

CNAMPX-16X60

16 Channel Multi-Room Amplifier

The CNAMPX-16X60 provides 16 channels of world-class audio amplification for the distribution of speaker-level audio to up to 8 stereo room zones as part of a complete Crestron Home® audio distribution system. Brilliantly designed to complement Crestron's **PAD8** audio distribution processors, the CNAMPX-16X60 delivers a robust 60 watts per channel into 8 ohms, and 90 watts per channel into 4 ohms. Through the use of the optional **CNXBRMO** bridging interface, up to eight of the CNAMPX-16X60's sixteen outputs may be bridged to produce 220 watts per channel into 8 ohms.

Its massive twin toroidal power transformers feature MOH cores for maximum efficiency, with bifilar windings directing pure, continuous power to each of the eight stereo amplifier modules. Each module includes its own power supply fed by a separate set of transformer windings, producing astounding dynamic range and very low distortion in every room, all the time.

The highest grade components mounted to multi-layer FR-4 glass epoxy circuit boards help guaranty a long life of trouble free operation. With more than 300 square inches of heat sink surface area per stereo module, cool, quiet, and reliable operation is ensured. Gentle power-up is achieved through a "soft-start" inrush current limiting circuit. Quick-response opto-coupled output protection on each channel prevents failures caused by speaker line faults or signal spikes, providing exceptional dependability with no compromise to sound quality. In the unlikely case of a failure, Crestron's Detachable Modular Component design allows for rapid repair in the field.

The CNAMPX-16X60 combines true audiophile performance with Crestron intelligence, allowing critical control and diagnostic information to be reported to the control system via the Cresnet control network. From the control system, the main amplifier power, as well as each stereo amp channel, can be individually turned on and off. Faults within any amp module or the connected speaker lines are detected and reported to the control system, and amplifier temperature and output levels can be monitored. This valuable diagnostic information can be used by the control system to display a warning message on a touchpanel, reduce audio levels, or even activate an external cooling fan.

- > *Audiophile-grade 16 channel amplifier*
- > *High-performance Class AB design*
- > *Discrete high-current, bipolar output transistors*
- > *60 Watts per channel @ 8 ohms (full bandwidth)*
- > *Up to 8 outputs bridgeable using optional CNXBRMO*
- > *Twin MOH-core toroidal transformers with bifilar windings*
- > *Separate power supply for each stereo output*
- > *Convection-cooled modular component design*



> Opto-coupled output protection | Inrush current limiting

> *Sophisticated control and fault monitoring via Cresnet*

SPECIFICATIONS

Audio

Typical of 8 Stereo Room Outputs:

Output Power: 20Hz to 20kHz, all outputs driven at rated THD:

- 60 watts per channel at 8 ohms
- 90 watts per channel at 4 ohms
- 220 watts at 8 ohms bridged (channels 1-4 and 13-16 only; requires **CNXBRMO**, sold separately)

Power Bandwidth: 3Hz to 50kHz, +0/-3dB

Frequency Response: 20Hz to 20kHz, +0/-0.1dB at 1 watt, 8 ohms

Total Harmonic Distortion (THD): <0.03% at full power

IHF I.M. Distortion: <0.01%

SMPTE I.M. Distortion: <0.03%

Dynamic Headroom: >2dB

S/N Ratio: >110dB A-weighted

Gain: 28dB

Damping Factor: >400

Channel Separation: >100dB, 20Hz to 20kHz

Connectors

ROOM INPUTS 1 - 8: (16) RCA female comprising (8) unbalanced stereo line-level audio inputs;

Input Impedance: 28k ohms;

Connect to room outputs of **CNX-PAD8A** or **CNX-BIPAD8**

ROOM OUTPUTS 1 - 8: (16) Dual 5-way binding posts comprising (8) stereo speaker-level audio outputs;

Output Power: 60 Watts/Ch. @ 8 ohms, 90 Watts/Ch. @ 4 ohms

G: 6-32 screw, chassis ground lug

NET: (1) 4-pin 5mm detachable terminal block;

Cresnet slave port, connects to Cresnet control network

120V AC 60Hz: (1) IEC male and main fuse holder;

IEC: Mates with removable power cord (included);

Fuse: 3AG, 15 Amps, 250 Volts, fast-acting

CNAMPX-16X60 16 Channel Multi-Room Amplifier

Controls & LED Indicators

POWER (front): (1) Toggle switch with (1) green LED, enables/disables main power if Cresnet power and mains power are connected

PWR (rear): (1) green LED, indicates 24 Volts DC power supplied from Cresnet control network

NET (rear): (1) yellow LED, indicates communication with Cresnet system

OVERRIDE/SETUP (rear): (1) miniature pushbutton and (1) red LED, overrides control system to activate main power and enable all room output channels; Cresnet power and mains power must be connected; also used for touch-settable ID (TSID)

Power Requirements

Main Power: 120 Volts AC $\pm 10\%$, 50-60 Hz, 1800 Watts

Cresnet Power Usage: 12 Watts (0.5 Amps @ 24 Volts DC)

Environmental

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

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

Enclosure

Black metal, 4U 19-inch rack-mountable (rack ears included)

Dimensions

Height:

7.69 in (19.53 cm);

7.0 in (17.78 cm) without feet

Width: 17.18 in (43.64 cm);

19.0 in (48.26 cm) with rack ears

Depth: 17.45 in (44.32 cm)

Weight

90.2 lbs (41.0 kg)

INTERNATIONAL VERSION (230 VAC)

CNAMPXI-16X60

All the features and specifications of the CNAMPX-16X60 except:

Connectors (partial)

ROOM OUTPUTS 1 - 8: (16) Dual binding posts comprising (8) stereo speaker-level audio outputs;

(Banana plugs prohibited);

Output Power: 60 Watts/Ch. @ 8 ohms, 90 Watts/Ch. @ 4 ohms

230V AC 50Hz: (1) IEC male and main fuse holder;

IEC: Mates with removable power cord (included);

Fuses: (2) M205, 8 Amps, 250 Volts, fast-acting

Power Requirements

Main Power: 230 Volts AC $\pm 10\%$, 50-60 Hz, 1800 Watts

Cresnet Power Usage : 12 Watts (0.5 Amps @ 24 Volts DC)

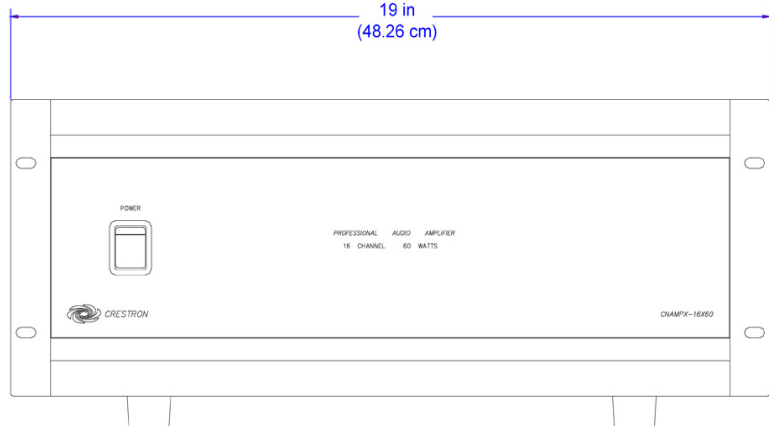
AVAILABLE ACCESSORIES

CNXBRMO: Bridging Module

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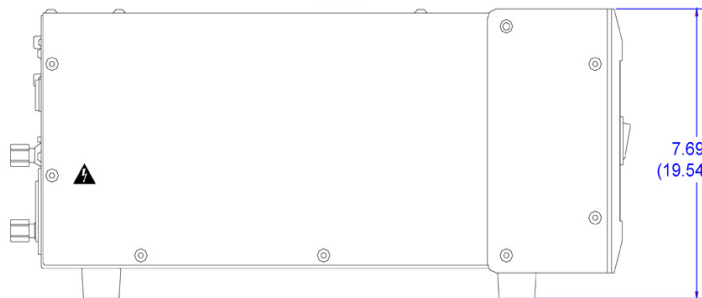
Front

19 in
(48.26 cm)



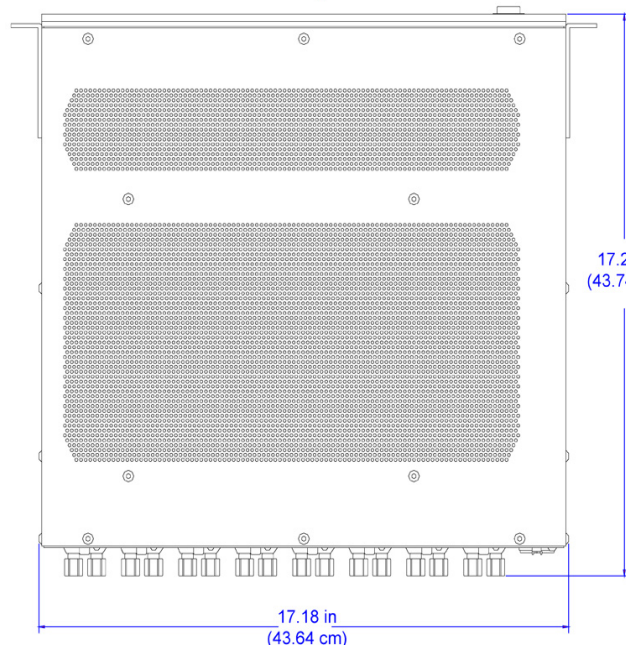
Side

7.69 in
(19.54 cm)



Top

17.22 in
(43.74 cm)



17.18 in
(43.64 cm)

Back

