

# AUDIO MEDIA

THE WORLD'S LEADING PROFESSIONAL AUDIO TECHNOLOGY MAGAZINE

Prolight + Sound 2006  
Frankfurt Preview

## AMSR Exclusive: Vi6 *Soundcraft's new digital console*



Final Cut: Ice Age 2



*Snow Business*



03

9 770960 747024

WORLDWIDE EDITION

ISSUE 184 • MARCH 2006 • UK £3.80





# SOUNDCRAFT VI6

## DIGITAL LIVE CONSOLE

Soundcraft has cogitated, refurbished, re-tooled, and recruited. Now it's ready to go digital. Paul Mac reports with an exclusive preview of the new Vi6 digital live console.

As most live console manufacturers will bear out, ushering in the digital age is not straight forward, but it is now essential as the SR market has taken digital to heart. Soundcraft, amongst the acknowledged big hitters in the live console arena, has now taken up the challenge – to show that it can take its experience and reputation in the analogue domain and bring that to bear on its own vision of what a digital live console should be. It's first offering is the Vi6.

One major advantage in all aspects of the digital challenge is the recent creation of the Soundcraft Studer Group, which in itself is part of the much larger Harman Group. The resources that this position commands are extensive, and provide a head start when it comes to waving the digital wand.

Soundcraft talks, rightly, of the need to get the audio as good as it can be, but then of the need to make sure that the big differentiating factor – the user interface – can woo engineers, hire companies, venues, and so on. No where else in our industry is the need for immediate, intuitive, and flexible control emphasised more than in the SR market.

With those parameters in mind, it's not so difficult to spot one major Studer influence on the Vi6. The Vistonics control interface has been an unqualified success not only in Studer's core markets, but in a surprising number of live venue operations. Its own Vista Series has proven itself in the studio, the broadcast control room, the theatre, the opera house, and more – so why not apply it to a pure SR product? But first, the basics...

### Center Stage

The Vi6 comes with a fixed channel capability and a fixed frame size. Obviously this isn't the only digital console that Soundcraft will be manufacturing, so you've got to assume that other variations will come along. For this product though the numbers run as 64 input channels and 32 output channels, plus the main LCR outputs. Those inputs and outputs can be configured as you wish - from straight mic inputs through effects returns, inserts, aux busses, matrix outputs, and so on. Assignment and set-up is tied in with the Vistonics system and is therefore so simple you'll weep. Incidentally, the MADI output can be dedicated to full 64 direct outputs without compromising the I/O count.

There are three main components to the product. The surface is connected to a local rack via cat-5, plus a few audio connections such as headphones, talkback, and so on. That local rack houses the DSP and some I/O. There are 16 analogue inputs and outputs, 16 channels of AES inputs and outputs, and a 64 I/O MADI card. The Stage box is once again connected via cat-5, though

there is an optical option for runs over 100 meters. It has a full compliment of 64 mic/line inputs and 32 analogue outputs, plus extras such as GPO contacts, MIDI connects, and so on.

The default sample rate for the console is 48kHz, though you can opt for 96kHz with some extra DSP. However, there is double redundancy on the stage box connection which would be lost with 96kHz.

Also, the engine doesn't need the console to keep it going, so if the board goes AWOL then audio continues. And the status is saved at the DSP, so if a reboot of the DSP is required and the surface remains offline, then again, audio continues as before.

The Vi6 has five Vistonics screens, each corresponding to sections of eight physical channels. The first three groups of eight default to input channels, the next is an output section, and the last is another section of (default) input channels, the surface, and Vistonics, is flexible enough to allow contextual variations to this default arrangement. For example, the final section of eight can become an output section and expand the physical output fader count to 16. The default configuration demands two layers of input channel strips, and four layers of output channel strips - all very easily switched with a single touch.

### Interface Is All

One of the holy grails of digital console design is to achieve the 'all things at all times' idea of surface ergonomics. Failing that, a product can succeed or die simply on its ease-of-use factor. If you've never seen or tried Vistonics before, then I suggest you seek out a demo because it really does offer an intuitive solution to digital console control. The basics involve a colour touch screen with knobs and buttons actually positioned on the screen itself. The idea is that the visual feedback can change depending on status and the function of those controls at any point. The graphics are very carefully designed to get the maximum information to the user without overloading – lots of pictures rather than lots of numbers. In the case of the Vi6, Vistonics becomes Vistonics II. The main difference is that instead of having forty pots and buttons per screen, there are 16. which leaves a lot more real estate on the screen for graphics and touchscreen functionality.

Each Vistonics input section on the Vi6 dedicates its main touchscreen area to eight channel overviews - each arranged in a familiar vertical layout, with each section represented in iconic form, rather than any strange virtual knob simulation or similar. The result is a view entirely suited to the console environment. Thus you can look across the console and actually take in all of the important



settings without much effort. Personally, I think it offers something even more intuitive than scanning a traditional analogue board for pot and button positions.

Looking at the Vistonics channel strips in more detail, each neatly summarises the input section, EQ, dynamics, the output busses, panning, routing, and output control. The two knob/button sections available to each channel defaults to aux 1 and aux 2, but this is configurable and adapts to whatever you're doing at the time. For example, if you select the input section, the 16 knobs and buttons will provide control over the channel's two alternative input options, analogue gain (at the stage box), analogue HP filter, digital HP and LP filters, digital trim, phantom powering, phase switching, delay (up to 100ms per channel), and so on. You might also be pleased to note that the philosophy of steering away from a central bank of all-things 'system' means that channel names, routing, and so on are all accessed through the channel strip itself. There's no need to get your head around a complicated central routing matrix or 'mission command' menu system to do assignments and housekeeping.

Stereo linking on this board is worthy of a special mention. To create a stereo channel, you simply have to link two mono channels. You then have the choice of whether to link vertically (link

one channel with the corresponding channel on the other layer) or horizontally (linking next-door neighbours). The vertical linking can have all sorts of benefits - no wasted layer space, for example, and permanent access to stereo channels (one of the linked channels will always be on the top layer).

The Vi6 channel EQ is a four-band parametric of Studer origin, though this doesn't expel the possibility of other EQ types in the future that could be assigned plug-in-style to the channel. There are already plans to incorporate BSS and dbx dynamics options, and included in the price will be eight Lexicon processors and 16 BSS graphic EQs. However, these are unlikely to be available at the ship date, so if you buy a Vi6 before implementation, the upgrade is free.

The channel dynamics sections are made up of three units: gate/de-esser, compressor, and limiter. Again, for all these channel items, Vistonics really comes into its own, and it's obvious that time and effort expended over just how every parameter is presented pays dividends for the user. The channel audio is further supported on the fader panels with gain reduction and level metering, scaled in a familiar analogue vein.

### Buss Master

The buss section Vistonics screen default provides

an overview of console-wide metering for all 64 input and 32 output channels. A neat little feature here is the ability to touch a section of metering on the screen and have the section brought up onto the right-hand eight channel section, so seeking out clips and so on need not disrupt the console overview too much. There's direct access to the 32 buss masters on the lower, knob-laden portion of the screen.

Dealing with the buss master section of the Vi6 takes us neatly to another little innovation that Soundcraft calls FaderGlow. A monitor engineer who wants to use faders for control can switch to that mode very simply. The 32 buss masters get spread across eight center-section faders. If he then solos a buss master, then the input faders become the channel mix for that master. Obviously, if not all 32 output busses are assigned to auxes then the Engineer needs to know which is which. In this case, a thin strip of coloured light indicates which faders are which type of output: orange for auxes, green for groups, purple for matrix, and blue for VCA groups. Those colours are echoed in the Vistonics display to make everything nice and easy. Soundcraft is currently considering an implementation that would make FaderGlow useful for FOH - colour coding groups of inputs, for instance - though of course the two distinct function for Fader Glow would have to be

mutually exclusive.

You can assign up to 16 busses as matrix busses, with up to 32 sources. So in the same way as works with the other masters, selecting a matrix master can assign the matrix sources across the board for easy access.

### Essential Mix

With all this (and more) going on in the Vistonics system, the actual fader panels are remarkably clean and sparse. All over the console one thing that becomes apparent is a big effort to get away from multitudes of configuration buttons and indecipherable acronyms. Where buttons are necessary it's reasonably obvious what do, and simple button-shape variations and vibrant lighting provide extra guidance.

The essence of the fader strips are the faders themselves, mutes, solos, metering, and another row of encoders, plus 'iso' and 'f' keys. The encoders functions are switched with buttons to the right of the first 24 channels. Provided as direct access are buttons for pan, mic gain, and gate threshold, and there are two extra user-definable buttons for anything else you need fast access to.

There are a couple of less obvious buttons that grace the fader strips – 'iso' and 'f'. The 'f' key is user-definable with number of preset functions, one of which simply locks a channel strip to its position on the console, so if you change layers,

that strip remains on top – or it can be used to switch between the channel's two alternative inputs, or be assigned to trigger a contact closure on either local or stage racks.

Iso is Snapshot Isolation button. The Vi6 Snapshot automation store and recall interface sits comfortably in the masters section Vistonics screen and is pretty straightforward. The store function always stores the entire console and you can add console blackout, MIDI events, HiQnet venue recall messages, and GPO contact closures to that. Cue selection is easy, and there's 'next' and 'previous' buttons near the Vistonics display, as well as on the fader panel – the latter defaults as locked out in case of accidents.

The snapshot recall can then be refined with the use of snapshot isolation. Every fader strip's Iso button takes that channel (or section or parameter, with a hold-select) out of the reach of the snapshot recall. There is also the option of using changes to a cue to offset the rest of the cues in the list, so tweaks to vocal channels etc do not need to be repeated per cue while the performance is running.

### Conclusion

The Vi6 is a digital live console that brings a tried and tested 'performance' solution to the game. You really do have to sit in front of a Vistonics surface to realise just how intuitive it is,

and the Vi6 capitalises on this with its own specific implementation. There is very little opportunity to get bogged down in set-up screens and menus, and even though the console's footprint is small, you do feel that there's plenty of room to move around. The I/O is entirely flexible – the only limits are put on the number of VCA groups and Matrix busses you can assign (up to 16 of each).

While my demo was necessarily conducted on a prototype unit (production units are expected in May), it still instilled a sense of co-operation with the user. No one wants a console to become a 'necessary obstacle' to a decent sound, and I feel that the Vi6 is just the opposite. It's no longer credible to deny that an improved interface can improve the result, and the Vi6 will be proof of that. **AM**

### INFORMATION

📞 Soundcraft Vi6 £TBA/\$TBA

📍 Soundcraft (UK)

☎ +44 (0)1707 665000

🌐 [www.soundcraft.com](http://www.soundcraft.com)

📍 Harman Pro North America

☎ +1 818.920.3212

## Beyond Intuitive



[www.soundcraftdigital.com](http://www.soundcraftdigital.com)

Soundcraft  
**Vi6**<sup>TM</sup>  
DIGITAL LIVE SOUND CONSOLE

**H** A Harman International Company