Adagio® Entertainment System

> Adagio® integrated multiroom audio system

> Audio distribution for 6 rooms, expandable up to 24

> Choice of keypad, LCD, touch screen, and wireless room controllers[1]

> e-Control® remote access via computer and mobile devices

> Built-in modular multi-tuner allows up to 6 independent radio tuners

> Up to 6 AM/FM radio tuners with RDS/RBDS[3]

> Up to 3 XM® satellite radio tuners[3,4]

> Up to 3 Internet radio tuners[3]

> Plug-and-play media player support using Crestron iServer®, Interface for Apple iPod®, and ADMS[1,5]

> Integrated control of AV source devices

> Flexible setup via front panel or software[2]

> Scalable and programmable for enhanced integration with lighting, climate control, security, and more[2]

The Adagio Entertainment System (AES) from Crestron® delivers a complete, cost-effective solution for high-performance multi-room audio distribution. Right out of the box, the AES provides sophisticated audio signal routing, processing, and amplification for up to 6 rooms, with extensive expansion capabilities and room control options. Its built-in Crestron control system enables enhanced control and integration capability for AV and home automation.

Multi-Room Audio

The AES distributes stereo audio from up to 10 different stereo sources to speakers in up to 6 different rooms, allowing listeners in each room to enjoy their own choice of radio stations, CDs and MP3s. Each room includes its own volume, bass, and treble controls, with the ability to combine a group of rooms easily at the press of the "Party Mode" button. Its integrated multi-channel power amplifier delivers a robust 45 watts per channel to all rooms. Without requiring any programming, the AES can easily be expanded to support another six rooms by adding an AAE Audio Expander[1]. In fact, a total of three AAE's may be added to handle as many as 24 rooms, with simple setup afforded using Crestron Adagio Composer software[2].

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.

Satellite & Internet Radio Multi-Tuner

Up to three ATC-Series tuner cards can be installed in the AES to enable combinations of AM/FM terrestrial radio, XM® satellite radio, and Internet radio tuners. With up to six tuners possible, the AES lets listeners in

different rooms each enjoy their own choice of music, news, sports and talk. Metadata such as the radio station name, song and artist, traffic, weather, and phone numbers can be displayed on the AES's front panel, and on touch screens and controllers throughout the house. Every AES model comes with one tuner card included, and the modular design makes it easy to expand or alter the tuner configuration at any time as needs change or new services become available.[3,4]

Plug-and-Play Media Sources

In addition to radio, the AES provides ten line-level inputs to accommodate external audio sources (Inputs 1-6 are shared with the tuner card slots). Native compatibility with the ADMS Intermedia Delivery System™[1] provides a quick path to enjoying the ultimate in multi-zone audio with your Adagio system. Providing up to three independent audio zone outputs, the ADMS lets you play and store your entire music collection while simultaneously providing access to endless downloadable and streaming Web content. Or, choose the Crestron iServer® (CEN-ISERVER[1]) or Interface for Apple® iPod® (CEN-IDOCV or CEN-IDOCV-DSW[1]) for a very cost-effective, high-quality music player solution that works with Adagio without requiring any special programming.[5]
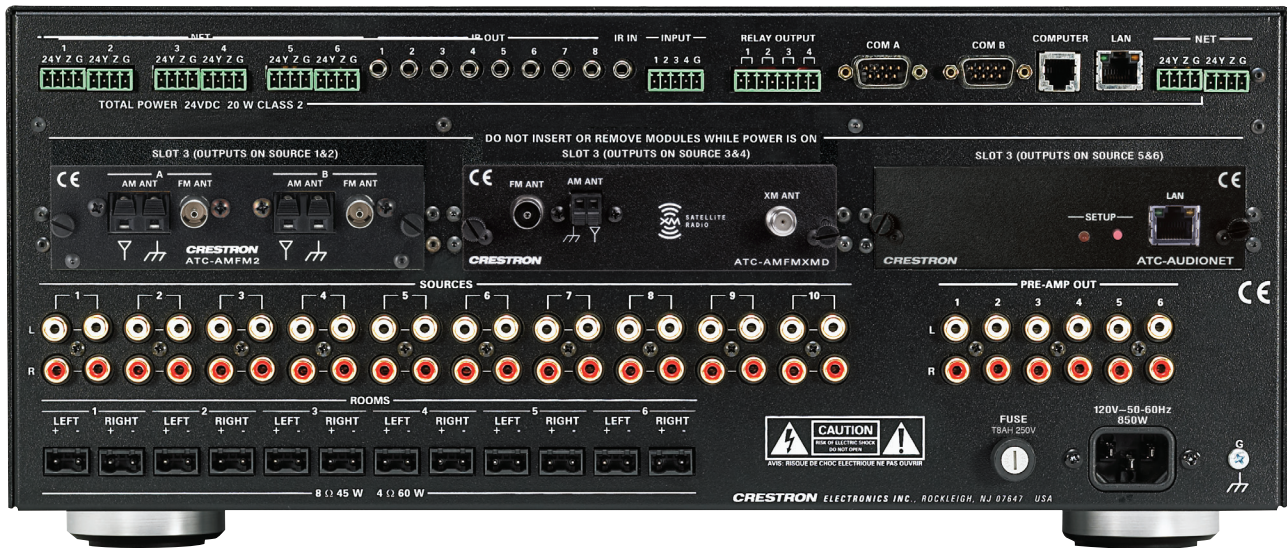
Enhanced Front Panel Control

With its large backlit LCD display, dual rotary controls, and easy-access pushbuttons, the AES's front panel provides a very powerful, yet friendly user interface for setting up and controlling the complete multiroom audio system. Custom naming of rooms, groups, and sources is facilitated on the LCD display as well as above each ROOM and GROUP button. Custom backlit labeling of the buttons is achieved using an assortment of pre-made labels included, or by ordering the AES Backlit Engravable Label Strip (model AES/AMS FRONT LABEL[1]).

Preset Groups

The "Group" feature makes it simple to combine speakers in adjacent rooms, or switch into whole-house party mode, by letting the user link any number of rooms to function as one. Grouping lets you easily route one source to multiple rooms at once without the sync problems common to streaming-based systems. Up to 6 groups can be defined using the front panel PRESET GROUP buttons.

AES – Rear View with ATC-AMFM2, ATC-AMFMXMD, and ATC-AUDIONET Tuner Cards

Versatile Room Controls

Control of the AES in enabled in every room using a choice of basic 12-button keypads (C2N-DBF12[1]) or the advanced APAD Wall Mount LCD Controller[1]. A keypad provides the essential controls for adjusting volume, selecting sources, and toggling up and down through tracks and radio channels. For a more elegant control solution, the APAD extends the many functions of the AES's front panel to each room, displaying audio settings and sources by name, and letting you browse through media playlists and radio guides by channel, artist, album or song title.

A selection of Crestron touch screens and wireless remotes[1] is also available, affording the ultimate in high-end room control. Simplified programming for many Crestron touch screens and handhelds is supported through Adagio Composer software[2], affording a feature-packed touch screen solution for controlling the whole house. You may also opt to use your Apple iPhone®, iPad®, iPod touch® or Android™ device running our Crestron Mobile Pro®[1] control app, offering a very convenient solution for controlling your system over your wireless home network — or remotely over a mobile network[6].

Whole-house Integration

Adagio brings Crestron Total Home Technology™ to residences and businesses of any size and budget. The AES allows for incredible personalization and expansion through custom programming by a Crestron authorized programmer using Adagio Composer or Crestron SystemBuilder™ software. More than just a home audio system, the AES can grow as part of a complete home automation solution supporting Crestron dimmers, shade controllers, and thermostats[1]. Its built-in Ethernet, IR, RS-232, relay, and digital input ports provide for integration with third-party devices such as audio source components and security systems. The onboard e-Control® Web server allows secure remote access and control using Windows® and Mac® computers, and mobile devices like Android and iPhone[6].

SPECIFICATIONS

Operating System

Real-time, preemptive multi-threaded/multitasking kernel; FAT32 file system with long names; SIMPL Windows, SIMPL+®, and SystemBuilder™ programmable

Memory

Flash: 8 MB
SDRAM: 32 MB
NVRAM: 256 KB

Communications

Ethernet: 10/100 Mbps; auto-switching; auto-negotiating; auto-discovery; full/half duplex; TCP/IP; UDP/IP; CIP; SSL; SNMP; built-in Web server and SMTP e-mail client; supports Crestron Mobile™, e-Control® 2 XPanel, Fusion RV™ and RoomView® applications
Cresnet®: Cresnet master mode
USB: Supports computer console via front panel USB 1.1 device port
RS-232: Supports 2-way device control and monitoring up to 115.2k baud with hardware and software handshaking; supports computer console via rear panel COMPUTER port
IR/Serial: Supports 1-way device control via infrared up to 1.2 MHz or serial TTL/RS-232 (0-5 Volts) up to 115.2k baud; supports CNXRMIRD IR Receiver[1]

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 ±0.2dB (preamp);
20Hz to 20kHz ±0.75dB (power amp)

S/N Ratio: >100dB (preamp), 100dB (power amp) 20Hz to 20kHz A-weighted

THD+N: <0.05% (preamp), 0.05% (power amp) 20Hz to 20kHz

Stereo Separation: >80dB (preamp), >75dB (power amp)

Output Power: 45 Watts per channel at 8 Ohms;
60 Watts per channel at 4 Ohms

LCD Display

Green LCD dot matrix, 128 x 64 resolution, adjustable LED backlight

Controls and Indicators

STANDBY: Pushbutton with green LED, places audio in standby

MUTE: Pushbutton with red LED, mutes audio in selected room or group

MODE/MENU: (8) Pushbuttons, select mode or menu item for adjustment: SOURCE, ROOM, HOUSE, MENU, BKLT, SCHED, DISPLAY, MORE (refer to manual)

SOFTKEYS: (4) LCD display-driven pushbuttons, select/activate various functions

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

PRESET GROUP: (6) Pushbuttons with green LEDs and backlit labeling strip, select group(s) to adjust

SELECT: Continuous turn rotary encoder with adjoining "ENTER" pushbutton with green LED, for selecting rooms, sources, and radio stations

VOLUME: Continuous turn rotary encoder, adjusts volume of selected room or group

H: Hardware reset button, recessed, reboots the control system

S: Software reset button, recessed, restarts the SIMPL program

Connectors – Audio

SLOT 1 – 3: (3) Adagio tuner card slots; accept choice of ATC-series tuner cards;
Outputs from the tuner cards parallel to input and loop-thru jacks for SOURCES 1 – 6

SOURCES 1 – 10: (40) RCA female providing (10) unbalanced stereo line-level audio inputs with parallel loop-thrus; connect to outputs of sources, with loop-thru to AAE; Inputs 1 through 6 parallel with outputs from tuner card slots;
Maximum Input: 3.2 Vrms (flat);
Input Impedance: 47k ohms

PRE-AMP OUT 1 – 6: (12) RCA female providing (6) unbalanced line-level audio outputs; selectable for variable or fixed volume, bass, treble, balance, and loudness;
Maximum Output: 2.5 Vrms;
Output Impedance: 100 ohms

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

Connectors – Control

NET 1 – 6: (6) 4-pin 3.5mm detachable terminal blocks;
Cresnet Master ports, provide data and power for keypads and other Cresnet devices

IR OUT 1 – 8: (8) 3.5mm TRS mini-phone jacks, IR/Serial ports;
IR output up to 1.2 MHz; 1-way serial TTL/RS-232 (0-5V) up to 9600 baud

IR IN: (1) 3.5 mm TRS mini-phone jack;
For connection of the CNXRMIRD IR receiver[1];
Allows IR wireless control from Crestron and third-party remotes using RC-5 IR commands, custom programming required

INPUT 1 – 4: (1) 5-pin 3.5mm detachable terminal block;
Comprises (4) digital inputs;
Rated for 0-24 Volts DC, referenced to GND;
Input Impedance: 2.2k ohms pulled up to 5 Volts DC;
Logic Threshold: 2.5 Volts DC nominal

RELAY OUTPUT 1 – 4: (1) 8-pin 3.5mm detachable terminal block;
Comprises (4) normally open, isolated relays;
Rated 1 Amp, 30 Volts AC/DC;
MOV arc suppression across contacts

COM A – B: (2) DB9 male, bidirectional RS-232 ports;
Up to 115.2k baud, hardware and software handshaking support

COMPUTER: (1) 6-pin RJ11 female, bidirectional RS-232 computer console port

LAN: (1) 8-wire RJ45 with 2 LED indicators;
10Base-T/100Base-TX Ethernet port;
Green LED indicates link status, Yellow LED indicates Ethernet activity

NET: (2) 4-pin 3.5mm detachable terminal blocks;
Cresnet Master ports, paralleled with NET ports 1 through 6;
Normally connect to AAE(s)

USB (front): (1) USB Type B female (behind label strip);
USB 1.1 computer console port (cable included)

Connectors – Power

FUSE (US/North America): Main fuse, T8AH;
(1/4" x 1-1/4", 250V, 8A, time-lag, high-rupture rated)

FUSE (International): Main fuse, T4AH;
(5mm x 20mm, 250V, 4A, time-lag, high-rupture rated)

120V~50-60Hz (US/North America): (1) IEC C14 male chassis plug;
Mates with removable power cord (included)

230V~50-60Hz (International): (1) IEC C14 male chassis plug;
Mates with removable power cord (included)

G: 6-32 screw, chassis ground lug

Power Requirements

Main Power (US/North America): 850 Watts (7 Amps) @ 120 Volts AC, 50-60Hz

Main Power (International): 850 Watts (3.5 Amps) @ 230 Volts AC, 50-60Hz

Available Cresnet Power: 20 Watts (0.83 Amps @ 24 Volts DC)

Environmental

Temperature: 41° to 104°F (5° to 40°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 650 BTU/hr @ 8 ohms, 750 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: 7.39 in (188 mm)
Width: 17.16 in (436 mm)
Depth: 18.60 in (473 mm)

Weight

43.0 lb (19.5 kg)

MODELS & ACCESSORIES

Available Models

AES: Adagio® Entertainment System, includes (1) Dual AM/FM Tuner Card
AES-AMFMXMD: Adagio® Entertainment System, includes (1) AM/FM & XM® Satellite Radio Tuner Card
AES-AUDIONET: Adagio® Entertainment System, includes (1) Internet Radio Tuner Card
AESI: Adagio® Entertainment System - International Version, 230V, includes (1) Dual AM/FM Tuner Card Just Released
AESI-AUDIONET: Adagio® Entertainment System - International Version, includes (1) Internet Radio Tuner Card

Included Accessories

ATC-AMFM2: Dual AM/FM Radio Tuner Card (Qty. 1 included with AES and AESI)
ATC-AMFMXMD: AM/FM and XM® Satellite Radio Tuner Card (Qty. 1 included with AES-AMFMXMD)
ATC-AUDIONET: Internet Radio Tuner Card (Qty. 1 included with AES-AUDIONET and AESI-AUDIONET)

Available Accessories

AES/AMS_FRONT_LABEL: Backlit Engravable Label Strip
ATC-AMFM2: Dual AM/FM Radio Tuner Card
ATC-AMFMXMD: AM/FM and XM® Satellite Radio Tuner Card

ATC-AUDIONET: Internet Radio Tuner Card
AAE: Adagio® Audio Expander
AAEI: Adagio® Audio Expander - International Version, 230V
APAD: Wall Mount LCD Controller
C2N-DBF12: Decorator Function Keypad
TPMC-4SM: Isys™ 4.3" Touch Screen
TPMC-4SMD: Isys™ 4.3" Designer Touch Screen
TPS-4L: Isys® 3.6" Wall Mount Touch Screen
TPS-6L: Isys 5.7" Wall Mount Touch Screen
CRESTRON-MOBILE-PRO: Crestron Mobile Pro® Control App
ML-600: MiniLCD 1-Way RF or IR Wireless Handheld Remote
MTX-3: Isys™ 2.8" Handheld Wireless Touch Screen w/infiNET EX™
TPMC-3X: Isys™ 2.8" Handheld WiFi Touch Screen
TPS-6X: Isys™ 5.7" Wireless Touch Screen
TPS-6XWALL: Isys® 5.7" Wall Mount Wireless Touch Screen
TPS-6: Isys™ 5.7" Tilt Touch Screen
ADMS: ADMS Intermedia Delivery System™
ADMS-BDP-CX7000ES_PAK: ADMS Intermedia Delivery System™ w/400-Disc Changer & HDMI Switcher
ADMS-BR: ADMS Intermedia Delivery System™ w/Blu-ray Disc® Drive
CEN-BDP-CX7000ES: Sony® 400-Disc Blu-ray/DVD ES MegaChanger
CEN-IDOCV: Interface for Apple iPod®
CEN-IDOCV-DSW: Wall Mount Interface for Apple iPod®
CEN-ISERVER: Crestron iServer™ Network Audio Server
CHV-TSTAT: Heating and Cooling Thermostat
CHV-THSTAT: Heating, Cooling and Relative Humidity Thermostat
CHV-TSTATEX: infiNET EX™ Thermostat
CLS-C6: iLux Integrated Lighting System
CLS-C6RF: iLux Integrated Lighting System w/infiNET™
CLW-DIM: Wall Box Dimmer, 3 Button
CLW-DIM1: Wall Box Dimmer, Single Button
CLW-DIMS: Wall Box Dimmer, Slave-Capable, 3 Button
CLW-DIMS1: Wall Box Dimmer, Slave-Capable, Single Button
CLF-DIMRFB: infiNET™ Lamp Dimmer
CLW-DIM1RF: infiNET Wall Box Dimmer, 1-button
CLW-DIM4RF: infiNET Wall Box Dimmer, 4-button
CLW-DIMS1RF: infiNET Wall Box Master Dimmer, 1-button
CLW-DIMS4RF: infiNET Wall Box Master Dimmer, 4-button
CLW-SW1RF: infiNET Wall Box Switch, 1-button
CLW-SWS1RF: infiNET Wall Box Master Switch, 1-button
CLW-LDIMEX: Wireless Lamp Dimmer
CLW-LSWEX: Wireless Lamp Switch
CLW-DIMEX-P: Cameo® Wireless In-Wall Dimmer
CLW-DIMEX-E: Cameo® Express Wireless In-Wall Dimmer
CLW-DIMSWEX-P: Cameo® Wireless In-Wall Dimmer/Switch
CLW-DIMSWEX-E: Cameo® Express Wireless In-Wall Dimmer/Switch
CLW-SWEX-P: Cameo® Wireless In-Wall Switch
CLW-SWEX-E: Cameo® Express Wireless In-Wall Switch
STIRP: IR Emitter Probe
CNSP-XX: Custom Serial Interface Cable
C2N-TXM-C50: Antenna Extension Cable for XM® Radio, 50 ft
SRD-ANT-1-PAK: Satellite Radio Antenna System

SRD-ANT-1LD-PAK: Satellite Radio Antenna System, Long-Distance

SRD-ANT-4-PAK: Satellite Radio Antenna System, 4-Way

SRD-ANT-8-PAK: Satellite Radio Antenna System, 8-Way

CNXRMIRD: IR Receiver

CNRFGWA-418: 418MHz 1-Way RF Gateway

CEN-HPRFGW: Extended Range RF Wireless Gateway

CEN-WAP-ABG-1G: Wall Mount 802.11a/b/g Wireless Access Point

CEN-WAP-ABG-CM: Ceiling Mount 802.11a/b/g Wireless Access Point

C2N-MNETGW: infiNET Gateway

CEN-RFGW-EX: infiNET EX™ Wireless Gateway

RMK-5U: 5-Space Rack Mount Shelf

Notes:

1. Item(s) sold separately.
2. Adagio Composer is part of Crestron SystemBuilder™ software. All programming must be performed by a Crestron® authorized programmer.
3. Accepts up to 3 radio tuner cards allowing up to 6 AM/FM radio tuners, up to 3 AM/FM and 3 XM satellite radio tuners, up to 3 Internet radio tuners, or various combinations of AM/FM, satellite, and Internet radio tuners. One tuner card is included (see available models); additional cards sold separately. Out of the box functionality supports two tuner cards; additional programming required for third card.
4. XM Satellite Radio requires subscription. Contact Sirius XM Radio Inc. for details.
5. DHCP Ethernet router required.
6. Control using an Apple mobile device requires the Crestron Mobile Pro® or Mobile Pro G app, available via the Apple iTunes® app store. Remote access requires access to a wireless Ethernet network or a subscription-based mobile data service. Additional fees may apply.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

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Crestron Electronics, Inc. 15 Volvo Drive | Rockleigh, NJ 07647
Tel: 800.237.2041 / 201.767.3400 | Fax: 201.7671903
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