ONKYO

TX-RZ840 *9.2-Channel Network A/V Receiver*

RZ SERIES

Next Generation Network Audio

BLACK

CERTIFIED BY **THX** | THX SELECT | 4K HDR ULTRA HD — HDR10, HLG, BT.2020 | COMPATIBLE DOLBY VISION | IMAX ENHANCED | dts X | DOLBY ATMOS | Dynamic Audio Amplification

Wi-Fi CERTIFIED | ONKYO | Bluetooth | Works with SONOS | Chromecast built-in | works with the Google Assistant | dts Play-Fi | FlareConnect | DEEZER

TIDAL | Spotify | music | TUNE IN | AccuEQ ROOM CALIBRATION ADVANCE | ZONE B | POWERED ZONE 2 | POWERED ZONE 3 | Hi-Res AUDIO

Immense power for unparalleled speaker control

A glance at the TX-RZ840's imposing front panel reveals a component built for one purpose: making your smile wider as the volume goes higher. Its thick chassis is loaded with custom parts tested and tuned to THX® Certified Select™ reference standards, handling massive current flows for sound you feel emotionally and physically. Beyond 3D surround supporting IMAX® Enhanced*1 content up to 11.2 channels, and a finessed touch that breathes life into stereo music, the receiver forms a hub for house-wide entertainment with Next-Generation Network Audio integrating AirPlay 2, Works with Sonos, Chromecast built-in*2, and more over 802.11ac Wi-Fi®*3. Three-zone powered D/A audio distribution is easily managed from your smartphone. With state-of-the art connectivity and custom-installation interfaces included, it's the TX-RZ840's visceral presence you'll find most difficult to resist.

*1 Enabled with a future firmware update. *2 The unit may automatically download and apply an Over-the-Air software update during setup. *3 Some countries or regions have regulations that affect wireless signal strength and the use of Wi-Fi channels.

PRODUCT HIGHLIGHTS

- 215 W/Ch THX® Certified Select™ RZ Series DAA system
- Ultra-wide 5 Hz–100 kHz frequency response
- Works with Sonos, Chromecast built-in*1, AirPlay 2, DTS Play-Fi®, FlareConnect™*2, Spotify®, Amazon Music, TIDAL, Deezer, TuneIn*3
- Supports 5.2.4-ch Dolby Atmos® and DTS:X® playback
- 11.2-ch pre-outs and processing for 7.2.4 layouts
- Dolby Atmos Height Virtualizer*4
- IMAX® Enhanced*4 certified for IMAX® digital re-masters
- HDMI® Main output with eARC, HDMI Sub/Zone 2 Out*5
- Refined HDMI grounds, SoC board, and power amps
- Quad-core SoC supports 802.11ac (2x2 MIMO) Wi-Fi®*6
- Zone 2 and Zone 3 speaker outputs
- Zone 2 and Zone 3 DACs for D/A audio in three rooms
- Zone 2/Zone B and Zone 3 line-outs share D/A audio
- Stereo Assign Mode supports Height-channel playback
- DSP-based Vocal Enhancer improves dialog audibility
- OSD features media input/output data display function
- HDMI supports 4K/60p, 4K HDR, BT.2020, HDCP 2.2
- AccuEQ Advance 9-point calibration with AccuReflex™
- Volume memory-presets for A/V inputs via front panel
- IP control, RS-232C, 12 V trigger output, and IR input

AMPLIFIER FEATURES

- 215 W/Ch (6 Ω, 1 kHz, 10% THD, 1 channel driven), 180 W/Ch (6 Ω, 1 kHz, 1% THD, 1 channel driven, IEC)
- Certified for IMAX Enhanced and THX Certified Select
- Dynamic Audio Amplification with RZ Series Build
- Ultra-wide 5 Hz–100 kHz frequency response
- Custom-built High-Current Low-Noise Power Transformer
- Custom 15,000 µF high-current smoothing capacitors
- Non-phase-shift amp topology with discrete output stage
- Extruded anti-resonant aluminum heat-sink with black anodized paint
- Strengthened power-supply line for high-current dynamics
- Refined HDMI grounds and short signal-paths reduce noise
- Isolated SoC board reduces interference
- High current capability for 4-ohm speaker drive
- AKM (AK4458) 384 kHz/32-bit multichannel D/A conversion

- VLSC™ (Vector Linear Shaping Circuitry) noise filtering (Front L/R)
- PLL (Phase Locked Loop) anti-jitter technology for SPDIF audio
- Pure Audio Mode and Direct Mode for source authentic expression
- Independent tone controls (bass/treble) for all channels (Zone 3 excluded)

VIDEO & AUDIO SUPPORT

- Supports HDCP 2.2, 4K/60p, HDR (Dolby Vision™, HDR10, HLG), BT.2020, 4:4:4 color sub-sampling, 24-bit color, 3D Video, ARC (Audio Return Channel), DeepColor™, x.v.Color, and LipSync via HDMI
- Dolby Atmos, DTS:X, Dolby® TrueHD, and DTS-HD Master Audio®
- Dolby Atmos Height Virtualizer 3D audio processing
- Dolby Surround® and DTS® Neural:X upmixing technology
- IMAX Mode for IMAX Enhanced content
- THX® listening modes for movies, music, and games
- Sound optimization for games (Rock, Sports, Action, and RPG)
- Theater-Dimensional virtual surround-sound function

NETWORK FEATURES

- Next-Generation Network Audio supports multi-room streaming and Onkyo Controller*7
- Works with Sonos for the Sonos Home Sound System*8
- Chromecast built-in and voice control*9 with the Google Assistant
- AirPlay 2 multi-room audio and voice control*10 with Siri
- DTS Play-Fi multi-room audio via Onkyo Music Control App*7
- FlareConnect multi-zone audio with compatible components
- Quad-core SoC supports high-speed 802.11ac (2x2 MIMO) Wi-Fi
- Hi-Res Audio playback via network (DSD Direct 11.2 MHz*11; DSD 11.2 MHz/5.6 MHz/2.8 MHz*11 [PCM conversion]; FLAC, WAV [RIFF], AIFF, and ALAC to 192 kHz/24-bit*12)

CONNECTION FEATURES

- 7 HDMI inputs (1 front), 2 outputs (Main [eARC], Sub/Zone 2)
- 1 component video input (assignable)
- 2 composite video inputs (assignable)
- 2 digital audio inputs (optical and coaxial, assignable)
- 6 analog RCA inputs (assignable)
- 1 phono input with built-in low-noise MM equalizer for turntable
- 3.5 mm setup mic input for AccuEQ Advance (front)
- 6.35 mm headphone jack (front)
- 11.2-channel pre-outs (analog RCA, variable)
- Zone 2/Zone B and Zone 3 analog RCA line-level outputs
- 9 screw-type speaker posts (including Zone 2)
- Bi-directional Ethernet terminal for network and IP control
- USB input (5 V/1 A) for audio playback (rear)
- RS-232C serial port for remote control

- IR (infrared) input for remote-control extenders
- 12 V trigger output (Main, assignable, 100 mA)
- AC socket for detachable IEC power cord

ADVANCED FEATURES

- AccuEQ Advance 9-point calibration with AccuReflex
- Bluetooth® wireless technology with Wake on Play Standby
- Advanced Music Optimizer improves compressed audio playback
- Vocal Enhancer DSP clarifies dialog via remote or front-panel controls
- HDMI Main Out features eARC transmission of HQ audio from supported TVs to the A/V receiver
- Aluminum front panel and door to conceal front-panel controls
- Zone 2 and Zone 3 speaker outputs with Zone 2 and Zone 3 DACs play synced or unique D/A sources simultaneously (Zone 2 supports HDMI/SPDIF*13)
- Zone 2 line-out mode connects audio systems for independent D/A playback (including HDMI/SPDIF*14) in two rooms
- Zone B line-out mode supports wireless headphone transmitter connection for simultaneous playback of D/A audio in Main and Zone B*15
- Zone 2 and Zone 3 line-outs support simultaneous output*13
- Front-to-Height speaker-switching in Stereo Assign Mode for BGM
- 1080p to 4K Super Resolution upscaling via HDMI
- GUI with overlaid OSD via HDMI featuring media input/output display
- 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)
- Various efficient standby modes and HDMI pass-through
- Optional rack-mounting kit (IRK-180-4C)
- IP control for home automation, SmartGrid-ready
- 3-Mode display dimmer (Normal/Dim/Dimmer)
- 40 FM/AM random presets
- Redesigned simple remote control

*1 The unit may automatically download and apply an Over-the-Air software update during setup. *2 FlareConnect is a proprietary network protocol that shares select audio sources between supported components. Please visit the Onkyo website for product compatibility information. *3 Service availability varies with region and subscriptions may be required. *4 Enabled with a future firmware update. *5 HDMI Zone 2 Out mode supports signals from HDMI inputs 1–3 only. *6 Some countries or regions have regulations that affect wireless signal strength and the use of Wi-Fi channels. *7 Available free at the App Store and Google Play for iPhone, iPad, and Android™ devices. Please check device and OS requirements before installation. *8 Requires a Sonos Connect (sold separately). *9 Voice control requires a smart speaker featuring the Google Assistant. *10 Voice control with Siri requires an Apple HomePod. *11 DSD playback over Wi-Fi cannot be guaranteed in all network environments. *12 Supported sampling rates may vary depending on network environment. ALAC supported to 96 kHz. *13 When set to Zone 2, HDMI audio is available on inputs 1–3. SPDIF and HDMI support PCM signals only. Simultaneous playback of multiple audio sources enabled. Zone 3 supports analog/NET/Bluetooth. *14 HDMI audio is available on inputs 1–3. SPDIF and HDMI support PCM signals only. Simultaneous playback of multiple audio sources enabled. *15 When set to Zone B, playback of encoded and PCM audio via any input is enabled in Main and Zone B.

TX-RZ840 *9.2-Channel Network A/V Receiver*

Experience IMAX® Enhanced

This Onkyo A/V receiver is released under the IMAX Enhanced* program, which features DTS:X immersive audio decoding that is optimized to properly reproduce the full dynamic range of IMAX theatrical sound mixes available in digitally re-mastered IMAX Enhanced content. The IMAX Mode reproduces IMAX Enhanced content at the highest levels, just as the filmmakers intended. IMAX Enhanced versions of films, from Hollywood blockbuster movies to documentary films, are scheduled for 4K HDR streaming and Ultra HD Blu-ray™ release.

* Enabled with a future firmware update.

IMAX® ENHANCED

THX® Certified Select™ cinema-reference sound

THX Certified Select guarantees the same reference volume level of a commercial cinema in rooms where the viewing position is about 3.5 m from the screen. To gain certification for reference sound within strict THX® sound-quality parameters, receivers must pass 2,000 bench-tests in 75 categories covering 14,000 data points.

Dolby Atmos® and DTS:X®

Dolby Atmos and DTS:X formats map sounds in 3D space, allowing them to move around the room and immersing your audience in the film. With 11.2-ch pre-outs and 11-ch processing, you can enjoy 3D sound through a 7.2.4 layout (external power amp required), or use built-in amps for a 5.2.4 or 7.2.2 layout. Enjoy classic titles through your height-enabled speaker system with Dolby Surround® and DTS™ Neural:X finding cues in legacy soundtracks and upmixing for spatial playback.

Dolby Atmos Height Virtualizer

When playing any Dolby® format, engaging Dolby Atmos Height Virtualizer* enables a more immersive listening experience, creating a virtual surround and height effect from traditional speaker layouts without employing additional speakers.

* Enabled with a future firmware update.

Dynamic Audio Amplification – RZ Series Build

DAA stabilizes power delivery for accurate control and spectacular dynamics. High-Current Low-Noise Power Transformer and custom 15,000 µF high-current smoothing capacitors deliver instant power while non-phase-shift amps capture a 5 Hz–100 kHz frequency response. To keep them cool, an extruded aluminum heat-sink with black anodized paint controls resonance frequencies while more effectively cutting thermal distortion. Behind the aluminum front panel are hand-selected audio parts. DAA produces a visceral musicality that makes every note an emotionally moving experience.

New upgrades reduce noise and boost power

Additional refinements control noise, boost power, and improve S/N performance. A new HDMI® board has shorter signal-paths and large, well-finished grounds for A/V signal integrity. SoC is isolated to reduce interference noise. The power-supply line is reinforced in pursuit of smooth power delivery. These contribute to punchier bass and improved localization on an expanded sound-stage.

Next-Generation Network Audio

Access streaming content from Amazon Music, Spotify®, TIDAL, Deezer, and TuneIn and share sound as part of a multi-room system via Works with Sonos, Chromecast built-in®, AirPlay 2, DTS Play-Fi®, and FlareConnect™.

* The unit may automatically download and apply an Over-the-Air software update during setup.

Works with Sonos

The TX-RZ840 can join your existing Sonos Home Sound System, or be the start of a new one, just by pairing it with a Sonos Connect*. The AVR ties into the Sonos ecosystem, waking, changing inputs, and playing at the desired volume on command from the Sonos app*.

* Sonos Connect sold separately. Sonos app is available free for iPad, iPhone, and Android™ at the App Store and Google Play. Please confirm device and OS compatibility before installation.

Chromecast built-in with the Google Assistant

Stream any music from your smartphone, laptop, or PC to the receiver 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. If you have a smart speaker featuring the Google Assistant, you can cue, play, and control music playback by voice.
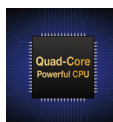
Note: The unit may automatically download and apply an Over-the-Air software update during setup.

Whole home audio: just add speakers

Orchestrate audio playback in up to three rooms at once using the Onkyo Controller app. The TX-RZ840 has two extra DACs to distribute unique or synced D/A audio sources via Zone 2 and Zone 3 speaker outputs, including HDMI®/SPDIF/NET/*Bluetooth®*. With nine amps, you can enjoy a 5.2.2-ch layout in Main with powered Zone 2 audio, or a 5.2-ch surround system in Main with powered audio distribution to Zone 2 and Zone 3.

Quad-core SoC supports 802.11ac Wi-Fi®

A powerful SoC (System on a Chip) processes multiple tasks at once. It evolves network functions and supports the latest high-speed 802.11ac (2x2 MIMO) specification while compatible with 802.11 b/g/n dual-band routers.

Quad-Core Powerful CPU

Note: Some countries or regions have regulations that affect wireless signal strength and the use of Wi-Fi channels.

Clarify voice dialog in-program instantly

Vocal Enhancer solves inaudible dialog in TV programs and movies. DSP technology identifies voice frequencies so you can conveniently adjust them using remote-control keys or controls on the front panel.

Versatile Zone 2/Zone B line-out

Connect your supported hi-fi system via analog RCA input to the AVR's Zone 2/Zone B line-out. In Zone 2 mode, you can play the same or different analog/digital sources (including SPDIF and HDMI) in either or both rooms at the same time. Zone B mode is an ideal match for a supported wireless transmitter. Listen to any source through wireless headphones for disruption-free late-night TV entertainment.

AccuEQ Advance with AccuReflex™

AccuEQ Advance room acoustic calibration uses nine-point mic measurement to calibrate and EQ speakers and subwoofers and remove standing waves that arise when sound from the speakers resonates with sound reflecting off the walls, compromising its proper expression. During the process, background noise is ignored to ensure accurate equalization. AccuReflex optimizes 3D sound through height speakers by resolving phase-shift, resulting in a cohesive sound-field.

Connections for custom installation

The TX-RZ840 features a 12 V trigger output for an external component and an IR input for remote-control range extension. It supports IP control, RS-232C, and OSD output for custom installers. An optional rack-mount kit (IRK-180-4C) is available.

Supports eARC audio transmission

HDMI Main Out features eARC supporting HD audio transmission from an eARC-compatible TV to the A/V receiver via HDMI cable. It works with 3D audio formats such as Dolby Atmos and DTS:X as well as Dolby® TrueHD and DTS-HD Master Audio™ lossless codecs. High bit-rate and object-based audio featured in videos streamed via Smart TV or smartphone app and a connected network media dongle can now be decoded and amplified by the A/V receiver at native quality.

SPECIFICATIONS

Amplifier Section

Power output (All channels)	
	215 W/Ch (6 Ω, 1 kHz, 10% THD, 1-ch driven)
	180 W/Ch (6 Ω, 1 kHz, 1% THD, 1-ch driven, IEC)
Dynamic power	250 W (3 Ω, Front)
	220 W (4 Ω, Front)
	130 W (8 Ω, Front)
THD+N (Total Harmonic Distortion + Noise)	
	0.08% (20 Hz–20 kHz, half power)
Input sensitivity and impedance	
	200 mV rms/47 kΩ (Line)
	3.5 mV rms/47 kΩ (Phono MM)
Rated RCA output level and impedance	
	1 V rms/470 Ω (Subwoofer pre-out)
	200 mV rms/470 Ω (Zone B/Zone 2 line-out)
Frequency response	5 Hz–100 kHz/+1 dB, -3 dB (Direct Mode)
Tone control	±10 dB, 20 Hz (Bass)
	±10 dB, 20 kHz (Treble)
Signal-to-noise ratio	106 dB (Line, IHF-A)
	80 dB (Phono, 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/Pr)
	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
Power consumption	870 W
No-sound power consumption	75 W
Standby power consumption	0.15 W
Dimensions (W x H x D)	435 x 201.5 x 398 mm
Weight	14.0 kg

CARTON

Dimensions (W x H x D)	570 x 335 x 490 mm
Weight	17.0 kg

Supplied Accessories

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

Text on receiver may vary with region.

ONKYO http://www.onkyo.com/

Amber TECHNOLOGY