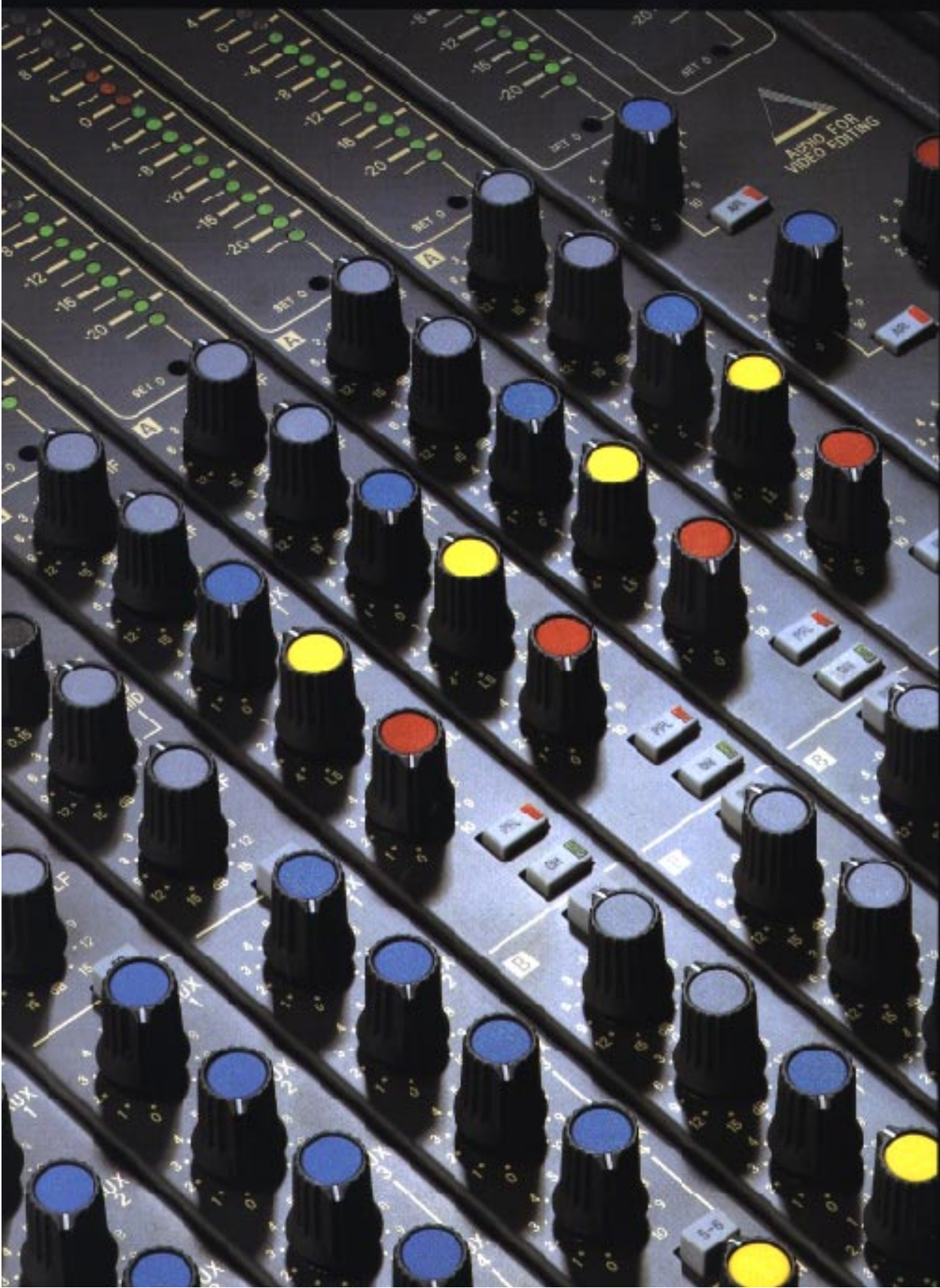


Soundcraft

DELTA
AVE





Audio For Video Editing From The Soundcraft Delta Range

Modern edit suites and post production facilities are continually pushing standards forward. Soundcraft's Delta Audio for Video Editing console has been specifically designed to match the performance you would expect from the video system.

Building on the success of the 200BVE and incorporating significant advances made in overall flexibility and performance in the 200 Delta, has led to the Delta AVE. Moreover, the refinements made to console styling will perfectly complement the highest standards of studio design.

Configured to interface with virtually any type of edit controller, the Delta AVE offers you a variety of modules and frame sizes to suit all applications. Although when stereo modules are needed, the stereo option frame must be specified.

The unmatched price/performance ratio means you can now specify the highest audio standards. And, when used in conjunction with our dedicated serial interface, the VSA24 II, you have a simple and cost effective tool to enhance the creative and operational facilities of your edit controller.

Specify To Your Own Requirements

The Delta AVE shares all the outstanding features of the highly acclaimed 200 Delta. This includes the Patented Active Pan Pot design, ensuring greater isolation between left and right buses. An advanced EQ is complemented by exceptionally low noise and crosstalk performance. The simplicity of the modular construction enables you to specify a console with any combination of standard Delta or AVE modules. This flexibility allows the console to be tailored to suit your application, whether it be A-B roll, ENG or the sophistication of the full D2 format.

Independent Audio Control

An audio-follow-video console requires either direct editor control, or the ability with a serial interface, to "eavesdrop" on common communication links between the editor and switcher.

A console which eavesdrops on, say GVG 100, allows the audio to follow the video edit literally, and this considerably eases the task. However there are many occasions when this is

restricting and although you need the editor to automatically cue an audio effect, this may not directly relate to the video effect.

With Delta AVE, automatic control of the audio, is further enhanced by the DEPTH fader. This controls the extent to which the edit controller can attenuate the signal by presetting the maximum fade depth from your audio console. To avoid unnecessary degradation of the audio signal, high quality, industry standard DBX VCAs are used in the main signal paths.

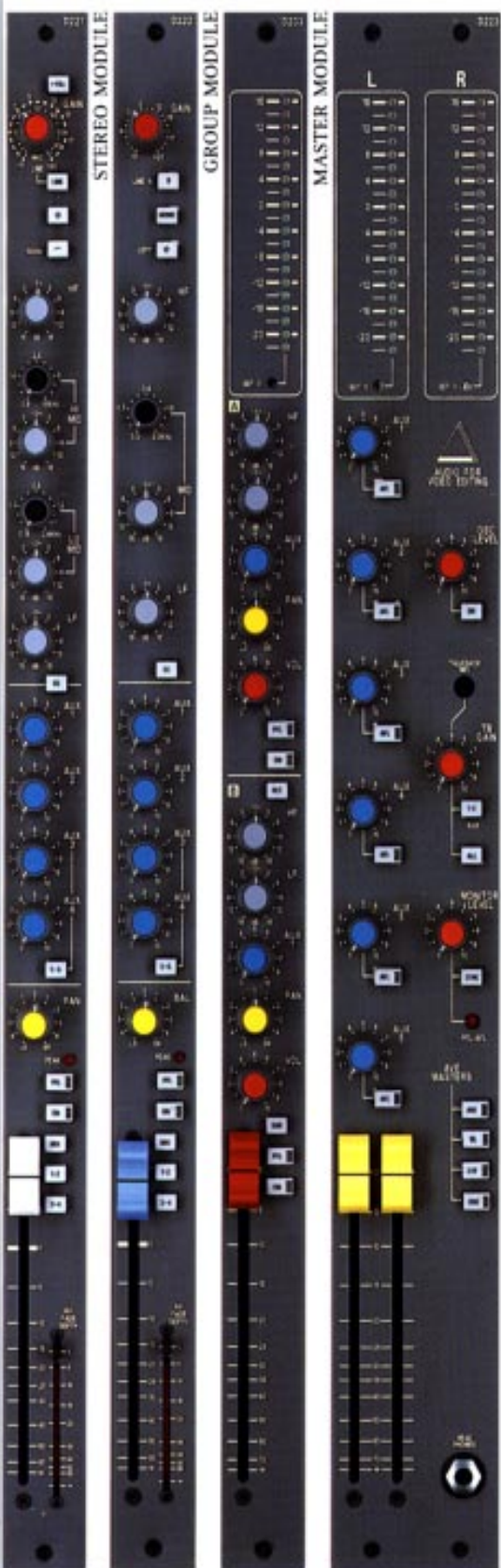
With the possibilities of direct control, eavesdrop or automatic triggering of preset audio effects, the Delta AVE is designed for creative, quality conscious video editing. The additional capabilities of the serial interface have been extended with an independent audio switcher that can be triggered locally or from GPIs, with its own variable crossfade type and duration.

Monitoring Control

Delta AVE incorporates sophisticated solid-state controls, which when supported by the edit controller, switch between listening to the stereo master output and the replay signal from the video recorder.

Four illuminated switches on the master module indicate the current control status - whether the console is under AVE control, the output is dimmed (either locally or automatically by the edit controller) and the monitor source selection (record or playback).





INPUT MODULE

The input module incorporates a switchable 4 band EQ, with two swept frequency mid bands and HF and LF providing 15dB cut or boost. In particular, the hybrid peak/shelving LF control allows low frequency signals to be accurately boosted without bringing in unwanted subsonic signals, minimising both loudspeaker distortion and restricted headroom. Furthermore, low frequency signals, such as rumble or wind noise, can be removed simply by activating the high pass filter switch.

Access to 4 auxiliary sends is provided, with a choice of pre/post fade settings. This allows you to add reverb and other effects to the final mix. A phase reverse switch, enables immediate phase correction to cater for poor microphone placements or phase errors on pre-recorded material.

The Patented Active Panpot design provides an extremely accurate panning law, giving precise stereo imaging and allowing the safe use of group outputs as individual mono sends. Routing the signal to main stereo mix is via the MIX button. Whilst in PFL mode, the pre-fade signal is routed to the control room monitor outputs without affecting the main console outputs.

A peak LED indicates less than 4dB of remaining headroom at the post EQ insert point. A 100mm high quality long-throw fader is provided with a short depth fader which sets the amount of attenuation when the VCA is faded down by the editor.

The rear connector panel facilities includes a separate mic and line input with an insert point, direct output and access the VCA control inputs.

THE STEREO MODULE

When stereo line inputs are needed, specifying this module offers a high degree of flexibility and saves having to use two mono channels. The stereo module option largely offers the same features as the mono input with the addition of some dedicated stereo features.

A single switch selects either of the two pairs of electronically balanced line inputs provided on the rear connector panel - allowing specific sources to be wired to the console and eliminating the need for re-patching.

The MONO switch sums both signals to the channel, useful for checking mono compatibility or routing a mono source to the main stereo mix.

The balance control gives precise stereo imaging across the left and right signal, with the high performance routing switching yield-

ing a L-R crosstalk figure better than -75dB.

As with the mono input module, a VCA depth fader is located adjacent to the main stereo fader which presets the amount of fade that will be applied to the channel when the VCA is activated by the edit controller.

GROUP MODULE

Up to four group modules can be specified on Delta AVE to provide individual record outputs, each via its own long throw fader, for 4-track formats such as D2 or BETACAM SP. As well as record outputs each module has a monitor input, which can be combined to provide a stereo control room mix, (via the monitor level and pan) of the recorded or replay signal.

Clear LED metering (either peak or average ballistic reading) is included to assist the editor in closely matching levels.

Should it be necessary to control the dynamic range of the recorded signal, pre-fade insert points are provided for external compressors or limiters.

MASTER MODULE

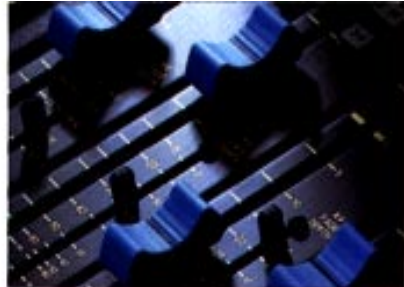
This module contains the auxiliary send and level control masters, as well as the main talkback and oscillator facilities.

The auxiliary master controls feature advanced circuit designs which preserve headroom when the buses are being driven hard and the output level is turned down. The illuminated AFL switches allow instant monitoring and metering of the outputs.

The stereo mix path features low noise summing amplifiers, an insert point and the main left right faders, which can be re-configured to control the balanced stereo outputs as well as the derived mono output.

To fully utilise the monitor switching capability of an edit controller Delta AVE incorporates a number of dedicated features. The AVE button globally bypasses the VCA system, illuminating when VCAs are externally controllable. The I/L button swaps the left monitor output from MIX L to the 2-track return L. The control can be activated by pressing, or by a remote external signal and is not affected by the status of the AVE switch. The 2/R button operates in the same way for the right-hand signal path. The illuminated DIM switch dims the left and right monitor outputs, can also be activated by pressing or by a remote external equipment and is not affected by the status of the AVE.

The master meters will follow the main control room output, and are unaffected by headphones being used from the front panel jack socket.



Delta AVE Specifications

Typical Performance Figures Measured On 16 Channel Console

TOTAL HARMONIC DISTORTION

Measured @ +20 dBu, 10 Hz to 80 kHz Bandwidth,
Unweighted

Main Outputs	1 kHz: 0.015%	10 kHz: 0.020%
Aux Output (Pre)	1 kHz: 0.003%	10 kHz: 0.006%
Deluxe Input to Line Output	1 kHz: 0.005%	10 kHz: 0.015%

CROSSTALK

Measured @ 1kHz

Channel Muting	>90dB
Maximum Fader Attenuation	>80dB
Maximum Aux Send Attenuation	>80dB

NOISE

Measured 22Hz to 22kHz Bandwidth, Unweighted

Mic Input @ Max Gain, EIN with 200 Ω Source	-127.5 dBu
Line Input @ Unity Gain, EIN with 40 Ω Source	-93 dBu
Mix Bus Noise (16 Channels Routed, Faders Down)	-80 dBu

FREQUENCY RESPONSE

Mic or Line Input to any Output	20Hz to 20kHz	+0, -0.5dB
------------------------------------	---------------	------------

INPUT AND OUTPUT LEVELS

Insert Send Nominal Level	-2 dBu
Direct Output Nominal Level	-2 dBu
Group Insert Nominal Level	-8 dBu
Group Output Nominal Level	-10 dBV or +4 dBu
Aux Output Nominal Level	+4 dBu
Mix Insert Nominal Level	-8 dBu
Mix Output Nominal Levels	-10 dBV or +4Bu

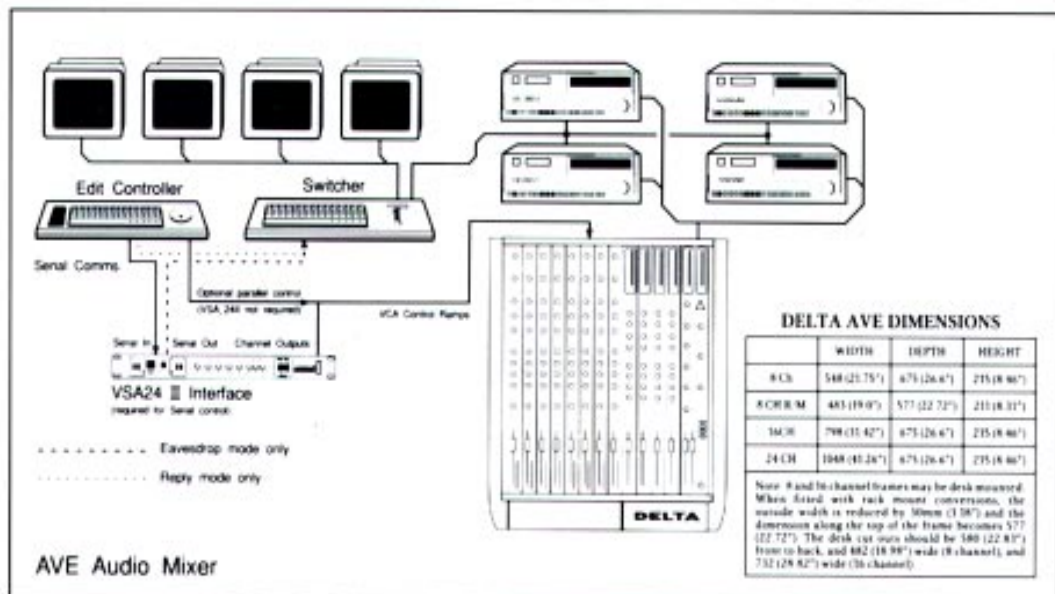
INPUT AND OUTPUT IMPEDANCES

Mic Inputs Electronically Balanced (Transformer Option)	>2 k Ω
Line Inputs Electronically Balanced	>10k Ω
R.L.A. Inputs	220 pF, 47k Ω
Insert Returns	10 k Ω
Outputs and Insert Sends	75 Ω

METERING

20 Segment LED Barograph	
Selectable, Peak or Average Reading	
Calibration Range	0 dB - -2 dBu to +20 dBu
Accuracy Relative to 0 dB	+/- 1dB

For full details of measurement conditions and further specifications, please contact your local Soundcraft dealer.



Soundcraft Electronics reserves the right to alter the design specifications of its products, without prior notice. E&OE 396. Printed in England. Ref No Z22707 STD Z2000 US.

Soundcraft Electronics reserve the right to improve or otherwise alter any information supplied in this document or any other documentation supplied hereafter. E&OE 396



Harman International Industries Limited
Cranborne House, Cranborne Industrial Estate, Pottery Bar, Hertfordshire EN6 3JN, UK.
Tel: +44 (0) 1707 665000 Fax: +44 (0) 1707 660482

Soundcraft JBL Professional, 8500 Balboa Blvd, Northridge, CA 91329 USA
Tel: 1-818-894-8850 Fax: 1-818-830-1220 Flashfax: 1-818-895-8190

HA Harman International Company