

# TECHNICAL INFORMATION

March 2007

Soundcraft

# ***Vi SERIES™***

**DIGITAL LIVE SOUND CONSOLES**



# TECHNICAL INFORMATION

MARCH 2007

The hardware for the Soundcraft Vi Series consoles comprise three main sections:

## The Main Console surface

with all the mix controls and faders and Vistonics™ II screens.



## The Local Rack

which is located near the console, and contains the DSP processing engine as well as some I/O.



## The Stage Box

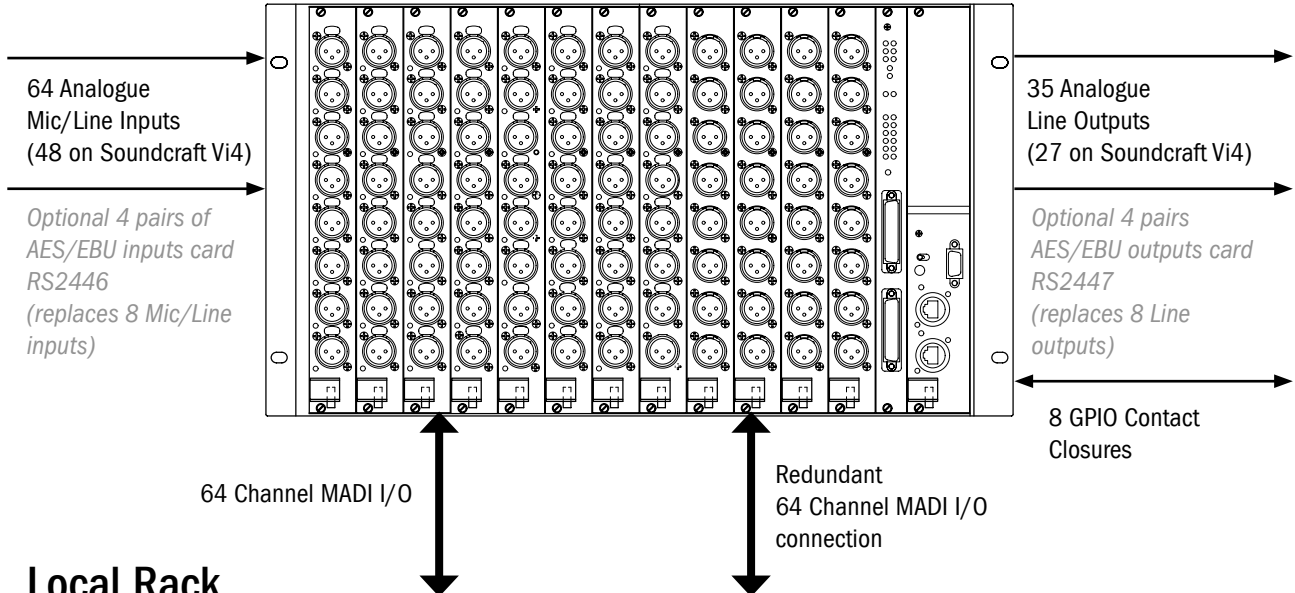
which is used for all main analogue (and digital where fitted) I/O, and will be located at the stage or point where most signals originate.

This document outlines the main functionality of the Local Rack and Stagebox, and shows the full I/O connectivity and interconnections of the Soundcraft Vi Series console system.

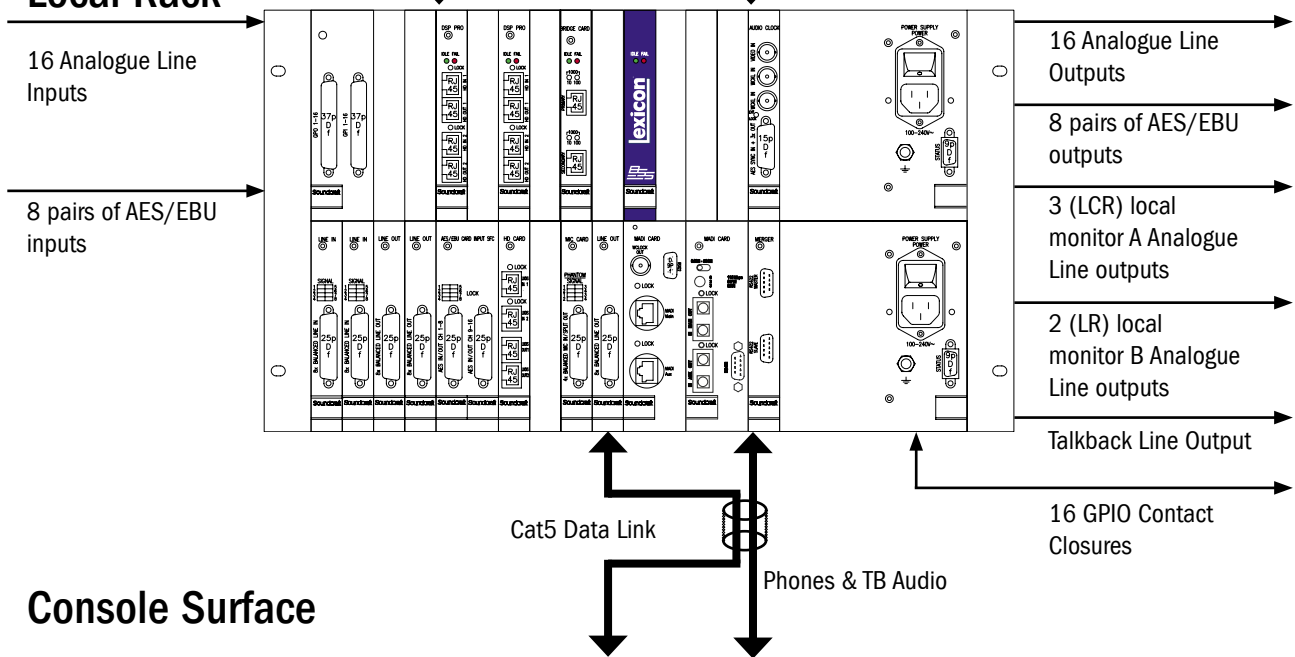


# System Hardware Diagram

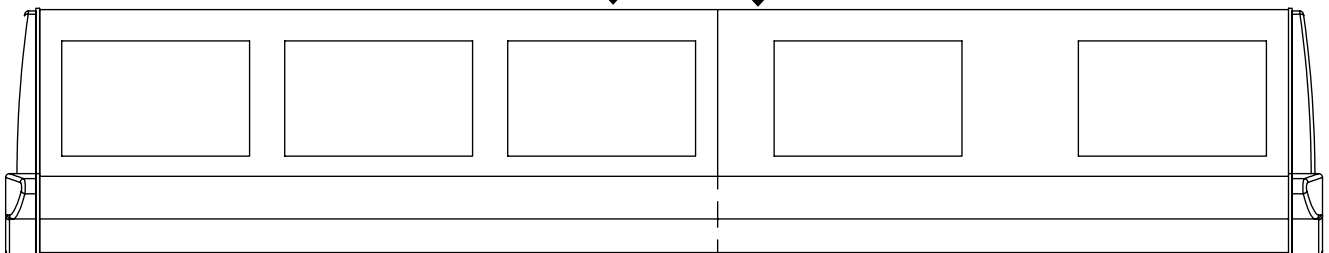
## Stage Box



## Local Rack

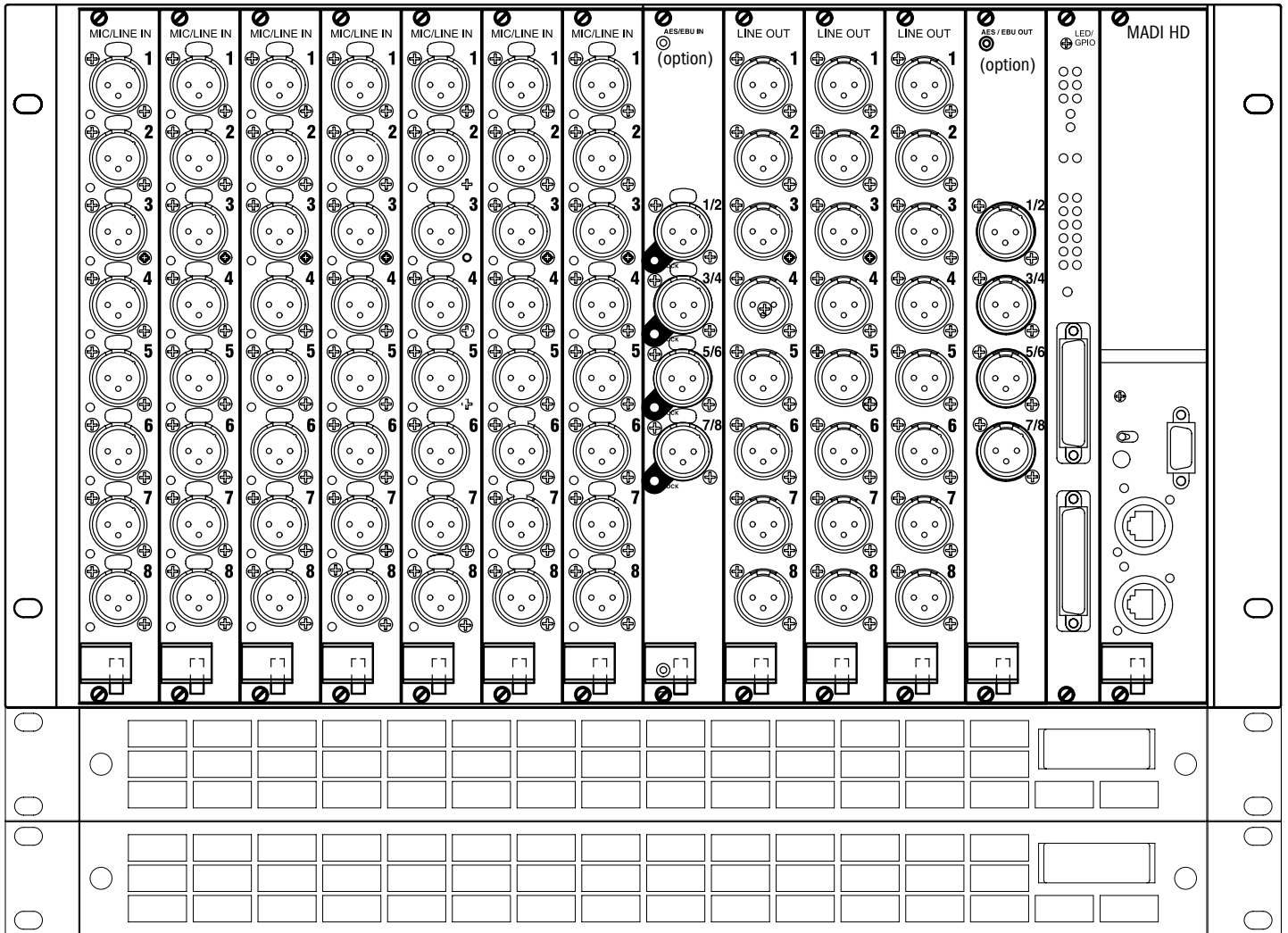


## Console Surface





# Stage Box



The Stage box contains the main Input connections for all microphones and line level sources, and also acts as the distribution point for the 32 (or 24) line outputs. Analogue inputs and outputs are all on XLR-type connectors.

Standard connection to the Local Rack is via a Cat5 or Cat7 cable, using Ethernet connectors. (A breakout panel converting to Amphenol RJF connectors is supplied). The Stagebox to Local Rack link cables use Amphenol RJF connectors, and can be up to 80m of approved cable (Neutrik Etherflex) or 130m of Cat 7 Installation cable (AMP Netconnect PiMF). A second cable offers redundancy in the event of cable failure.

If required, the Stagebox can be supplied with a fibre-optic redundant connection to the Local Rack.

### Optional AES/EBU inputs and outputs

Each analogue input card contains 8 inputs. This can be replaced by an optional AES/EBU input card which holds 4 pairs of AES/EBU inputs, with built-in Sample Rate Convertors.

Similarly, each analogue output card contains 8 outputs. This can be replaced by an optional AES/EBU output card which holds 4 pairs of AES/EBU outputs.

### GPIO

There are 8 sets of GPIO (general purpose input/output) contact closures, for use with triggering external equipment or receiving switch commands.

### Rack hardware

The stagebox is housed in a flight-cased rack, the total capacity it occupies is 8U (8 rack units) including the fan and filter units.

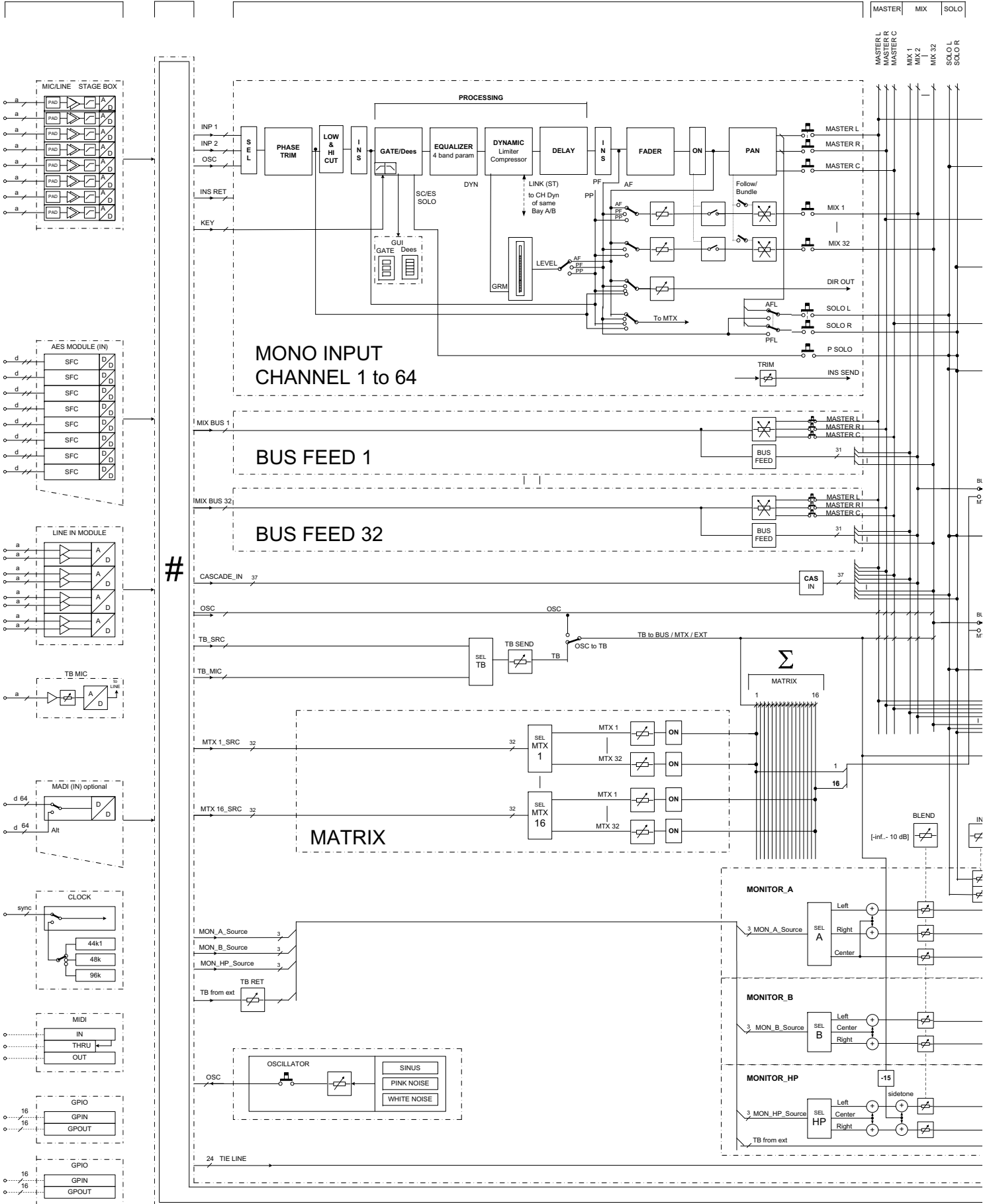
The Stagebox is normally supplied in a flightcase, but can also be mounted in an installation rack, along with the fan and filter units.

INPUTS

PATCH

INPUT CHANNELS / MATRIX / CASCADE

Σ



MASTER L  
 MASTER R  
 MASTER C  
 MIX 1  
 MIX 2  
 MIX 32  
 SOLO L  
 SOLO R

MONO INPUT  
 CHANNEL 1 to 64

BUS FEED 1

BUS FEED 32

MATRIX

MONITOR\_A

MONITOR\_B

MONITOR\_HP

#

BLEND  
 [-inf. - 10 dB]

MON\_A\_Source 3

MON\_B\_Source 3

MON\_HP\_Source 3

TB from ext

OSC

24 TIE LINE

Σ

MATRIX 16

SEL A

SEL B

SEL HP

-15

sidetone

TB from ext

OSC

TB RET

OSC

TB SRC

TB MIC

SEL TB

TB SEND

TB

OSC to TB

TB to BUS / MTX / EXT

CAS IN 37

MIX BUS 1

MIX BUS 32

CASCADE\_IN 37

OSC

OSC

MTX 1\_SRC 32

MTX 32

SEL MTX 1

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MTX 32

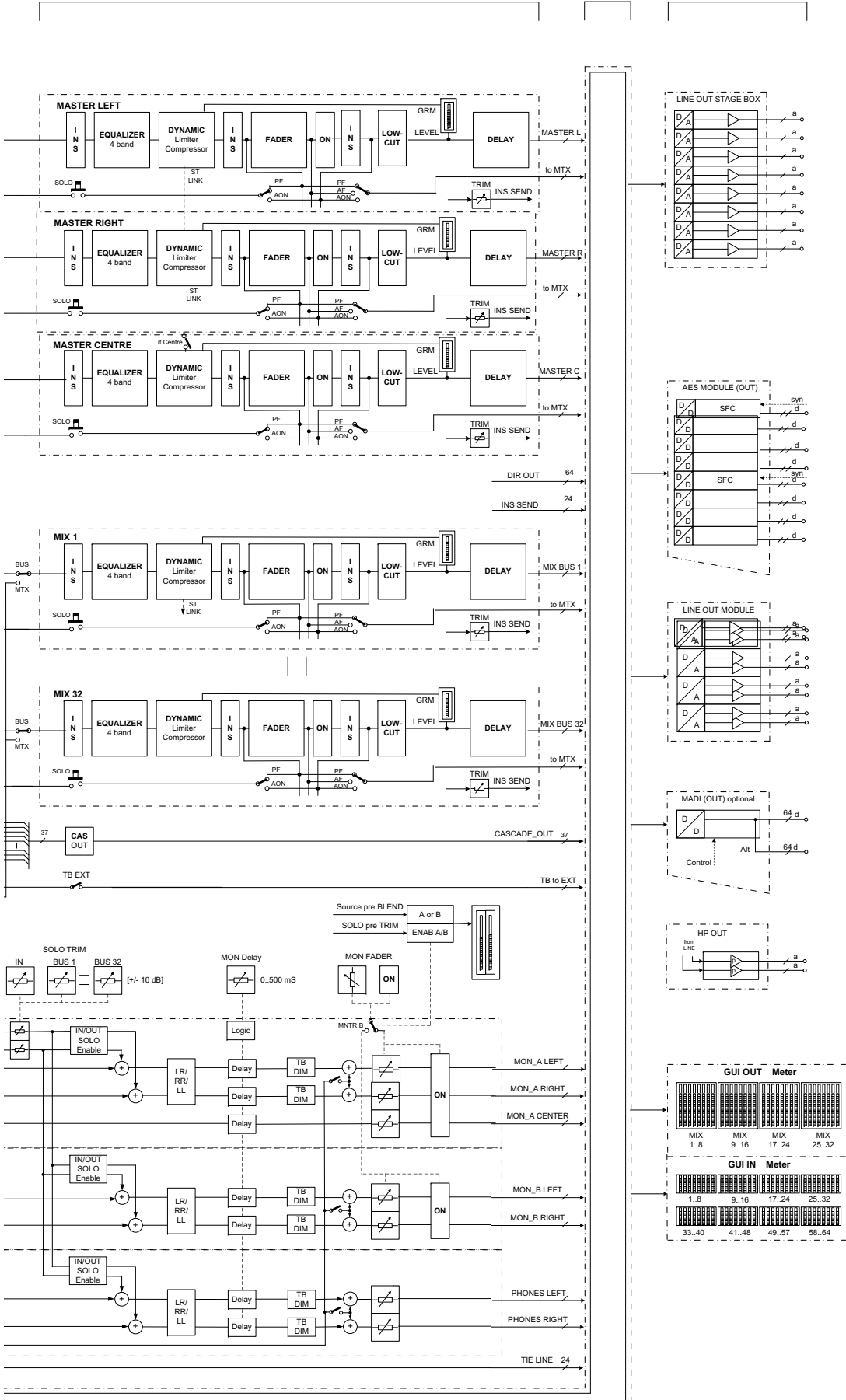
ON

ON

MASTER / MIX / MONITORING

PATCH

OUTPUTS



Block Diagram (showing Soundcraft Vi6)

## Cable Specifications

### Cat 5e:

Maximum 80m (260 feet) using Neutrik Etherflex Cat 5e cable (ZNK CT2672601), terminated with Amphenol RJF connectors.

Suitable 80m cable mounted on a lightweight drum is available from Soundcraft, part number RZ2713.

These cables are not included with the standard console and must be ordered separately.

Two 5m patch cables are supplied with each console as standard.

### Cat 7:

Maximum 130m (422 feet) using AMP Netconnect 57893 PiMF cable.

**Note: this cable is solid core and only suitable for fixed installations, not for touring use.**

**Not available from Soundcraft.**

### Optical Multimode Fibre:

Maximum distance 1500m (4875 feet) using continuous run of 50/125 multimode fibre, terminated with Fibrecast™ expanded beam connectors.

### Optical Multimode Fibre (cntd..)

Suitable cable is available from Soundcraft on a lightweight drum in the following lengths:

50m	RZ2714
150m	RZ2702
200m	RZ2701

Note: One of the above cables must be ordered if the optical stagebox link is requested.

### Single Mode Fibre:

Maximum distance 10km

Note: Special Optical MADI card is required, please contact Soundcraft for delivery time.

## Option Cards and Interfaces



The **Processor Card** (fitted as standard unless otherwise requested) adds 8 channels of high-performance Lexicon® Effects and 35 (or 27) 30-band BSS Audio™ graphic equalisers to the Soundcraft Vi6™ (or Soundcraft Vi4™).

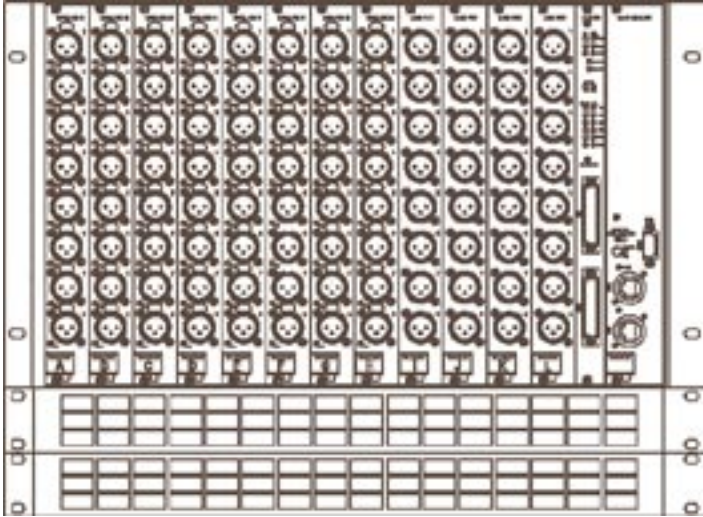
The **CobraNet™** card allows up to 32 channels of input or output signals (or a combination of both) to be received by or sent from the console onto a CobraNet™ network. The card must be used as the Conductor for the network. By default, the card is configured for 32 outputs.

The **Soundcraft A-NET 16V** card allows a direct digital connection to the Aviom® A-NET® Pro16™ Personal Monitor System. The card includes a switchable test tone and stereo pair linking via DIP switches.



# Rack Dimensions, Uncased

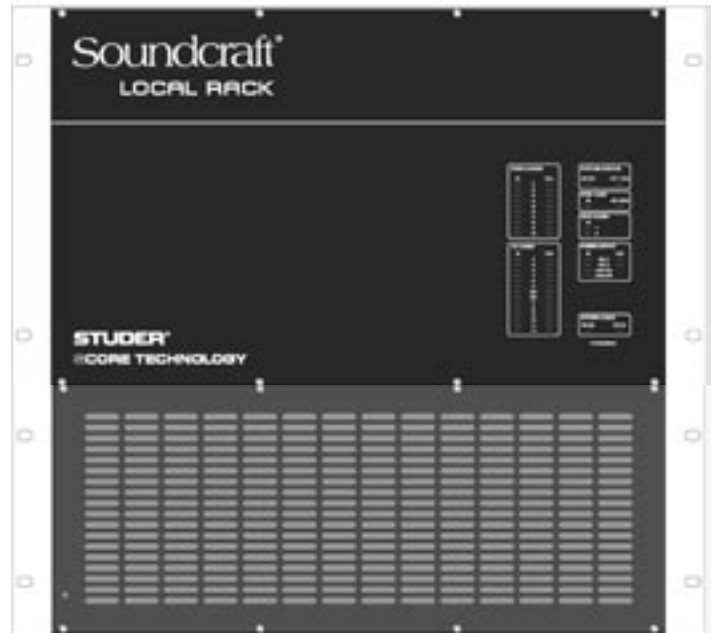
## Stagebox



Dimensions include the additional 1U fan and 1U Deflector unit as shown.

Height.....8U/ 356mm / 14"  
 Width.....483mm / 19"  
 Depth.....380mm / 15"  
 max, chassis size, no cables or connectors included

## SCore DSP & Local I/O



Dimensions include the additional 4U fan unit as shown.

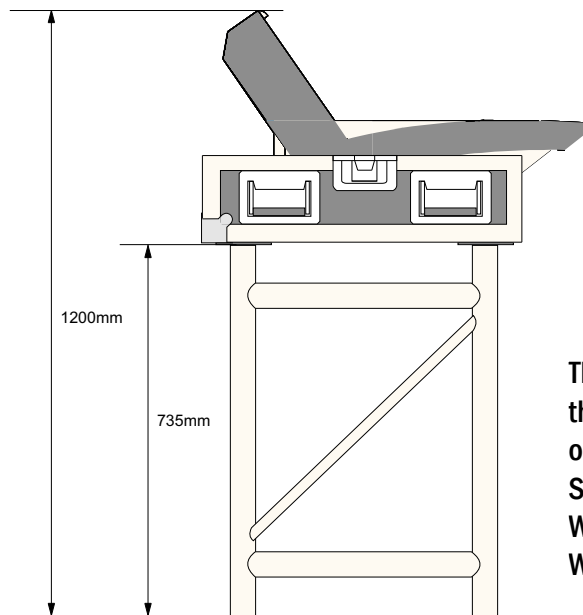
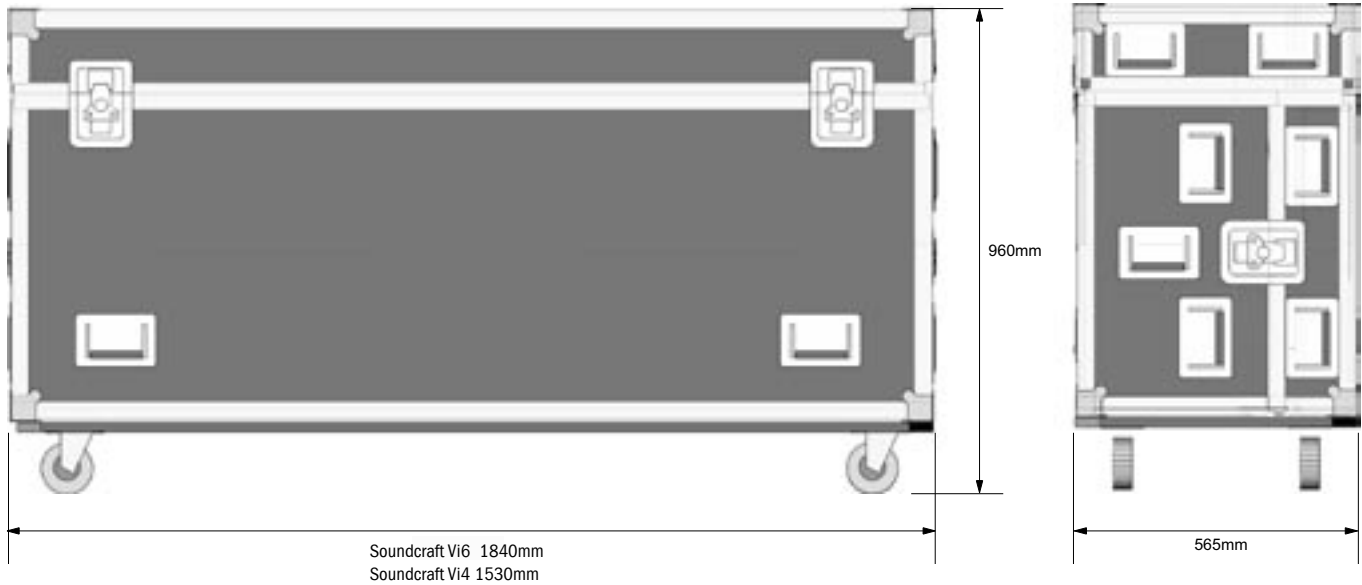
Height.....10U/445mm/17.5"  
 Width.....483mm/19"  
 Depth.....380mm/15"  
 max, chassis size, no cables or connectors included

When mounting the DSP core and stagebox and fans in a non-Soundcraft flightcase or rack, allow for cabling and connector space behind unit. Do not install without supplied fans. The DSP Core requires an additional 4U XLR breakout box to be mounted behind the rack (not shown).

# Dimensions, Flightcased (Deluxe)

Soundcraft Vi6 shown.

For Soundcraft Vi4, deduct 310mm



This case is available with or without the integral stand (Soundcraft Vi6 only).

Soundcraft Part Nos:

With Stand: PL1318

Without Stand: PL1319

Dimensions when cased including wheels:

	Height	Length	Width	Weight	Part No.
Control Surface, Soundcraft Vi6	960mm	1840mm	565mm	130kg	PL1318/1319
Control Surface, Soundcraft Vi4	960mm	1840mm	565mm	120kg	PL1322
Local Rack	810mm	940mm	580mm	50kg	PL1320
Stagebox	810mm	940mm	580mm	40kg	PL1320



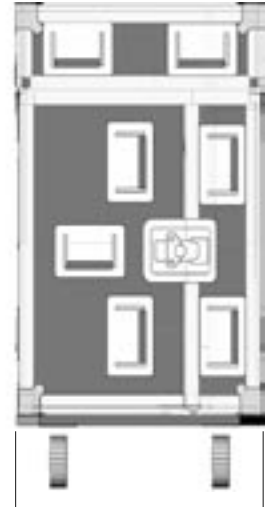
# Dimensions, Flightcased (Standard)

Soundcraft Vi6 shown.

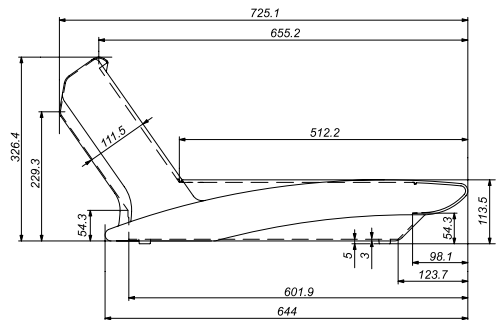
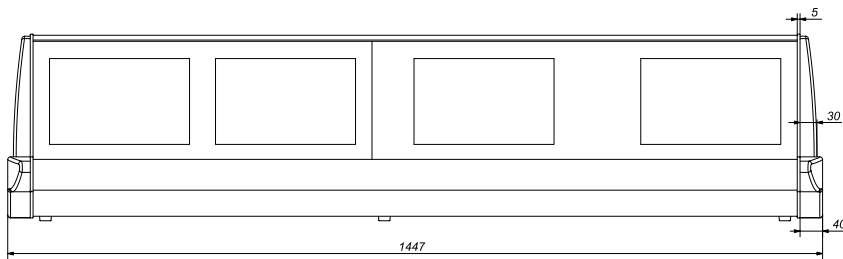
For Soundcraft Vi4, deduct 310mm



Soundcraft Vi6 1820mm  
Soundcraft Vi4 1510mm



Dimensions when cased:	Height	Length	Width	Weight	Part No.
Control Surface, Soundcraft Vi6	960mm	1820mm	490mm	130kg	PL1315
Control Surface, Soundcraft Vi4	960mm	1510mm	490mm	120kg	PL1321
Local Rack	950mm	600mm	670mm	50kg	PL1316
Stagebox	870mm	600mm	540mm	40kg	PL1317



## Control Surface Dimensions

Soundcraft Vi4 shown

For Soundcraft Vi6 add 310mm

