CEN-NSP-1

Network Stream Player

- *Provides a wireless or wired interface for Apple® iOS® devices using AirPlay® or USB*
- *Enables easy sharing of music from an iPod®, iPhone®, or iPad® through a whole-house audio system*
- *Built-in Internet radio enables listening to online music, news, and talk without a mobile device connected [2]*
- *Delivers touch screen control with metadata and album cover art*
- *Compatible with Apple USB docks and cables*
- *Compatible with Apple iCloud® and iTunes Match® services [3]*
- *Provides S/PDIF and analog stereo audio outputs [6]*
- *Integrates seamlessly with the Sonnex® Multiroom Audio System*
- *Compact, stackable "IFE small" form factor*
- *Surface or DIN rail mountable using bracket provided*
- *Available rack mount and pole mount options [4]*
- *PoE network powered*



iPhone and touch screen not included

The Crestron® CEN-NSP-1 Network Stream Player delivers a very practical solution for integrating Apple® iTunes® and Internet radio into a Sonnex® Multiroom Audio System or any other audio system. Using AirPlay® or USB, it lets you easily connect an iPod®, iPhone®, or iPad® to your system and instantly start playing your favorite tracks and playlists throughout your home or workplace. It also serves as an Internet radio tuner, allowing you to enjoy your choice of music, news, and talk without tying up your mobile device. Control over the CEN-NSP-1 *and* the connected device is enabled through a Crestron touch screen, or through a mobile device running the Crestron App.[1]

Wireless Streaming Using AirPlay®

The CEN-NSP-1 allows any AirPlay enabled iOS® device to connect wirelessly over a Wi-Fi® network and stream audio from iTunes (and other AirPlay enabled apps) to your whole-house audio system. Through a Crestron touch screen, you can pause, skip, advance, and repeat the currently playing track while viewing cover art and metadata (song title, artist, album, etc.). Full navigation of the entire iTunes library remains available on the iOS device. Control over the audio system, as well as lighting and other technologies, can even be accessed on the same iOS device by installing the Crestron App.

USB Wired Interface

Wired USB connectivity affords enhanced Crestron touch screen control with the ability to navigate the iTunes library and view metadata and cover art. Wired USB also enables compatibility with more devices, allowing virtually any iOS device to connect using a USB cable or dock. Any Apple dock and/or cable with a USB 2.0 interface can be used with the CEN-NSP-1.

Internet Radio

Built-in Internet radio provides access to online music, comedy, sports, news, and talk, with capabilities for browsing channel lists and viewing metadata from a Crestron touch screen or mobile app. The CEN-NSP-1 doesn't require a mobile device to be connected to enable Internet radio, keeping those devices available for other tasks, and assuring a listening experience uninterrupted by incoming phone calls and text alerts.

The CEN-NSP-1 currently supports SiriusXM® Internet Radio, Spotify®, and vTuner® Internet Radio. Additional streaming services are coming soon.[2]

Dedicated Music Server

Installed in your central equipment cabinet, the CEN-NSP-1 can serve as your primary music server and Internet radio tuner for the whole house. Just connect a dedicated iPod touch or iPhone and you've got a music server solution that's always ready and never has to stop to take a phone call. Leveraging Apple iCloud® and iTunes Match®, your centralized device will always be in sync with your other devices, so every song you've ever purchased, downloaded, or imported from a CD will be accessible at all times right from your Crestron touch screen. Unlike other music server solutions, there's no need to manually upload or sync anything ever. Just add or remove a song on your personal iPhone or computer, and the change is reflected on all your other devices automatically, including the one connected to the CEN-NSP-1.[3]

Remote Docking

Even if you don't want to commit your iOS device as a fulltime music server, you can still enjoy the enhanced touch screen experience that a wired USB connection affords. Simply dock your iPhone at a countertop, credenza, bedside table, or any other convenient location. The USB dock (not included) can be placed on the counter or tabletop while the CEN-NSP-1 gets mounted out of sight below. Its audio output can be extended up to 2000 feet (610 m) over a single CAT5 wire using a Crestron Audio over CAT5 Extender (AUD-EXT [4]).

CEN-NSP-1 Network Stream Player



CEN-NSP-1 – Front View



CEN-NSP-1 – Rear View

Multi-Zone Capability

The CEN-NSP-1 is ideally designed for use with multi-zone audio systems like Crestron Sonnex or the C2N-AMP-6X100 [4]. Multiple network stream players can be used together to provide a scalable, modular solution with multiple independently-controllable outputs. Each CEN-NSP-1 provides a single stereo output via unbalanced analog and S/PDIF digital connections.[5,6]

Integrator Friendly Enclosure

The CEN-NSP-1 features the Crestron IFE form factor, a compact "Integrator Friendly Enclosure" design that fits almost anywhere and enables a variety of installation options. Its shape allows multiple network stream players and other IFE compliant devices to be stacked together. Using the included mounting bracket, it can be fastened to any flat surface or snapped onto a standard DIN rail. Rack mount and pole mount kits are also available.[4]

Power over Ethernet

The CEN-NSP-1 communicates with a control system over high-speed Ethernet, and gets its operating power over the same Ethernet connection using PoE technology. To power the CEN-NSP-1, Crestron offers the PWE-4803RU PoE Injector [4], which simply connects in line with the Ethernet cable. Crestron also offers Ethernet switches with built-in PoE (models CEN-SW-POE-5 or CEN-SWPOE-16 [4]), affording a complete high-performance networking solution capable of powering multiple PoE powered devices.

SPECIFICATIONS

Audio – Digital

Streaming Formats: AAC, aacPlus, Apple Lossless (ALAC), HE-AAC, LPCM, MP3, WAV, WMA, WMA Lossless, WMA-PRO
Output Resolution/Bitrate: Up to 24-bit 48 kHz

Audio – Analog

D-A Conversion: Up to 24-bit 48 kHz
Frequency Response: 20 Hz to 20 kHz, ±1 dB
S/N Ratio: >110 dB
THD+N: < -100 dB

Communications

Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP, IEEE 802.3af and 802.3at Type 1 compliant
USB: USB 2.0 host for connection of Apple® iOS® devices

Connectors

AUDIO OUT, L/R: (1) pair RCA female;
Unbalanced stereo line-level audio output [6];
Output Impedance: 100 Ohms;
Maximum Output Level: 2 Vrms

AUDIO OUT, S/PDIF: (1) RCA female;
S/PDIF coaxial digital audio output [6];
Output Impedance: 75 Ohms

iPod/iPhone: (1) USB Type A female;
USB 2.0 host port for connection to an Apple iOS device;
Provides power for charging an iPhone® or iPod® device; does not charge iPad® devices

LAN/PoE: (1) 8-pin RJ45 female;
10Base-T/100Base-TX Ethernet port, Power over Ethernet compliant

G: (1) 4-40 screw, chassis ground lug

Controls & Indicators

PWR: (1) Dual-color green/amber LED, indicates operating power supplied via PoE, lights amber while booting and green when operating
NET: (1) Amber LED, indicates Ethernet link status
RESET: (1) Recessed pushbutton for hardware reset
SETUP: (1) Red LED and (1) recessed pushbutton, for Ethernet setup
ACTIVE STREAM: (1) Amber LED, indicates the CEN-NSP-1 is actively streaming audio from an iOS device or Internet Radio
LAN/PoE: (2) LEDs, green indicates Ethernet link status, amber indicates Ethernet activity

Power Requirements

Power over Ethernet: IEEE 802.3at Type 1 (802.3af compatible) Class 0 (12.95 W) PoE Powered Device;
Requires a PoE injector or PoE switch[4]

CEN-NSP-1 Network Stream Player

Environmental

Temperature: 41° to 113° F (5° to 45° C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 17 BTU/hr

Construction

Enclosure: IFE small form factor, black and blue plastic
Mounting: Freestanding, stackable, surface mount, or 35 mm DIN EN 60715 rail mount; occupies 8 DIN module spaces (144 mm); surface/DIN rail mounting bracket included, optional rack mount and pole mount kits sold separately

Dimensions

Height: 1.35 in (35 mm);
1.77 in (45 mm) with bracket
Width: 5.04 in (128 mm);
5.36 in (137 mm) with bracket
Depth: 5.10 in (130 mm)

Weight

11.2 oz (318 g)

MODELS & ACCESSORIES

Available Models

CEN-NSP-1: Network Stream Player

Available Accessories

PWE-4803RU: PoE Injector
CEN-SW-POE-5: 5-Port PoE Switch
CEN-SWPOE-16: 16-Port Managed PoE Switch
CEN-WAP-1500: High Power Dual-Band Wireless Access Point
RMK-IFE-1U: IFE Rack Mount Kit
PLMK-IFE-101: IFE Pole Mount Kit
AUD-EXT Series: Audio over CAT5 Extenders
CBL Series: Crestron® Certified Interface Cables

Notes:

1. A Crestron control system, and professional programming by an authorized Crestron system programmer, are required. Contact your Crestron representative for additional details.
2. Internet radio requires a broadband Internet connection. SiriusXM Internet Radio requires a paid subscription and is available only in the United States and Puerto Rico; refer to SiriusXM.com or contact Sirius XM Radio Inc. for complete terms of use and subscription details.
3. iCloud and iTunes Match are optional services that may be purchased by the end user from Apple for use with iTunes and iOS devices. These services do not run on, or connect to, any Crestron hardware or software. For more information about iCloud and iTunes Match, please visit www.Apple.com.
4. Item(s) sold separately.
5. A single iOS device cannot be paired with more than one CEN-NSP-1 at a time, whether by AirPlay or USB. A multi-zone, multi-source application may require more than one iOS device.
6. The analog and digital output connections contain the same signal and may be used simultaneously.

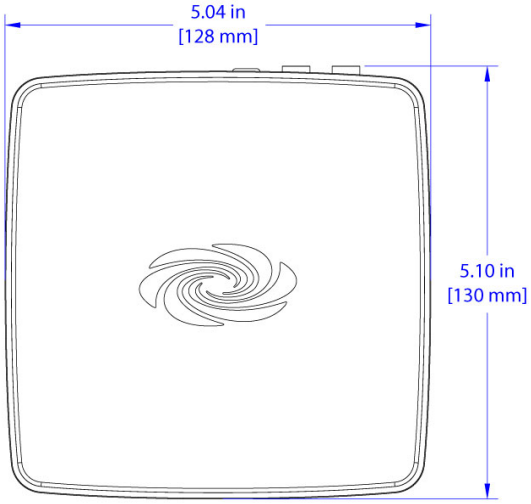
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

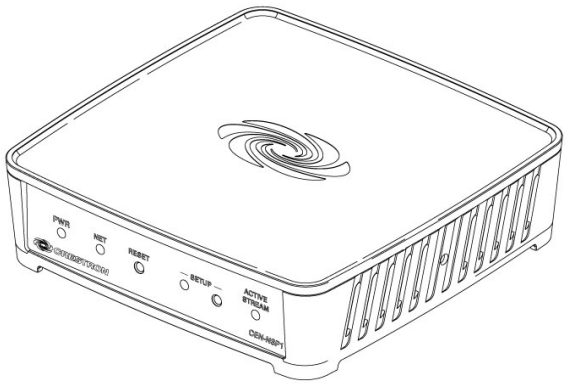
The specific patents that cover Crestron products are listed online at: patents.crestron.com.

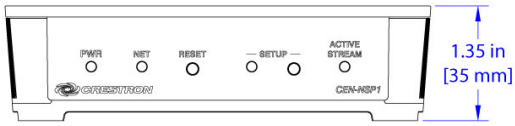
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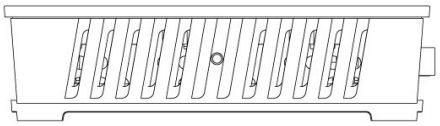
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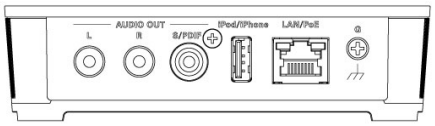
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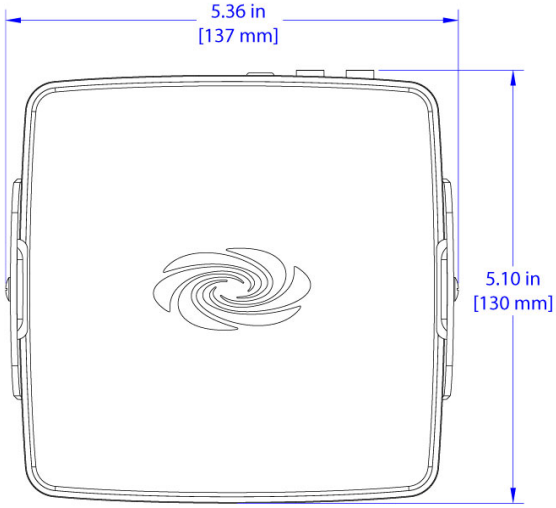


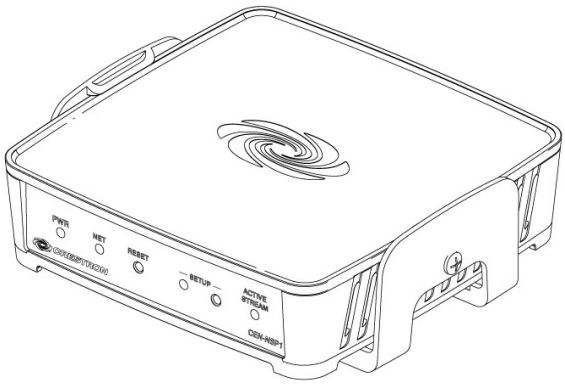


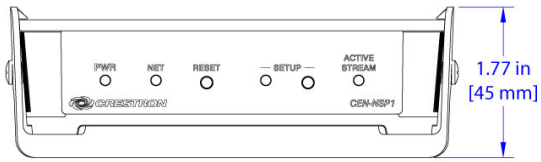


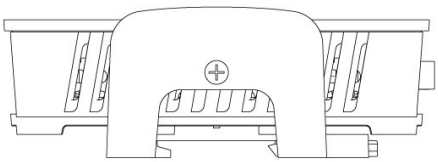


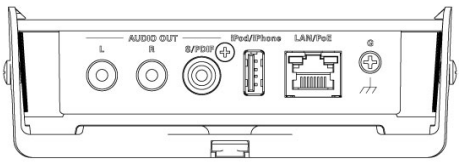
CEN-NSP-1 w/o Bracket











CEN-NSP-1 w/Bracket

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