

CS-515

CD RECEIVER SYSTEM

ONKYO
IMAGINATIVE SIGHT & SOUND



WRAT WIDE RANGE AMP TECHNOLOGY **VL** VECTOR LINEAR SHAPING CIRCUITRY **192 kHz/24 bit** **MP3** **A-OMF** MONOCOQUE **RI**

Compact in Size Yet Detailed, Balanced and Spacious in Sound

Building on the success of its immediate predecessor, the CS-515 CD receiver system embodies an approach to sound—detailed, balanced and spacious—that belies its size. The CD receiver itself exudes an air of solidity that is further accentuated by a concave, aluminum front panel. Also, not visible to the eye, the receiver's chassis has been constructed with a flatter underside that has proven to be effective in removing extraneous vibrations. On the inside, audio quality is promoted with the inclusion of a Wolfson® 192 kHz/24-bit DAC. The CS-515's relative power enlivens CD playback and gives your MP3 files an edge they've been missing. Also, combining the CS-515 with Onkyo's iPod Dock brings a whole new dimension to your iPod. It's improvement in increments for the receiver, but a brand new direction for the D-N9BX 2-way, bass reflex speakers that round out this system, which make it a fine investment for the home.

Wide Range Amplifier Technology (WRAT) for a Fuller, More Precise Soundscape

With any compact audio system, finding the right amplifier design will help to generate higher quality sound compared to a system built purely to meet size specifications. Taking the cue from some of Onkyo's renowned amplifiers and receivers, the CS-515 incorporates WRAT to achieve three important goals in the pursuit of higher standards in audio: 1) A wider frequency response; 2) Reduced amplifier distortion at high volume; and 3) Better control of current and electro/mechanical kick-back from speakers. WRAT ensures that you'll get the best audio playback quality possible from regular CDs, MP3s burnt to disc or your iPod.

Exclusive Onkyo Circuitry to Maintain Clean Audio Signals

With Onkyo's Vector Linear Shaping Circuitry (VLSC), digital data from CDs and MP3s is converted between sampling points and then joined with analog vectors in real-time to produce a smooth output wave form. The end result is a noiseless, smooth analog output signal based on the digital source. That's just the kind of purity you'll want to bring the best out of compressed digital audio files. Also, cost-cutting manufacturers will use just one circuit at the output stage. With multiple transistors crammed onto a single circuit, excess heat is generated and the audio signal is compromised. The CS-515 is different. It uses discrete amplifier technology similar to that found on Onkyo's bigger amplifiers and receivers. Keeping the transistors separate at the output stage enhances cooling, so the CS-515's longevity is extended and interference to the audio signal is reduced. Finally, Optimum Gain Volume Circuitry minimizes the possibility of noise when increasing volume.

iPod Playback through Onkyo's Remote Interactive (RI) System Capability

With Onkyo's RI system capabilities, you can add other Onkyo components to the CS-515—like a CD recorder or cassette deck—and operate them through one single remote control. RI capability also gives you the opportunity to integrate virtually any iPod model (including the diminutive iPod nano) with your CD receiver system through Onkyo's Remote Interactive Dock for the iPod. Simply connect the dock to the CS-515, then place your iPod in the dock for a "heftier and more detailed" sound than can be experienced with an RCA stereo cable. To cap it off, RI capability will also give you remote operability over your iPod for hands-off control over your digital music. The CS-515 will also accommodate an upcoming version of the Dock.

Comprehensive Control Over All Your MP3s

With more and more music being bought online, the CS-515 is an ideal solution for bringing greater audio fidelity to MP3s. As MP3s can be organized in a hierarchy with folders containing files and subfolders, you can use two modes, Navigation and All Folder, for selection and playback. In All Folder mode, all folders appear at the same level, making it easy to select each folder. If no file or MP3 is selected, all tracks will be played back in numerical order. With Navigation mode, you can actually move through the folder hierarchy. The display button on the remote also enables you to display information about the MP3 being played (including artist, title and album name).

Matching Speakers Featuring a Raft of Onkyo Speaker Developments

While the CR-515 CD receiver stands out with its easy-to-fit build and striking aluminum front panel, the accompanying D-N9BX 2-way, bass reflex speakers round out an ergonomic balance. But these speakers have not been built for design considerations alone. They provide a range of Onkyo speaker developments designed to match the CR-515 musically. A prime example is A-OMF Monocoque—the latest in a series of diaphragm fibers designed to support the piston motion range of the woofer. Compared to its predecessor, A-OMF Monocoque has a twill (cotton weave) that is 30% stronger giving it greater ability to provide support for the woofer's piston motion range. To deliver high frequency sounds with finesse, the speakers include a ring-drive tweeter that has proven to be effective in negating the effects of low-frequency interference emanating from inside the cabinet. Finally, a duct—called the Aero Acoustic Drive—is included to mitigate interference between high and low frequencies. The speaker base and cabinet are separated to further the effectiveness of the duct.

Maintaining Solid Connections Through to Speaker Output

The quality of speaker binding posts should not be overlooked. Poor binding posts not only degrade the sound, they also break easily. In many cases, mini audio systems are equipped with inferior connections. The D-N9BX speakers feature banana plug-compatible speaker posts and the CR-515 CD receiver has a corresponding connection. These posts enable a firm connection as well as ensure that wires are not exposed.

CS-515

CD RECEIVER SYSTEM

CR-515 [CD Receiver]

Amplifier Features

- 19 watts per channel minimum into 8 Ω , 1 kHz, JEITA; 26 watts per channel minimum into 4 Ω , 1 kHz, JEITA
- Wide Range Amplifier Technology (WRAT)
- High-current, low-impedance drive
- Discrete output stage circuitry
- Optimum Gain Volume Circuitry
- 4 audio inputs (1 front panel) and 2 outputs
- 1 digital input (optical)
- Subwoofer pre out

CD Player Features

- Plays audio CDs and MP3s burnt to CD-Rs and CD-RWs*
- Vector Linear Shaping Circuitry (VLSC)
- Wolfson 192 kHz/24-bit DAC
- 4 play modes (Normal/Memory/Random/1 Folder)
- Navigation/All Folder modes for selecting and playing MP3 files
- MP3 settings for personal preferences
- Memory playback (25-track programming)
- 2 repeat modes (Track/Full)

*Discs that have not been properly finalized may only be partially playable or not playable at all.

Tuner & Other Features

- Tone control (bass/treble)
- Super Bass function
- 4-mode timer (Play or Rec/Once or Every)
- Sleep timer
- Preset function with 40 FM/AM selections
- Preset naming (up to 8 characters)
- Manual and automatic FM/AM tuning
- FM auto preset
- Battery-free memory backup
- Aluminum front panel
- FM indoor antenna supplied
- AM loop antenna supplied
- Headphone jack
- Screw-type banana plug-compatible speaker posts
- Compatible with Remote Interactive Dock for the iPod
- RI (Remote Interactive) remote control

D-N9BX [2-Way, Bass Reflex Loudspeakers]

- 13 cm A-OMF Monocoque diaphragm woofer
- 3 cm ring-drive tweeter
- Aero Acoustic Drive for powerful and natural sound
- V-Line Edge to counteract unwanted diaphragm vibration
- Magnetically shielded
- Banana plug-compatible binding posts
- Impedance: 4 Ω
- Max. input power: 70 W
- Frequency response: 45 Hz-100 kHz

*Speaker cable and cork spacers included.

SPECIFICATIONS

CR-515

AMPLIFIER SECTION

Power Output	19 W + 19 W (8 Ω , 1 kHz, JEITA) 26 W + 26 W (4 Ω , 1 kHz, JEITA)
Dynamic Power	22 W + 22 W (3 Ω) 20 W + 20 W (4 Ω) 14 W + 14 W (8 Ω)
Total Harmonic Distortion	0.9 % (Rated Power)
Damping Factor	25 (Front, 1 kHz, 8 Ω)
Input Sensitivity and Impedance	
Line	150 mV/50 k Ω (Tape)
Output Level and Impedance	
Rec out	150 mV/2.2 Ω
Frequency Response	10 Hz-100 kHz \pm 3 dB (Line)
Tone Control	\pm 6 dB, 80 Hz (BASS) \pm 8 dB, 10 kHz (TREBLE) \pm 7 dB, 80 Hz (SUPER BASS)
Signal-to-Noise Ratio	100 dB (Line, IHF-A)
Speaker Impedance	4 Ω -16 Ω

TUNER SECTION

(FM)	
Tuning Frequency Range	87.5 MHz-108 MHz
Usable Sensitivity	
Stereo/Mono	22.2 dBf, 2 μ V (75 Ω , IHF)/15.2 dBf, 1 μ V (75 Ω , IHF)
Signal-to-Noise Ratio	
Stereo/Mono	67 dB (IHF-A)/73 dB (IHF-A)
Total Harmonic Distortion	
Stereo/Mono	0.5 % (1 kHz)/0.3 % (1 kHz)
Stereo Separation	40 dB at 1 kHz
(AM)	
Tuning Frequency Range	522 kHz-1,611 kHz
Usable Sensitivity	300 dBf (30 μ V)
Signal-to-Noise Ratio	40 dB
Total Harmonic Distortion	0.7 %

CD PLAYER SECTION

Frequency Response	4 Hz-20 kHz
Audio Dynamic Range	96 dB
Total Harmonic Distortion	0.005 % (1 kHz)
Wow and Flutter	Below threshold of measurability
Audio Output/Impedance	1.3 V/1 k Ω

GENERAL

Power Supply	AC 220-230 V, 50/60 Hz
Power Consumption	56 W
Standby Power Consumption	0.25 W
Dimensions (W x H x D)	205 x 116 x 353 mm
Weight	4.3 kg

D-N9BX

Speaker Type	2-Way, Bass Reflex
Drivers	
Woofer	13 cm A-OMF Monocoque diaphragm
Tweeter	3 cm Ring-Drive
Frequency Response	45 Hz-100 kHz
Crossover Frequency	6 kHz
Output Sound Pressure Level	84 dB/W/m
Max. Input Power	70 W
Nominal Impedance	4 Ω
Dimensions (W x H x D)	167 x 298 x 247 mm
Weight	4.1 kg

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