

TX-RZ620 7.2-Channel Network A/V Receiver

RZ
 SERIES


Putting More Heart Into Home Theater

The TX-RZ620 serves smooth and confident multichannel sound with a unique Dynamic Audio Amplification system tuned for wide-spectrum 5 Hz–100 kHz reproduction. Dolby Atmos® and DTS:X™ immerse you in heart-pounding sound as 4K movies burst from your TV screen. HDMI® now supports pass-through of HDR10, HLG (Hybrid Log-Gamma), Dolby Vision™, and BT.2020 for incredible picture realism. You can play music from streaming services including Spotify®, TIDAL, TuneIn, Deezer, and Pandora®, as well as Hi-Res Audio via music server. Network and analog* sources can be mirrored on optional wireless speakers over FireConnect™ powered by Blackfire, and everything needed to set the mood is inside the Onkyo Controller app. With patented VLSC™ filtering and AKM 384 kHz/32-bit DAC, your pair of quality front speakers will unveil the true soul of stereo. Ready to fit your home automation system, this muscular receiver delivers upscale entertainment at an accessible price.

* Transmission of signals input via external analog audio terminals is enabled with a future firmware update.

HIGHLIGHTS

- Supports 5.2.2-Channel Dolby Atmos® and DTS:X™ Playback
- HDMI® 7 In (1 Front^{*1}) / Main Out, and Sub Out^{*2} Supporting 4K/60 Hz, HDR10, Dolby Vision™, HLG, BT.2020, and HDCP 2.2 Pass-through
- Dynamic Audio Amplification with 5 Hz–100 kHz Frequency Response
- 384 kHz/32-bit DAC and VLSC™ Filtering for Superior Clarity
- Ready for Chromecast built-in³ and DTS Play-Fi®³
- 5 GHz/2.4 GHz Wi-Fi®, AirPlay, Spotify, TIDAL, Deezer, Pandora®, TuneIn⁴
- FireConnect™⁵ Wireless Multi-room Audio

ADVANCED FEATURES

- HDMI Terminals Supporting HDR10, Dolby Vision, HLG, BT.2020, 4K/60 Hz Pass-through and HDCP 2.2
- Supports 5.2.2-Channel Dolby Atmos Playback and Dolby Surround Upmixing
- DTS:X Object-based Audio Reproduction and DTS Neural:X™ Upmixing for Legacy Soundtracks
- AccuEQ Room Acoustic Calibration with AccuReflex Phase Alignment for Dolby Atmos-enabled Speakers
- Ready for Onkyo Controller App Integrated Multi-room Intuitive Operation⁶
- Stable Dual-band 5 GHz/2.4 GHz Wi-Fi® Connectivity
- Chromecast built-in Wireless Audio Streaming Platform
- DTS Play-Fi Shares Music from Apps to Receiver and Wireless Speakers
- AirPlay Audio Streaming from iTunes and iPad, iPhone, and iPod touch
- Supports Hi-Res Audio Including DSD 5.6 MHz/2.8 MHz⁷, 192 kHz/24-bit FLAC, WAV, AIFF, and ALAC, and Dolby® TrueHD⁸
- Supports Spotify, TIDAL, TuneIn, Pandora, and Deezer Services
- FireConnect™ Multi-room Distribution of Network and Analog Audio Sources⁹ to Compatible Wireless Speakers

- Powered Zone 2 Speaker Outputs and Zone 2 Pre-/Line Output with Dedicated DAC Supporting Digital¹⁰ and Analog Audio Playback
- Bluetooth® Wireless Technology for Mobiles, Laptops, and PCs (Version 4.1 + LE, Profile: A2DP v1.2, AVRCP v1.3)
- Supports Front L/R Channel Bi-Amping in 5.2-Ch Speaker Layout
- Advanced Music Optimizer Improves Compressed Digital Audio Quality, Including Bluetooth Audio
- 480i De-interlacing (480i to 480p) via HDMI for Legacy Video Formats

AMPLIFIER FEATURES

- 100 W/Ch (8 Ohms, 20 Hz–20 kHz, 0.08% THD, 2 Channels Driven, FTC); 215 W/Ch (6 Ohms, 1 kHz, 10% THD, 1 Channel Driven)
- Dynamic Audio Amplification System with 5 Hz–100 kHz Frequency Response
- High-current Power to Drive Large Speakers with 4-Ohm Resistance
- H.C.P.S. (High Current Power Supply) EI Transformer
- VLSC (Vector Linear Shaping Circuitry) High-frequency Noise-filtering Technology (Front L/R Channels)
- Non-Phase-Shift Amplification Circuitry for Clarity and Detail
- Discrete Output Stage Circuitry for Low Distortion
- Optimum Gain Volume Circuitry

PROCESSING FEATURES

- Dolby Atmos and DTS:X Reproduction (5.2.2 Channels)
- HDMI Support for 4K/60 Hz, HDR10, HLG, Dolby Vision, 3D, Audio Return Channel, DeepColor™, x.v.Color™, LipSync, Dolby Atmos, Dolby TrueHD, DTS:X, DTS-HD Master Audio™, DSD, DVD-Audio, Super Audio CD (SACD), Multichannel PCM, and CEC
- AKM (AK4458) 384 kHz/32-bit Multichannel DAC
- PLL (Phase Locked Loop) Jitter-Cleaning Circuit Technology for S/PDIF Audio
- 32-bit Digital Signal Processing
- DSP Modes for Gaming: Rock, Sports, Action, and RPG
- Theater-Dimensional Virtual Surround Function
- Direct Mode for Audio Reproduction Close to Original Source Quality
- Front L/R Tone Controls (Bass/Treble) and Independent Zone 2 Tone/Balance Controls

CONNECTION FEATURES

- 7 HDMI Inputs (1 Front) and 2 Outputs (1 Main Out, 1 Sub Out)
- Powered USB Port (5 V, 1 A) for Audio Playback
- 2 Composite Video Inputs
- 2 Component Video Inputs
- 3 Digital Audio Inputs (2 Optical and 1 Coaxial)
- 6 Analog Audio Inputs, 1 Stereo 1/4" (3.5 mm) Analog Input (Front)
- Phono Input (MM) and Equalizer for Turntable
- 2 Subwoofer Pre-Outs
- RS-232 Serial Input for External Control Commands
- 1/4" (6.35 mm) Headphone Jack (Front)
- Banana-plug-compatible Speaker Posts with Screw Knobs
- Speaker Setup Mic Input (Front)
- 12 V Trigger Out (Main, 100 mA) for External Component Control Integration
- IR Input for Remote Control

OTHER FEATURES

- 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)
- Graphical User Interface with Overlaid On-Screen Display (OSD) via HDMI
- Quick Setup Guide via GUI and Easy Connection Diagram on Rear Panel
- Large Input Selector Buttons and Front Panel Tone/Balance Controls
- Economical HDMI Pass-through and Network Standby Functions
- 3-Mode Display Dimmer (Normal/Dim/Dimmer)
- 40 FM/AM Random Presets
- Optional Rack-mounting Kit (IRK-155-3D)
- Full-sized Simple Remote Control

^{*1} HDMI Front Input does not support 4K/60p/4:4:4/24-bit video, HDR10, HLG, Dolby Vision, or BT.2020. ^{*2} HDMI Sub Out does not support ARC or CEC. ^{*3} Requires a future firmware update. ^{*4} Availability of services may vary with region. Please confirm before purchase. Subscription may also be required. ^{*5} FireConnect™ is a technology based on Blackfire provided by Blackfire Research Corp., USA. Sampling rates of 44.1 kHz and 48 kHz are supported. ^{*6} For iOS and Android™ devices. Please check App Store or Google Play™ for device and OS requirements. ^{*7} DSD not supported over wireless LAN. ^{*8} Dolby TrueHD playback via USB input only. ^{*9} Sharing audio from external analog inputs depends on the model and is enabled with a future firmware update. ^{*10} Audio via HDMI inputs excluded.

TX-RZ620 7.2-Channel Network A/V Receiver

Introducing the RZ Series

Our premium RZ Series A/V receivers deliver a significant boost to the dynamism, detail, and accuracy of music and movie soundtracks for a listening experience that packs deep emotional impact. The TX-RZ620 features high quality components, such as large custom capacitors, to provide high instantaneous current for fast transients and ultra-wideband frequency response down to 5 Hz. Discrete non-phase-shift amp circuits clearly focus the audio image and cut distortion even at floor-shaking volumes.



Unleash Dolby Atmos® or DTS:X™ Home Theater

Object-based soundtracks allow independently mixed sound to play through any speaker in your system, moving above and around you with breathtaking realism. The TX-RZ620 reproduces 5.2.2-channel Dolby Atmos or DTS:X formats, with AccuReflex correcting the phase of direct and indirect sounds for cohesive audio imaging with Dolby Atmos-enabled speakers.



Upmixing Solutions for Legacy Soundtracks

DTS Neural:X™ identifies spatial effects in multichannel soundtracks and upmixes for convincing 3D playback through your object-audio-ready speaker system. Dolby Surround can also remix legacy sound formats for multidimensional playback in a Dolby Atmos environment.

Music Made Easy with Chromecast built-in*

Stream any music from your smartphone, laptop, or PC to the TX-RZ620 with ease. Control playback with Chromecast-enabled apps you know and love from your iPhone, iPad, Android phone or tablet, Mac or Windows® laptop, or Chromebook™.



Stream Anything with DTS Play-Fi®

DTS Play-Fi is a wireless protocol that works with any audio app on mobiles and PC. Flick whatever's playing to the receiver, even different sources to different components at the same time.



FireConnect™ Wireless Multi-room Audio

FireConnect™ mirrors network audio and external analog sources connected to a master component—from streaming services to vinyl records—on FireConnect™-compatible speakers in other rooms. Music selection, speaker grouping, and playback management across the home are built into Onkyo Controller app for iOS and Android™.



Note: Sharing audio from external inputs depends on the model and is enabled with a future firmware update. Sampling rates of 44.1 kHz and 48 kHz are supported. FireConnect™ is a technology based on Blackfire provided by Blackfire Research Corp., USA.



Onkyo Controller Supports Next Generation Network Audio

Onkyo Controller collects streaming services and network-attached audio into an intuitive smartphone app. Control playback, explore services, and distribute audio all over the home via FireConnect™ from one easy interface.



Wi-Fi®, AirPlay, Spotify®, and Bluetooth®

Selectable 5 GHz/2.4 GHz Wi-Fi® assures stable connectivity so you can enjoy smooth streaming over AirPlay, the Spotify app, and the local network. Bluetooth wireless technology also provides quick streaming from your choice of music application.



Internet Radio and Streaming Services

TIDAL, Deezer, Pandora®, and TuneIn are on board to make selecting from a massive range of music and radio programs using Onkyo Controller very simple.



Supports HDR10, HLG, Dolby Vision™, BT.2020, 4K/60 Hz, and HDCP 2.2

Six rear HDMI® inputs support pass-through of HDR10, HLG (Hybrid Log-Gamma), and Dolby Vision; the BT.2020 4K video standard; 4K/60 Hz video playback; and HDCP 2.2 for premium video content. Further, a front HDMI terminal is ideal for video camera connection, while the rear Sub Out is handy for projectors.



Powered Zone 2 Audio Distribution

With a 5.2-channel layout in the media room, Powered Zone 2 speaker outputs can send amplified network, S/PDIF, and analog audio sources to a pair of stereo speakers in another room. For 5.2.2-channel home theater layouts, a pre-/line output is ideal for transmitting stereo sources available to the receiver to a hi-fi system elsewhere in the home. Multi-room playback is supported within Onkyo Controller app.

* Requires a future firmware update.

SPECIFICATIONS

Amplifier Section

Power Output	
All Channels	100 W/Ch (8 Ohms, 20 Hz–20 kHz, 0.08% THD, 2 Channels Driven, FTC)
	215 W/Ch (6 Ohms, 1 kHz, 10% THD, 1 Channel Driven)
Dynamic Power	240 W (3 Ohms, Front)
	210 W (4 Ohms, Front)
	120 W (8 Ohms, Front)
THD+N (Total Harmonic Distortion + Noise)	0.08% (20 Hz–20 kHz, Half Power)
Input Sensitivity and Impedance	
	200 mV/47 k-Ohms (Line)
	3.5 mV/47 k-Ohms (Phono)
Rated RCA Output Level and Impedance	
	1 V/470 Ohms (Subwoofer Pre Out)
	200 mV/2.3 k-Ohms (Zone Line Out)
Frequency Response	5 Hz–100 kHz/+1 dB, -3 dB (Direct Mode)
Tone Control	±10 dB, 90 Hz (Bass)
	±10 dB, 7.5 kHz (Treble)
Signal-to-Noise Ratio	106 dB (Line, I/HF-A)
	80 dB (Phono, I/HF-A)
Speaker Impedance	4 Ohms–16 Ohms

Video Section

Input Sensitivity/Output Level and Impedance	
Video	1.0 Vp-p/75 Ohms (Component Y)
	0.7 Vp-p/75 Ohms (Component Pb/Cb, Pr/Cr)
	1.0 Vp-p/75 Ohms (Composite)

Tuner Section

Tuning Frequency Range	
FM	87.5 MHz–107.9 MHz
AM	530 kHz–1,710 kHz
FM/AM Preset Memory	40 Stations

General

Power Supply	AC 120 V~, 60 Hz
Power Consumption	580 W
No-Sound Power Consumption	60 W
Standby Power Consumption	0.15 W
Dimensions (W x H x D)	17 1/8" x 6 1/16" x 14 7/16" (435 x 173.5 x 378 mm)
Weight	22.0 lbs. (10.0 kg)

UPC CODE

(B)	889951000785
-----	--------------

CARTON

Dimensions (W x H x D)	21 1/4" x 10 1/4" x 17 1/16" (539 x 260 x 450 mm)
Weight	28.7 lbs. (13.0 kg)

Supplied Accessories

- Power cord • Indoor FM antenna • AM loop antenna
- Speaker setup microphone • Quick Start Guide • Basic manual
- Remote controller • AAA (R03) batteries x 2

Optional Accessories

- Rack-mounting kit (IRK-155-3D)



Text on receiver may vary with region.

Due to a policy of continuous product improvement, Onkyo reserves the right to change specifications and appearance without notice. Dolby, Dolby Atmos, Dolby Surround, Dolby Vision, and the double-D symbol are trademarks of Dolby Laboratories. For DTS patents, see <http://patents.dts.com>. Manufactured under license from DTS, Inc. DTS, the Symbol, DTS and the Symbol together, DTS:X, the DTS:X logo, Play-Fi, and the Play-Fi logo are registered trademarks or trademarks of DTS, Inc. in the United States and/or other countries. © DTS, Inc. All Rights Reserved. The terms HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries. The Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. iOS is a trademark upon which Cisco holds the trademark in the US and other countries. AirPlay, iPad, iPhone, iPod, iPod touch, iTunes, and Mac are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc., registered in the U.S. and other countries. "Made for iPod", "Made for iPhone" and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone or iPad may affect wireless performance. AirPlay works with iPhone, iPad, and iPod touch with iOS 4.3.3 or later, Mac with OS X Mountain Lion or later, and PC with iTunes 10.2.2 or later. Android, Google Play, Chromebook and Chromecast built-in are trademarks of Google Inc. Wi-Fi® is a registered trademark of the Wi-Fi Alliance. The Wi-Fi CERTIFIED logo is a certification mark of the Wi-Fi Alliance. Spotify and the Spotify logo are trademarks of the Spotify Group, registered in the U.S. and other countries. Products displaying the Hi-Res Audio logo conform to the Hi-Res Audio standard as defined by Japan Audio Society. The Hi-Res Audio logo is used under license from Japan Audio Society. FireConnect™ is a technology based on Blackfire provided by Blackfire Research Corp., USA. Onkyo Controller, Music Optimizer, Theater-Dimensional, VLS, and AccuEQ are trademarks of Onkyo Corporation. All other trademarks and registered trademarks are the property of their respective holders.



<http://www.onkyousa.com/>

Copyright © 2017 Onkyo Corporation. All rights reserved.