

LEDblocc



RGBW

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1 PRODUCT (GENERAL)

1.1 PRODUCT INTRODUCTION

This product is designed for indoor or outdoor use. Suitable applications include wash or effect lighting for architectural, stage or nightclub applications. This product can also be installed for use in signage and advertising using the dynamic functions available with DMX512 control. Direct input of DMX512 signal allows the units to be controlled from any DMX512 controller. This product can be operated as a single unit or in multiple units for large applications.

The specially developed controller that allows the product to be controlled independent of the DMX512 controller enables the user to create and edit a wide range of custom programs. All programs can be touch-button displayed or scheduled to START and END at scheduled times. When programs have been created or edited in the controller, it is also possible to trigger these programs using the DMX IN function when connected to a DMX512 controller.

1.2 PRODUCT FEATURES

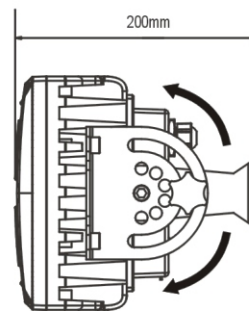
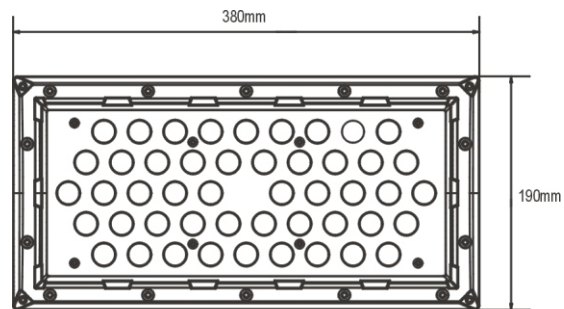
LED FIXTURE

- * RGB Dimmer 0-100%
- * Strobe
- * Automatic programs
- * IP65 protection rating
- * LCD display
- * Display control 'lock-out'
- * Direct DMX512 input
- * Independent ID address
- * Lightweight aluminium casing
- * Different white colors setting
- * 'Over-heat' protection (showing [High ^ T] on LCD display and automatic adjust the fixture's power when its temperature is $\geq 55^{\circ}\text{C}$)

1.3 TECHNICAL SPECIFICATIONS

LED MODULE

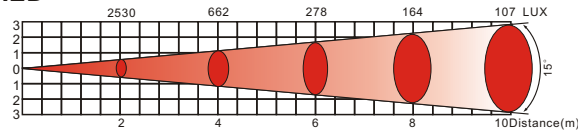
LED MODULE:	
Voltage	100~250V...50/60Hz
Rated Power	130W
IP	IP65 protection rating
LED/Unit	48pcs (12 x RED / 14 x GREEN / 12 x BLUE/10 x WHITE)
Output/LED	2W
Environment Temperature	-20°C~40°C
Cooling	Direct air convection
Dimensions	380 x 200 x 190mm
Weight	8Kg



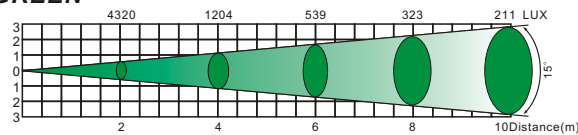
1.4 PHOTOMETRIC DATA

PHOTOMETRIC DATA

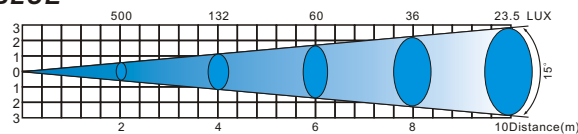
RED



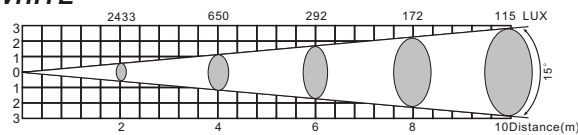
GREEN



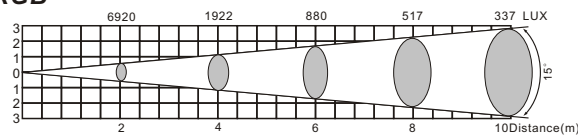
BLUE



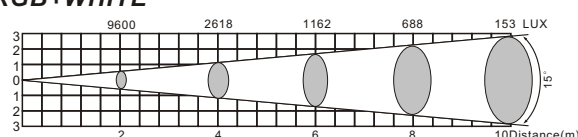
WHITE



RGB



RGB+WHITE



1.5 SAFETY WARNING

IMPORTANT

**[ALWAYS READ THE USER MANUAL BEFORE OPERATION.]
[PLEASE CONFIRM THAT THE POWER SUPPLY STATED ON THE
PRODUCT IS THE SAME AS THE MAINS POWER SUPPLY IN YOUR
AREA.]**

- This product must be installed by a qualified professional.
- Always operate the equipment as described in the user manual.
- A minimum distance of 0.5m must be maintained between the equipment and combustible surface.
- The product must always be placed in a well ventilated area.
- Always make sure that the equipment is installed securely.
- DO NOT stand close to the equipment and stare directly into the LED light source.
- Always disconnect the power supply before attempting and maintenance.
- Always make sure that the supporting structure is solid and can support the combined weight of the products.
- The earth wire must always be connected to the ground.
- Do not touch the power cables if your hands are wet.

ATTENTION



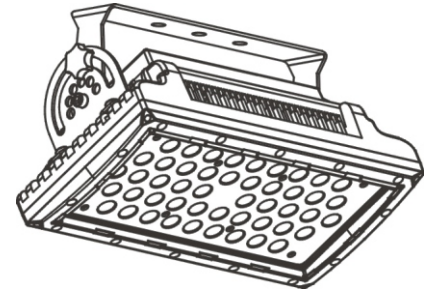
- This product left the place of manufacture in perfect condition. In order to maintain this condition and for safe operation, the user must always follow the instructions and safety warnings described in this user manual.
- Avoid shaking or strong impacts to any part of the equipment.
- Make sure that all parts of the equipment are kept clean and free of dust.
- Always make sure that the power connections are connected correct and secure.
- If there is any malfunction of the equipment, contact your distributor immediately.
- When transferring the product, it is advisable to use the original packaging in which the product left the factory.
- Shields, lenses or ultraviolet screens shall be changed if they have become damaged to such an extent that their effectiveness is impaired.
- The lamp (LED) shall be changed if it has become damaged or thermally deformed.

2 INSTALLATION

2.1 MOUNTING

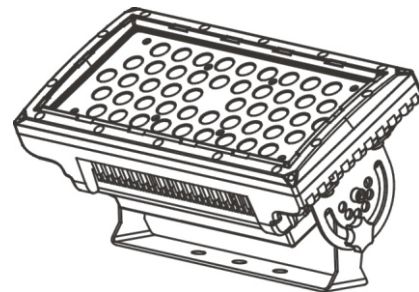
HANGING

The LEDbloc can be mounted in a hanging position using the supporting bracket. The bracket should be secured to the mounting truss or structure using a standard mounting clamp. Please note that when hanging the unit a safety cable should also be used.



UPRIGHT

The LEDbloc can be mounted in an upright or sitting position using the supporting brackets.



The LED MODULE can be mounted at any angle and in any position. It is possible to further adjust the angle of the LED MODULE using the two adjustment knobs located on the side of the fixture.

2.2 POWER CONNECTIONS

@ 220V: 20 units may be connected in series

@120V: 10 units may be connected in series

Note: As this fixture's DMX signal cable connection is Parallel connection, so if over 32 units to be connected, then a DMX signal amplifier is needed.

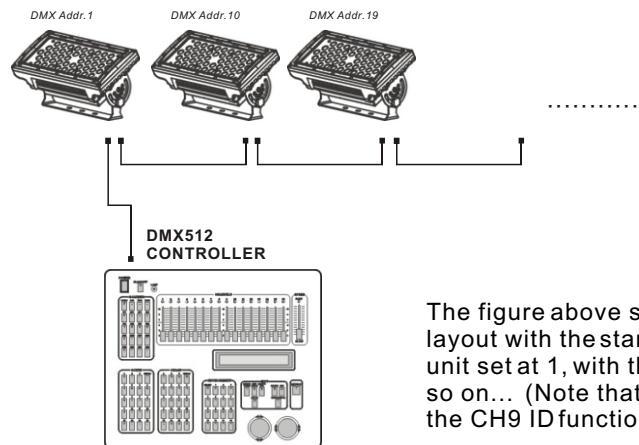
www.carlosmendoza.com.mx - (55) 56 72 85 69 - 72*15*18765

2.3 SETTING UP WITH A DMX512 CONTROLLER

2.3-1 **DMX512 ADDRESSING WITHOUT ID ADDRESSING (STAGE1 MODE)**

- Connect the DMX512 controller to the units in series.
- Each unit has 9 DMX channels so the DMX Addresses should increase by increments of 9 (e.g. 1,10,19,28...)
- The ID address has not been set so therefore when using the controller CH9 must be inactive (CH9=0).
- It is also possible to deactivate ID address selecting **【ID OFF】** from the **【Settings】** menu on the fixture
- Each DMX Address may be used as many times as required.
- Any DMX address in the range from 001 to 512 may be used.

Example:

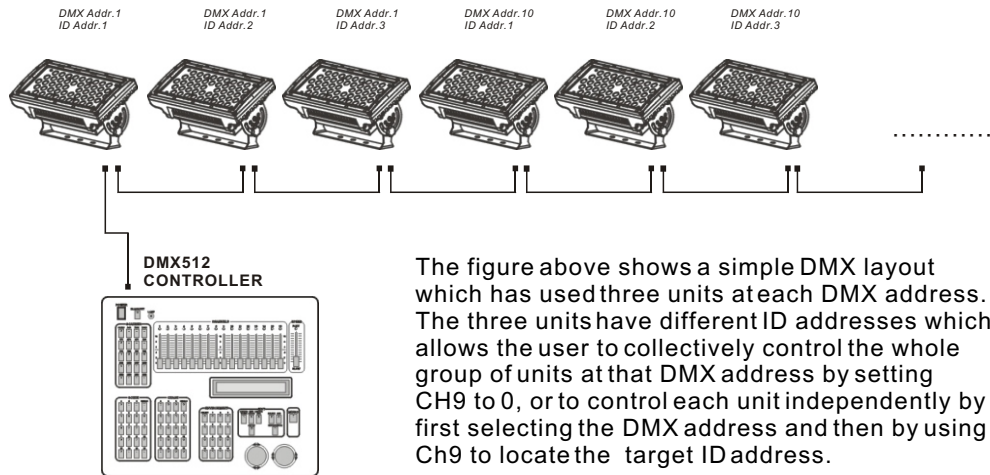


The figure above shows a simple DMX512 layout with the starting address of the first unit set at 1, with the second set at 10 and so on... (Note that when used in this way, the CH9 ID function must be inactive (CH9=0))

2.3-2 **DMX512 ADDRESSING WITH ID ADDRESS (STAGE1 MODE)**

- Connect the DMX512 controller to the units in series
- Each unit has 9 DMX channels so the DMX Addresses should increase by increments of 9 (e.g. 1,10,19,28...)
- Each DMX Address may be used as many times as required.
- Any DMX address in the range from 001 to 512 may be used.
- Each DMX address may carry up to 66 separate ID addresses.
- **【ID】** should be set in the menu on each unit in ascending values (i.e. 1,2,3...)
- **【ID On】** should be set in the **【Settings】** menu on each unit.
- ID addresses are accessible from Ch9 on the DMX512 controller.

Example:

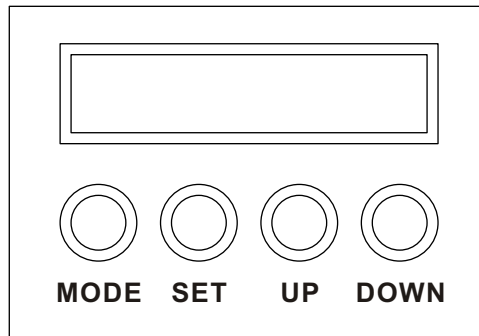


The figure above shows a simple DMX layout which has used three units at each DMX address. The three units have different ID addresses which allows the user to collectively control the whole group of units at that DMX address by setting CH9 to 0, or to control each unit independently by first selecting the DMX address and then by using Ch9 to locate the target ID address.

3 DISPLAY PANEL OPERATION

3.1 BASIC

The LED fixture is mounted with a LCD display and 4 control buttons.



【MODE】 scroll through the main menu or return to the main menu

【 SET 】 enter the currently selected menu or confirm the current function value

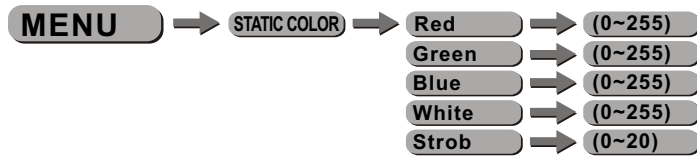
【 UP 】 scroll 'UP' through the menu list or increase the value of the current function

【DOWN】 scroll 'DOWN' through the menu list or decrease the value of the current function

3.2 MENU



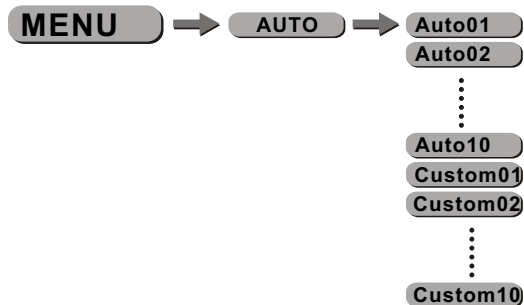
3.3 EDIT STATIC COLOUR



【STATIC COLOUR】

- Combine **【Red】**, **【Green】**, **【Blue】** and **【White】** to create an infinite range of colors (0-255)
- Set the value of the **【Strobe】** (0-20Hz)

3.4 ACTIVATING AUTO PROGRAMS



【AUTO】

- Select the target **【Auto】** program and press **【SET】** .
- Programs **【Auto01】** to **【Auto10】** are fully pre-programmed and will not be altered by changes in **【EDIT CUSTOM】** mode.
- Programs **【Custom01】** to **【Custom10】** are fully pre-programmed and can be edited in **【EDIT CUSTOM】** mode.

3.5 DMX512 SETTINGS



【DMX】

- Enter the **【DMX】** mode to set the DMX ADDRESS.

3.6 RUN MODE

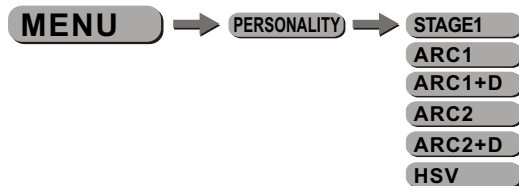


【RUN MODE】

- Enter the **【RUN MODE】** mode to set working mode.
- **【DMX】** mode is for using the DMX512 controller to control the fixtures.
- **【SLAVE】** mode is for Master -- Slave operation, or controlled fixture by Pix-controller.

Note: When fixtures are under Auto program operation, the **【RUN MODE】** does not work.

3.7 PERSONALITY



【PERSONALITY】

- Enter the **【PERSONALITY】** mode to select DMX mode: **【STAGE1】** , **【ARC1】** , **【ARC1+D】** , **【ARC2】** , **【ARC2+D】** or **【HSV】** .

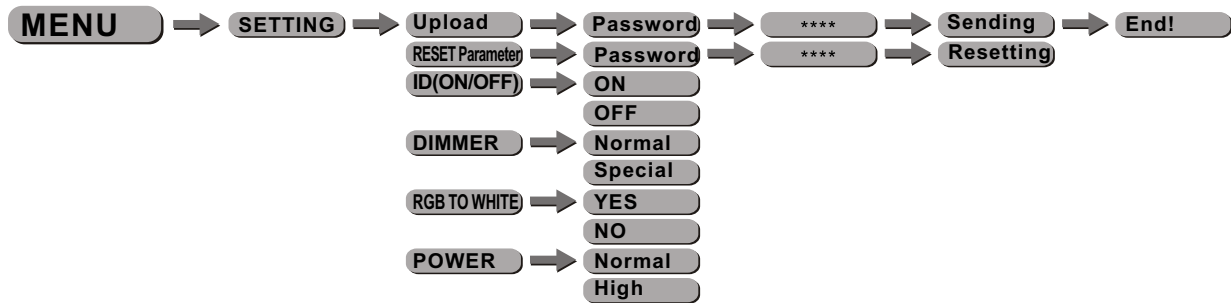
3.8 ID ADDRESS



【ID】

- Enter the **【ID】** mode to set the ID ADDRESS.

3.9 SPECIAL SETTINGS



【SETTING】

- Select **【Upload】** to upload the custom programs from the current MASTER unit to the SLAVE units.
- In order to activate the upload function the password must be entered.
- Password is the same as the main access password.
- When uploading the MASTER and SLAVE units will display YELLOW.
- If an error occurs when uploading the MASTER and/or SLAVE units will display RED.
- On successful uploading of the custom programs the MASTER and SLAVE units will display GREEN.
- In order to reset custom modes to default values select **【PESET Parameter】**.
- Enter **【ID ON/OFF】** in order to allow/disallow ID address function from the DMX512 controller.
- Enter **【DIMMER】** to select dimmer mode, when DIMMER is set to **【NORMAL】**, then RGBW and MASTER DIMMER are linear, when DIMMER is set to **【SPECIAL】**, then RGBW and MASTER DIMMER are not linear.
- When **【RGB TO WHITE】** is set to **【YES】**, on RGB = 255,255,255, the color is perfect white as the actual RGB values are adjusted to make white. When it is set to **【NO】**, on RGB = 255,255,255, the RGB values are not adjusted and the output is most powerful. The **【RGB TO WHITE】**'s parameter can be adjusted in **【CALIB】**.
- Enter **【Power】** to choose the operation power mode **【Normal】** or **【High】**, when it is normal mode, the power consumption is about 70W, while under high mode, it is about 100W.

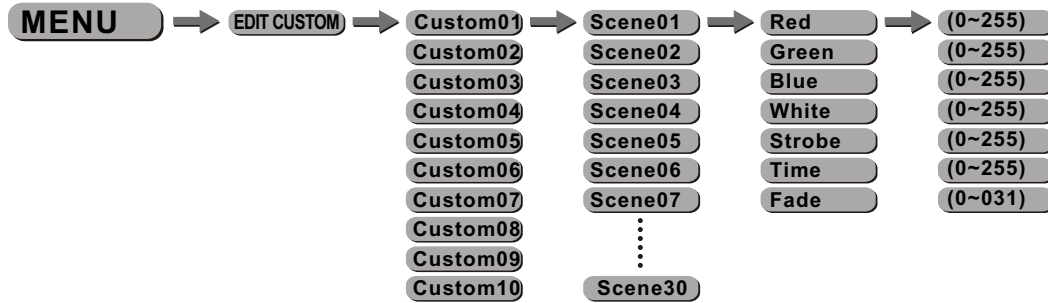
3.10 A CTIVATE THE PASSWORD



【KEYLOCK】

- Enter the **【KEYLOCK】** mode to select whether the access password is on or off.
- In order to enter access password it is necessary to first press **【SET】**.
- Access password is **【UP】 + 【DOWN】 + 【UP】 + 【DOWN】**.

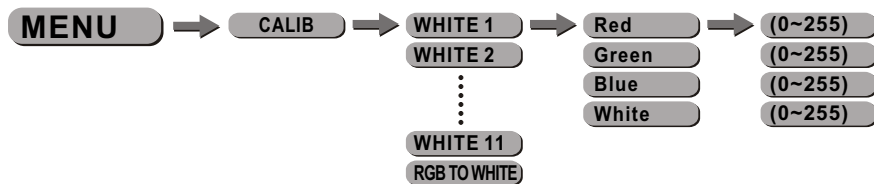
3.11 EDITING CUSTOM PROGRAMS



【EDIT CUSTOM】

- Enter the **【EDIT CUSTOM】** mode to edit the custom programs **【Custom01】** to **【Custom10】**.
- Each custom program has 30 steps that can be edited.
- Each step allows the creation of a scene using RED **【Red】**, GREEN **【Green】**, BLUE **【Blue】**, WHITE **【White】**, STROBE **【Strobe】**, TIME **【Time】** & FADE **【Fade】**.

3.12 WHITES SETTING



【CALIB】

- Enter the **【CALIB】** to select white color of different color temperature.
- There are 11 pre-programmed White colors plus RGB TO WHITE and can be edited by using **【Red】**, **【Green】**, **【Blue】** & **【White】**.

4 USING A DMX512 CONTROLLER

4.1 BASIC ADDRESSING

- Connect all of the units in series using standard DMX512 signal cable or the IP65 rated cable provided.
- Set the DMX512 address in the **【DMX】** menu.
- It is possible to have the same DMX address or independent addresses for each fixture.

4.2 CHANNEL ASSIGNMENT

- Note: This product has three DMX512 channel configurations: **【STAGE1】**, **【ARC1】**, **【ARC1+D】**, **【ARC2】**, **【ARC2+D】** and **【HSV】**

STAGE1

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	MASTER DIMMER
2	0 ↔ 255	RED (or STEP TIME when CUS.01-CUS.10 is activated)
3	0 ↔ 255	GREEN (or FADE TIME when CUS.01-CUS.10 is activated)
4	0 ↔ 255	BLUE
5	0 ↔ 255	WHITE
6	0 ↔ 5	NO FUNCTION
	6 ↔ 20	HIGH POWER (only when in NORMAL POWER mode)
	21 ↔ 30	NO FUNCTION
	31 ↔ 50	RED 100%/GREEN UP/BLUE 0%
	51 ↔ 70	RED DOWN/GREEN 100%/BLUE 0%
	71 ↔ 90	RED 0%/GREEN 100%/BLUE UP
	91 ↔ 110	RED 0%/GREEN DOWN/BLUE 100%
	111 ↔ 130	RED UP/GREEN 0%/BLUE 100%
	131 ↔ 150	RED 100%/GREEN 0%/BLUE DOWN
	151 ↔ 170	RED 100%/GREEN UP/BLUE UP
	171 ↔ 190	RED DOWN/GREEN DOWN/BLUE 100%
	191 ↔ 200	RED 100%/GREEN 100%/BLUE 100%/WHITE 100%
	201 ↔ 205	WHITE 1: 3200K
	206 ↔ 210	WHITE 2: 3400K
	211 ↔ 215	WHITE 3: 4200K
216 ↔ 220	WHITE 4: 4900K	
221 ↔ 225	WHITE 5: 5600K	
226 ↔ 230	WHITE 6: 5900K	

CHANNEL	VALUE	FUNCTION
6	231 ↔ 235	WHITE 7: 6500K
	236 ↔ 240	WHITE 8: 7200K
	241 ↔ 245	WHITE 9: 8000K
	246 ↔ 250	WHITE 10: 8500K
	251 ↔ 255	WHITE 11: 10000K
7	0 ↔ 9	NO FUNCTION
	10 ↔ 63	STROBE 1
	64 ↔ 127	STROBE 2
	128 ↔ 191	STROBE 3
	192 ↔ 255	STROBE 4
8	0 ↔ 9	NO FUNCTION
	10 ↔ 19	AUTO 01
	20 ↔ 29	AUTO 02
	30 ↔ 39	AUTO 03
	40 ↔ 49	AUTO 04
	50 ↔ 59	AUTO 05
	60 ↔ 69	AUTO 06
	70 ↔ 79	AUTO 07
	80 ↔ 89	AUTO 08
	90 ↔ 99	AUTO 09
	100 ↔ 109	AUTO 10. (AT.01 to AT.09 cycle 5min each AUTO mode)
	110 ↔ 119	PROGRAM 01
	120 ↔ 129	PROGRAM 02
	130 ↔ 139	PROGRAM 03
	140 ↔ 149	PROGRAM 04
	150 ↔ 159	PROGRAM 05
	160 ↔ 169	PROGRAM 06
	170 ↔ 179	PROGRAM 07
	180 ↔ 189	PROGRAM 08
	190 ↔ 199	PROGRAM 09
200 ↔ 255	PROGRAM 10	
9		ID ADDRESS
	0 ↔ 9	ID1-ID66
	10 ↔ 19	ID1
	20 ↔ 29	ID2
	30 ↔ 39	ID3
	40 ↔ 49	ID4
	50 ↔ 59	ID5
	60 ↔ 69	ID6
	70 ↔ 79	ID7
	80 ↔ 89	ID8
	90 ↔ 99	ID9
	100 ↔ 109	ID10
	110 ↔ 119	ID11
	120 ↔ 129	ID12
130 ↔ 139	ID13	

CHANNEL	VALUE	FUNCTION
9	140 ↔ 149	ID14
	150 ↔ 159	ID15
	160 ↔ 169	ID16
	170 ↔ 179	ID17
	180 ↔ 189	ID18
	190 ↔ 199	ID19
	200 ↔ 209	ID20
	210	ID21
	211	ID22
	⋮	⋮
	251	ID62
	252	ID63
	253	ID64
	254	ID65
	255	ID66

ARC1

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	RED
2	0 ↔ 255	GREEN
3	0 ↔ 255	BLUE

ARC1+D

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	MASTER DIMMER
2	0 ↔ 255	RED
3	0 ↔ 255	GREEN
4	0 ↔ 255	BLUE

ARC2

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	RED
2	0 ↔ 255	GREEN
3	0 ↔ 255	BLUE
4	0 ↔ 255	WHITE

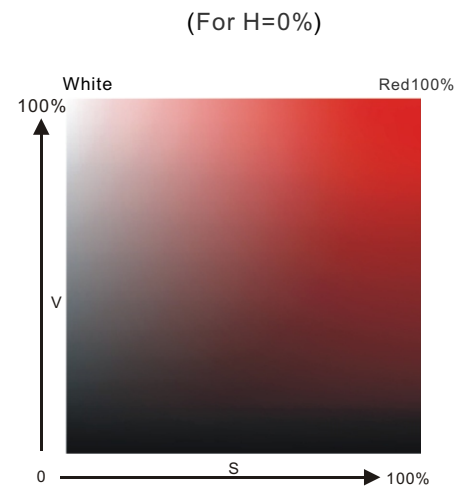
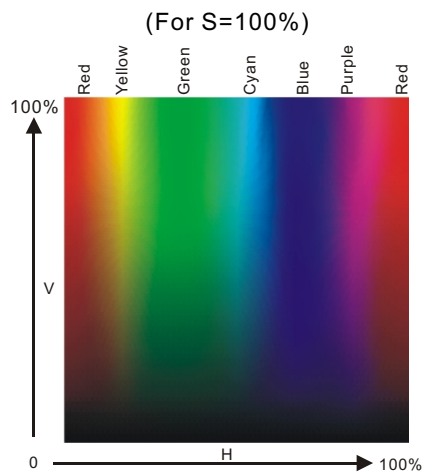
ARC2+D

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	MASTER DIMMER
2	0 ↔ 255	RED
3	0 ↔ 255	GREEN
4	0 ↔ 255	BLUE
5	0 ↔ 255	WHITE

HSV

CHANNEL	VALUE	FUNCTION
1	0 ↔ 255	HUE(0~100%)
2	0 ↔ 255	SATURATION(0~100%)
3	0 ↔ 255	VALUE(0~100%)

Note: In HSV mode, Hue stand for the visible light, like red, yellow, cyan etc; Saturation refer to the dominance of hue in the color, when saturation is 100%, then the color is purest; Value is the colors brightness, when value is 100%, the color is brightest..



4.3 BASIC INSTRUCTIONS FOR DMX512 OPERATION (STAGE1)

MASTER DIMMER

- CH1 controls the intensity of the currently projected color
- When the slider is at the highest position (255) the intensity of the output is the maximum

RED, GREEN & BLUE & WHITE COLOR SELECTION

- CH2, CH3 & CH4 & CH5 control the intensity ratio of each of the RED, GREEN, BLUE & WHITE LEDs.
- When the slider is at the highest position (255) the intensity of the color is the maximum.
- CH2, CH3, CH4 & CH5 can be combined together to create over 16 million colors.

COLOR MACROS

- CH6 selects the required COLOR MACRO
- CH6 has priority over CH2, CH3, CH4, CH5 & CH7.
- CH1 is used to control the intensity of the COLOR MACRO

STROBE

- CH 7 controls the strobe of CH1 to CH6
- Strobe 1 is with RGB in-step
- Strobe 2 is with RGB out-step
- Strobe 3 is a pulse strobe (fast on/slow off)
- Strobe 4 is a pulse strobe (slow on/fast off)
- Ch7 has priority over Ch2, Ch3, Ch4 & CH5.

ID ADDRESS SELECTION

- CH9 is used to select the target ID address.
- Each independent DMX address may have up to 66 independent ID addresses.
- An ID address of 0 will activate all ID address locations.

AUTO

- CH8 selects the preset AUTO programs AT.01-AT.10 or the custom AUTO programs CUS.01-CUS.10
- When activating the custom AUTO programs CUS.01 to CUS.10 then it is possible to control the STEP TIME and FADE TIME using CH2 and CH3 respectively.
- Ch8 has priority over Ch2, Ch3, Ch4, Ch5, Ch6 & Ch7.

5 APPENDIX

5.1 TROUBLE SHOOTING

SITUATION	CAUSE	ACTION
No display	1) No power input 2) Power connection error 3) Display damaged 4) Display board IC error, or power input connection error, or two board connection error 5) Contrast decay	1) Check power supply 2) Check power connection 3) Replace display 4) Check the IC and all the connections 5) Adjust the LCD contrast
LCD MODULE on, but no control from display	1) Main PCB reverse install 2) Main PCB damaged	1) Check Main PCB installation and quality
Display normal, but no response from buttons	1) Buttons damaged 2) Main PCB damaged	1) Replace buttons 2) Replace Main PCB
Display normal, but no response from buttons	1) Signal Cable error 2) Signal connection error 3) The input signal IC damaged 4) DMX address error	1) Check all signal Cables 2) Check all signal connections 3) Check the input signal IC 4) Check DMX address
When the temperature of the unit exceed 60 °C, but there is no "High T" showed on the LCD display.	1) The heat sensor resistance of LED board error 2) The temperature protection circuit on the display error.	1) Replace the heat sensor resistance. 2) Check the temperature protection circuit.
Color mixing uneven, with splash	1) LED not joining well 2) Lens not installing well	1) Check LEDs joining 2) Check lens installing
Partial color (partial red, partial green or partial blue)	1) The current of one of the color group LEDs is too strong or too weak. 2) LED brightness not enough	1) Check 2) Check LED quality
LEDs of the same color are not lit	1) LED damaged 2) LED damaged or Main PCB	1) Replace LEDs 2) Replace damaged LED or Main PCB
Manual and program can not save	1) Saving IC damaged	1) Replace saving IC

5.2 MAINTENANCE

No	ITEM
1	BRACKET
2	PLASTIC BASE COVER
3	DISPLAY BOARD
4	DRIVER BOARD
5	POWER SUPPLY
6	POWER SUPPLY COVER
7	METAL BASE
8	LED BOARD
9	LENS COMPLETE SET
10	PLASTIC UPPER COVER

