# DATA SHEET: *Integrator Series* Automix Matrix 780

Symetrix

The Vision Behind the Sound


## The *Integrator Series* Automix Matrix 780 from Symetrix.

The third product in the Integrator Series is the **Automix Matrix 780**, designed to do justice to sound where justice matters most. The 780 provides the tools required for consistently clear audio in courtrooms, government chambers, corporate boardrooms and houses of worship. Featuring twelve inputs (eight microphone, four line level) and eight outputs, it contains microphone pre-amplification, compression, AGC, automixing (both Gating and Gain-sharing), matrix mixing, feedback elimination, filters, equalization, limiting and delay. Setup is easy and efficient with a straightforward Windows® interface connected over Ethernet. The 780 is also compatible with Symetrix RS-485-based Adaptive Remote Control (ARC) Wall Panels for user control. An interactive front panel provides convenient access to vital system parameters or may be custom programmed for user and technician control. Open Collector outputs can drive LEDs directly for status updates or integrate with external logic and automation systems. Save time and money with the Automix Matrix 780 from Symetrix, the engineering-driven company of signal processing specialists.

The **Automix Matrix 780**'s beautiful software interface makes system setup a breeze. All mixing and routing functions are clearly displayed within two distinct panels ensuring that no parameter is more than two clicks away.

## Automix Matrix 780 Applications

**AUTOMIXING, SUBMIXING, ROUTING AND PROCESSING FOR:**

- Courtrooms
- Legislative and Government Chambers
- Corporate Boardrooms and Training Facilities
- Houses of Worship

### Features

- A complete, fully-optioned 12-channel Automixer with eight submixes for Courtrooms, Government Chambers, Corporate Boardrooms and Houses of Worship.
- Eight (8) Mic/Line Inputs with filters, EQ, and feedback elimination into Gating or Gain-sharing Automixing with full control over NOM counts and priorities.
- Four (4) Line Inputs featuring filters, EQ and Automatic Gain Control (AGC) for devices such as CD Player, TV Audio, DVD Audio, or an additional mixer.
- Eight (8) Outputs: Route sub or mix-minus mixes to as many as eight (8) unique locations or dedicate any number of outputs to specific tasks such as recording, archive or broadcast.
- Wizard-driven software set-up; network ready.

6408 216th Street SW | Mountlake Terrace, WA 98043 USA
**T** +1.425.778.7728 **F** +1.425.778.7727 | **www.SymetrixAudio.com**

Engineered by Symetrix

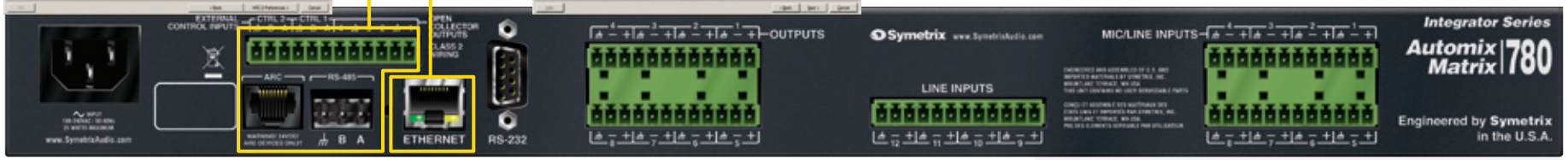
# DATA SHEET: *Integrator Series* Automix Matrix 780

Symetrix

The Vision Behind the Sound

The **External Control Wizard** quickly configures ARC Wall Panels, External Control inputs and Open Collector outputs.

The **Connection Wizard** effortlessly connects your computer to the Automix Matrix 780 hardware saving valuable set-up time.




## Architects and Engineers Specifications

The device shall provide eight inputs that are selectable as line or mic level with phantom power and four line level inputs. 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 Phoenix connectors.

The Graphical User Interface (GUI) software shall be installer programmable using the Windows® XP or Vista operating system. Computer connection and control shall be via the devices' rear panel Ethernet connector. The GUI shall provide display and control of all signal processing and configuration functions including, but not limited to: Input and Output Gain • Highpass Filtering • Lowpass Filtering • Parametric Equalization • Compression • Limiting • Automatic Gain Control • Feedback Elimination • Automatic Mixing • Signal Routing • Delay • Polarity.

The front panel shall include input and output signal present indicators as well as indicators for POWER, NETWORK, and ARC. Additionally, a front panel LCD shall display certain system parameters and may be programmed as an ARC for custom user control via the front panel UP, DOWN and MENU buttons.

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 or the front panel. 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. A rear panel RS-232 port is provided for additional 3rd party control options.

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 an IEC power input socket. The unit shall meet UL/CSA and CE safety requirements. The unit shall be RoHS compliant. The chassis shall be constructed of cold rolled steel and aluminum, and mount into a standard 19" 1U EIA rack. **The device shall be a Symetrix model Automix Matrix 780.**

## Specifcations

### INPUTS

**Number of Inputs:** 12 total, (8) switchable mic or line, (4) line level.
**Connectors:** Phoenix
**Input Impedance:** > 4 kΩ balanced, > 2 kΩ unbalanced
**Max. input line level:** +23 dBu
**CMRR:** > 55 dB at 1kHz, typical
**Mic/Line gain:** +20 dB, +40 dB or +50 dB (via internal jumpers)
**Mic EIN:** > -127 dB, 22 Hz – 22 kHz, 100 Ω source impedance
**Mic Phantom Power:** 48 VDC

### OUTPUTS

**Number of Outputs:** 8
**Connectors:** Phoenix
**Type:** electronically balanced
**Impedance:** 200 Ω balanced, 100 Ω unbalanced
**Max Output Level:** +24 dBu

### SYSTEM

**Sample Rate:** 48 kHz
**Dynamic Range:** > 110 dB A-weighted, input to output
**THD+N:** -85 dB typical at +22 dBu, 1 kHz, 0 dB gain
**Frequency Response:** 20 Hz – 20 kHz, +/- 0.5 dB
**Interchannel Crosstalk:** >-90dB typical @ 1kHz
**Nominal Operating voltage:** 100 – 240 VAC, 50/60 Hz
**Power Requirements:** 25 Watts

### PHYSICAL

**Shipping Weight:** 8.15 lbs. (3.70 kg)
**Dimensions:** 1U (WDH: 48.02 cm x 22.15 cm x 4.37 cm / 18.91 in x 8.72 in x 1.72 in), depth is specified from front panel to back of connectors.

### ENVIRONMENTAL

**Ventilation:** Maximum recommended ambient operating temperature is 86° F (30° C).

### SAFETY AND EMISSIONS

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



6408 216th Street SW | Mountlake Terrace, WA 98043 USA
**T** +1.425.778.7728 **F** +1.425.778.7727 | **www.SymetrixAudio.com**

Engineered by Symetrix