

## Jupiter • 4

Four inputs and four outputs

## Jupiter • 8

Eight inputs and eight outputs

## Jupiter • 12

Twelve inputs and four outputs



### Introducing Jupiter.

Jupiter packages powerful DSP into a zero learning curve, turn-key audio processing solution drawing its inspiration from the ‘apps’ paradigm of smartphones like the iPhone. Standing on the shoulders of Symetrix’ world-class SymNet DSP platform, Jupiter upholds our commitment to pristine sound.

### Hardware: Choice made simple.

The three Jupiter hardware offerings differ only in their audio input and output counts. All three use the same software and DSP processes, making your choice of hardware quick and easy.

### Software: Easy from the start.

Just like using productivity apps on your smart phone, you use Jupiter apps to do specific audio jobs with a simple download to Jupiter hardware. Tap into one of the multiple personalities of Jupiter – no design time, zero learning curve. Jupiter handles every task, from automixing to loudspeaker management. The ever-growing library of downloadable Jupiter apps future-proofs your hardware investment.

### Engineered by Symetrix.

Jupiter brings you controllable and simple to use audio DSP. Engineered and built in the US by Symetrix...

### Explore Jupiter.

## Jupiter Apps.

Mixing and Routing for:

- Houses of Worship
- Courtrooms
- Banquet Rooms

Public Address and Distribution for:

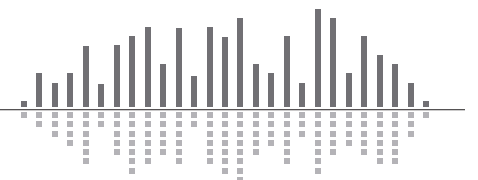
- Transit Stations
- Theaters
- Shopping Malls

Sound Reinforcement for:

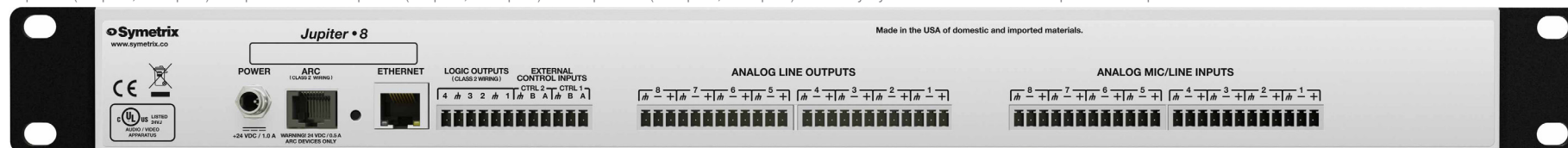
- Nightclubs
- Courtrooms
- Lecture Halls

Special Purpose Signal Processing for:

- Broadcast Facilities
- Production Suites
- Live Sound



Jupiter 8 (8 inputs, 8 outputs) rear panel shown. Jupiter 4 (4 inputs, 4 outputs) and Jupiter 12 (12 inputs, 4 outputs) differ only by their numbers of audio inputs and outputs.



## A&E Specifications

The device shall provide twelve, eight or four inputs (Jupiter 12, 8 or 4 respectively) that are selectable as line or mic level with phantom power and four, eight or four (Jupiter 12, 8 or 4 respectively) line level outputs. All signal processing, mixing and routing functions (including input gains) shall be controllable via software. Audio inputs and outputs shall be accessed via rear panel 3.81 mm terminal block connectors.

The Graphical User Interface (GUI) software shall be installer programmable using the Windows® XP or higher operating system. Computer connection and control shall be via the device's rear panel Ethernet connector. The GUI shall provide the management of apps, device files and display and control of all signal processing and configuration functions including, but not limited to: Input and Output Gain • Highpass Filtering • Lowpass Filtering • FIR Filters • Crossovers • Parametric Equalization • Graphic Equalization • Expansion • De-Essing • Compression • Limiting • Automatic Gain Control • Ambient Noise Compensation • Feedback Elimination • Automatic Mixing • Priority Mixing • Signal Routing • Delay • Polarity.

The front panel shall include input and output signal level indicators as well as indicators for POWER, NETWORK, and ARC.

External control shall include preset selection as well as I/O level control and muting, and shall be via industry-standard CAT5 cable with RJ45 connectors using the optional ARC wall panel remote controls. All program memory shall be non-volatile and provide program security should power fail. The device shall provide an on board real time clock to facilitate automatic, timed changing of presets. Third-party control systems may interface over IP using a published ASCII control protocol.

Audio conversion shall be 24-bit, 48 kHz. The dynamic range of the processor shall not be lower than 110 dB A-weighted.

The device shall have a captive power input socket for an external 24 VDC supply. The device shall meet UL/CSA and CE safety requirements and comply with CE and FCC Part 15 emissions limits. The device shall be RoHS compliant. The chassis shall be constructed of cold rolled steel and moulded plastic, and mount into a standard 19" 1U EIA rack. The device shall be a **Symetrix Jupiter model 4, 8 or 12.**

## Performance Data

### INPUTS

**Number of Inputs:** Twelve (12), eight (8), or four (4) switchable balanced mic or line level on Jupiter 12, 8 or 4 respectively.  
**Connectors:** 3.81 mm terminal blocks.  
**Nominal Input Level:** +4 dBu line or -36 dBu mic level (software selectable) with 20 dB of headroom.  
**Mic Pre-amp Gain:** +40 dB.  
**Input Trim:** +/- 24 dB.  
**Maximum Input Level:** +23 dBu.  
**Input Impedance:** > 18 kΩ balanced, > 9 kΩ unbalanced, > 2 kΩ with phantom power engaged.  
**CMRR:** > 50 dB @ 1 kHz, unity gain.  
**Mic Pre-amp EIN:** < -125 dBu, 22 Hz - 22 kHz, 100 Ω source impedance.  
**Phantom Power:** +20 VDC, 20 mA maximum per input.

### OUTPUTS

**Number of Outputs:** Four (4), eight (8), or four (4) line level on Jupiter 12, 8 or 4 respectively.  
**Connectors:** 3.81 mm terminal blocks.  
**Nominal Output Level:** +4 dBu line level with 20 dB of headroom. For unbalanced analog output, do not connect the minus output terminal. Unbalanced configuration results in 6 dB lower output level.  
**Maximum Output Level:** +24 dBu.  
**Output Impedance:** 200 Ω balanced, 100 Ω unbalanced.

### SYSTEM

**Sample Rate:** 48 kHz.  
**Frequency Response:** 20 Hz - 20 kHz, +/- 0.5 dB.  
**Dynamic Range:** > 110 dB (A-Weighted), input to output.  
**THD+Noise:** < -85 dB (un-weighted); 1 kHz @ +22 dBu with 0 dB gain.  
**Interchannel Crosstalk:** < -90 dB @ 1 kHz, typical.  
**Latency:** < 1.6 ms, input to output with all DSP inactive.

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## Mechanical Data

### SPACE REQUIRED:

1U (WDH): 48.02 cm x 19.05 cm x 4.37 cm / 18.91 in x 7.5 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.  
 Universal input.

### 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 OR COMPLIANCE:

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

### SHIPPING WEIGHT:

8 lbs. (3.63 kg)

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All specifications and features subject to change without notice.

