

300 SERIES PRODUCTS FROM SYMETRIX

Audio Tools for Installed Sound & Broadcast Production



302 Dual Microphone Preamplifier

A DUAL MICROPHONE PREAMPLIFIER designed for broadcast, sound reinforcement, and digital and analog recording. Offers substantial sonic improvements over stock mixers or console preamps. Has solid stereo imaging, excellent transient response, very low noise, and almost undetectable distortion. A mono summed 1+2 output is also provided.

- Polarity reversal switches and 15 dB pads on both channels.
- +48 volt phantom power.
- Gain variable from 20 to 60 dB, works with virtually any professional microphone.



303 Interface Amplifier (Bi-directional)

A STEREO LEVEL MATCHING AMPLIFIER that accepts balanced or unbalanced inputs and converts them to balanced or unbalanced outputs. Use the 303 to interface a consumer DAT, cassette recorder or computer sound card to a professional recording console or to other +4 dBu nominal level equipment.

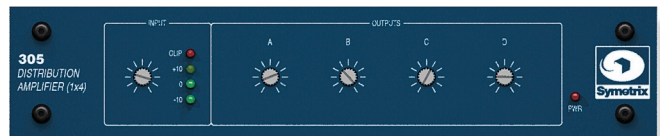
- Simple, affordable conversion of consumer audio to pro audio without loss of information.
- Stereo XLR and RCA input and output jacks.
- External power supply ensures low noise operation.



304 Headphone Amplifier

A STEREO IN, FOUR OUTPUT amp which drives headphones of any impedance. Used in broadcast, installed sound, and recording applications. High voltage technology provides a 6dB volume increase over most competing units. Compact half rack chassis permits 8 channels in one rack space.

- Individual volume controls for each output, master input volume.
- Stereo or mono operation, balanced or unbalanced input.
- Pass Thru jacks permit daisy-chaining of multiple units.



305 Distribution Amplifier (1x4)

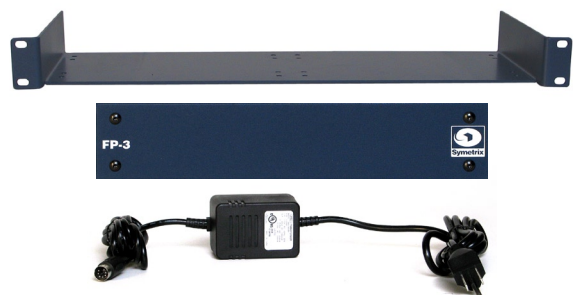
A ONE INPUT/FOUR OUTPUT mono distribution amplifier. Use the 305 to route your most critical audio to four separate outputs. Sound contractors will find the 305 essential for feeding multiple power amps. Broadcast engineers can easily and inexpensively distribute satellite audio around their station with the 305.

- Euroblock terminal connectors for quick installation.
- Precision circuitry yields THD+Noise less than .009%.
- Four-segment LED input level meter. Individual trim pots for input and output volume attenuation.

300 Series Accessories

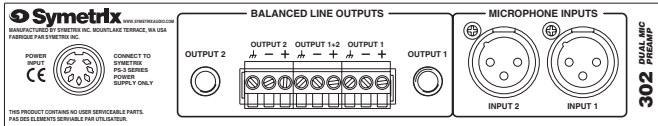
The following accessories are available for use with all Symetrix 300 series products.

- **RM-3** single rack space shelf which holds two 300 series products side by side.
- **FP3** half rack filler panel for use when rack mounting only one 300 series product on an RM-3.
- **PS-3, PS-3E, PS-3J** external power supply for 115 VAC (PS-3), 230 VAC (PS-3E) or 100 VAC (PS-3J) markets. One supply included with each 300 series product.



SPECIFICATIONS

Specifications subject to change without notice.



302 Dual Microphone Preamplifier

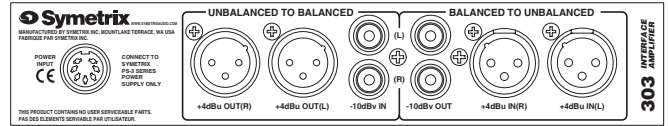
Input/Output	
Input Type	Low Z Transformerless
Maximum Input Level	+14dBV (with pad "In")
Maximum Output Level	+24dBu Balanced, 10k Ohm load +22dBu Balanced, 600 Ohm load
Input Impedance	>3k Ohms
Output Impedance	300 Ohms Balanced, 150 Ohms Unbalanced

Performance Data	
Clip Indicators	red LEDs, fire 3dB below clipping
Frequency Response	20Hz to 20kHz, +0, -1dB
THD+Noise	0.007% (1kHz, 0dBu, 600 Ohms out) 0.01% (1kHz, +22dBu, 600 Ohms out)
Signal to Noise Ratio	95dB (-50dBV, 150 Ohms in)
EIN	< -128dBu (150 Ohms source, 60dB gain, 22kHz bandwidth)
Phantom Power	+48V
Minimum Gain	20dB
Maximum Gain	60dB

Connections	
Input	XLR
Output	1/4" TRS jacks, Euroblock
Power In	7-pin DIN

Physical	
Size (HxWxD)	1/2 rack unit
	1.75 in. x 8.5 in. x 6.5 in., 4.445 cm x 21.59 cm x 15.875 cm
Shipping Weight	4.6 lbs.

Electrical	
Power Requirements	115V nominal, 95 to 130 VAC, 50 to 60 Hz, 10 Watts 230V nominal, 165 to 255 VAC, 50 Hz, 10 Watts



303 Interface Amplifier (Bi-directional)

Input/Output: +4dBu to -10dBV Circuit	
Maximum Input Level	+28dBu Balanced, +22dBu Unbalanced
Maximum Output Level	+18dBV Unbalanced
Input Impedance	40k Ohms Balanced, 20k Ohms Unbalanced
Output Impedance	100 Ohms Unbalanced
Input Common Mode Rejection	> 40dB

Performance Data: +4dBu to -10dBV Circuit	
Frequency Response	10Hz to 30kHz, +0, -1dB
THD+Noise	< 0.005% at +28dBu
Gain	-12dB

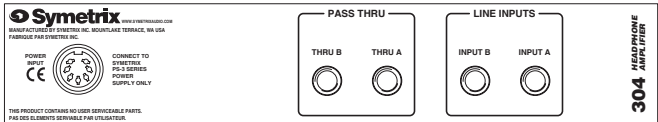
Input/Output: -10dBV to +4dBu Circuit	
Maximum Input Level	+8dBV Unbalanced
Maximum Output Level	+24dBm Balanced, 600 Ohm load +18dBm Unbalanced, 600 Ohm load
Input Impedance	100k Ohms Unbalanced
Output Impedance	200 Ohms Balanced, 100 Ohms Unbalanced

Performance Data: -10dBV to +4dBu Circuit	
Frequency Response	10Hz to 30kHz, +0, -1dB
THD+Noise	< 0.005% at +8dBV
Gain	+12dB

Connections	
Input	XLR, RCA jacks
Output	XLR, RCA jacks
Power In	7-pin DIN

Physical	
Size (HxWxD)	1/2 rack unit
	1.75 in. x 8.5 in. x 6.5 in., 4.445 cm x 21.59 cm x 15.875 cm
Shipping Weight	4.5 lbs.

Electrical	
Power Requirements	115V nominal, 95 to 130 VAC, 50 to 60 Hz, 10 Watts 230V nominal, 165 to 255 VAC, 50 Hz, 10 Watts



304 Headphone Amplifier

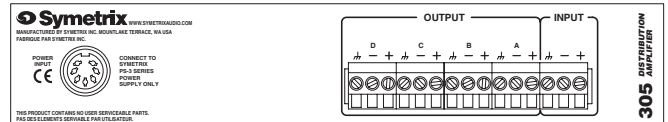
Input/Output	
Input Type	Bridging, Balanced or Unbalanced
Maximum Input Level	+18dBu
Maximum Output Level	+25dBm, 600 Ohm load, > 10Vrms, 200 Ohm load
Input Impedance	20k Ohms Balanced, 10k Ohms Unbalanced
Output Impedance	100 Ohms

Performance Data	
Frequency Response	20Hz to 20kHz, +0, -1dB
THD+Noise	0.01% (1kHz, 0dBu, 600 Ohms) 0.02% (1kHz, +24dBm, 600 Ohms)
Signal to Noise Ratio	95dB
Maximum Gain	20dB

Connections	
Input	1/4" TRS jacks
Output	1/4" TRS jacks
Power In	7-pin DIN

Physical	
Size (HxWxD)	1/2 rack
	1.75 in. x 8.5 in. x 6.5 in., 4.445 cm x 21.59 cm x 15.875 cm
Shipping Weight	4.5 lbs.

Electrical	
Power Requirements	115V nominal, 95 to 130 VAC, 50 to 60 Hz, 10 Watts 230V nominal, 165 to 255 VAC, 50 Hz, 10 Watts



305 Distribution Amplifier (1x4)

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

Performance Data	
Frequency Response	20Hz to 20kHz, +0, -1dB
THD+Noise	< 0.009% at +26dBu (30kHz bandwidth)
Signal to Noise Ratio	> 100dB, A-weighted at +4dBu
Dynamic Range	> 125dB, A-weighted
Common Mode Rejection	> 40dB, 20Hz to 20kHz
Input Gain Range	+/- 15dB
Output Gain Range	0 to -20dB

Connections	
Input/Outputs	Euroblock
Power In	7-pin DIN

Physical	
Size (HxWxD)	1/2 rack
	1.75 in. x 8.5 in. x 6.5 in., 4.445 cm x 21.59 cm x 15.875 cm
Shipping Weight	4.5 lbs.

Electrical	
Power Requirements	115V nominal, 95 to 130 VAC, 50 to 60 Hz, 10 Watts 230V nominal, 165 to 255 VAC, 50 Hz, 10 Watts



Symetrix, Inc.
6408 216th St. SW
Mountlake Terrace, WA 98043
USA

Tel (425) 778-7728
Fax (425) 778-7727
Web www.symetrixaudio.com
Email sales@symetrixaudio.com

Copyright 1997-2003, Symetrix, Inc.
All rights reserved. Information is
subject to change without notice.
Symetrix products and accessories are
manufactured in the USA and Canada.