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The Jands Vista

A new lighting console that rewrites the rules

by Rob Halliday

Once in a very rare while, a thoroughly remarkable product comes along, a product that changes not only the way you do your job, but your whole approach to that job. The first thyristor dimmers must have been like that, and the first memory lighting controllers, as well as those early moving lights. The very finest of these products are so elegant that they manage to be revolutionary while appearing so obvious that you wonder why nobody thought of them before. Think of WYSIWYG. Or, beyond our industry, think of the first appearance of the Apple Lisa and Macintosh in the then-DOS-only world.

And now there is the Jands Vista lighting console.

Jands may not be an enormously familiar name in the US-companies from Australia seldom are. It has made lighting consoles before, licensing the Hog operating system to produce the smaller Jands Hog line; it also makes dimmers and runs a lighting, sound, and staging supply operation Down Under. A few years ago, sparked by Nick Denville, one of the Hog programming team who moved to Australia, Jands' Paul Mulholland decided to make a lighting console from scratch. Vista is the result—and the rapt attention that it has been attracting at trade shows over the last year suggests that the slight detachment of working halfway round the world can lead to brilliant new solutions to familiar problems.

The sea-change is obvious the moment you sit behind the console: the staple of the majority of lighting consoles from the last 30 years, the calculator-style numeric keypad, is missing. Instead, the central control area consists of a large (15"), angled color screen with a dial (the grand master!) above it and a QWERTY keyboard and trackpad below. Around this are more familiar elements—a control panel with three dials, faders, and buttons grouped around clear blue LCD screens. The console is available in two configurations:

1.) one playback panel plus one control panel or 2.) two of each. The precise arrangement of either is impossible to describe, since the panels can be rearranged to taste. Round the back are the usual array of computer connectors (including four DMX outlets, one Ethernet outlet talking ArtNet or Pathport, MIDI in/out, timecode, two VGA outlets, and a 100-240V power input); under the padded armrest is a CD-RW drive and a slot for USB memory sticks, which will be the most common way of backing up shows. Inside, for those who thrive on specs, is a fast Pentium 4 processor, half a gig of RAM, a 40Gb hard drive and a variant on the Linux operating system.

Checking out the individual features

Turn the console on and the gorgeous screen fires up, crediting, as it does, all of those involved with Vista's creation-a nice touch. It also reveals the Vista's mantra: "think visually, work visually": this is a graphical-user-interface console-not just a touch-screen acting as infinitely flexible buttons, as on many other consoles, but your complete control area. Everything happens through it. To make this possible, it isn't a standard touch screen-fat fingers wouldn't give enough precision. Instead, it's a Wacom tablet screen, operated through a special pen. This takes a little getting used to, but soon becomes second nature, although an extended session can leave a blister on the first finger of computer-users out of practice at holding writing implements.

It would be an overstatement to say that, with pen in hand, you're up and running—but not much of one. In the same way that the Macintosh replaced cryptic command lines with lists of available options, so does Vista. The bottom of the screen presents buttons for the main display/operating modes: patch, console, programmer, and playback. Pick patch and the console shows all of the



available DMX outputs [See Fig. 1.] Select a fixture from the comprehensive list and drag it into the patch. Put it in the wrong place? Drag it to the right one.

Then switch to the programmer view [Fig. 2]. There are the standard display options: lists of channel levels, a fixture view showing what each light is doing in numbers or preset names-and here, the logic of that built-in QWERTY keyboard becomes clear: in the past, we simply labelled the odd cue; now we're labelling everything and yet most consoles still have no place readily accessible to actually put a keyboard. Vista's keyboard also supports familiar shortcuts such as ctrl-c and ctrl-v for copy and paste; as Jands says, people are now more familiar with PCs than lighting consoles, so why make them learn something new?

The most interesting display option is the graphical channel control page [Fig. 3], where you can arrange icons of your lights however you want—as a channel layout, or a Broadway-style magic sheet or, best of all, both, since Vista can store multiple channel layouts and switch between them as required. And these icons aren't just static channel selectors: they come to life. A circle in the middle of each black square icon fades up or down with intensity, changes size with beam size, changes color to match the light's output, and moves around within the square to give an indication of the direction the light is pointing in. It's not WYSIWYG, but it makes it easy to get an at-the-glance overview of what the rig is doing.

Next to this window are palettes for controlling the lights' functions—color, position, beam, gobo, framing (a picture of the shutters that you just drag to the required shape [Fig. 4]) and intensity [Fig. 5]. The last feature is controversial: it has a slider and buttons for 5% steps, full, off, and +/-10%, yet I would argue that sometimes it would still be quicker to type 'chans@level', particularly if you have lots of conventional channels or prefer looking at the stage rather than the screen (think visually, yes, but the visual we're ultimately concerned with is the lighting picture). But you have to admire the Jands team for sticking to its guns: the best consoles, historically, have been the ones with a clear view of what they are trying to achieve and a pure view of how to get there.

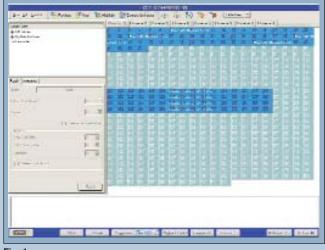
A new kind of control

In starting to control lights, you quickly discover that the Vista is doing a great deal to help you. The color palette, for example, will let you pick color by mixing hue and saturation, by mixing CMY or RGB, or by picking a color from a familiar list of gels—the Lee range at the moment, with others to come. In the manner pioneered by the [High End Systems] Wholehog III, Vista uses a generic fixture model where you tell the console what you want a light to do and, using its knowledge of the fixture, it figures out how to achieve that. Say "All lights go red" and every light will give its best possible red—and, if you later change fixture type, the new light will give the same result, as well as it can, without any re-programming. You can even choose to store degrees from a home position rather than just pan-and-tilt values.

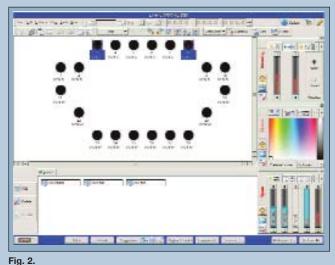
Of course, how well this all works depends on the accuracy of the fixture libraries—but these have a good pedigree, being produced for Jands (and a number of other manufacturers) by some of the ex-Hog III team. For those nervous of the console having too much control, Vista lets you decide how information gets stored, so if you want to mix your own color and record that as a DMX value for a particular fixture, you can. If you want to force it to use color-mixing, rather than a color wheel, you can do that, too.

As with all current consoles, anything you make can be stored in a preset for later use; Vista's displays for storing and selecting presets are somewhat inelegant at the moment, though the "quick picker" [Fig. 6] view that lists groups of lights then presets of all types for quick select-and-apply, looks useful. Countering those who hate touch screens because they're hard to busk on, Vista also lets you take the buttons around the smaller LCD screens, which are usually related to playback control, and turn them into group or preset select buttons, instead; you can also store multiple console set-ups, so you're not stuck with any one button arrangement.

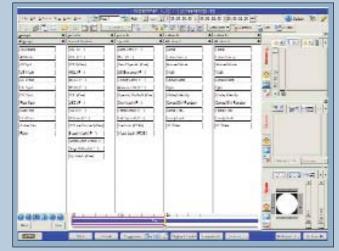
Manual control is also possible using the three rotary encoders, but they take on a whole new function when you move to actually storing and playing back what we would traditionally call cues. It's here that things get really exciting, since Vista throws away much of what we know about cue storage and replaces it with a timeline, a concept now familiar through audio- and video-editing software but which, though occasionally discussed, has rarely been seen in lighting consoles (Zero88's Sirius 250 being an honorable exception). Put simply, you define what a light does (fades up, turns red, moves downstage), then drag that event on a timeline to define when it does it. Time becomes a precisely controllable element of programming just as much as position, or color or anything else.





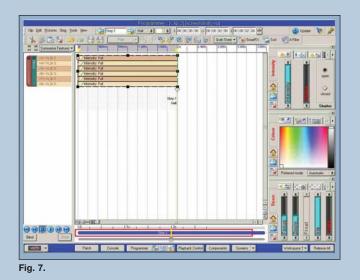








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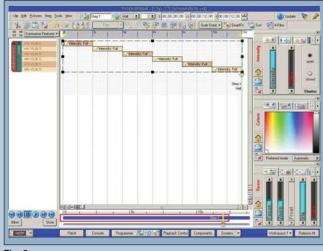


Fig. 8.

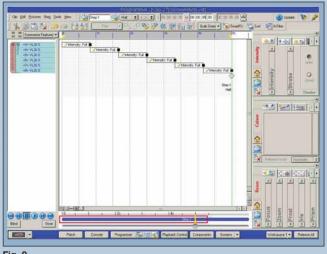


Fig. 9.

It's worth taking a moment to consider this, because more than any other console Vista forces you to re-examine what you mean by a cue: is Cue 2 the state or "look" of Cue 2, or is it the transition between Cue 1 and Cue 2? In traditional, particularly theatre-style, lighting consoles, we define states. The transitions are then the happy accidents that take place between one state and the next, with some hints from the programmer (in the form of part cues, or different timings and delays applied to certain parameters) to try to nudge it into a better-looking change. But precise changes to the way the cue runs are hard: do you want to see where everything is exactly halfway through the transition? Press go, wait for half the cue time, press pause. It's not ideal.

In Vista, you create a "clip," what other consoles would call a cue list or stack. That clip has time running across from left to right. Onto that timeline you insert the timing points for "steps"—what other consoles would call cues. You then put the playback line into one of these steps, and start setting lights. As you make a light do something, a bar defining that action appears in the timeline, by default filling that entire step. So, if you have a step that lasts two seconds, then makes six lights fade to full, six "intensity-to-full" bars appear, each two seconds long [Fig. 7]. Set back to the beginning of the step and press play. The lights all fade to full together, over two seconds—exactly as you'd expect.

But you want the lights to fade to full one after the other. So select those lights in the timeline, grab the bottom selection handle, and drag it sideways. The selected event bars are now skewed across so that each bar lasts two seconds but one now follows the previous one [Fig. 8]. Play the step again: the lights fade up one at a time. But now the step is too long—it's become 12 seconds. You want it to happen in five. Grab the selection handle at the end of selected events and drag it to the left. Every action gets scaled down while maintaining the relationships; the overall action just got shorter [Fig. 9]. Yes, you could do that on many other consoles with lots of selecting and typing, but not as quickly-and not as elegantly—and certainly not with a display that showed you what was going on as clearly the next time you came back to edit the cue.

Then add another step, put more actions in it [Fig. 10]. Stretch it and scale it. Or—and this is where the whole notion of the cue state starts to collapse—take an event from one step and drag it left so that half of it sits in the previous step. Or, within one step, have a light fade up, then down, then up again. You can make changes like this in the timeline without having to go back to the programmer screen, so much so that, once you've established some looks, you actually spend much of your time editing parameters right in the timeline, copying and pasting events, then modifying them (Jands is hopefully refining these graphics to let you see when a light is on even when you don't have intensities displayed). It's only some time into doing this that you'll realize, in a panic, that you've never actually recorded a cue! The most fundamental operation on many consoles doesn't exist here: when you do press save you're saving all of the steps in a particular clip.

But now, if you want to see what that the mid-point of that transition looks like, it's easy. Grab one of the rotary controls, switch it to shuttle mode, and you can wind slowly backwards and forwards through your clip (with the lights acting out their changes as you do!), pausing at any instant in time. Get to the point in the flyout where the lights are right in the audience's eyes, then drag the "turn red" action to precisely that moment!

Alternatively, Vista makes it easy to time sequences to music—listen to a track and press ctrl-m every time you want something to happen. A

marker will appear in the timeline at that moment; later on, you can figure out what you actually want to happen there. If the music is in MP3 format you can even import it into the console and play it from there.

This is all brilliant. The level of control easily available is, I would argue, unmatched by any other lighting console. But, to my mind, the most brilliant part isn't the timeline in itself; that could easily get out of hand and unmanageable, with thousands of little action bars for all the parameters of lots of lights. It's the way that the console deals with this, letting you control what you see and select. You can chose to view any element on its ownjust intensity, just color, or just overall fixtures [Fig. 11]. You can collapse and expand collections of things while maintaining their relationships. In the example above, collapse the intensities of the six lights down to just one bar, then stretch or compress it [Fig 12]. You can make ad-hoc groupings of things to reduce to a single time bar. You can save selections for later re-use. You can re-order things, since order in the timeline is important when you are skewing. And there is the intelligent selection of similar things-select one iris and grab control of them all. Alternatively, you can create custom selections -"if red and down center and full but on in block breakup" [Fig. 13]-though this needs some more criteria relative to previous steps, such as "select lights going down in intensity" to deal with the inherent lack of general fadeup and fade-down times. But the upshot-and I never thought I'd hear myself saying this—is that selecting things using the touch-screen does often feel quicker than selecting them using a numeric keypad.

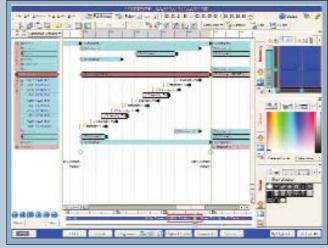
But does it work live?

Of course, life can never be this perfect, and here comes the big caveat. In live theatre, those damn tricky actors refuse to do things at precisely the same time every evening. Vista doesn't cope well with this at the moment. In the classic tracking-console scenario, where you start a slow cyclorama fade, then run cues over the top of it to fade areas up and down, Vista would jump to the absolute state of the cyc as defined at the moment the next cue ran, unless you took the trouble to have the cyc running in its own clip in its own playback. The Jands team are working on a solution, whereby the timeline becomes less absolute and steps can run over the top of each other hopefully with a way for the console to remember the relative trigger points for later examination—but it's not there just yet.

So it's not a finished product. What is these days? It has a good basic feature set, including functions not covered here, such as an effects engine, fade paths, multiple undo, and more, but there are elements of it that are unrefined, elements that are unfinished, and elements that are just plain buggy (save regularly!) though the time difference means that if you find a problem during your day, the programmers in Australia can often investigate it while you sleep at night.

For many, though, the imperfections and limitations will be dramatically outweighed by the compelling advantages. It won't be right for every show—I wouldn't want it near a theatre yet, though I'd miss the graphical cue timing. But if I was doing a show that ran to fixed time any time soon, I would absolutely want to have a Vista with me. It would also be great for controlling media servers. And it wouldn't be too much of a hardship for the show's producer or rental company since, compared to much of the competition, Vista is quite reasonably priced.

Vista is distributed in America by AC Lighting Inc. If you program lighting, you owe it to yourself to look at this console (or its off-line versions, native for Mac and PC, due soon). Even if you never use it again, it will give you a glimpse of your future.





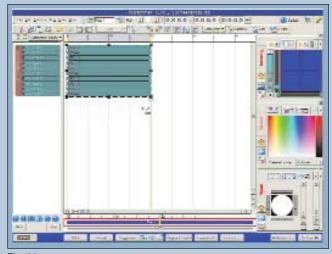


Fig. 11.

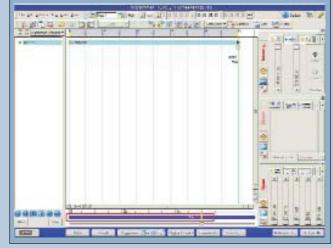


Fig. 12.

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Fig. 13.