

# TX-8222

STEREO RECEIVER

**ONKYO**  
IMAGINATIVE SIGHT & SOUND

WRAT  
WIDE RANGE AMP TECHNOLOGY

RI



Available in Black

## Getting Back to the Basics for the Sake of Audio Quality

While new technologies come and go, the fundamentals of competent receiver design remain constant. It is best to think of it in simple terms: a power supply, an input stage, a driver stage, and an output stage that all combine to amplify signals without any loss in quality. The current that actually drives the loudspeakers comes from a power source via the receiver's power supply. You can never underestimate the importance of the power supply, and all other audio processing functions cannot rule over good solid amplification. This is the direction Onkyo has taken with the TX-8222. Built for those people who value the benefits of time-proven amplification design, the TX-8222 takes core Onkyo technology—and an array of features you'll actually use—to bring you a no-nonsense stereo receiver that will deliver audio and radio signals with agreeable quality.

### Wide Range Amplifier Technology (WRAT)

Onkyo's collection of proprietary technologies ensures you can get the best audio performance possible from the TX-8222.

**Benefit 1: Uncommonly Low Negative-Feedback Design—Get cleaner sounds on program peaks**

NFB (negative feedback) is the most cost-effective way to reduce noise at lower frequencies, but it will severely inhibit an amplifier's ability to respond to large signal gains (e.g. musical finales) and to produce sound at high frequencies. The TX-8222 has a low negative-feedback design with audiophile-grade, close-tolerance components at critical points in the signal path to achieve a frequency response out to 100 kHz for high-resolution formats such as DVD-Audio and Super Audio CD, as well as for regular CDs and other music sources.

**Benefit 2: Closed Ground-Loop Circuits—Enjoy greater maximum volume without distortion**

If an amplifier's ground potential (voltage) fluctuates during playback, you can expect noise. In an open-loop circuit design, where all circuits are connected to the power supply via one loop (like on many amplifiers), the noise multiplies exponentially. The TX-8222's sophisticated closed-circuit design enables each circuit to go and return directly to the power supply, which cancels any individual circuit noise and keeps the ground potential free of distortion.

**Benefit 3: High Instantaneous-Current Capability—Experience audio with greater dynamics**

After an amplifier outputs audio signals, speakers accumulate energy, reflex and send energy back to the amplifier. The amplifier must immediately cancel the speakers' reflex energy and instantaneously send out the next signal. The same high current is also necessary to handle speaker impedance fluctuations, which can force an amplifier to provide four to six times its usual current load. The TX-8222 has an instantaneous current capability that ensures audio output is not affected by limited power.

### High-Current, Low Impedance Drive

To really get noticeable performance, a receiver's ability to increase output power into low impedances is essential. Without a consistent current flow through to your loudspeakers, audio output is restricted. Without the appropriate parts and design to support your amplifier, you will discover distortion on musical peaks, weak bass, loss of dynamics, hardening of timbre and a collapsing soundstage. The TX-8222's discrete output stage and capable power transformer will drive speakers with an impedance of up to 4 ohms—a demanding task. This power will give you access to a wider range of speakers with which to build your audio system.

### Speaker Playback and Remote Control for Another Room

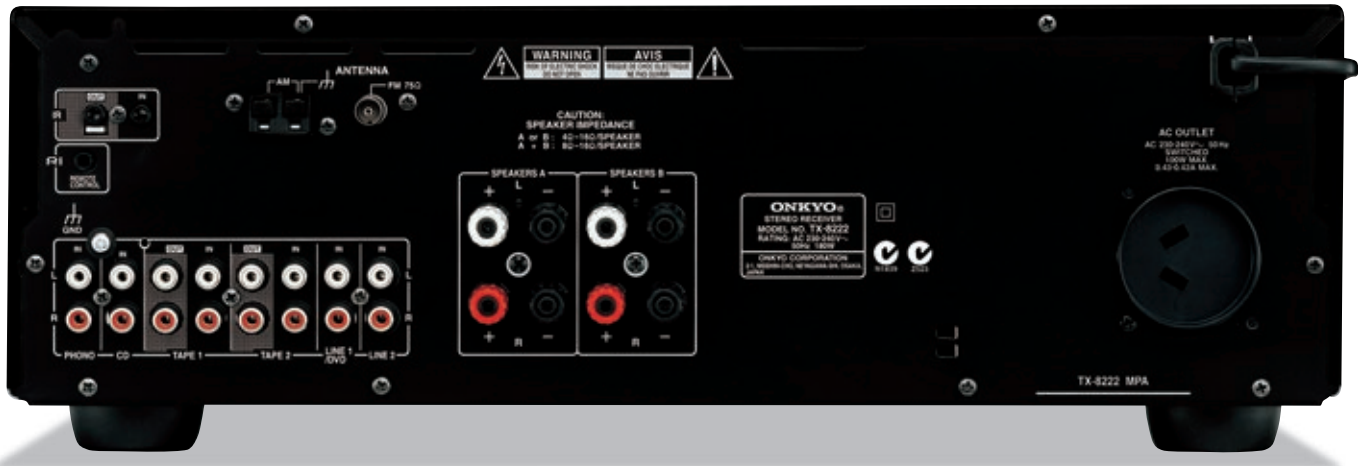
With speaker A/B selectors and speaker terminals, the TX-8222 can be set up for more than one room. Also, with the IR input you can control the receiver when it is concealed inside a cabinet or when the user is in the remote zone (where the second set of speakers is placed). Of course, it is necessary to use a multiroom distribution and control system such as those available from Niles® and Xantech®. Also, you can use the IR output with an IR emitter to remotely control other components.

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

With Onkyo's RI system capabilities, you can connect other Onkyo components to the TX-8222 and operate them through one single remote control. RI capability also gives you the opportunity to integrate the iPod with the TX-8222 through Onkyo's RI Dock for the iPod (DS-A1). The DS-A1 has been noted as offering "a heftier and more detailed sound" than by simply connecting via a cable. Simply connect the dock to the TX-8222, place your iPod in the dock and get a fuller sound from and hands-off control over your digital music. The dock recharges your iPod and is a convenient way of bringing files from iTunes to your stereo system. The TX-8222 will also accommodate any future versions of the RI Dock.

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STEREO RECEIVER



## Amplifier, Processing and Connectivity Features

- 50 watts per channel minimum into 8 ohms, 20 Hz-20 kHz, 0.08 % THD, FTC (2 channels driven); 90 watts per channel minimum into 4 ohms, 1 kHz, JEITA (2 channels driven)
- Wide Range Amplifier Technology (WRAT)
- High-current, low-impedance drive
- Discrete output stage circuitry
- Oversized isolated transformer
- Heavy-duty extruded heat sink for maximum heat dissipation
- A/B speaker selector and outputs to hook-up an additional pair of speakers
- 5 audio inputs and 2 outputs
- Phono input
- IR input and output for second room and other component control
- Independent treble, bass and balance controls
- Cassette tape dubbing capability
- Tape monitor

## FM/AM Tuner Features

- 40 FM/AM random presets with station naming
- Direct access tuning with 10 key buttons

## Other Performance Features

- Motor-driven, precision volume control
- Headphone jack
- Audio mute (via remote)
- 3-Mode display dimmer (dim/dark/normal)
- Sleep timer (via remote)
- Battery-free memory backup
- Non-resonant feet
- Vibration-resistant top panel
- Reinforced chassis side panels
- New slip-free rotary volume knob
- Solid aluminum front panel
- Compatible with RI Dock for the iPod
- Banana-plug compatible speaker posts
- Full-function RI (Remote interactive) remote control



Remote Control

## SPECIFICATIONS

### AMPLIFIER SECTION

<b>Power Output</b> .....	50 W + 50 W (8 Ω, 20 Hz-20 kHz, 0.08 % THD, 2 channels driven, FTC)
	90 W + 90 W (4 Ω, 1 kHz, 2 channels driven, JEITA)
<b>Dynamic Power</b> .....	110 W + 110 W (2 Ω)
	90 W + 90 W (4 Ω)
	55 W + 55 W (8 Ω)
<b>THD (Total Harmonic Distortion)</b> .....	0.08 % (Rated Power)
<b>Damping Factor</b> .....	60 (1 kHz, 8 Ω)
<b>Input Sensitivity and Impedance</b>	
Phono.....	2.5 mV/50 kΩ
Line.....	150 mV/50 kΩ
<b>Output Level and Impedance</b>	
Rec out.....	150 mV/2.2 kΩ
<b>Phono Overload</b> .....	120 mV (MM, 1 kHz, 0.5 %)
<b>Frequency Response</b> .....	10 Hz-100 kHz (+1 dB, -3 dB)
<b>Tone Control</b> .....	± 10 dB, 100 Hz (BASS)
	± 10 dB, 10 kHz (TREBLE)
<b>Signal-to-Noise Ratio</b>	
Phono.....	80 dB (IHF-A)
Line.....	100 dB (IHF-A)
<b>Speaker Impedance</b> .....	4 Ω-16 Ω

### TUNER SECTION

<b>[FM]</b>	
<b>Tuning Frequency Range</b> .....	87.5 MHz-108.0 MHz
<b>Usable Sensitivity</b>	
Stereo.....	22.2 dBf (75 Ω IHF)
Mono.....	15.2 dBf (75 Ω IHF)
<b>Signal-to-Noise Ratio</b>	
Stereo.....	67 dB (IHF-A)
Mono.....	73 dB (IHF-A)
<b>Total Harmonic Distortion</b>	
Stereo.....	0.5 % (1 kHz)
Mono.....	0.3 % (1 kHz)
<b>Frequency Response</b> .....	30 Hz-15 kHz, ± 1 dB
<b>Stereo Separation</b> .....	40 dB at 1 kHz
<b>[AM]</b>	
<b>Tuning Frequency Range</b> .....	522 kHz-1,611 kHz
<b>Usable Sensitivity</b> .....	300 μV/m
<b>Signal-to-Noise Ratio</b> .....	40 dB
<b>Total Harmonic Distortion</b> .....	0.7 %

### GENERAL

<b>Power Supply</b> .....	AC 230-240 V, 50 Hz
<b>Power Consumption</b> .....	180 W
<b>Standby Power Consumption</b> .....	0.3 W
<b>Dimensions (W x H x D)</b> .....	435 x 150 x 332 mm
<b>Weight</b> .....	7.5 kg

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