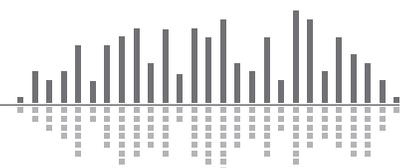## xControl

The Symetrix xControl provides external control expansion for use with Symetrix Radius, Edge, Prism, and Solus NX DSPs. Each of the 8 flexible analog control inputs may be configured for 1 potentiometer or 2 switches. The 16 logic outputs may be used to drive LEDs, trigger external relays, or control contact closure ports. Either of the 2 RS-232 ports may be configured to receive commands from third-party control systems, or, issue commands to third-party control systems. Utilizing PoE, one or more xControl devices may be mounted where convenient and connected to the control network, each with a single cable. A half-rack form factor conserves rack space, or, if preferred, the xControl may be surface mounted.
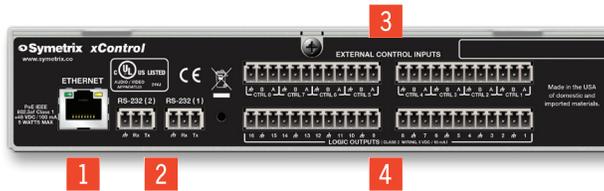
Features:

- External control expansion device for use with Symetrix Radius, Prism, Edge, and Solus DSP systems for cost-effective additional push-to-talk capability and LED activity indication in conferencing and paging applications.

- 8 analog control inputs may each be configured for 1 potentiometer or 2 switches. 16 logic outputs drive LEDs or trigger external relays. 2 RS-232 ports interface with peripherals such as projectors, camera controls and lighting. Multiple xControls combine for unlimited flexibility.

- xControl utilizes Power over Ethernet (PoE) for a single cable connection to a PoE switch, or, a direct connection to the DSP (PoE injector included).

- Simple set-up and management using Composer open-architecture design software.

- Versatile half-rack design. Mount 1 or 2 units in an optional 1U rack tray or surface mount with optional bracket.

Specifications

External Control Inputs	
Number of External Control Inputs	8 to 16 total; each configurable to accommodate 1 potentiometer or 2 closures for a maximum of 8 potentiometers or 16 closures.
Connectors	3.81 mm terminal blocks.
Reference Voltage	3.3 VDC
Recommended Potentiometer	10k Ohms linear taper.

Logic Outputs	
Number of Logic Outputs	16; each capable of driving an LED directly, triggering an external relay or sinking external voltage/current. Low (0 VDC) when active, pulled high (5 VDC) when inactive.
Connectors	3.81 mm terminal blocks.
Maximum Output Voltage	5 VDC
Maximum Output Current	10 mA
Maximum External Power Supply Voltage	24 VDC
Maximum External Power Supply Current Sinking	50 mA

RS-232 Ports	
Number of RS-232 Ports	2
Connectors	3.81 mm terminal blocks.
RS-232 Port Parameter	57.6 kbaud (default), 8 data bits, 1 stop bit, no parity, no flow control wired straight-through, only pins 2, 3, and 5 required.

System	
Ethernet Cable	Standard CAT5/6, maximum device-to-device length = 100 meters.

1 **Ethernet:** 10/100 Base-T Ethernet port for network connection to the system over IP. Features auto-crossover sensing for direct device-to-device connections. Accepts PoE IEEE 802.3af Class 1.

2 **RS-232:** Two serial communications interface for sending strings to 3rd party devices or accepting 3rd party control commands. Port Settings: 57.6 kbaud (default), 8 data bits, 1 stop bit, no parity, no flow control.

3 **External Control Inputs:** 8 analog control inputs may each be configured for 1 potentiometer or two switches (+3.3 VDC reference voltage supplied).

4 **Logic Outputs:** 16 logic outputs with 8 paired common ground pins. Logic Outputs go low (0 V) when active, and are internally pulled high (5 V) when inactive and can drive external LED indicators directly.

Mechanical Data

Item	Specifications	Remarks
Space Required	Half rack unit (WDH: 20.83 cm x 22.86 cm x 4.37 cm / 8.2 in. x 9 in. x 1.72 in.) Depth does not include connector allowance.	Allow at least 3 inches additional clearance for rear panel connections. Additional depth may be required depending upon your specific wiring and connections.
Electrical	PoE IEEE 802.3af Class 1, 6 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.
Shipping Weight	2.0 kg (4.4 lbs.)	
Certifications or Compliance	UL 60065, cUL 60065, IEC 60065, EN 55103-1, EN 55103-2, FCC Part 15, RoHS	

Architect and Engineer Specifications: Symetrix xControl.

The half rack device shall provide logic I/O expansion for a system with eight to sixteen total external control inputs, sixteen logic outputs, and two RS-232 ports.

Each external control input shall be configurable to accommodate one potentiometer or two closures for a maximum of eight potentiometers or sixteen closures. Each logic output shall be capable of driving an LED directly, triggering an external relay or sinking external voltage/current, low (0 VDC) when active, pulled high (5 VDC) when inactive.

All logic I/O and RS-232 connections shall be accessed via rear panel 3.81 mm terminal block connectors.

System connection for configuration and communication shall be via the device's rear panel Ethernet connector.

A designer software application shall be provided that operates on a Windows computer, with network interface installed, running Windows® XP or higher operating system.

The front panel shall include indicators for POWER, ETHERNET and ACTIVITY.

The device shall be powered over Ethernet (PoE) by an IEEE 802.3af Class 1 standard compliant switch or the included injector. 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 may be surface mounted or mount into a standard 19" 1U EIA rack using the included rack mount kit. The device shall be a **Symetrix xControl.**