DENON
PROFESSIONAL
ONE CYCLE

1RU Slot-in Network CD Player
DN-C640

Introduction

In our world of multifunctional electronics, it seems there is no combination of digital functions that hasn't been marketed. The key, of course, is meeting people's needs. So we have a camera on a cellphone, a game console with a media player, etc. The key to defining an object's basic nature is its form factor.

The new DN-C640 from Denon Professional is, at the heart of it, a full-featured, rack-mounted network CD player. But note the word "Professional" in the brand name. With a combination of flexible file formats, network control, and comprehensive inputs and outputs, this machine takes the "CD player" concept to new heights.

Key Features

— 1 RU Rackmount Size
— Supports CD-DA (.cda), WAVE (.wav), MPEG-1/2 Layer III (.mp3), MPEG-1 Layer II (.mpg), Windows Media Audio (.wma)
— Slot in CD/DVD drive
— +/- 12% Pitch Control
— Quick Replay Feature
— End Monitor and User-selectable Finish Mode Features
— Cue to Music (with dedicated button)
— Program Play
— Balanced Audio Output

Reads CD-R/RW, DVD-R/RW, and DVD+R/RW discs
For several years now, newer CD Players expanded the length of continuous playback time without interruption by adding the ability to play back compressed digital audio files off CD data discs. One CD data disc could provide as much as 20 hours when playing back low bit rate MP3 files. The DN-C640 embraces this idea but takes it a step further.

Not only can the DN-C640 playback MP3 and WMA files from CD DATA discs, but it is also capable of decoding broadcast standard MP2 and uncompressed digital PCM (WAV) files from those same discs.

In addition to reading all of those files from CD, it also has the unmatched ability to read any of the above from any DATA DVD. This not only expands the 20 hour playback time to almost 3 days of continuous playback (999 files at 4 Min. each), but also allows those users who demand uncompressed audio quality the ability to playback full 44.1kHz PCM recordings without being limited to the 80 minute CD-R.

Plays Back Digital Audio Existing on Other Network Devices
Not only can the DN-C640 decode a host of compressed and uncompressed digital audio files from CD or DVD data discs, but it now gives the end-user the unique ability to stream any of those files from a server or computer, as long as it is accessible via a network. Now, any corporate environment that records and stores their meetings on a network HDD or computer can simply navigate to that folder location from the front panel of the unit or by using the on-board web browser, select a specific file, and play it into their system. Any application from background music, to meeting recording playback, to small radio stations not utilizing some sort of enterprise software to manage their station will benefit greatly from this unique feature.

Controllability for Every Application
The new Denon Professional DN-C640 comes with a host of control options, suitable for every application and every installation.

25-pin Contact Closure (GPIO)
Denon CD players have been used for years in the broadcast market and the DN-C640 is no exception. A 25-pin GPIO port allows for easy integration and full-featured usability in every broadcast studio or station installation.
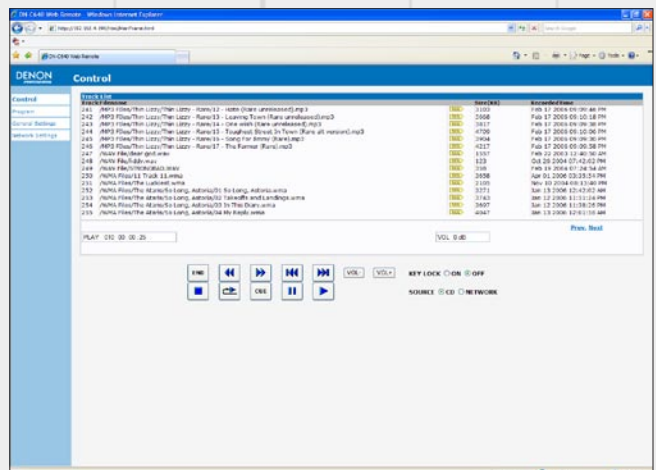
9-pin RS-232C Control
The DN-C640 easily integrates into any new or existing installation using third-party serial control systems like Crestron® or AMX®.

IR Control with included IR Remote Control
Like most CD players, the DN-C640 is controllable by it's included IR commander. Perfect for small installations not using serial control solutions or Health and Fitness centers, the IR control allows every feature from playback to the +/-12% pitch control to be activated/adjusted.

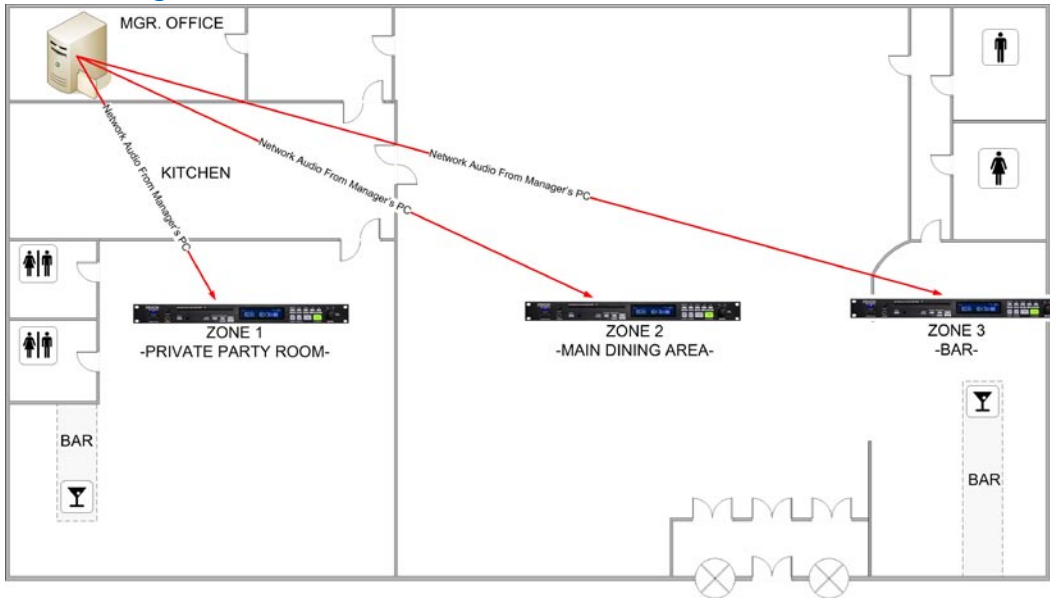*Internal WEB GUI for Control from any Web-enabled Computer*
It is becoming standard in our industry that any network device be controllable via a web-enabled computer. Because the machine has its own web server on-board, any computer on the same network can call up and play audio files, build program playlists, and have full transport control functionality over the DN-C640.

DN-C640

Example Network Diagram

Conclusion

Its combination of features can streamline operations in a vast array of playback situations, from restaurants and bars to schools and broadcasters. The practical uses of the Denon Professional DN-C640, professional-quality network CD player is limited only by your needs – and your imagination.

Audio Section

Audio Channel	2 channel stereo
Frequency Response	10 - 20,000Hz $\pm$ 1.0dB
Dynamic Range	98dB
Signal-to-noise Ratio	104dB (1kHz, 0dB playback, A filter)
Channel Separation	96dB (1kHz, 0dB playback, A filter)
Total Harmonic Distortion	0.004% (1kHz, 0dB playback, A filter)

Analog Output

Unbalanced Output (RCA)	2.0 Vrms at 0dB disc, 10 kohms
Variable Range	4.0 Vrms at 0dB disc, volume max.
Balanced Output (XLR)	+18dBu at 0dB disc, 600 ohms
Variable Range	+24dBu to +0 dBu at 0dB disc

Digital Output

Unbalanced Output (RCA)	0.5 Vp-p, 75 ohms
Balanced Output (XLR)	3.5 Vp-p, 110 ohms
Signal Format (Selectable)	SPDIF (IEC958 type II) - Consumer
	AES/EBU (IEC958 type I) - Professional

Other Specification

Headphone Output (1/4")	20mW, 33 ohms
Variable Pitch Control	$\pm$12% maximum
Frame Search Accuracy	1/75 second (CD-DA or WAV)

Signal System

Sampling Frequency	44.1kHz at Normal Pitch
Sample Rate Converter Settings	Auto, 32 kHz, 44.1 kHz, 48 kHz
Quantization	16-bit Linear

Inputs and Outputs
Audio Outputs

2 Analog Unbalanced Outputs	1 set - RCA L/R Fixed Level
	1 set - RCA L/R Variable Level
1 Analog Balanced Output	1 set - XLR L/R Output with Trim Control
2 Digital Outputs	1 - RCA S/PDIF Format
	1 - XLR AES/EBU Format
1 Headphone Output w/LC	1 - 1/4" Headphone Output (front panel mounted)

Control

Ethernet (LAN)	RJ-45, 10BASE-T/100BASE-TX
Serial Remote	RS232C, D-Sub 9-pin
Parallel Remote	D-Sub 25-pin
IR Control Input	IR Sensor

Power Supply

USA and Canada models	120V AC $\pm$10%, 60Hz
European, U.K. and Asia/Pacific	230V AC $\pm$10%, 50Hz
Power Consumption	25W (USA and Canada Models)
	25W (European, U.K. and Asia/Pacific models)

General

Installation	19-inch, 1U rack space
Maximum Dimensions	482.6 (W) x 44 (H) x 325 (D) mm
	19" (W) x 1.7" (H) x 12.8" (D)
Weight	4.3 kg, 9.5 lbs.
Accessory	IR Remote Included

Environmental Conditions

Operating Temperature	+5°C to +35°C
Operating Humidity	25% to 85%, non-condensing

Media Specifications

Compatible Disc Type	Standard Compact Discs (12 cm)
	CD-DA, CD-R/RW, DVD-R/RW, DVD+R/RW
Compatible Audio Formats	CD-DA (.cda)
	WAVE (.wav)
	MPEG-1/2 Layer III (.mp3)
	MPEG-1 Layer II (.mpg)
	Windows Media Audio (.wma)
Max. Files (LAN or Disc)	999
Max. Directories (LAN or Disc)	254
Compatible Text	CD-Text, ID3 v1/v2

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PLEASE NOTE: Specifications are based on measurement conditions and proper care for the machine, and are subject to change without notice.

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