

M-3500

Big-Console Features At A Midrange Price

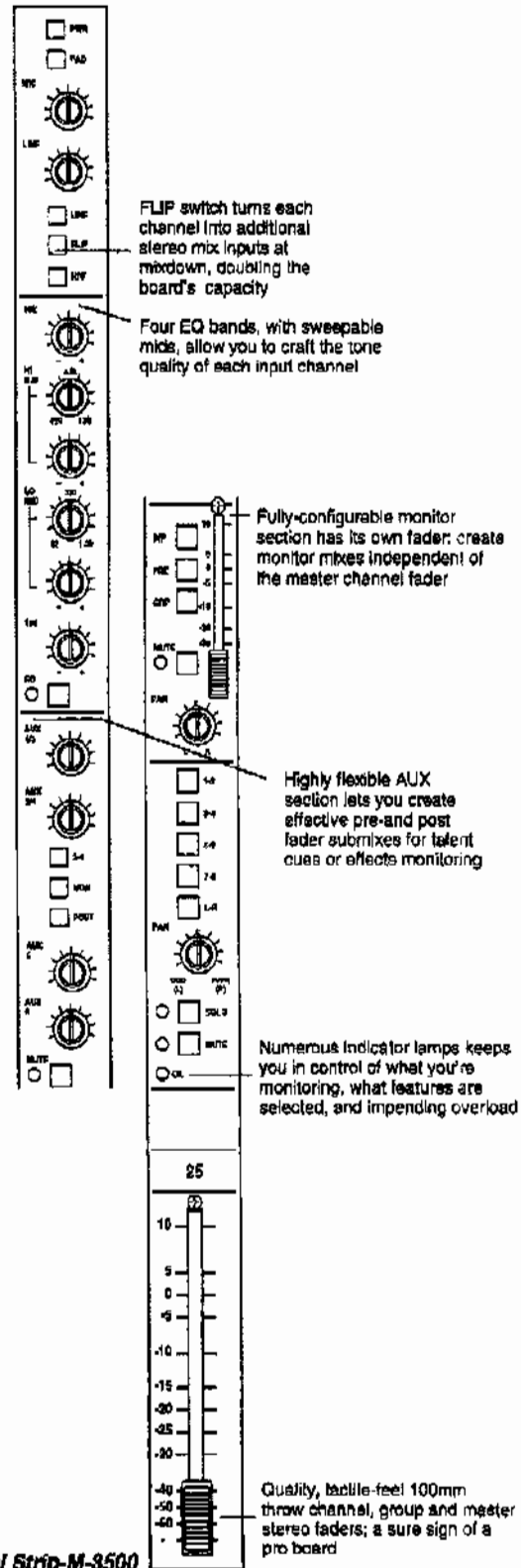
In a competitive modern recording or post-production studio, you're booking more clients with larger projects; ones that require 24 tracks and above. So you've got to upgrade your main control room to include a mixing console that creates production magic. But, those features can be costly. You need a console that offers an attractive price/performance ratio: the capabilities that make recording and mixdown go smoothly, and a bottom line that looks good on the balance sheet. Make room for the TASCAM M-3500.

The M-3500 places "big facility" features into a console that fits the budget range of small to medium project and post-production studios. They're available in 24- and 32-track models, so they've got the capacity to handle ambitious projects. They're also loaded with features that make recording, monitoring and mixdown sessions go faster (a necessity when a demanding client is driving the session in the control room).

And, since the M-3500 is a TASCAM product, you can count on a high standard of quality — as evidenced by the M-3500's low-noise, high quality specifications. The entire audible range of 20 Hz to 20 kHz is faithfully represented, crosstalk is minimized to below 60 dB, and Total Harmonic Distortion has been reduced to below 0.018%.

Flexibility — The Engineer's Requirement — It's What the M-3500 Has

Every production session is an intuitive experience when you're at the controls of an M-3500. Its four part design (with separate Main, Monitor, Auxiliary and Control Room mixes) is highly flexible, easy to navigate, and provides enough visual information to keep you from getting lost in detail.



Channel Strip-M-3500

All it takes is a few button pushes to send signal, pre- and post-fader, to most any signal bus. This makes it easy to get separate mixes for the talent and the control room, make A-B comparisons, monitor with and without effects, and quickly arrive at creative decisions and compelling mixes. The Monitor section of each channel strip features its own dedicated faders, so you can try ideas without disturbing the faders for the Main mix. There's an ample supply of indicator lights for muted and soloed channels, so you can orient yourself at a glance. With the M-3500, you're always in control. You can keep everyone involved in the production happy — and get the job done in record time.

Gain Staging Fully Implemented

The M-3500 accepts either unbalanced 1/4" jacks, balanced XLR plugs or line input from sources such as tape and CD players. With eight group busses, it's out-of-the-crate optimized for 8-, 16- or 24-track projects. On the front panel, gain staging is fully supported for the widest range of signal types and signal levels. Push a button to select MIC or LINE input and adjust the right level with the corresponding control. One touch likewise adds 48 volts of phantom power to mics that require it, filters low frequency "rumble" from program material, or PADs intense, high-gain signals.

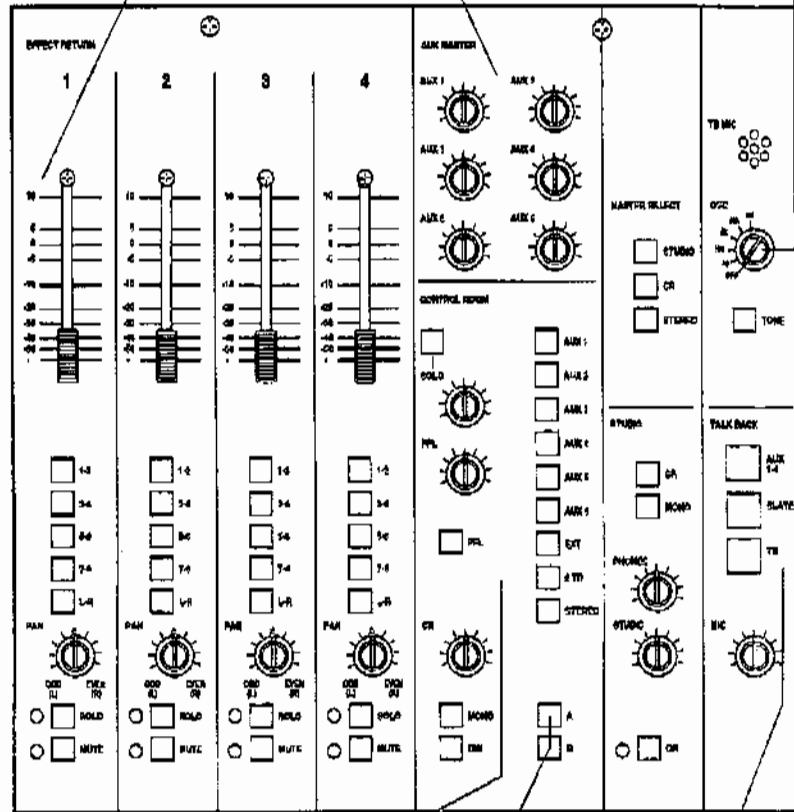
Four-Band EQ Section with Dual Sweepable Mids

Basic HI and LO controls are shelved at 10 kHz and 100 Hz, respectively, and excel at making ballpark adjustments, such as making a signal "duller" or "brighter." But, for the all-important midrange, the M-3500 offers separate HI MID and LO MID EQs

Fader-controlled EFFECT RETURN masters give you more control and visual feedback than rotary knobs

Six AUX output channels allow you to incorporate racks full of effects to each mix

Pushbutton OSC section makes it easy to generate common test and calibration tones



Control Room section lets you tune into any mix element without disturbing settings or interrupting the session

A and B buttons let you set up alternate monitor configurations, to test mixes on multiple playback systems

Talkback section keeps the entire production team in constant communication

with sweepable control. This lets you place the center of the EQ curve (± 15 dB) exactly where it will have the most desirable effect. With this kind of EQ control, it's easy for sharp-eared engineers to locate and optimize the critical frequencies for every track.

Alternatively, defeat the EQ for any individual channel with the touch of one button. A bright red indicator lamp serves as a reminder that the EQ is engaged or bypassed.

Front Panel-M-3500

Versatile AUX Section

With six AUX sends linked to four mono and two stereo returns, the AUXiliary section of the M-3500 is large enough to dutifully create talent cue mixes, or to set up effects loops, whether you're using mono or stereo effects. Each channel houses separate assignment and level switches, both pre-and post-fader, so you can easily assign varying levels of any channel's signal to up to four AUX signal paths. Then, in the Control section, 8 master send and 4 return controls route the channels' signals to your effects rack and back, finally residing in the stereo L-R or talent cue mix.

M-3500 Control Central

The M-3500 offers one of the most functional Control sections in its class. In addition to indispensable features like Talkback microphone assignable to tape (SLATE), Aux or Studio monitors, you'll find a fully assignable EFFECT RETURN "submixer," complete with dedicated faders, that can send the effects mix to any group or the stereo bus. The M-3500 Control section also has separate level controls for SOLO, A-B control room monitors, studio monitors and Pre-Fader Listen. So, once levels are set, its easy to toggle between functions, keeping hectic sessions moving right along.

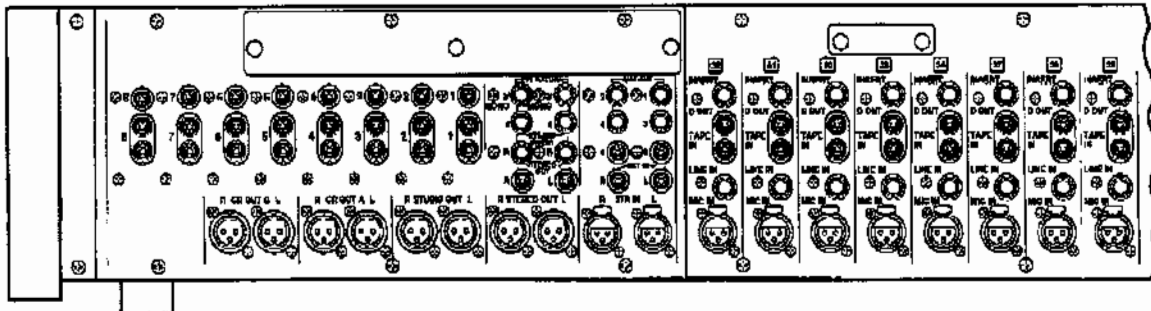
Move Quickly From Recording To Mixdown

In addition to keeping a busy engineer in control of a recording session, the design of the M-3500 also makes it easy to move from initial tracking to the actual mixdown process without a lot of repatching.

The FLIP switch, pioneered by TASCAM for affordable consoles, lets you instantly toggle between sending TAPE or MIC/LINE input through each main channel (with the short Monitor section faders performing the other function). This is especially useful during mixdown, when "flipped" input channels can be used to add virtual MIDI tracks, or other additional inputs, directly to the stereo bus, effectively doubling the track capacity of the board.

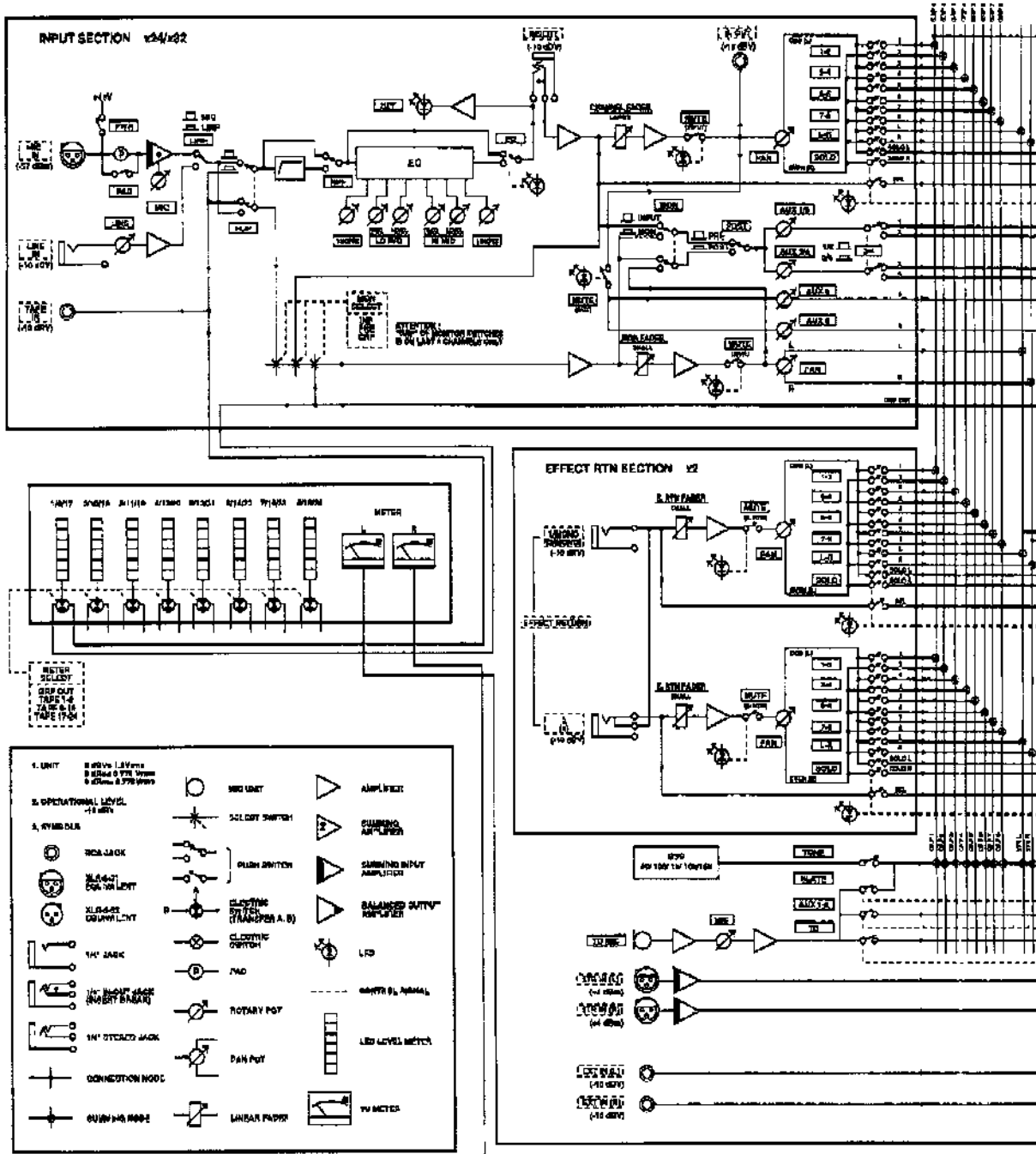
The M-3500 comes complete with an 8-channel LED meter bridge, which displays levels for selectable eight-track series or tape inputs and Group busses. The meter bridge also includes two master analog VU meters for the L/R mix. Rounding out the package is an external power supply that can be placed away from sensitive signal cables or areas.

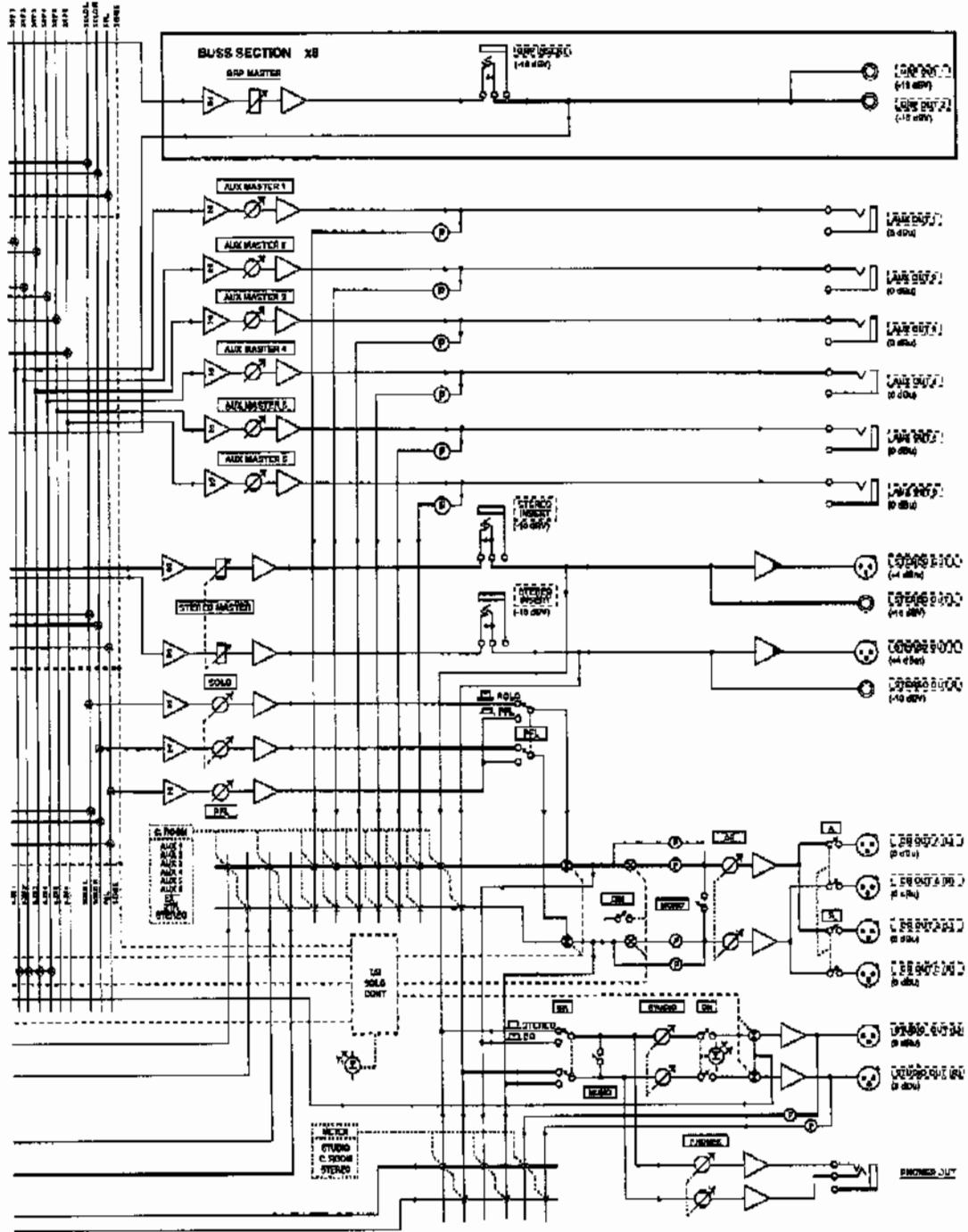
Rear Panel-M-3500



M-3500

MIXING CONSOLE





SPECIFICATIONS

ELECTRONICS

MIC IN (XLR Connector, balanced)

Input impedance:	2.2 kohms
Nominal input level:	-57 dBm (1.10 mV)
Minimum input level,	
Trim max:	-67 dBm (0.35 mV)
Maximum input level,	
Trim min:	-25 dBm (0.044 V)
With PAD:	+4 dBm (1.23 V)
Trim range:	42 dB
Pad:	30 dB attenuation

LINE IN (1/4" phone jack, unbalanced)

Input impedance:	16 kohms
Nominal input level:	-10 dBV (0.316 V)
Minimum input level:	-20 dBV (0.1 V)

TAPE IN (Unbalanced):

Input impedance:	10 kohms
Nominal input level:	-10 dBV (0.316 V)
Minimum input level:	-10 dBV (0.1 V)

Channel INSERT (TRS 1/4" phone jack, unbalanced):

Output impedance:	100 ohms
Nominal output level:	-10 dBV (0.316 V)
Maximum output level:	+18 dBV (8.0 V)
Input impedance:	40 kohms
Nominal input level:	-10 dBV (0.136 V)
Maximum input level:	+11 dBV (3.5 V)

D OUT (Unbalanced)

Output impedance:	7 kohms
Nominal output level:	-10 dBV (0.316 V)
Maximum output level:	+18 dBV (8.0 V)

EFT RETURN (1/4" phone jack, unbalanced):

Input impedance:	7 kohms
Nominal input level:	-10 dBV (0.316 V)
Minimum input level:	-20 dBV (0.1 V)

GRP OUT (Unbalanced)

Output impedance:	100 ohms
Nominal output level:	-10 dBV (0.316 V)
Maximum output level:	+18 dBV (8.0 V)

AUX OUT (1/4" phone jack, unbalanced)

Output impedance:	100 ohms
Nominal output level:	0 dBu (0.775 V)
Maximum output level:	+20 dBu (8.0 V)

CR OUT (XLR connector, unbalanced)

Output impedance:	100 ohms
Nominal output level:	0 dBu (0.775 V)
Maximum output level:	+20 dBu (8.0 V)

STUDIO OUT (XLR connector, unbalanced)

Output impedance:	100 ohms
Nominal output level:	0 dBu (0.775 V)
Maximum output level:	+20 dBu (8.0 V)

STUDIO OUT (XLR connector, balanced)

Output impedance:	75 ohms
Nominal output level:	+4 dBm (1.23 V)
Maximum output level:	+25 dBm (13.8 V)

STEREO OUT (phone connectors, unbalanced)

Output impedance:	100 ohms
Nominal output level:	-10 dBu (0.316 V)
Maximum output level:	+18 dBV (8.0 V)

GRP INSERT (TRS 1/4" phone jack, unbalanced)

Output impedance:	100 ohms
Nominal output level:	-10 dBV (0.316 V)
Maximum output level:	+18 dBV (8.0 V)
Input impedance:	20 kohms
Maximum input level:	+11 dBV (3.5 V)

STEREO INSERT (TRS 1/4" phone jack, unbalanced)

Output impedance:	100 ohms
Nominal output level:	-10 dBV (0.316 V)
Maximum output level:	+18 dBV (8.0 V)
Input impedance:	6 kohms
Maximum input level:	+11 dBV (3.5 V)

Headphone Output (TRS 1/4" phone jack)

Nominal load impedance:	8 ohms
Maximum output level:	100 mW + 100 mW

Equalizer

Type:	4-band, 2-sweep
Frequency	
Hi:	10 kHz
Hi MID:	420 Hz to 13 kHz
LO MID:	42 Hz to 1.3 kHz
LO:	100 Hz
Boost/Cut:	15 dB
HPF (High-Pass Filter):	12 dB/octave at 80 Hz

OL (OverLoad)

Indicator Flashing Level: +15 dBV (3 dB before clipping)

DIM CR OUT

Attenuation: 30 dB
Test tone OSC Output: 40 Hz, 100 Hz, 1 kHz, 10 kHz and 16 kHz Meter

8 LED and 2 VU meters

PEAK Flashing Level: +10 VU

Fader

Attenuation: 90 dB (at 1 kHz) or more

Power Requirements

USA/Canada:	120 V AC, 60 Hz
Europe:	220 V AC, 50 Hz
UK/Australia:	240 V AC, 50 Hz
General Export:	100/120/220/240 V AC, 50/60 Hz

Power consumption:

32-input model:	135 W
24-input model:	122 W

TYPICAL PERFORMANCE

Equivalent Mic input noise:	DIN AUDIO/IHF 'A' (150 ohm source) -130 dB/-132 dB
Signal/Noise ratio:	DIN AUDIO/IHF 'A'
32 MIC INs to GRP OUT:	50 dB/53 dB (150 ohm source)
24 MIC INs to GRP OUT:	52 dB/55 dB (150 ohm source)
1 LINE IN to GRP OUT:	82 dB/85 dB
32 LINE INs to GRP OUT:	62 dB/65 dB
24 LINE INs to GRP OUT:	63 dB/67 dB
1 LINE IN to AUX OUT:	70 dB/73 dB
1 LINE IN to CR OUT:	83 dB/86 dB
1 LINE IN to STUDIO OUT:	83 dB/86 dB
32 LINE INs (Monitor) to GRP OUT:	62 dB/65 dB
24 LINE INs (Monitor) to GRP OUT:	63 dB/67 dB
Headphones:	72 dB/75 dB

Total Harmonic Distortion (THD)

1 MIC IN to GRP OUT:	Less than 0.18% (at 1 kHz)
1 LINE IN to GRP OUT:	Less than 0.18% (at 1 kHz)
Frequency Response (at nominal input level)	
MIC IN to GRP OUT:	20 Hz to 20 kHz +0.5 dB/-1.5 dB
LINE IN to GRP OUT:	20 Hz to 20 kHz +0.5 dB/-1.5 dB
Headphones:	50 Hz to 20 kHz +0.5 dB/-3.0 dB
Crosstalk:	
GRP OUT:	Better than 59 dB (f 10 kHz)
STEREO OUT:	Better than 59 dB (f 10 kHz)
Other outputs:	Better than 60 dB (at 1 kHz)
Click Noise:	Less than 35 dB
Weight:	
Console:	
32-in model:	154-5/15 lbs. (70 kg.)
24-in model:	132-4/16 lbs. (60 kg.)
Power supply unit:	29-12/16 lbs. (13.5 kg.)

In these specifications, 0 dBV is referenced to 1.0 V, and 0 dBm/dBu is referenced to 0.775 V.

Specifications and features subject to change without notice or obligation.



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