HERITAGE 3000

midas

DESIGNED FOR A PURE PERFORMANCE

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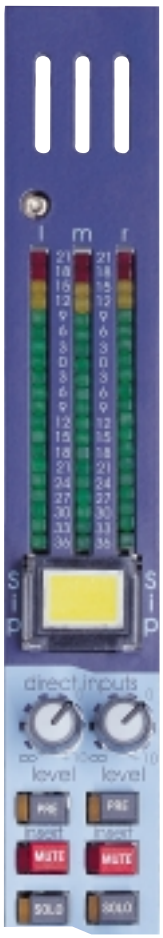
Masters Module



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.

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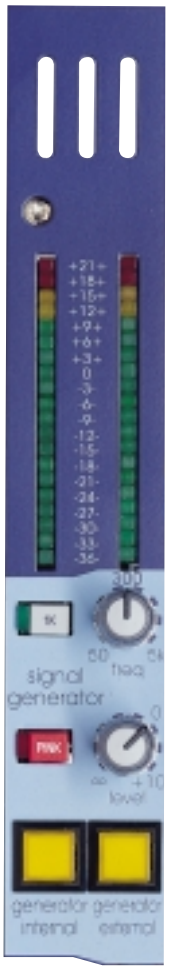
Monitor Module

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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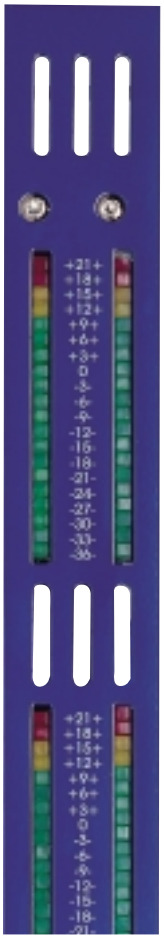
Matrix Module



Each HS0041 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 HS0011 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 group and pre/post switching is provided to determine whether the Group's matrix outputs are derived pre or post the Group fader and pre or post the insert point. Clear level metering monitors the signal levels from -36dB to +21dB and any Group can be assigned to VCA automation.

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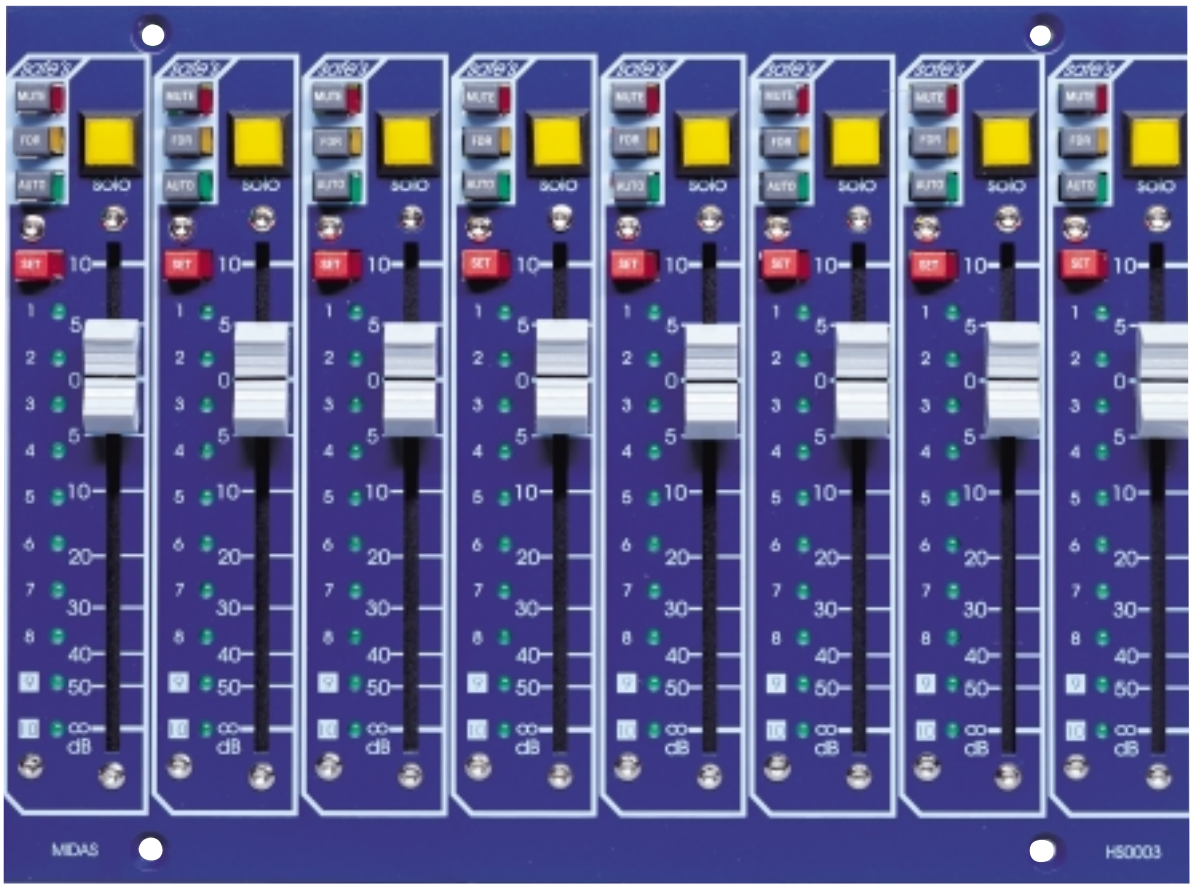
Input Fader



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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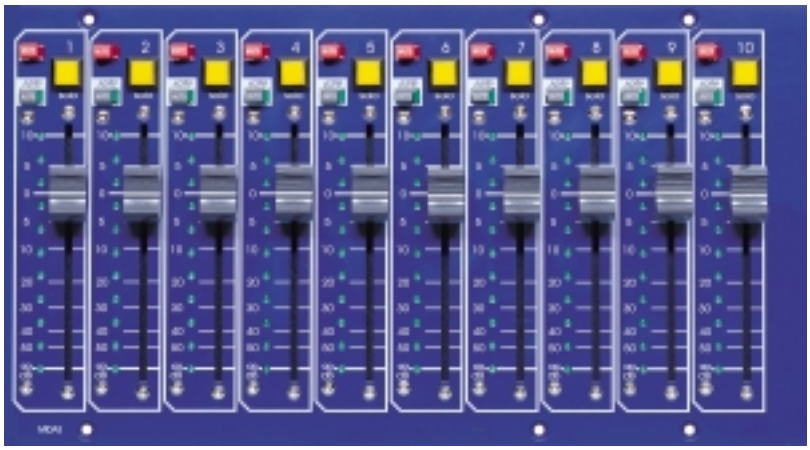
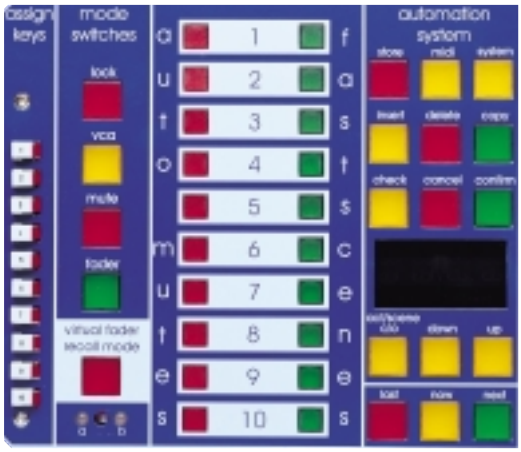
VCA Master Fader & Automation





The VCA Master Faders are equipped with Solo and Mute buttons, plus an Auto Safe switch that disables snapshot automation control of both the VCA master faders and VCA mutes. If the Solo button is pressed momentarily, it will latch on whereas if it is pressed and held for more than one second, the latching is disabled. The same status LED system is employed as on the channel faders to show the VCA 'virtual' fader settings and to assist the user in nulling the faders when necessary. The status LEDs turn off when the console is in VCA or mute assignment modes.

Virtual Fader Recall mode generates a VCA fader level based on the value at the time the last snapshot was stored. This level is added to the physical fader level (effectively a 'relative' mode) and the virtual fader level is displayed as a vertical bar of status LEDs.

The Heritage 3000 includes a highly sophisticated yet intuitive Mute and VCA automation system designed specifically for live performance. Numerical readouts of Act and Scene numbers is 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 two micro cards. 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 status 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 -0dB to + 35dB 0dB	
Maximum Input Level	Mic Mic + Pad Line Level Inputs	+ 6dBu + 31dBu + 21dBu	
CMR at 100kHz	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 (+ 60dB 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 > 600 Ohms To drive > 8 Ohms	
Maximum Output Level	All Line Outputs Headphones	+ 21dBu + 21dBu	
Nominal Signal Level	Mic Line Headphones	-60dBu to + 10dBu 0dBu + 10dBu	
Equaliser	Hi pass slope		12dB / Oct.
	Hi pass frequency	Continuously variable	- 3dB point from 20Hz to 400Hz
	Treble Gain	Continuously variable	+ 15 dB to -15 dB Centre detent = 0dB
	Treble Shelving Freq.	Continuously variable	- 3dB point from 1k to 20k
	Treble Bell Freq.	Continuously variable	centre from 1k to 20k
	Treble Bell Bandwidth	Continuously variable	0.1 Oct. to 2 Oct. Centre detent = 0.5 Oct.
	Hi Mid Gain	Continuously variable	+ 15 dB to -15 dB Centre detent = 0dB
	Hi Mid Freq.	Continuously variable	centre from 400Hz to 8k
	Hi Mid Bandwidth	Continuously variable	0.1 Oct. to 2 Oct. Centre detent = 0.5 Oct.
	Lo Mid Gain	Continuously variable	+ 15 dB to - 15 dB Centre detent = 0dB
	Lo Mid Freq	Continuously variable	centre from 100Hz to 2k
	Lo Mid Bandwidth	Continuously variable	0.1 Oct. to 2 Oct Centre detent = 0.5 Oct.
	Bass Gain	Continuously variable	+ 15 dB to - 15 dB Centre detent = 0dB
	Bass Shelving Freq	Continuously variable	- 3dB point from 20Hz to 400Hz
	Bass Bell Freq	Continuously variable	centre from 20Hz to 400Hz
	Bass Bell Bandwidth	Continuously variable	0.1 Oct. to 2 Oct Centre detent = 0.5 Oct.

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Mono / Stereo Input Module

The HS0001 Mono Input Module is a fully featured mic/line channel strip incorporating the classic XL4 mic-pre and MIDAS 4-band parametric equaliser with 24 adjustable, dual mode Group Mix controls. These controls operate as bus assign on/off switches as well as conventional aux sends, adjusting the signal levels sent to the corresponding aux buses. The group mix buses themselves may be configured as Mono Aux, Stereo Aux or Post Pan Group, selectable on an individual bus basis. In Stereo Aux mode, the leftmost control of each pair functions as a pan control while the rightmost control adjusts the aux level. The channel insert points may be switched pre- or post-EQ.

Each mono channel features the MIDAS SIS™ spacial imaging system for use with Left, Centre Right loudspeaker systems. When SIS™ is active, the Image control modifies the action of the pan control so as to adjust the amount of centre panned signals which are fed 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.

Stereo Input Module

Like the HS0001 Mono Input Module, the HS0004 stereo

is a comprehensive, mic/line channel strip incorporatingthe classic MIDAS 4-band equaliser and 24 adjustable, dual mode Group Mix controls that operate as bus assign on/off switches and aux sends. The input gain and EQ control settings apply to both the left and right signal paths. The aux modes are similar to those provided on the mono channel, though when configured to mono, 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. Bargraph metering indicates the pre-fader peak input levels while a Mono button connects the post-fader channel signals to the Mono Master fader.

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.

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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 25-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 (over 800 sold to date) and of the pioneering Midas XL4, many of whose advanced automation functions are employed in the Midas Heritage 3000 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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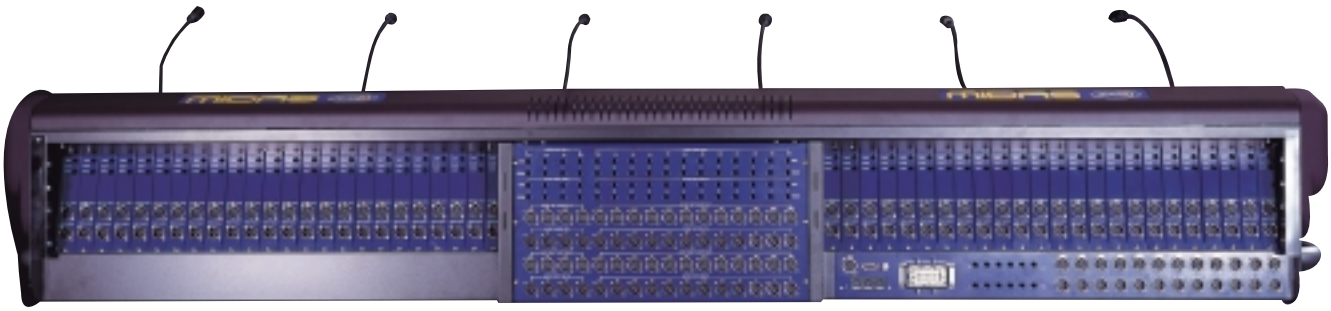
Overview and Statistics



The Heritage 3000 is a 30 buss console with an additional 27 x 8 output matrix.

The busses are 24 stereo or mono configurable groups =24
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 26 direct inputs on the group and master modules.

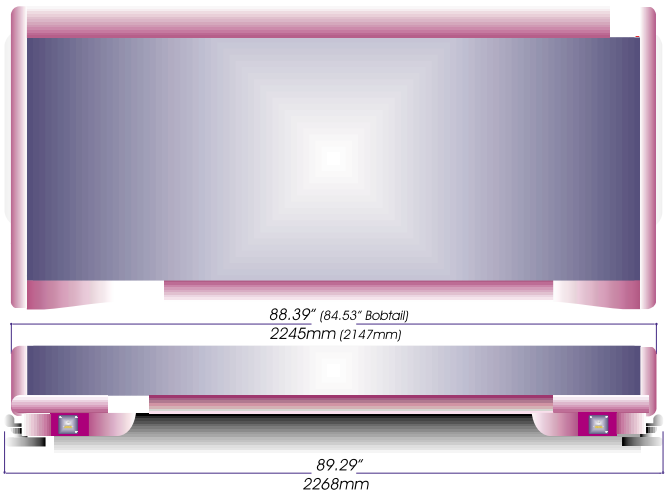
A total XLR input count of 95 are
52 channel mic inputs
24 group direct inputs
8 matrix bus inject inputs
3 solo bus inject inputs
2 master direct inputs
2 external inputs (2 track return)
1 master bus inject
1 talk mic input
1 talk external input
1 test bus input

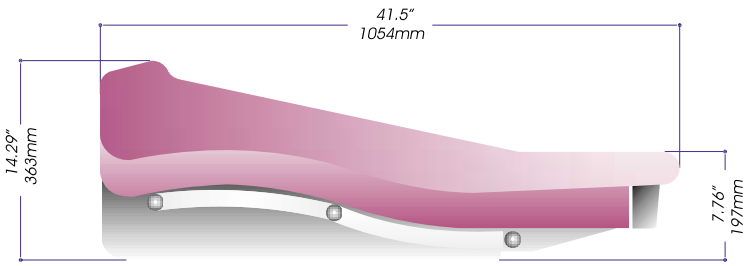
A total XLR output count of 89 are
44 input channel direct outputs
24 audio group outputs
8 matrix outputs
3 master outputs
3 solo outputs
6 local outputs
1 talk external output

A total of 180 balanced 1/4 inch jacks for inserts are
52 input channel insert sends
52 input channel insert returns
24 audio group insert sends
24 audio group insert returns
8 matrix insert sends
8 matrix insert returns
3 master insert sends
3 master insert returns
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
24 audio sub group mute switches
8 matrix mute switches
3 master mute switches





Weight out of Flight Case	200kg 440.9 lbs
Flight Case Dimensions	Width 2370 Height 1540 Depth 560 mm Width 93.3 Height 60.63 Depth 22.04inches
Bob Tail Case Dimensions	Width 2240 Height 1540 Depth 560 mm Width 88.19 Height 60.63 Depth 22.04inches
PSU	Width 443 Depth 380 Height 130 mm Width 17.05 Depth 14.96 Height 5.12 inches
Front Panel	Width 482 mm / 8.98 inches
Plus Harting Connectors	Depth 470 mm / 18.5 inches

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

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KLARK TEKNIK GROUP

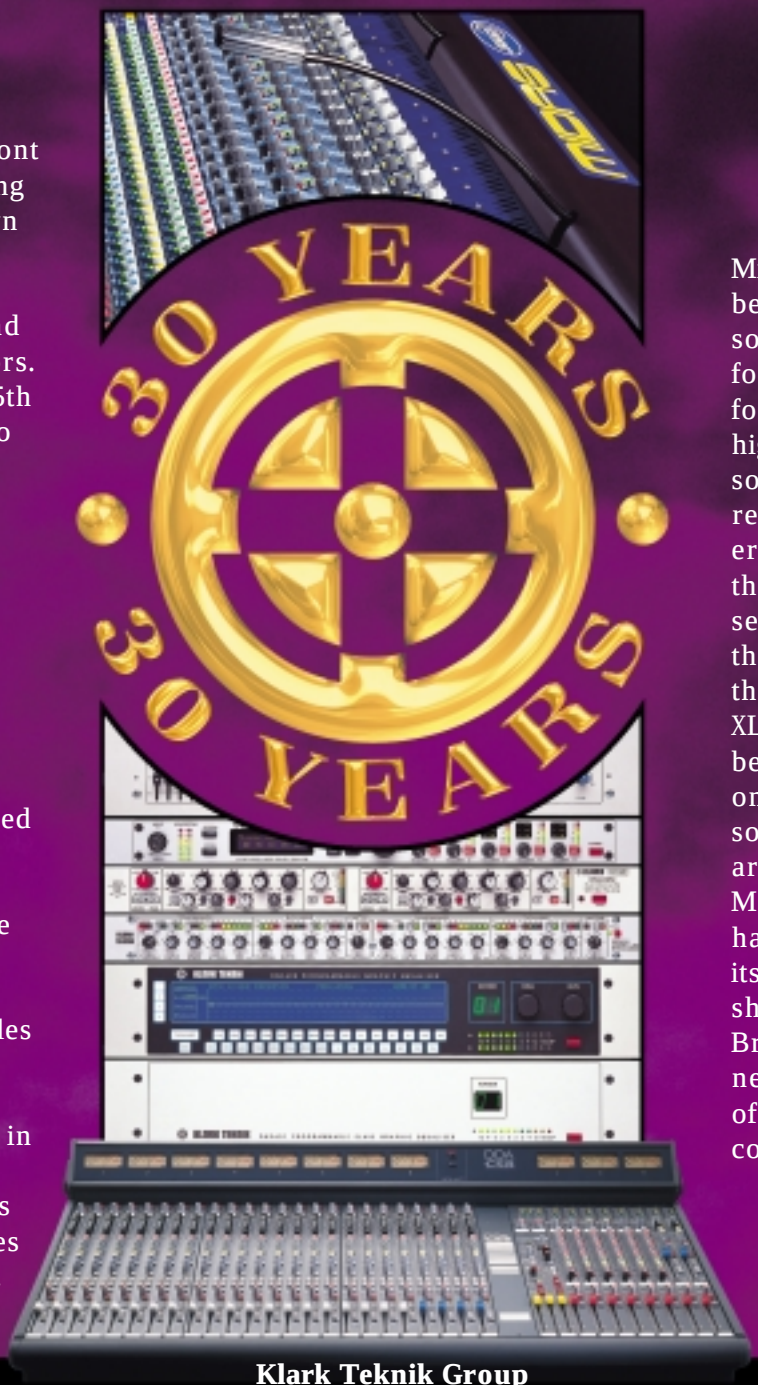
KLARK TEKNIK — SIGNAL PROCESSING BY DEFINITION

DDA — BETTER BY DESIGN

MIDAS — DESIGNED FOR A PURE PERFORMANCE

For many years Klark Teknik has been in the forefront of signal processing with its well known graphic EQ, parametric delay lines, analysers and dynamic processors. 1999 marks the 25th Anniversary and to celebrate this fact Klark Teknik have issued a limited edition of the industry standard DN360 EQ.

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.



Midas consoles have been renowned in sound reinforcement for over two decades for embodying the highest standards of sonic performance, reliability and sound ergonomics. Since the launch of the XL3 several years ago and the introduction of the XL200, XL250 and XL4, Midas has become the number one choice of leading sound engineers around the world. More recently Midas has expanded both its range and market share with the XL4 Broadcast and the new Heritage series of multipurpose consoles.

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