Solus • 4
Four inputs and four outputs

Solus • 8
Eight inputs and eight outputs

Solus • 16
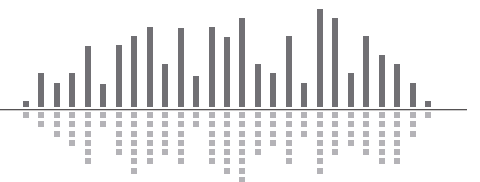Sixteen inputs and eight outputs

Benefits and Features

- Ideal for small to mid-size installations not requiring I/O expansion.
- Configured using open architecture SymNet Designer 10 to customize signal path and DSP modules.
- The most cost-effective SymNet solution to date.
- Four mic/line inputs and four outputs on Solus 4, eight mic/line inputs and eight outputs on Solus 8 and sixteen mic/line inputs and eight outputs on Solus 16.
- Ethernet, ARC port, RS-232 port, two control inputs, and four logic outputs.

Solus is powerful SymNet DSP hardware, ideal for small to mid-size installations not requiring I/O expansion. The entire family of SymNet hardware, including Solus, is configured using open architecture SymNet Designer software. System designers have the option to use or modify Solus DSP design templates for basic projects, or, to create unique designs entirely from scratch.

The three Solus hardware offerings differ only in their audio input and output counts; Solus 4 with four inputs and four outputs, Solus 8 with eight mic/line inputs and eight outputs and Solus 16 with sixteen mic/line inputs and eight outputs. Ethernet, ARC port, RS-232 port, two control inputs, and four logic outputs complete the control feature set. To simplify set-up, a front panel LCD displays system settings. Solus supports Symetrix ARC wall panels, third party control systems, and SymVue, a SymNet end-user control panel application.

When system designers need more than a fixed architecture box can offer, Solus delivers powerful standalone open architecture DSP.

Find Solus at www.symetrix.co.

Solus 8 (8 inputs, 8 outputs) rear panel shown. Solus 4 (4 inputs, 4 outputs) and Solus 16 (16 inputs, 8 outputs) differ only by their number of audio inputs and outputs.
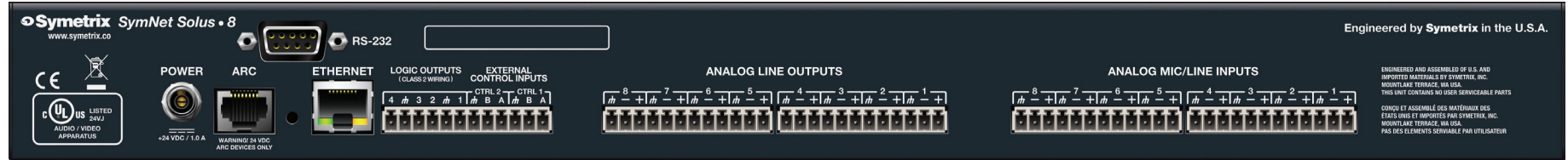
A&E Specifications

The device shall provide four, eight or sixteen inputs (Solus 4, 8 or 16, respectively) that are selectable as line or mic level with phantom power and four or eight (Solus 4 or Solus 8 and 16, 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.

A designer software application shall be provided that operates on a Windows computer, with network interface installed, running Windows® XP or higher operating system. Computer connection for configuration shall be via the device's rear panel Ethernet connector. All internal processing shall be digital (DSP). Available DSP components shall include (but not be limited to) various forms of: mixers, equalizers, filters, crossovers, dynamics/gain controls, routers, delays, remote controls, meters, generators, onboard logic, and diagnostics.

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

External control shall include dedicated software screens as well as preset selection, I/O level control and muting using the optional ARC wall panel remote controls via industry-standard CAT5 cable with RJ45 connectors. 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 and RS-232 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 SymNet Solus model 4, 8 or 16**.

Performance Data

INPUTS

Number of Inputs: Four (4), eight (8) or sixteen (16) switchable balanced mic or line level on Solus 4, 8 or 16, 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) or eight (8) line level on Solus 4 or Solus 8 and 16, 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 routed to output.
Delay Memory: 2.7 seconds.

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), Solus 4 and 8
11.5 lbs. (5.22 kg), Solus 16