

M X S E R I E S MX4



FEATURES

Configurable system controller

2-way stereo or 3/4-way mono crossover operation

Plug in equalisation card facility

Advanced limiter design

Plug in group delay card facility

19" 1 U standard rack mounting

Fully electronically balanced

Output LED indicators

APPLICATIONS

2-way stereo system controller

3/4-way mono system controller

The Martin MX4 is an advanced electronic controller which will optimise the performance of any Martin active 2, 3 or 4-way system. It can be used, for instance in its 2-way stereo mode for the VRS system, or as a 3 or 4-way mono unit for an F2 or F1 system.

Crossover frequencies, basic output levels and phase adjustments are all pre-set for a given system arrangement by means of an internal plug-in board dedicated for use with that particular system.

Fast attack, dual release limiters in each passband can be set to eliminate amplifier clipping and an internal rotary switch is user adjustable to suit any amplifier sensitivity. Front panel bargraph metering includes limit indicators to monitor system headroom.

In addition to the MX4-04 crossover board, further sub board options are available for specific systems. The MX4-06 EQ card provides low frequency equalisation and compression driver power response compensation.

The MX4-07 delay card introduces an appropriate delay to enable drive units to be correctly aligned with each other - a typical application for this would be the alignment of the direct radiator FSX sub-bass stacked with F Series or VRS horn loaded bass systems.

The MX4 features electronically balanced inputs and outputs. Minimum recommended output load impedance is 500 Ohms.

ARCH TECTURAL AND ENGINEERING SPECIFICATIONS

The electronic system controller shall operate as a stereo 2-way, or mono 3/4-way unit containing crossover slope, equaliser and delay circuitry. The output levels from the unit shall have preset limiters for loudspeaker protection.

All inputs and outputs shall be electronically balanced. Facilities for each output band shall include a mute switch with LED indication, -4dB to +6dB level control, and a -20dB to 0dB signal LED bar ladder indicator with separate limiter threshold.

Electronic crossover frequencies, equalisation and delay parameters shall be set by individual programming plug in cards dedicated to the loudspeaker system under control.

The power supply shall be capable of operating from a 100/120/220/240 Volts 50/60 Hz AC mains power source. Output noise levels shall be less than -90dBm, 20Hz - 20kHz unweighted.

Maximum input and output levels shall be $+20 \, \text{dBV}$. Dimensions shall be $485 \, \text{mm} \times 45 \, \text{mm}$ (1U) x 240 mm. The weight shall be $4.2 \, \text{Kg}$.

The electronic loudspeaker system controller shall be the Martin Audio MX4.



SPECIFICATIONS

MAINS SUPPLY	IEC mains connector with integral fuseholder and voltage selector switch
MAINS VOLTAGE	Selectable 100, 120, 220, 240, VAC 50-60Hz
INPUTS	XLR3-31 or equivalent > 10k electronically balanced, CMRR > 60dB @ < 10kHz maximum level +20dBu
OUTPUTS	XLR3-32 or equivalent < 50 Ohms electronically balanced with auto correction for unbalanced termination maximum level +20dBu into 1k (with limiter defeated)
HUM & NOISE	-90dBm 20Hz to 20kHz unweighted
FIXED FILTERS	Lowpass -3dB @ 30kHz Highpass -3dB @ 20Hz or as defined by option board MX4-06
SYSTEM PARAMETERS	Crossover frequencies and slopes, level matching and phase adjustments defined by main board MX4-06
OFFSET COMPENSATION	Driver offset compensation available on group delay board MX4-07
LIMITERS	Individual band limiters with switchable threshold and programme related dual attack time limit ratio 20:1

INDICATORS	10-LED display per channel; limiter attack, 8 x level indicators (in 3dB steps below threshold), output mute; plus over-limit indication
FRONT PANEL FACILITIES	Mains switch, power and system status indicator, mechanically latching mute switches, 4 x level controls (-4dB to +6dB)
PROTECTION	Auto-muting relays and soft start
GROUNDING	IEC direct to chassis Signal ground switchable direct or via 47 Ohm lift resistor
DIMENSIONS	(W) 485mm x (H) 45mm x (D) 240mm (W) 19.0ins x (H) 1.8ins x (D) 9.4ins
SHIPPING DIMENSIONS	(W) 525mm x (H) 100mm x (D) 345mm (W) 20.7ins x (H) 3.9ins x (D) 13.6ins
WEIGHT	4.2Kg (9lbs)
SHIPPING WEIGHT	5Kg (11lbs)

Trade Descriptions Act: Due to Martin Audio's policy of continuing improvement, we reserve the right to alter these specifications without prior notice.

Martin Audio is committed to refining the state of the art sound reinforcement combining in-depth product and field applications research with advanced manufacturing techniques.

Every Martin product is built to the highest manufacturing standards and rigorously tested to ensure that it meets the performance criteria specified in the design.



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