C2N-AMP-6X100

6 Room + 2 Audio System

> Affordable audio distribution for six rooms, expandable for up to 24 rooms

> Additional line-level room outputs enable support for two additional zones (expandable up to eight)

> Integrated 12-channel amplifier delivers 50 W/Ch. @ 8Ω and 75 W/Ch. @ 4Ω

> Each amplified room output is bridgeable for 150 W @ 8Ω (mono)

> Provides support for passive or active powered subwoofers

> Features independent control of volume, bass, treble, and other settings per room/zone

> Includes twelve stereo line inputs with loop-thru for easy expansion

> Includes front panel controls for source selection and volume control

> Front panel is customizable using Crestron® Engraver software or pre-printed labels provided

> Allows for Crestron system integration via Cresnet® or Ethernet

The Crestron® C2N-AMP-6X100 is a versatile and cost-effective multiroom audio system designed for small to moderate sized houses, condominiums, and businesses. Its integrated multichannel power amp provides ample power for up to six rooms, which can be expanded simply using additional C2N-AMP-6X100 units, or by connecting external amplifiers via the two extra line-level room outputs. Twelve stereo line inputs are included to accommodate a rack full of music and AV sources. With many of the same pro features as Crestron's more expensive systems, the C2N-AMP-6X100 lets everyone enjoy their own choice of music, sports, news, or talk in any room as part of a complete Crestron system.

Powerful Stuff

Each room output is capable of 50 Watts/Ch. @ 8Ω or 75 Watts/Ch. @ 4Ω — perfect for driving a house full of Crestron Excite®, Aspire®, Essence®, AIR®, or Saros® speakers.[1] Any room output may be bridged to deliver a robust 150 Watts @ 8Ω in mono to drive an in-wall subwoofer, or to deliver increased power in stereo using two bridged room outputs paired together. Each room has the ability to select any of the twelve input sources, with complete control over the room's volume, bass, treble, balance, loudness, mute, and mono settings.

Subwoofer Support

The C2N-AMP-6X100 supports both passive and active type subwoofers to provide any space with the extra low end you need to give your music maximum impact.

- **Passive Subwoofers** — Any room output can be configured for bridged mono operation to drive a single 8Ω passive subwoofer with 150 Watts of power. Simply pair the bridged room output with any stereo room output to support a complete 2.1 speaker system using a passive in-wall subwoofer, such as the Aspire IWS82, along with a pair of Aspire or other full-range speakers.[1]

- **Active Powered Subwoofers** — Room outputs 5 and 6 are each equipped with a stereo line output, which can be used to feed an active powered subwoofer. Simply connect a pair of full-range speakers to the speaker outputs of either room output 5 or 6, and connect the corresponding line output to the subwoofer's built-in amplifier. For long wire runs, use a Crestron AUD-EXT Audio over CAT5 Extender.[1]

Bonus Zones

In addition to its six amplified room outputs, the C2N-AMP-6X100 also includes two fully-independent line-level room outputs (Room outputs 7 and 8), providing a total of eight individually-controllable zones from a single unit. Each line-level room output includes the same complement of volume, bass, treble, and other adjustments as the amplified room outputs.

- **Extra Room Zones** — Simply connect external power amplifiers to outputs 7 and 8 to add support for up to two more rooms. Choose a high-powered amplifier, such as the Crestron AMP-2210S [1], to deliver extra output to the game room, workout room, indoor pool, outdoor deck, or any other space that demands higher volume levels.

- **Home Theaters** — Share all your whole-house audio sources with your home theater and other surround sound zones. Connect either output to the input of an AV receiver or surround sound processor, such as the Crestron HD-XSPA [1]. Use a Crestron AUD-EXT Audio over CAT5 Extender [1] to run the line-level signal up to 2000 feet (610 meters) to feed any AV receiver located far away from the central equipment cabinet.

- **Headphones** — Create your own personal listening zone by connecting either output to a headphone amplifier or wireless headphone system.

- **Outdoor Landscape Speakers** — Connect a 70 or 100 Volt amplifier, such as the Crestron AMP-2210T [1], to provide transformer-isolated "constant-voltage" outputs to feed a system of distributed speakers around the pool or patio. Use this solution with Crestron AIR landscape speakers or Saros SR surface mount speakers.[1]

- **Commercial Applications** — For restaurants, nightclubs, and retail spaces, a 70 or 100 Volt "constant-voltage" type amplifier can be connected to feed a distributed speaker system in a large dining area,

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C2N-AMP-6X100 — Rear View

corridor, or public space. Crestron Saros offers a complete line of commercial grade speakers for these and other applications.[1]

Mansion Expansion

A single C2N-AMP-6X100 provides a perfect solution for a typical apartment or small business — with room to grow. Expanding the system is easy — simply add up to three additional units to support a total of 24 rooms with built-in amplification, plus up to eight more rooms using the line-level room outputs.

Sources of Inspiration

To complement your multiroom audio system, Crestron offers a selection of source components with advanced features designed to deliver the ultimate in whole-house audio integration. The CEN-NSP-1 Network Stream Player enables seamless integration of your iPhone®, iPod®, or iPad® via AirPlay® or a USB dock, allowing all your music and other audio content to be easily selected and controlled right from the mobile device, or via a Crestron touch screen anywhere in the house. Multizone radio can be added to your system using the low-cost C2N-TAMFMXM AM/FM and XM® Tuner or the versatile CEN-TRACK TunerRack Modular Multi-Tuner, offering your choice of satellite, terrestrial, and Internet radio tuner options.[1]

Control Your Way

Crestron offers the widest selection of low-cost keypads, wireless remotes, and advanced touch screens for controlling your multiroom system. Our TSW-552, TSW-752, and TSW-1052 touch screens each offer a perfect complement to the C2N-AMP-6X100 in a range of sizes, providing a fun and intuitive touch screen controller for accessing all your multimedia sources as well as lighting, climate, and other functions. The TSR-302 handheld remote puts wireless touch screen control in the palm of your hand, moving effortlessly from room to room to control audio and anything else you desire. Crestron also offers the ability to control anything and everything from an iPhone, iPad, or Android™ mobile device.[1]

Contact your Crestron representative to discover all the amazing possibilities available for a complete, fully-integrated multiroom audio distribution and control solution.

SPECIFICATIONS

Audio

Features: 12x8 stereo matrix switcher, 8-channel audio processor, 6-channel stereo power amplifier, input compensation, amp bridging, fault detection and protection
Input Signal Types: Stereo analog line (unbalanced)
Output Signal Types: Stereo speaker level, stereo analog line (unbalanced)

Adjustments – Typical of 12 stereo inputs (ANALOG SOURCES 1 – 12):
   Input Compensation: ±10.0 dB per input

Adjustments – Typical of 8 stereo room outputs (SPEAKER OUTPUTS 1 – 4, SPEAKER/LINE OUTPUTS 5 – 6, ROOM OUTPUTS 7 – 8):
   Volume Control: -80 to +20 dB
   Mute: -100 dB
   Bass Control: ±12 dB @ 100 Hz, 2 dB steps
   Treble Control: ±12 dB @ 20 kHz, 2 dB steps
   Loudness Compensation: On/Off
   Balance Control: Left/Right adjustable
   Mono Summing: Selectable

Performance – Typical of 6 stereo amplified outputs (SPEAKER OUTPUTS 1 – 6):
   Output Power: 50 Watts per channel at 8 Ohms;
                  75 Watts per channel at 4 Ohms;
                  150 Watts mono at 8 Ohms bridged
   Frequency Response: 20 Hz to 20 kHz ±1 dB
   THD+N: 0.25%, 1 kHz, 50W @ 8 Ohms
   S/N Ratio: 100 dB, 20 Hz to 20 kHz, A-weighted
   Stereo Separation: >70 dB

Performance – Typical of 4 stereo unamplified outputs (LINE OUTPUTS 5 – 6, ROOM OUTPUTS 7 – 8):
   Frequency Response: 20 Hz to 20 kHz ±0.5 dB
   THD+N: 0.05%, 20 Hz to 20 kHz
   S/N Ratio: 110 dB, 20 Hz to 20 kHz, A-weighted
   Stereo Separation: >90 dB

Communications

Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP
Cresnet®: Cresnet slave

Connectors

ANALOG SOURCES L/R IN 1 – 12: (24) RCA female comprising (12) unbalanced stereo line-level audio inputs;
Maximum Input Level: 2 Vrms;
Input Impedance: 10k Ohms

ANALOG SOURCES L/R OUT 1 – 12: (24) RCA female comprising (12) unbalanced stereo loop-thru outputs;
Paralleled with inputs, connect to additional C2N-AMP-6X100 units or other audio preamplifier/receiver

SPEAKER OUTPUTS L/R 1 – 6: (6) 4-pin 5 mm detachable terminal blocks;
Power amplifier outputs;
Wire Size: Terminals accept up to 14 AWG

LINE OUTPUTS L/R 5 – 6: (4) RCA female comprising (2) unbalanced stereo line-level audio outputs (same signal as SPEAKER OUTPUTS 5 – 6);
Maximum Output Level: 2 Vrms;
Output Impedance: 100 Ohms

ROOM OUTPUTS L/R 7 – 8: (4) RCA female comprising (2) unbalanced stereo line-level audio outputs;
Maximum Output Level: 2 Vrms;
Output Impedance: 100 Ohms

NET: (2) 4-pin 3.5mm detachable terminal blocks;
Cresnet slave ports, paralleled

LAN: (1) 8-wire RJ45 female;
10Base-T/100Base-TX Ethernet port

120V~50/60Hz MAX 5A (US/North America): (1) IEC 60320 C14 main power inlet; Mates with removable power cord (included)

220-240V~50/60Hz MAX 2.5A (International): (1) IEC 60320 C14 main power inlet; Mates with removable power cord (not included)

G: 6-32 screw, chassis ground lug

COMPUTER (front): (1) USB Type B female;
USB computer console port;
For setup only

Controls & Indicators

SOURCE 1 – 12: (12) Pushbuttons and green LEDs, select input source for routing
ROOM 1 – 8: (8) Pushbuttons and green LEDs, select output zone for routing and volume adjustment
VOL ▲/▼: (2) Pushbuttons, adjusts audio volume for selected output
FAULT: (1) Red LED, indicates a Temperature, DC, or Over Current fault condition

NET: (1) Amber LED, indicates communication with Cresnet system
PWR: (1) Bi-color LED, amber indicates standby or booting up, green indicates amplifier is on
On/Off: (1) Rocker switch, turns unit on and off
SETUP (rear): (1) Recessed miniature pushbutton and (1) red LED, for Cresnet and Ethernet configuration
LAN (rear): (2) LEDs, green indicates Ethernet link status, amber indicates Ethernet activity

Power Requirements

Main Power (US/North America): 5 Amps @ 120 Volts AC, 60 Hz
Main Power (International): 2.5 Amps @ 220-240 Volts AC, 50/60 Hz
Power Consumption: 55 Watts idle, all amplifier channels off;
                              12 Watts with power switch turned off
Cresnet Power Usage: none

Environmental

Temperature: 41° to 104°F (5° to 40°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation:
    650 BTU/hr @ 8 Ohms, all amplifier channels at 1/8th output power;
    400 BTU/hr @ 4 Ohms, all amplifier channels at 1/8th output power;
    85 BTU/hr idle, all amplifier channels off

Enclosure

Chassis: Metal with black finish, vented sides, fan-cooled
Front Panel: Extruded metal with black finish and polycarbonate label overlay
Mounting: Freestanding or 2U 19-inch rack-mountable (adhesive feet and rack ears included)

Dimensions

Height: 3.47 in (89 mm)
Width: 17.28 in (439 mm)
Depth: 13.64 in (347 mm)

Weight

C2N-AMP-6X100: 25.0 lb (11.4 kg)
C2NI-AMP-6X100: 26.4 lb (12.0 kg)

MODELS & ACCESSORIES

Available Models

C2N-AMP-6X100: 6 Room + 2 Audio System
C2NI-AMP-6X100: 6 Room + 2 Audio System – International Version, 230V

Available Accessories

CBL Series: Crestron® Certified Interface Cables
AUD-EXT Series: Audio over CAT5 Extenders
CRESNET-NP: Cresnet® Control Cable, non-plenum
CRESNET-P: Cresnet® Control Cable, plenum
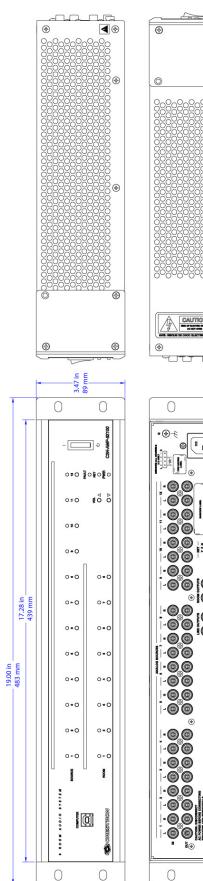
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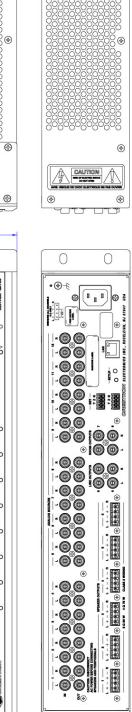
Notes:

1. Item(s) sold separately.

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.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

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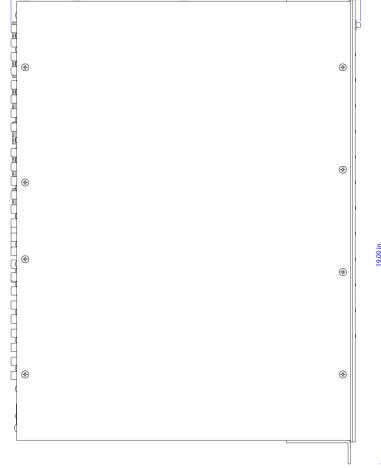
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