

Soundcraft **Vi6**TM

System FAQs

Oct 1, 2006

Where is the Vi6 designed and manufactured?

Vi6 was specified by Soundcraft Product Manager Andy Brown and was designed in Switzerland by a team of software and hardware engineers from our sister company Studer, and is manufactured at our headquarters in Potters Bar, just north of London.

What components make up the Vi6?

The Vi6 consists of 3 pieces:

- Control Surface with 32 Input Faders, 8 output Faders, and 3 main output faders, and a local monitor fader.
- Stagebox
- Local Rack/Engine

How do the various parts of the system communicate with each other?

The stagebox connects to the local rack/engine via a CAT5 cable which carries the 64 inputs and 32 outputs via MADi protocol along with control data.

The local rack/engine connects to the surface on a supplied harness which carries 3 balanced cables and a single CAT5 cable. Two of the audio cables are carrying stereo solo audio up to the control surface for headphones and the third is taking Talkback audio from the control surface down to the engine for routing. The CAT5 cable carries proprietary control data and is essentially the communication link between the surface and engine.

What is MADi?

MADi is an AES standard (AES 10) and stands for Multi-channel Audio Digital Interface. This first showed on the scene in the late 1980's and was used as interface on multitrack digital tape machines. (continued on next page)

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The original MADI standard allowed 56 channels of bi-directional audio to be sent down a single piece of cable. Originally this was a BNC coaxial cable but the Vi6 uses CAT5 for the stagebox and also has an optical MADI card in the local rack.

A newer MADI standard is referred to as extended MADI and expands the channel transmission count to 64 channels bi-directionally. Extended MADI is this format used in the Vi6

How far can the stagebox be located from the local rack/engine?

Using standard CAT5 the limitation is 100 meters or 300 feet. If you need to run longer than that you should use our fiber option which should provide at least 200 meters/600 feet.

How far can the local rack/engine be located from the surface?

In theory the CAT5 limitation of 300 feet, however this has not been confirmed. The standard umbilical provided is roughly 12 feet long.

Will any CAT5 cable work?

For short runs, probably, but at the moment we are only recommending a cable sourced from the UK Neutrik distributor and available only from Soundcraft USA (Neutrik US distributor does not stock or is even aware of such a cable) for long runs. We have had problems using other high quality CAT5 and CAT7 cables in 300 foot applications. We are in the process of evaluating additional cables including the easily sourced TMB Ethercon cable and will hopefully have additional options in the near future

Do you recommend an Uninterruptible Power Supply with the Vi6?

Yes! We provide 2U in all our local rack road cases specifically for this. Here in the US we have been using an APC Smart-UPS 750VA with good success

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What are the weights and dimensions for Vi6 Surface?

The control surface is: 68.6" Wide, 28.5" Depth (Armrest to Back Of Screen over-bridge), 12.8" in height. Weight is 139lbs

What's the Vi6's sampling rate?

Currently it is set at 48K. When the software is finished it can operate at 44.1k, or 96K. 96K will require additional DSP cards be added (additional cost) and will require both MADI ports on the stage box to be used.

What's the latency on throughput ?

At 48K, measuring an analog stagebox input to a local rack analog output is slightly less than 2ms.

How many Inputs and Outputs is the Vi6 capable of?

64 inputs simultaneously to the mix bus at one time and 35 Outputs. 3 of these outputs are dedicated Left, Right, and Center buses and 32 are configurable buses which can be any mix of mono or stereo auxes, groups, or matrices.

Can I expand this number by adding another stagebox or other expansion devices?

No, the Vi6's I/O capability can not be expanded nor can the control surface be made larger or smaller.

How many total audio connectors are on the Vi6?

Stagebox

64 Female XLR analog mic/line inputs
32 Male XLR analog line outputs.

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Local Rack

- 16 Female XLR analog /line Inputs
- 16 Male XLR line Outputs
- 8 AES/EBU Input Pairs
- 9 AES/EBU Output Pairs
- 3 Female XLR Mic Inputs
- 1 Optical MADI Input (64 Channels)
- 1 Optical MADI Output (64 Channels)
- 5 Male XLR for monitor outputs
- 1 Male XLR for Talkback output

What Operating System does the control surface use?

The Vi6 uses Windows XP Embedded which is essentially XP stripped to its most basic form (simpler=more reliable). We have our own software program called TXLA that drives the Vistonic TFT screens.

What DSP Chipset do you use?

The Vi6 uses state of the art Analog Devices Sharc Hammerheads which provide 40 bit floating point processing and gives the Vi6 excellent subjective audio performance in the digital domain.

How do I upgrade the software?

Users can access a password protected FTP site where the software can be downloaded to a computer and where the ZIP file containing the software may then be transferred to a USB drive. Insert the USB drive into one of the control surface's USB slots making sure the ZIP file is not contained in a folder.

Hit the power off switch on the console and choose "Fast Restart". The surface will then turn off and restart at which point it will come up with a screen that allows you options on loading the new software.

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Is a USB drive also how I save show or snapshot settings?

Yes, these settings are first stored to a hard drive mounted in the surface and may then be copied to a users USB drive and vice-versa

Is there an output for an external monitor?

No, all the screen drivers on the CPU are being used for the Vistonics TFT screens.

Are redundant power supplies available?

Redundant power supplies will be included as standard on all consoles imported into the US. Each component of the system (Stagebox, Local Rack, and Console Surface) have a redundant power supply fitted.

What parts of the system contain fans?

There are thermal sense fans in both of the racks that step up their speed as need demands. There are no fans in the control surface..

How low a line voltage can the Vi6 tolerate?

The Vi6 uses a switch mode power supply that can operate between +/- 10% of its rated voltage of 100-240V AC thus the Vi6 will continue to run at 90V AC.

Are there littlite sockets on the Vi6?

No, the Vi6 uses a series of high intensity LED lamps mounted in the meterbridge (more accurately TFT Screenbridge) that create waterfall lighting which illuminates the entire control surface

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don't have a gooseneck Talkback Mic? Is there another connector available so I don't have a mic cable draped over the console surface?

Yes, there is an additional TB mic connector on the back panel of the control surface which also has a 48V switch should it require phantom power.

Can I use 2 surfaces and engines with 1stagebox (i.e. FOH and Monitor Positions)?

Yes, one MADI output from the stagebox will feed the FOH console and one will feed the monitor console. The current version of software does not officially support this even though there are reports of at least one sound company successfully doing this. When this is fully implemented one surface will be locked out of analog gain control and will use digital trim for input gain adjustments.

Is there a redundant MADI link between the stagebox and engine?

Yes, there are two MADI connectors on the engine and the stagebox so two separate cable runs can be made. You must give up the redundancy if you configure the console for 96K operation or use two surfaces with one stagebox..

Is there offline editing software available for setting up the console using a PC?

This is in the works but is not expected until Summer of 2007

Does the console have VCA type groups?

Yes, it provides 16 VCA type groups.

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Are there insert points available for patching external processing on an input or an output?

Yes there is a pool of 24 inserts that can be placed on either an input or output.

Within what temperature range can I use the VI6?

The normal operating air temperature range is: 32 F to 113 F with a maximum relative humidity of 90% at 104 degrees Fahrenheit

Storage temperature range is -4 F and 140 F

Desk surface is protected against dripping water.

The system can also be powered on at very low temperatures without damage to the hard drive. The drive has the following spec: 20GByte 2,5" Hard drive and operates between -4 F and 185 F

Note that at temperatures below 0 °C the screens on the console will not function correctly, but the console will boot to allow warm up and pass audio