

M-308 SPECIFICATIONS

MECHANICAL CHARACTERISTICS

Input Selector	MIC/LINE
Fader Length	100 mm
Assign	Odd (1, 3, L)/ Even (2, 4, R)
AUX Select	AUX 1 Pre Equalizer/Line AUX 2 AUX 1/Post Fader, switchable
Monitor Select Matrix	Stereo, Ext 1, Ext 2, Mono/Effect, Aux 1/2
Meter Select Switch	1-4: PGM 1-4, TAPE RTN 1-4/5-8 L, R: Stereo, Ext 1, Ext 2, Mono/Effect, Aux 1/2, switchable
Dimensions (W x H x D)	584 x 220 x 692 mm (23" x 8-11/16" x 27-1/4")
Weight (net)	21 kg (46-5/16 lbs)

ELECTRICAL CHARACTERISTICS

Mic Input	
Mic Impedance	200 ohms to 600 ohms nominal
Input Impedance	2.8 k ohms
Nominal Input Level	-60 dBV (1 mV)
Minimum Input Level	-70 dBV (0.3 mV)
Maximum Input Level	+32 dBV (40 V) +34.2 dBm (40 V)
Attenuation	30 dB
Line Input	
Input Impedance	16 k ohms
Nominal Input Level	-10 dBV (0.3 V)
Minimum Input Level	-20 dBV (0.1 V)
Equalizer	
Type	Shelving-High Sweepable-Middle, Low
Frequency	10 kHz (High) 200 – 4 kHz (Middle) 50 – 1 kHz (Low)
Boost/Cut	±12 dB (High) ±15 dB (Middle, Low)
Channel Overload Indicator	Set to light at 25 dB above nominal
Channel Insertion	
Output Impedance	100 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+18 dBV (8 V)
Input Impedance	5 k ohms
Nominal Input Level	-10 dBV (0.3 V)
Maximum Input Level	+11 dBV (3.5 V)

Direct Output	
Output Impedance	100 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+18 dBV (8 V)
Buss (Sub) Input (PGM/STEREO/EFFECT/AUX)	
Input Impedance	22 k ohms
Nominal Input Level	-10 dBV (0.3 V)
Maximum Input Level	+18 dBV (8 V)
PGM Insertion	
Output Impedance	100 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+18 dBV (8 V)
Input Impedance	9 k ohms
Nominal Input Level	-10 dBV (0.3 V)
Maximum Input Level	+11 dBV (3.5 V)
PGM Output	
XLR Type	
Output Impedance	20 ohms
Minimum Load Impedance	200 ohms
Nominal Load Impedance	600 ohms
Nominal Output Level	+4 dBm (1.25 V)
Maximum Output Level	+25 dBm (14 V)
	Balanced
	+20 dBm (8 V)
	Unbalanced
RCA	
Output Impedance	100 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+18 dBV (8 V)
AUX Output	
1/4"	
Output Impedance	20 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	0 dBu (0.78 V)
Maximum Output Level	+20 dBu (8 V)
RCA	
Output Impedance	490 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+10 dBV (3.1 V)
Effect Output	
1/4"	
Output Impedance	20 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	0 dBu (0.78 V)
Maximum Output Level	+20 dBu (8 V)
RCA	
Output Impedance	490 ohms
Minimum Load Impedance	2 k ohms

Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+10 dBV (3.1 V)
Effect Return Input	
Input Impedance	3.5 k ohms
Nominal Input Level	0 dBu (0.78 V)
Minimum Input Level	-10 dBu (0.25 V)
Tape Return Input	
Input Impedance	12 k ohms
Nominal Input Level	-10 dBV (0.3 V)
Minimum Input Level	-20 dBV (0.1 V)
Stereo Insertion	
Output Impedance	100 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+18 dBV (8 V)
Input Impedance	7 k ohms
Nominal Input Level	-10 dBV (0.3 V)
Maximum Input Level	+11 dBV (3.5 V)
Mono Insertion	
Output Impedance	100 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+18 dBV (8 V)
Input Impedance	6 k ohms
Nominal Input Level	-10 dBV (0.3 V)
Maximum Input Level	+11 dBV (3.5 V)
External Input	
Input Impedance	8 k ohms
Nominal Input Level	-10 dBV (0.3 V)
Maximum Input Level	+18 dBV (8 V)
Stereo Output	
XLR Type	
Output Impedance	20 ohms
Minimum Load Impedance	200 ohms
Nominal Load Impedance	600 ohms
Nominal Output Level	+4 dBm (1.25 V)
Maximum Output Level	+25 dBm (14 V)
	Balanced
	+20 dBm (8 V)
	Unbalanced

RCA	
Output Impedance	100 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+18 dBV (8 V)
Mono Output	
XLR Type	
Output Impedance	20 ohms
Minimum Load Impedance	200 ohms
Nominal Load Impedance	600 ohms
Nominal Output Level	+4 dBm (1.25 V)
Maximum Output Level	+25 dBm (14 V)
	Balanced
	+20 dBm (8 V)
	Unbalanced

1/4"	
Output Impedance	20 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	0 dBu (0.78 V)
Maximum Output Level	+20 dBu (8 V)
Monitor Output	
1/4"	
Output Impedance	22 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	0 dBu (0.78 V)
Maximum Output Level	20 dBu (8 V)
RCA	
Output Impedance	490 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+10 dBV (3.1 V)
Solo Input	
Input Impedance	22 k ohms
Nominal Input Level	-10 dBV (0.3 V)
Maximum Input Level	+18 dBV (8 V)
Solo Output	
Output Impedance	100 ohms
Minimum Load Impedance	2 k ohms
Nominal Load Impedance	10 k ohms
Nominal Output Level	-10 dBV (0.3 V)
Maximum Output Level	+18 dBV (8 V)
Headphone Output	
Load Impedance	8 ohms, stereophones
Maximum Output Level	1.5 W +1.5 W
Meter	
Peak Indicator Level	6, VU Type
	10 dB above nominal output level
Fader Attenuation (1 kHz)	80 dB
Power Requirements	
U.S.A./CANADA	120 V AC, 60 Hz, 41 W
Europe	220 V AC, 50 Hz, 41 W
U.K./Australia	240 V AC, 50 Hz, 41 W
General Export	100/120/220/240 V AC, 50/60 Hz, 41 W

PERFORMANCE CHARACTERISTICS

Equivalent Input Noise	DIN Audio/"A" Wtd
150 ohm source	-130 dB/-132 dB
Signal-to-Noise Ratio	DIN Audio/"A" Wtd
8 Mic to PGM Output	60 dB/62 dB
1 Line to PGM Output	86 dB/87 dB
8 Line to PGM Output	80 dB/82 dB
1 Line to Effect/Aux Output	85 dB/87 dB
1 Line to Stereo Output	86 dB/88 dB
1 Line to Mono Output	83 dB/85 dB
1 Line to Monitor Output	84 dB/86 dB
1 Line to Solo Output	86 dB/88 dB

Total Harmonic Distortion (THD)

1 Mic Input to 1 PGM Output	0.025 % (20 Hz – 20 kHz, EQ OUT, 50 dB above nominal input level and MIC ATT 30 dB on, with 30 kHz L.P.F. connected)
1 Line Input to 1 PGM Output	0.02 % (20 Hz – 20 kHz, EQ OUT, nominal input level, with 30 kHz L.P.F. connected)

Intermodulation Distortion (IMD), (SMPTE Method)

1 Mic Input to 1 PGM Output	0.06 % (EQ OUT, 50 dB above nominal input level and MIC ATT 30 dB on)
1 Line Input to 1 PGM Output	0.045 % (EQ OUT, nominal input level)

Frequency Response

Mic Input to PGM Output	20 – 30 kHz +1 dB -2 dB
Line Input to Any Output	20 – 30 kHz +1 dB -2 dB

Cross-Talk, At 1 kHz	Better than 70 dB
At 18 kHz	Better than 60 dB

In these specifications: 0 dBV is referenced to 1.0 Volt; 0 dBu and dBm are referenced to 0.775 Volt. Actual voltage levels are also given in parenthesis (0.316 Volt for -10 dBV is rounded of and given as 0.3 Volt, and 0.775 Volt for 0 dBu as 0.78 Volt).

Changes in specifications and features may be made without notice or obligation.