, and 8.	1
EVENS	Selects every other fixture, within the designated range, starting with the second fixture. Example1: The range 1thru 8 is selected. Using EVENS select 2, 4, and 6. Example 2: The range 2 thru 8 is selected. Using EVENS s lects 3, 5, and 7.	2
3RD	Selects every third fixture, within the designated r nge, starting with the first fixture.	3
4TH	Selects every fourth fixture within the de ignated range, starting with the first fixture. Note: Even though the T olbar buttons are only up to 4th (every fourth fi ture) you can enter any number on the keypad.	4
/	Advance selection by a specified increment. Example: 4 / 2, sel cts the second fixture in each group of four fixtures. Ther fore CHANNEL 1 → 20 EVERY 4 / 2, selects channels 2, 6, 1 14, nd 18.	/

To us the quick selection buttons

1 Press **SPOT** or **CHANNEL**.

 Skip this step if the command default is the fixture type you want.

2 Select a range of fixtures.

3 Tap one of the quick selection buttons.

 The selected fixtures are displayed in yellow in the live display (and are shown in the command line) and are available for editing.

To grab the last selection

The last fixture selection can be quickly accessed.

Tap **LAST SELECTION** on the Editor tool bar.

The last selection is highlighted in the live display and is displayed in the command line.

OR

Move any wheel. The wheel grabs the last selection.

OR

Press ●. The last selection is highlighted in the live display and is displayed in the command line.

Interactive fixture selection

You can select fixtures directly from the live channel, spot, media server, and matri   displ ys. The default setting for this feature is disabled.

To enable interactive fixture selection

Go to the View menu and tap [icon] (Interactive fixture selection)

To use the interactive fixture selection feature

In the live display, tap the fixture numbers to select th m

Selecting fixtures via the topo map

The topo map can be used to select fixtures See <u>"Topo" page 305</u>.

To select fixtures via the topo map

Tap single fixtures or drag y ur ointing device to mark multiple fixtures.

Note: Make sure the top view is not in edit mode. If topo is in edit mode dragging fixtures moves them to a new location on the topo map.

Command line numerica default

A command line default can be set so Vector recognizes the first number entered as a belonging to the def u obj ct. The default selection makes it unnecessary to select the object type. When the editor is idle the command line default appears in parenthesis.

Command line default

>>[Spot]

Mode: T A Editor: 1

Figure 54: Spot is the command line default

The command line numerical default can be set for:

- Spot
- Channel
- Matrix
- Media Server
- Fixture

- QList
- Cue
- Group
- Dimmer

To set the command line selection default

Example: Set the command line default for spot or channel.

1. Press **SPOT** twice. *Spot* appears in the command line. Vector now recognizes the first number selection as spot selection, making it unnecessary to press this key before the number selection.

   Or

2. Press **CHANNEL** twice. Channel appears in the command line. Vector recognizes the first number selection as a channel without needing to press this key.

Note: In the selection sequences examples, the instruction to press the keys **SPOT** r **CHANNEL** is included for clarity. If the command line default is appropriate t the pe of fixture selection there is no need to press these keys.

Working with groups

Groups are collections of frequently used fixture selections. They are used for quick editing selections. Groups can be combined and manipulated lik all her selection sequences. It is convenient to save groups of fixtures that are related by type, unct n, or hanging position.

Automatic groups

Through the Generate Groups and Libs dial g box, Vector automatically generates fixture groups.

The automatic fixture group opti ns fo spots per device, channels, scrollers, matrix devices, and media server devices, are:

- All
- Even
- Odd
- Every ird - counting from the first fixture of a device type.
- Every fourth - counting from the first fixture of a device type.

You can choose to generate groups for some or all of the fixtures used in the show.
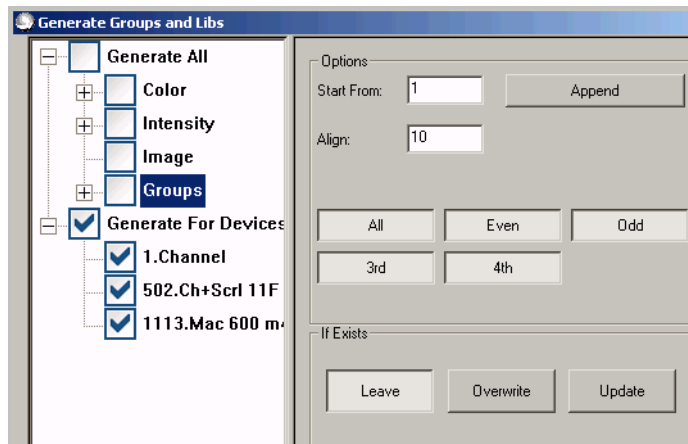
Figure 55: Generate libraries and groups dialog box

You can number groups to your convenience in the dialog box's numbering area. The numbering option fields are:

Start From   Store the first generated group to the numb   in his field and sequentially increment the groups.

Align   Choose an offset to leave space f r groups that will be stored later on. Generally, it is convenient to chose an offs t that corresponds to your display set up.

             Example: Assume that you h ve sized the soft keys pane to show 5 soft keys per row. You choose to generate 5 groups for each fixture type. If the start number is 1 and the offset is 10, th generated groups will appear in every other row.

If there are existing groups yo   can choose to:

- Leave them as is
- Overwrite them
- Update them

To ge   rate groups automatically

1   Open the Tools menu and tap Generate Groups and Libs.

        The dialog box opens.

2   Expand Generate All.

3   Make sure Groups is checked.

4   Expand Generate for Devices and make sure the devices you want organized into groups are checked.

5   Set the start number in the Start from fields and the offset in the Align field.

6   Select the type of group (Even, Odd, All, 3rd, 4th).

7   Select the behavior (Leave, Overwrite. or Update).

8   Tap **APPLY**.

Storing user-defined groups

Groups can contain any number of fixtures and fixture types.

[A]

To store groups

1 Select fixtures using any selection sequence.

2 Press **STORE**.

3 Tap a number on the group soft keys.

OR

1 Select fixtures using any selection sequence.

2 Press **GROUP** and enter a number on the numeric keypad.

3 Press **STORE**.

[E]

To store groups

1 Select fixtures using any selection sequenc

2 Press **STORE**

3 Tap a number on the group soft keys

OR

1 Select fixtures using any select n equence.

2 Press **STORE**.

3 Press **GROUP** and ente a number on the numeric keypad.

4 Press **ENTER**.

Tip! The elec ion order is saved with the group. Selection order controls how fan and effects re applied to the selection.

Adding text tags to groups

[A]

To add text tags to groups

1 Select the group.

2 Press **TEXT**.

The Text dialog box opens.

3 Use the keyboard to type the group's name.

4 Press **STORE** or tap *OK*.

The dialog box closes.

OR

Immediately after storing the group, press **TEXT** and follow steps 3 and 4.

E

To add text tags to groups

1 Press **TEXT**.

2 Select the group.

3 Press **ENTER**.

The Text dialog box opens.

4 Use the keyboard to type the library name.

5 Press **ENTER** (on the console or the keyboard) or tap *OK*.

The dialog box closes.

OR

Immediately after storing the group, press **TEXT** and fo low teps 4 and 5.

Deleting groups

A

To delete groups

1 Select the group or select mo e than one group: **GROUP # ➜ #**.

2 Press **DELETE**.

The Delete dial g b x opens.

3 Press **DELETE** gain or tap *DELETE* in the dialog box.

E

To delete groups

1 Press **DELETE**.

2 Select the group or select more than one group: **GROUP # ➜ #**.

3 Press **ENTER**.

The Delete dialog box opens.

4 Press **DELETE** or **ENTER** again or tap *DELETE* in the dialog box.

OR

1 Press **DELETE**.

2 Tap the group soft key.

3 Press **ENTER**.

Examining groups

To view a list of groups

A **E**

Toggle the group soft keys to grid view by tapping [grid]. A list of groups is displayed in the active pane.

A

Press **GROUP** and press **EXAM**.

E

Press **EXAM**, **GROUP**, and then press **ENTER**.

To examine a group

Example: Examine group 5

A **E**

1 View the groups in grid format. If the group tab s in oft key format, toggle to grid view.

2 Double click on group 5.

The contents of the group are display d in th active pane.

A

Select group 5 and press **EXAM**.

The contents of the group ar displayed in the active pane.

E

Press **EXAM**, select he group, and press **ENTER**.

The conten s of the library are displayed in the active pane.

Copying groups

To copy roups

1 Select the source group.

2 Press **COPY**.

The group is copied to the clipboard.

3 Select the target group.

4 Press **PASTE**.

The new group is named *Copy of Group* # (source group).

Editing groups

When editing groups you can choose to:

■ Overwrite the existing group with the selection.

■ Update by adding the selection to the group.

■ Release the selected fixtures from the group

A

To add fixtures

1 Select fixtures.

2 Select the target group.

3 Press **STORE**.

The Object Exists dialog box opens.

4 Tap *UPDATE*.

The dialog box closes and the group is updated with the new inform tion

E

To add fixtures

1 Select fixtures.

2 Press **STORE**.

3 Select the target group's number on the keyp d and press **ENTER**.

Or

Tap the group's number on the group soft key pane.

4 Tap *UPDATE*.

The dialog box closes and th group is updated with the new information.

To release fixtures from groups

1 Press **RELEASE**

2 Select the ixtur s.

3 Tap the g oup's soft key.

The group is updated.

Output location color code

The default color scheme for the console's output shows the output source:

■ Yellow - Fixture numbers for fixtures that are active in the editor.

■ Red - Values currently under wheel control.

■ White - Values in the editor, but not currently under wheel control.

■ Blue - Output from AB.

■ Yellow - Output from the faders or QKeys.

■ Purple - Tracking on the master playback. (tracking mode only).

■ Red - Redundant tracking. (tracking mode only).

Values displayed in white and red are, by default, the values included when storing a cue.

Resetting the editor

Resetting the editor clears all selections and values in the editor. However, the last selection remains active on the wheels. Example: Set a dimmer value for channel 1. Pressing **RESET** cle rs channel 1 from the editor. Move the dimmer wheel and channel 1 is active. Your last sel ctio is available until it is totally released.

To reset the editor

Press **RESET**. All values held in the editor are released in a 2 second fad

Or

Press **RESET RESET** quickly. All values held in the editor ump ut.

To clear the editor and release the last selection

Press **SHIFT** + **RESET**.

Note: This also clears the clipboard.

Default stage values

Pressing **RESET**, sends the paramete values to their default stage values.

Default stage values can be se as a device's home values or as the last editor value. Set this option in the **Settings** dialog box. See "About system settings" page 333.

Spot ignition

The Control picker allows access to all control features. The functions available in the picker depend on the type of spot. Typical functions are:

Lamp on

■ Lamp off

■ Lamp reset

Figure 56: Control picker

To turn the lamp on

1   Select the spots.

2   On the Editor toolbar, tap **CONTROL**.

    The Control picker opens.

3   Tap **LAMP ON** and **CLOSE**.

IMPORTANT!   Spot ignition is a stand alone function. To   on inue working, spots must be selected again.

To turn the lamp off

1   Select the spots.

2   On the Editor toolbar, tap **CON ROL**.

    The Control picker opens

3   Tap **LAMP OFF** and **CLOSE**.

To reset the fixture

1   Select the pots

2   On the Editor toolbar, tap **CONTROL**.

    The Control picker opens.

3   Tap **RESET** and **CLOSE**.

Selecting parameters and controlling parameter values

Parameter values are set for channels, scroller channels, spots, matrix fixtures, and media server fixtures. The wheels and keypad access all parameters.

Parameter values are displayed in the live displays. The parameter's display format options are found under the Format menu. See "Format menu and toolbar" page 55.

Trackball

The trackball is generally reserved for pan and tilt. When fixtures do not have pan and tilt parameters, such as RGB devices, the trackball will also function as a dimmer wheel.

Parameter wheels

The five flat encoders control all parameters. The Wheel Assignments (parameter to wheel) are organized in banks. Parameters can be assigned to up to eight times in any wheel bank or layer. Wheel assignments are made in the Device Builder.

Each parameter wheel has 2 associated keys. The left key pages the bank layer. The right key selects the parameter.
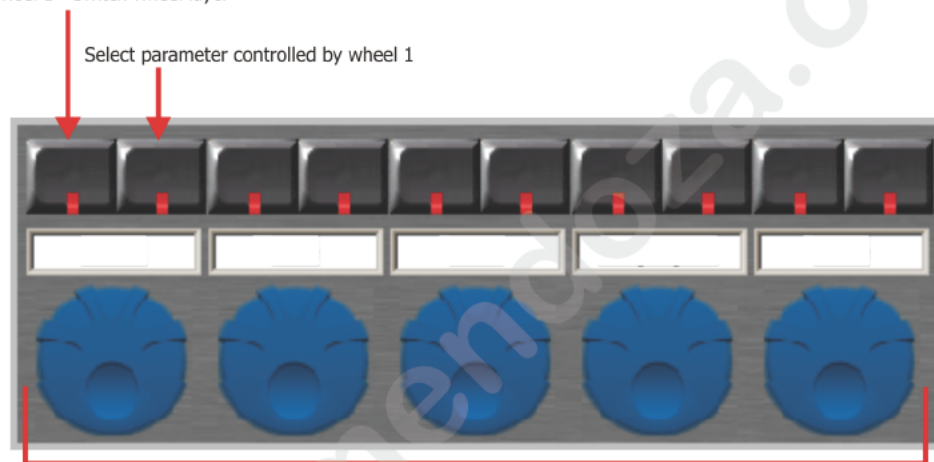
Figure 57: Parameter wheels, parameter keys, and wheel bank paging keys

The vertical wheel control the dimmer for all fixtures. Intensity parameters are also assigned to wheels in the intensity wheel bank.

Although pan and tilt are controlled by the trackball, they are also assigned to wheels in the position wheel bank. Wheels work in normal or fine resolution (for 16-bit parameters). Wheels 3 and 4 are used for fine resolution for 16-bit parameters.

Wheel banks (Parameter types)	Possible parameters
Figure 58: Parameter (type) bank keys	
INTENSITY	Dimmer, strobe
POSITION	Pan, tilt, movement speed

Wheel banks (Parameter types)	Possible parameters
COLOR	Cyan, yellow, magenta, color wheels, color speed.
BEAM	Focus, zoom, iris
IMAGE	Gobo wheels, prism, gobo spin.
SHAPE	Framing shutters, frost

To switch wheel banks

Press a wheel bank (parameter type) key.

The Wheel Assignments display shows the wheel bank for the select d parameter type. The wheels can now be used to set values for the selected parameters.

To use the wheels at fine resolution

Press and hold **SHIFT** while turning the parameter wheel

Note: This is for 16-bit parameters only.

Selecting parameters

A parameter is automatically selected when   s wheel is moved. When setting values for one param-
eter, all the parameters in that bank are act ve (appear in white) in the editor.

Individual parameters are selected by pre sing on the right side key of the key pair associated with a particular wheel.

igure 59: Select a parameter by pressing the right key of the key pair (detail from Vector PC panel)

ATTENTION! In Vector Violet you can select a parameter by clicking on the wheel itself
Double clicking on the wheel opens the picker for the parameters if the picker exists (for example color wheel picker)

To switch bank layers and select a parameter

Use this procedure to select a parameter when there is more than one layer in the wheel bank.

Example: Go to layer 2 in the image bank wheels.

1 Select fixtures.

2 Press **IMAGE**.

3 Press **IMAGE** again

Or

Press the left key of the key pair associated with a particular wheel.

Or

If there is more than one layer row displayed in the Wheel Assignments pane, click on the layer displayed in blue. The selected parameter jumps to the first row. This is useful for Vector Green and Vector Orange and also when working with blade parameters

Selecting parameters by parameter banks

Parameters can also be selected per parameter bank. Some uses for this feature include:

- Setting the same level for all parameters in a bank.
- Releasing all parameters in a bank.
- Ensuring all parameters in the bank are included when stor ng with the **ONLY SELECTED (RED)** store option. See <u>"Using store options" page 134</u>.

To select parameters by bank

Press **SHIFT** + parameter bank.

The relevant parameters are selected

OR

1 Select fixtures.

2 Press **SHIFT** + parameter ank.

The relevant parameters are selected.

OR

1 Select a gr up

2 Press **SHIFT** + parameter bank.

T e re evant parameters are selected for the fixtures in the group.

Adding parameters to the selection

Parameter selections remain active until the editor is cleared, by pressing **RESET**, **CLEAR** or **ENTER** or by completing a procedure with **STORE** or **UPDATE**. This allows setting parameter time across cells.

To add parameters to the selection

Example: Select spot 1 cyan and add spot 2 magenta to the selection.

1 Press **SPOT** and **1**.

2 If necessary, press **COLOR**.

The wheels switch to the color bank.

3 Select cyan.

4 Press **SPOT** and **2**.

5 Select magenta.

Parameter modes

There are two modes of parameters:

- Continuous parameters wheel up from 0 (zr) to 100% (FL) with no internal divisions.

- Step parameters are defined with internal divisions. There can be continuous control between steps or a step can transmit a preset value. Steps are commonly used for parameters c   rolling both dimmer intensity and strobe and with gobo wheels and color wheels.
  The display format for step parameters depends on the step's definition in the Dev ce Builder application. Some examples of step displays are: 2.FL (step 2 at its maximum   alue) or text, such as, Fast Strobe.
  Step parameters can be defined with a stopper between steps or without a stopper between steps. For steps with stoppers, a specific command must be giv n   move between steps.
  For more information on step parameters. See <u>"Editing paramet rs" page 422</u>

To move from step to step

Use the parameter wheel to set the step values. When th re are no stoppers between steps, moving the wheel moves from the highest value of one step to the lowest value of the next step.

OR

Tap **STEP UP** or **STEP DOWN**, located on the Editor tool bar, to jump from step to step.

When there are stoppers betw en steps, the only way to move to the next or previous step is by using these button

Setting parameter values

The wheels and trackball are used to set values for moving light parameters, channel dimmers, and scrollers. Absolute values can be set using the numeric keypad.

When   et   g pan and tilt for 16-bit parameters, wheels 3 and 4 are used for fine movement.

S me b   ons on the Editor tool bar, in parameter mode, can also be used for setting values.
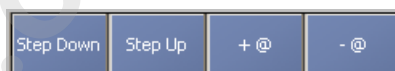
| Step Down | Step Up | + @ | - @ |

Figure 60: Parameter mode on the Editor tool bar

Button	*What it does*
STEP DOWN	Goes to the previous step.
STEP UP	Goes to the next step.
+@	Adds the selected value to the parameter's current value.
-@	Subtracts the selected value from the parameter's current value.

To set dimmer intensity

Select the fixtures and use the vertical wheel.

OR

Switch to the **INTENS**(ity) wheel bank and use the encoder dimmer wheel.

To set position

Select the fixtures and use the trackball to set pan and tilt

OR

Switch to the **POS**(ition) wheel bank and use the encoder wheels for pan and tilt
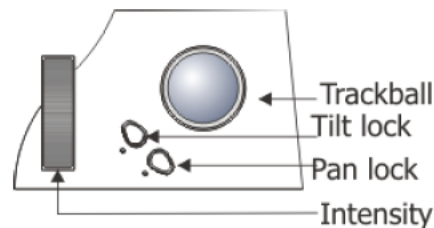
Figure 61: Pan and tilt l locks are located adjacent t the trackball

A

To set parameter values

Example: Set parameter values for dimm r intensity, the color wheel, and the rotating gobo.

1 Select the fixtures.

2 Set the dimmer intensity using the vertical dimmer wheel or the encoder wheel that controls the dimmer in the Intensity wheel bank

Or

Press **@** and en er a two digit number on the numeric keypad. The spot's lamp is on at the select d in nsity. The value is displayed on a red field in the editor.

3 Press **COLOR** to switch to the color wheel bank and use the appropriate wheel to set the color value.

Or

Press the associated parameter key or tap ***COLOR WHEEL*** in the wheel assignment display to select the parameter and enter a value on the numeric keypad.

4 Press **IMAGE** to switch to the image wheel bank and use the appropriate wheel to set the gobo value.

Or

Press the associated parameter key or tap ***ROTATING GOBO*** in the wheel assignment display to select the parameter and enter a value on the numeric keypad.

E

To set parameter values

Example: Set values for dimmer intensity, the color wheel, and the rotating gobo.

1 Select the fixtures.

2 Set the dimmer intensity using the vertical dimmer wheel or the flat encoder the controls the dimmer in the Intensity wheel bank

Or

Press **@** and set a value using the numeric keypad. Then press **ENTER**.

The spot's lamp is on at the selected intensity. The dimmer intensity is displaye   on a white field.

3 Press **COLOR** to switch to the color wheel bank and use the appropr   te wheel to set the color value.

Or

Tap *COLOR WHEEL* in the wheel assignment display and set a value using the numeric keypad.

4 Press **ENTER**. The color wheel goes to the n w v l e.

5 Press **IMAGE** to switch to the image whee bank

6 Use the appropriate wheel to set th   gobo

Or

Select the parameter by pr   sing the associated parameter key or tap *ROTATING GOBO* in the wheel assignment display, and enter a value on the numeric keypad.

7 Press **ENTER**. The rotat ng gobo goes to the new value.

Setting values using pickers

Vector has prese pickers for color and image parameters.
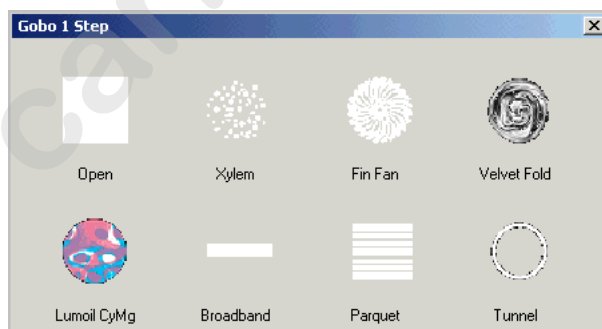
Figure 62: Gobo picker

Some pickers have more than one page. Use the *PREVIOUS* and *NEXT* buttons to page the picker dialog box.

In the color pickers, you can design your own custom colors or choose colors from the Roscolux or Lee Designers swatch book.
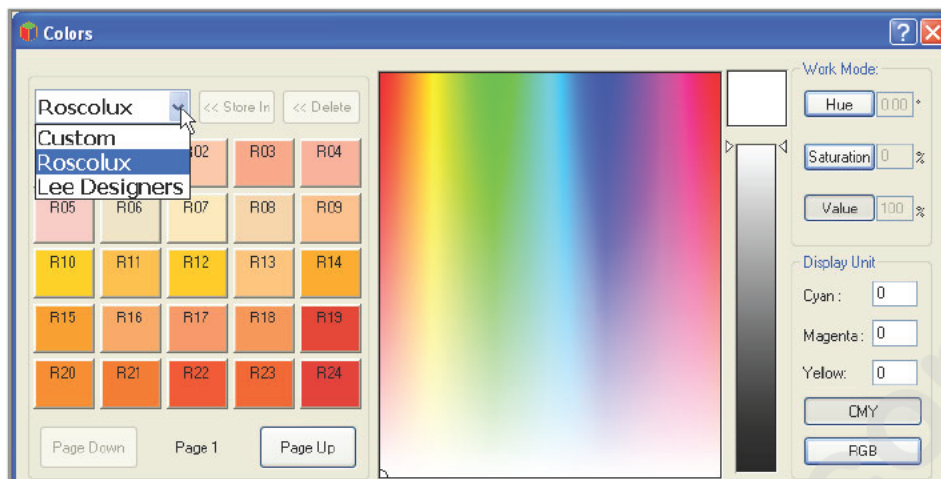
Figure 63: Color picker for designing custom colors or choosing colors from swatch books

To set values using pickers

Example: Set a gobo value

1 Select fixtures.

2 Press **IMAGE** to switch to the image wheel ank

Skip this step if the wheels are already se to th image parameters.

3 Double click one of the gobo parameters in the Wheel Assignments display.

The gobo picker opens.

4 Tap the gobo of your choice.

The choice is immedia y app ied to the selected fixtures.

5 Tap **CLOSE** to close th picker.

Or

Mov g a whee closes the picker.

Or

pen nother picker by selecting a different parameter type and a parameter.

To cre e custom colors

1 Select fixtures.

2 Press **COLOR** to switch to the color wheel bank.

Skip this step if the Wheel Assignments already show the color parameters.

3 Double click a color parameter (not Color Wheel) in the Wheel Assignments display.

The color picker opens. Custom is the default that appears in the drop down list.

4 In the Display Unit group, choose **RGB** or **CMY**.

5 Tap in the color palette area to select a color. This is the Hue.

The choice is immediately applied to the selected fixtures.

The color values are shown in the Display Unit fields.

6 To change the hue, tap in the color palette choosing another color,

Or

In the Work Mode group, tap *HUE* and use the color bar slider to change the hue.

7 To adjust the intensity of the hue, tap *SATURATION* and use the color bar slider to change the tone.

All changes in the hue and saturation are immediately output to the fixtures.

8 When you are satisfied with the color, tap store in and tap a button.

The color is stored.

9 Tap *CLOSE* to close the picker.

Setting values for multiple parameters using one wheel

Using one wheel to simultaneously assigning values for multiple parameters is especially useful when adjusting blades and shutters.

To set values for multiple parameters

1 Select the fixtures.

2 Select the parameters by pressing their sele t n keys.

Or

Press **SHIFT** + a parameter bank key o select all the parameters in the bank.

3 Press **@** and move any wheel ssoci ted with one of the selected parameters.

Setting absolute values

Absolute values are set by select ng a parameter and entering a value on the numeric keypad.

A

To set values using the numeric keypad

Examp   : Set dimmer at 60%, pan at 40, tilt at 35, and cyan at 20.

1 Se   t the fixtures.

2 Press **@ 60**.

The dimmer intensity is set to 60%.

3 Press **POSITION** to switch the wheel bank.

4 Tap *PAN* to select the parameter and enter **40** on the numeric keypad.

5 Tap *TILT* and enter **35** on the numeric keypad.

6 Press **COLOR** to switch the wheel bank.

7 Tap *CYAN* and enter **20** on the numeric keypad.

E

To set values using the numeric keypad

Example: Set dimmer at 60%, pan at 40, tilt at 35, and cyan at 20.

1   Select the fixtures.

2   Press **@ 60**.

3   Press **ENTER**.

The dimmer intensity is set to 60%.

4   Press **POSITION** to switch the wheel bank.

5   Tap *PAN* to select the parameter.

6   Enter **40** on the numeric keypad.

7   Press **ENTER**.

The position is updated with the new value.

8   Tap *TILT* and enter **35** on the numeric keypad.

9   Press **ENTER**.

The position is updated with the new value

10 Press **COLOR** to switch the wheel bank.

11 Tap *CYAN* and enter **20** on the numeric eypad.

12 Press **ENTER**.

The color is updated with the n w value.

Quick value keys

Frequently used values h   e dedicated keys and buttons:

FULL	Sets he elected parameter to 100%.
ON	Sets the selected parameter to the value set in the System Settings dialog box. the default value is 50%.
Z RO	Sets the selected parameter to 0%.
HOME	Sets the selected parameter to its home value. Home values are defined in the Device Builder.
+@	Increase the parameter level by a specific percent. This button is located on the Editor toolbar in selection mode.
-@	Decrease the parameter level by a specific percent. This button is located on the editor toolbar in selection mode.
●	Apply last value. The last parameter value chosen remains available until a new value is set. Thus, you can reuse the same value many times.

Note: 　E　 **FULL**, **ON**, **ZERO**, and **HOME** are immediately output. There is now need to complete the command by pressing **ENTER**.

To change the level by a specific percent

1 Make sure the fixture and parameter are selected in the editor.

2 Tap **+@** or **-@** on the Editor toolbar.

3 Enter a percentage on the numeric keypad. Example: **-@ 10** brings the level down 10%.

To apply last parameter value

Example: Spots 1 - 6 have cyan set at 20%. You can easily apply the same value to magenta.

1 Select the spots and select cyan.

2 Press **@**. and 20 on the keypad.

   Cyan is now set to 20%.

3 Select magenta.

4 Press **@**.

5 Press ●.

   Magenta is now set to 20% also.

Copying and pasting values

Parameter values can be copied from one pot nd pasted to other spots.

Copy and paste:

- All values
- Values from an entire parameter bank
- The value from a single parameter

To copy and paste all values

Examp   : Copy the all parameter values from spot 1 to spots 6 through 8.

1 Se   ct spot 1.

2 Press **COPY**.

   all parameters values are copied to the clipboard.

3 Select spots 6 through 8.

4 Press **PASTE**.

To copy and paste parameter bank values

Example: Copy the color values from spot 1 to spots 6 through 8.

1 Select spot 1.

2 Press **COLOR** to choose the color bank.

3 Press **COPY**.

The spot 1 color values are copied to the clipboard.

4   Select spots 6 through 8.

5   Press **PASTE**.

The color values copied from spot 1 are pasted to spots 6 through 8.

To copy and paste values for single parameters

Example: Copy the cyan value from spot 1 to spots 6 through 8.

1   Select spot 1.

2   Press **COLOR** to choose the color bank.

3   Press the selection key for Cyan.

4   Press **COPY**.

Cyan's value is copied to the clipboard.

5   Select spots 6 through 8.

6   Press **PASTE**.

Cyan's value is pasted to spots 6 through 8.

Flip pan and tilt

The flip feature reverses the pan and tilt axes 180 degrees, returning to the fixture's current position. This is useful for yokes and fixtures whose h   ds have 360 degree movement.

Example: In its current position, a yok i at he limit of its pan movement. To continue moving the yoke on its pan axis, apply the flip fe ture. The yoke returns to its current position without the movement limit.

To flip a fixture

1   Select the fixtur (s).

2   Tap *FLIP* on the Editor toolbar.

Changing pan and tilt orientation

You can change the pan and tilt orientation for any spot from the Editor tool bar without going into th P tch Manager.

Tapping *PAN/TILT PATCH*, on the Editor tool bar, provides three options to logically orient the pan and tilt directions to trackball movement.

| Invert Pan | Invert Tilt | Swap Pan/Tilt |
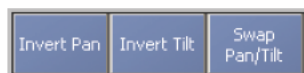
Figure 64: Pan/Tilt mode on the Editor tool bar

Button	What it does
INVERT PAN	Switch the full and zero values for pan.
INVERT TILT	Switch the full and zero values for tilt.
SWAP PAN/TILT	Pan becomes tilt and tilt becomes pan.

To change pan/tilt orientation

1   Select spots.

2   Select pan or tilt.

3   Tap *PAN/TILT PATCH*.

The Editor tool bar switches to pan/tilt mode.

4   Tap the required option.

Parameter grouping

The *PARAM GROUPING* button appears on the Editor tool   r in   election mode. When *PARAM GROUPING* is enabled all parameters belonging to he s me parameter type are active in the editor during editing.

Example: If you are setting levels for cyan, all   lor parameters are active in the editor and will subsequently be stored in the cue or library.

By disabling parameter grouping, you   an is late a parameter. This allows you to filter libraries or cues by storing only the selected par meter(s).

Example: The color paramete type includes cyan, magenta, yellow, color wheel 1, and color wheel 2. To store a library or cu   that includes only color wheel 1, set parameter grouping to off and then set the level for color wheel 1

The paramete grouping default is set in the System Settings dialog box and can be toggled on or off from the Edit r tool bar. *PARAMETER GROUPING* always resets to the default setting in the System Sett   gs dialog box.

To iso ate parameters

Example: Parameter grouping is enabled in the System Settings dialog box. You want to store a beam library that will contain only the iris levels.

1   Select the spots.

2   Tap *PARAMETER GROUPING* on the Editor toolbar.

The command line displays: *Parameter Grouping Off.*

3   Set the levels for the iris.

Only the iris is active in the editor.

4   Store a library using the usual procedure.

The library contains the iris parameter only.

The parameter grouping setting defaults to on.

Resetting parameter values

Pressing **RESET** to clear the editor, returns parameter values to either their default stage values or their home values. See "Default stage values" page 335.

Releasing parameter values

You can release fixtures, single or multiple parameters, or all parameters in the selected bank. Released parameters and fixtures are not included when storing a cue. Released parameters fade to default stage values in system release time.

A

To release fixtures

Select fixtures and press **RELEASE**.

E

To release fixtures

1   Press **RELEASE**.

2   Select fixtures.

3   press **ENTER**.

To release one or more parameters

1   Select fixtures.

2   Select the parameter by tapping h parameter in the wheel display or pressing the parameter key.

3   Press **RELEASE**.

To release all the parameters in a parameter bank

Example: Rele se all parameters in the color bank.

1   Sel ct fixt res.

2   P ss *COLOR*.

3   Press **RELEASE**.

Homing parameter levels

Home levels are defined in the Device application for each device type.

To home all parameters

1   Select the spots.

2   Press **HOME**.

All parameters, for the selected spots, are forced to home values and are active in the editor.

To home a selected parameter

1   Select the fixtures.

2 If necessary, select a parameter type.

3 Select the parameter.

4 Press **HOME**.

The selected parameter goes to its home values in default sneak time.

To home parameters grouped in the same wheel bank

Example: Home values for all parameters in the image bank.

1 Select the fixtures.

2 Press **IMAGE**.

3 Press **HOME**.

The parameters go to their home values in default sneak time.

Programming a home cue

Occasionally a parameter's home level, as set in the device definition, is not compatible with some fixtures because of, for example, their hanging positions. You can store a fixture specific home cue, which overrides home levels set in the device definition. V lues r fixtures not included in the home cue go to the levels set in the device definitio

A

To program the home cue

1 Select the fixtures.

2 Select the parameters and t the parameter levels.

3 Press **CUE**.

4 Press **HOME**.

5 Press **STORE**

To examine t e home cue

1 Pres **CUE**.

2 Pre **HOME**.

3 Press **EXAM**.

E

To program the home cue

1 Select the fixtures.

2 Select the parameters and set the parameter levels.

3 Press **STORE**.

4 Press **CUE**.

5 Press **HOME**.

6 Press **ENTER**.

To examine the home cue

1   Press **EXAM**.

2   Press **CUE**.

3   Press **HOME**.

4   Press **ENTER**.

To delete the home cue

1   Press **DELETE**.

2   Press **CUE**.

3   Press **HOME**.

4   Tap *DELETE* or press **ENTER**.

Selecting fixtures using Active

Active is a selection tool. Pressing **ACTIVE** sets the Edit   too bar to active mode. Use the tool bar buttons to select fixtures, specify the output source, a d se   onditions for selections.

| Stage | Editor | Master PB | Invisible Parameters | Inactive | Everything | =@ | <@ | >@ |

Figure 65: The Editor tool bar in active mode

Note: For **ACTIVE** to work corr ctly, the command line must be idle. Press **ENTER** to idle the command line befor b ginning these procedures.

Selection sources

There are three sources for fixture selection:

- Stage
- Editor
- Maste Playback

Button	What it does
STAGE	Grabs all parameters for all fixtures that comprise the lighting state, on the condition that their dimmer values are more than zero. It is unimportant whether the dimmer value is a hard value or derived from tracking. This is the default.
EDITOR	Grabs everything in the editor.
MASTER PB	Grabs the parameters output from the master playback device.

To select without specifying a source

You can make selections without specifying a source. The fixtures selected depends on the console's current state. If the last selection is still active on the wheel, all fixtures in the last selection will be selected. If not all output will be selected. (See)

Press **SHIFT** + **ACTIVE**.

The fixtures in the last selection are selected or all fixtures currently output are selected.

To select all active fixtures and parameters

SET, **SHIFT**, **ACTIVE**

To select all active spots and parameters

SPOT, **SHIFT**, **ACTIVE**

To select all active channels and values

CHANNEL, **SHIFT**, **ACTIVE**

To select fixtures output from the editor

Example: Channels 1 -> 10 are output from a pbd, hannels 15, 25, 35, 45, 55, are in the editor. Select only the editor channels.

1 Select channels: **CHANNEL 1 →55**.

2 Press **ACTIVE**.

3 Press *EDITOR*. Channels 15 25, 35, 45, 55, are now under wheel control.

4 Press **ENTER**.

To select fixtures output from the master playback

1 Press **ACT VE**.

2 Tap *MA TER PB*.

3 Pres **ENTER**.

To select all active parameters in a parameter bank

Press **SHIFT** + a bank key.

OR

1 Select fixtures.

2 Select a parameter bank - press **COLOR**, **BEAM**, **INTENSITY**, **POSITION**, **IMAGE**, or **SHAPE**.

3 Press **ACTIVE**.

The Editor tool bar is now in active mode.

4 Optional: choose a selection filter on the Editor tool bar.

5 Press **ENTER**.

To select some of the fixtures comprising the lighting state

Example: Channels 1 thru 10 are output from the master playback, channels 70 through 82 are output from QKey 1, and channels 15, 25, 35, 45, and, 55 are in the editor. Select the channels from the master playback and the editor.

1 Select channels: **CHANNEL 1**→ **55**.

2 Press **ACTIVE**.

Channels 1 thru 10, 15, 25, 35, 45, 55 are now under wheel control.

3 Press **ENTER**.

To select active fixtures by groups

Example: Select the even numbered spots that are active.

1 Press **GROUP** and select the group number.

2 Press **ACTIVE**.

The even numbered active spots are selected.

To remove fixtures from the selection

Example: Channels 1thru 10 are output from a pbd, hannels 15, 25, 35, 45, 55, are in the editor. You want to select all the channels, ex ept hannels 8 and 45.

1 Select channels: **CHANNEL 1** →**55**.

2 Press — (minus) and **8** on the numeri keypad. Press — (minus) again and **45** on the numeric keypad. The command line shows the selection.

3 Press **ACTIVE**. Channels 1 thru 7, 9, 10, 15, 25, 35, 55 are now under wheel control.

Conditional selections

After choosing the sele tion source, you can apply conditions to refine the selection.

Button	What it does
INVISIBLE PARAMETERS	Grabs parameters not visible onstage because dimmers are at zr.
INACT VE	Grabs fixtures whose parameters are gray (not output from a playback device or not active in the editor).
EVERYTHING	Grabs all fixtures and parameters, visible and not visible, that are active in the editor or output from a playback device.
=@	Grabs a parameter at selected level.
<@	Grabs a parameter when it is less than the selected level.
>@	Grabs a parameter when it is more than the selected level.

To grab fixtures not visible on stage

1 Press **ACTIVE**.

2 Choose the output source.

3 Tap *INVISIBLE PARAMETERS*.

To grab inactive fixtures

1 Press **ACTIVE**.

2 Choose the output source.

3 Tap *INACTIVE*.

To grab fixtures visible and not visible on stage

Fixtures who have no dimmer output are not visible, although parameters other than th dimmer may be active.

1 Press **ACTIVE**.

2 Choose the output source.

3 Tap *EVERYTHING*.

To grab fixtures (parameters) at specified levels

Example 1: Grab all fixtures whose dimmer level is 75%.

1 Press **ACTIVE**.

2 If necessary, choose the output source.

3 Select the dimmer parameter.

4 Tap **=@**.

5 Press **7** and **5**, on the keypad, to cho se the dimmer level.

6 Press **ENTER**.

Fixtures, from the de gnat d output source, whose dimmer level is 75% are available for editing.

Example 2: Grab all fixtures whose dimmer level is less than 75%.

1 Press **ACT VE**.

2 If necessary, choose the output source.

3 S lect he dimmer parameter.

4 Tap **<@**.

5 Press **7** and **5**, on the keypad, to choose the dimmer level.

6 Press **ENTER**.

Fixtures, from the designated output source, whose dimmer level is 75% are available for editing.

Example 3: Grab all fixtures whose dimmer level is more than 75%.

1 Press **ACTIVE**.

2 If necessary, choose the output source.

3 Select the dimmer parameter.

4 Tap **>@**.

5 Press **7** and **5**, on the keypad, to choose the dimmer level.

6 Press **ENTER**.

Fixtures, from the designated output source, whose dimmer level is 75% are available for editing.

Chapter 6   Programming and Updating Cues and QLists

All cues are organized into QLists. QLists can be played back on all of Vector's playback devices.

This chapter contains the following sections:

- Working with QLists (see page 123)
- Working with cues (see page 126)
- Updating cues (see page 142)
- Programming and update options in tracking operation (see page 157)
- Fade times (see page 164)
- Loops (see page 172)
- Linking Cues (see page 174)
- Fan (see page 175)
- Temporary Cues (see page 183)
- Using the faders in channel mode (see page 185)
- Blind Editor (see page 185)

Working with QLists

All cues are organized into QLists.

The default QList is the QList where new cues are automatically stored, unless Vector is instructed to store to some other QList. The default QList is the QList loaded to the master playback. See "Master playback" page 196. Cues can be stored to QLists resident on all playback devices.

Playback device **SELECT** keys are used to store QLists and cues.

Vector supports 999 Q-Lists. Playback properties can be defined for individual QLists. See "Setting up playback devices" page 215

Opening new QLists

New QLists can be opened on the master playback device and on all playback devices. Each new QList automatically contains cue 0. Cue 0 is an empty cue.

To open a new QList

Example: Open a new QList, QList 1, on the AB crossfader.

1   Press **QLIST** and **1** on the numeric keypad.

2 Press **SELECT** for AB. The command line shows: *Playback AB Assigned.* QList 1 will be output from AB.

Adding text tags to QLists

QLists can be given text tags.

A

To add text tags to QLists

1 Directly after storing a QList, press **TEXT**. A text field opens.

2 Type a name on the alphanumeric keyboard.

3 Press **STORE**.

OR

1 Select the QList.

2 Press **TEXT**.

3 Type a name on the alphanumeric keyboard.

4 Press **STORE**.

E

To add text tags to QLists

1 Directly after storing a QList, press **TEXT**. A text field opens.

2 Type a name on the alphan meri keyboard.

3 Press **ENTER**.

OR

1 Select the QLi t

2 Type a nam on the alphanumeric keyboard.

3 Pre s **ENT R**.

Deleting QLists

A

To delete QLists

1 Select a QList or a range of QLists.

2 Press **DELETE**.

The Delete dialog box opens.

3 Press **DELETE** again or tap *DELETE* in the dialog box.

E

To delete QLists

1   Press **DELETE**.

2   Select the QList.

3   Press **DELETE** or **ENTER**.

The Delete confirmation box is displayed.

4   Press **DELETE** or **ENTER**.again.

Or

Tap *DELETE* in the confirmation box. *Deleted*, displayed in the command line   onfirms a successful operation.

Examining QLists

A

To examine a list of QLists

Press **QLIST** and press **EXAM**.

OR

Toggle the QList soft keys to grid view   y tapping $\begin{smallmatrix}1&2\\3&4\end{smallmatrix}$. A list of QLists is displayed in the active pane.

To examine a QList

Example: Exam QList 5

1   Select QList 5.

2   Press **EXAM**.

The con ents   f the group are displayed in the active pane.

OR

1   If t   QList tab is in soft key format, toggle to grid format.

2   Double click on QList 5.

The contents of the QList are displayed in the active pane.

E

To examine a list of QLists

1   Press **EXAM**.

2   Press **QLIST**.

3   Press **ENTER**.

OR

Toggle the QList soft keys to grid view by tapping [grid icon]. A list of QLists is displayed in the active pane.

To examine a QList

Example: Exam QList 5.

1   Press **EXAM**.

The contents of the group are displayed in the active pane.

2   Select QList 5.

3   Press **ENTER**.

OR

1   If the QList tab is in soft key format, toggle to grid format.

2   Double click on QList 5.

The contents of the QList are displayed in the active pane.

Copying QLists

All cues in the source QList are copied to the new QList

To copy a QList

Example: Copy QList 1 to a new QList QLi   21.

1   Select QList 1.

2   Press **COPY**.

3   Press **QLIST** and **21**.

4   Press **PASTE**. In the QList soft tab, the text for soft key 21 is: *Copy of 1*.

5   Optional: rename the new QList.

Working with cues

P ogramming cues consists of:

■ Selecting fixtures

■ Assigning parameter values

■ Setting the fade times

■ Storing the resulting lighting state as a cue in a QList.

In Compulite mode, storing a cue does not clear the editor.

In tracking mode, storing a cue clears the editor.

Cues can be numbered from 0.1 to 9999.99.

Much of Vector's behavior when storing cues, is determined by the settings in the System Settings dialog box ▶ Behavior tab (See "Behavior" page 335.):

- By default Vector is set to automatically load the stored cue on the master playback device. You can change this setting in the System Settings dialog box ▶ Behavior tab ▶ Automatically Assign to Playback.

  Note: There are two conditions that, when present, do not load the stored cue to the master playback: 1) If you are working in the blind editor and 2) If the intensity fader is at zero.

- The next available number is the current cue number incremented by the number that is set in the Next Store Increment by Field in System Settings dialog box ▶ Behavior tab.

- The **STORE+** increment is set in the System Settings dialog box.

Storing cues

If you are storing cues to the QList on the master playback it is not necessary o pecify a QList number, as Vector defaults to the QList on the master playback. If no cue number is specified when storing a cue, the next available number in the QList is assigned to he n w cue.

Using **STORE** and **SELECT** is a fast way to store cues directly t a playback device.

STORE+ stores the editor as the next cue on the master playb ck device.

A

To store a cue to the master playback device

Example: Store a cue to the default QList the QList loaded to the master playback).

1 Select fixtures and assign value

2 Press **CUE** and enter a number on the numeric keypad.

3 Press **STORE**.

The cue is automatic lly added to the QList on the master playback.

The comm nd l ne shows: *Playback AB Assigned: QList 1 Cue 1 Stored*.

To add cues to he QList on the master playback device

Exam le: Store a new cue to the default QList (the QList loaded to the master playback).

1 S lect fixtures and assign values.

2 Press **CUE** and press **NEXT**.

The next available cue number is displayed in the command line with the QList number for the cue on the master playback.

3 Press **STORE**.

The cue is automatically added to the QList on the master playback.

OR

1 Select fixtures and assign values.

2 Press **STORE +**.

The editor is stored to the next available cue number. It is displayed in the command line with the QList number for the cue on the master playback.

To store a cue to any playback device

Example: Store cue 1 in QList 11. QList 11 is resident in fader 6.

1 Select fixtures and assign values.

2 Press **STORE**.

3 Press **SELECT** for fader 6.

The command line shows: *Playback 1/6: QList 11 Cue 1 Stored*.

OR

1 Select fixtures and assign values.

2 Press **QLIST 11**.

3 Press **CUE 1**.

4 Press **STORE**.

The command line shows: *Playback 1/6: QList 11 Cue 1 St red*.

To add cues to the QList on any playback d vic

Example 1: Store cue 2 (the next available cu number) in QList 11, loaded on fader 6. The next cue number is the current cue incremen ed by one.

1 Select fixtures and assign values

2 Press **SELECT** for fader 6.

The command line show : *Playback 1/6: QList 11 Cue 2 Stored* and the new cue is output from the playback de ice.

Note: When storing cu us ng the default increment, it is not necessary to specify the cue number before p essing **STORE**, **SELECT**.

Example 2: The last cue in QList 11 is cue 15. Store cue 20 in QList 11.

1 Sele fixtures and assign values.

2 Press **QLIST 11**. Skip this step if you are storing this cue to the master playback.

3 Press **CUE** and **20** on the numeric keypad.

4 Press **STORE**.

5 Press **SELECT** for fader 6.

The command line shows: *Playback 1/6: QList 11 Cue 20 Stored* and the new cue is output from the playback device.

Note: If the fader (as intensity master) is at its bottom end stop, the QList does not advance to the new cue.

To store point cues

Example: Store cue 2.5 in QList 1 that is on the AB playback.

1   Select fixtures and assign values.

2   Press **STORE**.

3   Press **2 ● 5**.

4   Press **SELECT**.

The command line shows: *Playback AB Assigned: QList 1 Cue 2.5 Stored*. Cue 2.5 is ou put from AB.

E

To store a cue to the master playback device

Example: Store a cue to the default QList (the QList loaded to the master playback).

1   Select fixtures and assign values.

2   Press **ENTER**.

The values are output.

3   Press **STORE**.

4   Enter a cue number on the numeric keypad.

5   Press **ENTER**.

The cue is automatically added to the QList on the master playback.

OR

1   Select fixtures and assi   valu s.

2   Press **ENTER**. The val es are output.

3   Press **STORE**.

The editor s sto ed to the next available cue number. It is displayed in the command line with th   QList number for the cue on the master playback.

To add cues to the QList on the master playback device

Ex mple: Store a new cue to the default QList (the QList loaded to the master playback).

1   Select fixtures and assign values.

2   Press **ENTER**.

The values are output.

3   Press **STORE+**.

4   Press **ENTER**.

The editor is stored to the next available cue number. It is displayed in the command line with the QList number for the cue on the master playback.

OR

1   Select fixtures and assign values.

2   Press **ENTER**.

129

The values are output.

3   Press **STORE**.

4   Press **CUE** and press **NEXT**.

The next available cue number is displayed in the command line with the QList number for the cue on the master playback.

5   Press **ENTER**.

The cue is automatically added to the QList on the master playback.

To store a cue to any playback device

Example: Store cue 1 in QList 11. QList 11 is resident in fader 6.

1   Select fixtures and assign values.

2   Press **ENTER**. The values are output.

3   Press **STORE**.

4   Press **SELECT** for fader 6.

The command line shows: *Playback 1/6: QList 11 Cue 1 Sto ed* and the cue is output from the playback device.

OR

1   Select fixtures and assign values

2   Press **ENTER**. The values are output

3   Press **STORE**.

4   Select **QLIST 11**. Skip this s   p if you are storing this cue to the master playback.

5   Press **CUE, 1**.

6   Press **ENTER**.

The command line shows: *Playback 1/6: QList 11 Cue 1 Stored* and the cue is output from the playb ck d vice.

To add cues to the QList on any playback device

Exampl 1: Store cue 2 (the next available cue number) in QList 11, loaded on fader 6. The nex cue number is the current cue incremented by one.

Select fixtures and assign values.

2   Press **ENTER**. The values are output.

3   Press **SELECT** for fader 6.

The command line shows: *Playback 1/6: QList 11 Cue 2 Stored* and the cue is output from the playback device.

Note: When storing cues using the default increment, it is not necessary to specify the cue number before pressing **STORE**, **SELECT**.

Example 2: The last cue in QList 11 is cue 15. Store cue 20 in QList 11.

1   Select fixtures and assign values.

2 Press **ENTER**. The values are output.

3 Press **STORE**.

4 Press **QLIST 11**. Skip this step if you are storing this cue to the master playback.

5 Press **CUE** and **20** on the numeric keypad.

6 Press **SELECT** for fader 6.

The command line shows: *Playback 1/6: QList 11 Cue 20 Stored* and the cue is output from the playback device.

Note: If the fader (as intensity master) is at its bottom end stop, the QList does not advance to the new cue.

To store point cues

Example: Store cue 2.5 in QList 1 that is on the AB playback.

1 Select fixtures and assign values.

2 Press **ENTER**.

3 Press **STORE**.

4 Press **2 ● 5**.

5 Press **SELECT**.

The command line shows: *Playback AB Assig   d: QList 1 Cue 2.5 Stored*. Cue 2.5 is output from AB.

Opening new QLists when storing cues

It is possible to store a cue and sim ltaneously open a new QList. The new QList uses the next available QList number, which i   the last stored QList number incremented by one.

A

To store a cue and open a new QList

Examp   1: Open a new QList and store the editor as cue 1.

1 Se   ct fixtures and assign values.

2 Press **STORE**.

3 Press **CUE**.

4 Press **SELECT** for an empty playback device.

A QList, using the next available QList number, is created and the editor group is stored as cue 1 in this new QList.

E

To store a cue and open a QList

Example 1: Open a new QList and store the editor as cue 1.

1 Select fixtures and assign values.

2 Press **ENTER**. The values are output.

3 Press **STORE**.

4 Press **CUE**.

5 Press **SELECT** for an empty playback device.

A QList, using the next available QList number, is created and the editor group is stored as cue 1 in this new QList.

Using soft keys to store cues

Using soft keys for a specific QList greatly enhances programming speed.

A

To store a cue to a QList using the soft keys

Example: Store cue 12 to QList 2.

1 Select fixtures and assign values.

2 Press **STORE**.

3 Tap *12* in the QList 2 soft key tab.

4 Optional - add a text tag to the cue. Press **TE T** to open the Text dialog box.

E

To store a cue to a QList using the sof keys

Example: Store cue 12 to QList 2.

1 Select fixtures and assig valu s.

2 Press **ENTER**. The val s are output.

3 Press **STORE**.

4 Tap *12* in the Q ist 2 soft key tab.

5 Optional add a text tag to the cue. Press **TEXT** to open the Text dialog box.

Preview cues wi h Try Cue

RY CUE allows previewing a cue before storing it. The editor is saved and can be previewed at any me. The preview includes cue times and cell times. *TRY CUES* are not saved with the show and therefore cannot be deleted. Saving a new *TRY CUE* overwrites the previous one. After saving a try cue, *TRY CUE* has a light orange field.

To save a Try Cue

1 Select fixtures and set values.

2 Optional: Program unique parameter times.

3 If you have entered time values, press **ENTER** now.

4 On the Editor tool bar, tap *TRY CUE*.

The editor is now saved. The look can be recalled at anytime.

At this point you can continue working, saving cues, saving libraries, etc.

To preview the Try Cue

1 On the Editor tool bar, tap *TRY CUE*.

2 Optional: enter fade-in time.

3 Press **ENTER**.

The look fades in according to time settings.

You can now save the editor as a cue.

Note: If no fade time is specified, cut time (0 seconds) is used.

Using cues as programming building blocks

A quick way of selecting fixtures is by entering cues into the editor as an editable group. It is also possible to load only specified values from cues to the editor or copy s cified values from cues to the clipboard.

To use cues for fixture selection

1 Select the cue.

The command line shows the QList and the cue number.

2 Turn the dimmer wheel.

The fixtures, in the cue, are ent red int the editor. Turning the dimmer wheel, fades their intensity from zero. Notice tha he ue has become a group in the editor and is no longer linked to the source cue

3 Edit and save as a cu

To load values from elected fixtures to the editor

1 Select one or m re fixtures in the cue.

2 Sele t par meters.

3 Press **@**.

4 Se ect the cue.

5 Press **ENTER**

All values from the selected fixtures are loaded from the cue to the editor.

To copy values from fixtures in a cue

1 Select one or more fixtures in the cue.

2 Select a parameter by choosing the parameter type (**INTENS**, **POS**, **COLOR**, **BEAM**, **IMAGE**, **SHAPE**) and then selecting the specific parameter.

3 Press **@**.

4 Select the cue.

5 Press **COPY**.

All parameter values from the selected fixtures are copied to the clipboard.

Using store options

The **STORE OPTIONS** button, on the Editor toolbar, provides added control over what is stored in cues. You can choose to store all fixtures active in the editor or just some of them and whether all parameters for the active spots are stored in the cue or not. The store options always revert to the default as defined in the System Settings dialog box. **STORE OPTIONS** is available on the Editor toolbar in select mode, parameter (levels) mode, and cue mode.
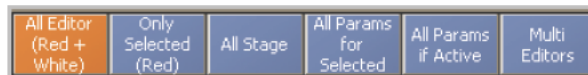
Figure 66: Store options mode on the Editor tool bar

Store options	What is stored
ALL EDITOR (RED + WHITE)	All fixture values displayed in red (selected in the editor) and white (active in the editor) are stored in the cue.
ONLY SELECTED (RED)	Only fixture values displayed in red (selected in the editor) are stored in the cue.
ALL STAGE	The entire lighting state is stored in the cue.
ALL PARAMS FOR SELECTED	All parameter values for the selected (displayed in yellow) spots even if the dimmer is not active in the editor.
ALL PARAMS FOR ACTIVE	All parameter values for the active spots (displayed in yellow) if the dimmer intensity for the fixture is more than zr. **Note:** If the dimmer level is set at zr, this is also considered as active parameter output.
MULTI EDITORS	All data from the active editors is stored in the cue. **Note:** Multi Editors can be enabled in Settings ▶ Behavior.

To view the store options

Press **STORE OPTIONS** on the Editor toolbar. The option buttons are displayed.

Note: **STORE OPTIONS** is available after pressing **CUE**.

A

To program cues using store options

1 Select fixtures.

2 Set levels.

3 Tap **STORE OPTIONS**.

The Editor tool bar shows the store options. **ALL EDITOR** is the default.

4 Tap one of the store options.

5 Press **CUE** and enter a cue number.

6 Press **STORE**.

The cue is stored. The contents of the cue is determined by the selected store option.

> E

To program cues using store options

1 Select fixtures.

2 Set levels.

3 Tap *STORE OPTIONS*.

The Editor tool bar shows the store options. *ALL EDITOR* is the default.

4 Tap one of the store options.

5 Press **STORE**

6 Press cue and enter a cue number.

7 Press **ENTER**.

The cue is stored. The contents of the cue is determine by th selected store option.

Adding text tags to cues

Text tags can be added to cues. Cues' text tags appear i cue and playback displays.

> A

To add text tags to cues

1 Directly after storing a cue, press **TEXT**. A text field opens.

2 Type a name on the alphanumeric keyboard.

3 Tap *OK* or press **ENTER**

OR

1 Select he QLi t (skip this if referring to the QList on the master playback).

2 Sel ct the cue.

3 P   ss **TEXT**.

The Text dialog box opens.

Type a name on the alphanumeric keyboard.

5 Tap *OK* or press **ENTER**.

> E

To add text tags to cues

1 Directly after storing a cue, press **TEXT**. A text field opens.

2 Type a name on the alphanumeric keyboard.

3 Press **ENTER**.

OR

1 Press **TEXT**.

2 Select the QList (skip this if referring to the QList on the master playback).

3 Select the cue.

4 Press **ENTER**.

The Text dialog box opens.

5 Type a name on the alphanumeric keyboard.

6 Press **ENTER** or tap *OK*.

Deleting cues

Individual cues or a range of cues can be deleted from QLists.

A

To delete a single cue

Example: Delete cue 9 from QList 5.

1 Select QList 5: **QLIST**, **5**.

2 Select cue 9: **CUE**, **9**.

3 Press **DELETE**.

The Delete confirmation box is displayed

4 Press **DELETE** again.

Or

Tap *DELETE* in the con mati n box.

Deleted, displayed in th command line confirms a successful operation.

To delete a range f cu s

Example: Dele   cue 9 through 15 from QList 5.

1 Select QList 5: **QLIST**, **5**.

2 S lect cues 5 through 9; **CUE 9 → 15**.

3 P ess **DELETE**.

The Delete confirmation box is displayed.

4 Press **DELETE** again.

Or

Tap *DELETE* in the confirmation box.

Deleted, displayed in the command line confirms a successful deletion.

E

To delete a single cue

Example: Delete cue 9 from QList 5.

1 Press **DELETE**.

2 Select QList 5: **QLIST**, **5**.

3 Select cue 9: **CUE**, **9**.

4 Press **DELETE** or **ENTER**.

The Delete confirmation box is displayed.

5 Press **DELETE** or **ENTER** again.

Or

Tap *DELETE* in the confirmation box.

Deleted, displayed in the command line confirms a success ul o eration.

To delete a range of cues

Example: Delete cue 9 through 15 from QList 5.

1 Select QList 5: **QLIST**, **5**.

2 Select cues 5 through 9; **CUE**, **9**,→,**15**

3 Press **DELETE** or **ENTER**.

The Delete confirmation box i displayed.

4 Press **DELETE** or **ENTER** ag in.

Or

Tap *DELETE* in he onfirmation box.

Deleted, di played in the command line confirms a successful operation.

To delete the urrent cue on the master playback device

1 Press **DELETE**.

2 Se ect the cue number.

3 Press **ENTER**.

The Delete confirmation box is displayed.

4 Press **DELETE** or **ENTER** again.

Examining cues

Select cues for examination using the console keys, the soft tabs in grid mode, or the workspace nodes. You can also view a track sheet that shows where specific fixtures are used in cues.

When examining cues, parameter levels are displayed using the playback color code. See "Master playback color code" page 197. The title bar for cue sheet displays shows the playback device source, if the cue is currently output, and the QList number and name.

A

To examine a cue

1 Select the QList. Skip this step if the QList on the master playback.

2 Select the cue.

3 Press **EXAM**.

The cue details are displayed in the active pane.

E

To examine a cue

1 Press **EXAM**.

2 Select the QList.

Skip this step if the QList is on the master playback.

3 Select the cue.

4 Press **ENTER**.

The cue details are displayed in the active pane

To examine a cue using the workspace

See,"To view cue sheets" on page 35

To examine a cue using the soft ke s

See "Soft key and grid format displays" page 39

A

To view the track sheet

1 Select a fixture

2 Press **E AM**.

3 Tap he tab labelled Exam.

A t of QLists and the cues, where the selected fixture is active, is displayed.

E

To view the track sheet

1 Press **EXAM**.

2 Select a fixture.

3 Tap the tab labelled Exam.

A list of QLists and the cues, where the selected fixture is active, is displayed.

Examining a QList track sheet

QList track sheets show the cues, the fixtures used in the cues, and the parameter levels in each QList. You can view channels' dimmer levels or spots' parameter levels. You select what is displayed, by choosing the fixture type and parameter in the controls located in the view pane's header.

parameter selection

fixture selection

number of columns displayed
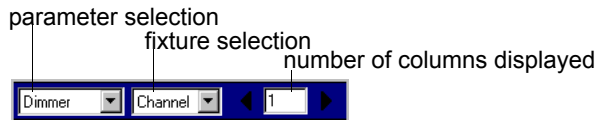
Figure 67: Track sheet controls in the pane header

IMPORTANT! To switch from viewing channels to viewing spot parameters the view pane's header must be visible.

A

To examine a QList track sheet

1   Select a QList.

2   Press **EXAM**.

3   Tap the tab labelled TSheet.

A list of cues, the fixtures in each c   , and the cues where the selected fixture is active is displayed.

4   To view channels, choose Chan el in the combo box list in the pane header.

To view spots, choose Sp t in the combo box list in the pane header.

To view matrix fixtures choose Matrix in the combo box list in the pane header.

To view media server devices, choose Media Server in the combo box list in the pane header.

5   Select th   parameter that you want to view in the combo box list in the pane header.

E

To exam ne a QList track sheet

Press **EXAM**.

2   Select a QList.

3   Press **ENTER**.

4   Tap the side tab labelled TSheet.

A list of cues, the fixtures in each cue, and the cues where the selected fixture is active is displayed.

5   To view channels, choose Channel in the combo box list in the pane header.

To view spots, choose Spot in the combo box list in the pane header.

To view matrix fixtures, choose Matrix in the combo box list in the pane header.

To view media server devices, choose Media Server in the combo box list in the pane header.

6 Select the parameter that you want to view in the combo box list in the pane header.

Examining fixture usage

Vector tracks patched fixtures that are used in the show and fixtures that are patched, but not used in the show. The mechanism that tracks this data is groups. Vector creates two groups, one for fixtures used in the show (group 9001) and one for free fixtures (group 9002). These groups are aut m i-cally updated.

A

To view fixtures used in show

1 Press **SPOT** or **CHANNEL**.

The Editor tool bar is in fixture selection mode.

2 Tap *USED IN SHOW*.

3 Press **EXAM**.

The fixtures that are used in cues are group are displayed.

To view free fixtures

1 Press **SPOT** or **CHANNEL**.

The Editor tool bar is in fixtur selection mode.

2 Tap *FREE IN SHOW*.

3 Press **EXAM**.

The fixtures that have not been used yet are displayed.

E

To view fixtur s used in show

1 Press **EXAM**.

2 Press **SPOT** or **CHANNEL**.

The Editor tool bar is in fixture selection mode.

3 Tap *USED IN SHOW*.

The fixtures that are used in cues are groups are displayed.

4 Press **ENTER**.

To view free fixtures

1 Press **EXAM**.

2 Press **SPOT** or **CHANNEL**.

The Editor tool bar is in fixture selection mode.

3 Tap *FREE IN SHOW*.

The fixtures that have not been used yet are displayed.

4   Press **ENTER**.

Copying and pasting cues

When copying cues or QLists, you copy the source cue (or QList) to the internal clipboard and then paste it to the target cue number (or QList).

When the console is operating in Tracking mode, copying a cue opens the Copy Cue dialog box which offers two options:

- ■ *STATE* - Copies the entire cue state. including values that are tracking.

MOVE ONLY - Copies only the hard moves stored in the cue.

To copy and paste cues - Tracking mode

1   Select the cue.

2   Press **COPY**.

The Copy Cue dialog box opens.

3   Tap *STATE* or *MOVE ONLY*.

The cue data, according to the option you ele ed, is copied to the clipboard.

To copy and paste cues - Compulite mode

1   Select the source QList.

Skip this step if the QList on th master playback.

2   Select the source cue.

3   Press **COPY** to copy th cue to the clipboard.

4   Select the target QLi t and the new (target) cue number.

5   Press **PASTE**.

A su cessful operation is verified in the command line. The new cue's text is: *Copy of QList # * (s urce QList).

6   Opt onal - Rename the cue using the text editor.

To c py an entire QList

Example: Copy all the cues from QList 1 to QList 2.

QLIST 1, **COPY**, **QLIST 2**, **PASTE**; The new QList's text is: *Copy of QList #* (source QList).

Editing cues

The **STORE** and the **UPDATE** keys can both be used when editing cues. The key you choose depends on the type of sequence you have used.

As a rule of thumb, use **UPDATE** to edit cues that are output on one of the playback devices. Use **STORE** for cues that are not output on a playback device.

Updating cues

Use **UPDATE** to modify cues that are currently output. Pressing **UPDATE** opens the Upda e Items dialog box.

The Update Items dialog box allows you to update cues and libraries. The cues affected by the update are displayed in the cue column. The libraries affected by the update a   displayed in the library column. You can update all the items that appear in the columns or update items selectively.

Undo is valid for all update actions.
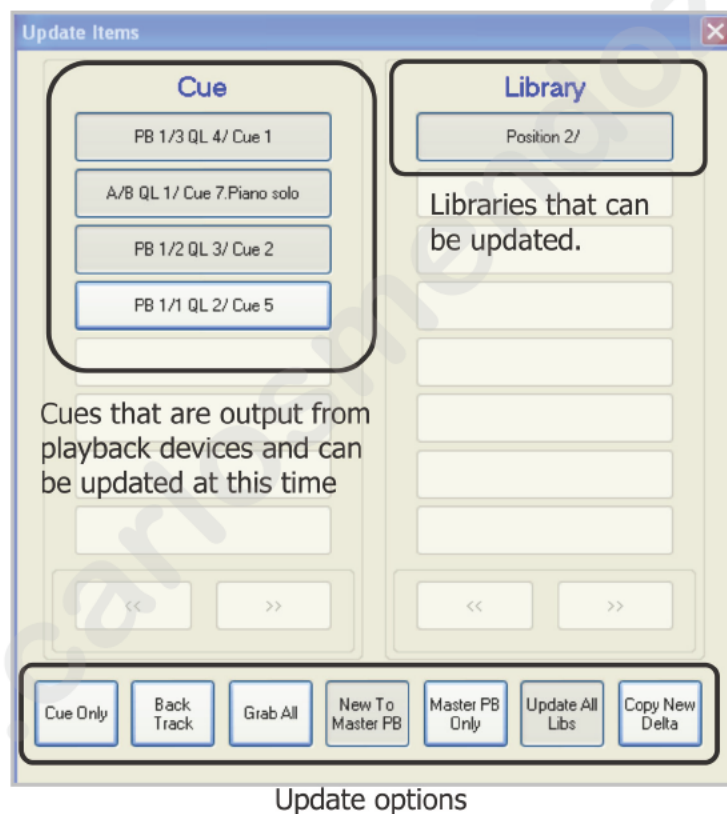
Figure 68: Update Items dialog box

Using the Update dialog box options

Option	What it does
GRAB ALL	New values can be stored to cues currently output from playback devices, on the condition that the cues are selected in the Cue column.
NEW TO MASTER PB	New values are stored in the cue output from the master playback. This is the default.
MASTER PB ONLY	Updates the cue on the master playback only.
UPDATE ALL LIBS	Updates all libraries where appropriate. The relevant libraries e di played in the library column.
COPY NEW DELTA	Copy the values active in the editor to the clipboard and us as a delta. See "Delta options" page 153.
CUE ONLY (Tracking mode)	The updated value(s) are for the current cue nly When fading to the next cue the updated values return to the track d v lue.
BACK TRACK (Tracking mode)	Change the value(s) in all the previ s cu s **To update cues using ba k tr k** Example: Channel 1 is racking through the cues at 70%. Update cue 5 for channel 1 at 35% nd update the previous cues (cues 1 - 4) with same value **1** Select c annel 1 and set the intensity to 35%. **2** P ss **UPDATE**. The update items dialog box opens. **3** Tap **BACK TRACK**. **4** Tap **OK**. The value for channel 1 is updated in cues 1 - 5.

Grab all

The term "new values" refers to values for fixtures or parameters that are not in the cues output from a playback device. Example:

Fader	loaded with	Channel/Output	Editor	Fader	Channel/Output
1QList 1 Cue 1	1 - FL	CHAN 1 → 5 @ 30 Choosing **GRAB ALL** results in:	1QList 1 Cue 1	1 - 30 4 - 30 5 30
2 QList 2 Cue 4	2 - FL		2QList 2 Cue 4	2 - 30 4 - 30 5 - 30
3QList 3 Cue 9	3 - FL		3QList 3 Cue 9	3 - 30 4 - 30 5 - 30

Notice that the values for channels 1, 2, and 3 are updated in the cues where they originate and not added to other cues. Channels 4 and 5, which do not ap ear in the original cues, are added to all of the cues.

A

To update cues live 1

Vector's current output is:

Playback Device	QList	Cue	Spot	Dimmer
AB (master playba k)	2	2	10	65

■ Ch ge t e dimmer value for the fixture in QList 2 cue 2 that is output from the A/B playback d vice

1 Select spot 10 and modify the dimmer value.

2 Press **UPDATE**.

The Update Items dialog box opens.

3 Make sure that AB/QL 2/CUE 2, in the Cue column, is selected.

4 Press **UPDATE** again or tap *OK*.

The cue is updated with the editor values.

The dialog box closes.

E

To update cues live 1

Vector's current output is:

Playback Device	QList	Cue	Spot	Dimmer
AB (master playback)	2	2	10	65

■ Change the dimmer value for the fixture in QList 2 cue 2 that is output from the A/B playback device.

1 Select spot 10 and modify the dimmer value.

2 Press **ENTER**.

The new dimmer value is output.

3 Press **UPDATE**.

The Update Items dialog box opens.

4 Make sure that AB/QL 2/CUE 2, in the Cue olumn i selected.

5 Press **UPDATE** again or tap *OK* or press **ENTE**

The cue is updated with the editor values

The dialog box closes.

A E

To update cues live 2

Vector's current ou put is:

Playback Devic	QList	Cue	Spot	Dimmer	Pan/Tilt	Cyan
AB (master playback)	2	2	10	Full	50/50	
PBD 5	3	3	10			80

■ Update QList 2 cue 2 (on AB) by changing the pan/tilt values to 60/60.

■ Update QList 3 cue 3 (on playback device 5) by changing the cyan value to 50.

1 Select spot 10.

2 Set the pan/tilt values to 60/60.

3 For Enter syntax - Press **ENTER**.

4 Set the cyan value to 50.

5 For Enter syntax - Press **ENTER**.

6 Press **UPDATE**.

The Update Items dialog box opens.

7 Make sure that both AB/QL 2/CUE 2 and PB1/QL 3/CUE 3, that appear in the Cue column, are selected.

8 Deselect *NEW TO MASTER PB*.

9 Press **UPDATE** again or tap *OK*.

The dialog box closes.

Cues are updated with the editor values for the parameters that originate from each cue.

:The updated output is:

Playback Device	QList	Cue	Spot	Dimmer	Pan/Tilt	Cyan
AB (master playback)	2	2	10	Full	60/ 0	
PBD 5	3	3	10			50

To update cues live 3

Vector's current output is:

Playback Device	QList	Cue	Spot	Dimmer	Pan/Tilt	Cyan
AB (master playback)	2	2	10	Full	50/50	
PBD 5		3	10			80

- Update List 3 cue 2 (on playback device 5) by changing the pan/tilt values to 60/60.
- DO NOT upd te values in QList 3 cue 3 (on AB).

1 S lect spot 10.

2 Set the pan/tilt values to 60/60.

3 For Enter syntax - Press **ENTER**.

4 Set the cyan value to 50.

5 For Enter syntax - Press **ENTER**.

6 Press **UPDATE**.

The Update Items dialog box opens.

AB/QL 2/CUE 2 and PB5/QL 3/CUE 3 appear in the Cue column.

Attention! Both cues are selected.

7 Make sure that only PB5/QL 3/CUE 3 selected and tap *GRAB NEW VALUES*.

8 Press **UPDATE** again or tap *OK*.

The dialog box closes. The cue on PB5 is updated.

The updated output is:

Playback Device	QList	Cue	Spot	Dimmer	Pan/Tilt	Cyan
AB (master playback)	2	2	10	Full	50/50	
PBD 5	3	3	10		60/60	80

Updating cues that are not output

Edit cues that are not currently output from a playback device and without entering hem to the editor.

A

To update or overwrite a cue

1 Select fixtures and assign values.

2 Select the QList and the cue.

3 Press **STORE**.

The Object Exists dialog box opens.

4 Tap **UPDATE** or **OVERWRITE**.

E

To update or overwrite a u

1 Select fixtures and assig   values.

2 Press **ENTER**

3 Press **STORE**.

4 Select the QList and the cue.

5   ess **ENTER**.

The Object Exists dialog box opens.

6 Tap **UPDATE** or **OVERWRITE**.

Tip! Use the blind editor to update cues and avoid interfering with the lighting state on stage. See "Blind Editor" page 185

Updating output from selected playback devices

When cues are output from many playback devices, it is sometimes difficult to know exactly which cue we want to update. **PLAYBACK EDIT** isolates the output from a specific playback device for cue editing. For information about loading QLists to playback devices, see See,"To load a QList to a playback device" on page 195

A

To edit output from a playback device

1 Press **EDITOR**.

   Skip this step if the editor is idle.

2 Tap **PLAYBACK EDIT**.

3 Press **SELECT** for the playback device controlling the cue.

   The cue is now active in the editor.

4 Edit the cue.

5 Press **STORE**.

E

To edit output from a playback device

1 Press **EDITOR**.

   Skip this step if the editor is idl .

2 Tap **PLAYBACK EDIT**.

3 Press **SELECT** for the pl yback device controlling the cue.

   The cue is now active in the editor.

4 Edit the cue.

5 Press **UPD TE**.

6 Pres **ENTER**.

Updating cues during their fade

Wh t happens when updating cues while they are fading in or out?			
Example 1 **The parameters have values in both cue 1 (fading out) and cue 2 (fading in).** **Update cue 1.**			
Cue 1 (outgoing)	Chan 1 @ FL Chan 2 @ FL	Editor: Chan 1 @ 80 Chan 2 @ 80	Press **UPDATE**: The editor is released, in default system time, to the parameters' current values and, if necessary, the values complete their fade in the remaining cue time.
Cue 2 (incoming)	Chan 1 @ 50 Chan 2 @ 50		

What happens when updating cues while they are fading in or out?			
Example 2 *The parameters do not have values in cue 2 (fading in).* *Update cue 1.*			
Cue 1 (outgoing)	Chan 1 @ FL Chan 2 @ FL	Editor: Chan 3 @ 80	Press **UPDATE**: Compulite mode - The editor is released and parameters fade to their released (or home) value in system default time. Tracking mode - The editor is release and parameters fade to their tracked valu in system default time.
Cue 2 (incoming)			

Example 3 *Update cue 2 (is fading in)*			
Cue 1 (outgoing)	Chan 1 @ FL Chan 2 @ FL	Editor: Chan 3 @ 80	Press **UPDATE**: The editor is r leased in system time, but the updated v lue tays where it is until the fade is mp te.
Cue 2 (incoming)	Chan 1 @ 50 Chan 2 @ 50		

Updating fade times (Action syntax: **CUE #, TIME # UPDATE)** (Enter syntax: **CUE #**, **UPDATE**, **ENTER)** during a fade does not change the t me f r the fade in progress. The new fade time is used the next time the cue is running.

To edit cues during fades

A

Select fixtures and dit values, **CUE #, UPDATE.**

OR

CUE #, Sele   fixtures and edit values, **STORE.**

E

Select fixtures and edit values, **CUE #**, **UPDATE**, **ENTER.**

Releasing fixtures or parameters from cues

You can release fixtures or parameters from a range of cues.

When a fixture's dimmer level is at zr (0%) Vector automatically releases it from the editor or the cues:

- Compulite mode! When a fixture's dimmer level is set to zr, it is released from the editor and not stored.

■ Tracking mode! When a fixture's dimmer level is set to zr, this is stored in the cue. If the dimmer level remains unchanged in the next cue, no longer appears. The level zr does not track. Example: In Cue 1, channel 1 intensity is at 75, in Cue 2, channel 1 intensity is set at zr and it saved in the cue, in Cue 3 there is no change to channels 1's intensity therefore is no longer tracked and does not appear in cue 3.

Note: To change the parameter values' fade time when releasing fixtures or parameters, See "Default release time" on page 338.

A

To release fixtures from a range of cues

1 Select the cues.

2 Select the fixture(s).

3 Press **RELEASE**.

4 Press **STORE**.

The selected fixtures are released from the range of cue and the cues are stored.

To release parameters from a range of cues

Example: Release cyan and magenta from cu s 1   orough 6.

1 If necessary, select the QList.

2 Select cues 1 thorough 6: **CUE 1 → 6**

3 Select the fixture(s).

4 Press *COLOR*.

The color wheel bank is now available.

5 Tap **CYAN** and **MAGENTA**.

6 Press **RELEASE**

7 Press **STORE**.

The selected parameters are released from the range of cues and the cues are stored.

E

To r lease fixtures from a range of cues

1 Select the cues.

2 Press **RELEASE**.

3 Select the fixture(s).

4 Press **ENTER**.

The selected fixtures are released from the range of cues and the cues are stored.

OR

1 Tap *EDIT CUE*.

2 Select the cues.

3 Select the fixture(s).

4 Press **RELEASE**.

5 Press **ENTER**.

The selected fixtures are released from the range of cues and the cues are stored.

To release parameters from a range of cues

Example: Release cyan and magenta from cues 1 thorough 6.

1 Press **RELEASE**.

2 Select the fixture(s).

3 Select cues 1 thorough 6: **CUE 1 ➔ 6**.

4 Press *COLOR*.

The color wheel bank is now available.

5 Tap **CYAN** and **MAGENTA**.

6 Press **ENTER**.

The selected parameters are released from the range of cue   and the cues are stored.

OR

1 Tap *EDIT CUE*.

2 Select the fixture(s).

3 Select the cues.

4 Tap **CYAN** and **MAGENTA**

5 Press **RELEASE**.

6 Press **ENTER**.

The selected fix   res   re released from the range of cues and the cues are stored.

A

To change cue ext

1 S lect the QList and the cue.

2 P ess **TEXT**.

3 In the Text dialog box, overwrite the old text with the new text.

4 Press **STORE**

E

To change cue text

1 Select the QList and the cue.

2 Press **TEXT**.

3 In the Text dialog box, overwrite the old text with the new text.

4 Press **ENTER**.

Exchanging parameter values

There may be instances where you need to exchange parameter values between two fixtures in one or more cues.

There are two exchange options available on the Editor toolbar in select mode:

- **EXCHANGE** - Swap the values for all the parameters in the selected fixtures.
- **EXCHANGE HTP -** Set the dimmer value according to the highest value. Example: channel 1 is set at 80%; channel 10 is set at 35%. **EXCHANGE HTP** sets both channels at 80%.

A

To exchange parameter values

Example: Channel 1 is temporarily substituting for channel 10. You want to transfer channel 10's dimmer levels to channel 1 in cues 5 through 12.

1 Select cues 5 through 12.

2 Press **CHANNEL** and 1 on the keypad to select channel 1.

3 Tap **EXCHANGE**.

4 Press 10 on the keypad to select channel 10

5 Press **STORE**.

The dimmer levels in channels 1 and 10 are wapped in the selected cues.

E

To exchange parameter values

Example: Channel 1 is temp rarily substituting for channel 10. You want to transfer channel 10's dimmer levels to channel 1 in cues 5 through 12.

1 Select cues 5 thr ugh 12.

2 Press **CHANNE** and 1 on the keypad to select channel 1.

3 Tap **EXCHANGE**.

4 Press 10 on the keypad to select channel 10.

5 Press **UPDATE**.

6 Press **ENTER**.

The dimmer levels in channels 1 and 10 are swapped in the selected cues.

Using Delta

A delta saves absolute and relative modifications of spot parameter levels, channel intensity, and scroller frames. Example: In a certain, channel 1 is at 50%. You update the level to 80% and copy this value as a new delta. The delta values are: Absolute 80%, Relative +30.

Delta is used to edit cues by pasting the levels in the delta to the target cue. The levels stored in the delta the values appearing in red or white, grabbed from the editor. The delta feature uses the copy and paste functionality, therefore anything copied to the clipboard overwrites the delta. You can store a new delta at any point in programming sequences. Vector supports one delta.

Delta options

There are three options when pasting the delta:

- **RELATIVE** - Paste the relative values stored in the delta. This is the default option.
- **ABSOLUTE** - Paste the absolute values stored in the delta.
- **ADD NEW** - Paste delta values to parameters that have no values stored in the cue or tracking through.
- **COPY NEW DELTA** - Grab the editor values and copy to the clipboard as the new delta
- **PASTE NEW DELTA** - Paste the contents of the clipboard according to the delta featur constraints.
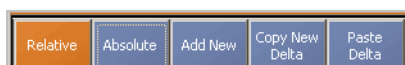
Figure 69: Delta mode on the Editor tool bar

Relative delta

Delta (as copied when editing a cue)		**Target Cue**	**Ta get Cue after pasting elta**
Channel 1	Absolute: 90 Relative: +30	Channel 1 @ 35	Channel 1 @ 65
Channel 2	Absolute: 90 Relative: +60	Channel 2 @ 50	Channel 2 @ FL
Channel 3	Absolute: 80 Relative: +30	Chan el 3 @ 30	Channel 3 @ 60
Channel 4	Absolute: 30 Relativ 4	Channel 4 @ 80	Channel 4 @ 40

Absolute del a

Delta (as c pied when editing a cue)		**Target Cue**	**Target Cue after pasting delta**
Channel 1	Absolute: 90 Relative: +30	Channel 1 @ 60	Channel 1 90
Channel 2	Absolute: 90 Relative: +60	Channel 2 @ zr	Channel 2 90
Channel 3	Absolute: 80 Relative: +30	Channel 3 @ 30	Channel 3 80
Channel 4	Absolute: 30 Relative: -40	Channel 4 @ 80	Channel 3 30

Add New delta

Delta (as copied when editing a cue)		Target Cue	Target Cue after pasting delta
Channel 1	Absolute: 90 Relative: +30	Channel 1 @ 60	Channel 1 @ 60
Channel 2	Absolute: 90 Relative: +60	Channel 2 @ not in cue	Channel 2 @ 90
Channel 3	Absolute: 80 Relative: +30	Channel 3 @ 30	Channel 3 @ 30
Channel 4	Absolute: 30 Relative: -40	Channel 4 @ 80	Channel 4 @ 80

To copy the delta from the editor

1 Select fixtures and adjust levels.

2 Press **@**.

3 Press **COPY**.

The absolute and relative values are c pied f om the editor to the clipboard and are ready for pasting.

OR

1 Select fixtures and adjust lev ls.

2 Press **UPDATE**.

The Update dialog b x opens.

3 Tap *COPY NEW DELTA*.

The abs lute nd relative values are copied from the editor to the clipboard and are ready for pasting

To paste delta values

Example: Update cues 5 through 9 by pasting the levels in the delta.

1 Press **CUE**, **5**, →, **9** to select cues 5 through 9.

2 Press **PASTE**.

The cues are updated with the new values.

Note: Using this sequence assumes pasting the relative values in the delta.

OR

1 Select cues.

2 Tap *DELTA*.

3 Optional: tap *RELATIVE*, *ABSOLUTE*, or *ADD NEW*.

4 Tap *PASTE* on the delta toolbar.

The cues are updated with the new values.

Renumbering cues

Renumber cues to eliminate point cues.

A few rules govern the renumbering of cues:

- Force-black cues retain their point numbering (#.#).
- Follow-on settings are deleted.

A warning message appears if the renumbering will overwrite existing cues.

ATTENTION! There is no undo after renumbering.

A

To renumber all the cues in the QList

1 Select the QList.

2 Tap *RENUMBER* on the Editor tool bar.

3 Enter the start number for the first cue.

4 Press **STORE**.

Confirmation is requested.

5 Tap *RENUMBER* to confir   or t p **CANCEL** to abort the renumbering operation.

To renumber a range of ues

1 Select the QLis

2 Select the ange of cues (**CUE # ➔ #**).

3 Tap *RENUMBER* on the Editor tool bar.

4 Ent r the start number for the first cue.

5 Pre s **STORE**.

Confirmation is requested.

6 Tap *RENUMBER* to confirm or tap **CANCEL** to abort the renumbering operation.

To renumber cues with intervals

1 Select the QList.

2 Optional: Select the range of cues (**CUE # ➔ #**).

If no range is selected, all the cues in the QList are renumbered.

3 Tap *RENUMBER* on the Editor tool bar.

4 Enter the start number for the first cue.

5 Tap *JUMP EVERY*.

6   Enter the interval.

7   Press **STORE**.

> Confirmation is requested.

8   Tap *RENUMBER* to confirm or tap **CANCEL** to abort the renumbering operation.

> E

To renumber all the cues in the QList

1   Select the QList.

2   Tap *RENUMBER* on the editor tool bar.

3   Enter the start number for the first cue.

4   Press **ENTER**.

> Confirmation is requested.

5   Tap *RENUMBER* to confirm or tap **CANCEL** to abort the renumbering operation.

To renumber a range of cues

1   Select the QList.

2   Select the range of cues (**CUE # → #**).

3   Tap *RENUMBER* on the editor tool bar.

4   Enter the start number for the first c e.

5   Press **ENTER**.

> Confirmation is requested

6   Tap *RENUMBER* to confirm or tap **CANCEL** to abort the renumbering operation.

To renumber cues with intervals

1   Select the QLis

2   Select th range of cues (**CUE # → #**).

3   Tap *RENUMBER* on the editor tool bar.

4   En r the start number for the first cue.

5   Tap *JUMP EVERY*.

6   Enter the interval.

7   Press **ENTER**.

> Confirmation is requested.

8   Tap *RENUMBER* to confirm or tap **CANCEL** to abort the renumbering operation.

Programming and update options in tracking operation

The Editor tool bar, in cue mode, shows buttons for editing cues in tracking mode.
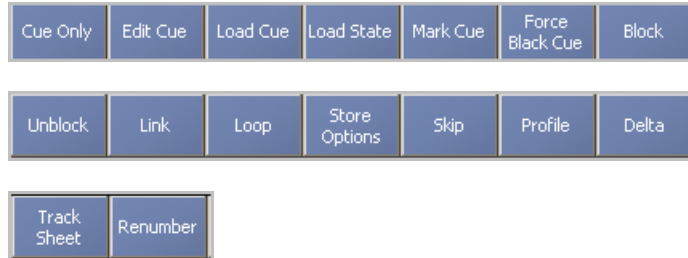
Figure 70: Cue mode on the Editor tool bar

Cue only

Updated values are valid only in the current cue. When fading to th nex cue, the parameters fade to their tracked values.

> **ATTENTION!** Cue Only interrupts the tracking. Ex mpl : In cues 1 through 5 cyan is set at FL. Cue 3 is cue only with cyan at 50%. If yo   go a k to cue 1 and adjust the cyan value to 80%, cues 1 and 2 will be updated w h th new value. Since the tracking update is interrupted at the Cue Only cue, the cy   leve in cue 4 will be at FL, its original value.

The last cue in the QList cannot be programmed as Cue Only.

In Tools > System Settings > Behavio   you can set cue only to be Vector's default behavior for cue editing.

Example: Update the pan value in cue 12 to 65% using the Cue Only feature.

Original Moves Tracking			*Moves/Tracking after updating with Cue Only*		
Cue 11	Tracking	80	Cue 11	Tracking	80
Cue 12	Tr cking	80	Cue 12	Move	65
Cue 13	Tracking	80	Cue 13	Move - Fading from cue 12 to 13, the pan value moves to original value	80
Cue 14	Tracking	80	Cue 14	Tracking	80

A

To store a cue as cue only

1. Select fixtures and assign values.

2. Press **CUE** and select a cue number.

3. Tap *CUE ONLY*.

4. Press **STORE**.

E

To store a cue as cue only

1 Select fixtures and assign values.

2 Press **ENTER**.

3 Press **STORE**.

4 Press **CUE** and select a cue number.

5 Tap *CUE ONLY*.

6 Press **ENTER**.

To paste Cue Only cues

CUE ONLY can be applied when pasting cue data from the clipboard.

1 Copy cues or some of the cue information.

   See "Copying and pasting cues" page 141.

2 Press **CUE** and select the cue number.

3 Tap *CUE ONLY*.

4 Press **PASTE**.

Edit cue

The selected cue is loaded to the maste playback and its fixtures and levels are active in the editor. For use in tracking or Compulite modes

A

To edit a cue

1 Select the QLi t and cue.

2 Tap *EDIT CUE*

3 Sel ct a fixture.

   Th cue is loaded to the master playback and output.

4 Edit the cue.

5 Press **UPDATE**.

   The Update dialog box opens.

6 Optional - choose on of the options in the dialog box.

7 Tap **OK**.

OR

Press **CUE # ENTER**. and continue with step 3.

E

To edit a cue

1 Select the QList and the cue.

2 Tap *EDIT CUE*.

3 Select a fixture.

   The cue is loaded to the master playback and output.

4 Edit the cue.

5 Press **UPDATE**.

6 Optional - choose one of the options in the dialog box.

7 Press **ENTER**.

OR

Press **CUE # ENTER** and continue with step 3.

Load cue

The selected cue is loaded to the editor, but not outp t fr m the master playback.

A

To edit a lighting state

1 Press *LOAD CUE*.

2 Select the cue.

3 Carry out modificati ns.

4 Press **ENTER**.

5 Press **UPDAT**

6 Press   NTER

E

To edit a ghting state

1 Press *LOAD CUE*.

2 Select the QList and the cue.

3 Carry out modifications.

4 Press **ENTER**.

5 Press **UPDATE**.

6 Press **ENTER**.

Load state

The entire lighting state, including all tracked values, is loaded to the editor. This feature can be used with Compulite mode also. Where appropriate (in tracking mode), new values are back-tracked.

A

To edit a lighting state

1 Select the cue.

2 Press **LOAD STATE**.

3 Carry out modifications.

4 Press **ENTER**.

5 Press **UPDATE**.

6 Press **ENTER**.

E

To edit a lighting state

1 Press **LOAD STATE**.

2 Select the QList and the cue.

3 Carry out modifications.

4 Press **ENTER**.

5 Press **UPDATE**.

6 Press **ENTER**.

Skip

Values in skip cues or sk p parameters are valid only for that particular cue. Fading to the next cue restores paramet r values to the levels used in the cue before the skip cue.

Example: In ues 1 through 5 cyan is set at FL. You insert cue 2.5 with cyan at 50%, which is the value or th cue only. In cue 3 you want the value to return to tracking (FL). In this case, program cue 2.5 a "skip" cue.

Ski cues do not interrupt tracking. Example: In cues 1 through 5 cyan is set at FL. Cue 2.5 is a skip cue with cyan at 50%. If you go back to cue 1 and adjust the cyan value to 80%, cues 2, 3, 4, and 5 will be updated with the value. The tracking update will ignore the skip cue.

Example: Update the pan value in cue 12 to 65% using the Skip feature.		
Original Moves/Tracking	**Moves/Tracking after Skip**	
Cue 11 Tracking 80	Cue 11 Tracking	80
Cue 12 Tracking 80	Cue 12 Move	65
Cue 13 Tracking 80	Cue 13 Tracking - Fading from cue 12 to 13, the pan value returns to tracked value.	80
Cue 14 Tracking 80	Cue 14 Tracking	0

It is also possible to skip specific parameters.

Cue	Track or Move	Cyan	Yellow	Cue	Moves/Tracking after Skip	Cyan	Yellow
11	Tracking	80	FL	11	Tracking	80	FL
12	Tracking	80	FL	12	Move - Only cyan is set to skip.	65	50
13	Tracking	80	FL	13	• Cy returns to original racked value. • Yellow begins tracking from its new value	80	50
14	Tracking	80	FL	14	Tracking	80	50

Example: Skip only the cyan parameter. Do not skip the yellow parameter.

A

To program a skip cue

1 Selec the ue.

2 Tap *SKIP*

3 Press **STORE**.

T   skip specific parameters

Example: Skip only the cyan parameter. Do not skip the yellow parameter.

1 Select fixtures.

2 Set a value for yellow.

3 Set a value for cyan.

4 Make sure that the cyan values appear on a red field and tap *SKIP*.

5 Store the cue.

| E |

To program a skip cue

1 Select the cue.

2 Tap *SKIP*.

3 Press **ENTER**.

To skip specific parameters

Example: Skip only the cyan parameter. Do not skip the yellow parameter.

1 Select fixtures.

2 Set a value for yellow and press **ENTER**.

3 Set a value for cyan and press **ENTER**.

4 Press **STORE**.

5 Enter the cue number.

6 Make sure that the cyan values appear on a red field nd tap *SKIP*.

7 Press **ENTER**.

Back track

Changes the value(s) in all the previous cue

To update cues using back trac

Example: Channel 1 is track ng t rough the cues at 70%. Update cue 5 setting channel 1 at 35% and update the prev ous ues (cues 1 - 4) with same value.

1 Select channel 1 and set the intensity to 35%.

2 Press **UPDATE**

The Update Items dialog box opens.

3 Tap *BACK TRACK*.

4 Ta *OK*.

The value for channel 1 is updated in cues 1 - 5.

Block

When updating cues, no information tracks past the block cue.

| A |

To program a block cue

1 Select the cue.

2 Press *BLOCK*.

3 Press **STORE**.

E

To program a block cue

1 Select the cue.

2 Tap *BLOCK*.

3 Press **ENTER**.

Unblock

Cancel the block cue and reinstate tracking when updating cues.

A

To cancel a block cue

1 Select the cue.

2 Press *UNBLOCK*.

3 Press **STORE**.

E

To cancel a block cue

1 Select the cue.

2 Press *UNBLOCK*.

3 Press **ENTER**.

Loading cues to the editor

You can load cues to the editor retaining the link between the cue information and the cue or enter cues to the editor with o t retaining the link to the specific cue.

When updating c es, you will want to retain the link to the specific cue. If you are using the cue information s a building block for a new cue, you will not care about maintaining the original cue's identit .

A E

To load a cue to the editor for updating

1 Select the QList and the cue.

2 Press **SPOT** or **CHANNEL**.

The cue is now active in the editor and is captured on the master playback.

OR

1 On the Editor toolbar, tap *LOAD STATE* or *LOAD CUE.*

2 Press **ENTER**.

3 Select the QList and the cue.

The cue is active in the editor.

A

To load a cue to the editor and store a new cue

Example: Load cue 5 to the editor, modify the values, and store a new cue.

1 Press **CUE** and **5** to select the cue.

   Or

   If the cue is available on a soft key, tap the cue's soft key.

2 Press **ENTER**.

3 Modify the values in the editor, add fixtures, or remove fixtures.

4 Enter a number for the new cue and press **STORE**.

E

To load a cue to the editor and store a new cue

Example: Load cue 5 to the editor, modify the values, and s ore a new cue.

1 Press **CUE** and **5** to select the cue.

   Or

   If the cue is available on a soft key, tap the   s soft key.

2 Press **ENTER**.

3 Modify the values in the edito   add fixtures, or remove fixtures.

4 Press **ENTER** to see the changes.

5 Press **STORE**.

6 Press **CUE** am enter   number for the new cue.

7 Press **ENTER**.

Fade times

ime- n, time-out, delay-in, delay-out, and wait times may be set for cues and parameters.

If no times are set, the cue default time is used. The default cue time is 2.0 seconds. You can change the default cue time in: Tools ▶ Settings ▶ Timing.

Press 0 to set a cut (bump) time.

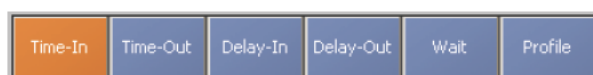| Time-In | Time-Out | Delay-In | Delay-Out | Wait | Profile |

Figure 71: Time mode on the Editor tool bar

Key/Button	Function
TIME	Set the Editor toolbar to cue time mode. Set fade times for the current cue on the master playback device.
TIME IN	On Go, all fixtures fading to higher values begin their fade. The fade takes place in the set time.
TIME OUT	On Go, all fixtures fading to lower values begin their fade. The fade takes place in the set time. If no time-out is set, time-out is identical to the time-in setting
DELAY IN	On Go, all fixtures fading to higher values begin to coun the delay time before beginning their fade.
DELAY OUT	On Go, all fixtures fading to lower values begin to count the delay time before beginning their fade.
WAIT	Pressing *WAIT* opens two options on t e Ed toolbar: *FOLLOW ON* and *MANUAL*.
FOLLOW ON	Fade to the next cue with ut w iting for a Go command. Loops use this setting. A cue can be given a spe ific wait time. This is the move fade time - the time that the f llowing cue waits before fading in. You can use this to begin fade to the next cue before the fade to the current cue is complete. Example: Cue 2's fade time is 8 and wait tim 4. Four seconds after the fade to cue 2 begins, the fade to will start. The fade to cue 2 continues until it is complete. Both cues are fading at the same time.
MANUAL	Wait for a Go command before fading to the next cue. This is the default.

Setting and editing fade times

You c n set fade times for cues, parameters, or entire parameter banks.

A

To set cue fade times when programming

Example: Program fade times for cue 5 in QList 1.

Time:	*Time in*	*Time out*	*Delay in*	*Delay out*	*Wait*
Set to:	4.5	Default (4.5)	3.0	2.0	No assignment

1 Select fixtures and assign values.

2 Select QList 1: press **QLIST**, **1**.

3 Press **CUE** and **5** on the numeric keypad.

4 Press **TIME**.

The Editor tool bar is now in time mode.

5 Tap *TIME IN* and press **4.5** on the numeric keypad.

6 Tap *DELAY IN* and press **3** on the numeric keypad.

7 Press *DELAY OUT* and **2** on the numeric keypad.

8 Press **STORE**.

To edit cue fade times

Example: Set 4.5 seconds fade- in time for QList 1 cue 5.

1 Select QList 1.

2 Select cue 5.

3 Press **TIME**.

The Editor tool bar is set to time mode.

4 Tap *TIME IN* and press **4.5** on the numeric keypad.

5 Press **STORE**.

OR

1 Press **EXAM**.

2 Select the QList.

3 Switch to grid view by tapping [grid icon] .

The cues in QList 1 are display d

4 Select cue 5.

5 Tap a fade time field to select it and enter the new time on the console's number keypad or on the external keyb ard.

To edit fade times for a range of cues

Example: Set 4.5 seconds fade- in time for QList 1 cues 5 → 10.

1 S lec QList 1.

2 Se ect cues 5 → 10.

3 Press **TIME**.

The Editor tool bar is set to time mode.

4 Tap *TIME IN* and press **4.5** on the numeric keypad.

5 Press **STORE**.

To edit fade times for the current cue on the master playback device

Example: Set 4.5 seconds fade- in time for QList 1 cue 5.

1 Press **TIME**.

The Editor tool bar is set to time mode.

2 Tap *TIME IN* and press **4.5** on the numeric keypad.

3 Press **STORE**.

To set fade times for parameters

Example: Set a delay-in of 5 seconds for the color wheel.

1 Select the spots and set values.

2 Press **COLOR**.

The wheel assignments switch to the color bank.

3 Tap *COLOR WHEEL* or press the color wheel parameter key.

4 Press **TIME**.

The Editor tool bar is now in time mode.

5 Tap *DELAY-IN* and press **5** on the numeric keypad.

6 Optional - Display the time value in the parameter cell: Format▶Time

To edit bank time

1 Select spots.

2 Select the bank by pressing one of the bank keys (**IN ENS**, **POS**, **COLOR**, **BEAM**, **IMAGE**, **SHAPE**).

3 Press **TIME**.

The Editor tool bar is now in time mode.

4 Choose a time setting from the Ed or t ol bar.

5 Use the wheels or the keypad t set the time.

6 Press **UPDATE**, if editing a cue, or store a new cue.

To edit parameter fa e times

Example: Set a de y in time of 5 seconds for the color wheel parameter in QL1 Cue 5.

1 Select QLis 1 and cue 5.

2 Sel ct spot(s).

3 P ss **COLOR**.

The wheel assignments switch to the color bank.

Tap *COLOR WHEEL* or press the color wheel key.

The Color Wheel parameter is selected.

5 Press **TIME**.

The Editor tool bar is set to time commands.

6 On the Editor tool bar, press *DELAY IN* and **5** on the numeric keypad.

7 Press **STORE**.

The parameter's time assignment is stored in the cue.

8 Optional - To display a time assignment in the parameter cell, choose the time icon in the Format menu or tool bar.

To release parameter fade times

1 Select QList 1 and cue 5.

2 Select spot(s).

3 Select the parameter.

4 Press **TIME**.

   The Editor tool bar is set to time commands.

5 Press **RELEASE**.

6 Press **STORE**.

   The parameter's time assignment released.

E

To set cue fade times when programming

Example: Program fade times for cue 5 in QList 1.

Time:	Time in	Time out	Delay in	De ay out	Wait
Set to:	4.5	Default (4.5)	3.0	2 0	No assignment

1 Select fixtures and assign values.

2 Press **ENTER**.

3 Press **STORE**.

4 Select QList 1: press **QLIST**, **1**.

5 Press **CUE** and **5** on t e numeric keypad.

6 Press **TIME**.

   The Editor tool bar is set to time mode.

7 Tap *TIME IN*   nd press **4.5** on the numeric keypad.

8 Tap *DELAY IN* and press **3** on the numeric keypad.

9 Pr ss *DELAY OUT* and **2** on the numeric keypad.

10   ess **ENTER**.

To edit cue fade times

Example: Set 4.5 seconds fade- in time for QList 1 cue 5.

1 Select QList 1.

2 Select cue 5.

3 Press **TIME**.

   The Editor tool bar is set to time mode.

4 Tap *TIME IN* and press **4.5** on the numeric keypad.

5 Press **ENTER**.

OR

1 Press **EXAM**.

2 Select QList 1.

3 Press **ENTER**.

4 Switch to grid view by tapping ⊞ .

The cues in QList 1 are displayed.

5 Select cue 5.

6 Tap a fade time field to select it and enter the new time on the console's numb r keypad or on the external keyboard.

To edit fade times for a range of cues

Example: Set 4.5 seconds fade- in time for QList 1 cues 5 → 10

1 Select QList 1.

2 Select cues 5 → 10.

3 Press **TIME**.

The Editor tool bar is set to time mode.

4 Tap *TIME IN* and press **4.5** on the num ic keypad.

5 Press **ENTER**.

To set fade times for the current ue on the master playback device

1 Press **TIME**.

The Editor tool ba is se to time mode.

2 Tap *TIME IN* and pre s the fade time on the numeric keypad.

3 Press **ENT R**.

To set pa ameter fade times

Example: Set a delay-in of 5 seconds for the color wheel.

1 Select the spots and set values.

2 Press **ENTER**.

3 The values are output.

4 Press **COLOR**.

The wheel assignments switch to the color bank.

5 Tap *COLOR WHEEL* or press the color wheel parameter key.

6 Press **TIME**.

The Editor tool bar is now in time mode.

7 Tap *DELAY-IN* and press **5** on the numeric keypad.

8 Optional - Display the time value in the parameter cell: Format ▶ Time.

9 Press **ENTER**.

To edit bank time

1 Select spots.

2 Select the bank by pressing one of the bank keys (**INTENS**, **POS**, **COLOR**, **BEAM**, **IMAGE**, **SHAPE**).

3 Press **TIME**.

4 The Editor tool bar is now in time mode.

5 Choose a time setting from the Editor tool bar.

6 Use the wheels or the keypad to set the time.

7 Press **UPDATE**, if editing, or store a new cue.

8 Press **ENTER**.

To edit parameter fade times

Example: Set a delay-in time of 5 seconds for the color wheel parameter in QL1 Cue 5.

1 Tap *EDIT CUE*.

2 Select QList 1 and cue 5.

3 Press **ENTER**.

4 Select spot(s).

5 Press **COLOR**.

The wheel assignments switch   the color bank.

6 Tap *COLOR WHEEL* or press the color wheel key.

The Color Wheel parameter is selected.

7 Press **TIME**.

The Editor ool ar is in time mode.

8 On the E itor tool bar, press *DELAY IN* and **5** on the numeric keypad.

9 Press **ENTER**.

10 Press **UPDATE**.

11 Press **ENTER**.

The parameter's time assignment is stored in the cue.

12 Optional - To display a time assignment in the parameter cell, choose the time icon in the Format menu or tool bar.

To release parameter fade times

1 Select the cue.

2 Select the fixtures.

3 Select a parameter.

More than one parameter can be selected and entire parameter banks can be selected via Intens, Pos, Color, Beam, Image, Shape.

4 Press time.

5 Tap time In or Delay In or both.

6 Press delete.

7 Press update.

8 Press enter.

The fade times, for the selected parameters, are deleted.

OR

1 Tap *EDIT CUE*.

2 Select QList 1 and cue 5.

3 Press **ENTER**.

4 Select spot(s).

5 Select the parameter.

6 Press **RELEASE**.

7 Press **TIME**.

8 Press **ENTER**.

The **UPDATE** LED blinks, indicatin **UPDATE** is required.

9 Press **UPDATE**.

10 Press **ENTER**.

Using the slash key (/) to set fade times

Each press on *I*, cycles through the time options. The current option is displayed in the command line.

To use the slash key for setting fade times

1 Se ect the cue.

2 P ess **TIME**.

The command line displays *QList # Cue # (parameter) Time-in #*.

3 For time-in, enter the number of seconds now.

4 For Time-Out, Delay-In, Delay-Out, and Wait times, press the slash key (*I*) until the required option is displayed in the command line.

5 To return to a previous option press **SHIFT** + *I*.

6 Press **NEXT** or **PREV** to toggle between manual and follow-on.

Deleting delay times

ATTENTION! Only delay times can be deleted.

To delete delay times

Example: Delete the delay- in time set for cue 3 in QList 1.

1 Select QLists 1 and cue 3.

2 Press **TIME**.

The Editor toolbar is in time mode.

3 Tap *DELAY - IN*.

4 Press **DELETE**.

The delay time is deleted.

Loops

The loop feature strings together sequential cues. Loops can be used wi   in QLists, like mini chasers, to repeat a series of cues. Cues in loops fade according o th ir et fade times. Loop information is displayed in the cue sheet, the playback displays, and the playback displays.

| Loop type	About
AUTO LOOP	• Pressing **GO** to fade to the first cue in the loop initiates the entire loop. The loop runs without any operator interference.
	• Can repeat an infinite umber of times or can run a specified number of loops. The def ult n mber of repeats is set to infinite. The digit 0 represents infini loops.
	• When to ing auto loops, Vector automatically sets the looped cues' wait time as follow-on.
MANUAL LOOP	• Requ es a **GO** command for each cue in the loop sequence.
	• Can repeat an infinite number of times or can run a specified number of loops. The default number of repeats is set to infinite.
	• The wait time for cues in this type of loop is manual.
AUT FO LOW	When reaching the end of a loop sequence Vector automatically fades to the cue that follows the loop. Example: Cues 5 through 10 are set to loop 3 times. When auto follow is set, Vector fades to cue 11 after completing the loops. This is not a valid selection if the auto loop is infinite.
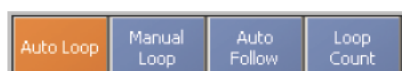
Figure 72: Loop mode on the Editor tool bar

Working with loops

To program an infinite auto loop

Example: Program a loop in QList 1, where cues 5 through 10 automatically loop an infinite. number of repeats

1 Select QList 1. Skip this step if QList 1 is on the master playback.

2 Select cues 5 through 10: **CUE**, **5**, **➜**, **10**.

3 Tap *LOOP* on the Editor toolbar.

4 Press **STORE** or **ENTER**.

To program a finite auto loop

Example: Program a loop in QList 1, where cues 5 through 10 loop thr e tim s.

1 Select QList 1. Skip this step if QList 1 is on the master playback.

2 Select cues 5 through 10: **CUE**, **5**, **➜**, **10**.

3 Tap *LOOP* on the Editor toolbar.

4 Press **3** on the numeric keypad.

   On the Editor toolbar, loop count is displaye in o nge.

5 Press **STORE** or **ENTER**.

To program an infinite manual loop

Example: Program a loop in QLis 1, where cues 5 through 10 automatically loop.

1 Select QList 1. Skip this tep if QList 1 is on the master playback.

2 Select cues 5 through 10: **CUE 5 ➜ 10**.

3 Tap *LOOP* on the Edi or toolbar.

4 Tap *MANUAL OOP*.

5 Press **STOR** or **ENTER**.

To program an infinite manual loop

Ex mple: Program a loop in QList 1, where cues 5 through 10 automatically loop.

1 Select QList 1. Skip this step if QList 1 is on the master playback.

2 Select cues 5 through 10: **CUE 5 ➜ 10**.

3 Tap *LOOP* on the Editor toolbar.

4 Tap *MANUAL LOOP*.

5 Press **STORE** or **ENTER**.

To program a finite manual loop

Example: Program a loop in QList 1, where cues 5 through 10 automatically loop 6 times.

1 Select QList 1. Skip this step if QList 1 is on the master playback.

2 Select cues 5 through 10: **CUE 5 ➜ 10**.

3 Tap *LOOP* on the Editor toolbar.

4 Press **6**.

5 Tap *MANUAL LOOP*.

6 Press **STORE** or **ENTER**.

To program an auto follow loop

Example: Create a looped chase in QList 1, where cues 5 through 10 automatically loop 6 times. Upon completion the is an automatic fade to cue 11 (the next cue).

1 Select QList 1. Skip this step if QList 1 is on the master playback.

2 Select cues 5 through 10: **CUE 5 → 10**.

3 Tap *LOOP*.

4 Press **6**.

5 Tap *AUTO FOLLOW*.

6 Press **STORE** or **ENTER**.

A

To delete loops

1 Select the first cue in the loop.

2 Tap *LOOP*.

3 Press **DELETE**.

E

To delete loops

1 Press **DELETE**.

2 Select the f rst ue in the loop.

3 Tap *LOOP*.

4 Pre s **ENTER**.

Playing back loops

S   "Loop playback" page 226

Linking Cues

You can link nonsequential cues.

- A forward link skips the cues in between the link. Example: Cue 5 is linked to cue 8. When cue 5 is the current cue, a go command initiates a fade to cue 8. The playback skips cues 6 and 7.

- A backward link returns to the first linked cue. Example: Cue 8 is linked to cue 5. When cue 8 is the current cue, a go command initiates a fade to cue 5.

To link cues

Example: Link cue 8 to cue 2.

1 Select cue 8.

2 Tap *LINK* on the Editor toolbar.

3 Press **2**.

4 Press **STORE** or **ENTER**.

A

To delete links

Example: Delete the link from cue 8 to cue 2.

1 Select cue 8.

2 Tap *LINK* on the Editor tool bar.
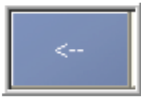
3 Press **DELETE**.

E

To delete links

Example: Delete the link from cue 8 to cue 2

1 Press **DELETE**.

2 Select cue 8.

3 Tap *LINK*.

4 Press **ENTER**.

Fan

The fan feature ap lies spread values to spot parameters, channel intensity, and scroller values according to heir selection order. The parameter wheels are used to set the spread. Spot parameters, scroll rs a d channels can be fanned from the side, center, or mirrored.

Fan direction is selected on the Editor toolbar in fan mode:

Fan toolbar	What it does
<--	Left - Spread parameter values from the first fixture in selection. The base value is taken from the first fixture in the selection. The offset values decrease from the base value (the first fixture) to the last fixture.
-->	Right - Spread parameter values from the last fixture in selection. The base value is taken from the first fixture in the selection. The offset values increase from the base value (the first fixture) to the last fixture.
<-- -->	Center mirror - Fan equally from center. The base value is taken from the center fixture. Parameter values are fanned from the selection's center fixture to the last fixture and from the center fixture to th firs fixture. The offset values increase from the middle to the ends.
\/	Center diagonal - Fan from the center. The base value is t ken from the center fixture. Fan from the center fixture to the last fixture in the selection with ascending values and from center to th firs fixture in the selection with descending values. This can be use to create a seesaw effect with pan or tilt.
Spread Negative	Flip the direction of the fan offset.
Fan Groups	When fixture selection is through groups, fan values according to the groups.
Fan Blocks	Create ad hoc block of sequential fixtures and fan parameter values accordingly

When fan is active he k y's LED is on. Selecting another parameter turns off the fan feature. Press **FAN** again to re tivate.

The fan featu e can also be applied in the Effect Editor.

Exampl s of fan use:

- Colors - Apply fan to cyan. The result is light cyan to dark cyan according the selection order. You can add a fan applied to yellow and get graduated shades of green.

- Iris - Applying fan to the iris, when the starting value of the first spot in the selection is a small iris, gives you beams that ascend or descend in size.

Examples of fan types
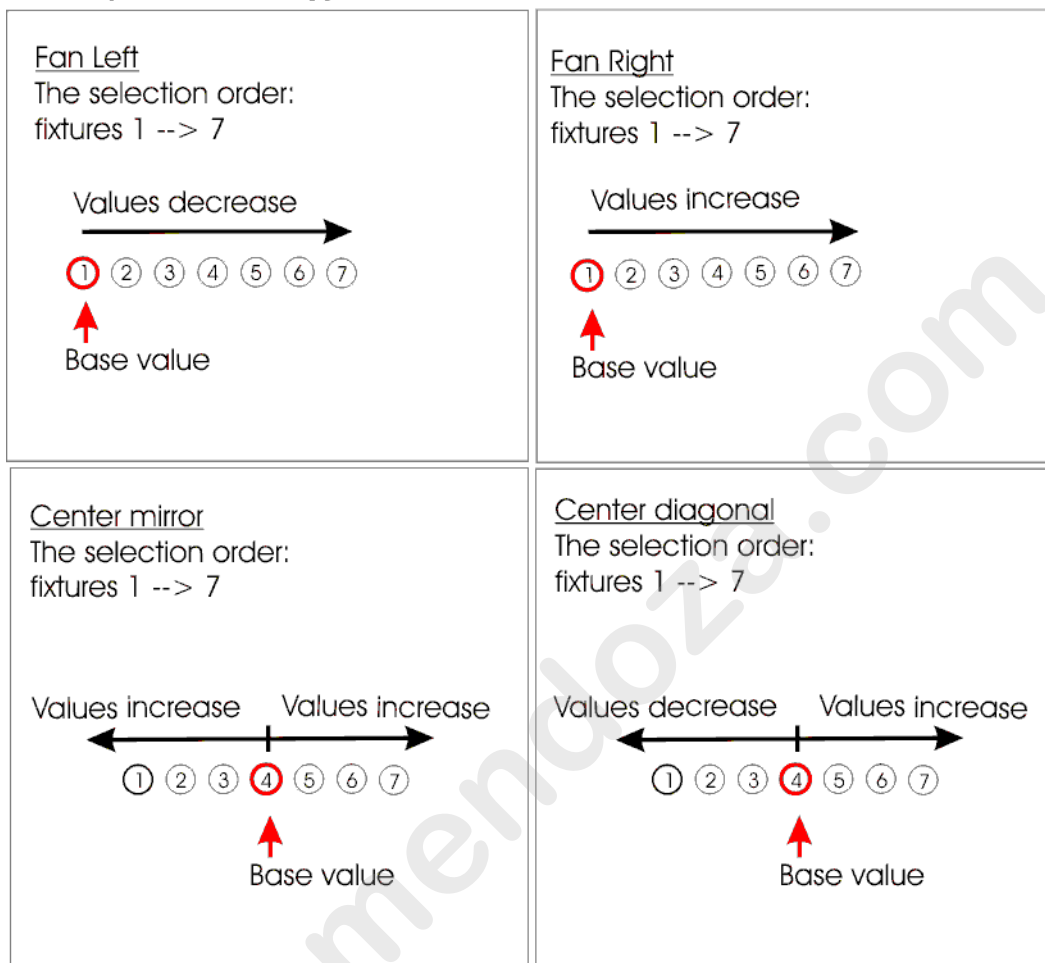
Figure 73: Fan types

> **Tip!** Use fan for qu ck library programming.

Working with the fan feature

Setting the spread

A

To choose the fan type and set the fan spread

1 Select a range of fixtures.

2 Optional - Select a parameter.

If no parameter is selected, the fan defaults to the dimmer parameter.

3 Press **@** and enter a value range. Example: **SPOT 1 → 6 @ 25 → 85**.

The Editor tool bar in now fan mode.

Fan right is the default selection.

4   Optional - change the fan type.

5   If necessary, adjust the value offset using the appropriate parameter wheel.

6   Store as a cue.

OR

1   Select a range of fixtures and set values.

    For spots, select a parameter and set the start or base value.

    For channels, set the start or base value.

    Base values are the value reference for the fan offset.

2   Press **FAN**.

    The Editor tool bar in now fan mode.

3   Optional - change the fan type.

4   Use the appropriate parameter wheel to fan the selection.

    Vector sets the offset according to the selected fan type and the fixture selection order.

5   Store as a cue.

E

To choose the fan type and set the fan sp ead

1   Select a range of fixtures.

2   Optional - Select a parameter.

    If no parameter is selected the an defaults to the dimmer parameter.

3   Press **@** and enter a pa meter value range. Example: **SPOT 1 → 6 @ 25 → 85**.

    The Editor tool bar swit hes to fan mode.

    Fan right is the defau t selection.

4   Press **ENT R**.

5   Opti nal   change the fan type.

6   Opti nal - adjust the value offset using the appropriate parameter wheel

7   Store as a cue.

OR

1   Select a range of fixtures and set values.

    For spots, select a parameter and set the start or base value.

    For channels, set the start or base value.

    Base values are the value reference for the fan offset.

2   Press **ENTER**.

3   Press **FAN**.

    The Editor tool bar in now fan mode.

4   Optional - change the fan type.

5 Use the appropriate parameter wheel to fan the selection.

Vector sets the offset according to the selected fan type and the fixture selection order.

6 Store as a cue.

Fan timing

Use fan timing to create a quick and simple effect.

Tip! To view the fan time, change the display format to time settings: Format menu > Time.

A

To set fan timing

1 Select fixtures.

2 Select a parameter and assign values.

3 Press **TIME**.

4 Optional - choose *DELAY*.

5 Enter a time range on the numeric keypad **# → #**.

6 Optional - change the fan type.

7 Store as a cue.

OR

1 Select fixtures.

2 Select a parameter an assign values.

3 Press **TIME**.

The tool ba is n time mode.

4 Option l - ch ose *DELAY*.

5 Pre s **FAN**.

6 Ch ose the fan type.

7 Use the parameter wheel to set the spread.

8 Store as a cue.

E

To set fan timing

1 Select fixtures.

2 Select a parameter and assign values.

3 Press **ENTER**.

4 Press **TIME**.

The tool bar is in time mode.

5 Optional - choose *DELAY*.

6 Enter a time range on the numeric keypad - # → #.

7 Press **ENTER**.

8 Optional - change the fan type.

9 Store as a cue.

OR

1 Select fixtures.

2 Select a parameter and assign values

3 Press **ENTER**.

4 Press **TIME**.

5 Optional - choose *DELAY*.

6 Press **FAN**.

7 Choose the fan type.

8 Use the parameter wheel to set the time.

9 Store as a cue.

Fan Group

When fixture selection is through groups, *FAN GROUPS* button fans values according to the groups.

Group	Channels	Base level	Wheel	After Group Fan
1	1 + 2			20%
2	3 + 4	20%	+60%	40%
3	5 6			60%
4	+ 8			80%

To fan values among groups

1 Press **GROUP** and select the groups (# → #).

2 Optional: Select a parameter.

   The default parameter is dimmer.

3 Optional: Set the base value.

   When no base value is set the fan begins from the current value.

4 Press **FAN**.

5 Tap *GROUP FAN* on the Editor tool bar.

6 Turn the wheel that controls the selected parameter to fan values.

Note: Cancelling *GROUP FAN* reverts to the standard per fixture fan.
Enabling *GROUP FAN* again restores this function and again fans values per group.

Fan blocks

Three parameters define the blocks of fixtures and application of the Fan Blocks feature

1. Fixture block - The number of fixtures in each block. Each block is manipulated as a roup. Example: If the fixture selection is 1 → 12 and the number of fixtures in the block s 4, the fixture blocks are 1 → 4, 5 → 8, 9 → 12.

2. Subdivide fixture blocks - Each subdivision is manipulated as a group. F nning is applied to each subdivision in each block. Example: If the fixture selection 1->12, and the number of fixtures in the block is 4 with each block subdivided into 2 then the first two fixtures in each group are subdivision 1 (fixtures 1 and 2, 5 and 6, 9 and 10) the next pair of fixtures are subdivision 2 (fixtures 3 and 4, 7 and 8, 11 and 12). The dot (●) key precedes the number of subdivisions.

3. Offset fixture block: - The start fixture for fanning The slash key (/) precedes the offset selection. Example: If the fixture selection is 1 >12 nd the number of fixtures in the block is 4, setting the offset to 2 makes fixture 2 th first fixture in the first block.Thus the fixture blocks are now 2 → 5, 6 → 9, 10 → 12.

Fixtures	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
Define fixture blocks.												
FAN BLOCKS value is 4	Block 1				Block 2				Block 3			
4 is the number of fixtu es per block. 12 fixtu es, ith 4 fixtures per block produces 3 blocks **Note** This s similar to the G up F n feature.	0	0	0	0	10	10	10	10	20	20	20	20
ubdivide the fixture blocks												
FAN BLOCKS value is 4.2:	Block 1				Block 2				Block 3			
• 4 is the number of fixtures per block • 2 is the number of fixtures in each subdivision.	0	0	20	20	0	0	20	20	0	0	20	20

Fixtures	1	2	3	4	5	6	7	8	9	10	11	12
FAN BLOCK value is 6.2: • 6 is the number of fixtures per block • 2 is the number of fixtures in each subdivision.	Block 1						Block 2					
	0	0	10	10	20	20	0	0	10	10	20	20
Offset fan												
FAN BLOCK value is 4/2: • 4 is the number of fixtures per block. • The fan is offset by 1. The fan skips the first fixture. Note the allocation of fixtures into the blocks has changed.	NC*	Block 1				Block 2				Block 3		
	NC*	0	0	0	0	10	10	10	10	2	20	20
* NC = No Change												

To set the number of fixtures in a block

Example: Twenty fixtures are selected. Divid the selection into 4 blocks of 5 fixtures each.

1 Select fixtures.

2 Press **FAN**.

3 Tap **FAN BLOCKS**.

4 Enter the number of fixtur s in the block. For this example, enter **4**.

5 Use the paramet r wheel to set the fanned values.

6 Optional: Set fan timing by pressing time and enter an absolute value range (# g #) on the keyp d or use the parameter wheel.

   The time s allocated according to the blocks. Example:

To set a block's internal subdivisions

Example: Twenty-four fixtures are selected. Divide the fixture selection into 4 blocks of 6 f xtures and subdivide each block into 3 groups of 2 fixtures each.

1 Select fixtures.

2 Press **FAN**.

3 Tap **FAN BLOCKS**.

4 Enter the number of fixture grouping.

5 Press ●.

6 Enter the number of fixtures in each subdivision.

7 Use the parameter wheel to set the fanned values.

To define the offset

1 Select fixtures.

2 Press **FAN**.

3 Tap *FAN BLOCK*.

4 Enter the number of fixture grouping.

5 Press *I*.

6 Enter the offset value.

7 Use the parameter wheel to set the fanned values.

Temporary Cues

Temporary cues are editor groups loaded to an empty playback device. Temporary cues can be used, in conjunction with the Active feature, as building blocks for cues. Temporary cues can easily be stored as cues in QLists.

There a two methods for loading the fixtures for temporary cues:

- Load fixtures without setting parameter levels. The fader controls the output level from zr - FL, ignoring the values in the editor.
- Load fixtures with parameter levels. The fader controls the output level from zr to the highest specified level.

Working with temporary cues

To load a temporary cue

Example: Load selected fixtures to fader 6.

1 Select fixtures

 Or

 Select a group.

2 Press **SELECT** for fader 6

 The command line shows: *Playback 1/6: Temporary Cue Assigned*. The fader controls the output level from zr - FL.

To load a temporary cue with specific values

Example: Load the editor to fader 6.

1 Select fixtures or a group and set values.

2 Press **STORE**.

3 Press **SELECT** for fader 6.

 The command line shows: *Playback 1/6: Temporary Cue Assigned*. The fader controls values from zr to the level set for each fixture.

To add fixtures to a temporary cue

Example: Add the editor group to the temporary cue on fader 6.

1 Select fixtures.

2 Press **STORE**.

3 Press **SELECT** for fader 6.

   The Object Exists dialog box opens.

4 Tap *UPDATE*.

   The new fixtures are added to the temporary cue.

To release fixtures from a temporary cue

Example: Release the fixtures in the editor from the temporary cue on fader 6.

1 Select fixtures.

2 Press **STORE**.

3 Press **SELECT** for fader 6.

   The Object Exists dialog box opens.

4 Tap *RELEASE*.

   The fixtures are removed from the tempo ary c   .

To overwrite a temporary cue

Example: Replace the temporary ue on fader 6 with the fixtures selected in the editor.

1 Select fixtures.

2 Press **STORE**.

3 Press **SELECT** f r fader 6.

   The Object E ists dialog box opens.

4 Tap *OVERWRITE*.

   The editor ontents replaces the fixtures the temporary cue.

To name emporary cues

1 Press **TEXT**. The text dialog box opens.

2 Press **SELECT** for the playback device with the temporary cue.

3 Use the keyboard to type the group's name.

4 Tap *OK*.

To convert a temporary cue to a cue in a new QList

Example: The show contains QLists 1- 3. Covert the temporary cue on fader 6 to cue 1 in a new QList (QList 4) and store the active editor as cue 2 in QList 4.

1 There is a temporary cue already loaded to fader 6.

2 Select fixtures and assign values.

3 Press **STORE**.

4 Press select for fader 6.

The Object Exists dialog box opens.

5 Choose Create New QList.

The dialog box closes.

The command line shows: *QList 4 Cue 2 Assigned*. The new QList now has two cues; the original temporary cue is now cue 1.

Using the faders in channel mode

You can create a look using the faders in channel mode and then store the loo as a cue.

When the faders are in channel mode, each fader controls one channel The number of fader pages available are as many pages as necessary for the number of channels

Setting a channel level by moving a fader off its bottom end stop enters the channel to the editor. Pressing **RESET**, fades the channel to zr in default sneak ime The fader automatically returns to its bottom end stop.

Working in channel mode

To switch faders to channel mode

Press **CHANNEL** (located to h left of the faders)

To set levels and store a ue

1 Press **CHANNE** (loc ted to the left of the faders) to set the faders to channel mode.

2 If necessary, pa e to the channel needed.

3 Bring ch nnels into the editor by setting levels using the faders.

4 Stor a cue using **STORE+**

Or

QLIST # CUE # STORE, or **STORE SELECT**.

5 Press **RESET** to release the channels from the editor.

Blind Editor

You can program and update cues in the blind editor. When the blind editor is active, the fixture values in the live editors are not output.

When **BLIND** is active it is indicated in the command line: **[BLIND]>>Blind Editor**

Using the blind editor

To activate the blind editor

Press **BLIND**.

The key's LED is on.

To store cues in blind mode

1 Press **BLIND** to switch to the blind editor.

2 Select fixtures and assign values.

3 Use any store sequence, including **STORE**, **SELECT**.

Note: When storing a cue in blind mode, the playback device does not advan   to the new cue.

To exit the blind editor

Press **BLIND**.

The key's LED turns off and the blind editor indication i r moved from the command line.

Blind editing for incoming cues

This feature provides quick, blind editing of the incoming cue. When editing is completed, exiting the blind editor is automatic.

To edit the incoming cue n the blind editor

1 Tap *BLIND PB PREVIEW EDIT*.

The blind editor is now active.

2 Press **SEL CT** for the playback outputting the cue.

The conte ts of the next (incoming) cue are active in the editor.

The c mmand line shows the QList, cue number, and fixtures in cue. Example: *QList 3, cue 6,   hannel 3 → 14, spot 1 → 12*.

3 Select fixtures and set parameter levels.

4 Press **UPDATE**.

5 For Enter syntax - Press **ENTER**.

The incoming cue is updated and the blind editor closes.

Chapter 7   Playback Devices and QList Playback

This chapter includes the following sections:

About playback devices

Vector' p yback devices are:

- AB   ossfader
- Motorized (or non-motorized) faders
- QKeys

All playback devices have a Select key (top key) that allows loading a QList or a temporary cue and also serves to designate the master playback device, see "Master playback" page 196. When the playback device is designated as the master playback the Select key's LED is on.

Each playback device has a LED above the Select key. The LED's color represents load types.

LED Color	Load
Green	QList
Red	Chase
Orange	Temporary cue

The default functions for the playback devices' control keys and faders can be changed. see "Setting up playback devices" page 215.

AB crossfader

The AB crossfader. is the default master playback and the master playback dedicated control keys execute playback functions for AB. see "Master playback" page 196.

When AB is not the master playback device, use the AB control keys f r playing back QLists on the crossfader. The default key functions are:

- **BACK/HOLD -** left key

- **GO -** right key
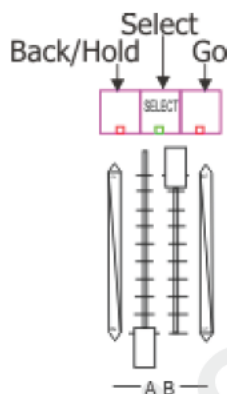
Figure 74: AB cr ssfader and its playback controls

The key and fader functions can be changed in the Playback Properties dialog box > Playback Definitions tab (see "Setting up playback devices" page 215).

The crossfader can work in dipless mode, where:

- In fader - fades incoming values.

- Out fader - fades outgoing values.

The crossfader can also work in dip mode, where:

- In fader - fades incoming values.

- Out fader - blacks out the HTP output. In effect, it works like a submaster.

To change the crossfader mode

1 Open the Tools menu.

2 Choose Settings.

3 Tap *DIP XFADE* to toggle between enable or disable.

Faders
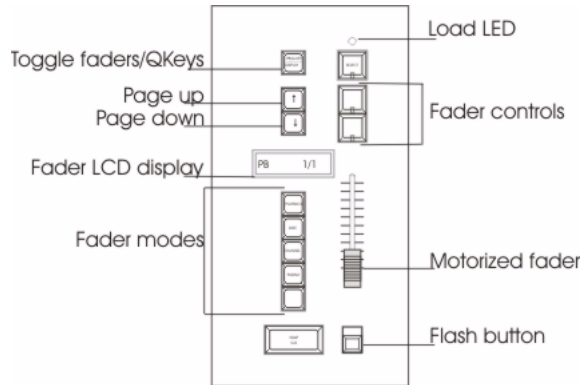
Figure 75: Motorized fader with related keys and displays

Each fader has a programmable flash key and two programmabl control keys. The fader function can also be changed. The fader control keys and fader functions re onfigured in Playback Definitions tab of the Playback Properties dialog box (see).

The default functions are:
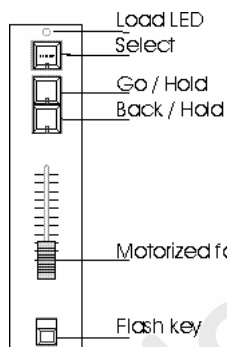
Figure 76: Faders and control keys

Flash keys

Press a la h key to bump parameter values, for the fixtures output from the specific playback
 evic , to their maximum level. The flash level is shown in orange in the Fader Level field and the playback device's LED blinks while flash is active.

Figure 77: Fader level field

A latched flash key (see "Flash behavior" page 220) toggles the values in the current cue on or off. Flash keys always work in cut time. The Bottom Key row, in the Playback Wing display, shows the latched flash keys' indication.

Figure 78: Bottom key indication on the Playback Wing display

### To latch flash keys

1 Press **SETUP**.

2 Press the select key for a playback.

The Playback Properties dialog box open

3 On the Playback Definitions tab, click th arrow to view the flash behavior options.

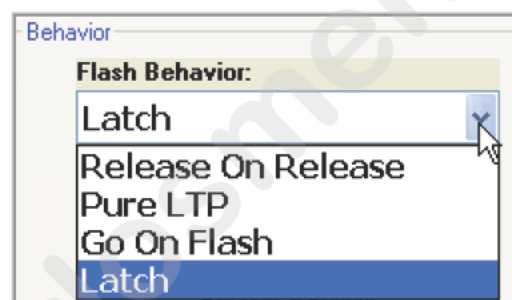*Figure 79: Flash behavior options*

4 C ick *LATCH*.

5 Click *CLOSE*.

T operate latched flash keys

1 Press the flash key to output all parameter values in the current cue.

This turns on the dimmer also, regardless of the fader position.

2 Press again to turn off.

Values bump out.

Fader modes

The faders work in four modes:

Mode	What it does
PB (Playback)	The faders are intensity masters.
RATE	The faders are rate masters.
CHN (Channel)	Each fader controls one channel. Channel pages are unlimited.

Fader modes are global, affecting all of the faders, unless specified otherwise in the Pl yba k Properties **dialog box**.

> **Note:** Motorized faders (Vector Red and Vector Blue) automatically jump to the correct level when changing the fader mode or paging the faders. Non-motorized faders (Vector Green, Vector Orange and Vector Violet) may be mismatched when changing the fader mode or paging. If the fader level is mismatched an indication (an up or down arrow) appears on the wing display. To match the level to the current equi ment, move the fader handle up or down according to the indication.

Paging faders

There are 5 fader pages for Vector Red and Violet The e are 10 fader pages for Vector Blue and Vector Green.

Motorized faders remember their level on ea h page and jump to that position when paging. Example: On page 1 fader 8 is set at 50% and on page 2 fader 8 is at full. Paging from page 2 to page 1, the fader jumps to 50%. Paging o page 2 the fader moves to full.

To page faders

UP to page up; the page number appears in the LCD display and on the playback wing.

DOWN to page down; the page number appears in the LCD display and on the playback wing.
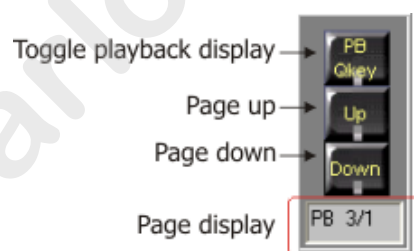
Figure 80: Playback device paging controls for faders and QKeys.

> **Note:** When paging the faders, the QKeys are also paged in the background.

Qkeys

QKeys are playback devices without a physical fader. Each QKey has a Select key and one programmable control key. The default control key command is Go and can be changed in the Playback dialog box ▸ Playback Definitions tab. There are 10 QKey pages.
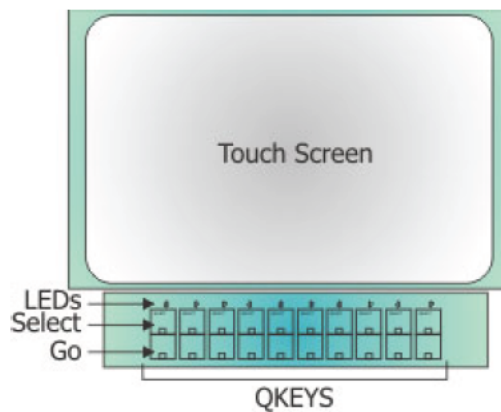
Figure 81: QKeys are located below the touch screen

Playback control key LEDs

Key	LED
Go (top key)	• LED blinking - A fade is in progress. • LED on - The playback device has ctiv output. No fade is in progress. • LED off - There is nothing load d on the pbd or there is no output.
Back / Hold (bottom key)	• LED blinking - A fade is in pr ess. • LED on - The playback device is paused.

Playback priorities

Output priority is determined by playback priority maps.

Vector contains two priority maps	
Priority map	**Default mapping**
LTP priority This is the default	All playbacks are of equal priority and are mapped to the same priority number. The last device that executed a playback command grabs priority. The default priority mapping for LTP is: • AB is priority 1 (the lowest priority). • All Playbacks and QKeys are priority 11.
Ordered priority	Playback devices are set in a rigid hierarchy. Devices are mapped to a unique priority number or groups of devices may be mapped to the same priority number. The priority range for playback devices is 1 - 210. The default priority mapping for ordered priority is: • AB - 1 • All QKeys - 10 • All faders - 11 through 110

To select the priority map

1 Go to Tools ▶ Settings ▶ Behavior tab.

2 Tap **ORDERED PLAYBACK PRIORITY**.

When this button is enabled (light colored), the Ordered priority map is active.

When this button is disabled (dark colored), the LTP priority map is active.

Mapping priority per playback device

You can also map the priority for specific playback devices. Operator defined priority maps are stored in snaps and restored when the snap is applied.
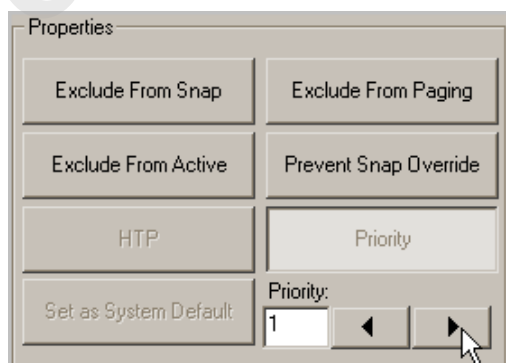

Figure 82: Playback Definitions - Properties group

ATTENTION!

Playback devices mapped to the same priority become an LTP group (they adopt LTP behavior within the group) regardless of the priority map chosen in the Systems Settings dialog box.

Playbacks that have different priorities do not adopt LTP behavior, even when the default priority map is LTP.

To map specific playback devices with unique priority

1   Open the Playback Properties dialog box, by pressing **SETUP** and then Select for th play-back device.

2   Tap the Playback Definitions tab.

3   In the Properties group, tap the up or down arrow buttons until the re uire priority number is displayed in the Priority field.

4   Tap *STORE* to exit the dialog and store the new priority setting

Note: If the priority map is changed in the System Setting dialog box, priorities mapped by the operator are overridden by the default ap.

Controlling output priority on-the-fly

When output priority is LTP you can quickly cha ge playback device priority from the console panel, fading from the output of the one playb ck device to the output from the selected playback device.

When switching priority, the cros fad takes place in default GoTo time as set in System Settings ▶ Timing.

Note: For LTP pr ority, *ORDERED PLAYBACK PRIORITY* must be disabled in System Settings ▶ Behavi r

To change output priority

1   Pres **PRIO**(rity).

2   Press the Select key for the required playback device.

This initiates a crossfader between the current playback device output priority and the new one.

Loading and freeing playback devices

To playback QLists they must be loaded to a playback device. Each fader can host only one QList to a page. Different QLists can be loaded to the same fader on different pages.

Example: Load QList 3 to playback wing 1 fader 1, go to page 2 and load QList 13 to playback wing 1 fader 11 (fader 1 one page one), etc.

Groups and fixtures can also be loaded to faders as temporary cues. Text tags can be appended to temporary cues that are output on the faders.

To load a QList to a playback device

1 Choose the QList: **QLIST** #.

2 Press Select for a playback device.

The QList is loaded to the selected device. The LED above the Select key is lit; it is green.

To load a range of QLists

Select the QLists (**QLIST # ➜ #**) and press Select for a playback device.

The selected QLists are loaded to consecutive playbacks.

ATTENTION! If the selected range contains more QLists than the playback devices available on the current page, the remainder is loaded to the next page.
Example: The selected range of QLists is 1 through 15 with QList 1 loaded to playback 1 on page 1; QLists 11 through 15 will be loaded to playback 1 through 5 on page 2.

To load a group to a playback device

1 Choose the group.

2 Press Select for a playback device.

The QList is loaded to the selected device.

The LED above the Select key is lit it is orange.

To load fixtures

see

To free one playback device

FREE, Select; the playback device's LED is extinguished.

To free more than one playback device

1 Press and hold **FREE**

2 Press Select for as many playback devices as you want.

The load LEDs are extinguished. as the playback is freed.

Or

3 Press **FREE** twice to lock.

When locked the key's LED blinks.

4 Select (for any playback device).

5 Any key press (except Select) releases the **FREE** lock.

To free all playback devices

Press **SHIFT** + **FREE**.

The load indication LEDs are extinguished.

To add text tags to objects on a playback device

Add text tags to groups, cues, or temporary cues that are output from a playback device.

1 Press **TEXT**.

2 Press Select for the playback device where the object is located.

The Text dialog box opens.

3 Type text.

4 Tap *OK*.

Master playback

The master playback is the default playback device, which means that unless specified otherwise new cues are appended to the QList loaded on the master playba k. see <u>"Working with QLists" page 123</u>.

The AB crossfader is the default master playback, b t any other playback device can be designated as the master playback device. The designated ma ter p yback device is shown in the playback displays with on a green field.

The playback keys, located above and below he master playback LCD, are dedicated to master playback control. The LCD display sh ws the current and next cues on the master playback:

GOTO- Fade to selected cue or interrupt a fade in progress

Master Playback LCD display

HOLD - Pause a fade in progress

BACK - Fade to the previous cue

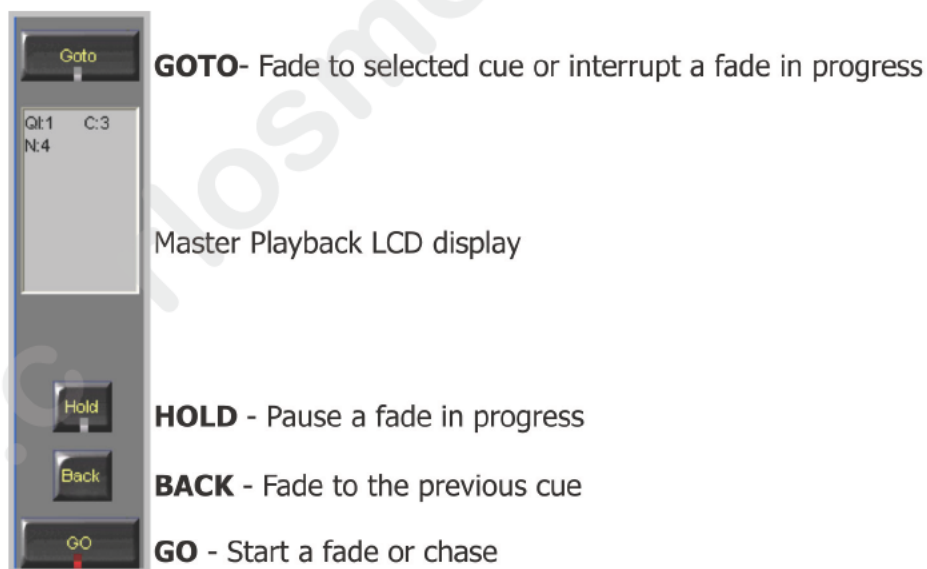**GO** - Start a fade or chase

Figure 83: Master playback LCD and control keys

To designate the master playback

Press the playback device's Select key twice; the key's LED is lit.

Master playback color code

Color coded parameter values are shown in the live fixture displays.

While a fade is in progress, the color code for values output from the master playback show the levels fading up, fading down or remaining unchanged.

LED Color	Parameter values
Red	• Compulite mode: Values remain unchanged from the previous cue.
	• Tracking mode: Values saved in the current cue are the same values a the previous cue.
Blue	Values fading to a higher value.
Green	Values fading to a lower value.
Purple	Tracked values. (Tracking mode only)

Fading cues out of sequence on the master playback

Vector's default settings allow using **GO** or **GOTO** to pla cu   out of sequence.

To play a cue out of sequence using GO o GOTO

Example: Cue 5 is current on the master pl yback. Fade to cue 20.

CUE 20, **GO**; initiates a fade to cue 20 in ts cue time, executing attached macros and parameter time settings.

CUE 20 GOTO; fade to cue 20 in the default GOTO time. see

CUE 20 TIME GOTO; re pect ll time settings and execute macros (if any).

To specify a fade time o   the master playback

1   Press **CUE** and   elect a cue number.

2   Pres   **TIME**.

3   Specify the fade time.

4   Press **GOTO**.

The fade to the selected cue occurs in the specified time.

OR

1   Press **GOTO**.

2   Select a cue number.

Important! Do NOT press **CUE**, just enter the cue number.

3   Press **TIME**.

4   Specify the fade time.

5   Press **ENTER**.

The fade to the selected cue occurs in the specified time.

To specify a fade time on the playback devices

1 Press **GOTO**.

2 Select a cue number.

Important! Do NOT press **CUE**, just enter the cue number.

3 Press **TIME**.

4 Specify the fade time.

5 Press the Select key for the playback device.

The fade to the selected cue begins.

Changing the GO *key function*

The functionality of the **GO** key can be changed to prevent using the **GO** key to fade cues out of sequence. This is useful when you want to prepare an out of sequence fade, but, in the meantime, continue fading through the normal cue sequence.

Scenario: The current cue is cue 4. You are planning to fade to c e 20 after the fade to cue 10 is complete. Select cue 20; the selection is displayed in the command ine. Continue pressing **GO** until the fade to cue 10 is complete. Now press **GOTO** to fade to cu 20.

To change the GO key function

Go to Tools▸Settings▸Behavior and disable *GO AS GOTO WITH CUE TIME*.

Fading cues on the playback devices

Playback devices includ th faders, QKeys, and the AB crossfader. Each playback device has keys for playback control By d fault the keys are defined as Go and Hold/Back. The default functions can be changed in e P ayback Properties dialog box, Playback Definitions tab. (see ["Setting up playback devices" page 215](#)).

To fa e to the next cue

Pre the **GO** key.

To specify a fade time on the playback devices

1 Press **GOTO**.

2 Select a cue number.

Important! Do NOT press **CUE**, just enter the cue number.

3 Press **TIME**.

4 Specify the fade time.

5 Press the Select key for the playback device.

The fade to the selected cue occurs in the specified time.

Playback device controls

The playback device controls provide expanded functionality for playback devices. The function can be applied to single playback devices or to a group of playback devices (see).

Many of the playback function keys can be locked to allow choosing more than one fader's Select key. When locked, the key's LED blinks. When the key has been pressed, and not locked, the LED is on. The LED is extinguished after choosing a Select key.

To lock a playback control key

A double hit on the key locks it.

To free a locked key

Pressing any key (except Select) frees the lock.

Key Name	*What it does and how to use it*

JOIN	Links (joins) a number of playback device a owing you to start fades on multiple playback devices with a ing go command.
	
	To join playback devices
	
	1 Press **JOIN**.
	
	   The key's LED blinks.
	
	2 Press S ct for each participating playback device.
	
	   The de ice's LED flashes red when joined.
	
	To rele e a playback device from join
	
	   When **JOIN** is active, press Select for the fader you want to remove. The fader's LED is no longer red.
	
	To release all playback devices from join
	
	   Press **JOIN** and then **RELEASE**.

PRIO(rity)	Switch output priority between playback devices. Priority is always LTP.
SUBMASTER	Set a fader to act as an inhibitive submaster for fixtures. **To set inhibitive submasters** **1** Select fixtures. **2** Press **SUBMASTER**. **3** Press Select for a fader.

Key Name	What it does and how to use it
SEQ(uence)	• On - Cues fade in numerical sequence. • Off - Only possible to fade between the current cue and cue 0. **Note:** The default setting for **SEQUENCE** is on. **To enable/disable sequencing** 1 Press **SEQUENCE**. 2 Press Select for a playback device.
TRIGGER	• On - Triggering macros that are attached to cues is enabled. • Off - Triggering macros that are attached to cues is disabled.
FREE	Free QLists and temporary cues loaded on playback devic s. se ”Loading and freeing playback devices” page 194.
ON	Restore a released cue. **To restore a released cue** 1 Press **ON**. 2 Press Select for the playba k device. The released cue is resto ed in cut time.

Key Name	What it does and how to use it
SOLO	Black out all playback device output except the output from the selected playback device. Solo can fade or bump the output. **To use solo by fading** 1 Press **SOLO**. 2 Press Select for the solo playback device. All output except selected fades to blackout. The output from selected device fades to the dimmer level set by the fader. Example: If the fader is at 80%, the solo output will no be more than 80%. **To use solo by bumping** 1 Press **SOLO**. 2 Press the flash key for the playback d vice. All output except selected bumps o b ack. The output from the selected device jumps to he f xtur 's stored dimmer levels regardless of the fader level. **To lock solo** Hit **SOLO** twice to lock they key. Press Select or the flash key for any playback devic o solo the fader's output. **To unlock solo** P ess **RESET**.
STEP	S ep hrough chasers manually. **STEP SELECT** Lock the fader's Go key to step through a chase. **STEP SELECT GO** Release step mode. • **STEP STEP** Lock the key.
PB RE EASE	• **PB RELEASE** + **SELECT** Release the playback device's output without freeing the playback device. • **PB RELEASE** ➔ Release all playback devices. • **SHIFT** + **PB RELEASE** Release all playback devices. • **PB RELEASE SELECT** ➔ Release all playback devices from the first selected to the last loaded pbd. • A double hit on **PB RELEASE** locks the key.

Key Name	What it does and how to use it
GO	A generic go key. Use this key when there is no dedicated go key for a fader or QKey. Or Give a go command simultaneously to more than one playback device. • **GO SELECT**; Fade to next cue, start an effect or a chase on the selected playback device. • Hold down **GO** and press Select (for as many playback devices as y want). • **SHIFT** + **GO**; starts all playback devices. • A double press on **GO** locks the key.
‖ / ◀	• Hold (pause) the fade running on the selected fader. • Fade back to previous cue.
↔	Reverse sequence direction for the QList on the sel cted faders. Generally used with chases.

Playback selection

Select playback devices and QKeys for global respo se to a control function. Selections can include AB, playback faders and QKeys.

> **Note:** All playback controls can be ap lied except **SUB**(master).

Examples:

- Select all the playback de ices on page 1 and free them.
- Select all the playb ck d vices on page 2 and give them a go command., even if the current page is on pag 1.
- Apply Got com ands to selected playback devices.
- Load a ange of cues to selected playback devices.
- Load range of QLists to selected playback devices.

There are three ways to select playback devices:

- Directly using the Select keys, when selecting from the current page
- The console keys, where the first number is the page and the second number is the playback device.
- The Editor tool bar in playback selection mode.

Figure 84: Editor tool bar in playback selection mode

The Editor tool bar buttons in playback selection mode are:

Button	What it does
PLAYBACK	Sets the keypad for playback device selection.
QKEY	Sets the keypad for Qkey selection.
ALL PLAYBACKS	Selects all playback devices (except AB).
ALL QKEYS	Selects all QKeys.
AB	Selects AB.
LAST SELECTION (●)	Recalls last playback selection. **Note:** Another way to recall the last selection is press ng **PB**, ●.

TRIGGER, SEQ, and PRIO are applied according to certain r les.	
Control	**Behavior**
TRIGGER	Toggled on or off according to the state of the first layback device in the selection. Example: The selection is playbacks 2, 5, **TR GGER** is off for playbacks 2 and 7; playback 5 has trigger on. Pressing **TRI GER** turns it on for the entire selection.
SEQ	Toggled on or off according to th sta of the first playback device in the selection. Example: The selection is playbacks 2, 5, 7. **SEQ** is off for playbacks 2 and 7; play-back 5 has trigger on. Pr ss ng **SEQ** turns it on for the entire selection
PRIO	Affects only the first play ck device in the selection.

Working with playback selection

To select and opera e playbacks

1 Tap *LAYBACK* on the Editor tool bar or press **PB** on the console panel.

The Editor tool bar switches to playback selection mode.

PB is displayed in the command line.

2 All selection sequences (**# ➜ #**, **# + #**, **# - #**) can be used for the current page. Use the **#/#** syntax to select playback devices on other pages.

Or

Use the selection options on the Editor tool bar.

Or

Press the Select key for playback devices. Pressing and holding Ctrl (on the external keyboard) allows you select multiple playback devices.

Or

Select playback devices by page number and playback number.

Example: (page) **2 / 5** (playback device).

3 Press a playback control.

All selected playback devices respond to the control.

To clear playback selection

The selection remains available until manually cleared by:

Selecting a fixture

OR

Pressing **SHIFT** + **CE**

OR

Pressing **SHIFT**+ **RESET**

Using playback selection with macros

Using playback selections in macros provide a quick way to give comm nds to more than one play-back device at the same time.

Example: Free all playback device except AB. The macro would ook like: **PB**, ***ALL PLAYBACKS***, **SHIFT** + **FREE**.

Vector Violet Playback and Q-Key functionali y

IMPORTANT! This section applies on y to Vector Violet and Ultra Violet consoles.

The Vector Violet and Ultra Violet not have their own physical Q-Keys (see ["Qkeys" page 191](#)). The playback SELECT keys can unction as QKeys trigger keys in QK MODE.

The Vector Violet has 5 p ges of 20 playbacks and 5 virtual pages of 20 Q-Keys.

The Vector Violet ha 2 addi ional keys:

- **Q-KEY MODE** is a toggle to switch the Playback keys to function with PB or QKeys
- **PLAYBACK ELECT** enables to assign to Playback keys PB or QKeys depending on the mode.

Q-KEY MODE key has a red LED. When **Q-KEY MODE** is pressed - the LED is on

> **Note:** When the **QKEY MODE** is ON, the command line displays *[Q-Key]*

The **PLAYBACK SELECT** key allows the system to assign and store to the Qkeys and PB's when the normal Select key is not available because the system is in Q-KEY Mode. The **PLAYBACK SELECT** can also be used to assign and manipulate Playbacks when **Q-KEY-MODE** is off

When **Q-KEY MODE** is ON:

- The Select for playback is used to trigger the QKey or select it (after pressing **PLYABCK SELECT**).

When **Q-KEY MODE** is OFF:

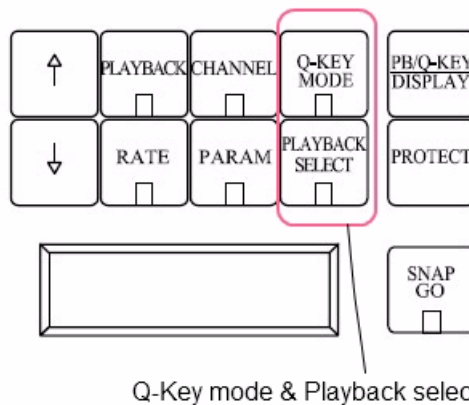- After pressing **PLYABCK SELECT** - all PB keys can be used to select playbacks.

Q-Key mode & Playback select keys

Figure 85: **Q-KEY MODE** *and* **PLAYBACK SELECT** *keys*

PLAYBACK SELECT key has a green LED that turns on whenever he k y is pressed. e.g **STORE, PLAYBACK SELECT**, (LED turns green), SELECT for Playba k # (A er the assignment -the LED turns off)
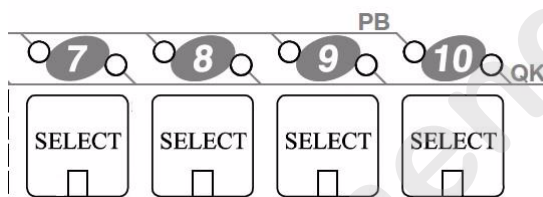

Figure 86: Each PB/Qkey has 2 LEDS

Each Playback/QKEY has 2 LE S indicating whether this control is assigned. The Left higher LED is for Playback assignment and right lower LED is for QKey assignment. The color of these 2 LEDS is as in all V ctor models (green for QList, orange for temporary cue, red for chaser)

> **IMPORTANT!** When a show is loaded from a Vector with Qkeys assigned, the Qkey assignm nts will be loaded to the virtual Qkeys. The right (Q-Key) LED of the PB will be ON ac rding to the assigned object (Qlist, Chaser or temporary cue) so the user knows that here are assignments on the Qkeys. Pressing the Qkey Mode key will give the oper- ator physical access to the Qkeys.

To assign QLIST to Q-Key

1 Press **Q-KEY-MODE** to turn Q-Key mode on

2 Press **QLIST,** select a number

3 Press **PLAYBACK SELECT**

4 Press Select for a Qkey device # (for example 19).

Qkey 19 LED (above the SELECT key) is lit green

To free QKEY 19

1 Press **Q-KEY-MODE** to turn Q-Key mode on

2 Press **FREE**

3 Press **PLAYBACK SELECT**

4 Press Select for a QKEY device 19

   QKey 19 led (above the SELECT key) is turned off

To play QKEY 19

1 Press **Q-KEY-MODE**

2 Press SELECT for Q-Key device 19

To pause a running chaser on Q-Key 1

1 Press **Q-KEY MODE**

2 Press **PAUSE** (in PB control section)

3 Press **PLAYBACK SELECT** (in PB control section)

4 Press Select for a QKEY device 1

   The Q-Key on the display screen has a pause ign

5 To re-run the chaser, press Select for QKey device 1

To free a chaser running Q-Key 1

1 Press **Q-KEY MODE**

2 Press **FREE**

3 Press **PLAYBACK SE ECT**

4 Press SELECT f r a QKEY device 1

   QKey 1 is reed (The specific QKey LED turns off)

To release a Q Key in Q-Key mode

1 Make ure **Q-KEY MODE** is pressed

2 Pr ss **PB RELEASE**

3 Press **PLAYBACK SELECT**

4 Press SELECT for QKEY #

To release a playback in Q-Key mode

1 Make sure **Q-KEY MODE** is pressesd

2 Press **PB RELEASE**

3 Press **PLAYBACK SELECT**

4 Press any of the 3 executors **except** SELECT, which is for the Q-Key

To designate a Q-Key as a master PB

1 Make sure **Q-KEY MODE** is pressed

2 Press and hold **PLAYBACK SELECT**

3 Press twice SELECT for QKEY

Tip! All playback control keys (such as FREE, SOLO, PAUSE etc) operate in similar sequence order in QKey mode. Please look at sequences for **PB RELEASE** to operate any one of them.

To play PLAYBACK 19

1 Press **Q-KEY-MODE**

2 Press [Top Key] (below the SELECT key)

Playback/QKEYS options table

The following table maps the various execution/assignment pti ns of playback and Qkeys based on the **Q-KEY-MODE** and **PLAYBACK SELECT** key

Q-KEY-MODE	*OFF*	*ON*	*ON*	*OFF*
PLAYBACK SELECT	*OFF*	*OFF*	*ON*	*ON*
SELECT	SELECT PB	PLAY K	SELECT QK	SELECT PB
Top Key	PLAY PB	PLAY PB	SELECT PB	SELECT PB
Mid Key	HOLD/BACK PB	HO D/BACK B	SELECT PB	SELECT PB
Bottom Key	FLASH PB	FLASH PB	SELECT PB	SELECT PB

Note: Th key functionality is customizable

General master

The general master and its associated blackout key, control Vector's overall dimmer output. When the grand master is at its bottom end stop, all dimmer output is at zero. When the general master is at the top of its travel, all dimmer output is at maximum level.

The general master can be disabled in the System Settings dialog box. see .

General master status is displayed in the command line's status bar.
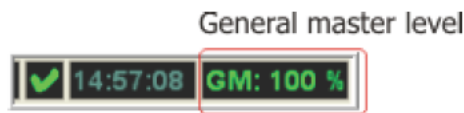
General master level

Figure 87: General master level indication in the status bar

To blackout all dimmer output

Press **B.O.**

The active dimmer output bumps out.

The key's LED is on and the GM status is displayed in red in the status line.

OR

Move the general master slider to 0%.

the active dimmer output fades out.

To cancel the GM blackout

Press **B.O.**

The dimmer outputs bumps in.

The key's LED is off and the GM level is isplayed in the status line.

OR

Return the general master slider to 100%.

the dimmer output fades in.

Playback displays

Playback device displ ys a   opened from the workspace. Playback displays include:

- Wing 1
- Wing 2
- Qkeys 1
- Qkeys 2
- AB Playback

- Master (playback device)
- Individual playback devices
- Individual QKey devices
- Attachments to cues running on the master playback device

Note: PB Q-KEY/ DISPLAY toggles between Fader Wing and QKey displays.

Playback display color code

Live fixture display color code	
Playback device	**Value color**
Faders	Yellow

Live fixture display color code	
Playback device	*Value color*
QKeys	Yellow
Master playback	see "Master playback color code" page 197.

Playback wing display color code	
Load	*Playback device color*
No load	The background color is gray.
Load	The background color is black.
QList	The playback device number is green.
Chaser	The playback device number is red.
Temporary cue	The playback device number is yellow.

Playback device displays

Open a pane for playback display or it add a t b in a existing pane.

Playback wing displays have side headers wh ch can be organized through the Grid Properties dialog box. Use the options in the View men to resize, show, and hide columns (see "Grid properties" page 59).

Master playback display

The master playback display has green highlight and progress bars to differentiate it from the other playbacks.
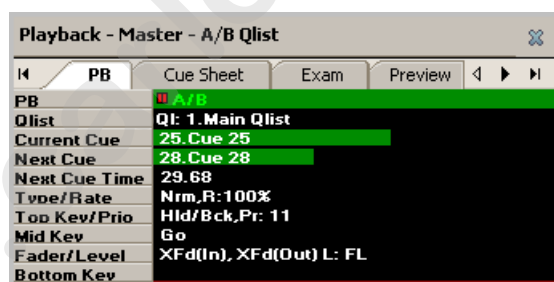

Figure 88: Master playback display, PB tab

To display the master playback

1 Activate a pane.

2 Open the Workspace tree.

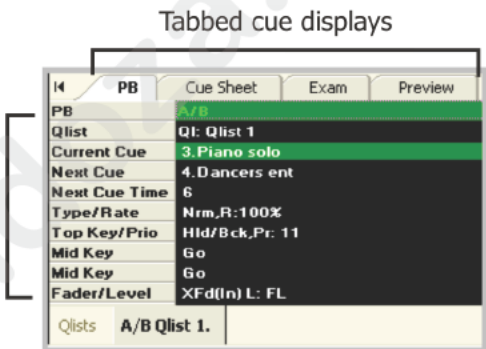Skip this step if the Workspace tree is open.

3 Expand the Playback node.

4 Tap M**a**ster.

Individual playback device displays

Cue sheets, current cue exams, and next cue (preview) exams can be displayed for:

- Master playback
- AB crossfader
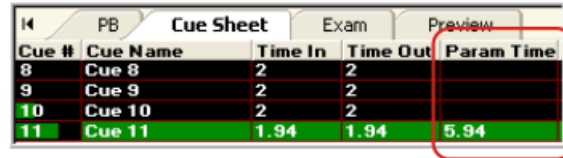- Individual faders
- Individual QKeys

Playback device display	
Tab	*Header options*
PB	The PB tab is for the master playback device and the AB crossfade only! Tabbed cue displays The side header order is set in the Grid Properties dialog box. *Figure 89: Master lay ack or AB display - PB tab*
Cue Sheet	• Cue number • Delay In • Link to • Cue name • Delay out • Loop • Time in • Wait • Trigger Time ut • Param(eter) Time

Playback device display
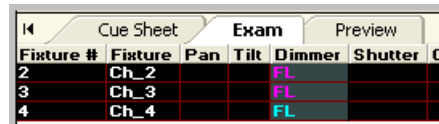
Tab	Header options

Param Time shows the fade progress for the parameter with the longest fade-in time

Figure 90: Cue sheet

Cue sheets show a fade progress bar that highlights the active cue.

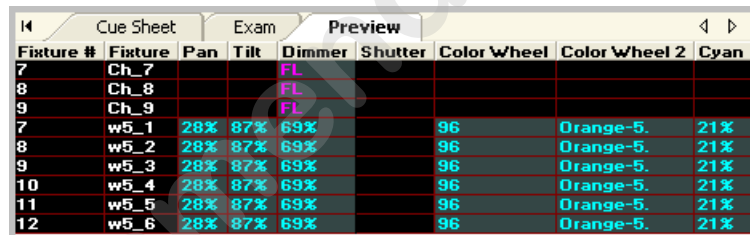| Exam	The fixtures and parameter levels for the current cue.

Figure 91: Exam tab for playback device d spla

Preview	The fixtures and parameter levels for t incoming cue.

Figure 92 P e iew tab for playback device display

To display t e mas er playback

1 Ac vate a pane.

2 Op n the Workspace tree. Skip this step if the Workspace tree is open.

3   xpand the Playback node.

4 Tap Master.

To display AB

1 Activate a pane.

2 Open the Workspace tree. Skip this step if the Workspace tree is open.

3 Expand the Playback node.

4 Tap AB.

To display a cue sheet for a single playback device or a QKey

Example: Show the QList on playback device 4.

1 Activate a pane.

2 Open the Workspace tree. Skip this step if the Workspace tree is open.

3 Expand the Playback node.

4 Expand Wing 1 node.

5 Tap PB 4.

OR

1 Press **EXAM**.

2 Press the Select key for playback device 4.

Fader wing display

Figure 93: Playback wing 1 display (par al)

Header (row) options for playback wing displays	
Header (row)	**What is displayed**
PB	• The playback device number is displayed as Page number / Device number. • Indications showing the playback status (such as pause, reverse direction, etc.) are displayed in this field as required. *Figure 94: Indications, showing the playbac status, appear next to the playback device identifier.*
Fader/Level	• Fader function according t playback setup. • Fader output level.
Type/Rate	• Normal sequencing Q ist or a chase. • The fade rate f r the playback device.
QList	The Qlist numbe and text tag.
QList #	The Qlist umber
QList	The Qlis text tag.
Current cue	The active cue number and text tag.
Next cue	The incoming cue number and text tag.
Next c tim	The incoming cue fade times.
Top key* Prio	Top key function indication.
Mid key*	Middle key function indication.
Bottom key*	Bottom (flash) key function indication.
* see "Playback Properties dialog box - Playback Definitions tab" page 218.	

To display playback wings

1 Activate a pane.

2 Open the Workspace tree.

Skip this step if the Workspace tree is open.

3 Expand the Playback node.

4 Tap Wing 1or Wing 2.

QKey display

Figure 95: QKey display

Header (row) options for QKey displays	
Header (row)	**What is displayed**
PB	• The playback device number is displayed as Page number / Device number. • Indications showing the playback status (such as pause, reverse direction, etc.) are displayed in this field as required.
Level/Prio(rity)	• Output intensity. • Place in the priority stack.
QList	The Qlist number and text tag.
QList #	The Qlist number
QList	The Qlist text tag.
Current cue	The active cue's numbe and text.
Next cue	The incoming cu 's number and text.
Next cue time	The fade mes for the incoming cue.
Key functions	Con ol keys function indications. see ”Playback Properties dialog box - Playback Definitions tab” page 218.

To display QKeys

1 A tivate a pane.

2 Open the Workspace tree.

Skip this step if the Workspace tree is open.

3 Tap Playback.

4 Tap Qkeys 1 or QKeys 2.

To toggle the QKey and playback wing display

Press **PB/QKEY** to toggle the playback wing display between faders and Q-keys.

Note: If the PB field is displayed, the master playback device is highlighted in green.

Setting up playback devices

The Playback Properties dialog box is used to customize the control keys and fader default functions and also to control QList playback behavior.

- QList Properties tab - control QList playback behavior.
- Playback Definitions tab - control keys and fader function.

All playback device settings are saved with snaps.

Playback Properties dialog box - QList Properties tab

The QList Properties tab is available only when there is a QList loaded on the sele ed playback device.
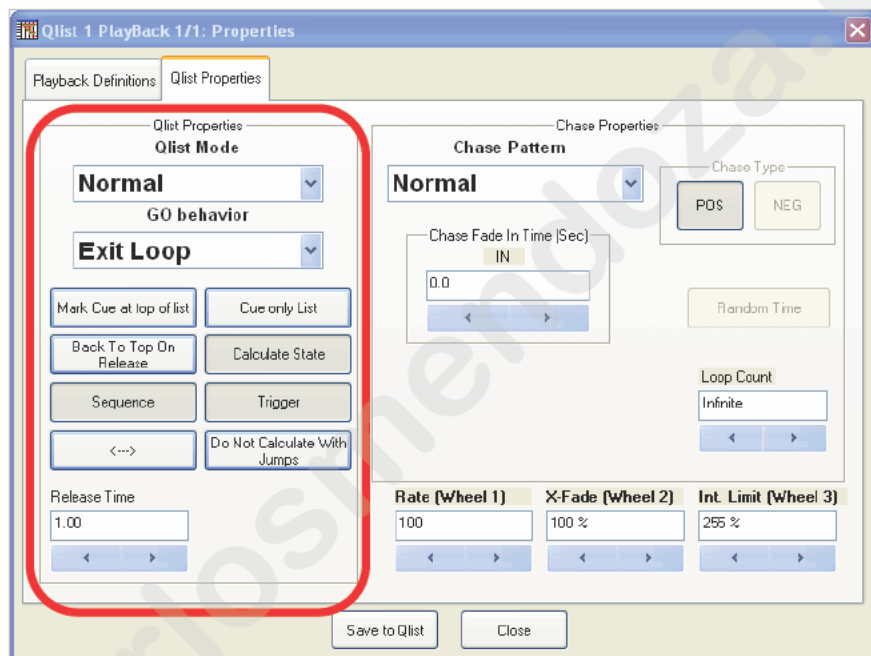
Figure 96 Playback Properties dialog box, QList Properties tab

QList P operties		What it does
QList Mode	Normal	Cues run in sequence, according to cue timing, responding to manual Go commands.
	Chase	Cues fade automatically after the initial Go command. All cues are considered chase steps.

When setting the QList mode, using **SAVE TO QLIST** or **CLOSE** to exit this dialog box determines where the QList mode is stored.

SAVE TO QLIST- The QList mode is stored with the QList. Example: Change the playback mode to chase. The QList is always a chase no matter where it is loaded.

CLOSE - The QList mode is stored in the current snap. Example: When snap 4 is active, change the playback mode to chase. The QList is always loaded as a chase with snap 4. All other times it is loaded as a normal QList.

QList Properties		What it does
Go Behavior	Exit Loop	Pressing **GO** during a loop, exits the loop and initiates a fade to the next cue or the next loop.
	Stop at Next Cue	In normal and chase modes, pressing **GO** advances to the next cue or step and holds.
	Restart Loop	In normal and chase modes, pressing **GO** interrupts the loop and begins a fade to first cue in he loop.
	Exit Loop at End	The loop completes its final step and then utomatically fades to next cue or the n xt loop.
Mark cue at top of list		Set a cue, at the top of the cue list, to look ahead a d pr position fixtures and scrollers.
Cue only list		For tracking mode operation! Cue Only stores only the moves in th cue nd does not track the lighting state.
Back to top on release		After release, QLists are reset o the first cue.
Calculate state		For tracking mode opera ion! • Enabled - Only fixtur parameter moves appear on stage. • Disabled - Th ent e lighting state appears on stage.
Sequence		• Enabl d - Th cues fade in sequence with each go command. • Di a led - The cues do not sequence. **Note** The Indications, in playback displays, show the Sequence status.
Trigger		Enabled - Fading to a cue triggers attached macros and snaps. • Disabled - Attached macros and snaps are not triggered.

QList Properties	What it does
↔	
Do not calculate with jumps	Reset the show defaults. If no show defaults were saved the system defaults are referenced.
Release Time	This is a QList attribute. The time set here determines the fade speed when releasing a QList from a playback device. ***To set QList release time*** **1** Select a Qlist. **2** Press **SETUP**. The QList # Properties dialog box opens. **3** Enter a time value in the Release Time field. Use the arrows or Click the field and use the numeric k ypad. **4** Tap ***STORE***. The dialog box closes.

To set QList and chase properties

1 Press **SETUP**.

2 Press the Select key for a playback device.

The Properties dialog box ope s.

3 Go to the QList Properties tab

4 Choose the options in he fields.

5 Tap ***SAVE TO QLIST*** or ***CLOSE*** to exit the dialog box.

Playback Properties dialog box - Playback Definitions tab

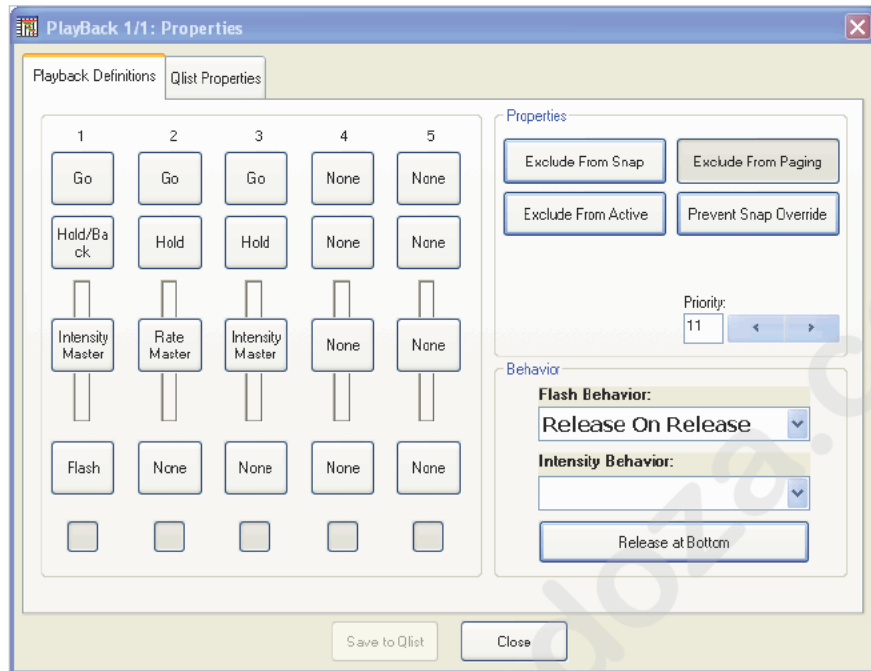All settings in the Playback Definitions tab are saved in the current snap.

Figure 97: Playback Properties dialog box, Playba k Definitions tab

Playback Definitions tab - Fader and key behavior	
All Parameters	All pa ameters are released when the fader is at its bottom stop witho t advancing to the next cue. **Not :** To use this feature, *RELEASE AT BOTTOM* must be enabled.
Intensity Master	The fader controls the intensity. Moving the fader off its bottom end stop raises value levels. When the fader is at the top of its travel, parameter values are at their maximum values.
None	The fader is disabled.
X- fader In	The fader controls values to fading up.
X- fader out	The fader controls values fading down.
Rate master	The fader operates as a rate master.

You can set global defaults for control keys and flash behavior and fader behavior, according to the type of object loaded on the playback device, in System Settings ▶ Default PB Definitions. see

> **ATTENTION!** When Default PB Definitions is enabled, the default definitions are applied to new assignments. Faders that are already loaded with QLists, cues, or tempo-rary cues must be manually updated and the snap must also be updated.

To set fader and key functions

1 Press **SETUP**.

2 Press the Select key for a playback device. The Playback Properties dialog box opens.

3 Tap the Playback Definitions tab.

4 Tap the square under the fader to enable.

Figure 98: Tap to access settings

5 Click on a key or a fader.

The fly-out list shows the options.

6 Tap the function.

7 Tap *CLOSE* to exit the di 1 g box and save playback device settings.

Playback Definitions tab Control and Flash key behavior	
↔	R verse the sequencing direction. Not implemented yet.
Back	Fade to the previous cue.
Flash	Flash (bump) the cue on the fader.
GO	Initiates a fade.
G /Re se	Fades the cue (Go) in cue fade time or releases the playback using the default release fade time.
Hold	Pauses a fade.
Hold/Back	• First press pauses a fade. • Second press fades to the previous cue.
None	The key is disabled.
On/Off	Toggles the cue On (Go) or Off (Release). This is especially useful with QKeys. The go and off operations are carried out in cut time. **Note:** The **Back to top on release** setting controls what happens when the cue is released.

Playback Definitions tab - Control and Flash key behavior	
Release	Releases the playback device.
Sequence on/off	Toggle cue sequencing to on or off.
Solo	Pressing the flash key bumps or fades out other output. Not implemented yet.
Step <<	Jump to the previous cue.
Step >>	Jump to the next cue.
Trigger on/off	Enable/disable automatic triggering of macros attached t cues

Playback Definitions tab - Properties group	
EXCLUDE FROM SNAP	The pbd is not stored in snaps.
EXCLUDE FROM PAGING	This fader is parked and doesn' pag ith the rest of the pbd's.
EXCLUDE FROM ACTIVE	Functions using **active** will not grab output from this fader.
SET AS SYSTEM DEFAULT	
PREVENT SNAP OVERRIDE	The playback load is locked cannot be overwritten by snaps. Example: House lights are on pbd 1 and podium lights are one pbd2. To avo d overwriting these assignments set to prevent snap o erride.
PRIORITY	Use he arrow keys to set a unique priority level for the selected pl yback device.

Playback Definiti ns tab - Behavior group		
Flash behavi r	*RELEASE ON RELEASE* - Releasing the flash key, releases the dimmer.	
	PURE LTP - Pressing the flash key grabs the priority. The playback device retains priority even after releasing the flash key.	
	GO ON FLASH - Pressing the flash key bumps to the next cue and flashes the dimmer value.	
	LATCH - A latched flash key toggles the values in the current cue on or off.	

Playback Definitions tab - Behavior group	
Intensity Behavior	**INTENSITY ONLY** - the fader controls the only the dimmer value.
	GO+FADE PARAMETERS - Moving the fader off its bottom stop, initiates a fade to the next cue in the QList. The speed of the fader movement controls the timing for the dimmer fade. The parameter values fade according to Vector's default cue time.
	GO+JUMP PARAMETERS - Moving the fader off its ottom stop, bumps to the next cue in the QList. The sp ed f the fader movement controls the timing for the dimmer fade The param- eter values bump in.
Release At Bottom	Each time the fader is moved to its bottom stop, the parameter values output from this fader are rele sed.

Playback control groupings

Faders and their control keys can be setup in playb ck c ntro groups.

Example:

Figure 99: Faders 1 - 4 set up as a group of controls in the Setup dialog box

Playback Device	Function	Comments
Fader 1	Intensity master	Faders 1 - 4 are now a mega playback device.
Fader 2	X-fader (In)	**Note:** The control keys for each fader can also have unique setups.
Fader 3	X-fader (Out)	Always load the QList to the first fader in the control group, in this example the QList would be loaded to fader 1.
Fader 4	Rate Master	

To setup split crossfaders

Example: Set fader 1 as the "In" fader and fader 2 as the "Out" fader.

1 Tap the Playback Definitions tab.

2 Press **SETUP** and then Select for fader 1.

The Playback Properties dialog box opens.

3 In the dialog box, tap the slider handle for fader 1 and choose *X-FADER (IN)* from the flyout menu.

4 Enable fader 2 by tapping on the rectangle under the square representing the push k y.

5 Tap the slider for fader 2 and choose *X-FADER (OUT)* from the flyout menu

6 Tap *CLOSE*.

Now faders 1 and 2 are setup as split crossfaders.

Default playback device definitions

In the System Settings dialog box, Default PB Definitions you ca set global defaults for playback device control keys according to the type of object loaded the layback device (see "Default PB Definitions" page 345).

Default PB Definitions are applied to all empty playbac devices.

Default PB Definitions are not applied to the pl yback devices that had QLists, chasers, and temporary (single) cues loaded before the changing he default settings. However, the new default settings can be applied to the previously loaded playback devices.

To apply playback device d fa lts

1 Press **SETUP**.

2 On the Editor to l ba tap *APPLY PB DEFAULTS*.

The playback d vice defaults as defined in system Settings ▸ Default PB Definitions tab are applied

ATTENTION! For correct playback, you must resave the snap after using *APPLY PB DEFAULTS*.

Controlling fade rates

Fade rates can be controlled by setting the faders to function as a rate faders, putting a specific playback device under rate wheel control, or putting all the playback devices, globally, under rate control.

Global rate control uses both the options on the toolbar and the wheels.

Using the faders for rate control

The fader function mode can be switched to rate control. When switching faders to rate control, the faders automatically jump to 100, the default cue time. Moving the fader up increases the fade rate. Moving the fader down decreases the fade rate. At its bottom stop the fade is paused.

To set faders to rate control

Press **RATE**. The faders jump to the default rate level (100).

Using wheels for rate control

You can control the rate for one or more than one playback device. Also, all playback devices can be put under global rate control.

Pressing **RATE**, switches the first three wheels to rate mode. The wheels in rate mode are:

- Wheel 1 - Chase Rate
- Wheel 2 - xFade
- Wheel 3 - Int Limit

To use global rate control

Press **RATE**; The Editor toolbar is now in rate mode and the wheels control rates. The wheels and the toolbar buttons affect all playback devices.

To exit global rate control

Press **SHIFT** + **RATE**. Playback device rates are reset to 100%.

To put a specific playback device under rate control

1 Press **RATE** (the large key next to **BEAT**).

2 Press Select for the specific playback device.

   Note: To bring additional playback devices under rate control, press their
   Select keys.

3 Use the *CHASE RATE* wheel to control the fade rate on the selected chase or use the
   toolbar buttons.

Using the rate mode toolbar

The rate mode buttons on the editor toolbar toggle between to freezing and restarting chases and effects. These buttons are always applied globally to all playback devices.

Pressing **RATE**, switches the Editor tool bar to rate mode.

Figure 100: Rate mode on the Editor tool bar

Button	What it does
FREEZE ALL	Toggles freezing and running all active chases and effects.
FREEZE CHASE	Toggles freezing and running all active chases.
FREEZE EFFECT	Toggles freezing and running all active effects.

Editor fades

Editor fades expand Vector's playback abilities when using the dimmer (intensity) wheel to fade cues.

Editor fade options are available on the default Editor tool bar a d on he Setup tool bar. The options are:

- **MOVE FADE**
- **X-FADE**
- **SHAFT FADE** (HTP)
- **GROUP FADE** (mask)
- **CLEAR ON MASTER GO**

To use Editor Fade option

1 Select a cue.

2 Press **SETUP**

   The Editor tool   ar switches to Setup mode.

3 Tap **EDITOR FADE**.

   The options are displayed on the tool bar.

4 Tap the editor fade required.

5 Use the dimmer wheel.

   The dimmers in the selected cues fade in, according to the selected editor fade.

Move Fade

When there are values active in the editor, fading in a cue using the dimmer wheel fades the editor values to the values stored in the cue. If there are fixtures active in the editor which are not in the cue, the editor values remain active.

Current	After Move Fade
Example 1	
Cue: channels 1 through 10 @ 50%	Channels 1 through 10 @ 50%
Editor: channels 9,10, 11, and 12 at 100%	Channels 11 and 12 at 100%
Example 2	
Cue: channels 1 ➔ 8 @ 100% channels 9 ➔ 10 @50%	Channels 1 ➔ 8 fade @ 100%
	Channels 9 and 10 at 50%
Editor: channels 1 ➔ 12 @25%	Channels 11 and 12 @25%
	Note: Even though you are wheel g channels 1 ➔ 8 to FL, chann ls 9 and 10 reach their maximum level a 50% All values go to the level stored in the cue.

X-Fade

When there are values active in the editor, fading in a cu usi g the dimmer wheel will crossfade from the editor values to the values stored in the cue If th re are fixtures active in the editor which are not in the cue, these values fade to zero.

Example:

Current	After Move Fade
Cue: channels 1 ➔ 10 @ 50%	Channels 1 ➔ 10 @ 50%
Editor: channels 9,10, 11, an 12 at 100%	Channels 11 and 12 at 0%

Shaft Fade (HTP)

Shaft fades merg the editor output and the cue levels. When wheeling in the cue it is possible to go beyond the alues stored in the cue. Values for fixtures that are only in the editor and not in the cue remain at e editor levels.

Note: When the dimmer level is less than or equal to the level stored in the cue, the value is displayed in white.
When the dimmer level is greater than the level stored in the cue, the value is displayed in red.

Example:

Current	After Move Fade
Cue: channels 1 ➔ 10 @ 50%	Channels 1 ➔ 5 @ 100%
Editor: channels 1 ➔ 5, 21 ➔ 25 @ 100%	Channels 6 ➔ 10 @ 50%
	Channels 21 ➔ 25 at 100%

Group Fade

Group fade converts cues to a group of fixtures in the editor. Dimmer levels for all fixtures are wheeled from zero to FL.

Clear on Master Go

With the go command on the master playback, this option crossfades the editor contents with the incoming cue. Example:

Current cue: channels 1 → 10 @ 65% Next cue: channels 1 → 10 @ 35%	**CLEAR ON MASTER GO** option results in: Channels 1 → 5 fade from 100% to 35%
Editor: channels 1 → 5, 21 → 25 @ 100%	Channels 6 → 10 fade from 65% (l vel n the current cue) to 35% Channels 21 → 25 fade to zero

Tapping **CLEAR ON MASTER GO** to disable, enables **CLEAR ON PB GO**.

Loop playback

The cue sheet displays show loop information. Th cue sheet for a QList loaded to a playback device, shows a progress bar and, when th loo is running, the loop countdown.

You can begin a loop from any cue in th 1 op or jump to a cue without exiting the loop.

Cue #	Time In	Time Out	Wait	Loop	Link To
0.Empty			Follow-On		
1.	5	5	Manual		
2.	6	8	Manual		
3.	2	2	Manual	3/3	5.
4.	2	6	Manual		
5.	1	2	Manual		
6.	8	8	Manual		
7.	5.3	5.3	Manual		

Figure 101: layba k display cue sheet with loop assignment

To playback a loop

Press **GO** to initiate the loop.

To start from any cue in the loop

Example: Cues 3 through 6 are looped. Begin the loop from cue 5.

Select cue 5 and press **GO**.

Exiting loops

You can exit a loop at any point in a loop's progress and fade to the cue immediately following the loop or to any cue in the QList.

The fade to exit cue can executes in cue time or in default GOTO time. see <u>"Default GOTO time"</u> <u>page 338</u>.

The default behavior, when exiting loops, can be set in the Playback Properties dialog box. The options are:

- Exit Loop
- Exit Loop at End
- Restart Loop
- Stop at Next Cue

see

To exit a loop using GO

Note: In the following examples, the go behavior is set to Exit Loop. This is the d fault behavior.

Example 1: Exit to the cue immediately following the loop, executing the fade in the cue time.

Press **GO**.

Example 2: Exit to a cue that is not directly after the loop xecu i g the fade in the cue time.

Select the cue and press **GO**.

Example 3: Exit to a cue that fades in a specifi d time.

1 Select the cue.

2 Press time and enter a time on the nume ic keypad.

3 Press **GO**.

To exit a loop using GOTO

Example 1: Exit to the cue immediately following the loop, in default GOTO time.

Press **GOTO**.

Example 2: Exit th ue immediately following the loop, in default GOTO time.

Press **GOTO**.

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Chases

Program chases by defining a QList as a chase in the **Playback Properties** dialog box. Panel keys are available for on-the-fly rate and direction override. The chase designation and all chase settings are saved with the QList. The QList's chase settings are always valid, no matter to which playback device the QList is loaded.

Setting chases and chase properties

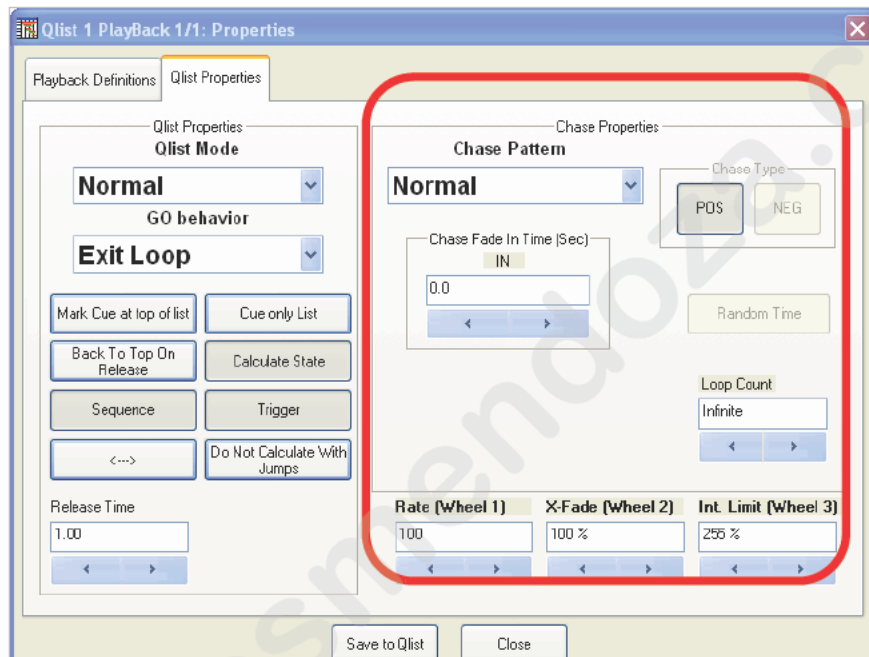The **Playback Properties** dialog box **Chase Option** fields control chase settings.

Figure 102: The Playba k Properties dialog box - Chase Properties

Chase Prope ties	*Options*	*What it does*	*Default*
Chase Patte n	Normal	The chase is executed in sequential cue order.	Yes
	Build	Values for each cues are piled until reaching the last cue. Then the first cues state is restored and the chase starts again.	
	Bounce	The chase runs from beginning to end and then from the end to the beginning.	
	Random	Steps are executed in random order or in random time or both, depending on the settings for random time and rate.	

Chase Properties	Options	What it does	Default
Chase Type	*POS*(itive)	The first cue's values are off. The rest of the cues are at their recorded values. As the chase progresses the first cue is turned on and the values of the second cue go to 0.	
	NEG(itive)	This type of chase is also known as a shadow chase. Example: Shadow chase with four steps: Step 1 - 2, 3, 4 are on. Step 2 - 1, 3, 4 are on. Step 3 - 1, 2, 4 are on. Step 4 - 1, 2, 3 are on.	Yes
Random Time	The step order remains the same, but the rate, when fading from step to step, is random.		
Chase fade time	In	Use the arrows to set he hase fade in time.	0.0 sec
Loop Count	Set the number of loops the chas makes.		
Rate (Wheel 1)	Set the chase rate.		100%
Xfade (Wheel 2)	Set the chase's crossfad properties. Note: 0% bumps from step to step (hard chase).		100%
Int Limit (Wheel 3)	Set a proportio al le el for the fader.		255

Go behavior is integral to chase pl yback. Define the Go behavior under the QList and Temp Assignment Properties gro p. se .

Programming chases

Chases are QLists that are designated as chases. The chase designation and all chase settings are saved wi h the QList when exiting the Playback Properties dialog box by tapping *SAVE TO QLIST*; the QList will always run as a chaser.

he QList run mode (normal or chaser) can be also be changed by editing the Mode column in the QList exam screen display.

Tip! For chases that occur within QLists, using just some of the QList's cues, use loops. see .

To designate a QList as a chase

1 Load the QList to a playback device.

2 Press **SETUP**.

3 Press Select (where the QList is loaded).

The Playback Properties dialog box opens.

4   Choose Chaser from the QList Mode drop down menu.

5   Tap *SAVE TO QLIST* or *CLOSE*.

A

To change the run mode through the exam display

1   Press **QLIST**.

2   Press **EXAM**.

3   Tap or Click the right side of the Mode column.

Qlist #	Qlist Name	Cues count	Mode	/	D
1	1. Song 1	6	Normal		
2	2. Song 2	0	N Normal		
3	3. Song 3	0	N Chaser		

4   From the drop down menu, choose Normal or Chase.

The QList will run in the selected mode.

E

To change the run mode through the exam display

1   Press **EXAM**.

2   Press **QLIST**.

3   Press **ENTER**.

4   Tap or Click the right side of the Mod column.

Qlist #	Qlist Name	Cues count	Mode	/	D
1	1. Song 1	6	Normal		
2	2. Song 2	0	N Normal		
3	3. Song 3	0	N Chaser		

5   From the drop down m nu, choose Normal or Chase.

6   The QList will run in the selected mode.

Controlling chase rate

Chase speed   n be controlled on-the-fly or preset in the Playback Properties dialog box.

Pressing rate displays the rate options in the Editor toolbar:

- *CHASE RATE* controls the overall speed of the chase; the rate at which it fades from step to step.

- *XFADE* controls the look of the chase; if it fades between the steps or jumps from step to step.

To control chase speed on-the-fly

1   Press the large **RATE** key.

2   Press Select for the pb device that is running the chase. The wheel assignments switch to the rate bank.

3   Use chase rate wheel to adjust the chase speed.

Or

4   Change the fader function to rate faders by pressing on the **RATE** key.

5   Use the fader to control the chase rate.

To preset the chase rate

1   Press **SETUP**. The Playback Properties dialog box opens.

2   Set the chase rate field, using the arrows.

3   Press *OK*. The chase rate is saved as an attribute of the QList.

To change the chase look

1   Press the large **RATE** key.

2   Press Select for the pb device that is running the chase. The wheel assignments switch to the rate bank.

3   Use xfade wheel to fade or jump the steps.

Snaps

A snap is a snapshot of the playback devices' state it   analogous to a page. Vector stores up to 9999 snaps. Triggering a snap loads playback devi es with the contents of the snap. Snaps can be attached to cues and automatically triggered when the fade to that cue begins.

Snaps include:

- QLists, temporary cues, and si gle   es loaded on each fader page, on QKeys, and on AB.
- Fader mode on each page
- Fader levels on each page
- Load (assignment) prop rties
- Run mod
- Priority value
- Pl y ack device setup as configured in the Playback Properties dialog box

Playback devices can be excluded from the snap. You may want to exclude your master playback usua y the AB crossfader) from snaps. Excluding playback devices from snaps is available in the Playback Properties dialog box. see .

Active snaps

There is always an active snap. The active snap's number is displayed in the master playback's LCD display and on the indications bar. Whenever you press **SNAP**, the active snap's number is displayed in the command line.

All objects loaded to empty playback devices are stored in the active snap.

To save run modes, rate changes, fader levels, and playback modes it is necessary to update the active snap.

When opening a new show, snap 1 is automatically active. When you begin programming a new show all temporary cues, QLists, and cues loaded on the faders are automatically stored as snap 1. When loading a show, snap 1 is automatically triggered.

Snap modes

Snaps work in two modes:

- Forcing snap mode - All current loads are replaced by those in the snap.

- Hold-over snap mode - The snap loads only playback devices that are released. Lo ds for active playback devices are held over; the load "waits in the wings". Whe the playback device is released the waiting it is then loaded with the QList or other o ject hat was held over.

Storing a new snap

A

To store snaps

1 Press **STORE**.

2 Tap a number on the snap soft keys.

OR

1 Press **SNAP** and enter a numb r on the numeric keypad.

2 Press **STORE**.

E

To store snaps

1 Press **STORE**

2 T p a number on the snap soft keys.

OR

1 Press **STORE**.

2 Press **SNAP** and enter a number on the numeric keypad.

3 Press **ENTER**.

Triggering snaps

To trigger snaps in forcing mode

Tap a snap in the snap key tab.

OR

Press **SNAP**, type the snap number on the numeric keypad, and press **ENTER**.

To trigger snaps in snap-add mode

Press and hold **SHIFT** and tap a soft key in the snap tab.

OR

1 Select a snap.

2 Press and hold **SHIFT** and press **ENTER**.

Using *Snap Go*

SNAP GO, located to the left of the faders' flash keys, is a quick way to operate the next or he previous snap. This key can be protected to ensure that it is not accidentally pressed.

To trigger snaps using Snap Go

Press **SNAP GO** to operate the next snap.

Press and hold **SHIFT** then press **SNAP GO** to operate the previous snap

To protect Snap Go

1 Go to the Tools menu and choose System Settings

   The System Settings dialog box opens.

2 Go to the General tab.

3 Tap *PROTECT SNAP GO*.

4 Tap *OK*.

To operate protected SNAP GO

Press the blank key above *SNAP GO* and then press *SNAP GO*.

Automatically triggering snaps

Automate playback by a taching snaps to cues. Fading to cue automatically triggers the attached snap. Automatic riggering can be disabled.

Note: S aps attached to cues are triggered in forcing mode only.

A

T attach a snap to a cue

1 Select the cue.

2 Select the snap.

3 Press **STORE**.

E

To attach a snap to a cue

1 Select the cue.

2 Select the snap.

3 Press **ENTER**.

To disable automatic triggering

Press **SETUP** and **SELECT** for the fader. Disable Trigger on the Assignment Properties tab.

OR

Press **SHIFT**+**TRIGGER** and **SELECT** for the fader.

Updating snaps

There is always an active snap. When you start programming a new show, snap 1 i ac ive and all objects loaded to the playback devices are added to snap 1.

In Tools ▶ System Settings ▶ Behavior ▶ Auto Snap Update, you can set a d fault for the way Vector updates snaps.

Option	What happens
No auto update	Snaps are never update utomatically. You must update the snap manua ly. **Note:** When is option is the default behavior, make sure you ave stored your snap before using **SHIFT + FREE** unload all playback devices.
On new assignments only	The s ap is updated only when objects are loaded to em ty playback devices. Freeing a playback device and loading a new QList does not update the snap. You must update the snap manually.
On any change	Snaps are always and under all conditions automatically updated. **Note:** When this option is the default behavior, be careful when using **SHIFT + FREE TO** unload all playback devices.

A

To u date snaps manually

1 Make the modifications to the snap.

2 Enter the snap number using the numeric keypad.

3 Press **STORE**.

4 Tap *OVERWRITE* in the Store Options dialog box.

E

To update snaps manually

1 Make the modifications to the snap.

2 Press **STORE**.

3   Enter the snap number using the numeric keypad.

4   Press **ENTER**. The Store Options dialog box opens.

5   Tap *OVERWRITE* in the Store Options dialog box.

Adding text tags to snaps

A

To add text tags to snaps

1   Select the snap.

2   Press **TEXT**.

The Text dialog box opens.

3   Use the keyboard to type the snap's name.

4   Press **STORE** or tap *OK*.

The dialog box closes.

E

To add text tags to snaps

1   Press **TEXT**.

2   Select the snap.

3   Press **ENTER**.

The Text dialog box open .

4   Use the keyboard to type t e snap's name.

5   Press **ENTER** or tap *OK*.

The dialog b   clo   s.

Deleting snaps

A

o delete snaps

1   Select the snap (or snaps).

2   Press **DELETE**.

The Delete dialog box opens.

3   Press **DELETE** again or tap *DELETE* in the dialog box.

To delete a range of snaps

1   Select the snaps: **SNAP # ➔ #**.

2   Press **DELETE**.

The Delete dialog box opens.

3 Press **DELETE** again or tap *OK*.

To delete snaps

1 Press **DELETE**.

2 Select the snap (or snaps).

3 Press **ENTER**.

The Delete dialog box opens.

4 Press **DELETE** or **ENTER** again.

Or

Tap *DELETE* in the dialog box.

To delete a range of snaps

1 Press **DELETE**.

2 Select the snaps: **SNAP #** → **#**.

3 Press **ENTER**.

The Delete dialog box opens.

4 Press **DELETE**, tap *OK*, or press **ENTER** ag in

Examining snaps

To view a list of snaps

Toggle the snap soft keys to gr d view by tapping . A list of snaps is displayed in the active pane.

To examine a s ap

1 View the snaps in grid format. If necessary, toggle to grid view.

2 Dou le click on snap 5.

Th contents of the snap are displayed in the active pane.

To view a list of snaps

Press **SNAP** and press **EXAM**.

To examine a snap

Example: Examine snap 5.

1 Select snap 5.

2 Press **EXAM**.

The contents of the snap are displayed in the active pane.

 E

To view a list of snaps

Press **EXAM**, **SNAP**, **ENTER**.

To examine a snap

Example: Examine snap 5.

1 Press **EXAM**.

The contents of the snap are displayed in the active pane.

2 Select snap 5.

3 Press **ENTER**.

Copying snaps

To copy snaps

1 Select the source snap.

2 Press **COPY**.

The snap is copied to the clipboard.

3 Select the target snap.

4 Press **PASTE**.

The new snap is named *Copy f Sn p #* (source snap).

Chapter 8 Saving, Loading, and Printing Show Files

Drive D:\ contains Vector's system files, show files, layout files, and visualizers.

This chapter contains the following sections:

- Saving Shows (see page 239)
- Loading shows (see page 240)
- Printing shows (see page 243)

Saving Shows

Show files include all show data, patch, macros, and d play layouts. the file extension for Vector shows is *.cvs. We recommend creating a new fol r to hold backup files for essential show files, layout files, and customized device files.

Although you can save a show by repeated y saving to the same file name, we recommend that you use the Save As option, so you can alw ys return to a previous version of the show if necessary.

> **IMPORTANT!** Make i hab t to frequently save your work!

To save a show

1. Go to he F e menu and choose Save. The Save dialog box opens.
2. Browse to he location where you save shows. Vector's default location is: D:\Program Files Compulite Vector\Vector Shows.
3. Type the show name in the File Name field.
4. Tap **SAVE**.

OR

Press Ctrl + S on the keyboard.

To use Save As

Go to the File menu and choose Save As.

Autosave

Vector automatically saves your show every 10 minutes, if there have been changes in the show data, or after a certain number of modifications to the show.

The autosave files are under D\Program Files\Compulite Vector\Config\Autosave. Autosave files are named: ShowName_###.cvs, where ### is incremented by one each time an autosave occurs. When reaching 999 the counter is reset to 000. the last 10 files are retained in the Autosave subdirectory.

Loading shows

When loading shows through the Open Show option (File menu), all show data is loaded.

To open a show

1 Go to the File menu and choose Open Show. The Open dialog box opens

2 Browse to where your saved shows are located. Vector's default location is: D:\Program Files\Compulite Vector\Vector Shows.

3 Choose a show from the list of your shows.

4 Tap **OPEN**.

A dynamic bar shows the load progress.

All patch information, settings, display layouts, nd s ored objects (cues, snaps, macros, etc.) are loaded.

Importing objects and patch

You can import selected objects or pat h inf rmation from saved shows. This is useful, for example, if you want to reuse the p tch o libraries from a previous show.

The objects you can import are:

You can import	
Objects	*Patch*
QLists	Devices
Libraries	Sets
Groups	DMX Out patch
S ps	DMX In patch
Macros	Matrix List
	Topo view
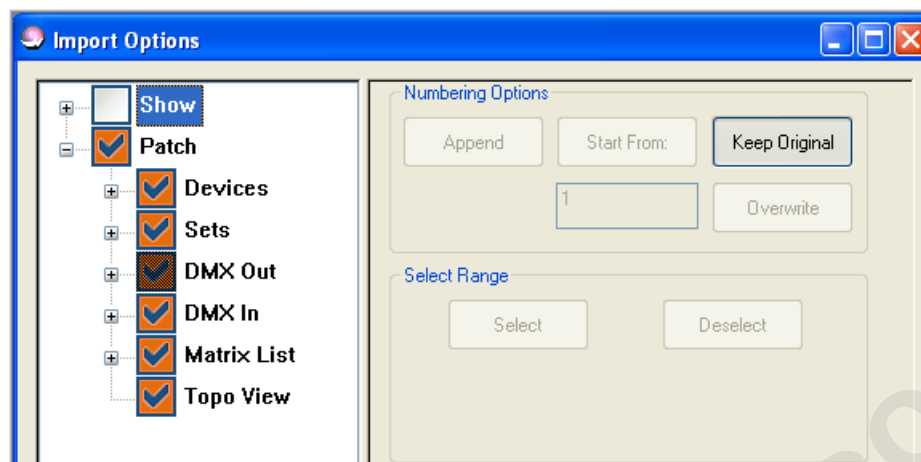
Figure 103: Import Options dialog box

Color coded selection boxes

Color	*What it means*
Orange	All items in this node are sele te
Light orange	Not all items in this node re s l cted
Dark orange	Required selections tha cannot be changed. Examples: • When loading QLis , it is required to also load libraries. • When lo ding the Patch, it is required to also load DMX.
Gray	Not sel ted.

Customized numbering for imported objects

Numbering imported objects is customizable in the Numbering Options group in the Import dialog box.

	Example: Your current show has QLists numbered from 1 to 5. You are importing QLists 4 th ugh 6 from a previous show.
APPEND	Start numbering imported objects from the next available number. As per the example: The imported QList 4 becomes QList 6, imported QList 5 becomes QList 7, and imposed QList 6 becomes QList 8.
START FROM	Specify the start number for the imported objects. As per the example: Starting from 10, imported QList 4 becomes QList 10, imported QList 5 becomes QList 11, and imported QList 6 becomes QList 12.
KEEP ORIGINAL	The original object numbers are preserved. If there are objects in the current show with the same number, the imported object will not be loaded. As per the example: Only QList 6 will be imported.

	Example: Your current show has QLists numbered from 1 to 5. You are importing QLists 4 through 6 from a previous show.
OVERWRITE	The imported objects overwrite the existing objects. As per the example: imported QLists 4 and 5 overwrite the current QLists 4 and 5.

ATTENTION! When importing objects or patch, the check box next to the item must be checked and the item must be selected. When selected, the item appears on a dark field.

To load specific objects

1 Open the File menu.

2 Choose (tap) Import.

  The Import Options dialog box opens.

3 Tap the object you want to load.

4 Select the numbering option.

5 If required, tap *SELECT* or *DESELECT* in the S lect Range group, and select the range of cues or libraries, etc.

6 Tap *OK*.

File conversion

Loading Ovation 4D, Micron 4D and Sabre show files to Vector automatically converts them to Vector format. File conversion is upported from OVD06R04, SPD06R04, and SBRD06R03. The conversion is one sided. Once s ved in Vector format, the files cannot be re-converted to Sabre or 4D format.

Compulite mode and Ac ion syntax are automatically set in the Behavior tab when loading shows converted from Sabr r 4D.

The names of show files that were converted from Sabre and 4D consoles, specify the source of the converted file. For Sabre shows, the show file number is preceded by the letter'C'. Example: Tosca_ 0010. For 4D shows, the show file number is preceded by the letter 'V'. Example: osca_V0010.

Converted	• QLists
	• Memories (including loops, links, text, time in/out)
	• Patch
	• Configuration (Service Tools ▶ Configuration ▶ System)
	• Libraries
	• Groups
	• Show Text
	• Fixtures
	Note: Sabre and 4D console devices can be opened in the Device Builder via the Patch Manager. You can change their profiles and save them as new devices or you can replace them with Vector devices.
Not converted	• Snaps
	• Macros
	• Events

To load a 4D or Sabre show file

1 Go to the File menu and choose Open Show.

The Open dialog box opens.

2 Browse to the show's location, select the file type, and the file. Sabre show files: C*.CUE. 4D show files: V*.CUE.

3 Tap *OPEN*.

The show opens.

4 Save the show in Vector format.

Printing shows

You may wish to print hard copy of your shows for archival purposes. Use the Workspace tree to select the information you want to print.

To select items for printing

1 Open the File menu.

2 Choose Print Multiple.

The Print Multiple dialog box opens.

3 Open the Workspace.

4 Expand the Show node.

5 Tap the items you want to print.

To select more than one item press and hold Ctrl and click each item you want to select.

To select continuous items, click the first item then press and hold Shift and click the last item.

6 Click or tap *PRINT*.

Chapter 9   Libraries

Libraries are a programmable database of preset parameter values.

This chapter includes the following sections:

- About libraries (see page 245)
- Working with libraries (see page 246)
- Using library storage options (see page 252)
- Editing libraries (see page 259)
- Using libraries for programming cues (see page 263)

About libraries

Libraries are user-programmed or automatically g nerated presets for parameter values. Libraries track through the cues, thus editing a library glob lly updates cues that reference that library.

You can store up to 9999 libraries of ea h ibrary type. The numbering in this list is identical to the numbering under the Library node in th Wo kspace tree.

1. Position - all parameters in e po ition bank.

2. Color - all parameters in the color bank.

3. Beam - all paramet   in he beam bank.

4. Effects - all ef ect a tributes. Effect libraries are non-tracking.

5. Timing   all iming settings.

6. Intensity - all parameters in the intensity bank. Intensity libraries are non-tracking.

7. Image   all parameters in the image bank.

8. Shape - all parameters in the shape bank.

9. Palette - a device specific tracking library that can include all parameters.

10. Tracking - a fixture specific tracking library that can include all parameters.

> **Tip!** Libraries can be used for assigning base values when programming effects.

Working with libraries

Libraries are stored using console key sequences and the Editor toolbar in library mode or using library type soft keys.

The workflow for storing libraries is:

1. Select fixtures and assign values.

2. Access library storage by pressing **LIB** on the console or *LIBRARY* on the toolbar.

3. Choose the library type and give the library a unique number.

4. Optional - select one of the storage options available on the toolbar.

Each library type appears in a numbered list in the workspace. Library types can be selected by their list number. You can also use the parameter type keys to select most lib ary t pes. Example: press **COLOR** when storing a color library or press **2**, which is color library in the numbered library list.

Automatically generating libraries

Vector can automatically generate:

■ Color libraries

■ Intensity libraries

■ Image libraries

You can choose to generate some or all f these objects for some or all of the devices used in the show.

Generating libraries is done in t e Generate Groups and Libs dialog box.
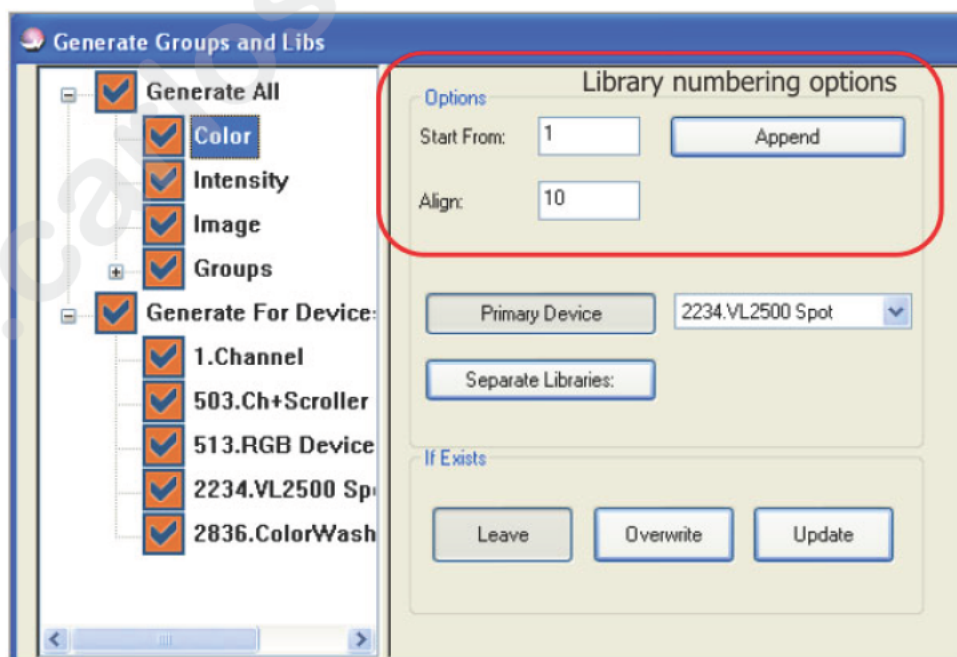
Figure 104: Generate libraries and groups dialog box

You can number the libraries to your convenience in the dialog box's numbering area. The numbering option fields are:

Start From	Store the first generated library or group to the number in this field and sequentially increment the libraries or groups.
Align	Choose an offset. Generally, it is convenient to chose an offset that corresponds to your display set up.
	Example: Assume that you have sized the soft keys pane to show 5 soft keys per row. You choose to generate 5 groups for each fixture type. If the start number i 1 and the offset is 10, the generated groups will appear in every other w.

If there are existing libraries you can choose to:

Leave	Leave libraries as is. When Vector encounters existing librarie it skips that library. Example: Color libraries 1 → 3 exist in the show. The first three generated libraries will begin from 4 and automatic libraries 1 → 3 ill not be generated.
Overwrite	Overwrite existing libraries with the automatical y generated libraries.
Update	Update the existing libraries. Example: You have added a new device to your rig. You want to add the new device to the utomatically generated libraries

Color and image libraries can be generated for on device or for multiple devices. Vector generates the libraries for multiple devices according to he primary device.

Primary Device	Base librar valu on the parameters as defined in the primary device when g erating libraries for more than one type of device. Example: Gener te co or libraries that will be common to three devices. The primary device has a color wheel and the other 2 devices lack a color whee , but have CMY color parameters. The libraries are generated ccording to the primary device's color wheel. For the other devices, Vector sets their CMY levels to match the primary device's color wheel.
Separate L raries	Generate separate libraries for each device.

T op the Generate Groups and Libs dialog box

Open the Tools menu and tap Generate Groups and Libs.

OR

1 Press **SET**.

2 Tap the ***GENERATE GROUPS AND LIBRARIES*** button on the Editor toolbar.

IMPORTANT! To generate libraries the check box next to the library type must be checked and the library type **must** be selected. When selected, the library type appears on a dark field.

To generate common color or image libraries for multiple devices

1. Open the Tool menu.

2. Choose (tap) Generate Groups and Libs.

   The Generate Groups and Libs dialog box opens.

3. Expand Generate All.

4. Make sure Color or Image are checked.

5. Tap Color or Image to select.

   The item appears on a light field.

6. Set the start number in the Start from fields and the offset in the Align field

7. Select the primary device from the drop down dialog menu.

8. Make sure the devices are checked under the Generate for Devices l st.

9. Select the behavior (Leave, Overwrite. or Update).

10. Tap *APPLY* or *OK*.

   The libraries are generated according to the primary dev ce

To generate separate color or image librari s for devices

1. Open the Tool menu.

2. Choose (tap) Generate Groups and L bs

   The Generate Groups and Libs di log ox opens.

3. Expand Generate All.

4. Make sure Color or Imag are hecked.

5. Tap Color or Image to lect.

   The item appear on light field.

6. Make sure he d vices are checked under the Generate for Devices list.

7. Set the s rt number in the Start from fields and the offset in the Align field.

8. Tap *EPARATE LIBRARIES*.

9. Se ect the behavior (Leave, Overwrite. or Update).

10. Tap *APPLY* or *OK*.

   Libraries are generated for each device.

To generate intensity libraries

1. Open the Tool menu.

2. Choose (tap) Generate Groups and Libs.

   The dialog box opens.

3. Expand Generate All.

4. Make sure Intensity is checked.

5. Make sure the devices are checked under the Generate for Devices list.

6 Set the start number in the Start from fields and the offset in the Align field.

7 Set the level increments in the% Step field.

8 Select the behavior (Leave, Overwrite. or Update).

9 Tap *APPLY*.

Storing libraries

A

To store a library

Example: Store color library 8.

1 Select the fixtures and set the color values.

2 Press **STORE**.

3 Tap color library soft key *8*.

OR

1 Select the fixtures and set the color values.

2 Press **LIB**.

Or

Tap *LIBRARY* on the Tool bar.

3 Press **COLOR** and **8**.

4 Press **STORE**.

E

To store a library

Example: Stor co or library 8.

1 Select t e fix   res and set the color values.

2 Pre s **ENTER**. The values are output.

3 Pr   s **STORE**.

4 Tap an available space on the color library soft keys.

OR

1 Select the fixtures and set the color values.

2 Press **ENTER**. The values are output.

3 Press **STORE**.

4 Press **LIB**.

Or

Tap *LIBRARY* on the Editor tool bar.

5 Press **COLOR** and **8**.

6 Press **ENTER**.

> **ATTENTION!** Parameters that are set, in the Device Builder, to be excluded from libraries are not included when storing libraries manually or when generating automatic libraries. To override the exclude setting, use the All for Selected Bank option that is available in library mode on the Editor tool bar.

Adding text tags to libraries

A

To add text tags to libraries

1. Select the library.
2. Press **TEXT**.

   The Text dialog box opens.
3. Use the keyboard to type the library name.
4. Press **STORE** or tap *OK*.

   The dialog box closes.

OR

Immediately after storing the library, press **T XT** a d follow steps 3 and 4.

E

To add text tags to libraries

1. Press **TEXT**.
2. Select the library.
3. Press **ENTER**.

   The Text dialog box opens.
4. Use th key rd to type the library name.
5. Pre s **ENTER** or tap *OK*.

   Th dialog box closes.

OR

Immediately after storing the library, press **TEXT** and follow steps 4 and 5.

Deleting libraries

A

To delete libraries

1. Select the library.
2. Press **DELETE**.

   The Delete dialog box opens.

3 Press **DELETE** again or tap *DELETE* in the dialog box.

E

To delete libraries

1 Press **DELETE**.

2 Select the library.

3 Press **ENTER**.

The Delete dialog box opens.

4 Press **DELETE** or **ENTER** again.

Or

Tap *DELETE* in the dialog box.

OR

1 Press **DELETE**.

2 Tap the library soft key.

3 Press **ENTER**.

Examining libraries

To view a list of libraries

Toggle the library soft keys, to gr d view by tapping ⊞ . A list of libraries is displayed in the active pane.

A

Press a parameter key to sel ct the library type and press **EXAM**.

E

Press **EXAM**, p ss a parameter key to select the library type, and press **ENTER**.

To examine a library

Example: Examine position library 5.

Select position library 5 and press **EXAM**. The contents of the library are displayed in the active pane.

Press **EXAM**, select the library, and press **ENTER**. The contents of the library are displayed in the active pane.

OR

1 View the position libraries in grid format. If the position library tab is in soft key format, toggle to grid format by pressing ⊞ .

2 Double click on library 5.

The contents of the library are displayed in the active pane.

Copying libraries

To copy a library

Copy position library 1 to position library 4.

1 Select position library 1.

2 Press **COPY** or **CUT**.

Position library 1 is copied to the clipboard.

3 Select position library 4.

4 Press **PASTE**.

Position library 1 is copied to position library 4.

The text on the soft key for position library 4 is, *Copy of 1*.

Using library storage options

Tapping *LIBRARY* or pressing **LIB** sets the Editor tool ba to l brary mode, which provides buttons for expanded control over library storage.

| Fixture Specific | Device Specific | Pattern | Library | Tracking | All For Selected Bank | Include Time | Include Effect | Bank Filters | Allow Reference | |
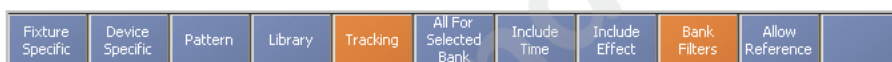
Figure 105: Library mode on the Editor tool bar

Buttons	*What they do*	*Default*
FIXTURE SPECIFIC	This type of ibrary can be applied only to the specific fixtures pr grammed in the library. A value is set for each fix re in the library.	Depends on the library category.
DEVICE SPECIFIC	Th type of library can be applied to fixtures of the same device type.	Depends on the library category
PATTERN	This type of library is analogous to effects.	Not selected
TRACKING	The library is tracked for global cue modification.	On
ALL FOR SELECTED BANK	All parameters belonging to the same parameter type as the active parameter are stored in the library.	On
INCLUDE TIME	Time assignments for the selected parameter will be included in the library.	Off
INCLUDE EFFECT	Effects running on the selected parameter will be included in the library.	Off
BANK FILTERS	• On - include all parameters in the bank. • Off - include all active parameters regardless of their wheel bank assignments.	On

ATTENTION! When storing a device specific library, make sure that all selected fixtures are set to the correct values. Within device specific libraries Vector allows individual fixtures to maintain a unique value. This is useful in cases where a fixture needs individual correction, for instance when gobos have been switched in a fixture's gobo wheel and gobo 1 is in the gobo 2's place.

Fixture and device specific libraries

Fixture libraries can be applied only to the specific fixtures programmed in the library. Dev ce libraries can be applied to all fixtures of the same device type.

The default library for parameter types are:

Fixture Specific	*Device Specific*	*Pattern*
Position	Color	Effect
Intensity	Beam	Timing
Tracking	Image	
	Shape	
	Palette	

Library modes are displayed in the library soft keys.

- Device specific libraries are represented by   D.

- Fixture specific libraries are represented   y an F.

- Pattern libraries are represented by a P

A

To store fixture or device specific libraries

Example: Store   fixtu e specific color library.

1 Select he f xtures and set the color values.

2   Pre s **STORE**.

3 T p *LIBRARY*.

O

Press **LIB**.

4 Press **COLOR**.

5 Tap *FIXTURE SPECIFIC*.

6 Tap a library number in the color library soft keys.

Or

Enter a number on the numeric keypad and press **STORE**.

E

To store fixture or device specific libraries

Example: Store a fixture specific color library.

1 Select the fixtures and set the color values.

2 Press **ENTER**.

The values are output.

3 Press **STORE**.

4 Tap *LIBRARY*.

Or

Press **LIB**.

5 Press **COLOR**.

6 Tap *FIXTURE SPECIFIC*.

7 Tap a library number in the color library soft keys.

Or

Enter a number on the numeric keypad and press **ENTER**.

Library patterns

Library patterns are applied to fixtures eq enti lly as a repeating pattern.

Example: the library contains values for fix ures 1, 2, and 3. Apply to fixtures 1 thru 9.

- The values for fixture 1 are pplie to fixture 1, 4, 7.
- The values for fixture 2 ar applied to 2, 5, 8.
- The values for fixtu e 3 a e applied to 3, 6, 9.

A

To store libraries using the pattern option

Exam le: Store a sequential color library.

1 S lect the fixtures and set the color values.

2 Press **STORE**.

3 Tap *LIBRARY*.

Or

Press **LIB**.

4 Press **COLOR**.

5 Tap *PATTERN*.

6 Tap a library number in the color library soft keys.

Or

Enter a number on the numeric keypad and press **STORE**.

E

To store libraries using the pattern option

Example: Store a pattern color library.

1 Select the fixtures and set the color values.

2 Press **ENTER**.

The values are output.

3 Press **STORE**.

4 Tap *LIBRARY*.

Or

Press **LIB**.

5 Press **COLOR**.

6 Tap *PATTERN*.

7 Tap a library number in the color library soft keys.

Or

Enter a number on the numeric keypad and press **ENTER**.

Filtering libraries

There are two buttons that filter librarie :

- *ALL FOR SELECTED BANK*

- *BANK FILTERS*

All for selected bank option

Some parameters a e no automatically included in libraries when they are not active in the editor. Example: Posit n typ parameters usually include pan and tilt, but certain devices might also have move speed or mo e time. When storing a position type library, move speed is not automatically included in th library.

What i automatically included in libraries?	
Parameter Bank	*Parameters*
Intensity bank	Dimmer only
Position bank	Pan, Tilt only
Color bank	All parameters: color wheels, CMY, speed, time, func
Beam bank	Focus, Zoom, Iris only
Image bank	Only parameters that have been edited
Shape bank	All parameters: all blades, etc.

The **ALL FOR SELECTED BANK** option allows you to include all parameters, belonging to the parameter bank, in the library.

To include all parameters

Example: You are storing an intensity library for a device that has a shutter and it is not active in the editor, but you want it included in the library.

1   Select fixtures.

2   Set dimmer level.

3   Press **STORE**.

4   Press **LIB**.

5   Tap **ALL FOR SELECTED BANK**.

6   Store an intensity library.

    The dimmer level and the shutter are stored in the library.

Bank filter option

In some cases, you might want to store parameters in libra s th   do not normally accept such parameters. Example: You might want to store dimmer, g bo, nd zoom values in a position library.

When **BANK FILTER** is disabled, any parameter c n be   ored in a library. The default is **BANK FILTER** enabled and the button has an orange   ld.

The rules that control which parameters are st red in unfiltered libraries when **BANK FILTER** is disabled:

1. If all the parameter values are di played in white in the editor, they are all included in the library.

2. If there are paramet r values displayed in the red and they do not belong to the library type, these values are stored in the library. Example: When storing a position library, you intend to include the dimmer gobos, and zoom parameters. In the editor, pan, tilt, dimmer and zoom parameter   lues appear in white and the gobo values in red. The pan and tilt parameters and the gobo will be stored in the library. the dimmer and zoom parameters are ignored.

To s ore an unfiltered library

1   Select the fixtures.

2   Set a dimmer level.

3   Set positions.

4   Set gobo values.

5   Set zoom values.

6   Press **ENTER**.

    All values are displayed in white.

7   Press **LIB**.

8   Press **POS**.

9   Tap **BANK FILTERS**.

256

The button now has a blue background and library filtering according to parameter type is cancelled.

10 Tap an SK on the position library tab.

The position library contains dimmer, zoom, and gobo as well as the color parameters.

A

To store an unfiltered library

1 Select the fixtures.

2 Set a dimmer level.

3 Set positions.

4 Set gobo values.

5 Set zoom levels.

6 Press **ENTER**.

All parameter values are displayed in white.

7 Press **LIB**.

8 Press **POS**.

9 Tap *BANK FILTERS*.

The button now has a blue background nd brary filtering according to parameter type is cancelled.

10 Enter a library number on the keypad.

11 Press *STORE*.

The position library ntai s dimmer, zoom, and gobo, as well as the pan and tilt parameters.

E

To store an unfilt ed library

1 Sel t the fixtures.

2 Se dimmer level.

3 Set positions.

4 Set gobo values.

5 Set zoom levels.

6 Press **ENTER**.

All parameter values are displayed in white.

7 Press *STORE*.

8 Press **LIB**.

9 Press **POS**.

10 Tap *BANK FILTERS*.

The button now has a blue background and library filtering according to parameter type is cancelled.

11 Enter a library number on the keypad.

12 Press **ENTER** or **STORE**.

The position library contains dimmer, zoom, and gobo, as well as the pan and tilt parameters.

To store some of the active parameters in a library

Example: Pan, tilt, dimmer, and color parameters are active in the editor. You want to s ore pan, tilt, and color settings in a color library, but not the dimmer.

1 Select the fixtures.

2 Set a dimmer level.

3 Adjust the pan and tilt.

4 Set color levels.

5 Press **POSITION**.

The position wheel bank is now available.

6 Press the parameter keys to select pan and ti

Pan and tilt are now selected (they appear n red) in the editor.

7 Press **LIB**.

8 Press **COLOR**.

9 Tap *BANK FILTERS*.

The button now has a blu background and library filtering according to parameter type is cancelled.

10 Store to a color brar .

The color brar contains pan, tilt, and the color parameters.

Storing intensity libra es as tracking libraries

By de ault, intensity libraries do not track. It is possible, however, to store intensity libraries as tra king libraries

A

To store intensity tracking libraries

1 Select spots and set dimmer values.

2 Press **STORE**.

3 Press **LIB**.

4 Press **INTENS**(ity).

5 Tap *TRACKING*.

6 Press **STORE**.

E

To store intensity tracking libraries

1 Select spots and set dimmer values.

2 Press **STORE**.

3 Press **LIB**.

4 Press **INTENS**(ity).

5 Tap *TRACKING*.

6 Press **ENTER**.

Editing libraries

Libraries can be edited directly or when updating cues. See . Cues referencing a library are automatically updated when the library is modified.

The highlight feature is useful when tweaking libraries. See .

A

To edit fixture values in a library

Example: Edit values for spot 2 in imag library 1.

1 Select image library 1.

2 Press **SPOT**.

The library values applied to the fixtures in the library.

3 Press **2** to selec spot 2 and adjust the values.

4 Press **STOR**

Im ge library 1 is updated.

To add fixtures to a library

Example: Add spots 3 and 4 to image library 1.

1 Select image library 1.

2 Press **SPOT**.

The library values are applied to the fixtures in the library.

3 Press **3**,**+**, **4** to select new fixtures.

4 Set parameter values.

5 Press **STORE**.

Image library 1 is updated.

To remove fixtures or parameters from a library

Example: Remove spots 3 and 4 from image library 1.

1 Select image library 1.

2 Press **SPOT**.

   The library values are applied to the fixtures in the library.

3 Press **3,+**, **4** to select the fixtures.

4 Press **RELEASE**.

5 Press **STORE**.

   Image library 1 is updated.

E

To edit fixture values in a library

Example: Edit values for spot 2 in image library 1.

1 On the Editor tool bar, tap *EDIT LIBRARY*.

2 Select image library 1.

3 Press **ENTER**.

   The library values are applied to the fixtu es in he library.

4 Press **2** to select spot 2 and adjust the va ues.

5 Press **ENTER**.

   The new values are applied to he elected spot.

6 Press **UPDATE**.

7 Press **ENTER**.

   Image library 1 is updated.

To add fixtures o a ibrary

Examp e: Add spots 3 and 4 to image library 1.

1 O the Editor tool bar, tap *EDIT LIBRARY*.

2 S lect image library 1.

3 Select spots 3 and 4 and set values.

4 Press **ENTER**.

   The values are applied to the selected fixtures.

5 Press **UPDATE**.

6 Press **ENTER**.

   Image library 1 is updated.

To remove fixtures or parameters from a library

Example: Remove spots 3 and 4 from image library 1.

1 On the Editor tool bar, tap *EDIT LIBRARY*.

2 Select image library 1.

3 Press **ENTER**.

The values are applied to the selected fixtures.

4 Press **RELEASE**.

5 Select spots 3 and 4.

6 Press **ENTER**.

7 Press **UPDATE**.

8 Press **ENTER**.

Image library 1 is updated.

Note: Adding and releasing fixtures from libraries can be applied to a ra ge o libraries.

To add parameters to libraries

Example: Include beam parameters in position library 22.

1 Select spots, set the positions, and store position library 2.

2 Toggle the position library soft keys to spread she form t.

3 In the row for position library 22, tap the ch ck b x for beam library.

Library Name	Library #	Mode	Intensity	Position	Beam
Lib 1	1	Fixture ☐		☒	☒
Lib 2	2	Fixture ☐		☒	☐
asdasdasd	5	Fixture ☐		☒	☐
Lib 6	6	Fixture ☐		☒	☐
Lib 22	22	Fixture ☐		☒	☒
Lib 24	24	Fixture ☐		☒	☐

4 Toggle to view the p ition library soft keys.

5 Select the spots gain and set values for zoom and focus.

6 Press **STORE**

7 Press **IB**.

8 Tap position library 22.

T Object Exists dialog box opens.

9 T p *UPDATE*.

The beam type parameters are stored as part of the position library.

Programming reference libraries

Reference libraries contain references to other libraries, thus selecting the reference library applies multiple libraries to a fixture selection. This is useful when certain libraries are consistently used together.

Example: Position library 1 lights the drum riser. Position library 2 lights the keyboard area. Position library 3 lights the vocalist downstage. Since these libraries are often used in the same cues, create a library that references these three libraries. You could call this reference library "The Band".

The advantage of this feature is that each library is still available for stand alone use.

Reference libraries can be referenced from another library.

Example: Color library 1 lights stage right. Color library 2 lights stage left. Color library 3 lights the cyclorama. These 3 libraries are referenced from a library called "The Set". "The Band" and "The Set" libraries can be referenced from another library called "The Stage".

Reference libraries are indicated by the letter'R' (reference) displayed on the library soft keys.
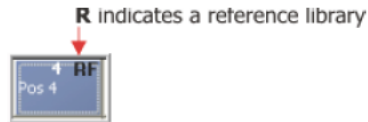
Figure 106: This fixture specific (F) position library soft key indicates a reference libra y (R)

Updating reference libraries

When updating the source (referenced) library, all libraries referencing the so   e are updated. Be aware that updates track forwards, but not backwards., so the link to th source library may be lost.

Example: *Position library 1 is referenced in position library 10.* *Position library 10 is referenced in position lib ary 2.*			
Library	*Referenced in library*	*Update*	*Result*
1	10	Library 1	• T e link to library 10 is retained. • Applying library 10 to a selection, sets the values as they appear in library 1.
1	10	Library 10	• The link to library 1 is broken. • Applying library 10 to a selection, sets the values as they appear in library 10.
10	12	Library 10	• The link to library 12 is retained. • The link to library 1 is broken. • Applying library 12 to a selection, sets the values as they appear in library 10.
10	12	Library 12	• The link to library 10 is broken. • The link to library 1 is broken. • Applying library 12 to a selection, sets the values as they appear in library 12.

Bank filters and reference libraries

The bank filter feature can be used with the reference libraries. Example: With **BANK FILTERS** disabled, reference position and image libraries within the same library.

To program reference libraries

Example: Program position library 10 to reference position libraries 1, 2, and 3.

1 Press **POS** to select position libraries.

2 Press **1** and **ENTER**.

Or

Tap position library 1's cell on the soft keys.

The spots in position library 1 are selected and the library is applied.

3 Press **SHIFT** + ●.

This cancels the spot selection and allows the next library selection.

4 Press **POS** to select position libraries.

5 Press **2** and **ENTER**

Or

Tap position library 2's cell on the soft keys.

6 Press **SHIFT** + ●.

This cancels the spot selection and allows the next library selection.

7 Press **POS** to select position libraries.

8 Press **3** and **ENTER**

Or

Tap position library 3's cell on the soft keys.

9 Press **STORE**.

10 Press **LIB**.

11 Tap *ALLOW REFERENCE*

12 Tap a library soft key.

Note: It is also possible perform this task by selecting the fixtures, apply the required libraries and store as a reference library. This allows you to reference only parts of the source libraries, especially when working with fixture type libraries.

Using libraries for programming cues

Using libraries to build lighting looks makes cue editing easier, quicker, and more accurate.

Use of position libraries is particularly important since updating libraries globally updates the cues programmed with libraries. If your show moves to a new venue, updating your position libraries ensures that the positions in cues will be on the mark.

More than one library can be selected and then applied simultaneously to the fixtures.

To program a cue using libraries selected via soft keys

Example: Program a cue using position library 5.

1 Select the fixtures.

2 Switch to the position library tab.

3 Tap **5** on the position library soft keys.

   The pan and tilt values are set according to the values stored in the library. The library icon is displayed in the pan and tilt cells.

4 Store the cue.

To program a cue using libraries selected on the keypad

Example: Apply position library 5, color library 3, and image library 1 t selected fixtures

1 Select the fixtures.

2 Press **POSITION** and enter **5** on the numeric keypad.

3 Press **ENTER**.

   The pan and tilt values are set according to the values stored in the library. The library icon is displayed in the pan and tilt cells.

4 Press **COLOR** and enter **3** on the numeric k ypad.

5 Press **ENTER**.

   The color values are set according to the values stored in the library.

   The library icon is displayed i the r levant parameter cells. Press **IMAGE** and enter **1** on the numeric keypad.

6 Press **ENTER**.

   The image value are se according to the values stored in the library. The library icon is displayed in the relevant parameter ells.

7 Store the c e.

Note: After electing a library, pressing **NEXT** or **PREV** cycles through the libraries.

To apply multiple libraries simultaneously

Example: Select position library 1, color library 3, and image library 5 and then apply them to the selected fixtures.

1 Select fixtures.

2 Press **POS** and **1** to select position library 1 (or use any other library selection procedure).

3 Press **COLOR** and **3** to select color library 3 (or use any other library selection procedure).

4 Press **IMAGE** and **5** to select image library 5 (or use any other library selection procedure).

5 Press **ENTER**.

   All of the selected libraries are applied to the fixtures.

Updating libraries when updating cues

See .

Library time

The library default time, the rate at which a library fades in, is set in the System Settings dialog box ▶Timing tab. You can change this default time, when the editor is in rate mode, using a rate wheel. This is useful when running a show live, creating mock fades. When the library default time is changed in the editor, it is changed automatically in the System Settings dialog box.

A

To change the library default time in the editor

   1 Press **RATE**.

   2 Use the Lib Fade Time wheel (wheel 4) to change the default fade time.

     Or

     Select library rate time by tapping the wheel assignment r pressing the wheel key and then enter the rate time on the keypad.

   3 Press **STORE**.

     The new default rate time is stored.

E

To change the library default time n he editor

   1 Press **RATE**.

   2 Use the Lib Fade Tim wheel (wheel 4) to change the default fade time.

     Or

     Select libr ry ra e time by tapping the wheel assignment or pressing the wheel key and then enter th rat   me on the keypad.

   3 Pre s **ENTER**.

     Th new default rate time is stored.

Library soft keys

Library soft keys are color coded. When you select fixtures, the library soft keys' color code shows the applicability of the library to the selection.

Color	*What it means*
Orange	The library matches all the fixtures in the selection.
Light orange	The library matches some of the fixtures in the selection.
Gray	There is no match between the library and the fixtures in the selection.

Color	What it means
Blue	• There is no selection; the system is in idle after pressing **SHIFT + RESET**. • There is no such library.

Note: The same color code is used for Context soft keys displaying libraries.

Chapter 10   Effects

This chapter includes the following sections:

About effects

Effects are continuously running fades of parameter value spread among a number of fixtures. Effects on the pan and tilt parameters can be used for example, to create circles and figure 8s. Effects running on color parameters can be used to create a rainbow effect. The use of effects is as unlimited as your imagination.

Effects editor

Effects are programmed and edited in the Effect Editor dialog box. When the Effect Editor is open, the parameter wheels are set to the effect wheel bank. Offset, size, rate, and duty cycle attributes can be set using the wheels or the fields in the Effect Editor. Base values for the selected parameter are controlled with the wheel labelled **BASE**. The vertical wheel controls the dimmer intensity. The trackball controls pan and tilt.

Effects can be programmed for all fixture types and all parameters. Effects can be played back on all playback devices and in the editor.

The default position for the Effect Editor dialog box is aligned left, so the Offset, Size, Rate, and Duty attributes appear above their control wheels.

Note: Vector remembers the dialog box's last position, therefore if it was moved it will not be aligned with the wheels next time it opens.

Prebuilt effects

Vector is supplied with prebuilt effects. All attributes of prebuilt effects can be modified. You can also build your effects from scratch using the primitives and attributes that appear on the Effect Editor's Basic tab.
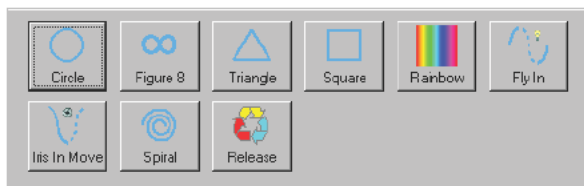
Figure 107: Pre-built effects in the Effect Editor dialog box

To use prebuilt effects

1 Select fixtures.

2 Press **EFFECT**. The Effect Editor dialog box opens. The wheel assignments jump to the effect wheel bank.

3 Tap the Pre-built tab. Choose an effect.

   The effect immediately begins running.

4 If necessary, adjust the effect using the wheels. See "Attribut..." page 268.

5 Store the effect as a cue or store it as an effect library.

Effect attributes
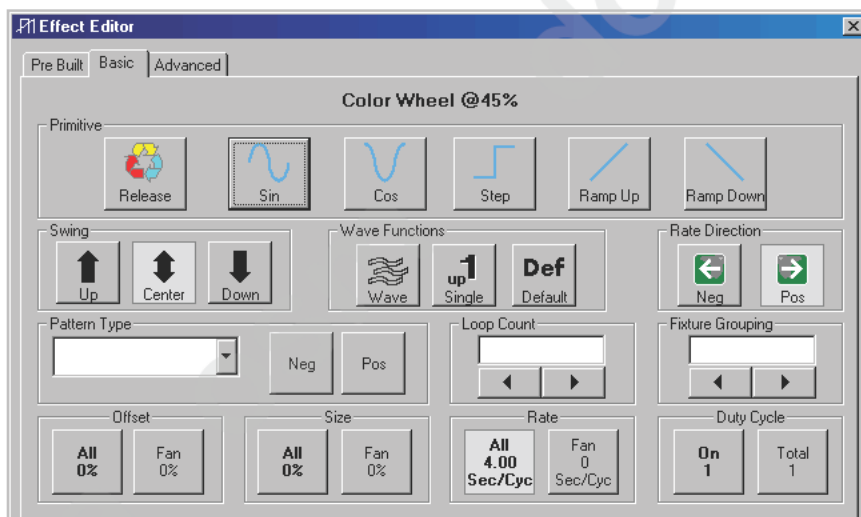
Figure 108 Basic tab in the Effect Editor dialog box

Attr butes		
Primitive	Primitives are the effect's basic movement pattern.	
Swing	Swing settings determine the value range of the effect.	
Wave Functions	Wave	Automatically fan offset attribute
	Single	Automatically fan offset attribute and set the duty cycle's Total attribute.
	Normal	Cancel the wave function and reset all attributes that were automatically changed.

Attributes		
Rate Direction	Switch effect direction	
	Neg(ative)	
	Pos(itive)	
Offset	Controls the point at which a paramete begins its action within the time cycle.	
	All	et th same off set for the selection.
	Fan	F ns the offset on the fixture selection.
Size	Determines dire tion and scope of the effect in relation to the base value.	
	All	Set the same size for the selection.
	Fan	Spread the size relatively over participating parameters.
Rate	Sets the number of seconds it takes to complete one effect cycle.	
	All	Sets the same effect rate for all participating parameters.
	Fan	Fans the rate on the fixture selection.
D y C le	Determines how many times the effect occurs within one time cycle.	
	On	How many times effect repeats
	Total	Time cycle
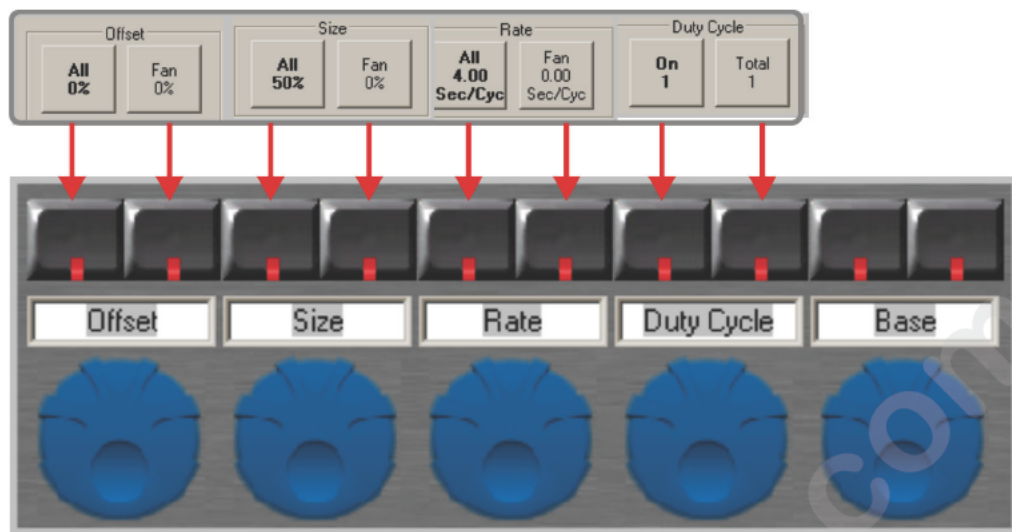
When editing effects, use the keys to toggle Effect attribute parameters

Primitives

Primitives are the effect's basic movement pattern Com inin primitives is a quick way to create effects. Example: Create a circle by assigning (primi ve) sine to pan and (primitive) cosine to tilt. primitives are available in the Basic and Advanced tabs
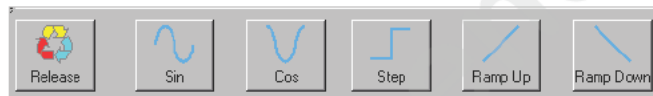
Figure 109: Primitives in the Basic ta
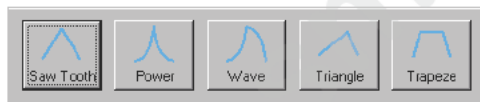
Figure 110: Primiti es in he Advanced tab

Fan and selection order

The order i which fixtures are selected determines the order in which fan settings are executed. Ex mpl   If the spot selection was 1 → 12, spot 1 is the first spot to respond, spot 2 is the next, etc. f the pot selection was 12 → 1, spot 12 is the first spot to respond, spot 11 is the next, etc. This is also true for non-sequential spot selections.

To program an effect

1 Select fixtures and parameters.

2 Press **EFFECT**.

The Effect Editor dialog box opens. The wheel assignments jump to the effect wheel bank.

3 Choose a primitive. The effect immediately begins running.

4 Adjust the effect using the fields in the Effect Editor or the wheels.

5 Store the effect as a cue or store it as an effect library.

Storing effects

Once an effect is working to your satisfaction, you can store it as a cue or as an effect library.

The default for effect libraries is pattern libraries. An effect library is never specific to a device. It can be applied to all fixtures and is not limited to the fixtures that were active when the effect library was stored.

Effect libraries are applied as patterns. Example: when stored the effect was running 3 spots. Apply it to 9 spots and it runs as 1, 2, 3, 1, 2, 3,1, 2, 3. Of course, when storing the effect library this default can be changed. .

> **Note:** Choosing *INCLUDE BASE*, when storing effect libraries, causes base valu s in effect libraries to override the parameter values in the editor.

To store an effect in a cue

The procedure is the same as storing any cue. .

To store an effect library

1 Designate a soft key set for effect libraries
2 Press **STORE**.
3 Tap a number in the effect library soft keys.

Movement attributes

Effects' movement attribu s are

- Primitive
- Base
- Swing
- Siz

Primitive

Primitives are the effect's basic movement pattern. Vector comes with five primitives. Different primitives can be assigned to each parameter. Combining primitives is a quick way to create complex effects.

Figure 111: Primitives in the Effect editor, Basic tab
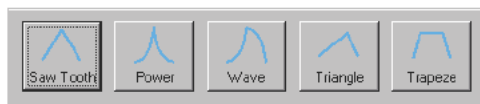
Figure 112: Primitives in the Effect editor, Advanced tab

A primitive can be assigned at any point during effect programming. You may find that you want to adjust the base, assign offset, and rate values before assigning the primitive.

Most primitives operate from 0% - full and back to 0%. This can be manipulated by changing the size attribute.

To assign a primitive

1 Select fixtures and set base values.

2 Press **EFFECT**.

3 Tap a primitive that appears in the **Basic** tab. The effect is immediately applied.

Primitive schematics

Sine primitive

Sine starts at 50%. it runs from 50% to full to 0% and ba k to 50%. This characteristic causes the effect to rest at 50% when the duty cycle is somethin other than 1:1 Use sine together with cosine to program a circle effect.
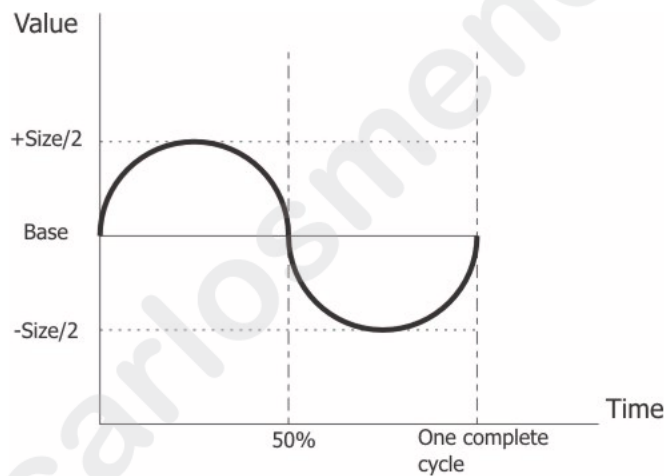
Cosine primitive
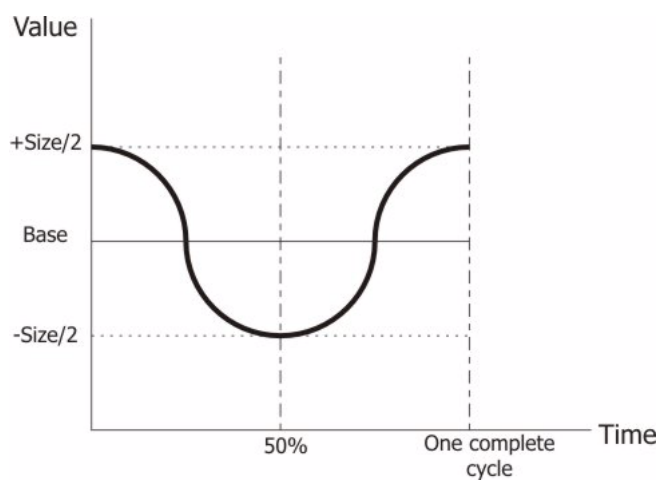
Step primitive
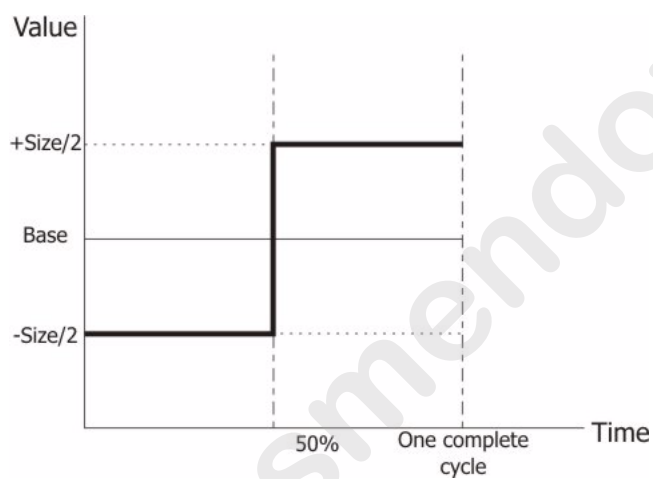
Ramp up primit ve
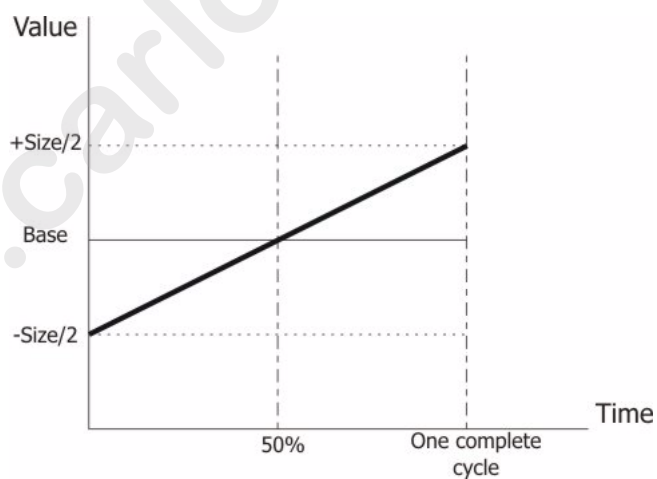
Ramp down primitive
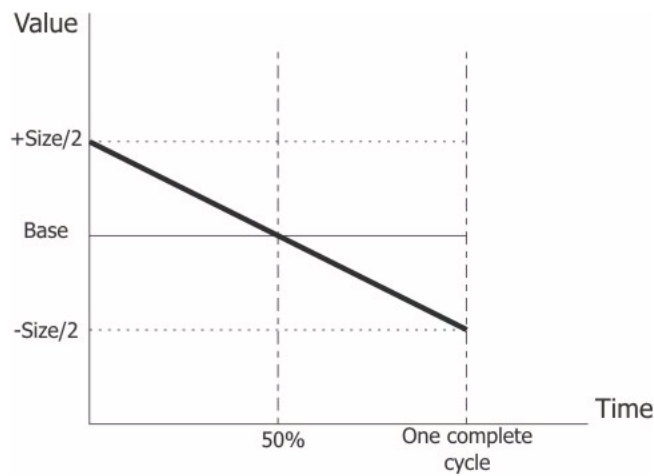
Base

Base is the parameter value that defines the effect's starting poin . Base values are parameter and spot specific. Set the base value prior to accessing the Eff ct Edit . Use the base wheel to change base values. Change dimmer (intensity) values using the verti al wheel.

To modify base values

Select the fixtures and the parameter. U e the base wheel to change the parameter value.

Tip! Use libraries to set base valu s.

Swing

Swing determines th dire tion and scope of the effect in relation to the base value, the starting point. Swing an b Up Center, or Down.
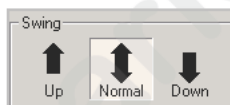
F gure 113: Swing options in the effect editor

Up swing
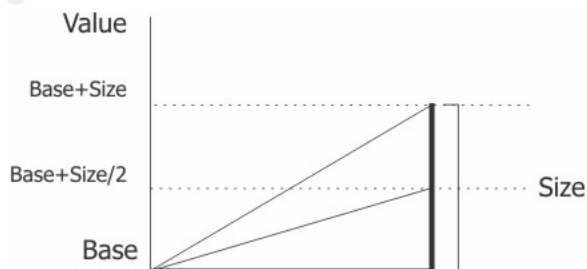
Center swing
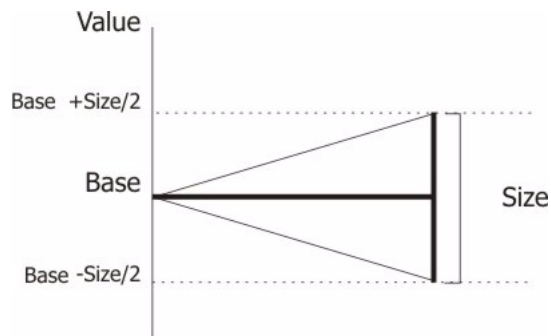
Down swing
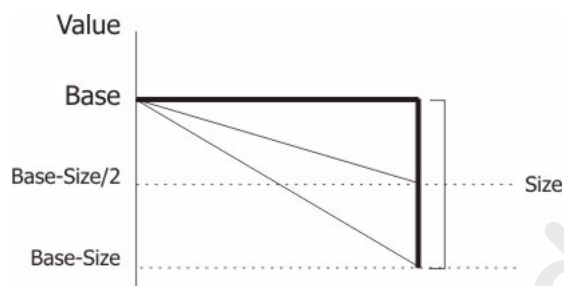
Swing examples

Example 1

- Base 30
- Size 50%
- Swing Up

The effect runs from th base (30) to 60 and to 90.
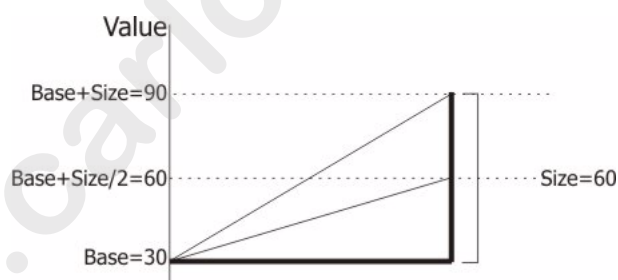
Example 2

- Base 30
- Size 50%
- Swing Down

The effect runs from the base (60) to 30 and to 0.
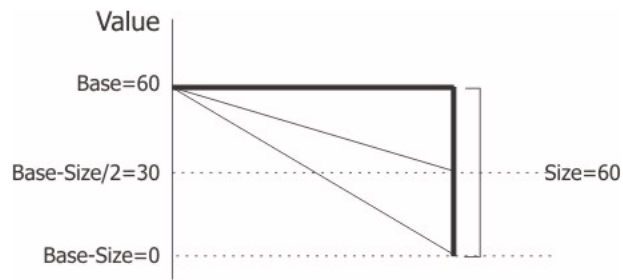
Example 3

- ■ Primitive - Sine
- ■ Base 70
- ■ Size 50%
- ■ Swing Center

The effect runs from the base (70) to FL (100%) to 20.

> **Note:** The top of the effect is actually 120. The effe   tay   at 100% for the length of time it takes to run from 100% to the virtual v lues above 100%).
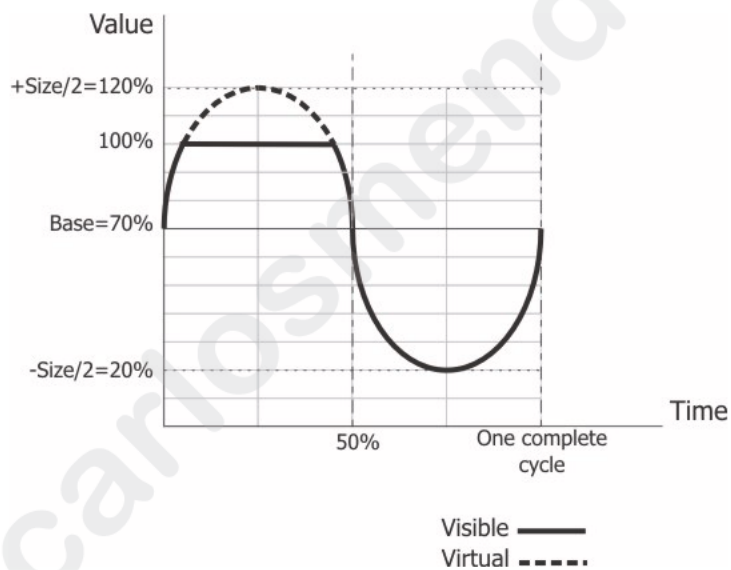
Size

Size determines how much movement takes place from the effect's starting point (the base). Size is a percentage. The size range is from 0% to 100%. The size default is zr or 50 or FL depending on the type of parameter.
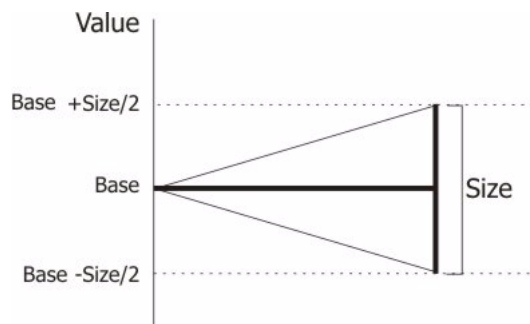
Example: The base is 60, size is 60, swing is center. The range of mov ment is base +30 and base -30.

Example: The base is 30, size   60, swing is center. The range of movement is base +30 and base -30. The parameter value limits are 60 at the top of the effect and 0 (zero) at the bottom of the effect.
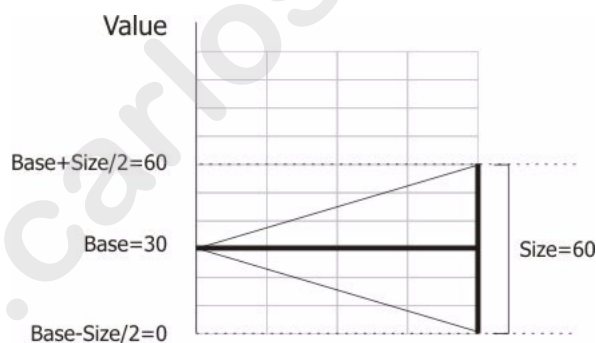
To change the size

1 Select the fixtures and the parameter.

2 Press **EFFECT** to open the Effect Editor.

3 If necessary, tap *ALL* in the Size group.

4 Use the size wheel to set the value.

Or

Enter an absolute value on the numeric keypad.

To apply (size) fan

1 Select the fixtures and the parameter.

2 Press **EFFECT** to open the Effect Editor.

3 Tap *FAN* in the Size group.

4 Use the size wheel to set the fan value.

Or

Enter an absolute value on the numeric keypad.

Fanning parameters

The *FAN PARAMETERS* option fans the effect over parameters. This allows c ntrol over the parameters in a single spot.

To fan parameters

Example: Apply a fan effect to cyan, magenta, and yell w i spot 1.

1 Select spot 1.

2 Select cyan, magenta, and yellow.

3 Press **EFFECT**.

The Effect Editor dialog box op ns

4 Select a primitive from the Pre- i t, Basic, or Advanced tabs.

5 Go to the Advanced tab.

6 Tap *FAN PARAM*

The Offset, Size, and Rate attributes can now be set for fanning parameters.

7 Adju the Offset, Size, and Rate attributes as required.

Time attributes

Th ime attributes are:

- Rate

- Offset

- Duty Cycle

Rate

Rate is how many seconds it takes to complete an effect cycle. Example: A rate setting of 4 seconds means that the entire effect cycle is completed in 4 seconds.

Rates can be positive or negative. A negative rate causes the effect to switch directions. Example: A circle effect assigned a rate of 10 seconds runs clockwise. A circle effect assigned a rate of -10 seconds runs counter clockwise.

To change the rate

1   Select the fixtures and the parameter.

2   Press **EFFECT** to open the Effect Editor.

3   Tap *ALL* in the Rate group.

4   Use the rate wheel to set the rate value.

   Or

   Enter an absolute value on the numeric keypad.

To fan the rate

1   Select the fixtures and the parameter.

2   Press **EFFECT** to open the Effect Editor.

3   Tap *FAN* in the Rate group.

4   Use the rate wheel to set the fan v lue.

   Or

   Enter an absolute value on the numeric keypad.

Offset

The offset con rols when a parameter begins its action within the time cycle. Offset has two settings:

- All   Sets n absolute offset value to the selected fixtures.
- Fan - Spreads the offset over the selected fixtures.

o pr vent accidentally changing the offset when setting the rate attribute, you can lock the offset.

To set an absolute offset

1   Select the fixtures and the parameter.

2   Press **EFFECT** to open the Effect Editor.

3   Tap *ALL* in the Offset group.

4   Use the rate wheel to set the offset.

   Or

   Enter an absolute value on the numeric keypad.

To set fan offset

1 Select the fixtures and the parameter.

2 Press **EFFECT** to open the Effect Editor.

3 Tap *FAN* in the Offset group.

4 Use the rate wheel to set the fan offset.

Or

Enter an absolute value on the numeric keypad.

To lock the offset

In the Effect Editor on the Advanced tab, tap *OFFSET LOCK*.

Fixture grouping

Fixture grouping with offset determines how the offset is spread among the devices.

Example: An intensity step effect is running on spots 1 through 10. All 10 spots turn on and off at the same time. Set the fixture grouping to 2 and tap *WAVE*. Now he odd spots are on when the even spots are off and vice versa.

Examples of Offset uses

Example: program an effect for channels where gro ps of channels are on or off at the same time in a step effect. The channels are divided like h s:

- Group 1 - channels 1, 11, 21
- Group 2 - channels 2, 12, 22
- Group 3 - channels 3, 13 23
- Group 4 - channels 4, 14, 2

Use Offset All and as gn:

- Offset 0 t gro p 1
- Offset 25 to group 2
- Offs 50 to group 3
- Of set 75 to group 4

Example: Offset All and Offset Fan can be used together. Changing offset values using All does not change the relative fan. Channels 1 through 4 have been set to fan values:

Channels	*Offset using* Fan	*After adding 5% using* All
Channel 1	0	5
Channel 2	25	30
Channel 3	50	55
Channel 4	75	80

Duty Cycle

The duty cycle determines how many times, within one time cycle, a parameter executes its effect. Duty cycle settings also allow some fixtures to run while other fixtures are resting.

The duty cycle is represented by two numbers- On and Total. The first number (On), the numerator, is the number of repeats within the time cycle. The second number (Total), the denominator, is the division of allotted time. The duty cycle default is 1:1.

The value for On may not exceed the value for Total.

Duty cycle schematics

Example: This effect is running 3 fixtures.

- Duty Cycle: 1/3
- No offset

Example This effect is running 3 fixtures.

- Du y Cycle: 1/3
- Offset: 0 / 33 / 66
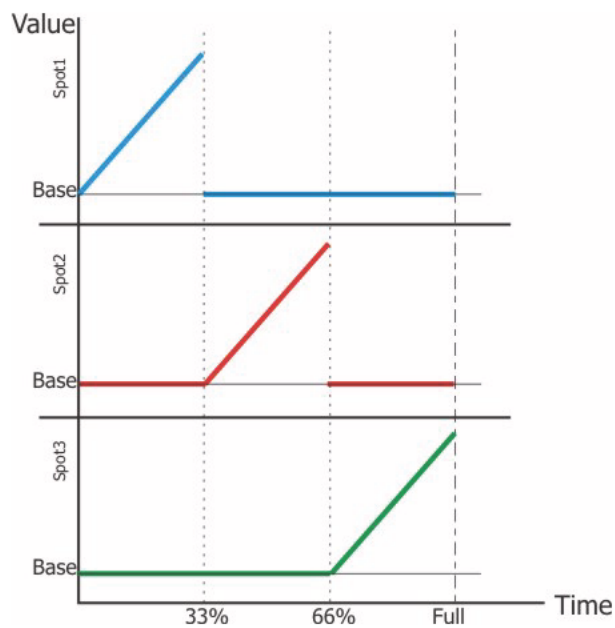
Some examples of duty cycles:

Duty Cycle	Rate	What happens
1:1	6 seconds	Parameters complet 1 effect cycle within the allotted time period (6 seconds)
1:2	6 seconds	Parameters complete 1 effect cycle in half the allotted time (3 seconds) During the remainder of the time cycle (3 seconds) they rest.
2:2	6 seconds	Parameters complete 2 effect cycles within the allotted time period.
2:4	6 seconds	Parameters complete the effect cycle twice in half the allotted time (2 complete effects in 3 seconds). During the remainder of the time (3 seconds) they rest.
1:3	6 seconds	Parameters complete 1 effect cycle in 1/3 the allotted time (2 seconds). During the remainder of the time cycle (4 seconds), they rest.
3:6	6 seconds	Parameters complete the effect cycle 3 times in half the allotted time (3 seconds). During the remainder of the cycle (3 seconds), they rest.

To change the duty cycle

1 In the Duty Cycle group, tap Total.

2 Use the duty cycle wheel to set the time division.

3 In the Duty Cycle group, tap Total.

4 Use the duty cycle wheel to set the time division.

5   In the Duty Cycle group, tap On.

6   Use the duty cycle wheel to set the number of repeats.

Synchronizing effects

You can synchronize effects running on different parameters. Attributes that are synchronized are:

- Offset
- Rate
- Duty cycle

To synchronize effects

Example: The effect running on cyan is ramp up and wave. The effect running on magenta is ramp up. Synchronize the effects on cyan and magenta.

1   Select fixtures, select cyan and set a base level

2   Press **EFFECT**.

3   Choose *RAMP UP* and *WAVE*.

4   Select magenta and set a base level.

5   Choose *RAMP UP*.

6   Go to the Advanced tab in the Effects dialog   box and tap *SYNC WITH*.

7   Select cyan.

8   Tap *CLOSE*.

Now the cyan and magenta effects are starting and finishing at the same time.

Releasing effects from cues or from the editor

You can release effect assignments from all the parameters, from selected parameters, or from parameter types.

A

To r lease effects from cues

1   Select the cue.

2   Select the fixtures.

3   Optional - select the parameters. If no parameters are selected, then all parameters are released.

4   Press **EFFECT**. The effect editor opens.

5   Press **RELEASE**. The selected fixtures and parameters are released from the effect. The effects editor closes.

6 Press **UPDATE**.

OR

1 Press **RELEASE**.

2 Press **EFFECT**.

3 Select fixtures.

4 Select cues.

5 Press **UPDATE**.

To release effects from all fixtures in the editor

1 Press **EFFECT**. The effect editor opens.

2 Press **RELEASE**. Effects are released from all parameters. The effec s editor closes.

To release effects from parameter types

Example: Release effects from all color parameters.

1 Select the fixtures.

2 Press **COLOR**.

3 Press **EFFECT**.

4 Press **RELEASE**. All color parameters are freed from effects.

E

To release effects from cues

1 Press **RELEASE**.

2 Press **EFFECT**.

3 Select cue.

4 Press **ENT R**.

OR

1 Tap *EDIT CUE*.

2 Chose the cue.

3 Press **ENTER**.

4 Press **RELEASE**.

5 Select the fixtures.

6 Optional - select parameters. If no parameters are selected, all parameters are released.

7 Press **EFFECT**. The effect editor opens.

8 Press **ENTER**.

To release effects from fixtures in the editor

1 Press **RELEASE**.

2 Select the fixtures.

3 Optional - select parameters. If no parameters are selected, all parameters are released.

4 Press **EFFECT**. The effect editor opens.

5 Press **ENTER**. The selected parameters are released from the effect. The effects editor closes.

To release effects from all fixtures in the editor

1 Press **RELEASE**.

2 Press **EFFECT**. The effect editor opens.

3 Press **ENTER**. Effects are released from all parameters. The effects editor closes

To release effects from parameter types

Example: Release effects from all color parameters.

1 Press **RELEASE**.

2 Select the fixtures.

3 Press **COLOR**.

4 Press **EFFECT**.

5 Press **ENTER**. Effects are freed from all col r par m ters.

Note: This sequence is valid for all paramet r types.

Chapter 11   Matrix

This chapter contains the following sections:

About Matrix

Vector's interactive matrix programmer is used to program   es   r:

- RGB or CMY devices in a matrix format
- A truss wall rigged with conventional channe s or other devices
- Any configuration where the fixtures ar rigged in a matrix format.

Vector's matrix feature supports.*gif, * ico (icon), *.bmp, and *.jpeg files including animated graphic files.

```
                    ┌─────────────────┐
                    │ Matrix work flow │
                    └─────────────────┘

┌───────────────────────────────────────────────┐
│  ┌──────────────┐                              │
│  │Patch Manager │ ══⇒ Define matrix            │
│  └──────────────┘        ⇩                     │
│              Map patched fixtures to matrix cells│
│                          ⇩                     │
│              Save and exit Patch Manager        │
└───────────────────────────────────────────────┘
                          ⬇

┌───────────────────────────────────────────────┐
│  ┌──────────────┐                              │
│  │   Editor     │ ─⇒ Select fixtures and assign values│
│  └──────────────┘    Or                        │
│                      Load picture files         │
│                          ⇩                     │
│              Store the lighting state as a cue  │
│                          ⇩                     │
│              Playback the QList                 │
└───────────────────────────────────────────────┘
```
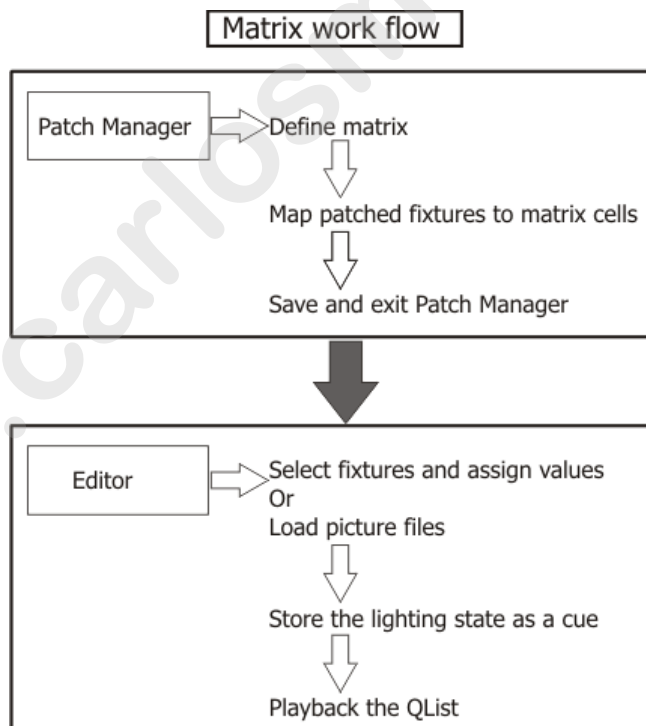
Note: Matrix capacity is limited to up to 2,500 RGB or CMY devices (7,500 DMX channels, 16 DMX universes).

Setting up matrixes

Matrixes are set up in the Patch Manager. Creating a matrix means defining the number of cells (rows and columns) and mapping patched fixtures to the cells.

To import and patch fixtures for use in the matrix

Example: Import an RGB device and create 400 fixtures for a 20x20 matrix grid.

1 Tap ▣.

A dialog box containing a list of devices opens.

2 Expand the Generic node and choose an RGB device.

3 Tap *OPEN*.

Defining new matrixes

The size of the matrix is set in the Matrix Data dialog box.

Matrix Data	
Num Rows:	10 — Number of rows
Num Cols:	10 — Number of fields
Name:	MyFirstMatrix — Text name
OK	Cancel
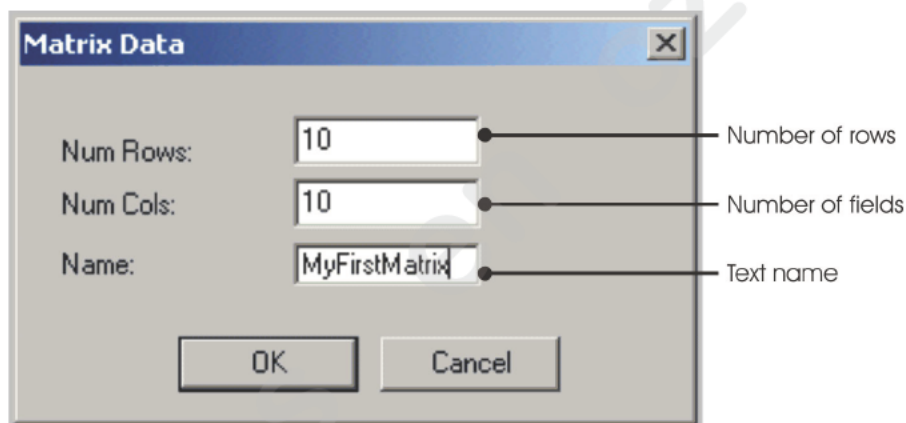
Figure 114: Matrix Data ialog box

To create a matrix

1 Open he Patch Manager.

2 Make sure the Workspace is in navigation mode. (Tap *N*).

3 In the Workspace, tap Matrix List.

4 On the Patch Manager tool bar, tap ▣ .

The Matrix Data dialog box opens.

5 Fill in the fields in the Matrix Data dialog box.

6 Tap *OK*. The matrix's name appears in the Matrix List.

To map fixtures to the entire matrix grid

1 Select the matrix from the Matrix List.

2 Tap *S* to switch to selection mode.

3 Choose fixtures from Matrix in the Sets node.

If there are no fixtures in the matrix set, choose fixtures from Channels or Spots in the Sets node.

4 Drag fixtures from Matrix (or Channels or Spots) and drop them in the matrix cells. Repeat until the matrix mapping is complete.

Note: You can select a range of fixtures, by holding down **SHIFT** and clicking on the first and last fixtures in the range. Then drag the entire selection and drop it in the first cell of the range. The selection will arrange itself 1:1.

5 Exit the Patch Manager.

Don't forget to save the changes.

To map fixtures to selected matrix cells

You can select cells on the matrix and drag and drop fixtures to map them to the selected cells. The cells are populated from left to right and from row 1 down.

1 Tap *N* to put the Workspace tree in navigation mode;

2 Select the matrix from the Matrix List.

The matrix is displayed in the main patch pane.

3 Tap *S* to switch to selection mode.

4 Select fixtures from Matrix in the Sets nod and drop them in the matrix cells.

Fi ure 115: Mapping fixtures to selected cells

o clear fixtures

1 Select the matrix from the Matrix List.

2 Select the fixtures by tapping on them in the matrix grid.

3 Tap ![icon].

The Delete Items warning is displayed.

4 Tap *YES* to continue and delete the fixtures.

Tap *NO* to cancel.

To delete a matrix

Select the matrix in the Matrix List node and tap ![icon].

Matrixes using conventional channels

When using convention channels with color filters in a matrix format, you may want to set the color properties for the channels. The advantage of setting the color properties is that when programming cues, the correct color will be displayed on the matrix grid. If the color property is not set, the channel is shown in white.
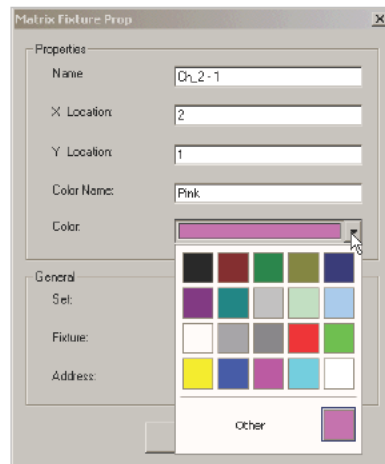
Figure 116: Matrix Fixture Properties dialog box

To set color properties

1 Select the fixture in the matrix grid.

2 Tap ⬛ . The Matrix Fixture Properties dialog box opens.

3 Choose a color from the drop down color list.

4 Tap *OK*.

Programming cues using matrixes

Once a matri is set up and fixtures are mapped in the Patch Manager, you can program cues that use th mat ix. Cues are programmed as usual and, of course, are organized in QLists. Playback th e Q i ts as usual.

V ct r uses a special display, the matrix programmer, for programming these cues.
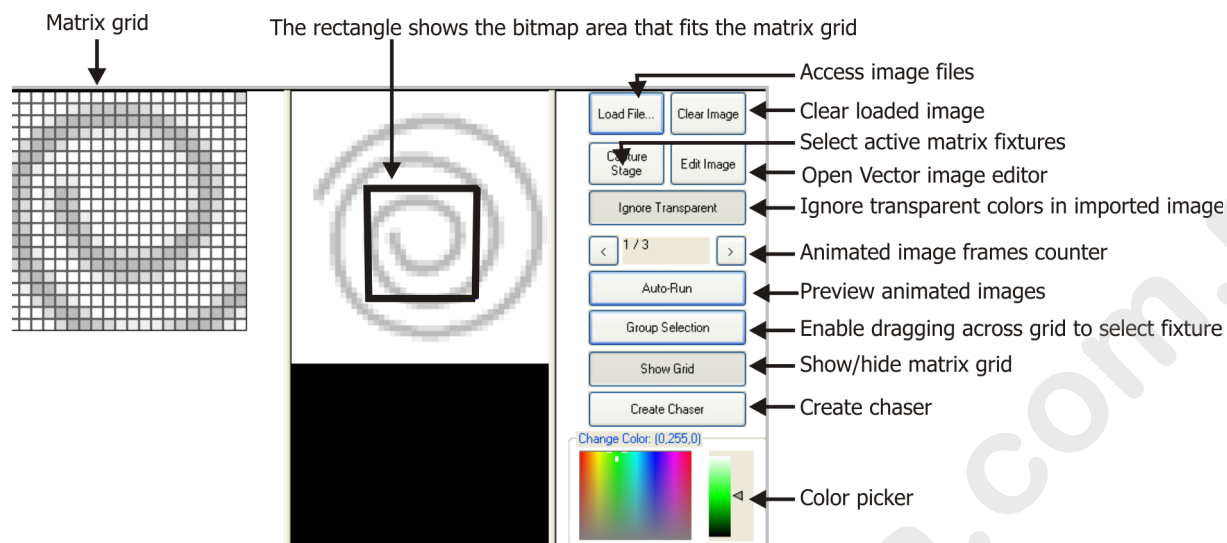
Figure 117: The matrix grid and programmer

Matrix programmer elements	*What it does*
Matrix Grid	• Represents the m rix grid area as defined when setting up the matrix. • Click on cells to select matrix RGB fixtures.
Define area	This r ct gle defines the area of an image that is output to the matrix.
Load file	Lo d a graphic file.
Clear image	C ar the loaded file.
Edit Image	Open the Vector Image Editor to edit the current graphic file.
Capture Stage	Grab all the active RGB fixtures.
Ignore Transparent	Manage images with transparent color layers.
Image rames	Animated graphic file frames appear here in a # of # format. Example: 2/10 means the current frame is frame 2 out of 10 frames. Use the arrows to go to the next or return to the previous frame.
Auto run	Preview animated graphics. The cues run in default system time.
Group Selection	Enabled - Select blocks of fixtures on the matrix grid cells. Disabled - Select select fixtures by tapping individual cells.
Show Grid	Show or hide the grid lines on the matrix grid.
Create Chaser	Automatically program chasers for animated gif files.
Color picker	Select colors using the color picker.

> **Tip!** Create color effects using the effect editor e or the fan feature with the RGB fixtures.

When setting color levels for RGB fixtures,

To display the matrix programmer

1 Activate a pane.

2 Open the Workspace and expand the Live node and the Matrix subnode.

3 Tap one of the matrix setups.

The selected matrix is displayed.

4 Optional - Toggle show/hide the matrix grid lines by tapping **SHOW GRID**.

To program cues using fixtures

1 Select fixtures. Tapping a cell in the matrix grid, selects the fixture mapped to that cell. Tapping on multiple cells selects all the fixtures mapped to that ell.

Or

Select fixtures using the usual methods.

2 Assign values. The active values are display d in he matrix grid.

Figure 118: The mat ix grid shows the active fixtures and their color values

3 Save the lightin state as a cue using the usual methods for saving cues in QLists.

4 Cont nue rogramming cues as necessary.

To prog am cues using bitmaps

Ve   r supports most picture formats and animated graphic files.
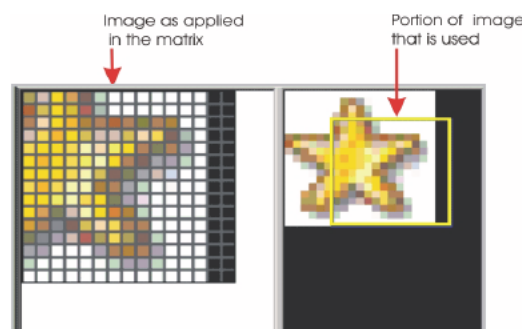
Figure 119: Matrix programmer grid with imported bitmap

1 Display the matrix programmer.

2 Tap *LOAD IMAGE*. The Open dialog box opens.

3 Browse to your image, select it, and tap *OPEN*. The image is displayed. The usable portion is delineated by a rectangle. The area within the rectangle is displayed in the matrix grid. Fixture selection and setting the parameter values are automatic.

4 If necessary, change the portion of the image output in the matrix. Move the rectangle to surround the portion you want to use by dragging it (the pointer becomes a hand tool) to a different location. The editor automatically resets the fixtures and the color values.

5 Store as a cue in a QList.

To program cues using animated graphics
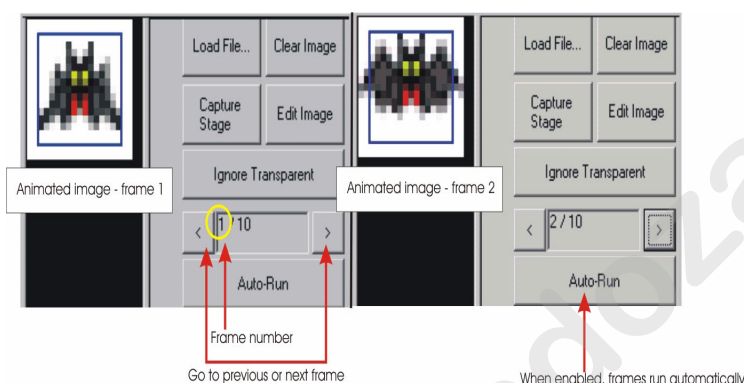
1 Display the matrix programmer.

2 Tap *LOAD IMAGE*. The Open dia og box opens.

3 Browse to the animation nd double click to open. The first animation frame is displayed.

4 Store as a cue in a QL st.

5 Advance to the next frame and store as a cue. Continue until you have stored each frame as a cue. You can skip or repeat frames.

To automati ally p ogram chasers

1 Display the matrix programmer.

2 Tap *LOAD FILE*.

The Open dialog box opens.

3 Browse to the animation and double click to open.

4 The first animation frame is displayed.

5 Optional - tap *AUTORUN* to preview the animation.

6 Tap *CREATE CHASER*.

The Create Chaser dialog box opens.

7 Fill in the fields.
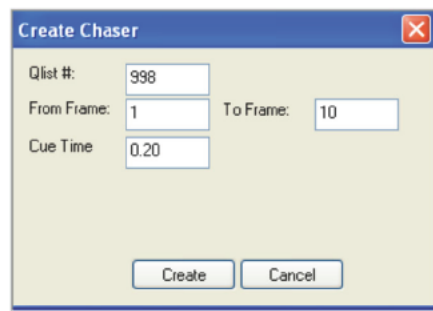
Qlist #	The chaser cues are stored in the QList designated here. Attention - Choose a QList number that is not used yet!
From Frame	Start frame. It is not necessary to use all the animation frames. The chaser can start from any frame.
To Frame	Last frame. It is not necessary to use all the animation frames. The chaser can end at any frame.
Cue Time	The chaser defaults to system time as set in System Settings > Timing.

Figure 120: Create Chaser dialog box

8 Tap **CREATE**.

One cue is automatically stored for e ch f ame in the selected range. While cues are stored, a progress bar is displayed in the Crea e Chaser dialog box.

Image editing

The Vector Image Edi r di log box provides standard image editing tools to edit graphic files used in the matrix

Some of examples of image editing:

- Ch ge b ckground color.

- Create a mirror image.

- Blur the image, return to the programmer, and save the edited image as a cue. Then return to the Image Editor, sharpen the image, and save as the next cue. Repeat as desired; the image goes in and out of focus when playing back the cues.
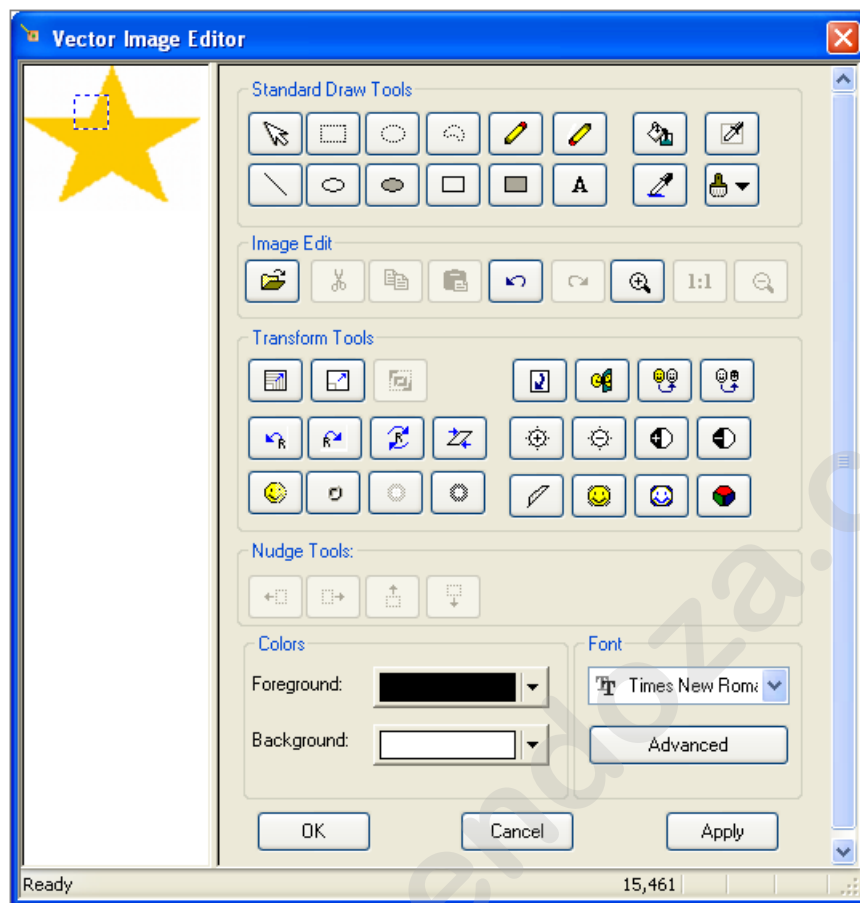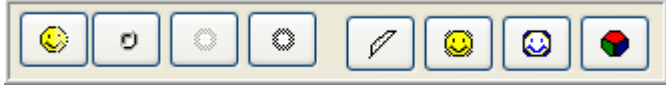
Figure 121: Vector Image Editor

Standard Draw Tools
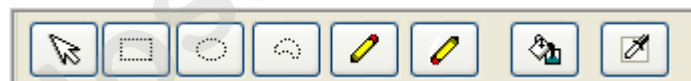
• Pointer - When this tool is se cted, you can drag the blue frame that delin ates the part of the image used.	• Pencil tool - Moving the pencil point over pixels colors them with the color that appears in the Foreground field.
• Rectangular selecti n tool - Define a rectangular area for de ting or copying.	• Erase tool - Moving the eraser over pixels erases the color.
• Ellip ical selection tool - Define an elliptical area fo del ting or copying.	• Fill - Clicking on a pixel, colors it with the color that appears in the Foreground field.
• Fre form selection tool - Define a freeform area for deleting or copying.	• Transparent dropper - Clicking on a color in the image, makes that color transparent. This is applied to all the pixels using that color.

• Line tool - Draw a line in the image area. The line's color is the color that appears in the **Foreground** field. • Ellipse tool - Draw an ellipse. The outline of the ellipse is the color that appears in the **Foreground** field. • Filled ellipse tool - Draw a filled ellipse. The fill color is the color that appears in the **Foreground** field. • Rectangle tool - Draw a rectangle. The outline of the rectangle is the color that appears in the **Fore-ground** field.	• Filled rectangle tool - Draw a rectangle. The fill color is the color that appears in the **Foreground** field. • Text tool - Draw a text box and then type text. • Color selection tool - Click on any pixel to set its color as the foreground color. • Brush tool - One click colors large areas with the color that appears in the **Foreground** field.

Image Edit

• Open image from file - Browse to open another image that replaces the current image. • Cut - Cut the area of the image defined by one of the selection tools. • Copy - Copy the area, defined by one of the selection tools, to the clipboard. • Paste - Paste the clipboard contents.	• Undo - Undo the l s action. • Repe t - R peat the last action. • Zoom in Enlarge the view of the image. • 1 1 - i play the image with no enlargement. • Zoom out - Reduce the view of an enlarged image.

Transform tools

• Resize image - The resize dialog box opens. • Resize border area - The resize dialog box opens. • Not used	• Flip the image 180 degrees • Create a mirror image. • Change all colors to grayscale. • Convert the image to negative.

• Rot te the image 90 degrees left. • Rotate the image 90 degrees right. • Rotate at an angle specified in the rotate dialog box. • Skew the image as specified in the skew dialog box.	• Brightness - Make the image lighter. • Brightness - Make the image darker. • Contrast - Increase the contrast. • Contrast - Decrease the contrast.

• Blur - Blur the image. **Tip!** Blur is useful for taking the image in and out of focus. • Emboss - Create an embossed effect. • Soften the image. • Sharpen the image.	• Feather - Soften the image according to the value in the feather dialog box. • Offset - Add a random offset to each pixel. **Tip!** Offset is useful for scrambling and reassembling an image. • Enhance the variations between each pixel. • Colorize - Change the coloration of the entire image through the color dialog box.

Colors and font

• Foreground - Choose the color to apply to image pixels and free text, using the various editing tools. • Background - Choose the background color.	• Font field - Select the font for free text. • Advanced - Open the font dialog box.

To edit matrix images

1 Load the graphics file or select fixtures to the matrix.

2 Click *EDIT IMAGE* on the matrix programmer.

The Vector Image Editor opens.

3 Edit the image.

4 Click *APPLY*.

5 Click *OK*.

The Vector Image Editor closes and you can continue programming.

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Chapter 12   Macros

This chapter includes the following sections:

-
-

About macros

Macros are collections of commands. Triggering a macro activates he c mmands stored in the macro. An example of a possible macro is: **FREE**, **SELECT** (for PB 2   **QLIST**, **5**, **SELECT** (for PB 2), **GO**.

Macros are triggered manually, by selecting and op rating the macro, or automatically by attaching a macro to a cue or including the macro as a time line   vent. Macros that are attached to cues operate when the cues sequence on a playback dev ce.

There are dedicated console keys for quick a cess to macros 101 through 106. You can also set up soft keys for macros.

When storing macros, remember th   macros are a collection of keystrokes. Manual faders are not recognized and therefore not stor d in macros. Wheel values are recognized, however they are treated as absolute values and t e fixture jumps to values stored in macro.

You can store up to 9999 Mac os.

Working with macros

![Teach Macro | MIDI Macro buttons]

Figure 122: Macro mode on the Editor tool bar

Stor ng macros

The most efficient method for storing macros is using macro soft keys. Be sure to create a soft key tab for macros before storing macros.

To store macros

Example: Store macro 10 that activates snap 5.

1 Press **SHIFT** + **MACRO**

Or

Press **MACRO** and tap teach *MACRO*.

(M) is visible in the command line.

2 Press **SNAP** and **5**. Then press **ENTER**.

The key presses are collected in the command line.

3 Press **SHIFT** + **MACRO**.

(END) now precedes the collected keypresses displayed in the command line.

4 Press **STORE** and tap macro soft key *10*.

Or

A

Press **MACRO**, select the macro number on the numeric keypad, and p ess **TORE**.

E

Press **STORE**, select the macro number on the numeric keyp d and press **ENTER**.

Storing macros 101 - 106

Store macros 101 - 106 directly on their access keys.

To store macros 101 - 106

1 Press **SHIFT** + **MACRO**.

The system is now in teach mac mod .

2 Press the keys in the sequence at will be stored in the macro.

3 Press **SHIFT** + **MACRO**

The system stops macr recording.

4 Press **STORE**.

5 Press one f the direct access macro keys (**M.101** - **M.106**).

Adding text tags o macros

A

To add text tags to macros

1 Select the macro by tapping its soft key.

Or

Tap *MACRO* and then enter the macro number on the keypad.

2 Press **TEXT**.

The Text dialog box opens.

3 Type the text and tap *OK*.

E

To add text tags to macros

1 Press **TEXT**.

2 Select the macro by tapping its soft key.

The Text dialog box opens.

Or

Tap *MACRO*, enter the macro number on the keypad and press **ENTER**.

The Text dialog box opens.

3 Type the text and tap *OK* or press **ENTER**.

Deleting macros

A

To delete macros

1 Select the macro.

Or

Select more than one macro: **MACRO #** ➔ **#**

2 Press **DELETE**.

The Delete dialog box opens.

3 Press **DELETE** again or t p *DELETE* in the dialog box.

E

To delete macros

1 Press **DEL TE**.

2 Sele t the macro.

r

Select more than one macro: **MACRO #** ➔ **#**

3 Press **ENTER**.

The Delete dialog box opens.

4 Press **DELETE** again or tap *DELETE* in the dialog box.

Examining macros

To view a list of macros

Toggle the macro soft keys, to grid view by tapping [1 2 / 3 4]. A list of macros is displayed in the active pane.

To examine a macro

1 View the macros in grid format. (If the macro tab is in soft key format, toggle to grid format.)

2 Double click on macro 10.

The contents of the macro are displayed in the active pane.

A

To examine a macro

Example: Exam macro 10.

1 Select macro 10.

2 Press **EXAM**.

The contents of the macro are displayed in the active pane.

OR

1 View the macros in grid format. (If the macro tab is in ft k format, toggle to grid format.)

2 Double click on macro 10.

The contents of the macro are displayed in the ctive pane or in the default exam pane.

E

To examine a macro

Example: Exam macro 10.

1 Press **EXAM**.

2 Select macro 10

3 Press **ENTER**

The c nten s of he macro are displayed in the active pane or in the default exam pane.

Copying macros

To copy macros

Example: Copy the contents of macro 1 to macro 6.

1 Press **MACRO** and enter **1** (the source macro number) on the numeric keypad.

2 Press **COPY**. The macro is copied to the clipboard.

3 Press **MACRO** and enter **6** (the target macro number) on the numeric keypad.

4 Press **PASTE**. The new macro is named *Copy of Macro 1*.

Triggering macros

Trigger macros manually or by attaching them to cues. Macros that are attached to cues are automatically triggered when the cue sequences on a playback device.

There are six dedicated macro keys for macros 101 - 106.

To operate macros manually

Go to the macro soft key tab and tab the macro.

OR

1 Press **MACRO** and enter the macro number on the numeric keypad.

2 Press **ENTER**.

Automatically trigger macros

Automate playback by attaching macros to cues. Fading to cue utom tically triggers the attached macro. Automatic triggering can be disable for specified playba k devices.

A

To attach a macro to a cue

1 Select the cue.

2 Press **MACRO** and enter the m cro number on the numeric keypad.

3 Press **STORE**.

E

To attach a macro t a ue

1 Select the ue.

2 Press **M CRO** and select the macro number on the numeric keypad.

3 Pres **ENTER**.

Note: Make sure **TRIGGER** is enabled for the playback.

To enable or disable automatic triggering

1 Press **SETUP** and **SELECT** for the playback device.

The Playback Properties dialog box opens.

2 Tap Trigger on the Assignment Properties tab.

Has a light field when enabled.

OR

Press **SHIFT**+**AUTO** and **SELECT** for the playback device. This is a toggle:

– If *TRIGGER* is disabled, this sequence will enable it.

– If *TRIGGER* is enable, this sequence will disable it.

Triggering macros using MIDI

Vector's macros can be triggered by an external MIDI device.

To trigger a macro with MIDI

Example: Trigger macro 10.

MACRO	10	ENTER
Note off 90	Note on 30 Note on 31	Note on 15

Chapter 13   Topo

Topo is an on-board utility that allows you to construct a topographical map of your rig.

This chapter contains the following sections:

Working with Topo

To construct a Topo map, you must be in Topo view. The basi Topo view is a top view of a stage. A grid is superimposed on the stage to aid accurate fix ure placement. Also shown is one highlighted vertical and one horizontal line that divide the stage int up left, down left, up right and down light with center stage clearly marked. The stage dimens n can be modified.
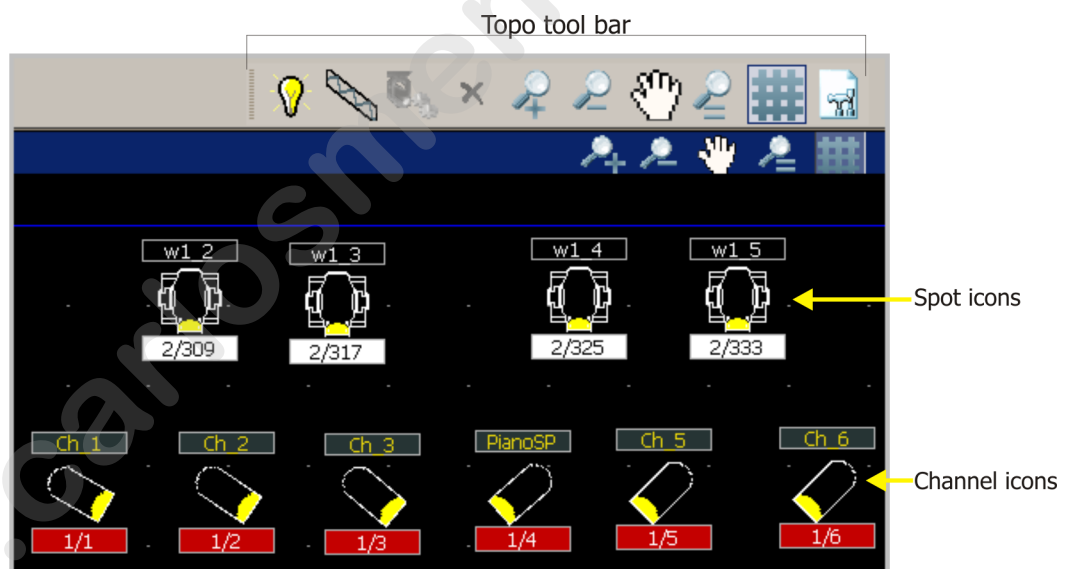
Figure 123: Topo view with channel and spot fixtures

In the Topo view you can:

- Set pipes and other hanging elements.
- Place and rotate fixtures in their hanging positions.
- Set placeholders to represent stage elements, such as tables, chairs, pianos, risers, etc.
- Select fixtures for editing. See "Selecting fixtures via the topo map" page 95

To open a Topo view

1 Go to the Patch Manager: Tools ▶ Patch Manager.

2 Make sure the Patch Manager workspace is in navigation mode (tap *N*) and select Topo View.

Setting stage dimensions

Stage dimensions are set in the System Settings dialog box. They can be set before entering Topo mode or while in Topo mode.

The stage dimensions are displayed in the Topo map's lower right corner. The default dim nsions are: 1800 cm. x 1200 cm. The maximum stage size is: 8000 cm. x 5000 cm.

To change the stage dimensions

1 Open the Tools menu and choose Settings.

The System Settings dialog box opens.

2 Open the Topo tab.

3 Type the new dimensions in the fields.

4 Tap *OK*.

OR

In the Patch Manager, open the Topo m nu and choose Settings in.

The System Settings dialog box opens to the Topo tab.

OR

If the Topo tool bar is op n, tap [icon].

The System Set ng dialog box opens to the Topo tab.
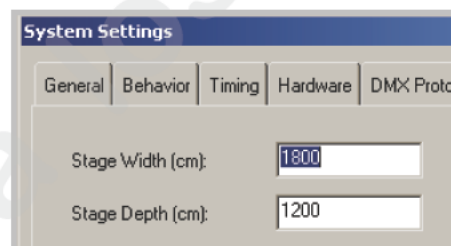
Figure 124: Topo stage dimensions are set in System Settings

Note: If the view does not refresh and display the new stage dimensions, close the Topo view and reopen it.

The Topo tool bar

Topo map set up tools

Delete fixture or element
Stage fixture properties
New stage element
New fixture

Zoom in
Zoom out
Hand tool
Fit to screen
Show/Hide grid
Topo settings

View manipulation tools
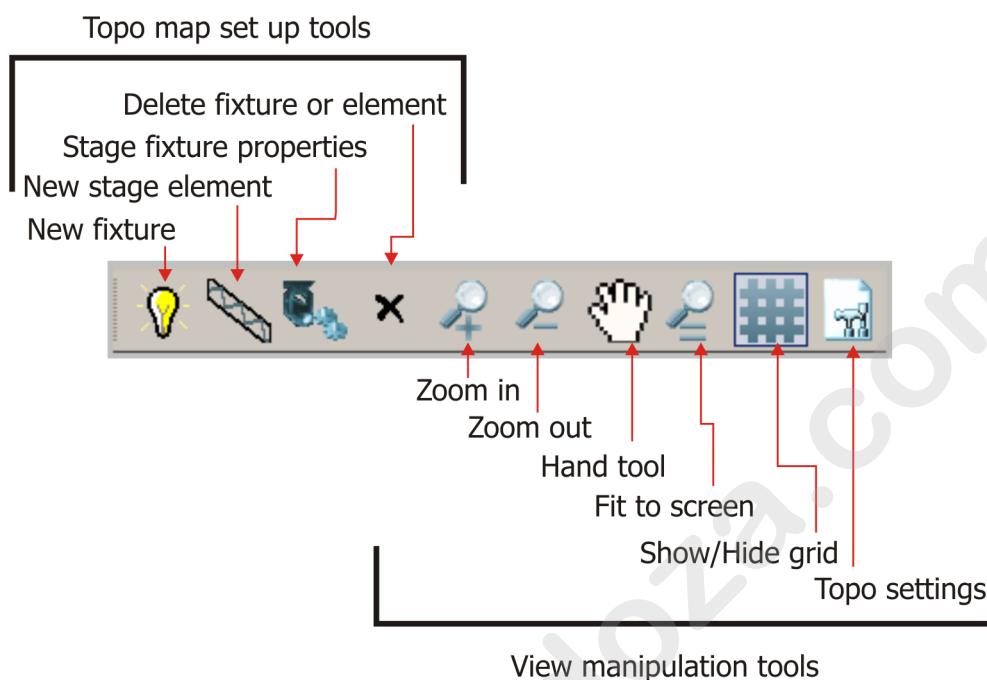
Figure 125: Topo tool contains set up tools and view man pulation tools

To show the Topo tool bar

On the menu bar, tap Topo▶Topo ool b r.

Topo grid

Topo view has a grid ove lay The grid points represent 50 centimeters (half a meter). You can show or hide the grid.

To show/hid grid

Tap   .

Placing fixtures and stage elements

St g elements are basically pipes and other hanging positions. These elements can be resized and used as placeholders for risers and other objects.

A range of fixtures can be selected. Each fixture set is represented by a different generic icon.

Channel set:
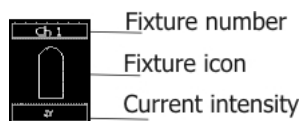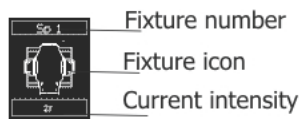
Fixture number
Fixture icon
Current intensity

Spot set:

Fixture number
Fixture icon
Current intensity

Notes: When building the topo map, you may find it easier to work with a mouse or the trackball in mouse mode.

To place fixtures

1 Tap .

The New Stage Fixture dialog box opens.
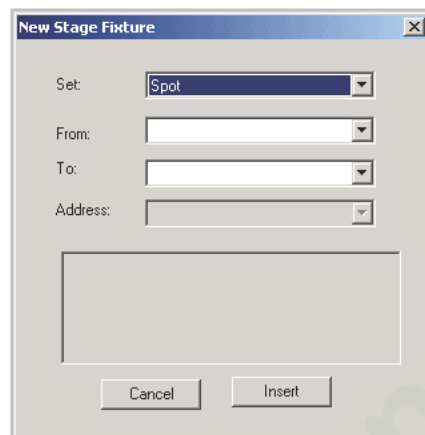
Figure 126: New stage fixture ia g box

2 Choose the fixture set from the Set drop down list.

3 Select a range of fixtures using the From and To field drop down lists.

4 Tap **INSERT**.

The new fixture is in erted at the top left corner of the stage.

5 Click a fix ure and drag it to its correct position.

Or

Drag rectangle around multiple fixtures and drag them to their correct position.

OR

Set an absolute location in the Stage Fixture Properties dialog box.

To rotate fixtures

1 Right click on a fixture and select Rotate from the fly out menu.

The pointer changes to the rotate icon.

2 Drag the rotate icon in the direction you want to rotate the element.

3 When the fixture is positioned, exit rotate by clicking the left mouse button.

To edit fixture properties

1 Right click a fixture and choose Properties from the short cut menu.

Or

Click the fixture to select it and click [icon].

The Stage Fixture Properties dialog box opens. The Stage Fixture Properties dialog box can be used to change the location of the fixture on the Topo map and record additional information pertaining to the fixture.
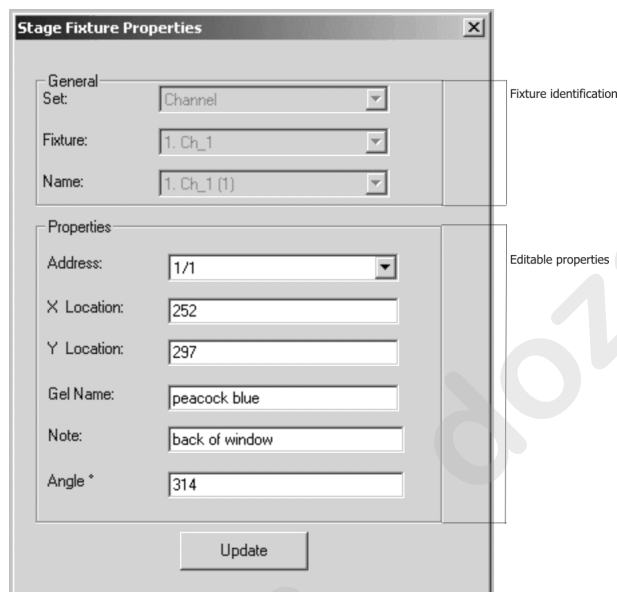
Figure 127: Stage Fixtur s Pr perties dialog box

Group	*Fields*	*What is it?*	*Edit*
General			
	S t	The fixture set.	This field cannot be edited.
	Fixture	The fixture number.	This field cannot be edited.
	Name	The fixture's name	This field cannot be edited.
Properties			
	Address	Fixture's DMX address	This field cannot be edited.
	X Location	The fixture on the x axis.	0:0 is the map's upper left corner (upstage right).
	Y Location	The location on y axis.	Enter a new location.

Group	Fields	What is it?	Edit
	Gel name	Free text field.	Type a gel name or number.
	Note	Free text field.	Type useful information.
	Angle	The angle is shown in degrees	Enter an absolute value. The reference is the original angle.

2   Navigate to the relevant field and type the new information.

3   Click **UPDATE**.

The dialog box closes and the new information is stored.

Channel set:
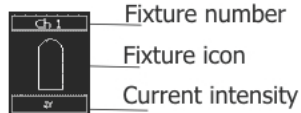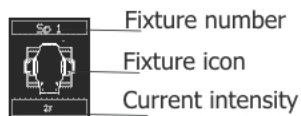
Fixture number
Fixture icon
Current intensity

Spot set:

Fixture number
Fixture icon
Current intensity

Notes: When building the topo map, you may find it easier to work with a mouse or the trackball in mouse mode.

To place stage elements

1   Tap .

By default he e ement is placed at center stage (at the intersection of the red vertical and horizon al lin s.

2   Cli k the element to select it.

A patterned rectangle appears around the selected element.

3   Drag it to the required position.

To rotate stage elements

1   Select the element by clicking on it.

A patterned rectangle appears around the selected element.

2   Right click and select Rotate from the fly out menu.

The pointer changes to the rotate icon.

3   Drag the rotate icon in the direction you want to rotate the element.

4   When the element is positioned, exit rotate by clicking the left mouse button.

To resize stage elements

1 Select the element by clicking on it.

2 Right click and select Properties from the fly out menu.

The Topo Element dialog box opens.

3 Type size values in the Width and Height fields.

4 Tap *OK*.

To change stage element text

1 Tap a stage element.

The stage element is now selected and displayed within a rectangle.

2 Right click inside the selection rectangle and, from the shortcut menu, choose Properties.

The Topo Element dialog box opens.
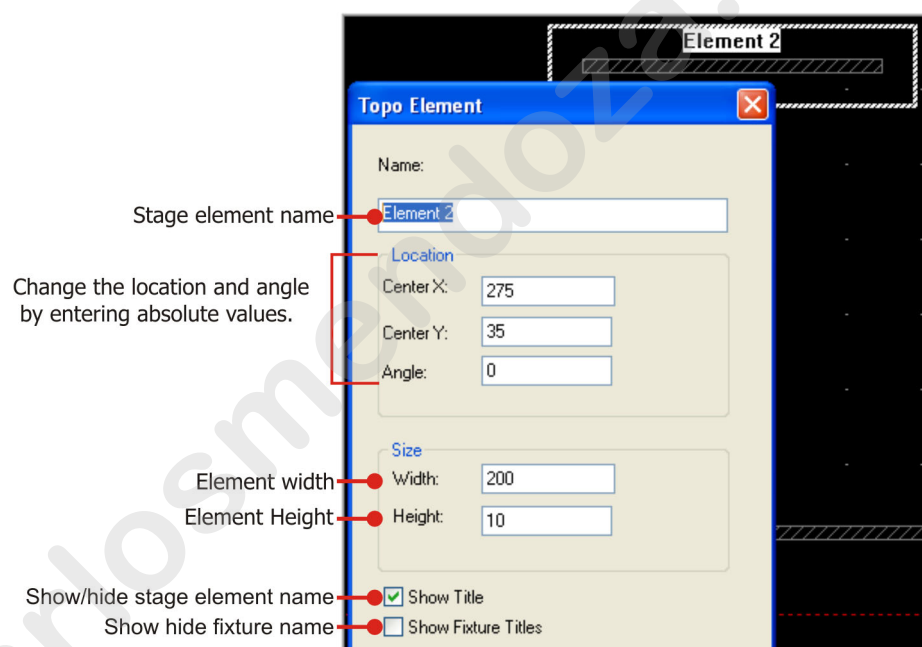
Fi ure 128: A stage element and the Topo Element dialog box

3 ype a name in the Name field.

4 Tap *OK*.

The dialog box closes. The stage element's name appears above it on the Topo display.

To remove a fixture or element

1 Select a fixture, a range of fixtures, or an element.

2 Tap ✖ .

The Delete Items warning is displayed.

3 Tap *YES* to confirm or *NO* to escape.

Manipulating the Topo view

You can:

- Zoom in
- Zoom out
- Fit the stage to the screen
- Slide the view with the hand tool
- Scroll the view

To zoom the view

Tap the zoom icon on the Topo tool bar. The cursor morphs into the icon. Click or tap on the view.

To exit the zoom tool

Tap the icon again. The cursor returns to being a pointer

To scroll the view

Use the mouse scroll wheel or Vector's vertical w eel with **SCROLL WIN** enabled.

Printing the Topo map

The Topo map prints on a whit b ckground while fixture icons, stage elements, and grid dots are in black. When printed the text b x under a fixture shows its DMX address.

To print the Topo map

1 Open he F e menu.

2   Tap **PRINT**. The Print dialog opens.

3 I nec ssary, set up print.

4 Tap **OK**.

Chapter 14 Advanced Editing and Programming Features

This chapter contains the following sections:

Dark parameter positioning

There are three features that allow you to pr set parameter values when a fixture's dimmer is dark, thus avoiding visible parameter mo eme :

- Look Ahead

- Mark Cue

- Force Black

Look Ahead

The Lo Ahe d feature is used for automatic pre-positioning of selected parameters when the fixture's dimmer is dark, thus avoiding visible parameter movement. For Look Ahead to work, the fixtures' dimmer must be at zr and there must be parameter moves from one cue to the next cue.

Look Ahead fades can be set for a specified default time, which is different than the cues' default fade time.

Before using Look Ahead, you must create a Look Ahead mask. The Look Ahead mask tells Vector which spots, spot parameters, or scrollers are affected by the Look Ahead feature. If you have not specified parameters in the Look Ahead mask, all parameters will be affected. The Look Ahead mask can contain more than one parameter.

> **Note:** If, in specific cues, you want to prevent applying the Look Ahead mask, give dimmers a value of 1%.

Working with Look Ahead

To enable or disable Look Ahead

Go to Tools ▸ Settings ▸ Behavior and tap Look Ahead Active.

To change the default Look Ahead fade time

Go to Tools ▸ Settings ▸ Timing and set the time in the Default Look Ahead Time field.

To override the default Look Ahead fade time

Set unique fade times for the parameters participating in Look Ahead. See "Fade t mes" page 164.

A

To program the Look Ahead mask

1 Select fixtures.

2 Optional - Select parameters.

3 Tap [Look Ahead Mask]. on the Editor tool bar.

4 Press **STORE**.

To delete the Look Ahead mask

1 Select fixtures.

2 Optional - Select parameters.

3 Tap [Look Ahead Mask]. on the Edito t ol bar.

4 Press **DELETE**.

To examine the Look Ah ad mask

1 Press **EXAM**.

2 Tap *LOOK AHEAD MASK* on the tool bar.

E

To program the Look Ahead mask

1 Select fixtures.

2 Optional - Select parameters.

3 Press **STORE**.

4 Optional - select parameters.

5 Tap [Look Ahead Mask]. on the Editor tool bar.

6 Press **ENTER**.

To delete the Look Ahead mask

1 Press **DELETE**.

2 Select fixtures.

3 Optional - Select parameters.

4 Tap [Look Ahead Mask] . on the Editor tool bar.

5 Press **ENTER**.

To examine the Look Ahead mask

1 Press **EXAM**.

2 Tap *LOOK AHEAD MASK* on the tool bar.

3 Press **ENTER**.

Mark cues

Mark cues are inserted between existing cues to pre-position parameters when the fixtures' dimmers are at zero.

Mark cues pre-position all parameters whose values are moving, under he condition that the dimmers for the fixtures included in the mark cue are at zr intensity in the cue that immediately precedes the mark cue. If, in the cue before the mark cue, the dimmers are not at zr the move is ignored. The cue before the mark cue is automatically set   fo   w on cue to provide a seamless fade to the mark cue.

When you a insert a mark cue, it adopts the time s tting for the preceding cue.

Example: Cue 2 has a delay-in time of 4 seconds Cue 2.5, a mark cue inserted between cues 2 and 3, will also have a delay in time of 4 seconds. Also, Cue 2 automatically becomes a follow-on cue.

If you update the cue following the mar   cu with new parameter values, the mark cue is updated as well.

> **ATTENTION!** Do n t edit he mark cue. If you want to add parameters to the dark posi-tioning, edit the cue after the mark cue. Mark cues should only contain the dimmer at zero.

A

To insert a mark cue

Example: Insert a mark cue between cues 3 and 4. The mark cue will be cue 3.5.

1 Press **CUE** and **3.5**.

2 Tap [Mark Cue] on the Editor tool bar.

3 Press **STORE**.

E

To insert a mark cue

Example: Insert a mark cue between cues 3 and 4. The mark cue will be cue 3.5.

1 Press **STORE**.

2 Press **CUE** and **3.5**.

3 Tap [Mark Cue] on the Editor tool bar.

4 Press **ENTER**.

Force Black cues

Force Black cues are another way of positioning parameters in the dark. As it name implies, Force Black cues quickly force the dimmer to zero, then immediately moves the parameter levels, and finally follows on to the next cue, returning the dimmer to its stored level.

Example - Channel 1 is a scroller channel and its dimmer is on in cues 2 and 3.

Cue	Dimmer	Scroller	What happens during fades
2	FL	1	
3	FL	11	The move to the new scroller setting is i ible.

In this example, you program cue 3 as Force Black to move from scrolle frame 1 to 11 in the dark. Vector automatically inserts a cue between cues 2 and 3. The ns rted cue number is the closest available number. In our example, the Force Black cue is i   rte   before cue 3 and is numbered 2.99.

The inserted cue runs inherits one third of the fad   time or, in our example, cue 3. This is then divided in half. Half of the time is used to fad   he dimmer to zero. The remaining half moves the parameters.

Cue	Dimmer	Scroller	Wha happens during fades
2	FL	1	
2.99			The dimmer fades quickly to zero. Then the scroller moves to frame 11. There is an automatic follow on to cue 3.
3	FL	11	The dimmer fades up in cue time.

ATTENTION! If the dimmer comes back on before the parameter move is complete, give the inserted cue a longer fade time. Example: if the inserted cue has inherited a 6 second ade time, make the time of the inserted cue, in our example this is cue 2.99, longer.

To store a Force Black cue

1 Select the cue.

2 Tap [Force Black Cue] on the Editor tool bar.

3 Press **STORE**.

To manually set Force Black time

1 Select the cue.

2 Tap *FORCE BLACK CUE* on the Editor tool bar.

3 Press **TIME** and enter time in #/#/# format, where the first time setting is dimmer fade to zr, the second time setting is delay-in time to allow parameter moves, and the third time setting is dimmer up time.

4 Press **STORE**.

To convert a Force Black cue to a normal cue

1 Select the cue.

2 Tap *FORCE BLACK CUE* on the Editor tool bar.

3 Press **DELETE**.

[E]

To store a Force Black cue

1 Edit and store the cue.

2 Press **STORE**.

3 Select the cue.

4 Tap ⟦Force Black Cue⟧ on the Editor tool bar.

5 Press **ENTER**.

To manually set Force Black time

1 Press **STORE**.

2 Select the cue.

3 Tap *FORCE BLACK CUE* n the Editor tool bar.

4 Press **TIME** and enter time in #/#/# format, where the first time setting is dimmer fade to zr, the second tome setting is delay-in time to allow parameter moves, and the third time setting is dimm up ime.

5 Press **ENT R**.

To convert a Force Black cue to a normal cue

1 P ss **DELETE**.

2 Select the cue.

3 Tap *FORCE BLACK CUE* on the Editor tool bar.

4 Press **ENTER**.

Pre positioning examples

Example 1: Channel 1 is a scroller channel and its dimmer is dark in cue 2.			
Cue	**Dimmer**	**Scroller**	**What happens during fades**
2	ZR	unknown	
3	FL	11	Scroller frame may change on the fade to cue 2.

Table 1: Using Look Ahead

Cue	Dimmer	Scroller	What happens during fades
2	ZR	unknown	When the fade to cue 2 is complete, the scroller automatically fades to frame 11.
3	FL	11	The scroller is ready on frame 11 when the fade to cue 3 begins.

Table 2: Using Mark Cue

Cue	Dimmer	Scroller	What happens during fades
2	ZR	unknown	
2.5 mark cue	ZR	11	When the fade to cue 2.5 is complete nd the dimmer is at zr, the scroller moves to frame 11.
3	FL	11	The scroller is ready on fr me 11 when the fade to cue 3 begins.

Example 2 - Channel 1 is a scroller channel and its dimmer is on in cues 2 and 3.			
Cue	**Dimmer**	**Scroller**	**What happens during fades**
2	FL	unknown	
3	FL	11	The move to the new scroller setting is visible.

Table 1: Using Look Ahead

Cue	Dimmer	Scroller	What happens during fades
2	F	1	
2.1	ZR	1	When the fade to cue 2.1 is complete, the scroller automatically moves to frame 11.
3	FL	11	The scroller is ready on frame 11 when the fade to cue 3 begins.

Table 2: Using Mark Cue - this will not give the desired result

Cue	Dimmer	Scroller	What happens during fades
2	FL	1	
2.5	ZR	11	The frame moves and the dimmer fades at the same time, so the move is visible. **Note:** Mark cues should only contain the dimmer parameter at zero.
3	FL	11	The scroller is on frame 11 when the fade to cue 3 begins.

Table 3: Using Force Black cue - this is the solution

Cue	Dimmer	Scroller	What happens during fades
2	FL	1	
2.99 (Force Black)	ZR	11	The scroller waits and begins its move only after dimmer has finished fading to zr. **Note:** Cues following Force Black cues are automatically follow on cues.
3	FL	11	The scroller is ready on frame 11 when the fade to cue 3 begins.

Cloning parameter levels

The clone feature copies parameter values, including libraries and cell timing, to new fixtures and stores them in all cues. This is a quick way to update all cues when fixtures have been added to your show.

To clone parameter values

Example: spots 1 ➜ 10 are used throughout your show. Moving to a new venue, 10 spots (spots 11 ➜ 20) have been added. Copy parameter values from spots 1➜ 10 to spots 11 ➜ 20.

1 Select the source spots (**SPOT 1 ➜ 10**).

2 Tap **>>** to go to the next page of the toolbar.

3 Tap **CLONE TO**.

4 Select the target spots (**SPOT 11 ➜ 20**).

5 Press **ENTER**.

A warning message is displayed.

6 Tap **OK** to continue or **CANCEL** to abort.

Parameter fade profiles

Profiles determine a parameter's behavior during a fade. Profiles are always relative to the cue time. Profile options are available on the Editor tool bar in profile mode.

| Linear | Jump on start | Jump on end | Jump on 50% |

Figure 129: Profile mode on the Editor tool bar

Profile	What happens on the fade
Linear	On go, the parameter fades in cue time to its new levels.
Jump on start	On go, the parameter jumps to its new levels.
Jump on end	When the fade is complete, the parameter jumps to its n w levels.
Jump on 50%	When the fade reaches 50% of cue time, the par meter jumps to new levels.

Fade profiles can be applied to the cue or an entire parameter ba k. View profiles on the live spot and channel displays.

To set a fade profile

1 Select fixtures and set parameter levels

2 Tap **PROFILE**.

The Editor toolbar is now in profile mode.

3 Tap a profile.

4 Repeat as required b fore s oring the cue.

A

To set a bank p ofile

1 Sele t sp ts.

2 Selec the bank by pressing one of the bank keys (**INTENS**, **POS**, **COLOR**, **BEAM**, **IMAGE**, **SH PE**).

3 Tap **PROFILE**.

4 Choose one of the profile options.

5 Press **UPDATE**, if editing a cue, or store a new cue.

E

To set a bank profile

1 Select spots.

2 Select the bank by pressing one of the bank keys (**INTENS**, **POS**, **COLOR**, **BEAM**, **IMAGE**, **SHAPE**).

3 Tap **PROFILE**.

4 Choose one of the profile options.

5 Press **UPDATE**, if editing a cue, or store a new cue.

6 Press **ENTER**.

To view profiles

1 Make sure the live spot or channel display is active.

2 Open the Format menu.

3 Tap Profile.

The profile appears in place of the parameter level.

	Profile on pan parameter			Profile on dimmer parameter

Fixture	Fix	Pan	Tilt	Dimmer
M6_1	1	Jmp on 50%	FL	Jmp on start
M6_2	2	Jmp on 50%	FL	Jmp on start
M6_3	3	Jmp on 50%	FL	Jmp on start
M6_4	4	Jmp on 50%	FL	Jmp on start
M6_5	5	Jmp on 50%	FL	Jmp on start
M6_6	6	Jmp on 50%	50%	Jmp on start
M6_7	7	Jmp on 50%	50%	Jmp on start
M6_8	8	Jmp on 50%	50%	Jmp on start
M6_9	9	Jmp on 50%	50%	Jmp on start
M6_10	10	Jmp on 50%	45%	Jmp on start
M6_11	11	Jmp on 50%	45%	Jmp on start
M6_12	12	Jmp on 50%	45%	Jmp on start

Highlight / Lowlight

The highlight/lowlight feature is use   as an aid to:

- Identifying fixtures that   re ac ive on stage
- Verifying pan and tilt orientation
- Verifying DMX a dress assignments
- Highlight/ owli ht can also be used as a quick method for updating libraries

About highlight/lowlight

Highligh lowlight can be used with all varieties of fixture selections. **NEXT** and **PREVIOUS** are used t   cycle through the fixtures. When reaching the end of the fixture selection, highlight/lowlight loops back to the first fixture in the selection.

Note: Highlight/lowlight cycles through selections in the same order that the fixtures were selected.

When highlight/lowlight is active the key's LED is on. Highlight/lowlight remains active until cancelled. *Highlight* or *Lowlight* appears in the command line as long as the mode is active.

Parameter values that are edited are retained in the editor, even when exiting highlight/lowlight mode or updating a library.

While in highlight or lowlight mode, most programming operations (such as storing and updating cues, storing and updating libraries, and applying fans) are available. Selecting unavailable features (such as, Rem Dim, flash, and all parameters except dimmer and position) generates the error message *Not available in Highlight mode*.

Highlight or *Lowlight* appears in the command line as long as the mode is active.

Lowlight is highlight in solo mode. In lowlight mode, the intensity of the active fixtures goes to 30% and the selected fixture's intensity goes to full. Use this mode when there are fixtures with levels active in the editor.

Using highlight / lowlight

Highlight	What happens	Lowlight	What happens
Channel	• Dimmer fades to FL or to the value set in the highlight palette.	Channel	• Selected fixture s dimmer fades to FL. • O her fixtures fade to 30% or to th value set in the lowlight palette.
Fixture with scroller	• Dimmer fades to FL or to the value set in the highlight palette. • Scroller goes to its home value or to the value set in the highlight palette.	Fixture with scroller	• Selected fixture's dimmer fades to FL. • Other fixtures fade to 30% or to the value set in the lowlight palette. • Scroller goes to its home value.
Spot	• Dimmer fades to FL or to the value s in the highlight palette. • All parameters (except pan and ilt) are forced to home values or fade to values set in the highlight alette. • Pan and tilt are not affected.	Spot	• Selected fixture's dimmer fades to FL. • Other fixtures fade 30% or to the value set in the lowlight palette. • All parameters (except pan and tilt) are forced to home values or fade to values set in the lowlight palette. • Pan and tilt are not affected.

Tip! When using highlight or lowlight, you can adjust pan and tilt for the entire range of s ots. This is useful for changing all the pan and tilt parameters at the same time, for instance when tweaking libraries.

To apply highlight or lowlight

1   Press **HI.LIGHT** or **LO.LIGHT**.

    Highlight or *Lowlight* appear in the command line.

2   Select a fixture, or a range of fixtures, or a group.

3   Move the pan/tilt wheel or trackball to initiate the highlight feature.

4   Press **NEXT** or **PREVIOUS** to move to the next or previous fixture.

5 To jump to another fixture, select a new fixture and again move the pan/tilt wheel or track-ball to initiate the highlight feature.

Note: You can edit the entire range of fixtures only if **NEXT** and **PREVIOUS** have not yet been used to cycle through the spots.

To exit highlight or lowlight

1 Clear the command line by pressing **SHIFT** + ● or **SHIFT**+ **CE**.

2 Press the active mode -**HI.LIGHT** or **SHIFT** + **LO.LIGHT**.

The mode is no longer indicated in the command line.

ATTENTION! Pressing **HI.LIGHT** or **LO.LIGHT** without clearing the comma d lin , clears the **HI.LIGHT** or **LO.LIGHT** values. Pan/tilt and dimmer changes a e retained in the editor and the system is still in **HI.LIGHT** or **LO.LIGHT** mode.

To switch between highlight and lowlight modes

Press **SHIFT** + **HI.LIGHT** or **SHIFT** + **LO.LIGHT**

A E

To edit position libraries without activating hig light or lowlight mode

Example: The current cue uses position ibra y 1. In the current venue the bar is a bit higher than usual and the position library require editing.

1 Press **SHIFT** + **RESET**.

2 Press **POS** and select a sitio library.

3 Press **HI.LIGHT OR LO LIGHT**.

4 Edit pan and tilt

Pan and til are djusted for all the selected spots.

5 Action syntax -Press **STORE**.

Ente syntax - Press **UPDATE** and then **ENTER**.

6 To continue editing positions, repeat the procedure from step 1.

A E

To edit position libraries in highlight lowlight mode

1 Press **SHIFT** + **RESET**.

2 Press **HI.LIGHT OR LO.LIGHT**.

3 Press **POS** and select a position library.

4 Press **SPOT**.

5 Edit pan and tilt.

The command line shows exactly which position library you are working on.

6 Action syntax -Press **STORE**.

Enter syntax - Press **UPDATE** and then **ENTER**.

7   To continue editing position libraries, press **SHIFT** + **RESET** and continue the procedure from step 3.

Using highlight and lowlight palettes

You can store palettes to use with the highlight or lowlight features. These palettes apply the palette values instead of the fixture's home values. Pan and tilt are not included in the highlight and lowlight palettes.

You can store only one highlight and one lowlight palette.

> **Note:**   Highlight and lowlight palettes are device specific.

A

To store highlight or lowlight palettes

Example: Create a highlight palette where the color setting are: cyan @ zr, magenta @ zr, and yellow @ FL and dimmer is FL.

1   Select fixture. Set dimmer to full and set color p ram ter levels.

2   Press **LIB**.

3   Press **HI.LIGHT**.

Or

Press **SHIFT** + **LO.LIGHT** to st r a owlight palette.

4   Press **STORE**. The highlight r lowlight palette is stored.

To delete the highlight or owlight palette

1   Press **LIB**.

2   Press **HI.L GHT** r **LO.LIGHT**.

3   Pres **DE ETE**. Vector requests confirmation.

4   Press **DELETE** again or tap *OK*.

T exa ine the highlight or lowlight palette

1   Press **LIB**

2   Press **EXAM**.

3   Press **HIGHLIGHT** or **LOWLIGHT**.

The highlight (or lowlight) parameter values are displayed.

E

To store highlight or lowlight palettes

Example: Create a highlight palette where the color settings are: cyan @ zr, magenta @ zr, and yellow @ FL and dimmer is FL.

1   Select fixture. Set dimmer to full and set color parameter levels.

2 Press **ENTER**.

3 Press **STORE**.

4 Press **LIB**.

5 Press **HIGHLIGHT**.

Or

Press **SHIFT** + **LO.LIGHT** to store a lowlight palette.

6 Press **ENTER**. The highlight or lowlight palette is stored.

To delete the highlight or lowlight palette

1 Press **DELETE**.

2 Press **LIB**.

3 Press **HI.LIGHT** or **SHIFT** + **LO.LIGHT**.

4 Press **DELETE** again or press **ENTER** or tap *OK*.

To examine the highlight or lowlight palette

1 Press **EXAM**.

2 Press **LIB**.

3 Press **HI.LIGHT** or **SHIFT** + **LO.LIGHT**

4 Press **ENTER**.

The highlight (or lowlight) parameter values are displayed.

Using highlight to update libraries

Highlight can be used for quick updating of fixture specific libraries. This procedure can be used to update all libraries, including position libraries.

Before beginn ng this procedure, press **SHIFT** + **RESET** to clear the editor entirely and make sure that there is no ac ive selection. If there is an active selection the library will be applied to the selection.

A

To update a library

Example: Update position library 3.

1 Press **LIB**.

2 Press **POSITION** and **3** on the numeric keypad.

Or

POSITION 3 on the position soft keys tab

3 Press **HI.LIGHT**.

The dimmer, for first fixture in the library, it turned on.

4 Adjust the pan and tilt values using the trackball or the wheels or enter an absolute value.

5 Press **NEXT**.

The next fixture's dimmer is turned on.

6 Repeat steps 4 and 5 as needed.

7 Press **STORE** or **UPDATE**.

The library is stored with the new values. The highlight feature is now inactive.

E

To update a library

Example: Update position library 3.

1 Press **LIB**.

2 Press **POSITION** and **3** on the numeric keypad.

Or

POSITION 3 on the position soft keys tab

3 Press **HI.LIGHT**.

The dimmer, for first fixture in the library, is turned on.

4 Adjust the pan and tilt values using the trackball r the wheels or enter an absolute value.

5 Press **NEXT**.

The next fixture's dimmer is turned on.

6 Repeat steps 4 and 5 as needed

7 Press **STORE** or **UPDATE**

8 Press **ENTER.**

The library is stored wi h the new values. The highlight feature is now inactive.

Identifying fixtures

Occas ona y you may need to identify a particular fixture. This can be done using *REM DIM* or by blinking the fixture's dimmer.

Using REM DIM

REM DIM behavior:

- If the dimmer of the selected fixture is at any level, it remains at that level and all other fixtures fade to zero.

- If the dimmer of the selected fixture is at zero, it goes to the **ON** value and all other fixtures fade to zero.

Since this is an editor function all parameters and wheels are available for fixture editing while *REM DIM* is active. You can also apply a library to the *REM DIM* selection. You can store new cues using *REM DIM*.

Exiting *REM DIM* releases all unchanged values to playback device control. Parameter and dimmer values that were modified while *REM DIM* was active are retained in the editor.

To blackout all fixtures except the selected fixture

1 Select the fixture(s).

2 Tap *REM DIM* on the Editor toolbar.

   Only the selected fixture's dimmer remains on. All other fixtures are entered to the editor and forced to zr.

3 Tap *REM DIM* to exit.

   Or

   To select another fixture, repeat steps 1 and 2.

To locate a fixture

1 Select a fixture to start from.

2 Optional - set a dimmer level.

3 Tap *REM DIM* on the Editor toolbar.

   Only the selected fixture's dimmer remains n. All other fixtures are entered to the editor and forced to zr.

4 Press **NEXT** or **PREV** to advance.

   The active fixture is on at the specified level or, if no level was specified in step 2, at its original level.

5 Tap *REM DIM* to exit and ret rn the dimmer levels to all fixtures.

   Or

   To skip a large numb r of fixtures without exiting, just select the fixture and tap **REM DIM** again.

   Note: **NEXT** and **PREV** cannot be used if a range of fixtures has been selected.

To store a ue using REM DIM

Ex mple: The next to last lighting look has back light, a cyclorama color wash, and a special comprised of three fixtures. You want to quickly isolate the three fixture special and store only he special as last cue.

1 Select the three fixtures.

2 Set an intensity level.

3 Press *REM DIM*.

   The back light and color wash are forced to zero.

4 Store a new cue.

   Note: All zero intensity values are stored in the new cue.

Blinking fixtures

The blink feature provides an easy way to identify fixtures.

To blink fixtures

Select a single fixture (channel, spot, matrix, or media server) or a range of fixtures and tap **BLINK** on the Editor toolbar.

The selected fixtures blink between 10% and 80%.

Using Sneak

Sneak fades parameter levels to their previous level or to zr in the default sn ak time. Sneak times can also be changed on the fly. Also, specific parameter levels may be selected to override the default.You can change the default sneak time in: Tools ▶ Settings ▶ Tim n

A

To sneak a parameter

1 Select the fixtures.

2 If the selection is a moving device, select the parameter using the wheel bank keys or tap the parameter name in Wheel Assig ment

3 Press **SNEAK**.

The parameter level fades   its p evious level or to zr.

To sneak a parameter in   elected time

1 Select the fixtur s

2 If the selec ion s a moving device, select the parameter using the wheel bank keys or tap the par met r name in the Wheel Assignments.

3 Pr s **TIME** and enter a number on the numeric keypad.

4 P ss **SNEAK**.

The parameter level fades to its previous level or to zr in the selected time.

To sneak a parameter to a selected level

Example: Sneak spot 1 cyan parameter to 60 in 6 seconds.

1 Select spot 1.

2 Press **TIME** and **6** on the numeric keypad.

3 Select cyan.

4 Press @ and **60**.

The cyan parameter fades to 60% in the selected time.

E

To sneak a parameter.

1 Select the fixtures.

2 If the selection is a moving device, select the parameter using the wheel bank keys or tap the parameter name in Wheel Assignments.

3 Press **SNEAK**.

4 Press **ENTER**.

The parameter level fades to its previous level or to zr.

To sneak a parameter with selected time

1 Select the fixtures.

2 If the selection is a moving device, select the parameter using the wheel bank keys or tap the parameter name in Wheel Assignments.

3 Press **TIME** and enter a number on the numeric keypad

4 Press **SNEAK**.

The parameter level fades to its previous le el o to z in the selected time.

5 Press **ENTER**.

Editing objects on the grid display

Some object attributes can be dited directly on the grids.

Grid	*What can be edit d*
QList exam	**QList (playb ck) mode (toggle** Normal **or** Chaser**)** ### *To change the QList playback mode* **1** Toggle the QList soft keys to display as a grid. **2** Tap the Mode field. **3** Choose Normal or Chaser. **4** Press **ENTER** to move to Mode field in the next row. **QList name** ### *To change a QList's text tag* **1** Toggle the QList soft keys to display as a grid. **2** Double click the QList Name field. **3** Type the new text tag. **4** Press **ENTER** to move to QList Name field in the next row.

Grid	What can be edited
Cue sheet	**Cue name** ***To change a cue's text tag*** **1** Tap the Cue Sheet tab. **2** Double click the Cue Name field. **3** Type the new text tag. **4** Press **ENTER** to move to Cue Name field in the next row. **Fade times** ***To edit cue fade times*** **1** Tap the Cue Sheet tab. **2** Double click the Cue Name field. **3** Type the new text tag. **4** Press **ENTER** to move to Cue Name field in the next row.
Libraries	**Library name** ***To change a library's text tag*** **1** Toggle the library soft keys to di play as a grid. **2** Double click the Library Nam field **3** Type the new text tag. **4** Press **ENTER** to m to L brary Name field in the next row. **Mode (Device Specific, Fixture Specific, Pattern)** ***To change the library mode*** See Fixtu e and device specific libraries" page 253 **1** Toggle the library soft keys to display as a grid. **2** Tap the Mode field. **3** Choose Fixture Specific, Pattern, or Device specific. **4** Press **ENTER** to move to the Mode field in the next row. **Parameters (included in the library)** ***To add or remove parameters stored in the library*** "To add parameters to libraries" on page 261. **1** Toggle the library soft keys to display as a grid. **2** Tap the checkbox in the parameter columns to add or remove parameters from the library. Checked parameters are included in the library.

Grid	*What can be edited*
Groups	**Group name** ***To change a group's text tag*** **1** Toggle the group soft keys to display as a grid. **2** Double click the Group Name field. **3** Type the new text tag. **4** Press **ENTER** to move to Group Name field in the next row.
Macros	**Macro name** ***To change a macro's text tag*** **1** Toggle the macro soft keys to display as a grid. **2** Double click the Macro Name field. **3** Type the new text tag. **4** Press **ENTER** to move to Macro Name field in the n xt ow.
Snaps	**Snap name** ***To change snap's text tag*** **1** Toggle the snap soft keys to disp ay a a grid. **2** Double click the Snap Name f eld. **3** Type the new text tag **4** Press **ENTER** to mov to Snap Name field in the next row.
Time Line	**Time code** ***To edit event t me des*** **1** Toggle t e time line soft keys to display as a grid. **2** Double click the Time Code field. **3** Edit the event time. Enter the new time code in 00 (hours):00 (minutes):00 (seconds):00 (frames) format using the external keyboard. **4** Press **ENTER** to move to Time Code field in the next row. **Note:** Event time can also be changed on the graphical time line. See "Editing time lines" page 382. **Fade times** ***To edit fade times*** **1** Toggle the time line soft keys to display as a grid. **2** Double click the Fade Time field. **3** Edit the fade time. **4** Press **ENTER** to move to Time Code field in the next row.

Grid	What can be edited
Note: You can also display the various grids through the exam feature and edit the fields in the exam display. Example:	

A

To edit Qlist text tags

1 Press **EXAM**.

 QLists are displayed on the exam grid.

2 Double click the text field.

3 Type the new text.

4 Press **ENTER** to move to QList Name field in the next row.

E

To edit QList text tags

1 Press **QLIST** and select the QList numbr on he keypad.

2 Press **EXAM**.

3 Press **ENTER**.

 QLists are displayed on the exam grid.

4 Double click the text field

5 Type the new text.

6 Press **ENTER** to m ve to QList Name field in the next row.

When **SCROLLWIN** i activ you can use console keys or the equivalent keys on an external keyboard for diting and to navigate the grid.

Conso key	External keyboard	What is does
ENTER	Enter	Applies the changes and moves to focus to the cell below.
→	Tab	Moves one cell right.
SHIFT →	Shift + Tab	Moves one cell left.
Arrows	Arrows	Navigate cells up and down or right and left.
NEXT and **PREV**	Page up /Page down	Cycle through options in a drop down list.
DELETE	Delete	Delete text.
CE	Backspace	Deletes one character.

Chapter 15   System Settings

This chapter contains the following sections:

About system settings

The settings in the System Settings dialog box control Vector's default behavior.

Customized settings are saved with the show. Opening a new show resets the System Settings fields to their default settings.

Customized settings can be saved as the default settings.
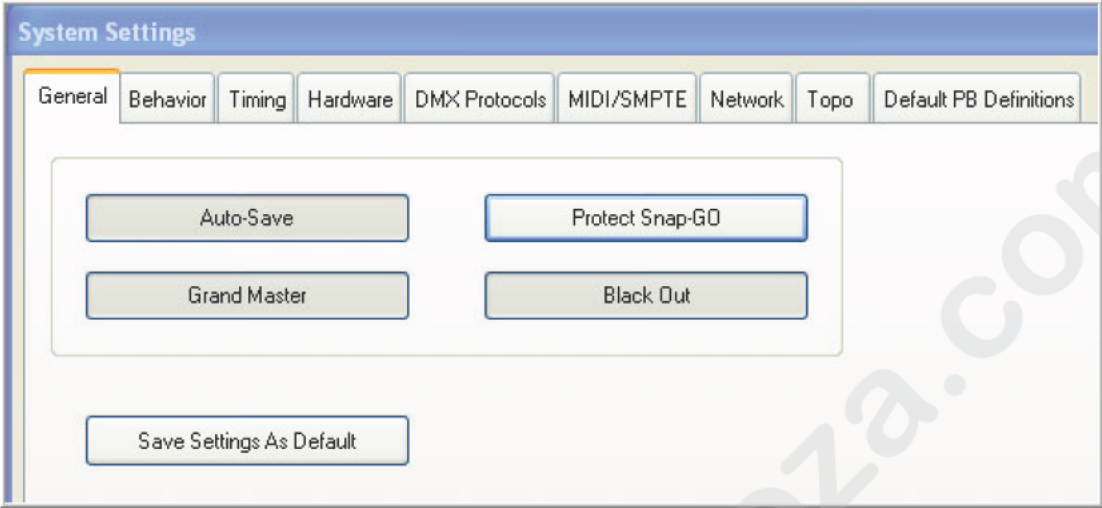
To open the system settings dialog box

Go to Tools menu ▶ Settings
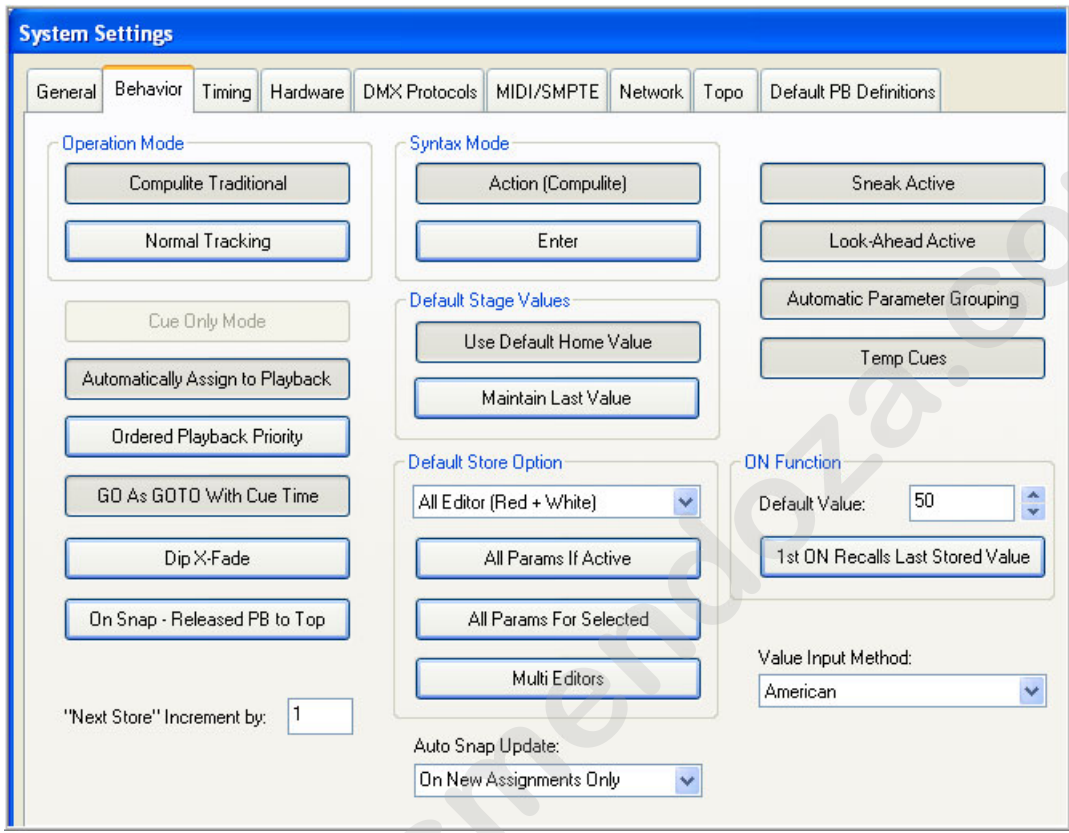
To save customized settings as default

1 When you have finished customizing the settings on all the tabs in the system settings dialog box, go to the General tab.

2 Tap **SAVE SETTINGS AS DEFAULT**.

Your customized settings are now the default settings. Each time you open a new show these settings will be used.

General

Group	Fields/buttons	What it does	Default

	AUTO-SAVE ENABLED	• On - The show is automatically saved periodically • Off - The automatic save feature is disabled.	On
	PROTECT SNAP - GO See page 233	• On Lock **SNAP GO** to prevent accidentally using this key. Off - **SNAP GO** is not locked.	Off
	GRAND MASTER	On - GM controls output levels from the console. • Off - All output is at Full and the GM level does not affect the output.	On
	BLACK OUT ENABLED	• On - The **B.O**. key is active and can be used to blackout the console's dimmer output. • Off - The **B.O**. key is disabled.	
	SAVE SETTINGS AS DEFAULT	Save your customized settings as the default setting. Each time you open a new show, these settings are valid.	Off
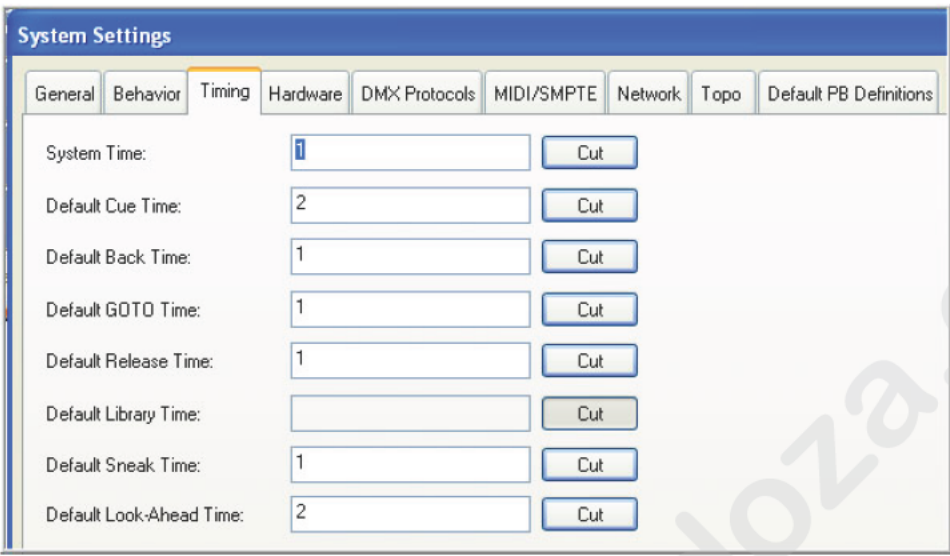
Behavior

Group	*Fields/buttons*	*What it does*	*Default*

Operation mode See page 11	**COMPULITE TRADITIONAL**	• The editor does not clear after storing a cue. • All parameter values for the active fixtures are stored in each cue.	
	NORMAL TRACKING	• The editor clears after storing a cue. • Only changed values (hard moves) are stored in the cue. All other values are tracked.	
Syntax See p ge 13	**ACTION** (Compulite)	Each keypress is immediately acted upon.	
	ENTER	Pressing **ENTER** completes a sequence.	
Note: Compulite mode and Action syntax are automatically set in the Behavior tab when loading shows converted from Sabre or 4D.			
Default stage values See page 116	**USE DEFAULT HOME VALUE**	After **RESET**, parameter levels return to home as defined for the device in the Device Builder.	
	MAINTAIN LAST VALUE	After **RESET**, the last parameter value is retained.	On

Group	Fields/buttons	What it does	Default
Default store option See page 134	Drop down list	Determines what is stored in each cue: • All editor (red and white) • Active only (red) • All stage	All editor
	ALL PARAMS IF ACTIVE	• On - If a spot's dimmer intensity is more than zr, all parameters will be stored in the cue. • Off - Only the active parameters will be stored in the cue.	
	ALL PARAMS FOR SELECTED	• On - All parameters (except dimmer) in the selected spot are stored in the cue even if there are no levels set. • Off - Only active parameters ar stored in the cue.	
	Multi Editors	• On - Allows saving the da a active in all the local console and n d con ole editors. • Off - Only the urr t editor in the local console is saved.	
Other default behavior	Value input method	• European Enter 1 digit for levels (example: 6 for 60% 5.5 for 55%). • meri an - Enter 2 digits for levels (example: 60 f r 60%).	Amer-ican

	Next store incremented by	Sets the increment when storing cues using:
		   STORE+
		   OR
		   CUE, **NEXT**, **STORE**
			1

	CUE ONLY MODE Tra king mode only! See page 157	• On - Edits to a cue are stored as cue only and do not affect the tracking. • Off - Edits to a cue are tracked through the cues.	
	AUTOMATICALLY ASSIGN TO PLAYBACK	• On - Stored cues are automatically loaded to the master playback. • Off - Stored cues are not automatically loaded to the master playback.	On
	ORDERED PLAYBACK PRIORITY	• On - Playback devices are set in a rigid priority hierarchy. • Off - Playback Device priority is LTP.	Off
	GO as **GOTO** with cue time See page 198	• On - **GO** key executes out of sequence fades. • Off - **GO** key does not execute out of sequence fades.	On

Group	Fields/buttons	What it does	Default
	DIP X-FADE	• On - Dip crossfade mode active. • Off - Dipless crossfade mode active.	
	ON SNAP - RELEASED PB TO TOP	• On - When a playback device was in a released state when the snap was stored or updated, the QList always loads at the first cue. • Off - When a playback device was in a released state when the snap was stored or updated, the QList always loads at the cue that was active when the playback was released.	
	SNEAK ACTIVE	• On - Sneak active. During editing, absol te val ues fade in default sneak time. • Off - During editing, absolute values bump in.	On
	AUTO SNAP UPDATE	Choose how snaps are updated. Options are: • No Auto Update • On Any Change • On New As ignm nts Only	
	LOOK AHEAD ACTIVE	• On - L ok Ahead enabled. • Off Lo k Ahead disabled.	
	AUTOMATIC PARAM-ETER GROUPING	• O all parameters belonging to the same type re active in the editor as soon as a level is set for one of the parameters. • Off - only the selected parameter is active in the editor, isolated from the other parameters belonging to the same parameter type.	
	TEMP CUES ENABLED	• On - allow temporary cues. • Off - create a new QList and its first cue with the levels in the editor.	
ON *Function*	Default value spin box	Sets the level for **ON** key.	50
	1st on recalls last value	• On - pressing **ON**, fades levels to last value stored for the selected fixtures. Press **ON** again, levels go to default **ON** value. • Off - pressing **ON** fades levels to the **ON** default value.	Off
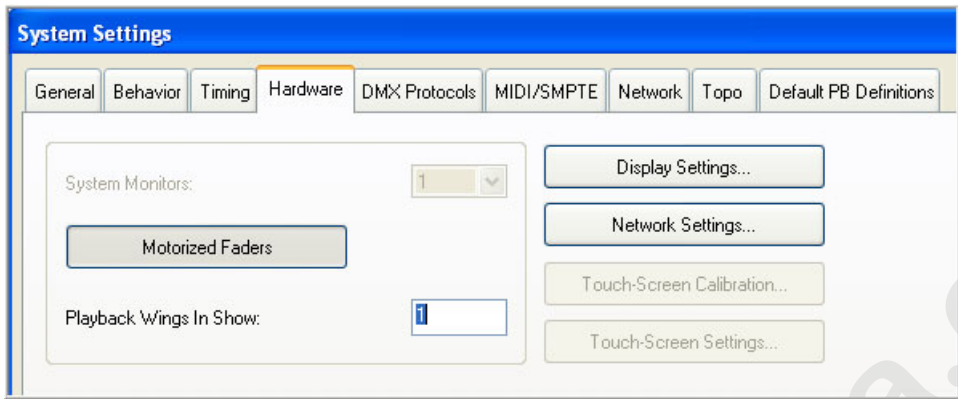
Timing

Group	Fields/buttons	What it does	Default

	System Time	Speed at which levels fade in or out in the editor.	1
	Default cue time	The defa lt time-in/time-out for cues.	2
	Default back time	Th d fa lt time for back fades.	1
	Default GOTO time	Th default time used by **GOTO**.	1
	Default release time	Speed at which released parameters fade out when released from the editor or from a playback device.	1
	Default libra y time	Speed at which library levels fade in or out in the editor.	1
	Def lt sneak time	Speed at which levels fade in when using the sneak feature.	1
	Default Look Ahead time	Speed at which levels fade when using the Look Ahead feature.	

Note: Default system time is automatically entered in the Time field if the CUT button is disabled.

To change default times
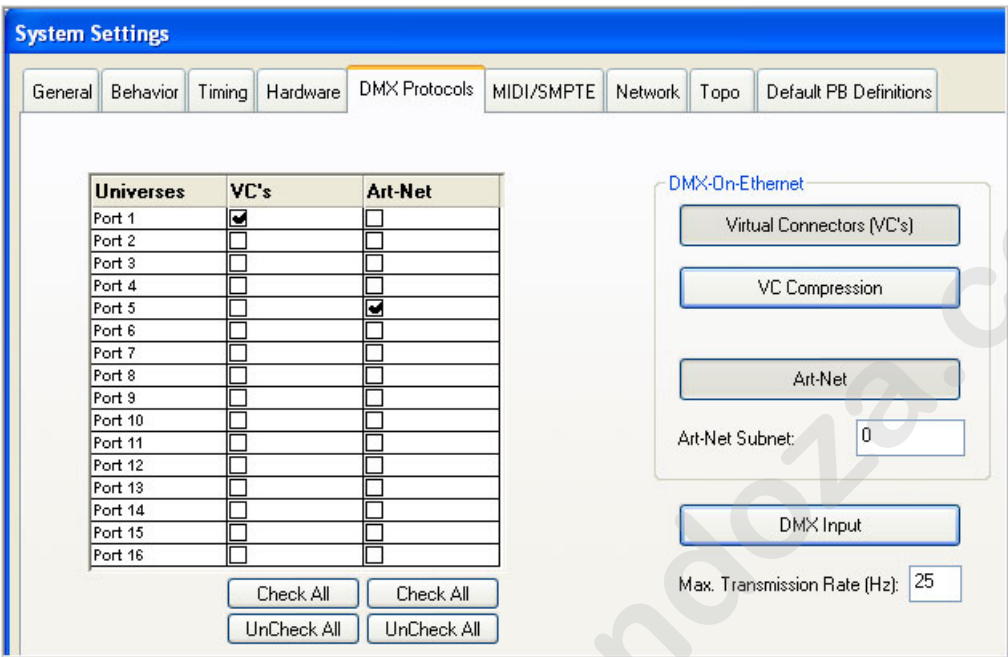
1 Open the Tools menu.

2 Tap Settings.

   The System Settings dialog box opens.

3 Go to the Timing tab.

4 Enter time values in the default time fields.

5 Tap *OK* to save and exit.

Hardware
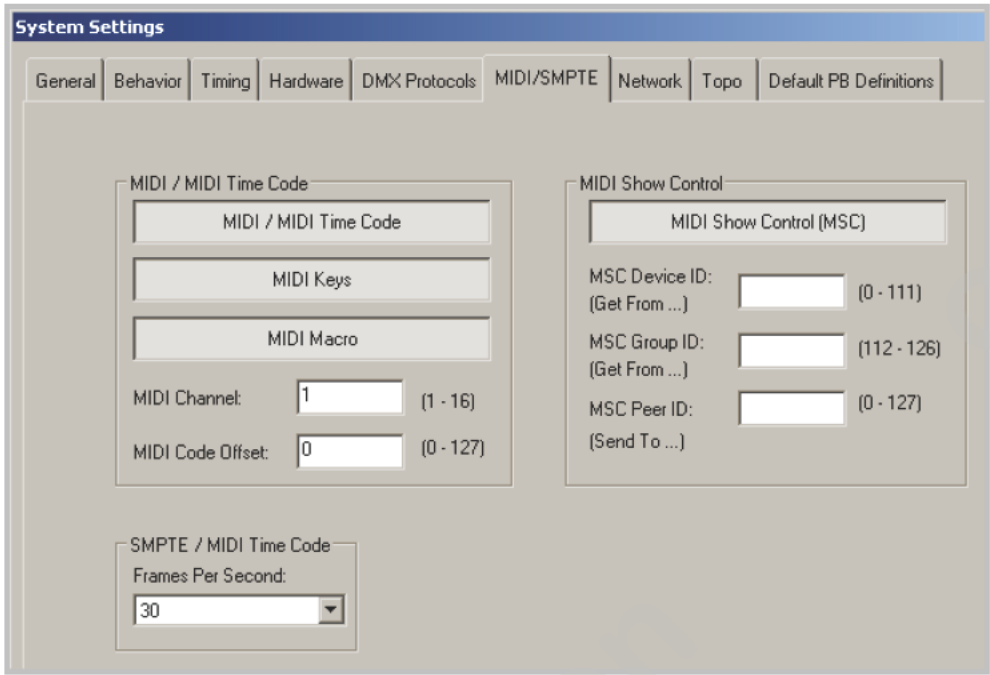
Group	*Fields/buttons*	*What it does*	*Default*

	System monitors		3 (Red) 2 (Blue)
	Motorized faders		
	Playback wings in show	Set the number of p ayback wings.	2 (Red) 1 (Blue)
	Display settings	Opens he Display Properties dialog box. In D play Properties set: • Number of monitors • Screen resolution • Desktop wallpaper • Other standard display settings **To improve display performance** **1** Right click on monitor 1. **2** Choose Primary. **3** Tap *OK*.	

Group	Fields/buttons	What it does	Default
	Network settings	Opens the Network Settings dialog box.	
	Touch Screen Calibration	Allows calibrating the touch screens. **To calibrate the touch screens** 1 Open the System Settings dialog box through the Tools menu. 2 Tap the Hardware tab. 3 Tap Touch Screen Calibration. 4 Tap the center of the x that appears in t e upper left corner of the display. 5 Tap the center of the x that appears in the lower right corner of the display.	
	Touch Screen Settings	Opens the Pointer Device P operti dialog box.	
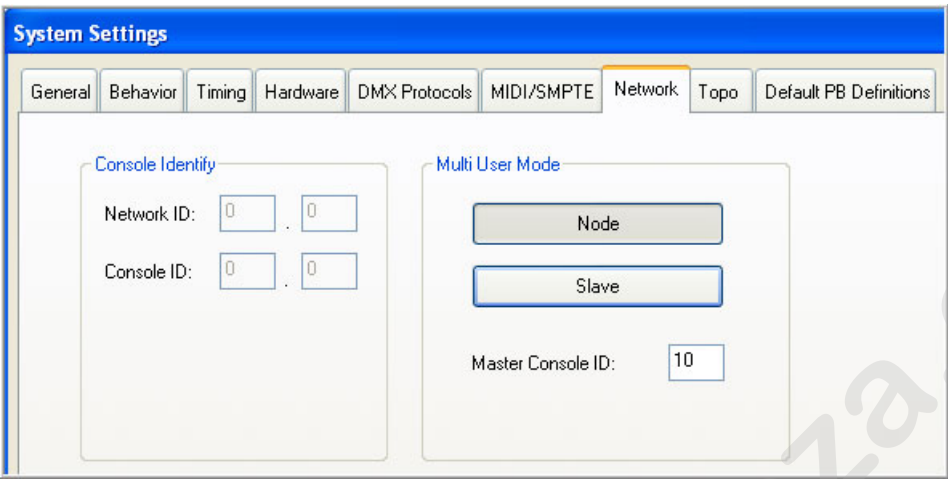
DMX Protocols

Group	Fields/buttons	What it does	Default
	Accurate configuration of the VC and Art-Net output of the console helps to reduce network traffic and uses less system resources.		
DMX / DMX-over-Ethernet	Virtual Connectors (VC')	• On - Virtual channel transmission (for DMX over Ethernet) is enabled. • Off - Virtual channel transmission is disabled.	On
	VC Compression	• On - VC compression is enabled. Off - VC compression is disabled.	Off
	Art-Net See page 377	Connect with Art-Net devices	
	Art Net Subnet	Set the Art-Net offset. When Art-Net is enabled, the Subnet setting defaults to 0. **Note:** Generally the Art-Net IP subnet on Art-Net devices, such as media servers, is set to the same IP subnet as Vector.	
	DMX Input See page 371	• On - The console responds to DMX512 input. • Off - The console does not respond to DMX512 input.	
	Max Transmission Rate (Hz)	Regulate the rate at which DMX over Ethernet is transmitted. The available range is 25 - 40 Hz.	
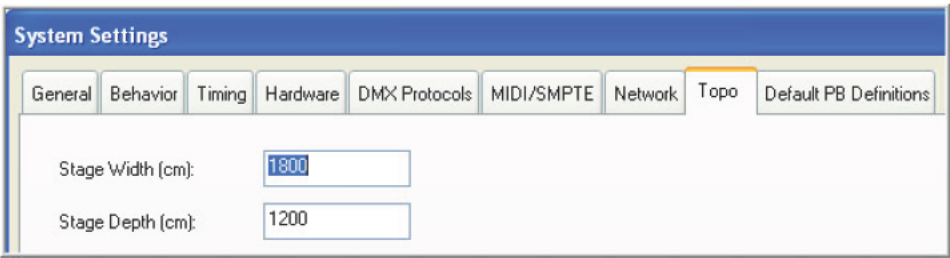
MIDI/SMPTE

Group	Fields/buttons	What it does	Default

Group	Fields/buttons	What it does	Default
MIDI See page 389	MIDI	• n - MIDI over Ethernet is enabled. • Off - MIDI over Ethernet is disabled.	On
	MIDI Keys	• On - Vector can receive MIDI keys transmitted by an outside source. • Off - Vector does not receive MIDI keys transmitted by an outside source.	
	MIDI Macr	• On - Storing MIDI macros is permitted. • Off - Storing MIDI macros is not permitted.	
	MIDI Channel	Set the MIDI channel	
	MIDI Code Offset		
	MSC	Enable/disable MSC (over Ethernet)	On
	MSC Device ID	Set the MSC device ID	
	MSC Group ID	Set the MSC group ID	
	MSC Peer's ID	Set the MSC ID	
	Frames per Second (SMPTE)	Set the frames per second value for SMPTE operation.	30

Network
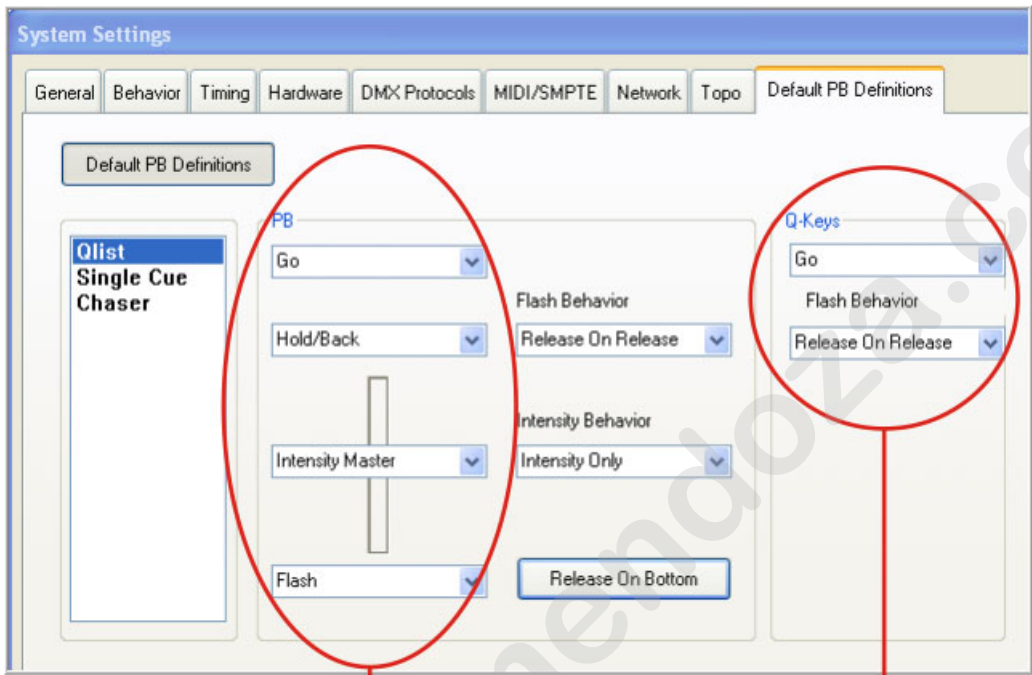
Group	Fields/buttons	What it does	Default
Console identifiers	Network ID	The Network ID number a pears in this field.	
	Console ID	The console ID num er appears in this field.	
Multi User Mode See page 365	Node	• On - The c nsole or Vector Node operates as a node. • ff - The console is not designated as a node.	Off
	Slave	• On - The console or Vector Node operates as a slave console. • Off - The console is not a slave console.	Off
	Master Consol ID	Identify the master console through its ID number.	

Topo

Group	Fields/buttons	What it does	Default

| | Stage Width | Enter stage dimensions. the unit of measureme t is centimetres. | 1800 cm |
| | Stage Depth | | 1200 cm |

Default PB Definitions

Set global defaults for playback device control keys according to the type of object loaded on the playback device.

Group	Fields/buttons	What it does	Default
	Set default functions for: Control keys Slider Flash — Set default functions for: Qkeys		
	DEFAULT PB DEFINI IONS	Enabled - *APPLY PB DEFAULT* is available in the Editor tool bar and in Setup mode. Disabled - *APPLY PB DEFAULT* is not available in the Editor tool bar and in Setup mode.	Disabled
Object List	Qlist S ngle (temporary) cue • Chaser	The defaults defined here are applicable to the selected object.	na

Group	Fields/buttons	What it does	Default
PB See page 218	Control key (first combo box)	Set the function for upper control keys.	Go
	Control key (second combo box)	Set the function for lower control keys.	Hold/Back
	Fader (third combo box)	Set the fader function.	X-Fader (In)
	Flash key (fourth combo box)	Set the flash keys function.	Flash
	Flash Behavior	Set default behavior for flash keys.	Release on Release
	Slider Behavior	Set default behavior for the slider when it is functioning as an intensity master.	Intensity Master
Qkeys	Control key	Set the control key function	Go
	Flash Behavior	Set default behavior for la h k ys.	Release on Release

To enable the playback defaults

Tap **DEFAULT PB DEFINITIONS**.

To set the playback device defau ts

1 Select the object from the object list.

2 Set the key or fad   fun ions in the appropriate fields.

3 Tap **OK**.

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Chapter 16   Multimedia Features

You can attach picture, *.avi or *.txt files to Vector show objects such as cues, libraries, groups, snaps, and macros. You can also capture frames from a video transmission and attach them to show objects.

This chapter contains the following sections:

File attachments

> **IMPORTANT!** Windows Media Player 9 (at l ast) must be installed on your Vector in order to use the attachment feature.

Attaching media and text files to show objec s can be a great aid in providing accurate documentation for rep companies or keeping light crew shifts up to speed. Each show object supports two attachments; one media file attachment nd one text file attachment.

The attachment feature option - Attach, Note and Delete Attachment are available in the attachment viewers and the Attachme t menu.

> **Note:** When using the Attachment menu, make sure the attachment viewer is the active pane.

Attachment view rs

Attached fi es are viewed in the attachment viewers.

 here are two attachment viewers:

One viewer is connected to the master playback device and its' title bar is Playback▸Master ▸Attachment.

The second attachment viewer is for show objects that are selected in grids or soft keys and its' title bar is labelled Editor Tools▸ Attachment Viewer. The Editor Tools viewer displays the selected show object in the title bar. The master playback viewer displays the current cue in the title bar.

Figure 130: Attachment viewer

Both attachment viewers have three controls

Control	Use
ATTACH	Attach a media file or text file to an object.
NOTE	Toggle between text and graphic attachments. Type a note in the attachment viewer area.
DELETE	Delete attached media file or text.

Working with attachments

To display the master playback attachme t viewer

1 Tap a pane to activate it.

2 Open the Workspace and   pan   Playback▶Master.

3 Choose Attachment.

To display an attachme t viewer

1 Tap a pane to a tivate it.

2 Open th Workspace and expand Editor Tools and choose Attachment Viewer to attach or view files attached to show objects.

To a tach a media or *.txt file to the current cue (on the master playback)

1 Tap **ATTACH** in the Master Playback Attachment Viewer. The Open dialog box is displayed.

   Or

   Go to the Attachment menu and tap Add Attachment.

2 Browse to the correct location and select your media file.

3 Tap Open. The file is attached to the current cue and is displayed in the Attachment Viewer.

To attach free text to the current cue (on the master playback)

1 Tap **NOTE** in the Master Playback Attachment Viewer.

The Open dialog box is displayed.

Or

Go to the Attachment menu and tap Note.

2 Type text in the Attachment Viewer.

To attach a media or *.txt file to an object

Example: Attach a media file QList 1 cue 1.

1 Select the cue in either soft key or grid display.

2 Tap *ATTACH* in the Attachment Viewer.

The Open dialog box is displayed.

Or

Go to the Attachment menu and tap Add Attachment.

3 Browse to the correct location and select your media file.

4 Tap Open.

The file is attached to the selected object and is di playe in the Attachment Viewer.

To attach free text to an object

Example: Attach a text file to macro 2.

1 Select the macro in either soft key or grid format.

2 Tap *NOTE* in the Attachment V ewe

Or

Go to the Attachment menu and tap Note.

3 Type text in the Atta hment Viewer.

To delete an attachment

1 Sele t th object in either soft key or grid format and tap cue 1 to select it. Skip this step if the ue is currently output.

2 Tap *DELETE* in the Attachment Viewer or Attachment menu.

You are asked to confirm the delete command.

To toggle the viewer between text and graphics

Tap *NOTE*.

R ceiving video transmission

IMPORTANT!

Support for a USB camera requires updating the Windows OS image. Please contact Compulite's support team prior to installing any USB camera driver.

Vector can receive and display video transmissions from a web cam connected at Vector's USB port or from digital cameras that are part of the general network and have an IP address. Frames can be captured and attached to show objects and to cues on the master playback.

DirectX9 must be installed in order to use a web cam connected on Vector's USB port.
If you are using cameras connected to Vector's USB ports, you must connect the camera before starting up Vector.

The Camera Viewer displays the input from the video source. The Camera Viewer has two controls: *ATTACH* and *MASTER PB*.

Camera viewer controls	
ATTACH	Press to attach the displayed image to the selected object or to th cue output on the master playback.
MASTER PB	Toggle between the master playback cue and the selected object.

To display the camera viewer

1 Open the Workspace and expand the Editor Tools node.

2 Choose Camera Viewer.

The transmission is visible in the active d spla pane.

To connect to a camera

1 Make sure the camera viewer i d played.

2 Open the Attachment menu

3 Choose Select Video Sou e.

The Video Device dialog box opens.

4 Tap *USB* to establish communication with a camera connected to Vector's USB port.

5 Choo   a c mera from the device list.

6 Tap *OK*.

OR

1 Open the Attachment menu.

2 Choose Select Video Source.

The Video Devices dialog box opens.

3 Tap *IP (ETHERNET)*, to connect to a camera that is available on the general network.

4 Enter the camera's IP address or URL.

5 Tap *OK*.

To capture and attach a video frame

Example 1: Attach a video frame to a cue on the master playback.

1 Make sure the Camera Viewer is open: Workspace▶Editor Tools▶Camera Viewer.

2 Make sure Master PB is enabled in the Camera Viewer.

3 Tapping *ATTACH* in the Camera Viewer attaches the current frame to the cue that is output on the master playback device.

Example 2: Attach a video frame to position library 1.

1 Make sure the Camera Viewer is open: Workspace▸Editor Tools▸Camera Viewer.

2 Select position library 1 by tapping its soft key or choose the library from the list in grid format.

3 Make sure Master PB is disabled in the Camera Viewer.

4 Attach the current frame to the library by tapping *ATTACH* in the Camera Viewer

Media Server integration

Vector consoles support bi-directional communication with the popular media servers. Easy access to media images by downloading thumbnails from the media serve   Imag   selection is through pickers on Vector. Media servers can be controlled via standard DMX   12 or Art-Net, thus light and video cues are controlled by the lighting console.

Overview

The live fixture display has dedicated fields f r media server devices. Set the live view format to Text to display folder and thumbnail (image)   ames in the fixture parameter fields.

Figure 131   ive media server display

Patching media server devices and configuring for Art-Net control

Medi   server devices are patched in Vector's Patch Manager. By default they are in the Media Server set (set 3). When creating the media server fixtures they can be organized in any other set, for instance in the spot set (set 1).

To patch media server devices

1 Open the Tools menu and choose Patch Manager.

The Patch Manager opens.

2 Tap (Create and Patch).

The Create and Patch Fixtures dialog box opens.

3 Tap *IMPORT DEVICE*.

The list of devices opens.

4 Scroll to the media server's manufacturer folder and expand the folder to view the device list.

5 Select the devices and click **OK**.

6 In the Number of Fixtures to Create field, enter the number of fixtures appropriate to your media server.

7 Set the Start Number for the fixtures.

8 In the Name field, enter the name of the media server or the IP as described in the manuf c-turer's user's guide.

IMPORTANT! To download thumbnails the fixture names must be identica to th media server computer name or to the media server IP (see, " Downloading thumbnails" on page 361.) Consult the media server manufacturer's instructions.

---

9 In the Set field, choose a set.

The default set is Media Server (set 3).

10 Tap **NEXT**.

11 Enter the port and DMX address.

12 Tap **FINISH**.

The patched fixtures are added to th selected set.

13 Save and exit the Patch Mana er

To control media servers over Art-Net

Two digits comprise the Art-Net configuration. The first digit is the Art-Net subnet and the second digit is the rt N t port number. On most media servers, Art-Net digits are displayed together. On Vect r, th Art-Net subnet is displayed in System Settings and the port number can be vi wed in th Patch Manager. On the media server, the Art-Net port number is the DMX p rt n mber minus 1.

Exampl : Vector Data connector and the media server are connected via a hub. The IP subnet i iden cal on Vector and the media server (90.x.x.x). On Vector the media server devices are pat hed to DMX port 4 and in System Settings ▶ DMX Protocols the Art-Net subnet is 0 and in the Art-Net column port 4 is checked. On the media server, the Art-Net configuration is 0 (subnet); 3 (DMX port number minus 1).

Vector can now communicate with the media server via Art-Net protocol.

1 Go to Tools ▶ Settings ▶ DMX Protocols and in the Art-Net column, check the DMX port that the media server is patched to.

Example: If the media server is patched to DMX port 4, tap the check box for port 4 in the Art-Net column.
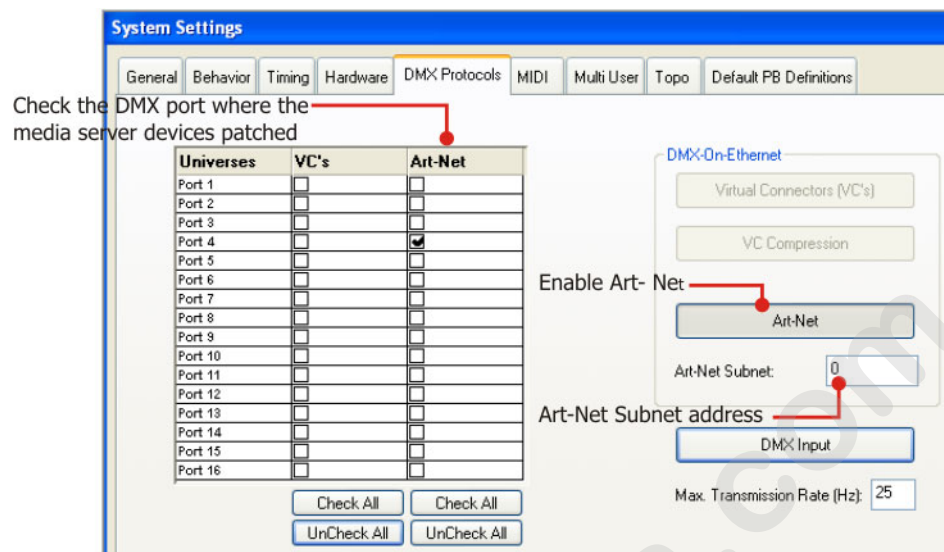
Figure 132: Art-Net setup in System Settings ▶ DMX Proto ol

2 Enable **ART-NET**.

The Art-Net Subnet field is active.

3 Set the Art-Net subnet to the same subnet as he media server.

The default Art-Net subnet for Vector and mos media servers is 0.

4 Tap **OK**.

To control media servers over DMX

Some media servers have native DMX connector and are subject to normal DMX control. The media server manufacturers r commend using Art-Net to control media servers. If you are using DMX and want to download media file thumbnails, all Ethernet connections and config-urations must be do as described in this document.

Connecting media servers to Vector

Ethernet co nection	*Cable type*
HUB (r commended)	Standard Ethernet cable
tor DATA port (direct connection)	Crossover Ethernet cable

Arkaos media server

To connect Arkaos to Vector

1 Change the Arkaos media server subnet to match Vector's subnet.

Example: If Vector IP is 91.xx.xx.xx, then the Arkaos IP must also begin with 91.

To configure Arkaos

These instructions are for Arkaos version 3.6.5.

1 Change the Arkaos computer workgroup to **COMPULITE**.

Go to Control Panel ▶ double click System ▶ Select the Computer Name tab ▶ Click Change▶ Type **COMPULITE** in the Workgroup Name field. Click OK twice and close the Control Panel.

2 Restart the Arkaos computer if the workgroup name or IP address was changed.

3 Run the Arkaos application -

4 On Arkaos open the Edit menu, select Preferences, then select DMX Setup.

ATTENTION! If DMX Setup does not appear in Preferences (on Arkaos) Ark o is either in demo mode or you do not have a DMX Key registration.
For full instructions consult Arkaos documentation.

---

5 From the shortcut menu, choose DMX Setup.

6 Configure according to Figure 133.
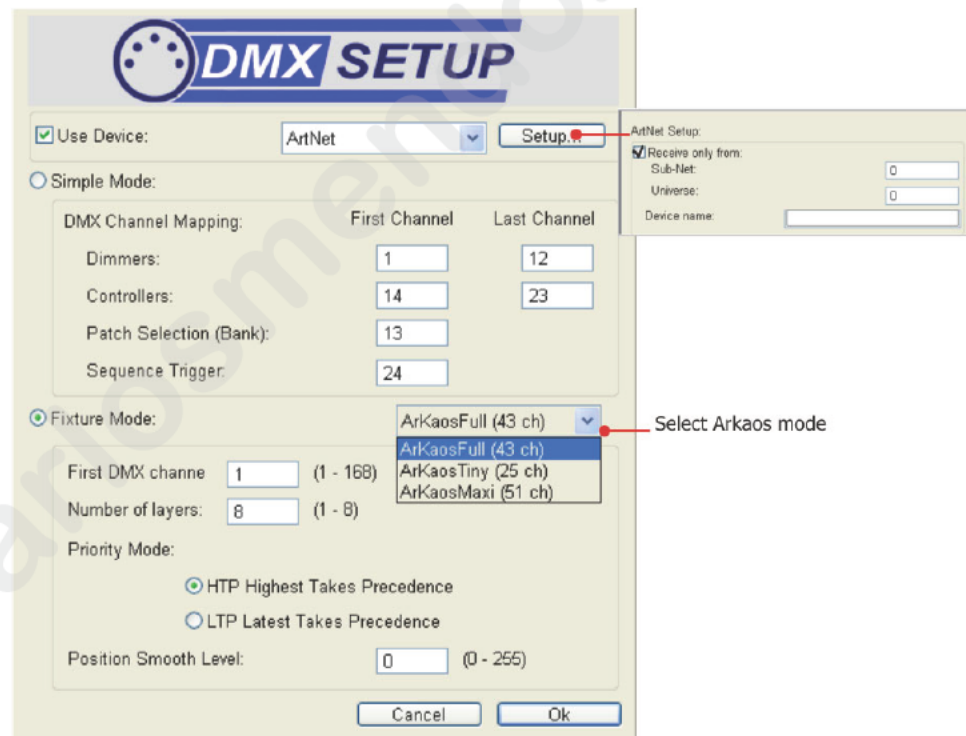
Figure 133: Arkaos DMX and Art-Net setup (see Arkaos user's guide)

To patch Arkaos devices on Vector

1 Open the Vector **Patch Manager**.

2 Import the Arkaos devices according to the Arkaos mode (Maxi, Full, or Tiny).

3 Create and patch Arkaos devices according to the number of layers configured in the Arkaos media server

4 Save and exit the Patch Manager.

ATTENTION! To download thumbnails media server devices require exact names!
IF ARKAOS IS RUNNING ON WINDOWS! Make sure that the Arkaos device names
are identical to the **Arkaos computer name**. Example: If the Arkaos computer name is
Arkaos-00123, the devices must be named Arkaos-00123_1, Arkaos-00123_2, etc.

IF ARKAOS IS RUNNING ON MACINTOSH! The name of the Arkaos device must be
identical to the **IP address of the Arkaos computer**. If Arkaos computer IP is 90.2.6.8
the devices names must be 90.2.6.8_1, 90.2.6.8_2, 90.2.6.8_3, etc.

Hippotizer V2 media server

To connect Hippotizer V2 to Vector

1 Change the Hippotizer V2 IP subnet to match Vector's IP subnet.

If Vector IP is 91.xx.xx.xx, then the Hippotizer V2 IP must also begin with 91.

2 On Hippotizer, check that the user name is 'vj' with no password or with the password 'vj'.

This is default on all Hippotizer V2 systems.

To configure Hippotizer V2

These instructions are for Hippotizer version 2.2.4.

1 On the Hippotizer computer, make sure that the media and mediamaps folders are shared
and there is a check in the Permissions check box to allow changes to the files.

2 Change the workgroup for the Hippotizer media server to **COMPULITE.** Go to Control
Panel ▶ double click System ▶ Select the Computer Name tab ▶ Click Change ▶ Type
COMPULITE in the Workgroup Name field. Click OK twice and close the Control Panel.

3 Restart the Hippotizer V2 computer if the workgroup name or IP address was changed.

4 On the Hippotizer computer, run Hippotizer Setup -

5 On the General tab, select the mode.
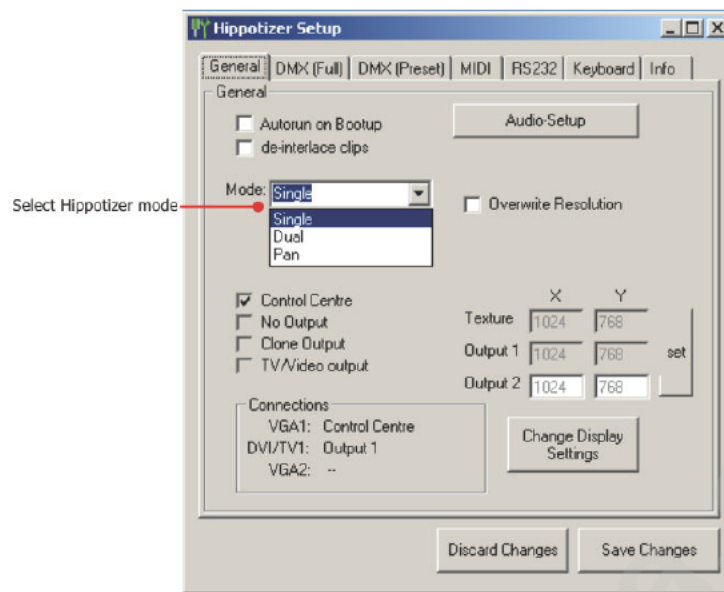
Figure 134: Hippotizer Setup dialog box, General tab s e th Hippotizer user's guide)

6 On DMX Full tab, check Enabled and configure the Art Net subnet.
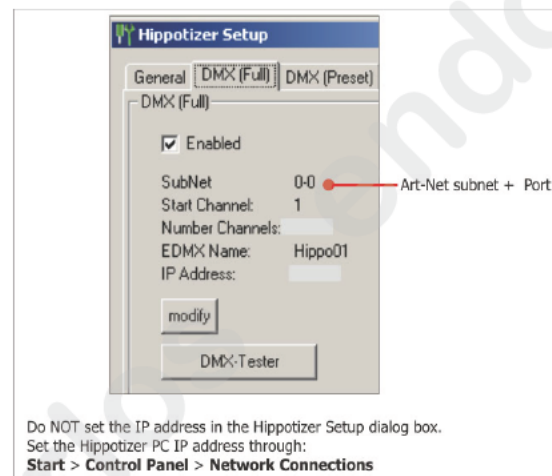
Figu 135: Hippotizer Setup dialog box, DMX tab detail (see the Hippotizer user's guide)

7 Save changes and run the Hippotizer - .

To patch Hippotizer V2

1 Open the Patch Manager.

2 Import, create, and patch Hippotizer devices.

Device Mode	Number of devices to create and patch
Single mode	1 x Hippotizer Master V2
	8 x Hippotizer Layer V2
Dual mode	1 x Hippotizer Master V2
	4 x Hippotizer Layer V2
	1 x Hippotizer Master V2
	4 x Hippotizer Layer V2
Pan mode	1 x Hippotizer Master V2
	1 x Hippo Pan Master V2
	4 x Hippotizer Layer WIDE V2
	4 x Hippotizer Layer V2

> **IMPORTANT!** The DMX address for the Master must always be before the DMX address of the layers. Example: Master is DMX 1 and the layers start at DMX 56.
>
> In each mode, set DMX addresses according to the order that the devices appear in this table.

3 When naming the Hippotizer V2 devices, remember that to download thumbnails media server devices require exact names!

Example: If the Hippotizer computer name is Hippov2-00123, the fixture layers must be named Hippov2-00123_1, Hippov2-00123_2, etc.

4 Save and exit the Patch Manager.

Hippotizer V3 media server

To connect Hippotizer V3 to Vector

1 Change the Hippotizer V3 IP subnet to match Vector's IP subnet.

If Vector IP is 91.xx.xx.xx, then the Hippotizer V3 IP must also begin with 91.

Configure Hippotizer V3

These instructions are for Hippotizer version 3.0.12.

1 Change the workgroup for the Hippotizer media server to **COMPULITE.** Go to Control Panel ▶ double click System ▶ Select the Computer Name tab ▶ Click Change▶ Type **COMPULITE** in the Workgroup Name field. Click OK twice and close the Control Panel.

2 Restart the Hippotizer computer if the workgroup name or IP address was changed.

3 On HippoNet Overview, open the Engine Settings to select the mode.

4 Run the Hippotizer Engine - and then the Zookeeper -

Select mode
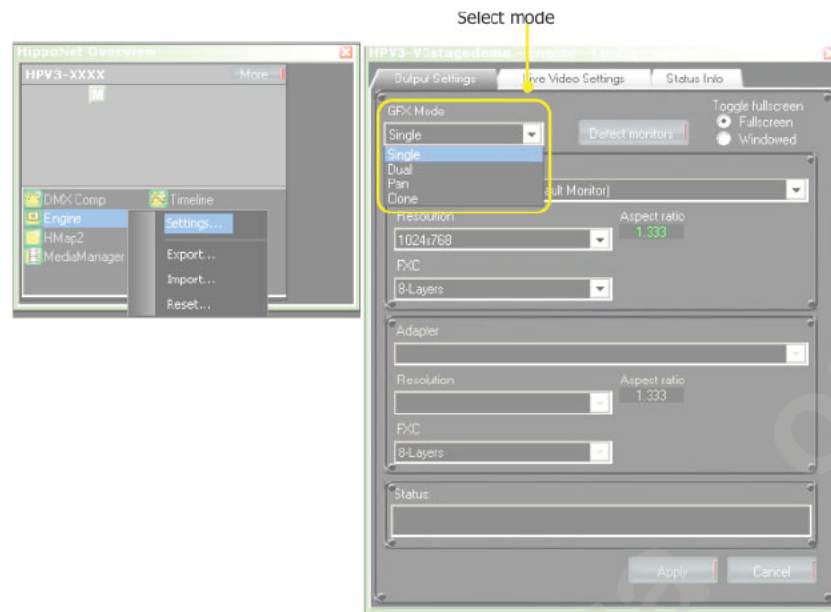
Figure 136: Hippo V3 Setup (see the Hippotizer use s guide)

5 On HippoNet Overview, open DMX Component Sett gs o set DMX and Art-Net configuration.

6 Check DMX On.

7 Uncheck Update.

8 Double click an Art-Net univers to ch nge the Art-Net configuration.
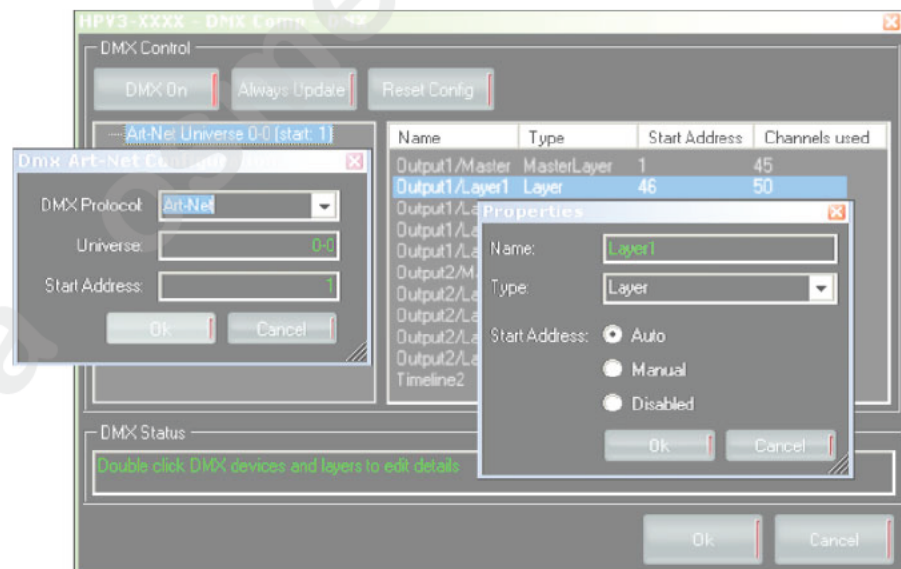
Figure 137: Hippotizer V3 DMX setup (see the Hippotizer user's guide)

ATTENTION! To connect with Vector, the Hippotizer media server must have a DMX component and an Hmap2 Server Component. In HippoNet Overview, check if these components are present. If they do not appear, add them to Hippotizer.

For full instructions consult Green Hippo documentation.

To patch Hippotizer V3

1 Open the Vector Patch Manager.

2 Import, create, and patch Hippotizer devices.

Device Mode	Number of devices to create and patch
Single	1 x Hippotizer Master V3 8 x Hippotizer Layer V3
Dual	1 x Hippotizer Master V3 4 x Hippotizer Layer V3 1 x Hippotizer Master V3 4 x Hippotizer Layer V3
Pan	1 x Hippotizer Master V3 1 x Hippo Pan Master V3 8 x Hippotizer Layer V3

IMPORTANT! The DMX address for the M ster must always be before the DMX address of the layers. Example Master is DMX 1 and the layers start at DMX 46.
In each mode, set DMX address s according to the order that the devices appear in this table.

3 Save and exit the Patch Manager.

ATTENTION!

To download thumbnail media server devices require exact names! Example: If the Hippotizer name is Hippov3-00123, the fixture layers must be named Hippov3-00123_1, Hippov3-0 123_2, etc.
If medi files have been added to Hippotizer V3, it is necessary to restart the Hippotizer sof are o download the new thumbnails.

Catalyst me ia server

Vector supports Catalyst media servers from Catalyst version 4.0.

To connect Catalyst to Vector

1 Change the Catalyst media server IP subnet to match Vector's IP subnet.

If Vector IP is 91.xx.xx.xx, then the Catalyst IP must also begin with 91.
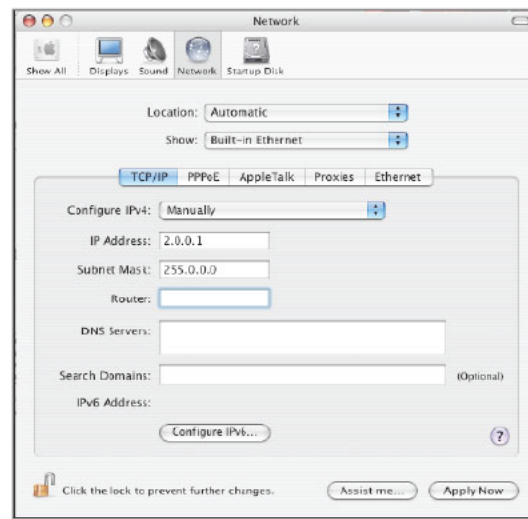
Figure 138: Catalyst Network dialog box (see the Catalyst user's guide)

To verify the connection between Vector and Catalyst

1 Make sure the Catalyst computer is running.

2 On Vector, browse to http://[Catalyst_IP]:8080/ tws iles.html.

Example: browse to http://91.0.0.5:8080/catws files html - where 91.0.0.5 is the Catalyst computer IP.

You should see an HTML page with ll the installed media thumbnails.

3 Then browse to http://[Catalys IP] 080/catws/Images/000_002.jpg.

You should see the thumbnai for file 2 in folder 0. This verifies that the connection is OK and the thumbnails are acc ssible.

Now the media picker for the file and the folder parameters are available.

To patch Catalyst

1 Patch th Catalyst layers in the Catalyst computer.

Con ult the Catalyst user's guide for details.

2 Ope the Vector Patch Manager.

3 Import the Catalyst v4.cvd device files located in the High End folder.

4 Create and patch Catalyst fixtures.

5 In the Name field enter the Catalyst computer IP address.

ATTENTION!

To download thumbnails media server devices require exact names! Example: If Catalyst computer IP address is 2.0.0.5, the layer names must be 2.0.0.5_1, 2.0.0.5_2, 2.0.0.5_3, etc. Note that Vector automatically appends _* to the layers.

6 Save and exit the Patch Manager.

Downloading thumbnails

Vector supports thumbnails for:

- Arkaos
- Hippotizer V2
- Hippotizer V3
- Catalyst V4

Before downloading thumbnails, perform all connections and configurations required by th media server. See <u>"Arkaos media server" page 353</u>, See <u>"Hippotizer V2 media server" page 355</u>, See <u>"Hippotizer V3 media server" page 357</u>, See <u>"Catalyst media server" page 359</u>

> **ATTENTION!** For Arkaos media server! Art-Net must be enabled to d wnload thumbnails.

There is an option to save thumbnails when saving a show. The adv ntage of saving the thumbnails with your show is that you can then program without the media   erver being connected. If some media files were added or changed, you must download the thumbnails again.

> **Note:** Although it is allowed to save thumbna s in he how it significantly increases show file size.

To download media server thumbnails

1 Select fixtures.

2 Tap ***DOWNLOAD THUMB***   located on the second page of the Editor tool bar.
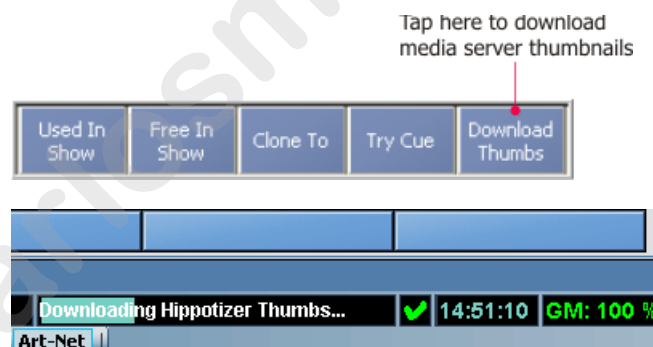
Figure 139: A progress bar shows the thumbnail download.

If there is a communication failure, an error message is generated and the procedure is aborted. If the procedure does not succeed, thumbnails that were present in the system are usually still available.

Selecting folders and media files

Vector supports media file previews for:

- Arkaos
- Catalyst

■ Hippotizer V2 and Hippotizer V3

Media folders and media files are selected using the Select Files and Select Files pickers.
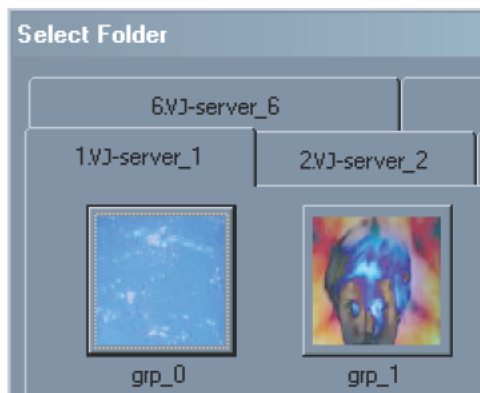
Figure 140: Folder picker showing available media folders

Figure 141: Media file picker showing images available in the selected folder

ATTENTION! Media server pickers have one tab for each layer (device). Make sure you choose media for each layer.

To select folders and media

1 Select the media server fixtures.

2 To select a media folder:

Hippotizer V2 and V3 - Double tap the *BANK* parameter to open the Media Folder pickers.

Arkaos - Double tap the *TYPE OF VISUAL* parameter to open the Media Folder pickers.

Catalyst - Double tap the *FOLDER* parameter to open the Media Folder pickers.

The folders are displayed, showing a thumbnail for the first image in the folder.

3 Select an media folder.

4 To open the Media File picker:

Hippotizer V2 and V3 - Double tap the ***CLIP*** parameter.

Arkaos - Double tap the ***INDEX OF VISUALS*** parameter.

Catalyst -Double tap the ***IMAGE FILE*** parameter.

Thumbnails of the media contained in the selected folder are displayed.

5 Select a media file.

6 Close the picker.

Appendix 1   Backups, Peripherals, DMX Input

This chapter contains the following sections:

Master and slave consoles

The master/slave feature enables connecting 2 Vector lighting consoles in a master/slave configuration. In slave mode, the console does not transmit VC's. In case of master console failure, or loss of connection, the slave takes over as master console after 10 seconds.

The master and slave consoles are automatically synchronized and the show running on the master console is automatically loaded on the slave console.

When connected, the master and slave consoles operate in parallel.

- The master and slave consoles display the same command line.
- The editor is shared by both consoles.
- Storing objects on one of the consoles stores the object on both consoles.
- The show is saved on both consoles.
- The slave console receives changes in data as they occur. Data includes new, deleted, and changed objects, such as cues, snaps, groups, libraries, etc. Editor levels are also transmitted to the slave console.
- Playbacks are synchronized periodically, provided that a significant change, such as a new assignment or a fade to a cue, has occurred.

Note: A PC/Laptop running version 3.06 (at least) of the Vector PC, can be connected as the slave.

The advantage of the master console and slave console operating in parallel is that when master console is in one location (the lighting booth, for instance) and the slave console is in another location (the house), you can program and control your lighting system from the slave without running DMX cables from the slave because the DMX output is from the master console.

Status display

Master and slave status is displayed in the command line. The status indications show whether the console is a master or a slave and to which console it is connected. If the connection is lost or cannot be established, the indications do not appear.

- The master console shows: *Master: Connected to #* (slave console's ID number).
- The slave console shows: *Slave: Connected to #* (master console's ID number).

Connecting the consoles

The Master/Slave connection is over the Ethernet network.

> **IMPORTANT!** The real time version in the master and the slave consoles must be identical for successful connection. If there is a mismatch in the RT softwar ver ions, a warning is generated on the master console.

To connect the consoles

Connect the control ports, located on the back panel of   ch console, using a crossed-linked Ethernet cable. (Recommended)

OR

Use an Ethernet switching hub. Connect both consoles to the hub using standard Ethernet cables from the Data port on each Vector.

Configuring the slave console

After the consoles are physical y connected, configure the slave console.
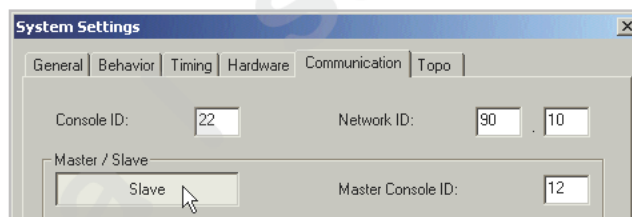
F gure 142: Master/Slave configuration

To configure the slave console

1 Go to the Tools menu and tap Settings. Open the Communication tab.

2 Tap Slave.

3 Set the ID of the master console. The master console's ID can be found on the master console, Tools ▶ Settings ▶ Communication.

4 Tap *OK*. The slave connects to the master. A successful connection is displayed in the slave's command line: *Slave: Connected to #* (master console's ID number).

ATTENTION! If the consoles do have the same RT version a warning is generated. It is necessary to update the consoles so they are running the same RT version.

To return the slave console to normal operation mode

Tools ▶ Settings ▶ Communication and then disable **SLAVE**.

Rules governing master/slave switchover

The rules governing master/slave switchover in the case of master console failure are:

- If the master fails, the slave takes over in 100 milliseconds.

- When the master is restarted, it is automatically set as the slave console. All d ta f om the current master console (formerly the slave console) is loaded to the new slav console.

- If the connection to the master is restored in less than 10 seconds after failure, it is re-established as the master console.

Using the Vector PC as slave

You can set Vector PC as the slave console.

When using Vector PC as a slave console there ar a few rules governing the output:

- If there are ePorts on the LAN, the slave s DMX output is according to the ePorts' address configuration.

- When using other Ethernet to DMX converters, that are not Compulite ePorts, only 1 DMX universe is output.

Connecting to the Vector console

- Connect the computer running Vector PC to Vector's DATA connector, on the back panel, using a crossed-linked Ethernet cable. (Recommended)

    OR

- Connec the pc running the off-line Editor to Vector's CONTROL connector, on the back panel, sing a standard Ethernet cable.

Setting the I ad ress on Vector PC

The PC's network ID must be the same as the target console's.

Note: If you are using Art-Net set the network ID according to the Art-Net IP (10 or 2).

To set IP address for Vector PC

See "configure the slave console" page 366.

Multi Users

In multi user mode, up to eight consoles can be used to run or program a show. Each node operator has full access for storing, deleting, and playback.

To enable a console as a multi user node

1 Go to Tools ▸ Settings ▸ Communication tab.

2 Tap **NODE**.

   When enabled the button's field is light.

3 Enter the master console ID number.

   All nodes in a multi user network must connect to the same master con ole
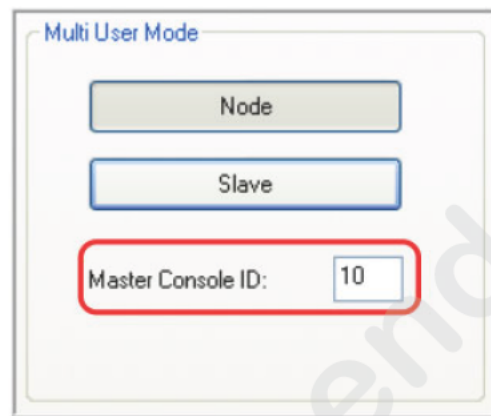
Figure 143: Master Con ole ID field

ATTENTION! A console an be designated as a node even if it is not yet connected to the master console.

Live display

Each co ole perator sees the output of all the consoles. The current, local editor is displayed in white Other local editors and editor values from other consoles are displayed in gray.

 ach ode displays its own command line.

Storing all editors

The multi-editor option controls the source of information that is stored in cues. **MULTI EDITORS** is accessed through **STORE OPTIONS** on the Editor tool bar in store mode or in Tools ▸ Settings ▸ Behavior tab

■ **MULTI EDITORS** enabled - all information active in the various editors is stored.This includes the console's internal editors, the Editor Wing in standalone mode, and Vector Node.

■ **MULTI EDITORS** disabled - only information in the console's current editor is stored.

A

To store output from all the editors

1 Press **CUE** and select the cue number.

2 If necessary, tap *STORE OPTIONS* and enable *MULTI EDITORS*.

3 Press **STORE**.

E

To store output from all the editors

1 Press **STORE**.

2 Press **CUE** and select the cue number.

3 If necessary, tap *STORE OPTIONS* and enable *MULTI EDITORS*.

4 Press **ENTER**.

MULTI EDITORS remains enabled until it is manually disabled.

Remote panels

Vector supports remote panels on two comm n p atforms:

- Pocket PC
- PC/laptop

Vector and the remote panels wor interlaced.

Use Vector's remote panel ppli ations for editing functions.

Setting up the network

Setting up the Vec or network consists of:

- Set ing th IP addresses for the console and the remote panel.
- Establishing the network connection

Vecto 's IP address is defined as:

- Network ID - 2 bytes define the general network, to which Vector is connected.
- Console ID - 1 byte defines the console's unique identifier.
- Component ID - a 1 byte identifier for network components within the console. The realtime component ID is 10. The Windows component is 1. This is factory configured and cannot be changed.

The remote panel's IP address is defined as:

- Network ID - Same as the target console.
- Any number - 0 - 254
- Any number - 1 - 254

Example:

Vector IP address

Network ID	Console ID	Component ID
90.10.	59.	1(Windows)

Remote panel IP address

Network ID	Any number	Any number
90.10.	0 - 254.	1 - 254

To set Vector's network and console IDs

1   Tap the Tools menu and choose Settings. The System Settings dialog box opens.

2   Enter the console ID and network ID in the appropriate fie ds Se <u>"DMX Protocols"</u> <u>page 341</u>.

3   Tap *OK*.

To connect Vector and the remote panel

Connect the remote panel directly to the Contr l port on Vector's back panel using a standard Ethernet cable.

OR

Connect the remote panel via a hub. Use a standard Ethernet cable to connect between the Control port and the hub's Uplink port or use a crossed Ethernet cable and connect to one of the hub's ordinary ports.

To connect the Pocket PC remote

1   Start the Ve tor iControl application.

2   Open the   ew menu, located on the bottom toolbar, and choose Connections.

3   F m the Available Consoles combo box, select the target console.

4   Press Connect. When the connection is successful, the disconnected message is replaced by *Connected*.

To connect the PC remote

1   Start the Vector Remote Panel application.

2   Move the mouse pointer to the top of the panel to open the menu bar.

3   Open the Application menu and choose Connect.

4   Select the target console.

5   Press OK.

DMX Input

A DMX source, such as a second lighting computer or a manual desk can be connected to the Vector. DMX input controls all fixture types. DMX input for fixtures is integrated into the main console output.

Vector has two DMX input ports. For every 4 DMX output ports, there is one DMX input port.

There are no constraints on the DMX Input; it is possible to patch DMX input to all available output ports. There is no default DMX Input patch.

Each DMX input address can be patched:

- Dimmer to fixture (if no parameter is specified the system defaults to the dimmer parameter)
- Dimmer to macro
- Dimmer to fixture and macro

To enable/disable DMX Input

1 Open Tools ▸ Settings ▸ DMX Protocol tab.

2 Tap *DMX INPUT*.

When enabled, the button has a light field

When disabled, the button has a dark field.

To clear the DMX input patch

1 Press **DIM**.

2 Select the dimmer number on the keypad.

Range selections are also valid.

Or

To clear the entire DMX input patch, skip this step and continue with step 3.

3 Tap *INPUT PATCH*.

4 Tap *CLEAR SELECTED/ALL*.

The selection is cleared from the patch.

If there was no selection the entire DMX input patch is cleared.

5 For Enter syntax - Press **ENTER**.

Triggering macros with DMX Input

One macro can be patched per DMX input channel. The intensity level of the input channel triggers the macro. The default execution threshold is 50%. The execution threshold can be changed when patching the DMX input address to the macro.

A

To patch DMX input channels and macros

1 Press **DIMMER**.

2 Select a DMX input channel.

3 Tap *INPUT PATCH TO*.

4 Press **MACRO** and select the macro number.

5 Optional: Press **@** and enter a dimmer level to set a trigger threshold

FL, **ZR**, **ON** can be set as the trigger threshold for macros th t a e operated via DMX input.

Note: If no value is entered, the setting defaults to 50%

6 Press **STORE**

E

To patch DMX input channels and mac os

1 Press **STORE**.

2 Press *DIMMER*.

3 Select the patched output add ess (**#** → **#**)

4 Tap *INPUT PATCH T*

5 Press **MACRO** and se ect the macro number.

6 Optional: Press **@** and enter a dimmer level to set a trigger threshold.

FL, ZR, ON can be set as the trigger threshold for macros that are operated via DMX input.

Note: If no value is entered, the setting defaults to 50%.

7 Pr ss **ENTER**.

To c ear the DMX input /macros patch

1 Press *DIM*.

2 Select the patched input address (**#** → **#**).

3 Tap *INPUT PATCH TO*.

4 Press **MACRO**.

5 Press **DELETE** or **RELEASE**.

Confirmation is requested.

6 Tap *DELETE* to confirm or *CANCEL* to abort.

OR

1 Press *DIM*.

2 Select the patched input address (**# ➔ #**).

3 Tap *INPUT PATCH TO*.

4 Press **MACRO**.

5 Tap *CLEAR SELECTED/ALL* or (for Enter syntax) press **ENTER**.

Patching DMX input and fixture parameters

A

To patch DMX Input channels and fixture parameters

1 Press *DIMMER*.

2 Select the patched output address (**# ➔ #**).

3 Tap *INPUT PATCH TO*.

4 Select a fixture.

5 Select a parameter.

Note: If no parameter is selected, Vector defa lts to th dimmer parameter.

6 Press **STORE**.

E

To patch DMX Input channels and fix ure parameters

1 Press **STORE**.

2 Press *DIMMER*.

3 Select the patch d ou put address (**# ➔ #**).

4 Tap *INPUT PATCH TO*.

5 Select a fixture.

6 Sele t a parameter.

Note: If no parameter is selected, Vector defaults to the dimmer parameter.

7 Press **ENTER**.

To clear the DMX Input /fixture parameter patch

1 Press *DIM*.

2 Select the patched input address (**# ➔ #**)

3 Tap *INPUT PATCH TO*.

4 Select the fixture.

5 Press **DELETE** or **RELEASE**.

Confirmation is requested.

6 Tap *DELETE* to confirm or *CANCEL* to abort.

OR

1 Press **DIM**.

2 Select the patched input address (**#** → **#**)

3 Tap *INPUT PATCH TO*.

4 Select the fixture.

5 Tap *CLEAR SELECTED/ALL* or (for Enter syntax) press **ENTER**.

Playback input patch

Operate Vector playback devices through an external console. There is full access t all playback pages, including pages that are not currently active on the main console.

> **ATTENTION!** If your main Vector console has motorized faders we recommend not working on the same page both on the main console and on the xternal console as you may encounter resistance on the motorized faders.

A

To patch playback input

1 Press **DIM**.

2 Select the DMX address.

A range can also be selected

3 Tap *INPUT PATCH TO*.

4 Press **PLAYBACK** and specify the page and playback device number (**#/#**).

A range can al o be selected.

Or

Pre s **PLAYBACK** and specify the playback device number (**#**).

Th playback device(s) on the active page is selected.

5 Press **STORE**.

OR

1 Press **DIM**.

2 Tap *INPUT PATCH TO*.

3 Press the Select key for a playback device.

4 Press **STORE**.

To release playback input patch

1 Press **DIM**.

2 Select the DMX address.

A range can also be selected.

3 Tap *INPUT PATCH TO*.

4 Press **PLAYBACK** and specify the page and playback device number (#/#).

5 Press **RELEASE**.

Or

On the Editor tool bar, tap *CLEAR ALL*.

OR

1 Press **DIM**.

2 Tap *INPUT PATCH TO*.

3 Press the Select key for a playback device.

4 Press **RELEASE**.

Or

On the Editor tool bar, tap *CLEAR ALL*.

E

To patch playback input

1 Press **DIM**.

2 Select the DMX address.

A range can be selected.

3 Tap *INPUT PATCH TO*.

4 Press **PB** and specify the page and playback device number (#/#).

A range can also b sele ted.

Or

Press **PLA BACK** and specify the playback device number (**#**).

The playb ck device(s) on the active page is selected.

5 P ss **NTER**.

OR

Press **DIM**.

2 Select the DMX address.

3 Tap *INPUT PATCH TO*.

4 Press the Select key for a playback device.

5 Press **ENTER**.

To release playback input patch

1 Press **RELEASE**.

2 Press **DIM**.

3 Select the DMX address.

A range can be selected.

4 Tap *INPUT PATCH TO*.

5 Press **PB** and specify the page and playback device number (#/#).

Or

Press **PLAYBACK** and specify the playback device number (**#**).

The playback device(s) on the active page is selected.

6 Press **ENTER**.

OR

1 Press **RELEASE**.

2 Press **DIM**.

3 Select the DMX address.

4 Tap *INPUT PATCH TO*.

5 Press the Select key for a playback device.

6 Press **ENTER**.

OR

1 Press **DIM**.

2 Select the DMX input address.

3 Tap *INPUT PATCH TO*.

4 Press **PB** and specify the page and playback device number (#/#).

5 On the Editor tool bar, tap *CLEAR ALL*.

6 Press **ENTER**.

OR

1 Press **DIM**

2 Select th DMX input address.

3 Tap *NPUT PATCH TO*.

4 Pres the select key for a playback device.

5 Press **RELEASE**.

Or

On the Editor tool bar, tap *CLEAR ALL*.

6 Press **ENTER**.

Art-Net

To use Art -Net protocol you must	
• Connect the Vector and the Art-Net device.	Connect the Art-Net device to Vector's data connector. Use regular Ethernet data cable.
• Set the Vector network ID.	**To set the network ID** **1** Open the Tools menu. **2** Go to the Communication tab. **3** In Network ID field, enter 2 or 1 dep nding on the Art-Net device network setting.
• Enable Art-Net and set the Art-Net subnet offset.	**To enable Art-Net** **1** Open the Tools menu. **2** Open the Setti gs dialog box. **3** Go to the ommunication tab. **4** Tap Art Ne Enabled. When enabled the background is light. **5** Enter an integer from 0 - 15 in Art-Net Subnet field. **6** Tap **OK**. The data is saved and the dialog box closes.

Appendix 2   Automated playback

Playback can be automated using time lines, MIDI or SMPTE.

This chapter contains the following sections:

Time lines

A time line is a Vector show object comprised of a progresi n of events that are automatically triggered when reaching the time set for the event.

Events can include:

- Playback commands such as go, rever e di ection, free, playback release, etc.
- Macros
- Snaps

The time line representati   in the indications bar flashes when time line is in teach mode.

Events can be trigger d from an external SMPTE source and MIDI time codes (MTC) or through Vector's inter al c ck.

> **ATTE TION!** Only commands are recorded in time line events. Changes in fader levels ar n t re orded or recalled.

Time line views

Time lines can be viewed in spread sheet or graphic format.
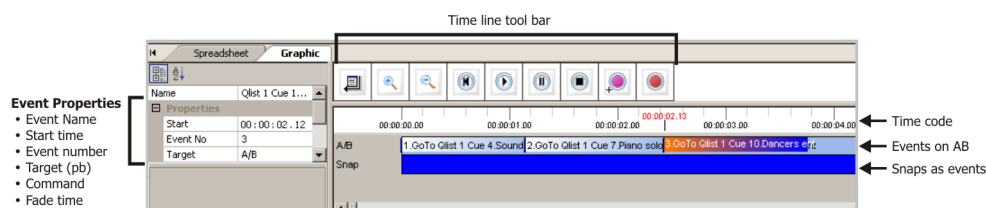
Figure 144: Time line graphical display

To view time lines

1   Set a pane (or tab) for time line (Workspace tree ▶ expand the Show node ▶ expand the Time Line node ▶ select a time line).

The selected time line is displayed in spread sheet format.

2   To view the graphic format, click the Graphic tab.

Time line tool bars

| Restart | Run | Pause | Stop | Set Time | Clear Events | Teach + Add New | Teach Overwrite | Event Number | Renumber Events |
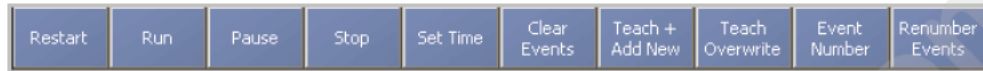
Figure 145: Time line mode on the Editor tool bar

Button	*What it does*
RESTART	Reset the time line clock to 00:00:00.00.
RUN	Run the time line events.
PAUSE	Pause the clock and remain in time l ne teach mode.
STOP	Stop the time line clock and xit time line teach mode.
SET TIME	Set time in [hours: minutes econds; frames] format.
CLEAR EVENTS	Clear all events in th active time line.
TEACH + ADD NEW	Teach a new time li e or add events to an existing time line.
TEACH + OVERWRITE	Overwrite an xisting time line.
EVENT NUMBER	Choos an event for editing or deletion.
RENUMBER EVENTS	Renumber events after adding new events to the active time line.

Restart Run Pause Stop

Show/Hide Properties Zoom in Zoom out   Teach + Add New Teach + Overwrite
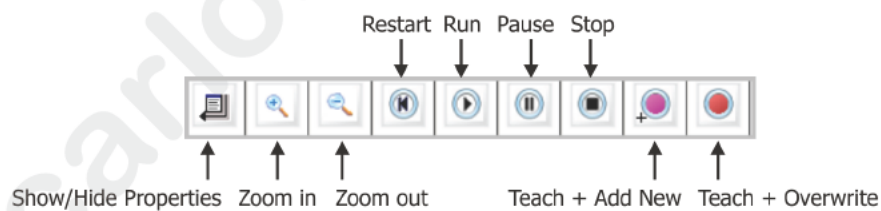
F gu e 146: Time line tools on the graphic display

Frame setting

You can set the frames per second (See "Frames per second" page 391). The options are:

- 24
- 30
- 25
- 30 Drop Frame

To change the frame setting

Go to Tools ▶ System Settings ▶ Communication tab and choose from the options in the Frames per Second drop down list.

Event fade times

- Fades to cues triggered by a time line event occur according to the cue fade times. If the cue's fade times are changed, the event fade time behaves according to the updated information.

- If an event uses GOTO time, the fade will always occur in GOTO time. Any change to the cue's fade times are ignored.

- Temporary cue commands are stored as time line events.

Working with time lines

Time lines are taught and edited using the buttons on the Editor toolbar n time line mode.

Teaching and storing time lines

The **TEACH + ADD NEW** and **TEACH OVERWRITE** but ons on the Editor tool bar save events to the time line.

To teach time lines

1 Press **SHIFT** + **TIME LINE**. The time ne toolbar opens.

2 Tap **TEACH + ADD NEW**.

3 Connect an external SMPTE r MIDI source.

When the SMPTE or MIDI source is active, it is automatically identified. You can start the programming the time line.

Or

Tap **RESTART** to restart Vector's internal clock and **RUN** to start the teach function.

4 Giv playback commands, operate snaps, and operate macros to create events.

Th events are stored on the time line.

A

To store time lines

1 After completing the teach-time line process, press **SHIFT** + **TIME**.

2 Enter the time line number on the keypad.

3 Press **STORE**.

The time line is stored.

E

To store time lines

1 Press **STORE**.

2 Press **SHIFT** + **TIME LINE**.

3 Enter the time line number on the keypad.

4 Press **ENTER**.

The time line is stored.

To overwrite time lines

The overwrite feature deletes events when reaching the time line trigger for the event.

1 Press **SHIFT** + **TIME LINE**.

The time line toolbar opens.

2 Tap *TEACH + OVERWRITE*.

3 Tap *RUN*.

The time line begins processing events.

4 Give playback commands, operate snaps, and operate macr s create events.

5 Store the updated time line.

6 When editing the active time line, remember that you ar editing a copy of that specific time line. After editing be sure to save to the act ve time line number.

To playback time lines

1 Press **SHIFT** + **TIME LINE** and select the ime line number.

2 Press **ENTER**.

3 Connect an external SMPTE or MIDI source, when the source begins its transmission the Vector clock synchronizes.

Or

Tap *RESTART* t res art Vector's internal clock and tap *RUN*.

The time l ne's vents are executed.

Editing time lines

You may ant to add events to the active time line.

When events are added to a time line they are arranged in the correct time sequence, however the vent numbers are not automatically updated. The events must be renumbered.

Events can be edited using the time line keys and buttons or directly on the time line graphical display.

To add events to a time line

1 Press **SHIFT** + **TIME LINE**.

The time line toolbar opens.

2 Tap *TEACH + ADD NEW*.

3 Tap *RUN*.

The time line begins processing events.

4   Give playback commands, operate snaps, and operate macros to create events.

These events are added to the active time line.

5   Store the updated time line.

To renumber new events

When events are added to the time line, they appear in the correct time sequence, but the numerical sequence of the events is not automatically update. You must renumber the events.

On the tool bar, tap **RENUMBER EVENTS**.

To edit event time

1   Press **SHIFT** + **TIME LINE**.

The Editor tool bar switches to time line mode.

2   On the tool bar, click **EVENT NUMBER**.

3   Enter the event number using the keypad.

Or

Select a range of events (**# ➔ #**).

4   Press **TIME LINE**.

5   Set an absolute time for the selected even using the numeric keypad.

Or

Change the time by pressi g **+** or   to advance the event(s) on the time line or go backwards on the time line.

For direct access to the frame, press ****.

6   Press **ENTER** if you re editing the active time line.

Or

Press **STORE** if the time line you are editing is not the active time line.

7   pea   steps 2 through 6, as necessary.

To edi   he time for a single event on the grid

1   Press **SHIFT** + **TIME LINE** and select a time line.

2   Press **EXAM**.

The spread sheet for the selected time line is displayed.

3   Tap the Time Code cell.

4   Enter the new time code in 00 (hours):00 (minutes):00 (seconds):00 (frames) format using the external keyboard.

To edit event time

1   Press **SHIFT** + **TIME**.

The Editor Tool bar switches to time line mode.

2 On the tool bar, click *EVENT NUMBER*.

3 Enter the event number using the keypad.

Or

Select a range of events (# → #).

4 Press **TIME**.

5 Set an absolute time for the selected event using the numeric keypad.

Or

Change the time by pressing **+** or **-** to advance the event(s) on the time line r g backwards on the time line.

For direct access to the frame, press \.

6 Press **ENTER**.

7 Repeat steps 2 through 6, as necessary.

To edit the time for a single event on the spreadsheet

1 Press **EXAM**.

2 Press **SHIFT** + **TIME** and select a time line

3 Press **ENTER**.

The spread sheet for the selected time line is displayed.

4 Tap the Time Code cell.

5 Enter the new time code n 00 (hours):00 (minutes):00 (seconds):00 (frames) format using the external keyboard

Note: When enter ng th time code, it is permitted to use single digits. Example: Entering the time ode for 15 frames, you type 0.0.0.15.

To edit the time for a single event using the graphical display

1 Click he event and, holding down the mouse button, drag the event to a new time slot.

2 Release the mouse button.

3 Remember to save the updated time line.

To edit the time for more than one event using the graphical display

1 Press and hold Cntrl and click events to select them.

2 Without releasing the Cntrl key drag to a new time slot.

All selected events move relatively.

3 Release the Cntrl key.

4 Remember to save the updated time line.

To copy and paste events using the graphical display

1 Right click an event.

2   Choose Paste from the shortcut menu.

3   Select the new position using the Current Position counter.

4   Right click the source event and choose Paste from the shortcut menu.

5   Choose Cursor Position from the shortcut menu.

     The event is pasted in the selected time slot.

To delete events using the graphical display

1   Right click an event.

2   Choose Delete from the shortcut menu.

3   The selected event is deleted from the time line.

To add text tags to time lines

1   Press **SHIFT** + **TIME LINE** and select the time line number.

2   Press **TEXT**.

3   Type text in the dialog box's text field.

4   Press **STORE**.

To delete time lines

1   Press **SHIFT** + **TIME LINE** and select t   tim line number.

2   Press **DELETE**. Vector asks for confirmation.

3   Press **DELETE** again.

A

To examine time lines

1   Press **SHIFT** + **TIME LINE** and select the time line number.

2   Press **EXAM**

     The time l ne exam is displayed in the active pane or in the dedicated exam pane.

E

To examine time lines

1   Press **EXAM**.

2   Press **SHIFT** + **TIME LINE** and select the time line number.

3   Press **ENTER**.

     The time line exam is displayed in the active pane or in the dedicated exam pane.

Scheduler

The scheduler is a tool for setting events that trigger macros according to date and time settings.
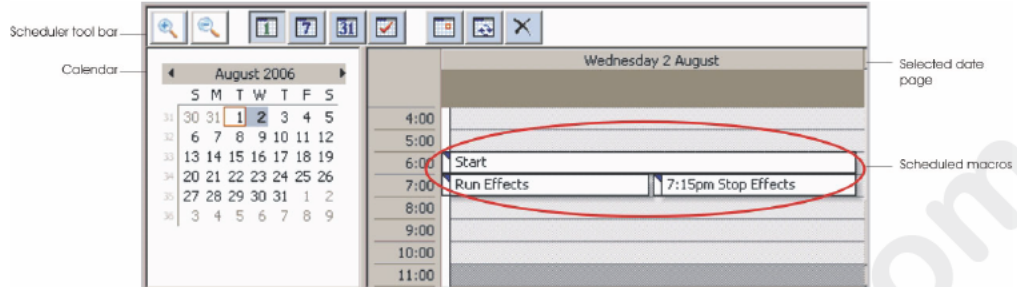
Figure 147: Scheduler

The icons on the scheduler tool bar control the view and open dialog boxes.
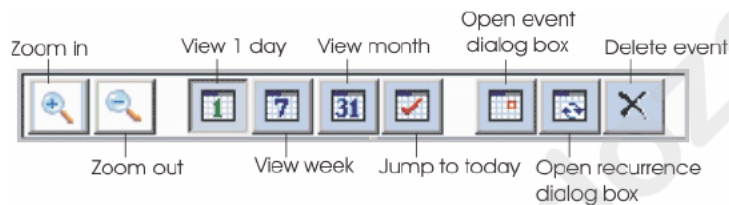
Figure 148: Scheduler tool bar

Clicking on a view icon changes the calend r disp ay in the right side pane. You can:

- View the selected day

- View one week (from Sunday hrough Saturday)

- View one month

- Zoom in or out

- Jump to the current date

Two dialog bo es a e u ed to schedule events:

- Edit Event - s hedule an event.

- Even Recurrence - set an event to repeat at specific intervals.
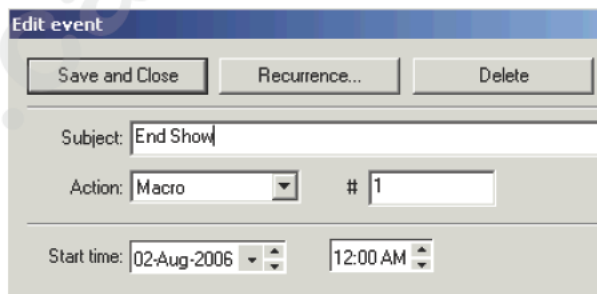
Figure 149: Edit Event dialog

Field/Button	Information
Subject	Free text that identifies the event.
Action	This is always Macro.
#	The macro number triggered by the event.
Start time	Set the start date and time in the spin boxes.
SAVE AND CLOSE	Save the event and exit the dialog box.
RECURRENCE	Open the Event Recurrence dialog box.
DELETE	Delete the selected event.

Figure 150: E ent Recur ence dialog box

Field	Information
Start	The start time set as in the Edit Event dialog box.
Recurre ce pattern	The repeat interval.
R ge of Recurrence	The start date set as in the Edit Event dialog box. The end date.
OK	Save the repeat information. and exit the dialog box.
CANCEL	Exit the dialog box without saving.
REMOVE RECURRENCE	Remove the entire series or the selected recurrence.

To open the scheduler

1 Chose a pane and tab for the scheduler.

2 Open the workspace.

3 Expand the Editor Tools node.

4 Chose scheduler.

The scheduler opens.

To select a date

Click on a date in the month calendar located in the left pane.

To change the view

Click one of the tool bar icons.

OR

Click zoom in or zoom out.

To schedule events

1 Click [icon] (New Event icon).

The Edit Event dialog box opens.

2 Type free text in the Subject field that gives information about the event.

3 In the # field, enter the macro number.

4 In the Start time fields enter the date and hour t   trigger the event.

5 Click *SAVE AND CLOSE*.

To repeat scheduled events

1 Click [icon] (Repeat Event i on).

The Event Recurrence dialog opens.

2 Enter the relevan information in the fields.

3 Click *OK*.

To edit or de ete   heduled events

1 Dou le click the event in the scheduler.

Th   Edit Event dialog box opens.

2 Edit the information in the fields and click *SAVE AND CLOSE*.

Or

Click *DELETE*.

The new information is saved.

Tip! When the view is set to 1 day, you can drag an event to a different hour.

To edit a scheduled recurrence

1 Double click an event in the scheduler.

The Open Recurring Item dialog box opens.

2 Choose Open this occurrence to edit the selected occurrence or choose Open the series to edit the entire series of recurrences.

The Edit Event dialog box opens.

3 Edit the information in the fields and click *SAVE AND CLOSE*.

Or

Click *RECURRENCE*.

The Event Recurrence dialog opens.

4 Click *OK*.

5 Click *SAVE AND CLOSE* in the Edit Event dialog box.

6 The new information is saved.

MIDI

ATTENTION! Vector consoles, 4D consoles, and Sab   con oles can send and receive MIDI over Ethernet without needing a MIDI c ble. Impo tant! MIDI-over-Ethernet is a unique, proprietary protocol for Compulite conso s. It works only when communication among Compulite consoles and not with exter al MIDI generators.

MIDI (Musical Instrument Digital Inter ac), is an industry-standard protocol that enables elec-tronic musical instruments and other el   tronic equipment to communicate, control, and synchronize with each other. MIDI tr nsmits event messages that trigger console operations. Console operations are mapp d to MIDI notes, so the MIDI note received determines which console operation is activ   d. The exterior instrument, which transmits MIDI, can be a synthesizer or a PC with a music program or any other instrument that communicates via MIDI.

For instance,   syn   esiz r is connected to the lighting console and a specific note is programmed to send a go comm   d that activates a crossfade pre-determined light cue. Specific notes can also be programme   to flash the contents of a playback device, thus allowing the musician to "play" the lights s h   or she plays the instrument.

MIDI tr   smission is often used to control other lighting consoles.

F   more information on MIDI go to: www.midi.org.

MIDI options, accessed through Tools ▶ Settings ▶ MIDI/SMPTE tab.

Vector supports MIDI in/out/thru. You can use MIDI to:

- Carry out panel commands
- Access some show control functions
- Remote trigger for macros 101 ➔ 106 and 901 ➔ 902

Note: To use this feature a MIDI card must be installed. If your Vector is not equipped with a MIDI card, contact your distributor or Compulite support.

> **Tip!** Instead of sending long MIDI strings, use Vector's macro feature. Program macros
> 101 ➔ 106 (Note On 96 - 101) and macros 901 ➔ 920 (Note ON 115 -124; Note Off 21 -
> 29) and trigger them via single MIDI note. See <u>"MIDI tables" page 397</u>.

MIDI settings

MIDI settings are located in the Tools▶Settings (dialog box), MIDI/SMPTE (tab).
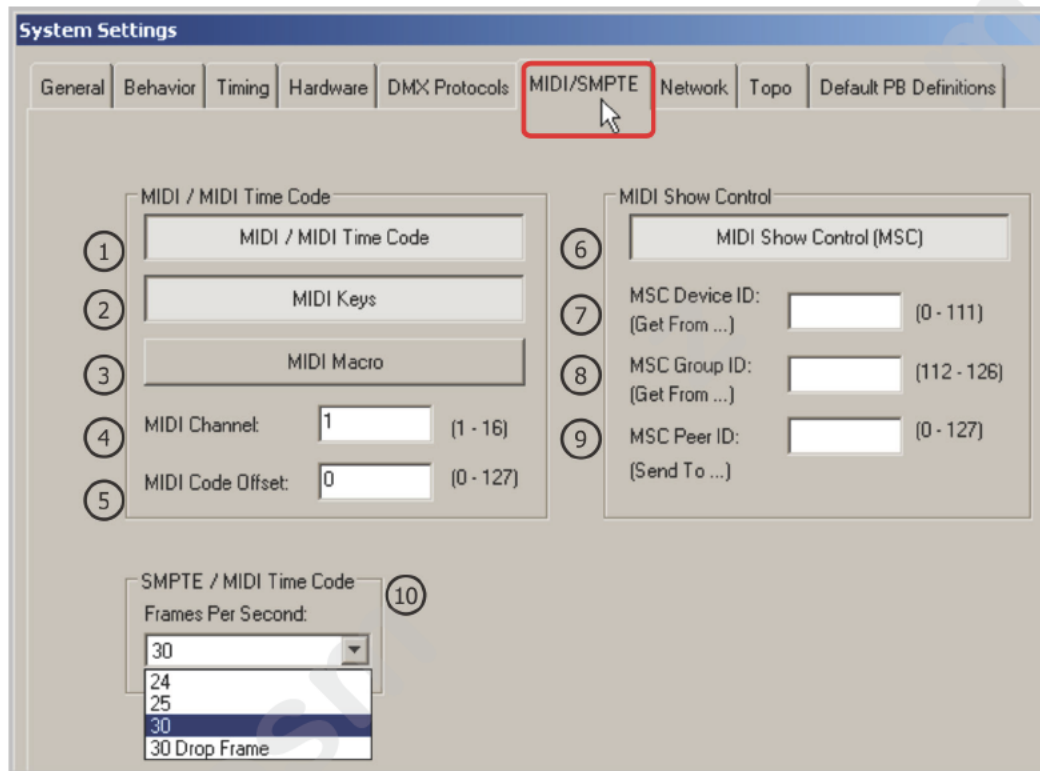
Figure 151: MIDI tab in t e System Settings dialog box

	Buttons/F elds	What it does	Default
1	**MIDI / MTC**	• Disabled - Vector does not receive or send MIDI transmission. • Enabled - Vector receives and sends MIDI transmission.	Disabled
2	**MIDI KEYS**	• Disabled - MIDI keys from an external MIDI device are not displayed on the Vector command line. • Enabled - MIDI keys from an external MIDI device are displayed on the Vector command line.	Disabled
3	**MIDI MACRO**	• Disabled - Vector does not receive or send MIDI macros. • Enabled - Vector receives and sends MIDI macros.	Disabled

	Buttons/Fields	What it does	Default
4	MIDI Channel	Set the MIDI channel. This is the channel that transmits MIDI. Consult your MIDI source for the correct channel. Legal values are from 1 - 16.	none
5	MIDI Code Offset	Support for MIDI devices broadcasting notes that are offset.	1
6	*MSC*	Enable/disable MSC (MIDI Show Control).	Dis bled
7	MSC Device ID (Send to)	See "MSC Device ID" page 391	none
8	MSC Group ID	See "MSC Group ID" page 391	none
9	MSC Peer ID (Get from)	See "MSC Peer ID" page 391	none
10	SMPTE/MIDI Time code Frames per second	There are four standard frame-rate ormats: • 24 - Mainly used in film work • 25 - European Broad asting Union standard used in countries where th mai s frequency is 50 Hz. (mainly Europe and Au trali) • 30 - Standard in the USA and Japan. • 30 Drop frame - Compensates for the discrepancy that accrues the 30 (it is actually 23.97) frames per sec- d ra . **Note:** MIDI Time Code or MTC allows a MIDI connection to carry the SMPTE time code, thus a suitably equipped MIDI sequencer can be synchronized to an absolute timing reference.	

To enabl MIDI

1 Go to Tools▶Settings. The System Settings dialog box opens.

2 Tap the MIDI tab.

3 Tap *MIDI*.

The MIDI Channel and MIDI Code Offset fields are now available.

4 Optional: Enter the MIDI channel in the MIDI Channel field.

Make sure that the MIDI channel matches the channel in your MIDI generating device.

5 Optional: Enter the offset in the MIDI Code Offset field.

MIDI macro

The MIDI Macro feature allows you to program a macro by transmitting MIDI code to Vector using a MIDI generator. The macro collects the MIDI codes received from the MIDI transmitting source.

MIDI macros can be attached to cues. Use the usual macro procedures to store, attach, and delete MIDI macros.

To enable Vector for MIDI macros

1 Go to Tools▶Settings▶Communication tab.

2 Tap *MIDI MACRO ENABLED*.

   Make sure *MIDI ENABLED* is also enabled.

3 Tap *OK*. The System Settings dialog box closes.

To store MIDI macros

1 Press **MACRO**.

   The Editor tool bar is now in macro mode.

2 Press **SHIFT** + **MACRO (TEACH)**.

   (M) now precedes the command line default   ode

3 Tap *MIDI MACRO*

4 Transmit MIDI commands from an xtern l device to the console.

   The MIDI commands are received and collected in a macro.

5 Press **SHIFT** + **MACRO**.

6 Press **STORE** and tap a m cro soft key.

   Or

   Press **MACRO**   elect the macro number on the numeric keypad, and press **STORE**.

   Pres **STORE**, select the macro number on the numeric keypad, and press **ENTER**.

   (See "Storing macros" page 299).

MIDI Show Control (MSC)

MIDI Show Control, or MSC, is an extension of the Musical Instrument Digital Interface (MIDI) standard. MSC enables all types of entertainment equipment to communicate with each other through the process of show control. MSC messages are transmitted serially and are compatible with conventional MIDI hardware. MSC compatible instruments have a built-in MIDI interface and many use the MIDI-over-Ethernet protocols to take advantage of higher bandwidth and the flexibility of networks.

MSC functioning is supported for the master playback only. Vector supports MSC's full frame format.

MSC commands can be sent to a single console or a group of consoles. ID numbers set in System Settings ▶ MIDI determine the command destination.

Buttons/Fields		Default
MSC Device ID (receive)	Units assigned a Device ID receive MSC commands explicitly addressed to that unit. The valid range for Device IDs is 0-111. Use 111 for 'AllCall' DeviceId.	none
MSC Group ID (receive)	Units assigned a Group ID receive MSC commands addressed to a group of units. Units may be assigned both Device and Group ID numbers. Valid Group ID numbers are 112 - 126.	none
MSC Peer ID (send)	The Peer ID number provides the address for outgoing commands. Peer ID numbers are 0 - 126. MSC comman are sent from the console to the Peer address. MSC commands must be actually done on the board. Example: To send a Go command to AB, the AB [GO] key must be p e d and a crossfade executed.	none

MSC group addresses

MSC provides 15 Group addresses.

MSC Group	Compulite Group ID	MSC Group	Compulite Group ID
1	112	9	120
2	113	10	121
3	114	11	122
4	115	12	123
5	116	13	124
7	117	14	125
8	118	15	126
9	119		
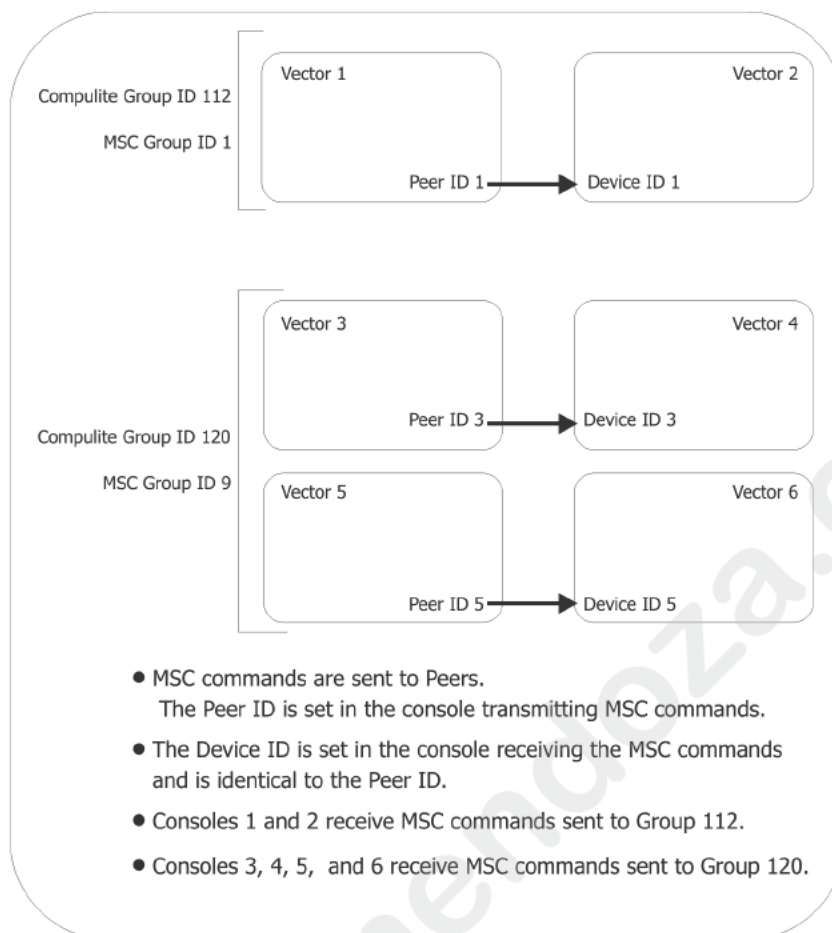
Figure 152: Examples of Group, P er, and Device setup for MSC

Playback operations using MSC

MSC is supported for th master playback only.

Command	What happens
Go	Initiates a fade to the next cue.
Hold (pa se)	Pauses the fade in progress.
Timed G	Applies a specified fade time to the incoming cue.
Resume	Restarts a fade that is paused.
Fire (trigger)	Operates macros 1 → 255.

To enable MIDI Show Control

1   Go to Tools ▸ Settings.

   The System Settings dialog box opens.

2   Tap the MIDI tab.

3   Tap **MIDI**.

   The MIDI Channel and MIDI Code Offset fields are now available.

4   Optional: Enter the MIDI channel in the MIDI Channel field.

Make sure that the MIDI channel matches the channel in your MIDI generating device.

5   Optional: Enter the offset in the MIDI Code Offset field.

6   Tap **MIDI SHOW CONTROL (MSC)**.

Vector is now enabled for MSC. The Device ID, Group ID, and PEER ID fields are now available.

7   Enter the ID numbers, as suits your setup, in the various fields.

8   Tap **OK** to save and exit System Settings.

Tap **APPLY** to save and remain in the System Settings dialog box.

SMPTE

Within the scope of the Vector lighting console, the SMPTE time cod is used to trigger time line events and, of course, as the MIDI Time Code. See <u>"SMPTE/MIDI Time code" page 391</u> and "<u>Time lines" on page 379</u>.

SMPTE   MIDI In/Out/Thru
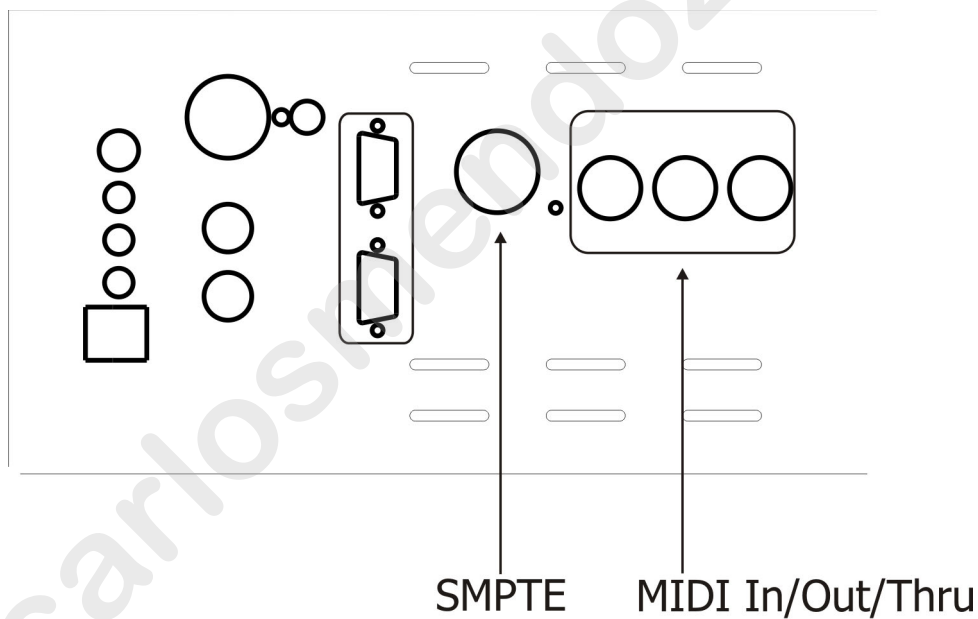
igure 153: SMPTE and MIDI connectors on the left side of Vector's back panel

MIDI tables

These MIDI tables are arranged according to MIDI note numbers.

MIDI Note On table

MIDI Note On table	
Command	*Note On #*
(not used)	0
DELAY (tool bar)	1
RELEASE	2
TIME	3
Macro 913	4
(not used)	5
SUB(MASTER)	6
FREE	7
CLEAR	8
REM DIM (tool bar)	9
→ (thru)	10
EDITOR FADE (tool bar)	11
▶ and **NEXT**	12
◀ and **PREV**	13
FLASH (Fixtur Test /tool bar)	14
ENTER	15
●	16
2	17
5	18
8	19
9	20

MIDI Note On table (continued)	
Command	*Note On #*
6	21
3	22
CE	23
(not used)	24
ZR	25
ON	26
L	27
7	28
4	29
1	30
0	31
STORE	32
FAN	33
TIME LINE	34
TEXT	35
DELETE	36
LOOP (tool bar)	37
EDITOR	38
STORE+	39
CUE	40
SPOT	41

MIDI Note On table (continued)	
Command	**Note On #**
EFFECT	42
UNDO	43
REDO	44
PASTE	45
DIMMER	46
RESET	47
CHANNEL	48
LINK (tool bar)	49
EXAM	50
STAGE	51
BLIND	52
COPY	53
SNAP GO (protect - pb faders)	54
@	55
PB RELEASE	56
MACRO 106	57
MACRO 105	58
MACRO 104	59
MACRO 103	60
MACRO 102	61
MACRO 101	62
SETU	63
PB/QKEY	64
master pb) **GO**	65
(master pb) **HOLD**	66
(master pb) **BACK**	67
GOTO	68

MIDI Note On table (continued)	
Command	**Note On #**
SEQ (PB control)	69
SELECT AB	70
(not used)	71
P key 1 (see, Figure 1 p.400)	3
P key 2 (see, Figure 1 p.400)	74
P key 3 (see, Figure 1 p. 00)	75
AB (righ key	76
AB (le key)	77
(not used)	78
P key 4	79
PB (fader mode)	80
PB RATE (fader mode)	81
CHANNEL (pb mode)	82
SHAPE	83
P key 4 (see, Figure 1 p.400)	84
P key 5 (see, Figure 1 p.400)	85
P key 6 (see, Figure 1 p.400)	86
P key 7 (see, Figure 1 p.400)	87
TEACH MACRO	88
SHIFT + *I* (slash)	89
SHIFT+ **RESET**	90
I (slash)	91

MIDI Note On table (continued)	
Command	*Note On #*
SHIFT + **II ◄** (Back/Hold All)	92
P key 9 (see, Figure 1 p.400)	93
PARK (**SHIFT** + **SNEAK**)	94
P key 10 (see, Figure 1 p.400)	95
MATRIX	96
Macro 901	97
Macro 902	98
Macro 903	99
Macro 904	100
Macro 905	101
Macro 906	102
LOCK X	103
LOCK Y	104
Macro 907	105
Macro 908	106
Macro 909	0
Macro 910	108
+@ (tool bar button)	109
SET	110
Macro 911	111
Ma ro 912	112
PB (**SHIFT** + **QLIST**)	113
B.O.	114
SHIFT+ **ACTIVE**	115
Deselect (**SHIFT** + ●)	116

MIDI Note On table (continued)	
Command	*Note On #*
COLOR	117
Macro 914	118
Macro 915	119
+	120
Macro 916	121
Macro 917	122
Macro 918	123
Macro 919	124
Macro 920	125
RATE	126
C NTROL (tool bar)	127

P Key 1
MIDI On 73

P Key 3
MIDI On 75

P Key 5
MIDI On 84

P Key 7
MIDI On 86

P Key 9
MIDI On 93

P Key 2
MIDI On 74

P Key 4
MIDI On 79

P Key 6
MIDI On 85

P Key 8
MIDI On 87

P Key 10
MIDI On 95
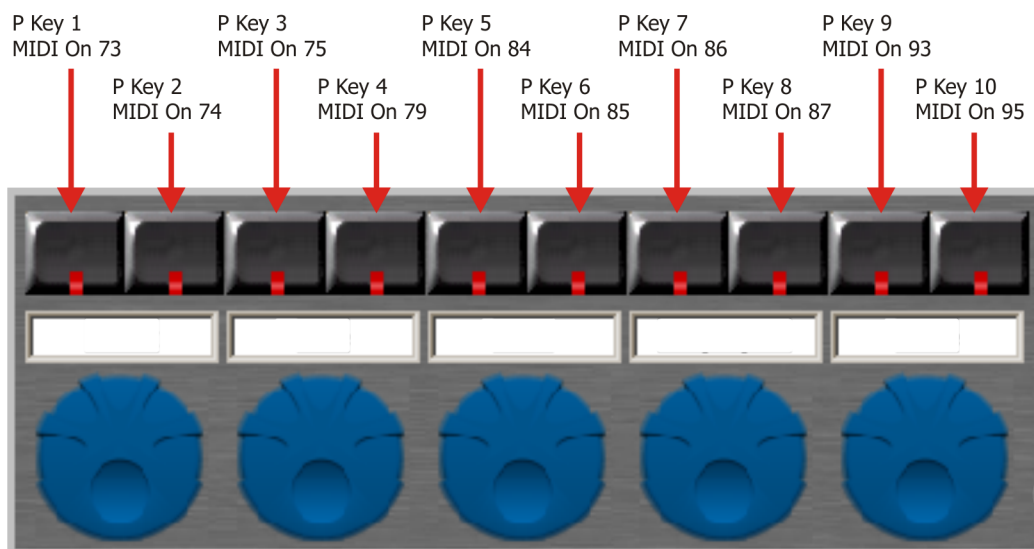
Figure 1: P keys (Vector Red, Vector Blue, and Vector PC)
and their MIDI Notes

Playback device

←Select key

←Top key

←Middle key

←Bottom key

Qkeys

←Select key

←Bottom key
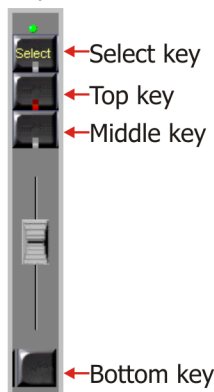
MIDI notes for these keys are found in the MIDI Notes Off and Control Change tables.

Figure 2: Playback device keys and QKeys are described
in the MIDI t bles by their location (Top, Middle, Bottom)

MIDI Note Off table

MIDI Note Off table	
Command	*Note Off#*
(not used)	0
CUT (**SHIFT** + **COPY**)	1
UPDATE	2
SHIFT + **FREE** (Free All)	3
SHIFT + **PB RELEAS** (PB Release All)	4
HOME	5
INTENSITY	6
BEAM	7
Bottom key PB 10 off	8
SELECT (playback 1)	9
SELECT (playback 2)	10
SELECT (playback 3)	11
SELECT (playback 4)	12
SELECT (playback 5)	13
SELECT (playback 6)	1
SELECT (playback 7)	15
SELECT (playback 8)	16
SELECT (playb ck 9)	17
SELECT (playback 10)	18
SELE T QKey 1	19
SELECT QKey 2	20
SELECT QKey 3	21
SELECT QKey 4	22
SELECT QKey 5	23

MIDI Note Off table (continued)	
Command	*Note Off#*
SELECT QKey 6)	24
SELECT (QKey 7)	25
SELECT (QKey 8)	26
SELECT (QKey 9)	27
SELECT (QKey 10)	28
SCROLL WIN	29
▲(PB page up)	30
▼(PB page down)	31
HIGHLIGHT	32
L WLIGHT	33
G OUP	34
QLIST	35
ACTIVE	36
Top key PB 4	37
Top key PB 5	38
Top key PB 6	39
Top key PB 7	40
Top key PB 8	41
Top key PB 9	42
MOUSE	43
(not used)	44
Bottom QKey 2	45
Bottom QKey 3	46
Bottom QKey 4	47
Bottom QKey 5	48

MIDI Note Off table (continued)	
Command	**Note Off#**
Bottom Q key 6	49
▲ (*STEP UP*) (tool bar)	50
▼ (*STEP DOWN*) (tool bar)	51
Top key PB10	52
Bottom QKey 7	52
Bottom QKey 8	54
IMAGE	55
(not used)	56
Bottom QKey 1	57
Bottom QKey 9	58
Bottom QKey 10	59
Top key PB1	60
Top key PB2	61
Top key PB3	62
Middle key PB1	63
Middle key PB2	64
Middle key PB3	65
Middle key PB4	66
Middle key PB5	67
Middle key PB	68
Middle k y PB7	69
Middle key PB8	70
Middle key PB 9	71
Middle key PB 10	72
Bottom key PB 1	73
Bottom key PB 2	74
Bottom key PB 3	75

MIDI Note Off table (continued)	
Command	**Note Off#**
Bottom key PB 4	76
Bottom key PB5	77
Bottom key PB 6	78
Bottom key PB 7	79
Bottom key PB 8	80
Bottom key PB 9	81
Bottom key PB 10	82
Bottom key PB 1of	83
Bottom key PB off	84
Bottom ey PB 3 off	85
B ttom ey PB 4 off	86
B ttom key PB 5 off	87
Bottom key PB 6 off	88
Bottom key PB 7 off	89
MACRO	90
Bottom key PB 8 off	91
Bottom key PB 9 off	92
SELECT PB 1off	93
SELECT PB 2 off	94
SELECT PB 3 off	95
SELECT PB 4 off	96
SELECT PB 5 off	97
- @ (tool bar button)	98
SELECT PB 6 off	99
SELECT PB 7 off	100
SELECT PB 8 off	101
SELECT PB 9 off	102

MIDI Note Off table (continued)	
Command	**Note Off#**
SNAP GO	103
SELECT PB 10 off	104
SELECT QKey 1 off	105
SELECT QKey 2 off	106
SELECT QKey 3 off	107
SELECT QKey 4 off	108
SELECT QKey 5 off	109
SELECT QKey 6 off	110
SELECT QKey 7 off	111
(not used)	112
SOLO	113
LIB	114
POSITION	115
LIB (tool bar) or **SHIFT** +**LIB**	116
PB PARAM (fader mode)	117
SELECT QKey 8 off	1 8
SELECT QKey 9 off	19
SELECT QKey 10 off	120
SNEAK	121
(not used)	122
SNAP	123
- minus)	124
(not used)	125
SHIFT + **SNAP GO**	126
(not used)	127

MIDI Control Change table

MIDI Control Change table	
Command	*Control change*
(not used)	0
Bottom QKey 1 off	1
Bottom QKey 2 off	2
Bottom QKey 3 off	3
Bottom QKey 4 off	4
Bottom QKey 5 off	5
Bottom QKey 6 off	6
Bottom QKey 7 off	7
Bottom QKey 8 off	8
Bottom QKey 9 off	9
Bottom QKey 10 off	10
Top key PB1 off	11
Top key PB2 off	12
Top key PB3 off	13
Top key PB4 off	14
Top key PB5 off	15
Top key PB6 off	16
Top key PB7 off	17
Top key PB8 off	18
Top k y PB9off	19
T p key PB10 off	20
Middle key PB1 off	21
Middle key PB2 off	22
Middle key PB3 off	23
Middle key PB4 off	24

MIDI Control Change table (continued)	
Command	*Control change*
Middle key PB5 off	25
Middle key PB6 off	26
Middle key PB7 off	27
Middle key PB8 off	28
Middle key PB9 off	9
Middle key PB10 of	30
MOVE	31
SHIFT + **GO** (PB con ol)	32
G (PB control)	33
ON (PB control)	34
PB RELEASE off	35
PB controls OFF (except **PB RELEASE**)	36
PRIO	37
JOIN	38
STEP	39
↔ (PB control)	40
II ◄ (PB control)	41
SHIFT + **BLIND**	42
MEDIA SERVER	43

MIDI Notes for triggering macros

MIDI Note ON for triggering CONSOLE MACROS	
Command	MIDI Note On
MACRO 101	62
MACRO 102	61
MACRO 103	60
MACRO 104	59
MACRO 105	58
MACRO 106	57
Macro 901	97
Macro 902	98
Macro 903	99
Macro 904	100
Macro 905	101
Macro 906	102
Macro 907	105
Macro 908	106

MIDI Note ON for triggering CONSOLE MACROS	
Command	MIDI Note On
Macro 909	107
Macro 910	108
Macro 911	111
Macro 912	112
Macro 913	
Macro 914	118
Macro 915	119
Macro 916	121
Macr 917	122
Macro 918	123
Macro 919	124
Macro 920	125
For more information about.Macros (see page 299)	

MIDI Notes for operating playback controls

MIDI Notes fo trigg ring PLAYBACK ON ROLS	
Command	MIDI Note
FREE	MIDI On 7
SUB(MASTER)	MIDI On 6
PB RELEASE	MIDI On 56
SEQ	MIDI On 69

MIDI Notes for triggering PLAYBACK CONTROLS	
Command	MIDI Note
TRIGGER	MIDI On 72
AB (right key)	MIDI On 76
AB (left key)	MIDI On 77
SHIFT + **II ◄**(Hold All)	MIDI On 92

MIDI Notes for triggering PLAYBACK CONTROLS	
Command	*MIDI Note*
SHIFT + **FREE**	MIDI Off 3
SHIFT + **PB RELEAS**	MIDI Off 4
SHIFT + **GO**	Control Change 22
GO	Control Change 33
ON	Control Change 34
SHIFT + **PB RELEAS** off	Control Change 35
PB controls OFF (except **PB RELEASE**)	Control Change 36
PRIO	Control Change 37
JOIN	Control Change 38
STEP	Control Change 39
⟷	Control Change 40
II ◀	Control Change 41
For more information about.Playback device controls (see page 199)	

MIDI Notes for operating master playback controls

MIDI Notes for triggering MASTER PLAYBACK CONTROLS	
Command	
GO	MIDI On 65
HOLD	MIDI On 66
B CK	MIDI On 67
For more information about.Master playback (see page 196)	

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Appendix 3 Visualizers

You can pre-program a virtual show in live mode with the Vector (or Vector PC) and 3D CAD lighting design software running on a PC.

Connecting the console and a PC

Consoles are connected to the computer running the visualizer via their Ethernet ports. The a ling used depends on whether the console is connected directly to the PC or is connected to the PC via an Ethernet network. Wireless communication is also supported.

Connecting Vector

Use either the Data port or the Control port to connect to the computer running WYSIWYG.

Cabling and connection

Connect from port	Connect to	Cable e uirements
Data	PC	Cros over cable
Data	Ethernet hub	Standard cable
Control	Ethernet hub	Crossover cable
Control	PC	Standard cable

After connecting to the PC, wheth r directly or via network equipment, there is no further requirement.

Verifying the connection on th PC

When the LED s on, it verifies that the physical connection is viable.

To verify t e connection on PC's running Windows 2000 and Windows XP

Start ▸ (Settings) ▸ Control Panel ▸ Network connections

When the connection is enabled, but not connected, it appears in blue with a red X super-imposed.

When the connection is enabled and working, the red X does not appear.

Configuring the network

To set up communication between the PC and the console, you must set the IP addresses.

The console and the PC must have Identical network ID numbers, Identical. subnet mask number.

To find the network ID for Vector

1 Open the Tools menu on Vector.

2 Tap Settings.

3 Open the Communication tab.

4 Jot down the network ID number and the console ID number and add the number 10.

Example:

Network ID	Console ID	
90.10.	59	10
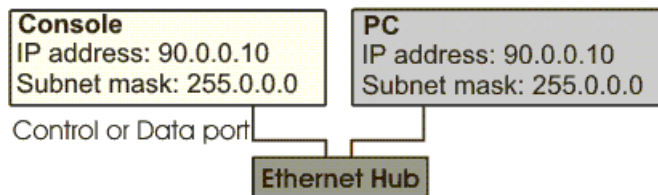
Figure 3: Vector lighting console and PC connected via an Ethernet hub

Configuring network settings on the PC

IMPORTANT! The network ID must be identical to th co   ole's network ID.

To set the IP address on the PC

Follow your operating system's instruct ons for configuring network connections. When you have set the PC's IP address verify the co nectivity.

To verify connectivity

1 Press WINKEY + R

2 In the Open field, type CMD.

3 Press Enter or click OK.

The cmd.e e is unning.

4 Typ : ping [IP], in our example: 90.10.15.10.

5 P ess Enter.

The result should look like this: *Reply from [IP]: bytes=32 times<1ms TTL=128*.

6 Close the window.

Transmitting virtual connectors (VC)

The console must be transmitting VCs in order to communicate with the visualizer.

To enable VC transmission for Vector

1 Open the Tools menu.

2 Tap Settings.

3 Open the Communication tab.

4 Tap *VC'S ENABLED*.

When enabled, the button's background is light.

> **Note:** It is recommended to enable **VC COMPRESSION** to conserve network resources.

5 Tap **OK**.

The console automatically transmits all patched ports over the network.

WYSIWYG

WYSIWYG can be installed on a PC or directly on the Vector console. WYSIWYG CE   packaged with Vector Red.

Installing WYSIWYG and the Compulite driver on the PC

Requirements:

- Windows XP & 2000
- NTFS-formatted hard drive
- WYSIWYG dongle (SE or CE)
- Compulite driver for WYSIWYG

> **ATTENTION!** Do not connect the WYSIWYG dongle. If it is connected remove it before installing the application. If you ha   he Standard Edition (SE), be aware that it is some-times called Perform. This   arning also appears when installing the application.

To install WYSIWYG

1 Insert the nstall tion disk or download the software version from http://www.cast-soft.com ▶ Downloads ▶ WYSIWYG.

Do nload the latest release.

2 Ru   the installation wizard.

3 Connect the dongle when requested.

4 Reboot the computer when requested.

> **Note:** Do not run the WYSIWYG application yet.

To install the Compulite driver

1 Download the Compulite driver from: http://www.compulite.com ▶ Downloads ▶ Visualizers.

The driver file name is: CompuliteWYSIWYG_DriverSetup.exe.

2 Run the installation wizard.

3 Read the licence terms and click Yes to continue.

4 Choose the dongle you are using and click Next.

5 If you are using the SE (Perform) dongle, choose your console from the console list.

6 Click Finish.

Note: It is not necessary to reboot the computer after installing the Compulite driver.

Establishing communication between Vector and WYSIWYG

Requirements

■ CE dongle. If using a console (CE) dongle, you must have at least one (1) fixture p   ched in the console before connecting to WYSIWYG. The console must set to transmit V   s.

■ SE dongle. If using a standard (SE) dongle there are no patch requirements before connecting to WYSIWYG.

■ VC transmission enabled on the lighting console. See "DMX Protocols" page 341

After completing the patch procedures, you can establish the connect on between the console and the WYSIWYG application.
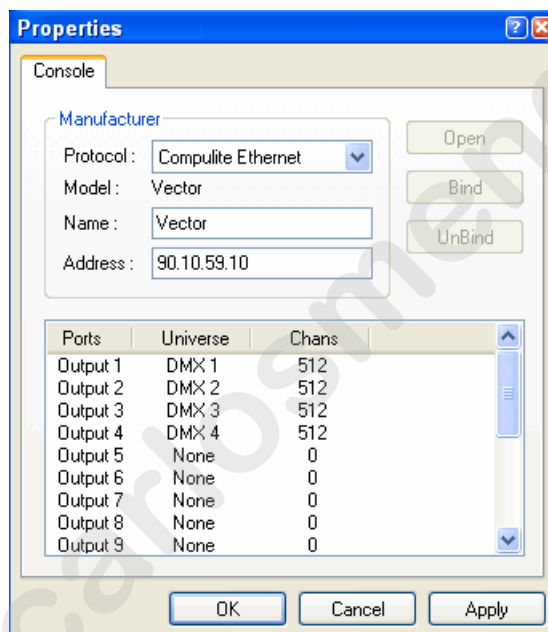
Figure 4: Connecting WYSWIG and Vector

To connect Vector and WYSIWYG

1 In the WYSIWYG application, click the Live tab.

2 Open the Live menu.

3 Choose Device Manger.

4 Expand the Consoles node.

5 Expand the Compulite node.

6 Choose your console.

7 Click Insert.

8 Click on the console and choose Properties.

9 In the Protocol field, change to Compulite Ethernet.

If Vector is your console, Compulite Ethernet is the only protocol available.

10 In the Address field, enter the **console's** IP address.

Make sure the last byte is 10.

11 The Bind procedure, opens the communication between the VC's defined in the con le and the output defined in the WYSIWYG patch.

■ Click on the required output.

■ Click Bind.

■ Select the relevant WYSIWYG ID number.

■ Click Select.

■ Check that the Universe column has been updated and show the propriate outputs.

■ Repeat this procedure for all required universes.

■ When the binding is complete, click OK.

12 Click Connect.

13 Verify that the status now shows *Connect d*.

14 Click Close.

Patching

IMPORTANT! In the WYSIWYG patch, you must set up ports. Do not use the default EDMX port, as this s rves different console.

IMPORTANT! In he WYSIWYG patch, you must set up ports. Do not use the default EDMX port as this serve a different console.

To instal the Compulite driver

ee "install the Compulite driver" page 409.

Establishing communication

After completing the patch procedures, you can establish communication between the console and the WYSIWYG application. If you intend to use the auto patch feature to transfer the patch to Vector, see .

To open communication between the console and WYSIWYG

1 In the WYSIWYG application, click on the Live tab.

2 Open the Live menu.

3 Choose Device Manger.

4 Expand the Consoles node.

5 Expand the Compulite node.

6 Choose your Vector.

7 Click Insert.

8 Click on the console and choose Properties.

9 Check that, in the Protocol field, Compulite Ethernet is displayed.

10 In the Address field, enter the console's IP address.

Make sure the last byte is 10.

11 The Bind procedure, opens the communication between the VC's defined in he c nsole and the output defined in the WYSIWYG patch.

■ Click on the required output.

■ Click Bind.

■ Select the relevant WYSIWYG ID number.

■ Click on Select.

■ Check that the Universe column has been updated an   sh ws the appropriate outputs.

■ Repeat this procedure for all universes.

■ When the binding is complete, click OK.

12 Click Connect.

13 Verify that the status now shows *Connected*.

14 Click Close.

Installing WYSIWYG on the Vector PC

Requirements:

■ Window XP & 20 0

■ NTFS- orma ted hard drive

■ WYSIWYG dongle (SE or CE)

■ Compulite driver for WYSIWYG

Finding the ne work ID

To find the network ID for Vector PC

1 Press WINKEY + R for the LAN IP.

2 In the Open field, type CMD.

3 Press Enter or click OK.

The cmd.exe is running.

4 Type: IPCONFIG and the IP computer's address.

5 Close the window.

IMPORTANT! If your PC has more than one network card, make sure you are entered the correct IP address for the correct LAN.

Installing WYSIWYG

Requirements:

- The WYSIWYG installation disk. If you do not have an installation disk, download the current software from the CAST website.
- The WYSIWYG dongle.
- The Compulite driver

ATTENTION! Do not plug in the dongle yet.

To install WYSIWYG

1 Insert the installation disk into your PC's disk drive and foll w he installation directions.

2 When the installation is complete, you are asked to go t file sntnllusb.sys.

3 When prompted, plug in the WYSIWYG dongle

4 Restart your computer.

IMPORTANT! Do not run the WYSIWYG pplication yet!

To install the Compulite driver

See .

Martin Show Designer (MSD)

Requi emen s:

- Windows XP & 2000

  Martin Show designer software

- Compulite MSD driver. Download the driver from http://www.lighthouse nl/download/msd/drivers/Compulite_v4500.zip

To connect MSD and console

1 On the lighting console, enable VC transmission.

2   Run Martin Show Designer.

3 Go to the Control menu and choose Select Driver.
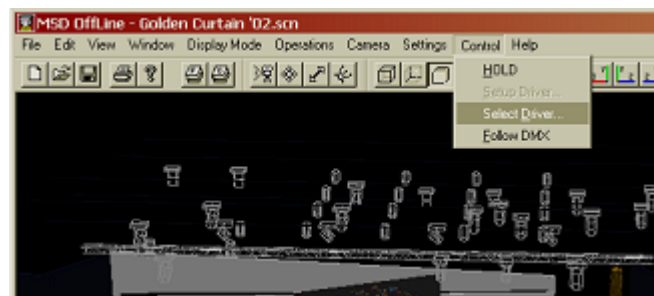
Figure 5: Martin Show Designer

4 Choose Compulite DMX.

5 Create the patch for your show on both the lighting console and on MSD

6 Go to the Control menu and choose Follow DMX.

MSD now receives the VCs transmitted on the network.

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Capture

Capture is supplied with the Compulite driver already installed in Capture versions 3.0 and Capture 2005. Patching must done on both the Vector console and in Capture.

To establish communication between Capture 3.0 and Vector

1 On Capture, go to the Tools menu.

2 Choose Providers.

3 Right click on Compulite Ethernet.

4 Click Enable.

To patch VC's (for Capture 3.0)

1 On the lighting console, enable VC's.

2 On Capture, go to the Setup Properties screen.

3 Right click the universe you want to patch.

4 From the shortcut menu, choose Provider.

5 Choose Setup.

6 Select the VC that the selected universe w ll be listening to.

To establish communication between Capture 2005 and Vector

There is no need to do anything special Capture automatically recognizes the console.

To patch VC's (for Capture 2005)

1 On the lighting console enable VC transmission.

2 On Capture, go to the Universes tab.

3 Click a un verse in the Project Universe pane.

4 Right cli k a universe in the External Universes pane and then click *Connect to selected proj ct universe* that appears in the short cut menu.
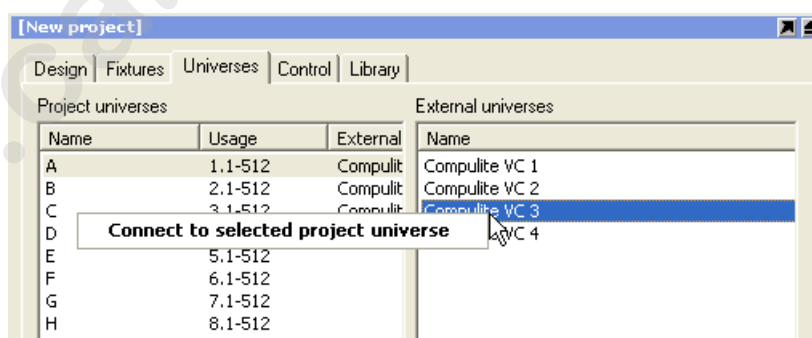
Figure 6: Connecting Capture and Vector

To begin working

On Capture, go to the View menu and choose Live mode.

Appendix 4   Device Builder

About Device Builder

The Device Builder is an application used to define devices (personalities) for Vector consoles.The devices can then be imported to Vector's Patch Manager.

You can open the Device Builder application from Vector's Tools menu as a stand alone applic tion or open it in the Patch Manager. Devices that were edited and saved when the Device Bu ld r was opened from the Patch Manager are saved with the show and are not added to the device ist in stand alone mode. You can add them to the general device library, using the **SAVE TO LIBRARY** option (See " Saving and importing devices" page 430.)

The file extension for Vector devices is *.cvd.

Opening the Device Builder in Vector

To open the stand alone Device Builder

Open Windows Start ▶ Programs ▶ Compulite   Ve   or   Device Builder.

OR

1   On Vector's main screen, go to the T ols menu.

2   Tap ![icon] Device Builder .

The Device Builder opens

To open the Device Builder in the patch manager

1   In the Patch Ma age workspace, select the Device node.

2   Right click a d vice in the Devices spread sheet.

3   Choose Prop   ies from the shortcut menu.

Th Device Builder opens to the selected device.

Tip! Put a shortcut to the Device Builder on your desktop.

To exit the Device Builder

Tap ![icon] .

The Device Builder closes.
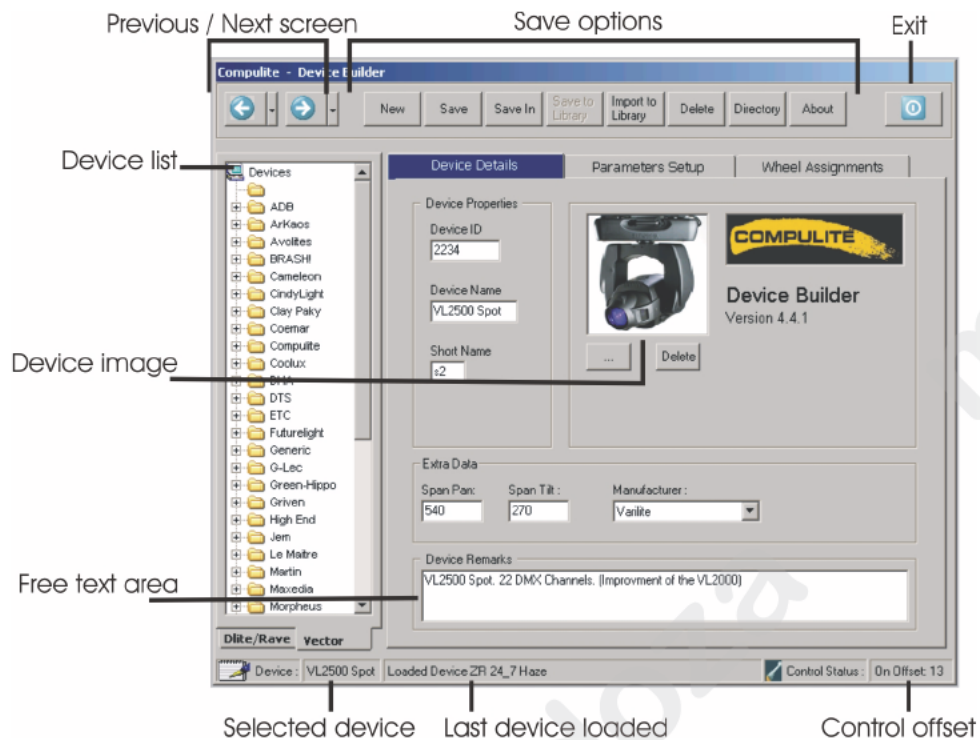
Figure 7: Device details tab - Vector

- The left pane shows a list of existing dev s organized alphabetically by manufacturer.

- The fields in the right pane tabs are used o edit existing devices and define new devices

Tab	What you d her
Device details	• Enter he d vice ID, device name, pan and tilt spans. • Attach a bitmap picture of the device. W i e remarks.
Parameter Set p	Map parameters to their DMX offset. • Set step ranges and properties. • Enter the control channel settings. • Set external DMX devices (yoke, scroller, etc.)
Con rols	• Map parameters to wheel banks and layers. • Determine wheel sensitivity.

Building and editing devices

The work flow for building devices is:

Tab	What you do here
Device Details	• Name and identify the device. • Each device must have a unique name and identifier. Device names can be up to 32 characters. Device IDs can be up to 5 digits. **Note:** ID numbers 9901 - 9999 have been reserved for user-d fined devices.
Parameter Setup	• Map parameters to their DMX offsets and edit p rameters. • Consult the manufacturer's manual for p amet rs' DMX offsets.
Wheel Assignments	• Map parameters to parameter banks and wheel layers. • Set wheel sensitivity.

ATTENTION! When the Device Builder is open d through the Tools menu, all device files open as read-only files. They cannot be dited. To edit devices open the Device Builder as stand-alone or through the Pa ch Manager.

To build a new device

1 Make sure that the Dev Details tab is on top and the device list is set for your console.

2 Locate the folder for th fixture's manufacturer in the device list and open it.

3 Tap *NEW* located on he upper button bar.

The New Device dialog box opens.

4 Type the device's name in the text field and tap *OK*.

The vice is added to the list in the folder that was selected.

5 Under Device Properties, enter a unique identifier in the Device ID field.

Note: An error message is displayed, if the ID number that is already in use. Correct the identifier and continue working.

6 The text in the Short Name field is the default name for fixtures created from the device.

The short name is automatically generated using the first two letters of the device's name. You can change the short name.

7 Under Extra Data, enter the pan and tilt spans.

Consult the manufacturer's specifications for this information.

8 Select the manufacturer from the Manufacturer combo box. If your device's manufacturer does not appear in the list, select Generic.

9 Free text can be typed in the Device Remarks field.

10 Optional- Display a picture of the device. Browse to the folder where the *.bmp images are stored and select the image.

11 Tap **SAVE** to save the new device.

A message confirming a successful export is displayed. The file name and path are also displayed.

12 Tap **OK** to confirm.

To delete a device

1 Select a device in the device list.

2 Tap **DELETE**.

Note: There is no undo when deleting devices.

3 Tap **YES** to confirm or **NO** to cancel the command.

Mapping parameter types to their DMX offsets

Each parameter must be mapped to its DMX offset. Consult the manufacturer's specifications for the correct DMX offsets.

Figure 8: Parameter Setup tab

There may be two or more instances of the same parameter type. Example: a device may have three color wheels. In this case, the same parameter type is mapped to three DMX offsets. In **Parameter Properties**, the parameter names are automatically set as Color Wheel, Color Wheel 2, Color Wheel 3.

To map parameters to DMX offsets

1 Tap the Parameter Setup tab.

2 Drag a icon from the parameter list and drop it in the map cell that corresponds to its DMX offset.

Consult the manufacturer's specifications for the correct DMX offset for each parameter.

3 Repeat Step 2 until all the parameters are mapped to their DMX offsets.

4 Double click the parameter icon to open the Parameter Properties dialog box for parameter editing.

5 Tap *SAVE*.

Note: To configure the control channel, See .

To map external parameters

Select the external parameter in the parameter list and drag it to he Extern area located below the parameter list.

To map shared DMX offsets

Sometimes different parameter types share th sam DMX offset. Example: dimmer and the shutter may share DMX offset 1.

1 Drag the dimmer icon from the parameter list to the cell for offset 1.

2 Drag the shutter icon from the parameter list and drop it in the cell for offset 1.

DMX offset controlling 2 parameter types

3 To v ew all the parameters mapped to offset 1, click the arrow for the drop down list.

Note: The parameters are automatically assigned to separate wheels.

To delete parameters from the DMX offset map

Right click on the parameter and choose *DELETE* in the shortcut menu.

Editing parameters

After mapping parameters to their DMX offsets, by dragging from the list and dropping in the appropriate DMX offset cell, you may want to edit the parameter settings. Parameters are edited in the Parameter Properties dialog box.
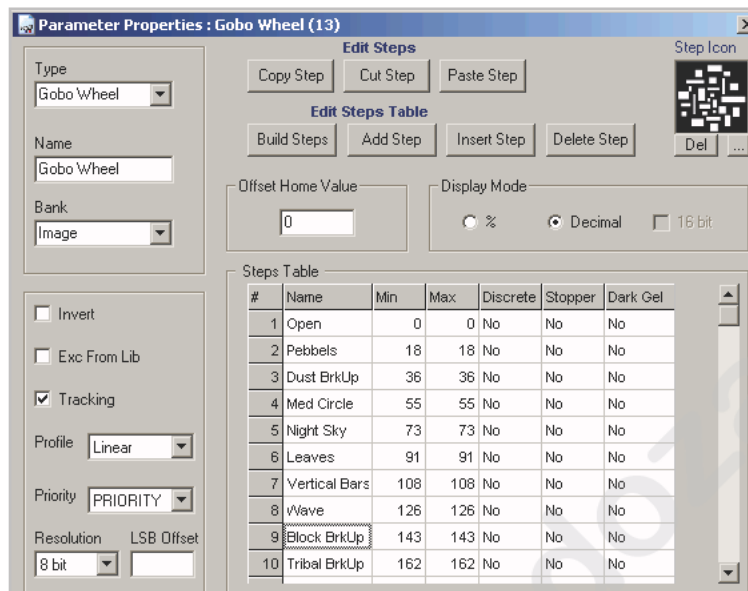
Figure 9: Parameter properties dialog box

To open the Parameter Properties dialog box

Double click on a parameter i   the DMX offset map.

OR

Right click on a par meter in the DMX offset map and choose Properties.

The title bar how   he selected parameter and its DMX offset.

To open the Parameter Properties dialog box for external dimmers

Double lick on the external parameter located below the parameter list.

Figure 10: External parameter box

OR

Right click and choose Properties.

The title bar shows the selected parameter and its DMX offset.

Field/Group	
Type	The parameter type determines the default wheel bank assignment.
Name	This is the text that appears on the Wheel Assignments display in Vector. **Note:** This is not available for Dlite and Rave.
Bank	The default wheel bank. Example: all gobo related parameters are auto-matically assigned to the image wheel bank and all color related param eters are assigned to the color wheel bank. The default assign ent an be easily changed.
Invert	• Check to invert the parameter. • Clear to uninvert the parameter.
Exclude from Lib	• Check to exclude the parameter from libra ies. • Clear to include the parameter in libraries
Profile	Set the parameter's behavior during fa e .
Priority	Set to LTP (Priority) or H P.
Resolution	Choose 8-bit or 16-bit re olution.
LSB Offset	Set lowest signific t bit for 16-bit resolution.
Edit Steps	Buttons for c pying, cutting, and pasting steps.
Edit Step Table	Add delet steps.
Step icon	You ca display an icon for the step. The icon displayed here is shown in the step picker. Vector only.
Offset Home Valu	Set the home value for the parameter. This is the value the parameter goes to when you press **HOME** or **RESET**. Example: Pan and tilt home values are usually set to 50% (128 -decimal or, in the case of 16-bit parameters, 32768).
Mode	Set the home value display mode to percent, decimal, hexadecimal.
S ep Table	Shows the step settings.

Changing the default wheel assignment

When defining a new device, parameters are automatically assigned to wheels according to the parameter type, as set in the Parameter Properties dialog box: color parameters are assigned to the color bank, gobo parameters to the image bank, etc.

Parameters are assigned to wheels in the order that they appear in the DMX offset map. Example: If the color parameter order is color wheel and color speed, then color wheel is automatically assigned to wheel 1and color speed to wheel 2.

> **Tip!** If the fixture has only a few parameters, you may want to group all parameters in the same wheel bank.

To change the default wheel bank assignment

1   In the DMX offset grid, right click on a parameter.

A short cut menu opens.

2   Choose Properties.

The Parameter Properties dialog box opens.

3   Open the Bank combo box and select another wheel bank.
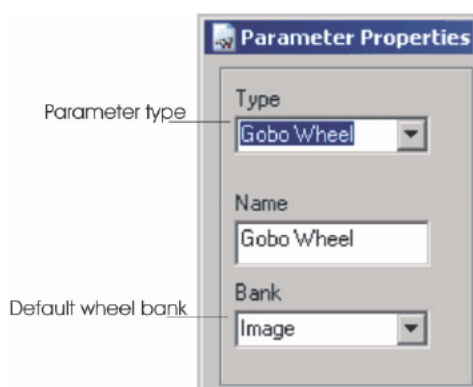
Figure 11: Parameter Properties tab detail

Generating steps

Some parameters, such as dimme or cyan, have only one step. Other parameters, such as gobo wheels or color wheels, may have many steps. When building a new device, all parameters initially have only one step. Add step using the Edit Step Table buttons.

Button	What it does
BUILD STEPS	Tapping Build Steps opens the Step Generator dialog box where you set the number of steps. DMX values (0 - 255) are automatically divided equally among the steps. This can be edited later.
ADD STEP	Tap this button to add a step at the end of the step list. Added steps must be further defined in the step generator
INSERT STEP	Tap this button to insert a step above the selected step.
DELETE STEP	Delete the selected step.

After setting the number of steps, fill in the Step Table fields.

Step Table Fields	
# (number)	Enter the number of steps for this parameter.
Name	Type the step's name. For example, you might name a step in the gobo wheel 'Starburst'.
Discrete	Click in the cell to toggle between Yes and No. • No - There is continuous control between steps. This is the d fault setting. • Yes - There is not continuous control between st ps. When setting values using the wheel, the value jumps from st p to tep without any intermediate values.
Stopper	Click in the cell to toggle between Yes and No. • No - There is no stopper between st ps This is the default setting. • Yes - There is a stopper between steps. Use **STEP UP** and **STEP DOWN**, on the Editor to l ba to move past the stoppers.
Min (from)	The step's DMX start va ue.
Max (to)	The step's DMX end value.
Dark Gel	For color scr llers The dark gel feature keeps two consecutive color frames in otion as long as the fixture's dimmer is at more than 10% inten ity This saves on gel burn when using very dark colors, as no singl area of the gel is constantly exposed to the heat of the lamp. Wh n assembling the gel ribbon cut a double length for dark colors. S rollers are usually defined with external DMX offsets. Click in the cell to toggle between Yes and No.

Note: Use **ENTER** and the arrow keys to navigate the Step Table.

To b ild steps

1 Open the Parameter Properties dialog box by double clicking on a parameter in the DMX offset map.

Or

Right click on a parameter in the DMX offset map and choose Properties.

The title bar shows the selected parameter and its DMX offset.

2 Tap **BUILD STEPS**. The Step Generator opens.

3 Fill in the fields in the Step Generator.

4 Tap **BUILD STEPS** to overwrite the current step table.

To add steps

1   In the Parameter Properties dialog box, tap ***ADD STEP***.

The new step is added to the end of the step table. The added step is labelled *New*.

2   Type a text tag for the new step.

3   Manually enter the settings for discrete, stopper, and DMX values range.

To insert steps

1   In the Parameter Properties dialog box, Step Table, tap a step to select it.

2   Tap ***INSERT STEP***.

The new step is added above the selected step.The added step is labelled *New*.

3   Type a text tag for the new step.

4   Manually enter the settings for discrete, stopper, and DMX values range.

OR

1   Tap a step to select it.

2   Tap ***BUILD STEPS***. The Step Generator opens.

3   Fill in the fields in the Step Generator.

4   Tap ***INSERT STEP RANGE***.

The new steps are added above the s lect d step.The new steps are labelled *Step 1*, *Step 2*, etc.

To delete steps

1   In the Parameter Properti s dialog box, tap a step to select it.

2   Tap ***DELETE STEP***.

The number of steps is automatically adjusted to accommodate the deletion.

IMPORTANT!   The DMX offsets are NOT automatically reconfigured when you delete a step You must reset them manually.

Editing steps

To add a text tag

In the Step Table, click the step and type the new text.

To change DMX values

In the Step Table, click the Min or Max for the step and type the new values.

To copy or cut a step

1   In the Step Table, stand on the step's name.

2   Tap ***COPY*** or ***CUT***.

OR

In the Step Table, stand on the step's name, right click, and choose Copy or Cut.

To paste a step

In the Step Table, stand on a cell where you intend to paste the step, and tap **PASTE**.

OR

In the Step Table, stand on the cell where you intend to paste step, right click, and choose Paste.

Note: The pasted step overwrites all existing information.

To set scroller steps and dark gel

1   Open the Parameter Properties dialog box by double clicking on the external parameter.

    ### Or

    Open the Parameter Properties dialog box by right clicking the external parameter and choosing Properties.

2   Click in the Dark Gel column where you have inserted a double sized frame.

    Yes appears in the Dark Gel column.

3   Tap **OK**.

Attaching a bitmap to a step

You can display a graphic representation f the step in the Step Icon area. Vector supports *.bmp or *.ico files.

Note: The graphic you ch ose h re represents the step in the gobo or color pickers.

To attach a bitmap to a step

1   In the step t le, lect a step.

2   Brows to t e f lder where the *.bmp images are stored and select the bitmap.

Configuring the control parameter

The control parameter controls the lamp on, lamp off, and reset functions of the fixture. These functions are accessed via the control function on the console. The control parameter is not controlled by a wheel, therefore it has no wheel assignment. The control parameter is configured in the Control Properties dialog box.
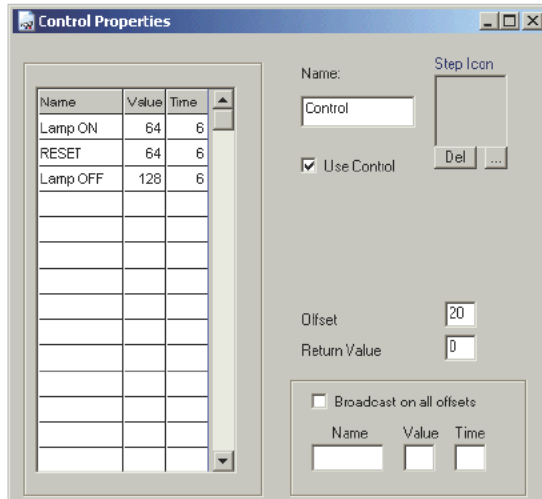
Figure 12: Control Properties dialog box

To configure the control parameter

1 Go to the Parameter Setup tab

2 Open the Control Properties dialog box by tapping the control icon below the parameter list.

3 Check the Use Control check box.

4 In the Offset field, enter the control channel's DMX offset.

Or

Check Broadcast on all offsets.

5 In the Return Value field, enter the return value. Sometimes, the return value is called the safe value. The return value is usually 0.

6 In the Name column, type the step names such as: Lamp ON, Reset, Lamp OFF.

7 In the Value column, fill in the step's DMX value. Example: The DMX value for Martin fixtures' Lamp ON for is 228; the DMX value for High End fixtures' Reset is 64.

8 In the Time column, enter in the number of seconds the value is sent. This is usually 6 seconds.

Setting up wheel assignments

Setting up the wheel assignments is done under the Wheel Assignments tab.
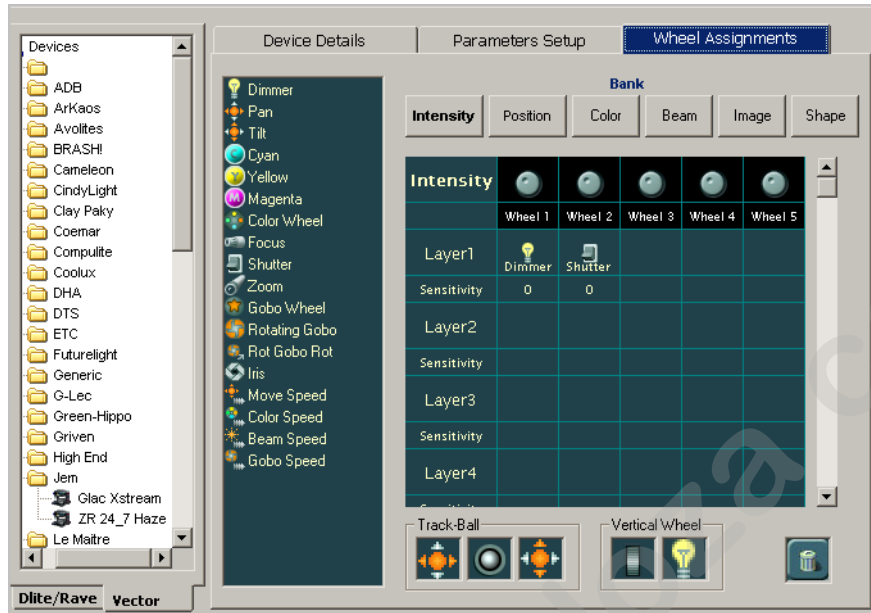
Figure 13: Wheel assignments tab

The six parameter types correspond to the six wh el banks:

- Intensity
- Position

- Color
- Beam

- Image
- Shape

When setting up the d vic ' parameters, each parameter type is automatically assigned to its default wheel ank Each bank can have up to six layers. A single parameter can be assigned up to 8 times. Param ter ypes can be assigned to any wheel bank, regardless of its default assignment.

Wheel s siti ity can be configured for each wheel and in each layer:

- 0 through 3 is coarse.
- 0 through -3 is fine.

Note: In each wheel bank, pan and tilt are always assigned to the trackball and dimmer is always assigned to the vertical wheel.

To assign parameters to wheels

Example: Assign cyan to wheel 1, magenta to wheel 2, yellow to wheel 3, and color wheel to wheel 4.

1 Show the Controls tab.

2 Tap on *COLOR* to select the color wheel bank.

3 Drag cyan from the parameter list to wheel 1.

4 Drag magenta from the parameter list to wheel 2.

5 Drag yellow from the parameter list to wheel 3.

6 Drag color wheel from the parameter list to wheel 4.

7 Optional: set the wheel sensitivity by double clicking on the sensitivity cell, located beneath the parameter name, and choose a setting from the combo box.

8 Choose another wheel bank and assign the appropriate parameters.

9 Repeat step 9 until all the parameters are assigned to wheels.

10 Tap *SAVE*.

To remove a wheel assignment

Select the parameter and drag it to the trash can or right click on the param ter nd choose **Delete** from the shortcut menu.

Saving and importing devices

The save options buttons control where new and m dified devices are saved and allow importing devices to the device library.

Figure 14: Save Options buttons

Button	Wha it does
NEW	De ine a new device.
SAVE	Save the selected device with the current show.
SAVE IN	• Select a folder. • Convert a Vector device for use with Dlite / Rave or a Dlite / Rave device for use with Vector.
SAVE TO LIBRARY	Enabled only when you open the Device Builder from Vector's patch manager. This allows you to save the new or modified device to the device library default folder.
IMPORT TO LIBRARY	Import a device definition from an external file or the show file to the device library default folder. Its name and ID number are added to the IdToNameTable, an automatic Excel file that is stored in the device library default folder.
DELETE	Delete the selected device.
DIRECTORY	New and modified devices are saved to the default directory selected here.
ABOUT	Shows the current Device Builder version.

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