

STEINBERG MR816 CSX and MR816 X

Technical Specifications

Electrical Characteristics

Sample Rate	Internal	44.1kHz, 48kHz, 88.2kHz, 96kHz
	External	44.1kHz, 48kHz, 88.2kHz, 96kHz ($\pm 0.1\%$)
Total Harmonic Distortion	GAIN: Minimum	0.004% or less (1 kHz @ +18 dB, into 600 Ω)
Frequency Response (CH IN to LINE OUT)	fs = 48 kHz	20 Hz–20 kHz, +1, -3 dB @ +4 dB, into 600 Ω
	fs = 96 kHz	20 Hz–40 kHz, +1, -3 dB @ +4 dB, into 600 Ω
Dynamic Range (SN ratio at the maximum level)		DA converter (LINE OUT): 110 dB (A-weighted), 104 dB (unweighted)
		AD + DA (to LINE OUT): 104 dB (A-weighted), 97 dB (unweighted)
		AD converter: 107 dB (A-weighted)
Hum & Noise (20 Hz–20 kHz) Rs = 150 Λ		-118 dB, Equivalent Input noise
		-86 dB, Residual output noise, output fader: Minimum
	GAIN: Maximum PAD: OFF	-86 dB (90 dB SN), LINE OUT Output channel fader: Nominal, All Input channel faders: Minimum
	GAIN: -60 dB PAD: OFF	-53 dB (57 dB SN), LINE OUT Output channel fader: Nominal, input channel fader (one channel): Nominal
Maximum Voltage Gain		84 dB, CH1 – 8 to LINE OUT
Crosstalk @ 1 kHz	GAIN: Minimum	-85 dB, CH1 – 8
	Adjacent Input	

Input and Output Specifications

Analog Input	Type	Input Level		
		Nominal Level	Maximum Level	Input Impedance
MIC/LINE/HI-Z jack 1, MIC/LINE jack 2 and MIC/LINE IN jacks 3 – 8 (CH1 – 8)	XLR type balanced, +48 V Phantom powered	-60 dBu to +10 dBu	+24 dBu	3.5 k Ω
INSERT I/O jack 1 and 2 (INSERT IN)	TRS phone type, unbalanced	0 dBu	+14 dBu	10 k Ω

Analog Output	Type	Output Level		
		Nominal Level	Maximum Level	Input Impedance
OUTPUT jacks 1 – 8 (Line Output)	TRS phone type, balanced	+4 dBu	+18 dBu	600 Ω
INSERT I/O jack 1 and 2 (INSERT OUT)	TRS phone type, unbalanced	+4 dBu	+18 dBu	10 k Ω
Headphone jacks 1 and 2 (Monitor 1/2)	TRS phone type, unbalanced	4 mW + 4 mW	25 mW + 25 mW	8 Ω
		12 mW + 12 mW	75 mW + 75 mW	40 Ω

General Specifications

Power Requirements	40W (PA-30)
Dimensions (H x D x W)	44 x 305 x 480 mm
Net Weight	3.2kg
Operating Free-air Temperature Range	+5 – +35
Included Accessories	AC power adaptor (PA-30 or equivalent)
	DVD-ROM (Cubase AI 4)
	CD-ROM (TOOLS for MR)
	Getting Started manual (printed booklet)
	IEEE1394 cable
	Rubber stoppers x 4

Functions

Input Channels 1 – 8	Analog Input	
	MIC Preamp	Discrete Class-A MIC preamp (Inverted Darlington Circuitry)
	[+48V] button (Phantom Power switch)	+48 V DC
	[PAD] button	0/26 dB
	Gain knob	44 dB variable (-60 dB to -16 dB)
	Phase	Normal/Reversed (controlled via a computer)
	High Pass Filter	OFF/80 Hz (-12 dB/oct.) Controlled via a computer
	[HI-Z] switch	On/off (for channel 1), Input impedance: 500 k Ω
	AD converter	24 bit linear, Enhanced dual-bit delta-sigma conversion
	[SIG/PEAK] lamp	-3dB or mode (red), -40dB – -3dB (green) (when the clipping point of the signal is assumed to be 0 dB)
Output Channels 1 – 8	Analog Output	
	Level Control	Multi Function Encoder knob control (for all the channels 1 – 8) Software control (for each of the channels 1 – 8)
	DA converter	24 bit linear, 128 times oversampling Advanced multi-bit delta/sigma conversion
Headphone jacks 1 and 2	Level Control	Multi Function Encoder knob control
	Maximum Output Level	25mW (@ 8 Ω)/75mW (@ 40 Ω)
IEEE1394 jack	Audio interface	16-ch input/16-ch output