

TX-RZ3100 11.2-Channel Network A/V Receiver

RZ
 SERIES


For Multidimensional Sound Without Compromise

Our flagship receiver's fathomless pool of high-current power and instantaneous full-scale dynamics make it the ultimate driving force for 7.2.4-channel home-cinema layouts with floorstanding speakers, dual subwoofers, and in-ceiling height speakers. Sound quality is accurate, lush, and exuberant, capable of transporting your audience out of this world and into the one created by the film's director. As well as completely transforming the cinematic and stereo-listening experience, the TX-RZ3100 serves entertainment seamlessly across the home, with wired or wireless* multi-zone digital/analog audio, Zone 2 UltraHD HDMI®, and a suite casting technologies to share app-based audio to the home cinema and beyond. Designed for easy custom home integration, the TX-RZ3100 is crafted with passion for the passionate home cinema enthusiast. * Requires optional FireConnect™-compatible speakers sold separately.

HIGHLIGHTS

- 200 W per Channel
- THX® Select2™ Plus Certification
- Native DTS:X™ and Dolby Atmos® to 7.2.4 Channels
- DTS Neural:X™ Upmixing for Legacy Multichannel Formats
- Google Cast™, AirPlay®, Wi-Fi®, and Bluetooth® App Streaming
- AccuEQ Room Calibration with AccuReflex Technology
- FireConnect™ Multi-Room Wireless Technology
- HDMI® 8 In (1 Front), Main Out, Zone 2 Out (HDCP 2.2/HDR*)

ADVANCED FEATURES

- THX® Select2™ Plus Cinema-Reference Audio Performance
- 7.2.4-channel DTS:X™ and Dolby Atmos® Object-based Audio Decoding
- DTS Neural:X™ Upmixes Standard 5.1 and 7.1 formats to 3D Sound
- HDMI Supports 4K/60 Hz, High Dynamic Range, 4:4:4 Color Space, and HDCP 2.2-protected Video*
- Google Cast®, AirPlay®, Wi-Fi®, Bluetooth®, TuneIn Radio, Pandora®, Spotify, TIDAL®, and Deezer® for App-based Audio Streaming*
- Network/USB Audio (DSD 11.2 MHz [Stereo], 192/24 PCM, Dolby® TrueHD, FLAC, WAV, ALAC, AAC, MP3, VMA)
- Powered Zone 2 and Powered Zone 3 Outputs for Multi-room Analog and Digital (HDMI/Network/OPT/COAX) Audio with Independent Volume/Tone Controls
- Whole House Mode Function
- AccuEQ Calibration with AccuReflex for Seamless Object-based, Multichannel, and Stereo Sound (Setup Mic Included)

- FireConnect™ Wireless Multi-room Digital/Analog Audio Distribution to Compatible Speakers (Sold Separately)
 - 11.2 Multichannel Pre-Outs for User Setup Customization
 - Quality Banana-plug Speaker Posts with Transparent Knobs
 - Remote App for iPhone/iPod touch® and Android™ Devices*
- *1 4G Video/HDCP 2.2 supported on HDMI inputs 1-5, Main Out, and Zone 2 Out. *2 Services enabled via firmware update. Details TBA. *3 Bluetooth specification Version 4.1 (compatible profile: A2DP v1.2, AVRCP v1.3) also supporting Advanced Music Optimizer. *4 Availability of services depends on region. Some services may require a paid subscription and firmware update. Availability of third-party services advertised here is accurate at the time of publication, but may be subject to change without notice. *5 Compatible with iPod touch (5th generation or later) and iPhone 4GS or later. *6 Requires Android 4.0.3 or later.

AMPLIFIER FEATURES

- 200 W/Ch (6 Ω, 1 kHz, 1% THD, 1 Channel Driven, IEC)
- 340 W/Ch (6 Ω, 1 kHz, 10% THD, 1 Channel Driven, JEITA)
- Onkyo High-Current Digital Amplification for Smooth Low-Distortion Power
- Customized High-Output Transformer, Custom Audio-Grade Capacitors, Separate Transformer for Standby
- Separated Digital and Analog Circuitry to Reduce Interference
- Extruded Metal Heat Sink with Polycarbonate Cooling Fan
- Optimum Gain Volume Circuitry
- VLS™ (Vector Linear Shaping Circuitry) Noise-free Signal Processing for All Channels
- PLL (Phase Locked Loop) Jitter-Cleaning Circuitry for S/PDIF Audio

PROCESSING FEATURES

- HDMI Support for 4K/60 Hz, 3D, Audio Return Channel, DeepColor™, x.v.Color™, LipSync, Dolby Atmos®, Dolby® TrueHD, Dolby® Digital Plus, Dolby® Surround, DTS:X™, DTS-HD Master Audio™, DTS 96/24, DTS-ES, DTS Express, DTS Neural:X™, THX® Cinema/Music/Game, DVD-Audio, Super Audio CD, Multichannel PCM, and CEC
- Dolby Atmos®, DTS:X™, Dolby® TrueHD, and DTS-HD Master Audio™ Decoding
- Separate 384 kHz/32-bit AK4490 Stereo DAC (Front L/R), 2 x 768 kHz/32-bit AK4458 Multichannel DACs (Surround Channels)

- Discrete 192 kHz/24-bit AK4388 Stereo DACs (x2) for Zone 2 and Zone 3
- Multiple 32-bit Digital Signal Processing Engines
- 4 DSP Modes for Gaming: Rock, Sports, Action, and RPG
- Theater-Dimensional Virtual Surround Function
- Direct Mode and Pure Audio Mode

CONNECTION FEATURES

- 8 HDMI Inputs (1 Front/7 Rear), Main, and Zone 2 Outputs
- Component Video Switching (2 Inputs and 1 Output) and 2 Composite Video Inputs
- 5 Digital Audio Inputs (3 Optical and 2 Coaxial) and 7 Analog Audio Inputs
- Phono Input (MM) for Turntable Connection
- Mass Storage Class USB Memory Playback Capability (Rear Input)
- Zone 2 and Zone 3 Powered Speaker Outputs
- 11.2 Multichannel Pre-Outs and Zone 2/3 Pre-/Line Outs
- Dual Subwoofer Pre-Outs
- 12V Trigger Out (Assignable) with IR Input; Supports IP and RS232
- 6.3 mm Headphone Input

OTHER FEATURES

- Tone Controls (Bass/Treble) ±10 dB for All Channels
- Independent Crossover Adjustment for Each Channel (40/50/60/70/80/90/100/120/150/180/200 Hz)
- A/V Sync Control (Up to 500 ms in 5 ms Steps at 48 kHz)
- New Graphical Overlaid On-Screen Display (OSD) via HDMI with Quick Setup Function
- Hybrid Standby Function with HDMI Passthrough
- 40 FM/AM and 40 Internet Radio Station Presets
- RiHD (Remote Interactive Over HDMI) for System Control
- Aluminum Front Panel and Volume Control Knob
- Simple Remote Control

TX-RZ3100 11.2-Channel Network A/V Receiver

Ultimate DTS:X™ and Dolby Atmos® Home Cinema

With 11.2 channels of instantaneous power from an uncommonly small body, the TX-RZ3100 enables the current maximum Dolby Atmos® and DTS:X™ home-cinema layout of 7.2.4 channels in a self-contained component for the ultimate in multidimensional object-based surround-sound.



Upmixes Standard Surround Formats

DTS Neural:X™ retrieves spacial cues from standard multichannel formats and upmixes for 3D playback that's virtually identical to a native DTS:X™ source, giving your existing Blu-ray library a new lease on life.

THX®-Certified for Cinema Reference Sound

THX® Select2™ Plus guarantees distortion-free Cinema Reference Volume in your home. Certified products are subjected to the industry's toughest bench-tests to satisfy THX® requirements for audio performance.

Introducing Onkyo High-Current Digital Amplification

The TX-RZ3100 combines high-current driving architecture with sophisticated digital amplification and filtering technology. Noise-reduction hardware including a new custom low-hum transformer delivers fast dynamics, thrilling power, and stunningly precise detail resolution. Painstakingly tuned for velvet-smooth and emotionally evocative audio reproduction, Onkyo High-Current Digital is where power meets control.

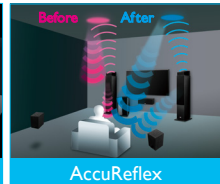


Cohesive Multidimensional Sound

AccuReflex—part of the AccuEQ room calibration suite—phase-matches height and floor-standing speakers for transparent and seamless reproduction of object-based sound. AccuEQ optimizes the entire system to suit your space without affecting front-speaker characteristics for pure stereo listening.



AccuEQ



AccuReflex

Google Cast™, AirPlay®, Wi-Fi®, and Bluetooth®

Most smartphone and PC music apps let you mirror what's playing to your TX-RZ3100 with ease using Google Cast. The receiver also features AirPlay, Bluetooth, and Wi-Fi® for universal wireless audio support, including DSD up to 11.2 MHz.

Spotify®, Pandora®, Deezer, TIDAL, and Tunes

Enjoy the music you want any time on your home cinema via these popular smartphone and PC applications or via Onkyo remote app.

FireConnect™ Wireless Multi-room Solution

Cast anything playing through your receiver—including vinyl and streaming audio—to compatible speakers* around your home using FireConnect™ technology. Manage multi-zone playback with our free smartphone app.

* FireConnect™-compatible speakers are scheduled for release. Please consult www.onkyo.com for details on Onkyo wireless speakers. Onkyo cannot guarantee operability with all FireConnect™-compatible products.



FireConnect™ by Blackfire Research Corp. is a stable wireless protocol that mirrors any audio source connected to the receiver—from vinyl to streaming audio.

Note: Audio sources supported by FireConnect™ are model-dependent.

Housewide Playback of Any Source

Put extra speakers you have to good use—connect them to the receiver's Powered Zone 2 and Powered Zone 3 outputs. Dedicated DACs and smartphone control options let you manage content in any zone, making housewide sound a practical proposition.

Latest Dual-Zone HDMI®

Select HDMI terminals support HDR, 4:4:4 color-space, and HDCP 2.2 for next-generation UltraHD Blu-ray, streaming 4K video, and 4K/60 Hz PC-based gaming. Zone 2 output transmits 4K home cinema sources to a second TV.

SPECIFICATIONS

Amplifier Section

Power Output	
All Channels	200 W/Ch (6 Ω, 1 kHz, 1% THD, 1 Channel Driven, IEC) 340 W/Ch (6 Ω, 1 kHz, 10% THD, 1 Channel Driven, JEITA)
Dynamic Power	320 W (3 Ω, Front) 270 W (4 Ω, Front) 160 W (8 Ω, Front)
THD+N (Total Harmonic Distortion + Noise)	0.04% (1 kHz, 100 V)
Input Sensitivity and Impedance	200 mV/82 kΩ (Line) 3.5 mV/47 kΩ (Phono MM)
Rated RCA Output Level and Impedance	1.0 V/330 Ω (Pre Out) 1.0 V/330 Ω (Subwoofer Pre Out) 200 mV/1.2 kΩ (Zone Pre Out) 2.0 V/1.2 kΩ (Zone Pre Out)
Phono Overload	70 mV (MM, 1 kHz, 0.5%)
Tone Control	±10 dB, 100 Hz (Bass) ±10 dB, 10 kHz (Treble)
Signal-to-Noise Ratio	108 dB (Line, IHF-A) 90 dB (Phono MM, IHF-A)
Speaker Impedance	4 Ω – 16 Ω

Video Section

Input Sensitivity/Output Level and Impedance	
Video	1.0 Vp-p/75 Ω (Component Y) 0.7 Vp-p/75 Ω (Component Pb/Cb, Pr/Cr) 1.0 Vp-p/75 Ω (Composite)
Component Video Frequency Response	5 Hz–100 MHz/±0 dB, -3 dB

Tuner Section

Tuning Frequency Range	
FM	87.5 MHz–108 MHz 87.5 MHz–107.9 MHz (Taiwan Model)
AM	530 kHz–1,710 kHz 522 kHz–1,611 kHz 522 kHz–1,611 kHz (Taiwan Model)
FM/AM Preset Memory	40 Stations

General

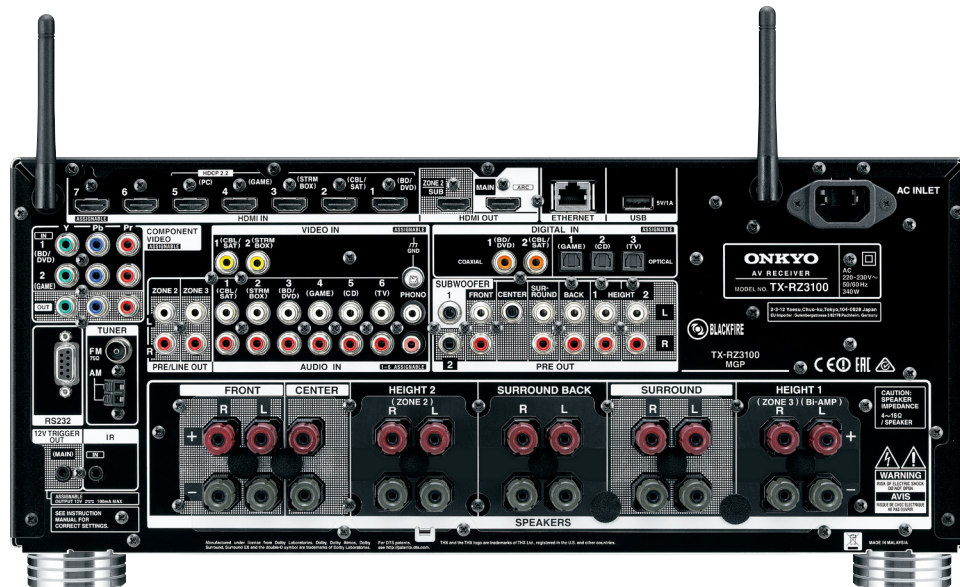
Power Supply	AC 220–230 V~, 50/60 Hz AC 120 V~, 60 Hz (Taiwan Model)
Power Consumption	340 W
Standby Power Consumption	0.15 W
Dimensions (W x H x D)	435 x 201 x 453 mm
Weight	19.7 kg

CARTON

Dimensions (W x H x D)	565 x 325 x 547 mm
Weight	22.5 kg

Supplied Accessories

- Indoor FM antenna • AM loop antenna • Speaker setup microphone
- Instruction manual • Remote controller • AA (R6) batteries x 2*
- * Batteries not included with Chinese model variants



Text on receiver may vary with region.

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