

CS-220

CD RECEIVER SYSTEM

ONKYO
IMAGINATIVE SIGHT & SOUND



An Elegant Blend of Quality and Style for When Space is at a Premium

Bring mini-system convenience and outstanding Onkyo musicality to your bedroom, den or study, with the CS-220 CD receiver system. The CS-220 sports a range of features you'd normally expect to find only on higher-end models. High-quality Wolfson® DACs for accurate digital-to-analog conversion; discrete output stage circuitry for a clean output signal from the amplifier; and A-OMF cones and Aero Acoustic Drive for enhanced speaker performance. Finished off with a sturdy yet stylish aluminum front panel, the CS-220 presents a winning combination of simplicity and performance.

Wide Range Amplifier Technology (WRAT)

Originally available only on our high-end models, Onkyo's exclusive WRAT offers several breakthroughs in amplifier configuration. Firstly, its low negative feedback design achieves a frequency response out beyond 100 kHz, for stunningly high-resolution playback. Secondly, closed ground-loop circuits reduce circuit noise and keep the ground potential free of distortion. And thirdly, its high instantaneous-current capability enables dramatic, theater-like dynamics and clarity.

Discrete Output Stage Circuitry

Mini-systems made by our cost-cutting competitors typically employ just one circuit at the output stage. With multiple transistors crammed onto this single circuit, excess heat is generated and the audio signal is compromised. The CS-220, though, uses discrete amplifier technology similar to that found on our high-end receivers. Keeping the transistors separate at the output stage enhances cooling, so that the lifetime of the unit is extended and unwanted interference to the audio signal is reduced.

Wolfson® Single-Bit D/A Converter

The CS-220 features a state-of-the-art digital-to-analog converter from Wolfson, a world-leading name in mixed signal semiconductors for multimedia applications. The CS-220's high-performance DAC supports sampling rates up to 192 kHz, and includes a serial interface port, digital interpolation filters and multi-bit sigma delta modulators. Exceeding the stringent Dolby® Class A performance requirements, this DAC reproduces your audio signal with clarity and faithfulness rare in such a compact system.

Aluminum Volume Control & Front Panel

Onkyo's renowned attention to build quality extends even to our most affordable models. While our competitors may skimp and use cheaper plastics, we offer superior materials and craftsmanship. Take, for example, the CS-220's aluminum volume control, with its reassuringly solid feel. Or the matching aluminum front panel which gives the CS-220 a refined look that will last long into the future.

12 cm A-OMF Diaphragm Woofer & Aero Acoustic Drive for Natural-Sounding Bass

Onkyo's redesigned A-OMF speaker diaphragms are stronger, more heat-resistant and provide improved transient response. With their vibration-absorbing pure cotton weave and thin yet rigid flexing diaphragms, A-OMF cones deliver superb mid-range clarity and imaging. Our original Aero Acoustic Drive technology, meanwhile, brings a new refinement to our existing bass-reflex speaker design. Oblong rather than circular, the Aero Acoustic Drive more effectively cut off high-frequency interference that can adversely affect your bass signal. With the CS-220, you'll enjoy smoother, more authentic bass.

CR-505 CD Receiver

Amplifier Features

- 25 W/Ch into 4 ohms (1 kHz, JEITA)
- WRAT (Wide Range Amplifier Technology)
- High-current, low-impedance drive
- Discrete output stage circuitry
- Tone control (Bass/Treble)
- Tone direct
- 3 audio inputs and 2 outputs

CD Player Features

- Plays Audio CDs and MP3 CDs
- Wolfson single-bit D/A converter
- 20-track programming
- 2-play modes (Random/Memory)
- Repeat mode
- Optical digital output

Tuner & Other Features

- 5-mode timer (Timer 1/2/3/4/Sleep)
- 40 FM/AM presets
- Automatic FM scan tuning
- Aluminum volume knob
- Battery-free memory backup
- Headphone jack
- Aluminum front panel
- RI-compatible remote control

D-S7GX 2-Way, Bass Reflex Loudspeakers

- 12 cm A-OMF diaphragm woofer
- 2.5 cm soft-dome tweeter
- Aero Acoustic Drive for powerful and natural sounding bass
- Magnetically shielded
- 4-ohm impedance
- Max input power: 70 W
- Frequency response: 50 Hz-35 kHz

SPECIFICATIONS

CR-505

AMPLIFIER SECTION

Power Output	25 W/Ch (4 Ω, 1 kHz, JEITA)
Dynamic Power	30 W/Ch (4 Ω)
Total Harmonic Distortion	0.2 % (1 kHz)
Damping Factor	25 (Front, 1 kHz, 8 Ω)
Input Sensitivity and Impedance	
Line	200 mV/50 kΩ
Output Level and Impedance	
Rec out	200 mV/2.2 kΩ
Frequency Response	10 Hz-50 kHz/± 3 dB (LINE)
Tone Control	
BASS	+ 9 dB, - 8.2 dB, 100 Hz
TREBLE	+ 11 dB, - 9 dB, 10 kHz
Signal-to-Noise Ratio	97 dB (LINE, IHF-A)
Speaker Impedance	4 Ω-16 Ω

TUNER SECTION

[FM]

Tuning Frequency Range	87.5 MHz-108.00 MHz
Usable Sensitivity	
FM Stereo/FM Mono	17.2 dBf, 2.0 μV (75 Ω IHF)/37.2 dBf, 20.0 μV (75 Ω IHF)
Signal-to-Noise Ratio	
FM Stereo/FM Mono	55 dB (IHF-A)/66 dB (IHF-A)
Total Harmonic Distortion	
FM Stereo	0.46 %
FM Mono	0.4 %
Frequency Response	30 Hz-15 kHz/± 1.5 dB
Stereo Separation	37 dB at 1 kHz

[AM]

Tuning Frequency Range	522 kHz-1.611 MHz
Usable Sensitivity (AM)	30 μV
Signal-to-Noise Ratio (AM)	50 dB
Total Harmonic Distortion (AM)	1.6 % (1 kHz)

COMPACT DISC SECTION

Frequency Response	20 Hz-20 kHz
Total Harmonic Distortion	0.01 %
Dynamic Range	96 dB
Wow and Flutter	Below threshold of measurability
Audio Output/Impedance	
Analog	1.0 V (rms)

GENERAL

Power Supply	AC 220-230 V, 50/60 Hz
Power Consumption	75 W
Stand-by Power Consumption	1.1 W
Dimensions (W x H x D)	205 x 103 x 356 mm
Weight	5.3 kg

D-S7GX

Speaker Type	2-Way, Bass Reflex
Woofer	12 cm A-OMF Cone
Tweeter	2.5 cm soft-dome
Frequency Response	50 Hz-35 kHz
Crossover Frequency	6.5 kHz
Sensitivity	85 dB/W/m
Max. Power	70 W
Nominal Impedance	4 Ω
Dimensions (W x H x D)	158 x 267 x 244 mm
Weight	3.7 kg

Due to a policy of continuous product improvement, Onkyo reserves the right to change specifications and appearance without notice.

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