

NP 20-R



Network Audio Player



NP 20-R is an advanced network audio player, unlike any other.

The most popular digital audio formats such as lossy mp3 and lossless wav can be perfectly managed.

Audio selections are played based on programmed playlists, a playback scheduler and/or network commands. An application for Windows, MAC and Linux operating systems is freely provided for an easy control via PC, laptop or tablets connected on the same wired or wireless network.

Features

Local storage

The NP 20-R houses an advanced internal InOut enterprise hard drive that is capable of providing months of non-repeating audio due to its higher capacity than traditional storage devices.

Program management using playlists

Automatic playback is accomplished by using the playlist function. This feature offers:

- ▶ Playlist creation.
- ▶ Popular software may be used to create M3U playlists to be imported in NP 20-R.
- ▶ Playlist export in M3U format.
- ▶ Playlist can be started by Date/time programmed parameters or Via TCP/IP commands

Options such as playback loop of playlist and cross-fade can be activated.

A powerful scheduler adds the flexibility to provide time and date dependent announcements and jingles.

The NP 20-R keeps a detailed record of all media content and significant system events. This is useful in providing proof-of-play when selling advertisements.

TCP/IP network connectivity and services

The NP 20-R appears as an audio object on networks, adding the possibility to be controlled through Telnet

The network control and interaction of the NP 20-R with other equipment is accomplished with the use of its Linux server based operating system.

The NP 20-R can be connected to a LAN or WAN for TCP/IP control and secure operation.

It embeds standard based interfaces, enabling developers to build a variety of remote management scenarios such as:

- Determine status and send commands using TCP-IP raw.
- Programming of automatically generated events and notifications via e-mail.

Network connectivity is provided by 100/1000BaseT Ethernet.

The NP 20-R is designed for rapid implementation. Both stand-alone and large-scale integration is possible.

consoles. Standard TCP/IP management allows easy and low-cost integration on huge extranet networks for background music applications.

Content providers are able to personalize each BGM location thanks to the management flexibility provided by the NP 20-R.

An integrated Ethernet interface allows local or global connectivity via any TCP/IP network such as the Internet.

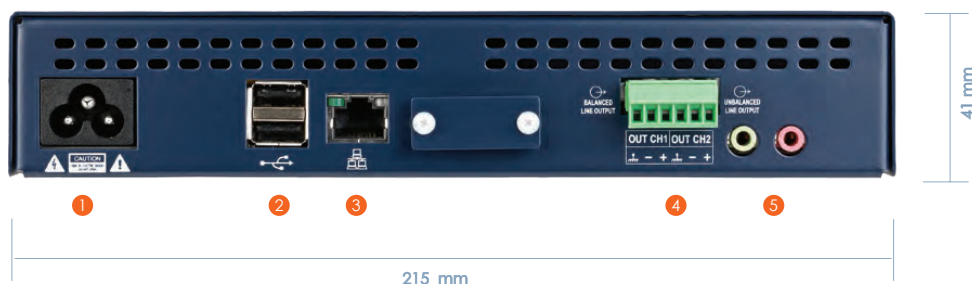
The NP 20-R does not require a dedicated network. It embeds a DHCP client to obtain an IP address and network parameters from a server.

The NP 20-R can import or update its digital audio data files and playlist content from USB storages and SMB network share, via an easy-to-use GUI.

Management options include:

- ▶ Applications for Windows (XP,7 and Vista), MAC and Linux Operating systems.
- ▶ TCP/IP: Using a regular TCP connection one or more NP 20-R can be remotely controlled from an external application.
- ▶ The NP 20-R also offers the ability to send e-mails or TCP/UDP commands over the network.
- ▶ The operating system is embedded in the NP 20-R to enable developers to build automation applications and complex systems.

Rear Panel (Inputs/Outputs)



- 1 Mains
- 2 2 USB Ports
- 3 1 Gbit/s LAN interface
- 4 Balanced Line Output
- 5 Unbalanced Line Output

Audio Interfaces

The NP 20-R comes standard with one line level balanced stereo output on phoenix connectors and unbalanced on 3.5" jack.

Applications

- ▶ Informational and directory systems in transportation facilities and museums.
- ▶ Commercial and jingle insertion for broadcast.
- ▶ Audio for amusement parks and tourist facilities.
- ▶ Announcement and entertainment systems in trains, busses, and other vehicles.

- ▶ Corporate and institutional radio.
- ▶ Background music, jingles, audio advertisement and pre-recorded announcements for commercial sites, public places, sport clubs, industrial structures etc.
- ▶ Standalone or integrated multi-zone fixed installations.
- ▶ Domestic multi-room audio distribution systems.
- ▶ Digital music signage services.
- ▶ Remotely controlled systems.

Technical Characteristics

Power supply: 100 to 240 VAC 50/60 Hz, IEC connector

Consumption: 40 W Max

Dimensions: Half Rack 19", depth 202 mm

Weight: 1.7 kg

Operating conditions

Humidity: 0 to 80%

Temperature: 0°C to 40°C.

Audio file format:

MPEG1 Layer 1/2, MP3 - MPEG1 Layer 3, AAC - MPEG-4 part3, Vorbis, AC3 - A/52 (Dolby Digital), E-AC-3 (Dolby Digital Plus), MLP / TrueHD, DTS, WMA, FLAC, ALAC, Speex, Musepack / MPC, ATRAC 3, Wavpack, Wave (.wav), Mod (.s3m, .it, .mod), TrueAudio (TTA), APE

Playlist format:

M3U

Audio storage

Enterprise grade Serial ATA hard drive

Line level balanced stereo outputs

Output Level: 1Vrms (0 dBv) @ 32ohm

Signal to Noise Ratio: 100 dB

Frequency Response: 20 Hz to 20 kHz (±3dB)

Ports

10/100/1000BaseT (RJ45) Standard IEEE 802.3 Ethernet port

2 USB2.0 ports on back side

2 USB2.0 ports on front side

Network protocols and functions

TCP/IP – for administration, remote control and command transmission to external devices

UDP/IP – command transmission to external devices

DHCP client – for automatic configuration of the network parameters

SMTP – enables NP 20-R to generate email triggered by events

NTP – enables NP 20-R to synchronize to a network time server or become a time server

Linux embedded operating system

Advanced Scheduler

Security

User and Groups management

Accessories

RM 30 : 1U 19" rack space tray

FP 30 : ½U 19" rack filling panel