



Figure 1

Avolites Tiger Touch

By: Rob Halliday

Avolites is an unusual company. It appears genuinely content with the spot it occupies in the lighting world, rather than appearing nakedly set on world domination, as its competitors often seem to be. Its product range isn't enormous, but all are well thought out, very well put together, and are used and respected around the world.

Actually, it's more than that: Avolites' products are loved by those who use them. That's true of the dimmers: I know production electricians who will fight tooth and nail to get Avo's Art racks over anything else, for their versatile patch and rugged reliability. Of course, it's particularly true of the consoles. Avo built its reputation on consoles that people wanted to sit behind and drive, from the massed faders of the original QM500 and later Sapphire and Diamond consoles to the more recent, more compact models such as the Pearl and the Azure. The secret of this success is perhaps as simple as not skimping on the ingredients: Avo consoles have always had a rock-solid feel, with the highest

quality faders, encoders, and switches. Add in responsive software, and it always felt like the company was ready to stick by you through the most frenetic chases and toughest of tours.

That's the other clue to its success: knowing its target audience. Though the company's slogan is "From Rock to Opera," and Avo consoles have been used for theatre and opera productions, the live music world is their natural home, often run by lighting designers reacting hands-on as their gigs unfold in front of them. The hardware design of the consoles has always reflected that: You can run them heads-up, looking at the stage rather than at a screen. As smaller shows demanded more compact consoles, Avo devised new solutions, such as the "Rolacue" roller on the Sapphire, then Pearl, consoles, which gave direct, obvious, easy switching between pages of faders—and one that was incredibly easy to label at that!

But Avo's designers—a close-knit team, many of whom are also co-owners of the company—have faced a conundrum in recent years. The

increasing range of equipment lighting consoles are being asked to control—LEDs and video, in particular—demand a different interface, one where screens can give useful visual feedback. Also, shows are getting more complicated: The ten pages offered by a roller might not be enough. And while tape and a Sharpie make a great labeling tool, this approach doesn't work so well when touring shows are being moved to new consoles around the world, or when multiple operators are sharing a console in a club.

Most of Avo's rivals moved years ago to touch screens to solve these problems. Avo's dilemma was that you have to look at a touch screen to operate it, taking your eye away from the stage.

The launch of the Tiger Touch at PLASA 2009 therefore had a slightly un-Avo feel to it: Here was a console that had the look and high-quality build of an Avo desk, but with those big, familiar banks of faders replaced by a big, color touch screen. The end of the world, or the possibility of a

better interface? Avo seems pretty confident of what it is offering—though it continues to point out that the more traditional Pearl, now in its updated Pearl Titan Expert guise, is still available for those preferring more faders, and at about the same price. Let's take a look and see . . .

Hardware

At first glance, the Tiger Touch is quite a beauty. Its case, with its machined side panels, feels solid; the white finish, white keycaps on many of the keys, and polished aluminum encoders give it a light, airy, modern feel. It feels more expensive than it is—a good sign in my book. It's also very human in scale; everything is within easy reach and feels like a comfortable one-person lift out of a flight case. (It measures 29" by 24" by 12" and weighs in at 29.5lbs).

That light-and-airy feel is artfully achieved, since a lot is crammed in to the Tiger's front panel [Fig. 1], its adjustable feet allowing it to be angled to taste. The top left area is dominated by the console's touch screen, a 15.4" diagonal wide-screen LCD, coupled with a resistive touch-sensor; this is a single-touch rather than multi-touch type. The screen occupies about two-thirds of the console's width. As several other manufacturers do in their consoles, Avo actually mounts the screen upside down, since it was designed to be most legible viewed from above in a laptop. The software deals with this in normal running mode, but the start-up text appears backwards!

Below the screen are a grandmaster fader with blackout button, playback page +/- keys, plus 10 playback faders, each with add (flash) and swap (solo) buttons; as always with Avo, the feel of these faders is quite beautiful, though the curved front case does seem to drop away a little abruptly below the faders—there is no armrest—and their very smoothness and relative lightness does make it a little easy to inadvertently jostle them off zero.

At the bottom-center-right are



Figure 2 - Encoder wheels

three rotary encoders [Fig. 2]; these feature the design Avo now has across all of its consoles—aluminum; a low, gently curved top; rubber-edged; and with an incredibly simple, yet effective, gearing arrangement: Each has two finger indentations, one near the edge, the other near the middle; coupled with well-thought-out acceleration control in the software, positioning lights is easy. There is nowhere obvious to hand-label faders; the intention is for the screen to do this, though there is just room below the faders for tape die-hards.

The right-hand third of the console has a more familiar Avo feel, and indeed the layout will be—is designed to be—intimately familiar to anyone who has used a Pearl console. There's a numeric keypad complete with Avo shift-key (this is arranged telephone style, with "1" top-left, the reverse of most lighting consoles), keys for stepping through selections, master playback keys, a "connect" key for assigning the encoders to control chase, then two long, vertical columns of keys, one for actioning the console's most common functions (record cue, delete, fan), and one for selecting attribute families for moving lights. The keys are responsive and

reliable, but quite "clicky" for some tastes. Many include an LED, and Avo has done a good job of using color-coding to highlight groups of keys.

At top right of the console are ten macro keys, then ten more faders, of a shorter throw than the main playback faders and without any dedicated page controls; these are intended for things you always want to have on hand, like smoke machines.

Between these faders and the screen is an indication of how Avo plans to bridge the gap between the "hands-on" control it is famous for and the lack-of-feel offered by that versatile touch screen: seven softkeys that change function according to where you are in the console. Their function is always shown on the screen, but the intent is that, once you start to learn the console, you'll know what function is current and be able to select it without looking. Below these keys is another slight departure from Avos of the past: a rocker switch, instead of a key switch, deciding between "run" and "edit" mode. I guess there were just too many lost keys!

Round the back is a standard set of connectors, including IEC mains in, an XLR for connecting a desk lamp, a

PRODUCT IN DEPTH



Figure 3 - iPhone remote

VGA connector for an external monitor, plus mounting points to support an LCD monitor, MIDI in and out, audio in, and a USB socket for saving the show to memory stick. There are four real DMX output connectors, each capable of being assigned to any of the 12 universes the console can support. An Ethernet socket allows access to all 12 universes, these output as Art-Net. Again, unlike its rivals, Avo seems happy to offer a console capacity that will appeal to the real world, rather than aiming to control the world's biggest live events. The Ethernet socket also allows remote control using an iPhone as a remote [Fig. 3], allowing the Tiger Touch to talk to media servers that support the CFTP protocol for sharing media thumbnails.

Internally, the Tiger Touch is a PC, running Windows XP Embedded on an Intel Core Duo processor. You rarely need to be aware of Windows once you have the console up and running, though the manual does warn of the need to shut down properly to avoid data loss. The console auto-saves as you're working, but crash or shut down incorrectly and you could lose work back to that auto-save. Internal storage is to solid-state hard drive, which should be reliable even in harsh environments.

Software

Of course, beautiful though the hardware may be, it's the software that actually governs how well things



Figure 4 - User interface with Visualizer in action

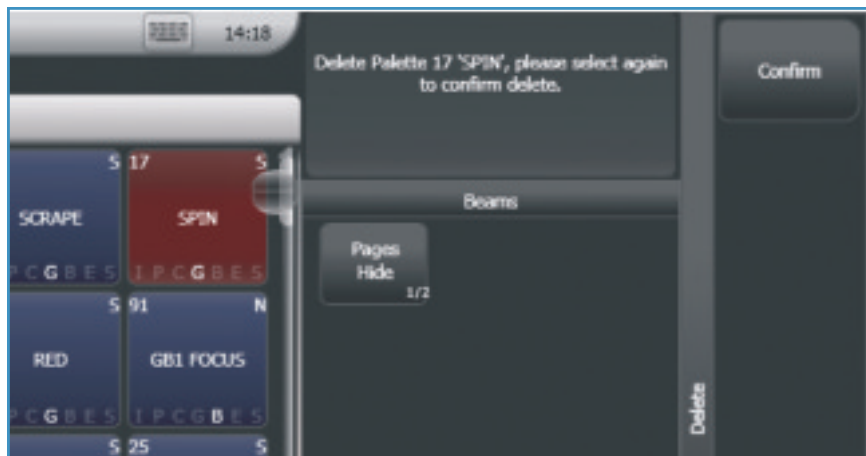


Figure 5 - Color as warning delete

work—particularly with a touch screen as the primary interface. Powering the Tiger Touch is what Avo calls “Titan.” Reading between the lines, this is an attempt to create a new common core operating system to be shared across many console types. To Avo, the advantage is that there will be only one base to maintain and improve; to users, it should mean show file compatibility across consoles. Titan is currently also powering the Pearl Expert plus its optional touch screen and will soon be in the Diamond 4; the software currently stands at Version 3. (Version 4, with various speed optimizations, new features including cross-loading show files between various Avo consoles, and multiple language support, is due around the time of PLASA.)

From a user point of view, the most immediately obvious feature of

the software is its gorgeously muted on-screen appearance. Some rivals present a very Windows-style bright-white display with black text—which is incredibly distracting in a dark auditorium. Others have done the complete opposite: pitch-black background, white text. Tiger Touch is better than either [Fig. 4]. The background is dark gray rather than black, and the text is in variations of gray rather than white. Because it's not high-contrast, it is very easy on the eyes; the fonts chosen are easy to read, even when used at small sizes. Color is used very sparingly—a touch of dark blue to indicate playback functionality or when things are active in the programmer, a hint of gold when showing the functions assigned to the encoders. The result is that when color does appear—the muted red background warning you that

you're about to delete a palette, say—you know the Tiger is trying to tell you something important [Fig. 5].

The interface also keeps the screen busy, the bottom area always showing the label and status of the playbacks, an area set aside for the softkey labels, and a permanent area for recalling window setups (“work-spaces”) [Fig. 6]. As with the Wholehog, palette windows can be quarter, half, or full screen only, and are re-arranged using move keys rather than by dragging. Once you learn where things are, everything works pretty well; where there are issues, they're often the same as on other touch-screen devices. For example, does the label on a button show you the mode it's in, or the mode it will go to when you touch it? What does work well is the softkeys, which let you start to “touch-type” on the console as you learn it, and the fact that you can usually touch something and then edit it directly. The responsiveness of the screen itself is pretty good, better than many rivals—though all now feel slightly cumbersome in the multi-touch iPhone/iPad world.

Beyond the elegant visuals, the Tiger Touch will be familiar both to existing Avo operators, but also to anyone coming to the console from the Hog or grandMA. A softpatch lets you arrange channels and fixtures to a numbering scheme of your choice, though, helpfully, the console will let you refer to a fixture by its address if at some point that's all you can remember. The console has a comprehensive fixture library, this Avo's own [Fig. 7]. Adding a new fixture used to involve a call to Avo, but a fixture editor that will run on the console or a PC is now available.

After patching, the console can auto-generate palettes, these divided into position, beam, and color types, and split into “shared” (same values for all fixtures of a type) and normal types. Finer granularity of attribute types is possible when masking for store operations. The Tiger Touch also runs Avo's Visualizer software, this automatically interchanging patch



Figure 6 - Workspaces

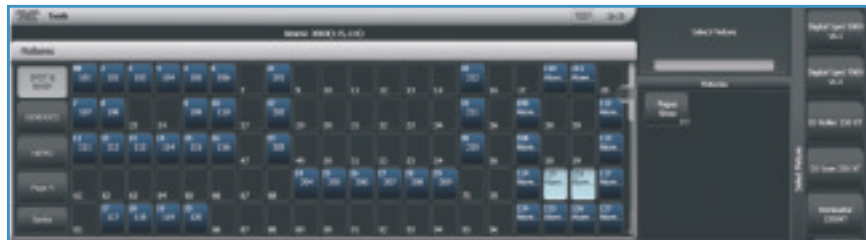


Figure 7 - Patch

information with the console patch [Fig. 4]. While having a built-in visualizer is, at times, invaluable, this one does seem to give a bit of a performance hit to things; switching between display setups can become a little sluggish while it's running.

Once patched, you can start grab-

bing lights, adjusting parameters, storing presets, then storing looks into cues or chases. As with many other multi-cue list consoles, the Tiger Touch uses a programmer philosophy: By default, only parameters that you've adjusted get stored by a record command, though you can override this to store all of the attributes of any light you've touched, or all of the lights that are on. Adjustment is generally made using the encoders, though the touch screen does allow direct selection of parameters (to pick a gobo, for example) [Fig. 8], and color can be mixed using an on-

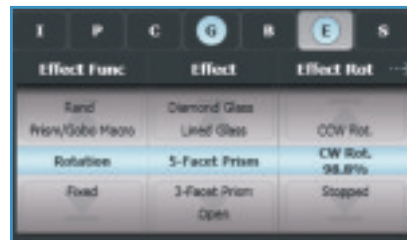


Figure 8 - Encoder displays



Figure 9 - Color picker

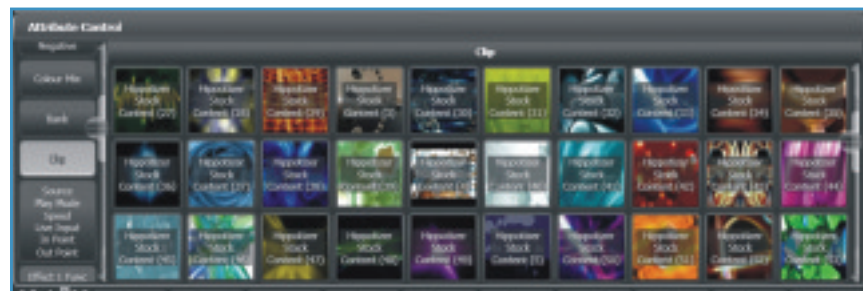


Figure 10 - Media thumbnails

Cue View -

	Number	Dimmer	Pan	Tilt	Zoom	Focus	Iris	Colour 1
		D F	D F	D F	D F	D F	D F	D F
CirSp 1200	101	- -	5 3	4 3	- -	- -	3 -	
CirSp 1200	102	- -	6 3	6 3	- -	- -	3 -	
CirSp 1200	103	- -	5 3	4 3	- -	- -	3 -	
CirSp 1200	104	- -	4 3	4 3	- -	- -	3 -	
CirSp 1200	105	- -	5 3	4 3	- -	- -	3 -	
CirSp 1200	106	- -	6 3	6 3	- -	- -	3 -	
CirSp 1200	107	- -	5 3	4 3	- -	- -	3 -	

Figure 11 - Timing per parameter

screen color picker [Fig. 9]. It's a shame that the touch screen control doesn't yet extend to other functionality, such as framing shutters. Of course, where it does work spectacularly well is when you hook the Tiger Touch up to a compatible media server, at which point it will automatically pull in thumbnail images of the server's media, making selection easy and obvious [Fig.10]. Sadly, the console doesn't yet cache these thumbnails, so you need to keep the server connected to keep working this way.

Interestingly, these thumbnails have provoked another great idea within Avo—not in the console yet but coming in V4: to let you use your own graphics, rather than just text, as labels for on-screen palette buttons—a return to the free-form scribble labeling always possible with tape and Sharpie. Hopefully, they'll also add swatch-type blobs for color palettes and maybe even gobo graphics for gobo buttons—though it would add a little more clutter to the interface, I think it would be useful clutter.

Included in the Titan software is true timing-per-parameter, making it easy to create very structured transitions. Here, as in many areas of the Tiger Touch, it is not just the functionality that is well thought out, but the language describing that functionality. If you don't want to manually set lots of fade or delay times [Fig. 11], for example, you can adjust the “overlap”—effectively, the offset across the selection order (which you can adjust, including making multiple lights have the same selection order). Making wipes this way is very easy. My other favorite piece of language: “bunch up,” for omitting unused faders when copying ranges of cue lists. The words make it very clear what the action will be.

Tiger Touch lets you record looks in three ways—as a stand-alone cue, as cues in a cue list, or as steps within a chase. Cues are fully tracking sequences of looks; chases are effectively sets of complete mini-states, each replacing the previous as the chase runs. In every case, the “state”



can contain either a static look, or movement generated using the console's dynamic shape functions complete with phase/offset control. Chase timing can be adjusted on the fly, or can be learned by tapping time.

Cuelists, whether cue sequences or chases, are assigned to faders for playback. As with the Pearl and other consoles, there are multiple—currently 60, soon to increase—pages of playback faders, with the page +/- buttons stepping between them; the touch screen also includes a graphical version of the Avo Rolacue, allowing you to flip between pages [Fig. 12]. Faders stay active until they are faded out or released, even through page changes—the Tiger Touch does not have motorized faders, and this is one area where they might have been useful. The console does let you set cue lists to be common to all fader pages, if required. The console also retains Avo's “unfold” feature—you can expand a cue list out so that one cue or step lives on each fader, letting you then step through and adjust each look very easily [Fig. 13]. You can currently blind-edit cues in the on-screen channel grid, but not using the programmer or the visualizer, which would be useful.

Where the console's roots do shine through are the tools it includes for busking shows live in front of an audience. Type a number, then touch a palette, and that palette will be applied in that time, for example; palettes set in this way don't get locked into the programmer, so you don't end up with that look stuck on stage as other cues run. (The flip side is that you have to remember to press “channel” when you want to specify a channel number). When you do need to lock something on stage, you can adjust the priority of playbacks to achieve this.

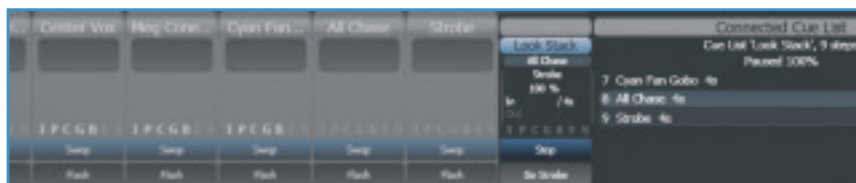


Figure 13 - Unfold

Missing, to date, are the many tools that can help speed up programming or re-programming—for example, select a light, and there is no indication as to which palettes contain any information for that light; selecting a palette or cue, then adjusting its contents, usually requires you to manually re-select the palette or cue to store into, rather than having an automated update function do the work for you. The console also does not “abstract” fixture information in any way, ultimately storing DMX values into palettes and so into cues. Though it offers “cloning” tools to help change fixture types or add additional fixtures, the manual does warn that this will work best if you’ve programmed your show using palettes, since those will need to be updated to suit the new fixture type.

The Avo folks know this is not ideal; interestingly, conversations about any new function with the company’s senior staff tends to produce a roll of the eyes, a gentle laugh, and the recollection that a similar feature was part of a console back in the day, but just got lost along the way. Often that was because the rigs of the day weren’t complex enough for users to appreciate the function. Now that even “small” rigs are often that complex, one suspects many of those features might start re-appearing.

In action

We had, I must confess, less hands-on time with the Tiger Touch than with many of the other consoles

we’ve reviewed—a combination of scheduling, strong demand for the console, and the fact that, for a variety of reasons, Avo doesn’t yet have an off-line version of the console software available. Nonetheless, even the briefest time makes it clear that it is beautiful hardware, well-built, and begging to be played—a real operator’s console.

Who will it appeal to? That’s an interesting question, because the touch screen, and the operating methodology it presents, make it quite like the Hog, the grandMA, the ChamSys, and other consoles, and they have several years head start over Avo at figuring out how to make best use of the touch screen interface. Yet the Avo graphical design is easier on the eye than the others. Look at it another way: It retains much of the “heads-up” methodology of Avo’s Pearl, but with an interface that lets you get in and ditz with the details if you need to, as you might when programming more structured shows.

I will say that I’ve never really been comfortable with the “Avo way”—it’s a bit far from my background and most of my experience, and I like being able to pick away at the details of the programming. I felt comfortable with the Tiger Touch, though. Given that I suspect many users of older Avo consoles will also like and feel comfortable with it, that’s quite an achievement. If you mainly busk shows, but occasionally do things with a bit more structure, it should definitely be on your list to try. 🐼