

## Adagio® Audio Expander

The Adagio Audio Expander (AAE) is a high-performance audio distribution processor with integrated multi-channel amplifier. Designed to expand a Crestron Adagio home entertainment system with 6 additional room outputs, the AAE is equally well equipped for use as part of any complete Crestron Home® audio distribution solution.

### Multi-Room Audio Routing

Built around a 10 x 6 stereo matrix switcher, the AAE delivers professional-quality audio signal routing to 6 amplified room outputs from any of 10 stereo sources. Multiple AAE units may be combined to handle as many as 24 rooms\*.

### Preamp Controls

Independent software-driven volume, bass, treble, balance, loudness, and mute controls are available on every room output, enabling listeners in each room to tailor the sound to individual taste right from the room touchpanel or keypad. Additional features include input gain compensation to assure consistent levels between input sources, plus programmable scaling factor to define minimum and maximum levels for each room, and mono summing to accommodate monophonic speaker systems. Front panel pushbuttons are included for room selection when using the AAE in an Adagio system.

### Multi-Channel Power Amplifier

The AAE's built-in 12-channel power amplifier delivers a robust 45 watts per channel to support up to 6 separate pairs of speakers. Mute relays on every output ensure silent muting, and provide protection against "thumping" on power-up.

### High-End Performance

An advanced Class G amplifier topology produces the great sound of a classic Class AB design with near-digital efficiency. A massive MOH-core toroidal power transformer directs pure, continuous power to each channel, achieving exceptional dynamic range and low distortion sound quality in every room. Gentle power-up is achieved through a "soft-start" inrush current limiting circuit, and quick-response output protection on each channel prevents failure caused by speaker line faults and overheating.

### Easy, Flexible Setup

Together with any 2-Series control system and choice of keypads and touchpanels, the AAE provides an extensively customizable audio control solution. Programming a complete audio distribution system is a quick and simple task using Crestron **SystemBuilder™** software. For Adagio systems, no programming is required at all, with plug-and-play support for a single AAE, or simplified setup for up to 3 AAE's using Crestron Adagio Composer software.

### Built-in Cresnet Distribution

Six powered Cresnet ports are built into the AAE, providing for the termination of keypads and other Crestron devices without necessitating an external distribution block or power supply.

- > 6 room audio distribution | 10 stereo line inputs
- > Integrated 45 watts x 12 channel power amplifier
- > Expands Adagio systems to support up to 24 rooms
- > Works with any Crestron 2-Series control system



> Built-in Cresnet distribution and power supply

## SPECIFICATIONS

### Audio

Typical of 6 Room Outputs:

Controls: Volume, Balance, Bass, Treble, Loudness, Mute, Mono, Input Compensation

**Volume Gain Range:** -80dB to +20dB, 1 dB steps

**Mute:** -100dB (electronic), -120dB (relay)

**Input Compensation:** ±10dB

**Bass Gain Range:** ±12dB @ 100Hz, 2 dB steps

**Treble Gain Range:** ±12dB @ 10kHz, 2 dB steps

**Frequency Response:** 20Hz to 20kHz ±0.75dB

**S/N Ratio:** 100dB, 20Hz to 20kHz A-weighted

**THD+N:** 0.05%, 20Hz to 20kHz

**Stereo Separation:** >75dB

### Connectors

**SOURCES 1 - 10:** (40) RCA female providing (10) unbalanced stereo line-level audio inputs, and (10) parallel loop-thrus;

Maximum Input: 3.2 Vrms (flat);

Input Impedance: 47k ohms;

Connect to audio loop-thru from **AADS** or **AES**, or other source devices, with loop-thru to additional AAE units

**ROOMS 1 - 6:** (12) 2-pin 7.62mm detachable terminal blocks, power amplifier outputs;

Wire Size: 12 AWG maximum;

Output Power (per Channel): 45 Watts at 8 ohms, 60 Watts at 4 ohms

**NET 1 - 6:** (6) 4-pin 3.5mm detachable terminal blocks;

Cresnet distribution ports, provide data and power for keypads and other Cresnet devices

**LOOP THRU:** (2) 4-pin 3.5mm detachable terminal blocks;

Cresnet loop-thru ports; Y, Z, and G paralleled with NET ports 1 through 6; Connect to **AADS**, **AES**, or other 2-Series control system, and additional AAE units

**FUSE:** Main fuse, T8AH;

(1/4" x 1-1/4", 250V, 8A, time-lag, high-rupture rated)

**120V~50-60Hz:** (1) IEC Male; mates with removable power cord (included)

# AAE Adagio® Audio Expander

G: 6-32 screw, chassis ground lug

## **Controls and LED Indicators**

---

**ROOM:** (6) Pushbuttons with green LEDs and backlit labeling strip, select room(s) to adjust

**SETUP (rear):** (1) Miniature pushbutton and red LED for touch-settable ID (TSID)

## **Power Requirements**

---

**Main Power Consumption:** 7 Amps @ 120 Volts AC, 50-60Hz

**Available Cresnet Power:** 50 Watts (2.08 Amps @ 24 Volts DC)

## **Environmental**

---

**Temperature:** 41° to 104°F (5° to 40°C)

**Humidity:** 10% to 90% RH (non-condensing)

**Heat Dissipation :** 700 BTU/hr @ 8 ohms, 800 BTU/hr @ 4 ohms; all channels loaded to 1/8 full power

## **Enclosure**

---

Black metal with molded ABS/PC front panel;

Freestanding, side ventilation should not be restricted

## **Dimensions**

---

**Height:** 5.64 in (14.33 cm)

**Width:** 17.16 in (43.59 cm)

**Depth:** 18.08 in (45.92 cm)

## **Weight**

---

36.6 lbs (16.2 kg)

## **INTERNATIONAL VERSION (230 VAC)**

---

AAEI

All the features and specifications of the AAE except:

## **Connectors (partial)**

---

**FUSE:** Main fuse; T4AH;

(5mm x 20mm, 250V, 4A, time-lag, high-rupture rated)

**230V~3.5A:** (1) IEC Male; mates with removable power cord (included)

## **Power Requirements**

---

**Main Power Consumption :** 3.5 Amps @ 230 Volts AC, 50Hz

**Available Cresnet Power:** 50 Watts (2.08 Amps @ 24 Volts DC)

## **AVAILABLE ACCESSORIES**

---

**AAE/AADS FRONT LABEL:** Backlit Engravable Label Strip

*\* Room outputs are expandable by cascading the inputs of multiple AAE units using standard RCA interconnect cables. Crestron recommends cascading no more than four (4) AAE units. Adagio systems may utilize up to three (3) AAE units in addition to the main unit. The actual number of possible units in a system is virtually unlimited, although additional equipment may be necessary to maintain signal integrity. Contact Crestron for assistance.*