

CR-N765 Network CD Receiver

SILVER | BLACK



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(B)

Feel it in High Resolution

This is the best high-fidelity CD Receiver we've ever made. Almost all of the premium technology featured in our Reference components has found its way inside the thick metal chassis to bring network Hi-Res PCM and double-rate DSD to your listening space. Everything is premium spec, from discrete three-stage amp circuitry to the top-shelf 768 kHz/32-bit D/A converter with VLSC™ pulse-noise removal. The huge capacitors, heavy-duty transformer, and symmetrical amp layout effortlessly power your choice of bookshelf speakers. We pair discrete headphone amplifier circuitry that will drive 600-ohm cans with DIDRC technology to erase high-frequency clock noise. So this receiver is perfect for your desktop as well. Hi-Res is zero hassle. The CR-N765 will handle anything from gapless 192 kHz/24-bit FLAC to native 5.6 MHz DSD seamlessly—just browse to your albums using our remote app or stream from online services or your phone directly. An iPod/iPhone-certified terminal supports most formats on USB flash drives; there's FM/AM radio and a front-loading CD player. Whatever your source ... get ready to hear it as it should be heard.

CR-N765 Network CD Receiver

- 22 W/Ch (4 Ω, 1 kHz, 0.4% THD, 2 Channels Driven, IEC)
- Plays Audio CD, CD-R, and CD-RW^{*1}
- Play 192 kHz/24-bit Hi-Res PCM Audio, DSD 2.8/5.6 MHz, Lossless, and Compressed Formats via DLNA with Remote App^{*2} Control
- Gapless Playback of FLAC, WAV, and ALAC Audio Formats
- Stream Music Stored on Mobile via Onkyo Remote App^{*2}
- Supports Spotify Connect Streaming Service via Spotify App
- Internet Radio and Music Streaming via Remote App² (Spotify, TuneIn Radio, Deezer, AUPEO!)^{*3}
- Supports Optional Wireless LAN Adapter (UWF-I) and Bluetooth USB Adapter (UBT-I)
- Plays MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, AAC, Apple Lossless, LPCM, DSD 2.8/5.6 MHz via Network and USB

- Premium 768 kHz/32-bit VERITA AK4490 Stereo DAC for Hi-Res Audio Decoding
- VLSC™ (Vector Linear Shaping Circuitry) to Reduce High-Frequency Pulse Noise
- Advanced Music Optimizer to Enhance Compressed Digital Formats
- Discrete Headphone Amplifier with 150 + 150 mW (THD+N 0.4%, 33Ω) Output for 16–600 Ω Headphones
- Headphone Amplifier Features DIDRC (Dynamic Intermodulation Distortion Reduction Circuitry) for Clear, Low-Distortion Sound
- VRAT (Wide Range Amplifier Technology)
- Three-Stage Inverted Darlington Circuitry Amplification with Discrete Output Stage
- Symmetrical Power Amplifier Circuit Design to Minimize Interference
- Short Signal Paths Between Amplifier and Power Supply
- Two Audio-Grade 4,700 μF Capacitors for Instantaneous Power Delivery

- Phase-Matching Bass Boost
- Quality Tone Control Circuits (Bass/Treble)
- Dedicated Transformer for Standby Mode
- Front-Panel USB Port for iPod/iPhone or USB Flash Drives
- 40 Preset FM/AM Stations
- Digital Audio Inputs (Optical and Coaxial)
- 3 Analog Audio Inputs and 1 Output
- Subwoofer Pre-Out
- Transparent, Gold-Plated Speaker Posts
- 1.2 mm Thick Solid Metal Chassis
- Display Dimmer (Normal/Dim/Dimmer)
- 40 Preset FM/AM Stations
- RDS (PS/RT) (European Model Only)
- Full-Size Remote Control

^{*1} Discs should be properly finalized. ^{*2} Compatible with iPod touch (3rd generation or later) and iPhone 3GS or later. (All models require iOS 4.2 or later.) Android Devices Require Android 2.1 or later. ^{*3} Availability of services depends on region. Services advertised are accurate at the time of printing, but may be subject to change without notice.



CR-N765 Network CD Receiver

Stream Hi-Res Audio from PC or Media Server

The CR-N765 is engineered to play 192 kHz/24-bit Hi-Res PCM and native 2.8/5.6 MHz DSD formats via the home network. Download the Hi-Res albums of your choice, store them in a folder on PC or NAS, and use our smartphone app to select and stream via DLNA.

Gapless Hi-Res Playback

Gapless playback is supported on the most popular Hi-Res formats including FLAC, WAV, and ALAC. This prevents a distracting moment of silence when tracks blend into each other, such as between movements in classical music.

Stream Music from Mobile Apps

Onkyo's free control app lets you navigate and stream music stored on your device, and also incorporates a number of internet radio and music streaming services including Spotify and Deezer. Subscribers can also stream direct to the CR-N765 from the Spotify app, which lets you use other mobile applications as you listen without pausing playback.

Internet Radio and Music Streaming Services

You can also explore a massive selection of online radio channels or browse and stream from leading on-demand music services such as Deezer, all within the smartphone app.

High-End Amplification Breathes Life into Music

To realize our aim of reproducing authentic Hi-Fi sound in one compact component, we include Three-Stage Inverted Darlington Circuitry—the same technology used in our range-topping Reference Series Hi-Fi amplifiers. The design uses minimal negative feedback to preserve the energy and vitality of the original performance while unique three-stage topology, discrete output transistors, and a solid metal heat sink cut distortion to negligible levels. The result? Breathtaking sound.

All-New 32-bit D/A Conversion with VLSC™ Technology

Smoothly decoding Hi-Res PCM and Double DSD (as well as other digital sources) is the flagship AK4490 VERITA 768 kHz/32-bit stereo D/A converter. As well as reducing audio degradation, the device boasts outstanding THD+N performance and an impressively wide dynamic range. The DAC works in harmony with Onkyo's VLSC (Vector Linear Shaping Circuitry), a system that reduces high-frequency pulse noise generated by the clocking signal. Together, these D/A conversion technologies produce brilliantly clear and detailed sound from any digital source.

Discrete Headphone Amplifier with DIDRC

The CR-N765 doubles as a dedicated DAC/amp for headphone listening. Discrete Class A/B headphone amp circuitry delivers 150 + 150 mW of power—enough to drive any headphones rated between 16 and 600 Ω. The amplifier also benefits from proprietary DIDRC (Dynamic Intermodulation Distortion Reduction Circuitry) originally developed for our Reference two-channel components. This technology reduces high-frequency pulse noise to enhance clarity. With onboard 32-bit D/A conversion, you can simply move the symphony inside your head any time you want without compromising the power and emotion of your listening experience.

Built for Maximum Fidelity

Housed inside a thick 1.2 mm anti-vibration metal chassis are top-quality audio components. A custom power transformer links to the symmetrical L/R channels via short signal pathways to reduce errors in stereo playback. Two large 4,700 µF capacitors (sourced from our top-of-the-line P-3000R pre-amplifier) keep a deep reserve of power on hand for stellar dynamic performance, and there's also a dedicated transformer for standby mode. Processing and amplification blocks are separated to minimize noise, and your speakers are treated to gold-plated banana-plug-compatible terminals. From top to toe, this receiver is built for high-fidelity sound.

Connect iPod/iPhone and USB Flash Drives

The front-panel USB input enables a direct-digital connection to iPod, iPod touch, and iPhone, meaning the CR-N765 performs digital-to-analog conversion for vastly improved sound quality. The connection also supports playback of compressed, lossless, and Hi-Res file formats (including DSD) stored on USB flash drives.

Optional aptX® Bluetooth Streaming

With the addition of our UBT-I Bluetooth dongle (sold separately) you can stream almost any digital audio source to the CR-N765 via compatible devices. Bluetooth 3.0 and aptX technology enhances the quality of wireless audio by compensating for audio information lost in the compression process. This mini-system also supports the UWF-I Wireless LAN adapter if a wired connection isn't convenient.

Phase-Matching Bass Enhancement

PM Bass optimizes low frequencies while preserving mid-range clarity. It counters phase shifting (which generally occurs in the all-important mid-range zone occupied by vocals) by synchronizing frequency timing. The result is deep, well-defined bass that won't blur vocals or strings.

SPECIFICATIONS

CD RECEIVER SECTION

Amplifier Section	
Power Output	22 W + 22 W (4 Ω, 1 kHz, 0.4%, 2 Channels, Driven, IEC)
THD+N (Total Harmonic Distortion + Noise)	
	0.4% (1 kHz, 1 W)
Damping Factor	
	58 (1 kHz, 8 Ω)
Input Sensitivity and Impedance	
	150 mV/47 kΩ (Line)
Rated RCA Output Level and Impedance	
	150 mV/470 Ω (Line Out)
Frequency Response	10 Hz–100 kHz/+3 dB, -3 dB
Tone Control	±6 dB, 80 Hz (Bass) ±8 dB, 10 kHz (Treble) +8 dB, 30 Hz (PM Bass)
Signal-to-Noise Ratio	100 dB (Line, IHF-A)
Speaker Impedance	4 Ω–16 Ω
Tuner Section	
Tuning Frequency Range	
FM	87.5 MHz–108 MHz
AM	522 kHz–1,611 kHz
General	
Power Supply	AC 220–230 V~, 50/60 Hz
Power Consumption	75 W
Standby Power Consumption	0.2 W
Dimensions (W x H x D)	215 x 119 x 331 mm
Weight	5.0 kg

CARTON

Dimensions (W x H x D)	487 x 232 x 309 mm
Weight	7.0 kg

Supplied Accessories

- Indoor FM Antenna • AM Loop Antenna • Instruction Manual
- Remote Controller • AAA (R03) Batteries x 2



CR-N765 Rear View



CR-N765(S) and Speakers

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