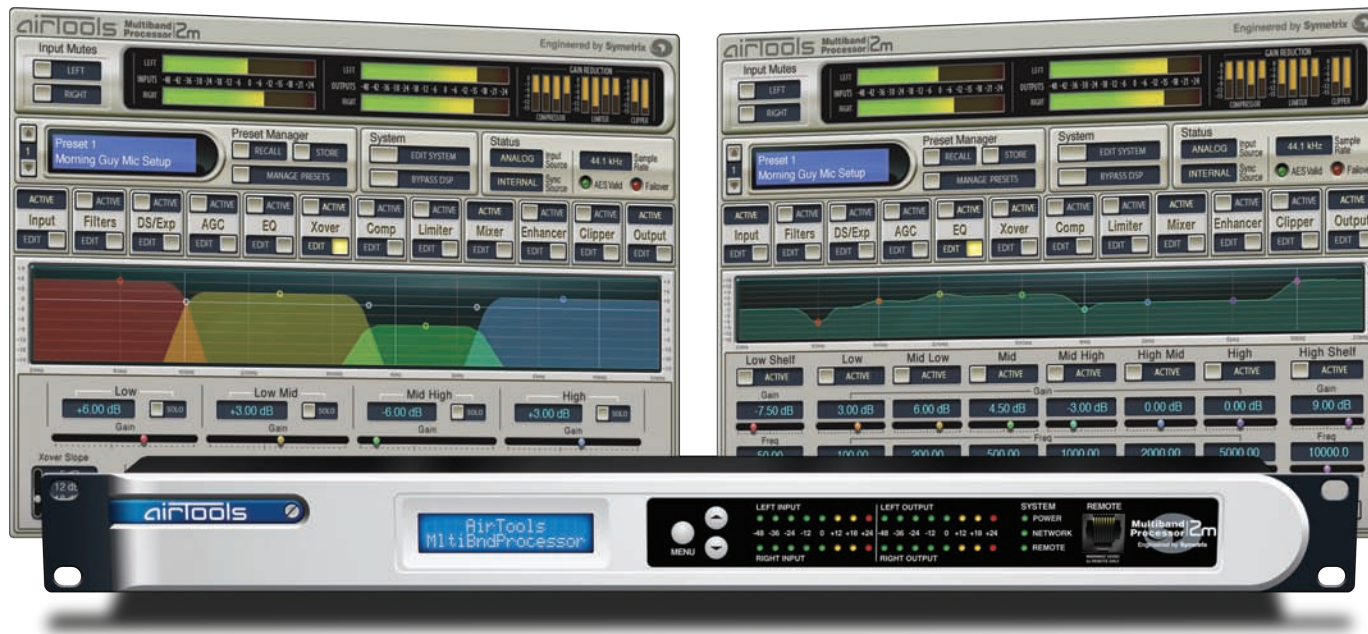


DATA SHEET: Multiband Processor 2m



The **AirTools Multiband Processor 2m** has been created to provide comprehensive broadcast audio level and quality optimization. The deployment of multiple floating point DSP modules (see *Features reverse side*) results in listener perceived improvements in tone, intelligibility and intensity regardless of the type of audio program or its source.

Our hardware component selection and design methodologies have produced a minimum latency digital processor with wide dynamic range and extremely low distortion (see *Performance Data reverse side*).

The 2m is set up from a wizard driven Windows application. Presets are recalled manually from the front panel, network computer or optional controller hardware. Automatic recall by time of day is done using the onboard event scheduler.

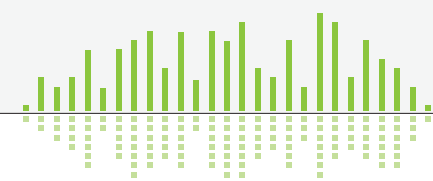
There's a lot more to learn about the 2m. Visit our website at www.SymetrixAudio.com for a free, unregistered download of the 2m Windows application and Quick Start Guide.

AirTools products are Engineered by Symetrix to help you **Control Your Airspace**.

Applications

Audio level and sound quality optimization for:

- AM/FM/TV program audio
- Satellite uplink
- Satellite ingest
- Headphone airchain simulation
- Internet streaming
- Alternate language programming
- In studio live performance "mastering"
- Microwave links
- Telco/VoIP feeds/returns





Features

- Two (2) analog line inputs, one (1) AES3 input, two (2) line outputs, one (1) AES3 output, word clock input plus user configurable audio input failover and stereo/mono/MS encode/MS decode operating modes.
- Processing modules include programmable filters, phase rotator, de-esser, downward expander, broadband automatic gain control (AGC), 8-band parametric equalizer, 4-way programmable crossover, 4-band multiband compressor and limiter, stereo image enhancer, acoustic environment simulator, clipper, and alignment delay.
- Configure named presets to accommodate any format – up to 50, including factory presets – configured via the included Windows® software.
- Presets are recalled manually from the front panel, network computer or optional controller hardware. Automatic recall by time of day is done using the onboard event scheduler.

Performance Data

ANALOG INPUTS

Nominal Input Level: +4 dBu or -10 dBV line level (software selectable) with 20 dB of headroom, Analog; -20 dBFS, Digital
Maximum Input Level: +23 dBu, Analog; 0 dBFS, Digital
Input Impedance: 6.67 k Ω balanced, > 3.3 k Ω unbalanced, Analog; 110 Ω , Digital
CMRR: > 55 dB @ 1 kHz, unity gain
A/D Conversion: 24-bit delta/sigma
A/D Dynamic Range: 116 dB (A-Weighted)
A/D THD+Noise: -102 dB (un-weighted); 1 kHz @ -2 dBFS with 0 dB gain
A/D Latency: 0.25 mS

ANALOG OUTPUTS

Nominal Output Level: +4 dBu line level with 20 dB of headroom, Analog; -20 dBFS, Digital
Maximum Output Level: +24 dBu, Analog; 0 dBFS, Digital
Output Impedance: 200 Ω balanced, 100 Ω unbalanced, Analog; 110 Ω , Digital
D/A Conversion: 24-bit delta/sigma
D/A Dynamic Range: 114 dB (A-Weighted)
D/A THD+N: -98 dB (un-weighted); 1 kHz @ -2 dBFS
D/A Latency: 0.2 mS

SYSTEM

Nominal Sampling Rate: 48 kHz
Output Sample Rate: 44.1 or 48 kHz internal, or equal to AES/Word input
Sync Input Range (Word and AES): 22 - 192 KHz
A/D/A Frequency Response: 20 Hz - 20 kHz, +/- 0.25 dB
A/D/A Dynamic Range: 113 dB (A-Weighted)
D/D Dynamic Range: > 140 dB
A/D/A Latency: < 0.7 mS; with all DSP active
D/D Latency: < 1.0 mS; with all DSP active

Mechanical Data

SPACE REQUIRED

1U (WDH: 48.02 cm x 23.11 cm x 4.37 cm / 18.91 in x 9.1 in x 1.72 in), depth is specified from front panel to back of connectors.
 Allow at least 3 inches additional clearance for rear panel connections. Additional depth may be required depending upon your specific wiring and connections.

ELECTRICAL

100-240 VAC, 50/60 Hz, 25 Watts maximum.
 No line voltage switching required.

VENTILATION

Maximum recommended ambient operating temperature is 30 C / 86 F. Ensure that the left and right equipment sides are unobstructed (5.08 cm, 2 in minimum clearance). The ventilation should not be impeded by covering the ventilation openings with items such as newspapers, tablecloths, curtains, etc.

CERTIFICATIONS

UL 60065, cUL 60065, IEC 60065, EN 55103-1, EN 55103-2, FCC Part 15, RoHS

SHIPPING WEIGHT

12 lbs. (5.44 kg)

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