




midas
DESIGNED FOR A PURE PERFORMANCE

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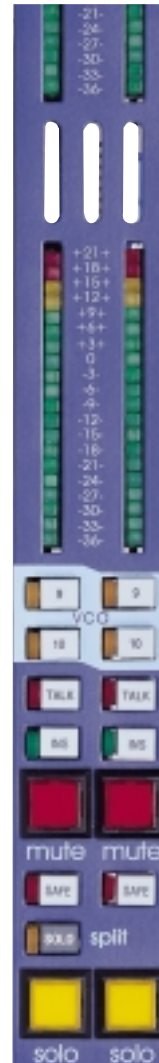
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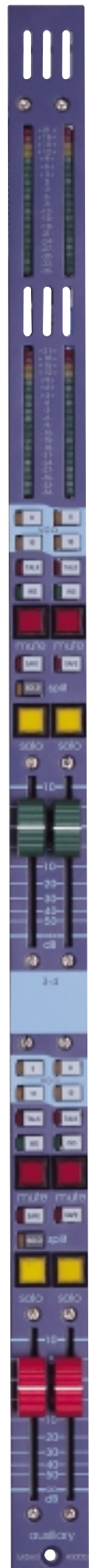
MIDAS Masters Module Aux Module



Full Left / Centre / Right metering is provided as part of the HS0021 Masters Module along with a large Solo-in-Place switch. Direct inputs may be summed into the left and right buses for console linking, or other applications, and these may be switched pre or post the master insert point. Each of the eight Matrix Master controls has Left/Right/Sum source switching and the matrix feeds may be switched pre or post the Master fader. This module also includes the talkback controls, overall control of the master stereo balance and single fader control over the stereo mix level. The master mute buttons are integrated into the snapshot automation system and there's a VCA link to allow the mono output level to track that of the stereo master fader.



Each module provides four Aux output master control sections complete with post-fade level metering. VCA switches assign the aux output to VCA control from VCA master 9 and 10 while a Safe switch may be used to remove the aux from the snapshot automation system. Solo (PFL mono/AFL stereo) and mute buttons are provided for each send and the mutes may be controlled via the snapshot automation system. As a safety feature, the Solo buttons are self-cancelling whenever a new channel is solo'd - multiple channels can be solo'd using the Solo Add Mode switch on the Monitor module. A Split button changes the aux AFL solos from mono to stereo.



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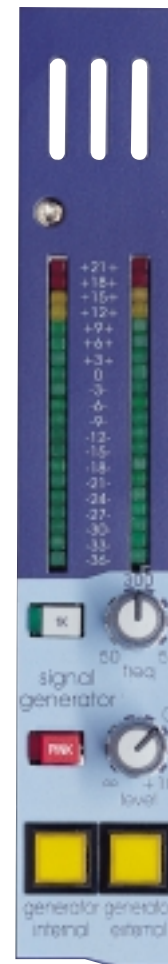
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MIDAS

Monitor Module

The HS0031 Monitor Module includes peak metering of the left and right monitor signals, a variable frequency test oscillator with a 1kHz fixed tone switch, pink noise generation and a talkback mic input. The talkback mic may be routed to an external XLR or to the console's internal talk system, in which case local outputs are dimmed by 20dB. The signal generator section may be routed to the console's internal Talk to All and Talk Select busses and/or to an external XLR connector. The Talk to All switch takes priority over other output talk switches so that the signal generator section or mic can be routed to all outputs.

A headphone monitoring section is also fitted along with phase reverse, left/right reverse switching mute and solo buttons for the monitor output. A single fader provides overall control over all three local monitor outputs and a switchable Solo Add mode allows multiple channels to access to the Solo bus.



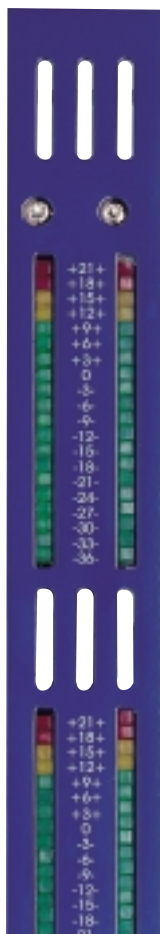
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Matrix Module



Each HS0041/HS0042 Matrix Module provides full fader control and level metering for four matrix outputs. Matrix outputs may be individually assigned to VCA control from the master fader and Talk buttons may be used to include the matrix outputs in the talkback system. Safe buttons remove the matrix output from snapshot automation control and Solo switches send the matrix signals to the PFL mono and AFL buses.

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Group Module

The HS0012 Group Module provides a highly flexible stereo Group master control strip with one direct input per Group that can be mixed with the existing bus signal. These direct inputs may be employed as extra effects returns or for console bus linking. Eight matrix level controls are provided per channel and 'per channel' pre/post switching is provided to determine whether the Group's matrix outputs are derived pre or post the Group fader. VCA switches are fitted to assign the audio subgroups to VCA control via VCA masters 9 and 10. Clear level metering monitors the signal levels from -36dB to +21dB. The Group insert point may be switched so that the signal sent to the matrix mixes is either pre or post the insert point. A large, illuminated mute button may be used for manual channel muting or may be controlled from the Automute snapshot automation system.



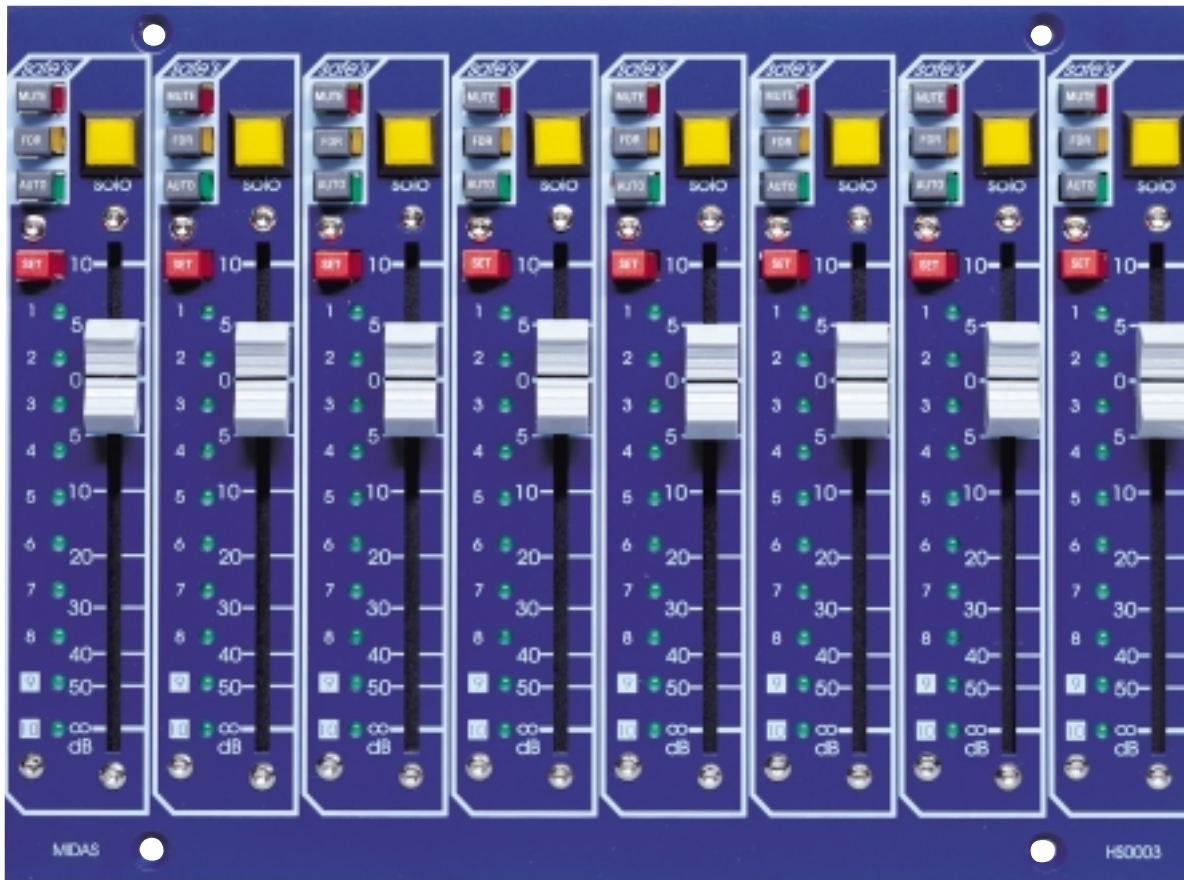
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MIDAS

Input Fader



The Input faders of the HS0003 are linked to an intuitive, VCA level automation system, which is mainly controlled from the centre section of the console, though key status buttons and indicators are located adjacent to each fader. Each fader has a Automation Safe button that removes it from automation control as well as a Fader Safe button which removes the fader from any form of remote control. The set switch is used to program the channel automute and VCA assignment when

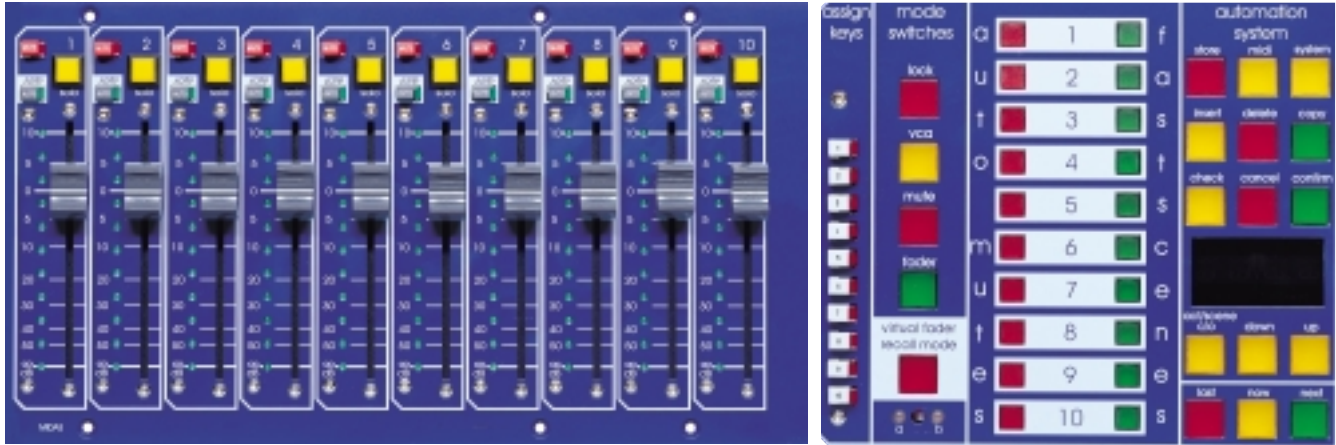
creating subgroups. Status LEDs are used to show the VCA 'virtual' fader level as well as to prompt the operator when nulling the faders. The focus is on fast, intuitive use in a live performance situation.

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VCA Master Fader & Automation



The Heritage 2000 includes a highly sophisticated yet intuitive VCA automation system designed specifically for live performance. Numerical readouts of Act and Scene numbers are provided and there's direct Fast Key access to the ten most commonly used snapshots as set up by the user. Snapshots may be stored as either acts or scenes where scenes are organised as sub-sets of acts. Scene recall may be achieved by stepping through the stored scenes in numerical order using the Last/Next buttons, by using the Act/Scene Up/Down buttons or by direct recall using a Fast Key. Alternatively, scenes may be recalled directly via MIDI. A check mode is provided so that virtual fader positions for a newly recalled scene can be viewed before making that scene active.

The automation data is read from a micro card (up to two may be installed at any one time) and status LEDs show whether the automation is active or inactive. Where two cards are installed, a switch is used to select whether card A or B is active. Potential fault situations are also monitored by the status LEDs. Comprehensive automation and MIDI editing is provided, though this may be disabled during performance if required for security reasons.

The fader automation operates in either Real Fader mode or Virtual Fader mode. In Real Fader mode, the signal levels are controlled by the physical faders while in Virtual mode, they are controlled by the VCA automation system. In virtual mode, the 11 meter LEDs adjacent to the faders show the VCA gain setting regardless of the physical fader position.

In Real Fader mode, the automation system can still provide visual prompts via the status LEDs. Comprehensive editing facilities are provided, including the ability to edit, insert or copy scenes.

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Performance Specifications

Input Impedance	Mic Line	2K Balanced 20K Balanced
Input Gain (all faders at 0dB)	Mic Mic + Pad Line Level Inputs	Continuously variable from + 15dB to + 60dB Continuously variable from -10dB to + 35dB 0dB
Maximum Input Level	Mic Mic + Pad Line Level Inputs	+ 6dBu + 31dBu + 21dBu
CMR at 100Hz	Mic (gain + 40dB) Mic + Pad (gain 0dB)	Typ 115dB Typ 80dB
CMR at 1kHz	Mic (gain + 40dB) Mic + Pad (gain 0dB) Line	> 100dB > 60dB > 50dB
Frequency Response (20 to 20kHz)	Mic to Mix (gain + 60dB)	+ 0dB to - 1dB
Noise (20 to 20kHz)	Mic EIN ref.150 Ohms (gain + 60dB)	-128dBu
System Noise (20 to 20kHz)	Summing Noise (48 channels routed with faders down) Line to Mix Noise (48 channels routed at 0dB, pan centre)	- 80dB -75dB
Distortion at 1kHz	Mic to Mix (+ 40dB gain, 0dBu output)	< 0.03%
Crosstalk at 1kHz	Channel to Channel Mix to Mix Channel to Mix Maximum Fader attenuation	< -90dB < -90dB < -90dB > 80dB
Output Impedance	All Line Outputs Headphones	50 Ohms Balanced Source to drive > 600W To drive > 8W
Maximum Output Level	All Line Outputs Headphones	+ 21dBu + 21dBu
Nominal Signal Level	Mic Line Headphones	-60dBu to + 10dBu 0dBu + 10dBu
Equaliser	Hi pass slope Hi pass frequency Treble Gain Treble Shelving Freq. Treble Bell Freq. Treble Bell Bandwidth Hi Mid Gain Hi Mid Freq. Hi Mid Bandwidth Lo Mid Gain Lo Mid Freq Lo Mid Bandwidth Bass Gain Bass Shelving Freq Bass Bell Freq Bass Bell Bandwidth	Continuously variable Continuously variable Continuously variable Continuously variable Continuously variable Continuously variable Continuously variable Continuously variable Continuously variable Continuously variable Continuously variable Continuously variable Continuously variable Continuously variable 12dB / Oct. - 3dB point from 20Hz to 400Hz + 15 dB to -15 dB Centre detent = 0dB - 3dB point from 1k to 20k centre from 1k to 20k 0.1 Oct. to 2 Oct. Centre detent = 0.5 Oct. + 15 dB to -15 dB Centre detent = 0dB centre from 400Hz to 8k 0.1 Oct. to 2 Oct. Centre detent = 0.5 Oct. + 15 dB to - 15 dB Centre detent = 0dB centre from 100Hz to 2k 0.1 Oct. to 2 Oct Centre detent = 0.5 Oct. + 15 dB to - 15 dB Centre detent = 0dB - 3dB point from 20Hz to 400Hz centre from 20Hz to 400Hz 0.1 Oct. to 2 Oct Centre detent = 0.5 Oct.

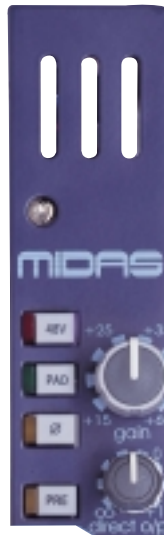
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MIDAS

Mono / Stereo Input Module

The HS0002 Mono Input Module is a fully featured mic/line channel strip incorporating a classic MIDAS 4-band equaliser that features two fully parametric mid sections, variable frequency high and low filters with switchable shelving/bell characteristics and a variable frequency 20 Hz to 400 Hz high-pass filter. Input pad, phase and phantom power switches are fitted.

Eight mono aux controls may be individually assigned to pre or post-fade operation with two further stereo aux sends, with level and pan controls, feeding aux busses 9 - 10 and 11 - 12. A variable gain, direct channel output is available and this may be switched pre or post-equaliser. The channel insert points may also be switched pre- or post-EQ and a switch is provided for linking the insert send to the insert return, effectively bypassing any connected device. Each mono channel features the MIDAS SISTTM spacial imaging system for use with Left, Centre Right loudspeaker systems. When SISTTM is active, the Image control modifies the action of the pan control so as to feed centre panned signals equally to both left and right outputs as well as to the centre. This can be particularly useful for distributing the load of high energy, centre-panned sounds across all FOH loudspeaker arrays. A constant power law ensures that the overall balance will not change as the Image control is adjusted. Group routing for 12 busses is provided along with a Pan switch that affects all group routing by moving the channel source from post-fader to post-both the fader and the Pan control. Pre-fade metering is provided close to the fader and a Mono switch allows the post-fader channel signal to be routed to the mono master buss. A large, illuminated mute



button may be used for manual channel muting or may be controlled from the Automute snapshot automation system.

Stereo Input Module

Like the HS0002 Mono Input Module, the HS0005 stereo is a comprehensive, mic/line channel strip and incorporates the classic MIDAS 4-band equaliser. There are eight mono aux sends and two stereo aux sends, all individually switchable pre or post-fader. The aux and insert modes are similar to those provided on the mono channel where the stereo sends may be switched to mono, in which case the signal is derived from a sum of the left and right channels. Like the mono version, the channel insert points may be switched pre or post EQ. The input sources are regulated using a gain and a balance control with a separate phase switch for each channel. Bargraph metering indicates the pre-fader peak input levels for both channels while



a Mono button connects the post-fader channel signals to the Mono Master buss. Left and right pan controls are used for setting the stereo positioning of the two channels and a Stereo routing button connects the post-fader channel signals to the stereo bus via the pan controls. Routing is identical to the mono HS0002 module. A large, illuminated mute button may be used for manual channel muting or may be controlled from the Automute snapshot automation system.



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Introducing The Heritage Series

Midas is proud to introduce the Heritage Series of audio mixing consoles, the latest in the Midas tradition of impeccable sonic quality and outstanding technical specifications. These three new consoles represent the state of the art in audio mixing technology, with features and electronics developed in direct response to the outstanding success of the Midas XL3 and XL4 consoles during the 1990s. Midas has been designing and manufacturing live performance mixing consoles for the world's most demanding sound engineers, performers and production rental companies since the early 1970s. The evolution of Midas consoles throughout the 30-year history of this classic marque has always paralleled, and often led, increasingly sophisticated audio innovations for the world-wide entertainment technology industry. Raising the standards of sonic quality through continual research and development has always been - and still remains - our overall aim. Equally important to us is the design and implementation of many new areas of control functionality and user-friendly desk operation to anticipate and accommodate the rapidly changing and expanding needs of audio professionals who specify Midas consoles for their major tours, festivals, international events, broadcast projects and prestigious fixed installations. The Midas design pedigree has, since our birth, been founded upon a track record of achieving a unique symbiosis with working sound engineers around the planet - engineers who respect and endorse our proven technology in the light of their responsibilities to their internationally-based clients who are themselves the leading lights of our industry.

Better Audio Technology with the Midas Touch

The new Midas Heritage Series embodies features selected after extended consultation with hundreds of leading international and local sound rental and installation specialists and sound engineers - adding up to a powerful bedrock of on-the-road expertise. At every point in the critical audio path, our use of the highest possible quality components ensures smooth, consistent performance within a truly class-leading

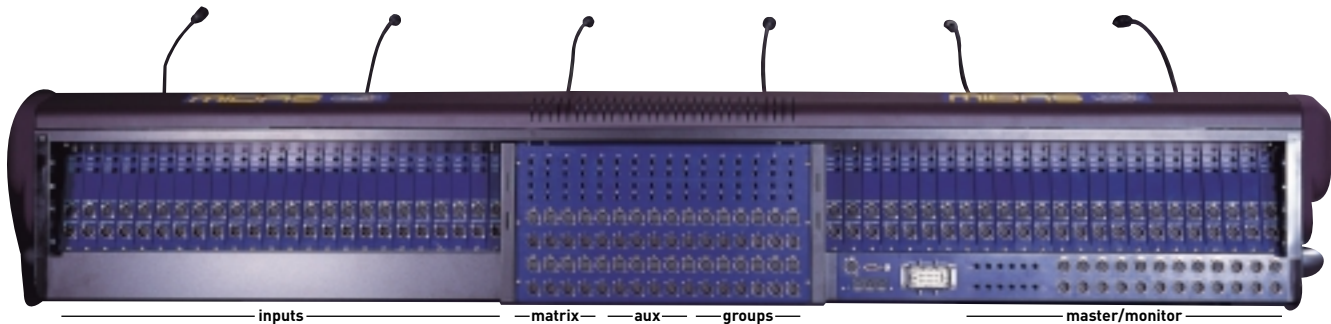
sonic, electronic and mechanical design concept. Electronics derived in part from the Midas XL4 provide a superb dynamic range, very low noise floor, flawless audio path transparency and a beautifully warm EQ. Equally importantly, every Midas console has an impeccably solid construction with proven road-worthiness, using high quality mechanical components, a rugged frame and easily-serviceable modular design - and is designed by engineers who have a personal interest in music and the needs of real-world live performance. Other generic features include the XL4's high quality mic pre amp, 1st stage passive filtering, constant bandwidth topology, low noise at mid gains, totally symmetrical voltage gain and Z; full headroom and total stability maintained into all load types; unity Gain Structure and the all-important Midas EQ. Gold board interconnections, high stability and tight tolerance resistors and capacitors, low noise summing amplifiers, hum / noise cancelling busses, sealed high cost ALPS pots and a zinc plated steel chassis complete some more of the special Midas audio and mechanical quality picture. The enduring legacy of the Midas XL3, the first truly industry standard multifunctional console and of the pioneering Midas XL4, many of whose advanced automation functions are employed in the Midas Heritage 2000 console, including features expressly designed to accommodate multiple stereo inputs and generous facilities for stereo in-ear monitoring and Matrix mixing, has created a powerful new series of sound desks fully equipped for the new Millennium.

This is the Midas Touch.

The new Midas Heritage Series.

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Overview and Statistics



The Heritage 2000 is a 30 buss console with an additional 15 x 8 output matrix.

The busses are

- 12 audio groups = 24
- 8 mono aux = 8
- 2 stereo aux = 4
- 1 stereo master = 2
- 1 mono master = 1
- 1 stereo AFL = 2
- 1 mono PFL = 1
- TOTAL = 30

10 automute sub groups and 10 VCA sub groups which include VCA sub group muting.

52 input channels plus an additional 14 direct inputs on the group and master modules.

A total XLR input count of 95 are

- 52 channel mic inputs
- 12 group direct inputs
- 12 aux bus injects
- 8 matrix bus inject inputs
- 3 solo bus inject inputs
- 2 master direct inputs
- 2 external inputs (2 track return)
- 1 master bus inject
- 1 talk mic input
- 1 talk external input
- 1 test bus input

A total XLR output count of 89 are

- 44 input channel direct outputs
- 12 audio group outputs
- 12 aux outputs
- 8 matrix outputs
- 3 master outputs
- 3 solo outputs
- 6 local outputs
- 1 talk external output

A total of 180 balanced 1/4 inch jacks for inserts are

- 52 input channel insert sends
- 52 input channel insert returns
- 12 audio group insert sends
- 12 audio group insert returns
- 12 aux insert sends
- 12 aux insert returns
- 8 matrix insert sends
- 8 matrix insert returns
- 3 master insert sends
- 3 master insert returns
- 3 local insert sends
- 3 local insert returns

58 long throw faders for mix control with fader position recall and virtual fader functions.

1043 automated switch functions are

- 480 input channel VCA sub group virtual assign switches
- 480 input channel mute sub group virtual assign switches
- 48 input channel mute switches
- 12 audio sub group mute switches
- 12 aux mute switches
- 8 matrix mute switches
- 3 master mute switches

A total of 89 peak program meters with 20 LED segments on all outputs and 11 LED segments on input channels.



Weight in Flight Case

Weight in Flight Case (Bob Tail)

Weight out of Flight Case

Flight Case Dimensions

Bob Tail Case Dimensions

PSU

Front Panel

Plus Harting Connectors

425kg 937.125 lbs

425kg 937.125 lbs

200kg 440.9 lbs

Width 2370 Height 1540 Depth 560 mm

Width 93.3 Height 60.63 Depth 22.04inches

Width 2240 Height 1540 Depth 560 mm

Width 88.19 Height 60.63 Depth 22.04inches

Width 443 Depth 380 Height 130 mm

Width 17.05 Depth 14.96 Height 5.12 inches

Width 482 mm / 8.98 inches

Depth 470 mm / 18.5 inches

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KLARK TEKNIK GROUP



KLARK TEKNIK
SIGNAL PROCESSING BY DEFINITION



DIDA
BETTER BY DESIGN



MIDAS
DESIGNED FOR A PURE PERFORMANCE

"Celebrating their 30th Anniversary in 2000, the Midas name has long represented the pinnacle of live console design and engineering. Though many things have changed in the past 30 years, the fundamental principles applied by Midas remain the same: to provide the professional sound engineer with the ultimate in audio quality, flexibility and reliability.

The legendary XL3 was launched in 1990 and was joined by the unique XL4 in 1995. The range has been subsequently expanded with the launch of the XL200 and XL250 consoles, making the great Midas sound accessible to a whole new market. 1999 saw the launch of the Heritage Series, the most popular analogue live sound reinforcement consoles of recent years.'



"At the forefront of professional signal processing since their conception, Klark Teknik celebrated their first quarter-century in 1999. From their industry-standard analogue graphic equalisers to the leading edge technology of their digital units, Klark Teknik continues to be the first choice for audio professionals around the world. The year 2000 also marks the introduction of several groundbreaking new products."

DDA has established a reputation for designing and manufacturing live performance and recording production consoles of outstanding quality. DDA consoles are used in some of the most prestigious studios and concert venues around the world.

Klark Teknik Group

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Canada	705, Progress Ave, Unit No. 10, Scarborough, Ontario M1H 2X1	+ 1(0)4164314975	+ 1(0)4164314588
France	Parc de Courcerin, Allee Lech Walesa, Lognes, F77322 Marne La Vallee, Cedex 2	+ 33(0)164800090	+ 33(0)160065103
Germany	Hirschberger Ring 45, Postfach 0254, D-94315 Straubing	+ 49(0)94217060	+ 49(0)9421706357
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