

AD-16x Audio Matrix Switch



Ideal for large, multi-zone audio installations, the AD-16x provides routing for 16 audio sources to 16 zones. For added convenience, the AD-16x also features eight remote source inputs, which allows devices located in other rooms to be used as a global source. If the system grows past 16 zones, up to four AD-16x units can be cascaded for up to 64 output zones. The switch also delivers complete audio management, including parametric equalizing, zone grouping, and balance control - all configurable via a convenient web interface. For amplification, use the RTI CP-16i Cool Power® amplifier to drive crystal-clear audio to every speaker.

Setting the AD-16x apart is the engineering that enables this matrix to become an extension of the RTI ecosystem. At the heart of this powerful integration is the AD64 two-way driver running on an RTI XP processor, providing integrators with unmatched flexibility and programming efficiency.

Accessories



PDM-1
Phone/Doorbell Module



RSP-1
Remote Source Wall Plate



RSO-1
Digital to Analog Audio Converter



CP-16i
16 Channel 100W Cool Power® Audio Amplifier

Key Features

- Provides routing of 16 stereo audio sources to 16 zones.
- Eight remote source inputs allow devices located in other rooms to be used as a global source using the RSP-1 accessory.
- RSO-1 digital to analog converter (sold separately) provides audio input for digital audio sources.
- Up to four AD-16x units may be source-looped, for up to 64 output zones.*
- Custom project labeling allows integrators to name all of the zones and sources for more efficient programming (via AD64 driver).
- Dynamic audio source management tracks the sources that are active, allowing users to select a different one and avoid inadvertent music changes (via AD64 driver).
- Preamp outputs require external amplification via RTI or third-party audio amplifier.
- Eight bands of parametric audio equalizing in all zones.
- Built-in web interface allows zones to be configured and grouped, allowing multiple outputs to be controlled as a single zone.
- Audio input trim adjustment on each source.

Included in the Box

AD-16x, power cord, rack ears (2) with screws, feet with screws (4)

Specifications

AC Input Voltage 100VAC ~ 240VAC, 50~60Hz
 Switching Power Supply, 20W

Power switch Front Panel On/Off control
 with LED power indicator

Mounting Rack mount or free standing

Dimensions 16.9" (430mm) x 5.3" (133mm) x 14.5" (369mm)
 (WxHxD)

Weight 14.5lb (6.6kg)

Operating Temperature +32°F to +122°F (0°C to +50°C)

Operating Humidity 5% to 95% Non-Condensing

Heat Output 68 BTU/hr

Output Zones Sixteen zones of stereo L/R, 16 RCA jack pairs
 (switchable between fixed or variable)

Audio Source Inputs (Local) Sixteen, 16 RCA jack pairs

Audio Source Inputs (Remote) Eight, RJ-45 jacks

Loop Outputs Sixteen, 16 RCA jack pairs

Control Input (CTRL IN) One, 3.5mm jack, compatible with
 industry standard IR repeaters and receivers

Control Output (CTRL OUT) One, 3.5mm jack, compatible with
 industry standard IR repeaters and receivers

Remote Source IR Inputs Nine, 3.5mm jacks
 Eight discrete, One universal (All)

Mute Input One, 3.5mm jack
 Phone Input Sensitivity: AC25V-AC100V 20Hz
 Doorbell Sensitivity: AC/DC 3-12VDC

Trigger Output (Status Jack) One, 12VDC, 15mA max

+12VDC Voltage Output One, 12VDC, 500mA max

Serial (RS-232) Port One, Bi-directional DB9

Ethernet Port One, 10/100Base-T, RJ45 Connection

Unit ID Numbers 1-8, Set using 3 switches

Total Harmonic Distortion <0.03%

S/N Rating 92dB (@ mute +1) , 100dB(@ mute)

Frequency Response 20Hz ~ 20KHz +/- 0.5 dB

Input Overload 2.1V

Input Impedance 22K ohms

Channel Separation @1KHz >60dB

Crosstalk Between Sources >90dB

Crosstalk Between Zones 90dB

Treble Control @10KHz 8.5dB +/- 0.5 dB

Bass Control Range @100Hz 8.5dB +/- 0.5 dB

Equalizer Bands (8) 32Hz, 64Hz, 256Hz, 512Hz,
 1024Hz, 2048Hz, 4096Hz, 16380Hz

Warranty Three Years (Parts & Labor)

All Specifications subject to change without notice.

*NOTE: Up to eight AD-16x units may be used to reach 128 output zones using Infrared control. There is a limit of four AD-16x units when the AD64 two-way driver is used, for a maximum of 64 output zones.

Do more with Integration Designer 11

Integration Designer 11 elevates the experience for all RTI systems, from residential to commercial. Its stunning new template - complete with custom slider support, one-click background swapping and more - makes it faster than ever to deliver a beautiful finish to every installation. Drivers are directly accessible from within the software, with notifications to keep you always up to date. The integrated system manager lets you track rooms, room status, and source status to save time on every installation. All this and more in [Integration Designer 11](#).

