

- Network-based A/V Control
- Configured with Composer Software with Familiar Workflow
- Browser-based Administration and Control
- Supports BYOD Computers, Tablets, and Phones
- A Wireless Access Point or Bridge to the A/V System



Network-based A/V Management. Control Server is a flexible and extensible approach to the control of Symetrix Composer-enabled DSPs and select third-party A/V components. The centralized server-based technology enables comprehensive design, deployment, and maintenance of large and sophisticated systems employing numerous control endpoints supporting multiple simultaneous users.

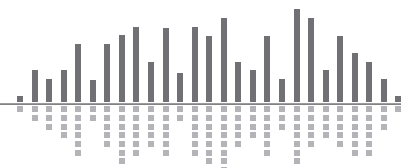
Wired and wireless network interfaces. Control Server’s wired Gigabit Ethernet port enables control via dedicated A/V or general purpose facility networks, as well as direct communication with networked DSP hardware. Operating in wireless mode, Control Server functions as an access point providing mobile device connectivity – in essence providing a secure “A/V control island”.

Straight-forward Setup and Deployment. Control Server is designed into a system using Composer - Symetrix’ award winning open-architecture CAD application. Composer is used to locate and program Control Server and other Symetrix DSPs and accessories. Control Server’s browser-based administration is then used to manage app licenses, users, and user access.

Benefits of the “App” Model. Because apps are virtual, they serve to reduce overall system costs by cutting down on hardware requirements. As an example, the Control Server’s multi-touch “Mixer” app provides up to 32 faders and mutes with customizable labels, colors, ranges, and display units. It can trigger up to 16 presets. Unlike Control Server apps, functionally equivalent hardware products are expensive and prone to wear, tear, and failure.

Electrical Specifications

Items	Specifications
System	
Processor	Intel® 64 Architecture Chipset.
Ethernet Cable	Standard CAT5e or CAT6, maximum device-to-device length = 100 meters.
Maximum Devices Per System	80 units per Site File.
Maximum Stored Presets	1000.
Peripheral Connectivity	
Ethernet	Integrated Intel® 10/100/1000 Network Connection.
Wi-Fi	IEEE 802.11a/b/g/n.
USB	Two Hi-Speed USB 2.0 ports.
Wi-Fi	
Chipset	Atheros XSPAN family with SST3™, with increased link rate by 100% at short range, 50% at mid-range and 25% at long range.
Type	IEEE 802.11n compliant and backward compatible with 802.11a/b/g.
Power	19 dBm maximum output (per chain) /22 dBm (aggregate).
Frequency	Simultaneous dual-band 2.4 GHz and 5 GHz with Dynamic Frequency Selection (DFS). IEEE 802.11 b/g/n: 2.412-2.462 GHz. IEEE 802.11a/n: 5.18-5.24 + 5.745-5.825 GHz (US) 5.18-5.24 GHz (Europe ETSI).
Data Transfer Rates	Up to 300 Mbps.
Radio Data Rates	Auto rate sensing.
Enhancements	Dual-band 2x2 spatial multiplexing, cyclic-delay diversity (CDD), low-density parity check (LDPC), maximum ratio combining (MRC), space time block code (STBC) and Tx beamforming (TxBF).
Antennae	Two RP-SMA (reverse-polarity SMA) auto switching omni-directional antennae providing 1.5 dBi nominal gain at 2.4 GHz and 2.1 dBi nominal at 5 GHz.
International	Multi-Country Roaming Supported (IEEE 802.1d Global Harmonization Standard).
Modulation	OFDM: BPSK, QPSK, 16-QAM, 64-QAM; DSSS; DBPSK, DQPSK, CCK.
Security	40-bit (also called 64-bit) and 128-bit WEP, WPA-PSK, WPA2-PSK, and WPA/WPA2 Enterprise, IEEE 802.11i encryption.
Number of Simultaneous Connections	50.





- 1 Power:** Power plug accepts power from Symetrix power supply part number 12-0036-A (100-240 VAC, 50-60 Hz, 36 Watts max). Connect only to a grounded power outlet.
- 2 Ethernet:** 1000 Base-T Ethernet port for Symetrix Composer host control, web-based administration, serving of end-user apps, and control over devices on the A/V network. Features auto-crossover sensing for direct device-to-device connections.
- 3 USB:** Two (2) Type A USB 2.0 ports. May be used with specially configured USB keys to reset certain settings or to factory defaults under the direction of Symetrix Technical Support.
- 4 Audio Out:** 3.5 mm unbalanced stereo analog and optical (S/PDIF) combo jack.

Mechanical Specifications		
Items	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 antenna or connector allowance.	Allow at least 3 inches additional clearance for front and rear panel connections. Additional depth may be required depending upon your specific wiring and connections.
Electrical	12 VDC @ 2.5 A, 30 Watts Maximum. Symetrix part number 12-0036, CUI part number SMI36-12-V-P6.	
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	SAFETY: UL/CSA/EN 60065 EMC: FCC 15.107, FCC 15.109, ICES-003, EN 300 328 V2.1.1, EN 301 489-17 v3.1.1, EN 301 893 V2.1.1, EN 55103-2, EN 55032, EN 61000-4-5, EN 61000-3-2. ENVIRONMENTAL: RoHS FCC: Part 15 Subpart C, Subpart E (JNII-1/2/2Ext/3). ID: N6C-SXPCEAN2.	
Shipping Weight	5.2 lbs. (2.4 kg)	

Architect and Engineer Specifications: Symetrix Control Server

The front panel shall include a bi-color LED and momentary switch used for network identification, power-on, and other documented features or control.

The unit shall provide user connections for the included power supply and a standard 10/100/1000 Base-T RJ45 network connection utilizing CAT5e/6 cable. A standard 802.11 a/b/g/n Wi-Fi interface may be enabled for built-in wireless control of the AV network or bridging control access from an existing network.

The unit shall host apps which provide specialized web-based user control interfaces and enhanced functionality for Symetrix DSP systems. These interfaces may be accessed by multiple network devices running compatible web browsers. Compatible web browsers for the user interface shall be:

Windows: Internet Explorer 10+, Microsoft Edge, Chrome, and Firefox.
 macOS: Safari, Chrome, and Firefox.
 iOS: Safari.
 Android: Android Web Browser.

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 and may sync to NTP.

A designer software application shall be provided that operates on a Windows computer, with network interface installed, running Windows® 7 or higher operating system. The application shall discover units on the network and program its control interfaces. A built-in web-based administration interface shall provide the means to install new, update existing, and license apps as well as define users and configure various system settings.

The device shall have a power plug that accepts power from Symetrix part number 12-0036, CUI power supply part number SMI36-12-V-P6. 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 Galvalume®, and may be surface mounted or mount into a standard 19" 1U EIA rack using an available bracket or rack tray. The device shall be a **Symetrix Control Server**.

