



FI-P4X8

4 In x 8 Out digital speaker management processor



The FI-P4X8 is a self-contained, fully programmable, Digital Loudspeaker Management System capable of handling full control of loudspeaker systems.

The four inputs and eight outputs can be routed in multiple configurations to meet any system requirement.

Full system setup and configuration can be done in real time from the front panel or with the intuitive PC based graphic user interface software via the on-board RS485 and USB ports.

Packaged into a neat 1U rack design, an intuitive and concise front panel with LCD screen enables engineers to make essential adjustments to the speaker configuration with accuracy.

Features

- 96KHz sampling frequency, 32-bit DSP processor, 24-bit A/D and D/A
- USB and RS485 connectors are present for PC connection. 250 units can be connected together via Rs485 and it can be controlled remotely as far as 1500 meters
- 30 user-program parameters can be stored into the device
- Safety/security lock buttons provide peace of mind against unwanted changes from unauthorized users or unwanted set-up changes
- 6 independent parametric EQ on each input and output. The gain range is 120dB. The EQ of output channel has two slopes: Lo-shelf and Hi-shelf
- Every input and output has compression, delay, phase control and mute settings. Delay function offers a maximum of 100ms
- Adjustable gain & limiter of output channel; Just choose the input signal and copy all the parameters from one channel to another channel

Applications

- Live sound loudspeaker management
- Active monitor systems
- Fixed installations

Specifications

Input channel jacks	4 CHs, Female XLR
Output channel jacks	8 CHs, Male XLR
Input impedance	Balanced: 20K Ω
Output impedance	Balanced: 100K Ω
PC ports	USB (front panel), 2 RS485 RJ45 (back panel)
CMRR	>70dB (1 KHz)
Input range	\leq +25dBu
Frequency response	20Hz-20KHz (-0.5dB)
S/N R	\geq 90dB@1 KHz 0dBu
THD	<0.01% OUTPUT=0dBu/1 KHz
Crosstalk of channels	>80dB (1 KHz)
Functions of input channels	
Input mute	Mute with each input & output channel
Input volume	Input gain range: -80dB-+12dB, step @ 1db
Input delay	Each input channel has single delay control, range: 0-1000ms; 21 μ S step-over, 0-10ms; 84 μ s step-over, 10ms-20ms; 0.5mS step-over, 20ms-1000ms
Input polarity	In-phase (+/+) or reversed phase (+/-)
Input EQ	6-bands if individual parameter EQ; Frequency: 20Hz-20KHz; Gain:-20 db-+20 db; Bandwidth: 0.05oct-3oct
Function of output channels	
Output mute	Each channel has independent mute control
Output selection	Each input channel can be selected to each output channel
Output gain	Range:-80d $^{\circ}$ -+12db, step: 1db
Output delay	Every input channel has independent compensation delay control, adjust range: 0-1000ms, step-over: 2 μ s@< 10ms, 10ms-20ms, step-over: 84 μ s@> 20ms, step-over: 0.5ms
Output polarity	Same phase (+/+) or reversed Phase (+/-)
Crossover	Each output channel can be independently set as LPF or HPF. These parameters can be adjusted. Filter type: Linkwitz-Riley; Bessel; Butterworth. The crossover frequency: 20Hz-20KHz, Slope: 12db/oct; 18db/oct; 24db/oct 30db/oct 36db/oct; 42db/oct; 48db/oct
Limiter	Limiter present for each output channel. These parameters are adjustable: Threshold value:-40dbu-+20dbu; step: 0.5dbu. Attack time: 0.3mS-200mS. 0.1 mS step@0.3-1mS; 1ms step @1mS-100ms. Release time: Release ti
Output EQ	Each output channel has a 6-band EQ: 3 modes: Lo-shelf/Hi-shelf/parameter. A: Lo-shelf: Slop: 6dB/12db; Frequency: 20Hz-20kHz; Gain:-20db-20db; B: Hi-Shelf: Slop: 6db/12db; frequency: 20Hz-20kHz; gain:-20db-20db; C: Parameters: frequency: 20Hz-20KHz, bandwidth: 0.05oct-3oct; Step: 0.05oct; Gain:-20db-+20db, Step 0.1db
Processor	92KHz sampling frequency, 32-bit floating-point DSP
Display	2 x 24 LCD, 8-LED for input/output level. Mute and editing functions can be displayed
Power consumption	\leq 25W
Power	AC 110V/220V 50Hz/60Hz
Product dimension(WxDxH)	482X228X44mm
Net weight	4.1 kg
Shipping dimension(WxDxH)	1PC:555X325X98mm/0.0177m 3 6PCS:573X337X615mm/0.1188m 3
Gross weight	1PC:5 (kg) 6PCS:31.5 (kg)

