

THE SYMETRIX 581E DISTRIBUTION AMPLIFIER (4X4) IS A FOUR-INPUT, sixteen-output distribution amplifier. In a typical configuration the 581E accepts four input signals and distributes each input to four independent outputs. The attenuation of each of the sixteen outputs may be individually trimmed via its front panel potentiometer. Similarly, the level of each of the four inputs may be independently controlled. Associated with each input is a four LED level meter to assist the user in setting optimum operating levels. The balanced input stages are designed for high common mode rejection and RF immunity. Output line drivers are stable short-circuit protected and designed around industry standard 5532 type op amps. The 581E operates from an internal power supply built around a low magnetic field toroidal transformer, resulting in a very low noise, high performance product.

The 4x4 architecture of the 581E allows the amplifier to fit the greatest possible number of configurations. Each one input, four output module is independent of the others. Wiring the 581E's inputs to four separate audio sources provides four mono distribution channels with four outputs each. This configuration also accommodates two stereo audio feeds.

An alternate 2x8 configuration of the 581E is possible through simple rewiring. Stereo audio

can be distributed to eight outputs by strapping the inputs together in pairs. Left channel audio is wired to inputs #1 and #2, while the right channel connects to inputs #3 and #4.

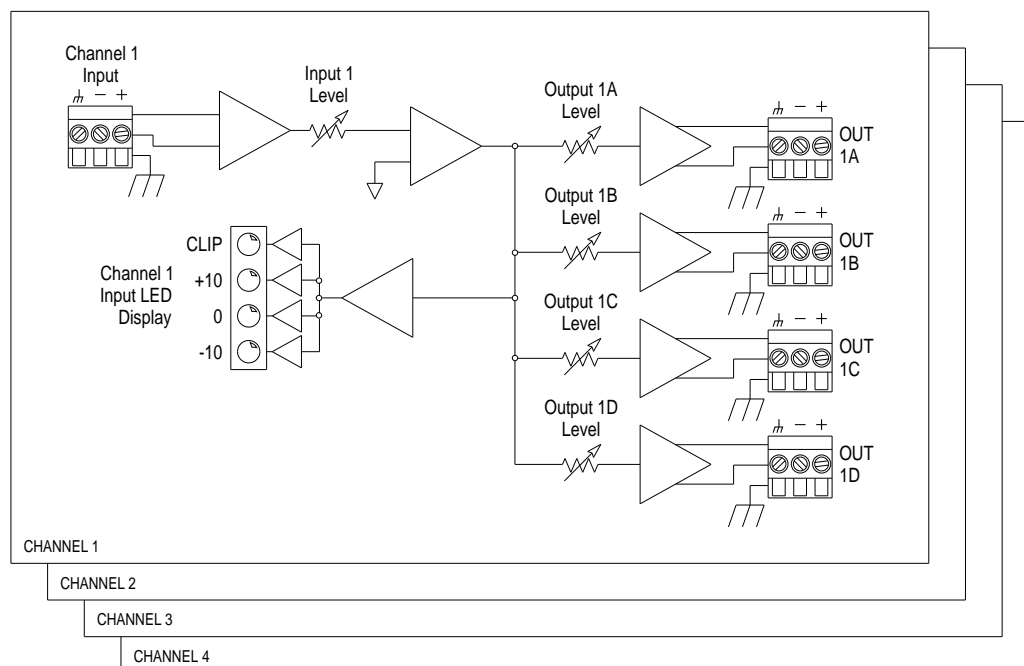
The 581E distributes a single mono audio source to all 16 outputs when all inputs are strapped together. Regardless of your audio distribution requirements, the Symetrix 581E solves the problem with minimum cost and no wasted outputs.

APPLICATIONS

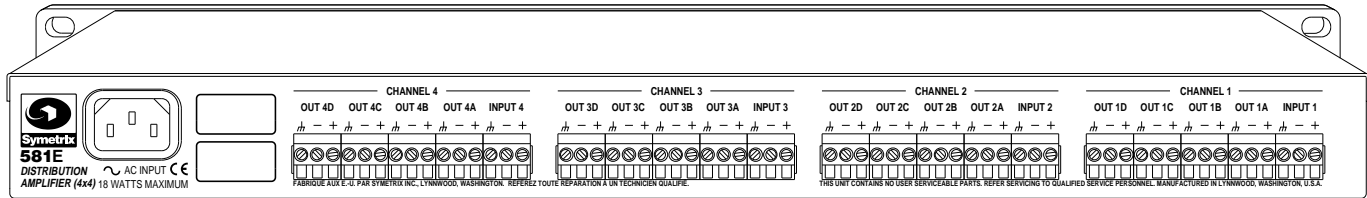
- Broadcast
- Installed Sound
- Post Production
- Recording

FEATURES

- Four Balanced Inputs and Sixteen Balanced Outputs
- 4 LED Input Level Meters
- Detachable Terminal Blocks
- Master Input Level Controls
- Individual Output Level Controls
- Internal Power Supply
- CE Marked



581E



SPECIFICATIONS

Specifications subject to change without notice.

Input/Output

Maximum Input Level	+26 dBu Balanced
Maximum Output Level	+26 dBu (20k Ohm load) +22 dBm (600 Ohm load)
Input Impedance	20k Ohms Balanced, 10k Ohms Unbalanced
Output Impedance	200 Ohms Balanced, 100 Ohms Unbalanced

Performance Data

Frequency Response	$\pm 1/2$ dB, 20Hz - 20kHz
THD+Noise	< .009%, unity gain input to output, 30kHz measurement bandwidth
Signal to Noise Ratio	>100dB, A-weighted, ref. to +4dBu
Dynamic Range	>125dB, A-weighted
Common Mode Rejection	>40dB, 20Hz - 20kHz
Input Gain Range	± 15 dB
Output Gain Range	0 to -20dB

Physical

Size (hwd)	1.72 x 19 x 6 inches, 4.37 x 48.26 x 15.24 centimeters
Shipping Weight	8 lbs.

Electrical

Power Requirements	117V AC nominal, 95-130V AC, 50-60 Hz 230V AC nominal, 165-255V AC, 50 Hz
Power Consumption	18 watts maximum

581E ARCHITECTS AND ENGINEERS SPECIFICATIONS

The audio distribution amplifier shall be a four channel unit with each channel consisting of one electronically balanced input amplifier and four electronically balanced output amplifiers. Associated with each channel shall be a master gain adjustment circuit capable of up to 15dB of gain or 15dB of loss for the purpose of optimally matching incoming signal level(s). Also associated with each channel shall be a four LED array for the indication of the signal levels applied to the output drive circuits. The LED's shall be labelled CLIP, +10, 0, and -10 corresponding to internal signal levels of +18dBu, +10dBu, 0dBu, and -10dBu.

Frequency response through the amplifier shall be $\pm 1/2$ dB, measured between 20 Hz and 20 kHz. THD+Noise shall be less than 0.009% measured at unity gain with a bandwidth of 30 kHz. Residual noise will be >100 dB below a +4 dBu input signal when measured with an A-weighting filter.

The unit shall occupy one rack space (1U). The physical dimensions shall be 1.72"H x 19"W x 6"D; 4.45cm H x 43.7cm W x 15.24cm D.

The distribution amplifier shall operate by means of its built-in power supply connected to 117V AC, nominal, 95-130V AC, 50-60 Hz; or 230V AC nominal, 165-255V AC, 50 Hz. Power consumption shall be 18 watts, maximum. There shall be a rear panel receptacle for an IEC type detachable power cord. The distribution amplifier shall carry the CE mark.

The distribution amplifier shall be a Symetrix, Incorporated model 581E Distribution Amplifier (4x4).

581E