

4 Channel AEC Input Card

A single Edge frame has four configurable card slots, providing up to 16 channels of local IO. The AEC input card provides four channels of transparent Acoustic Echo Cancellation (AEC), with phantom power, 54 dB of gain and 24 dB of trim. Symetrix' latest generation AEC provides wideband processing with tail lengths up to 250 mS, and convergence times greater than 100 dB/S. Symetrix AEC latency is an industry low 11 mS and near zero bypassed. Each channel of AEC features discrete reference inputs and direct outputs for local reinforcement. AEC processing may be applied to any SymNet system input while still allowing the card's inputs to be used. The inputs are electronically balanced using plug-in barrier strip connectors. Control of each input includes gain with metering, trim, mute, AEC, noise cancellation, non-linear processing, and AGC (Automatic Gain Control).



Features:

- Wideband dedicated processing. Does not consume Edge DSP resources.
- Zero-latency direct outputs and discrete reference inputs per AEC channel.
- AEC processing available to the card's direct inputs or internally routed sources.
- 11 mS AEC latency, up to 250 mS tail length, and greater than 100 dB/S convergence time.
- Field swappable by certified technicians.

Specifications

Number of Inputs	Four (4) acoustic echo cancellation.	Input Impedance	8k Ohms balanced, 4k Ohms unbalanced.
Connectors	3.81 mm terminal blocks.	Phantom Power	+20 VDC @ 10 mA maximum.
Nominal Input Level	+4 dBu with 20 dB of headroom.	A/D Dynamic Range	< 115 dB, A-weighted.
Maximum Input Level	+23 dBu	A/D Latency	0.28 mS (direct), 11 mS (AEC enabled).
Mic Pre-amp Gain	0, 11.8, 24, 44 or 54 dB switchable with ± 24 dB trim.	A/D THD + Noise	< -94 dB, unweighted.
Mic Pre-amp EIN	< -127 dB with 150 Ohm source impedance.	Tail Length	> 250 mS
CMRR	> 76 dB @ 1 kHz, unity gain.	Convergence Time	> 100 dB/S

Mechanical Data

Items	Specifications	Remarks
Shipping Weight	1 lbs. (0.45 kg)	
Certifications or Compliance	EN 55103-1, EN 55103-2, FCC Part 15, RoHS.	

Architect and Engineer Specifications: SymNet 4 Channel AEC Input Card.

The device shall provide four acoustic echo cancellation inputs to an EDGE or RADIUS AEC frame with coarse gain, fine trim and phantom power. Up to four of these devices may be installed in a single EDGE frame for up to sixteen channels of local input and up to one of these devices may be installed in a single RADIUS AEC for up to four channels of local input. Levels, phantom powers, signal inversions and mutes shall be controllable via software. Audio inputs shall be accessed via rear panel 3.81 mm terminal block connectors.

Audio conversion shall be 24-bit, 48 kHz. The dynamic range shall not be lower than 115 dB, A-weighted with a maximum input level of +23 dBu.

The device shall comply with CE and FCC Part 15 emissions limits. The device shall be RoHS compliant. The mounting plate shall be constructed of cold rolled steel, and mount into a SymNet Radius AEC or EDGE frame I/O card slot. The device shall be a Symetrix SymNet 4 Channel AEC Input Card.

