

TX-RZ820 7.2-Channel Network A/V Receiver

RZ
SERIES



BLACK | SILVER



CERTIFIED BY **THX** THXSELECT

DOLBY DOLBY VISION

dts DTS

Hi-Res AUDIO

WiFi CERTIFIED

Bluetooth

Spotify

TIDAL

pandora

COMPATIBLE **DOLBY** VISION

Chromecast built-in

384kHz/32bit

AccuEQ ROOM CALIBRATION

Dynamic Audio Amplification

dts **Play-Fi** music is home

ONKYO

Fire connect Powered by **BLACKFIRE**

VLSC

AirPlay

Made for **iPod** **iPhone** **iPad**

Monumental Sound & Vision Delivered Without Compromise

Upgrades to the TX-RZ820 Network A/V Receiver—our THX® Certified Select™ 7.2-channel flagship—result in genuinely spectacular sonic performance. Dynamic Audio Amplification delivers instantaneous high-current power to full-scale speakers for thrilling energy and lifelike transient response across a wide 5 Hz–100 kHz spectrum. VLSC™ on all channels and non-phase-shift circuitry clarify details floating in three-dimensional space. Multi-room network and analog audio, including streaming over Chromecast built-in* and DTS Play-Fi®, are served to NCP-302 wireless speakers via FireConnect™ powered by Blackfire. Powered and pre-/line audio distribution adds app-controllable audio in up to three zones simultaneously. Decoding Dolby Atmos® and DTS:X™, the receiver also supports Dolby Vision™, HDR10, HLG (Hybrid Log-Gamma), and BT.2020 video pass-through, and is set up for custom installs. Simply, it's the no-compromises 7.2-channel powerhouse you've been waiting for. * Enabled with a future firmware update.

HIGHLIGHTS

- THX® Certified Select™ Reference Sound
- Dynamic Audio Amplification with 180 W/Ch, 5 Hz–100 kHz Frequency Response, and VLSC™ On All Channels
- Supports 5.2.2-Channel Dolby Atmos® and DTS:X™ Playback
- 7 HDMI® Inputs (1 Front¹⁾ / Main Out/Zone 2 Out Supporting Dolby Vision™, HDR10, HLG, and 4K/60p Pass-through and HDCP 2.2
- Ready for Chromecast built-in² and DTS Play-Fi^{®2}
- 5 GHz/2.4 GHz Wi-Fi®, AirPlay, Spotify®, TIDAL, Deezer, Pandora^{®3}, Tunes14
- FireConnect™⁵ Wireless Multi-room Audio, Powered Zone 2, Zone 2/3 Pre-/Line Outs, and 7.2-Channel Pre-Outs

ADVANCED FEATURES

- THX Certified Select for Cinema-Reference Volume and Sound Quality
- HDMI Terminals Supporting Dolby Vision, HDR10, HLG, BT.2020, 4K/60 Hz Pass-through, and HDCP 2.2
- Zone 2 HDMI (4K/60 Hz/HDCP 2.2) for Distributed Video
- 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
- 5 GHz/2.4 GHz Wi-Fi for Stable Network Connection
- Features 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 Direct DSD 11.2 MHz⁷, DSD 5.6 MHz/2.8 MHz⁷, 192 kHz/24-bit FLAC, WAV, AIFF, and ALAC, and Dolby® TrueHD^{®8}
- Supports Spotify, TIDAL, Tunes1, Pandora, and Deezer Services
- FireConnect™ Multi-room Network and Analog Audio Distribution to Supported Wireless Speakers⁹

- Powered Zone 2 Speaker Outputs and Zone 2/3 Pre-/Line Output with Dedicated DAC Supporting Network, S/PDIF, HDMI, and Analog Audio¹⁰
- 7.2-Channel Pre-Outs, 12 V Trigger-Out, and IR Input
- 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) for Legacy Video Formats

AMPLIFIER FEATURES

- 180 W/Ch (6 Ω, 1 kHz, 1% THD, 1 Channel Driven, IEC)
- Dynamic Audio Amplification System with 5 Hz–100 kHz Frequency Response
- H.C.P.S. (High Current Power Supply) EI Transformer
- VLSC™ (Vector Linear Shaping Circuitry) Noise-filtering Technology for All Channels
- Optimum Gain Volume Circuitry
- Non-Phase-Shift Amplification Circuitry for Clarity and Detail
- Discrete Output Stage Circuitry for Low Distortion

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 (ARC), 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
- THX Listening Modes for Movies, Music, and Games
- 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 and Zone 3 Tone, Balance, and Volume Controls

CONNECTION FEATURES

- 7 HDMI Inputs (6 Rear, 1 Front), Main Out, and Zone 2 Output
- 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
- Phono Input (MM) and Equalizer for Turntable
- 7.2-Channel Pre-Outs
- 2 Subwoofer Pre-Outs
- LAN Input with IP Control Support for Home Automation Systems and Setup via a Connected PC
- RS-232 Serial Input for External Control Commands
- 12 V Trigger Out (Main, 100 mA) for External Component Control Integration
- IR Input for Remote Control
- 6.35 mm Headphone Jack (Front)
- Speaker Posts with Screw Knobs
- 3.5 mm Speaker Setup Mic Input and Microphone

OTHER FEATURES

- Aluminum Front Panel, Volume Control, and Flap Door
- 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
- Economical HDMI Pass-through and Network Standby Functions
- 3-Mode Display Dimmer (Normal/Dim/Dimmer)
- 40 FM/RDS and AM Random Presets
- Rack-mounting Kit (Optional)
- Full-sized Simple Remote Control

¹ HDMI Front Input does not support 4K/60p/4:4:4/24-bit video, HDR10, Dolby Vision, HLG, or BT.2020. ² Requires a future firmware update. ³ Pandora available in Australia and New Zealand only. 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 distribution via S/PDIF or HDMI not supported in Zone 3.

TX-RZ820 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-RZ820 features quality components, such as large custom capacitors, to provide high instantaneous current for fast transients and 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.



Customized high-current capacitors

THX® Certified Select™ Reference Sound

THX Certified Select guarantees the same high-volume sound you experience at a commercial cinema in your home. To gain certification, amplifiers must pass the industry's most severe benchmarks covering every aspect of audio performance. THX Certified Select components are ideally suited to rooms where the screen-to-seat viewing distance is approximately 3 meters, and the room volume is approximately 57 cubic meters.



Unleash Dolby Atmos® or DTS:X™ Home Cinema

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-RZ820 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.



Upxmixing Solutions for Legacy Soundtracks

DTS NeuralX™ identifies spatial effects in multichannel soundtracks and upmixes for 3D playback through object-audio-ready speaker systems. Dolby Surround also upmixes legacy sound formats so you can experience multidimensional playback of legacy sound formats in a Dolby Atmos environment.

Music Made Easy with Chromecast built-in*

Stream any music from your smartphone, laptop, or PC to the TX-RZ820 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 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.

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

Selectable 5 GHz/2.4 GHz Wi-Fi® assures a stable connection so you can stream over AirPlay, the Spotify app, and the local network. Bluetooth wireless technology provides simple streaming from your choice of app.

Internet Radio and Streaming Services

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

Note: Pandora is available in Australia and New Zealand only.

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

Six rear HDMI® inputs, Main Out, and Zone 2 Out 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. Front HDMI terminal is ideal for video camera connection, while the Zone 2 output distributes home cinema video to a display in a second room.



Wide Connectivity for Custom Setups

With 7.2-channel pre-outs, 12 V trigger, IR input, and optional rack-mount kit, the TX-RZ820 easily integrates other components (such as outboard amps) to create a full wired multi-room setup thanks to Powered Zone 2 and Zone 2/3 Pre-Line Outputs governed by a Whole Home Audio Mode and supported within Onkyo Controller. RS-232 and IP Control via LAN are ready for home automation systems.



* Requires a future firmware update.

SPECIFICATIONS

Amplifier Section

Power Output	
All Channels	180 W/ch (6 Ω, 1 kHz, 1% THD, 1 Channel Driven, IEC)
	300 W (3 Ω, Front)
	250 W (4 Ω, Front)
	150 W (8 Ω, Front)
Dynamic Power	
	200 mV/2.3 kΩ (Zone2/3 Line Out)
THD+N (Total Harmonic Distortion + Noise)	0.08% (20 Hz–20 kHz, Half Power)
Input Sensitivity and Impedance	
	200 mV/47 kΩ (Line)
	3.5 mV/47 kΩ (Phono)
Rated RCA Output Level and Impedance	
	1 V/320 Ω (Pre Out)
	1 V/470 Ω (Subwoofer Pre Out)
	1 V/2.3 kΩ (Zone2/3 Pre Out)
	200 mV/2.3 kΩ (Zone2/3 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, 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)
Tuner Section	
Tuning Frequency Range	
FM	87.5 MHz–108 MHz
AM	522 kHz–1,611 kHz
	530 kHz–1,710 kHz
FM/AM Preset Memory	40 Stations
General	
Power Supply	AC 220–240 V~ 50/60 Hz 60 W
Power Consumption	650 W
No-Sound Power Consumption	70 W
Standby Power Consumption	0.15 W
Dimensions (W x H x D)	435 x 201.5 x 395 mm
Weight	14.0 kg
CARTON	
Dimensions (W x H x D)	550 x 303 x 490 mm
Weight	17.0 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



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. THX and the THX logo are trademarks of THX Ltd., registered in the U.S. and other countries. THX CERTIFIED SELECT and the THX SELECT application icon are trademarks of THX Ltd. 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, DTSX, the DTSX 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 U.S. 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.