TX-NR5100 7.2-Channel Network A/V Receiver

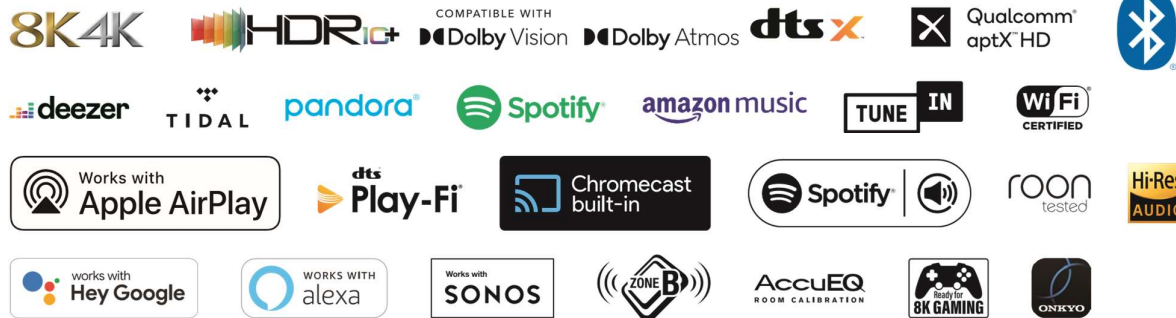**SMART AV RECEIVER™**

BLACK

The sound of the future

Unlock 8K/60p video passthrough via HDMI® 2.1-specified HDMI terminals and enjoy HDR10+ or Dolby Vision™ HDR formats with eARC supporting amplification of encoded multichannel audio from your compatible TV's video-streaming apps, tuner, or connected media players. Enhancements to HDMI eliminate latency for smooth, lag-free gameplay. With discrete high-thrust amps developing 165 W/Ch, Dolby Atmos® and DTS:X® soundtracks are played with thrilling dynamism while Dolby Atmos Height Virtualizer and DTS Virtual:X™ can work 3D magic on almost any audio played through any speaker layout. SMART AV Receiver™ offers a wide selection of streaming services and forms the heart of your wireless multi-room audio ecosystem. The receiver also fits into an existing Sonos Home Sound System. Cue and control music around your home with voice assistants Hey Google or Alexa or hear what's playing through the AVR on wireless headphones over bi-directional *Bluetooth*® wireless technology.

PRODUCT HIGHLIGHTS

- 165 watts x 7 channels
- 5.2.2-ch Dolby Atmos® and DTS:X® playback
- Dolby Atmos Height Virtualizer and DTS Virtual:X™ 3D sound virtualization technologies
- SMART AV Receiver™ Works with Sonos*1, Chromecast built-in™, AirPlay 2, and DTS Play-Fi®; includes Spotify®, Amazon Music HD*2, Pandora®, TIDAL, Deezer, and TuneIn streaming services*3
- Works with Hey Google or Alexa*4
- Stream over 5 GHz/2.4 GHz dual-band Wi-Fi® supporting the 802.11ac standard*5
- HDMI® supports 8K/30p(4:2:0/12-bit), 4K/120p(4:2:0/12bit), HDR10+, Dolby Vision and BT.2020 color; VRR (Variable Refresh Rate), ALLM (Auto Low Latency Mode), and QFT (Quick Frame Transport); eARC (Main Out), and HDCP 2.3
- HDMI Sub Out for media transmission to a projector, gaming monitor, or TV
- Send or receive audio via *Bluetooth*® wireless technology (RX mode: SBC/AAC, TX mode: SBC/Qualcomm® aptX™/ aptX HD)
- Zone B pre-/line-out plays MAIN Zone audio to a compatible headphone dock
- Vocal Enhancer, media info and playback status display, and one-touch volume memory-preset functions
- AccuEQ with AccuReflex™ and subwoofer EQ

AMPLIFIER FEATURES

- 165 W/Ch (6 ohms, 1 kHz, 10% THD, 1 channel driven), 80 W/Ch (8 ohms, 20 Hz–20 kHz, 0.08% THD, 2 channels driven, FTC)
- Discrete 2-stage power amplifier circuitry
- Custom High-Current Low-Noise Power Transformer
- Isolated network module reduces high-frequency signal interference on audio circuitry
- High current capability drives 4-ohm loads through 7 channels
- Precision 192 kHz/24-bit D/A conversion for Hi-Res Audio
- PLL (Phase Locked Loop) anti-jitter technology for SPDIF audio
- Tone controls (bass/treble) for front L/R channels

VIDEO & AUDIO SUPPORT

- Supports features defined in HDMI 2.1 specification including 8K/60p(4:4:4/12-bit*6), 8K/30p(4:4:4/12-bit*6, 4:2:2/12-bit*6, 4:2:0/12bit), 4K/120p(4:4:4/12-bit*6, 4:2:0/12-bit) video passthrough, VRR, ALLM, QFT (Quick Frame Transport), DSC (Display Stream Compression), QMS (Quick Media Switching) and eARC (Main Out); supports HDR10+, Dolby Vision®, HDR10, and HLG, and BT.2020 color; DeepColor™, x.v.Color™, LipSync, and HDCP 2.3
- Dolby Atmos, DTS:X, Dolby ® TrueHD, and DTS-HD Master Audio® decoding
- Dolby Atmos Height Virtualizer and DTS Virtual:X 3D processing
- Dolby Surround® and DTS® Neural:X 3D upmixing solutions
- Hi-Res Audio playback via network and USB including DSD256, DSD128, DSD64 (DSDIFF/DSF) and 192 kHz/24-bit FLAC, ALAC, WAV (RIFF), and AIFF*7
- SACD (Super Audio CD) playback via HDMI (2.8 MHz 2-ch/multichannel)
- Theater-Dimensional virtual surround-sound
- Sound optimization for games (Rock, Sports, Action, and RPG)
- Direct Mode and Pure Audio Mode

NETWORK FEATURES

- SMART AV Receiver multi-room platform with integrated streaming services, voice assistant support, and control via remote apps
- Fast quad-core SoC supports 802.11ac (2x2 MIMO) Wi-Fi
- Works with Sonos for the Sonos Home Sound System with Sonos app*8 control
- Works with Alexa supporting multi-room music*9
- Works with Hey Google and Chromecast built-in
- Supports Apple AirPlay 2 enabling Siri voice control
- DTS Play-Fi® multi-room audio via Onkyo Music Control App*8
- Control and manage media playback with the Onkyo Controller app*8
- Roon Tested certification for the Roon Core
- IP Control for setup via PC and integration into a home automation system

CONNECTION FEATURES

- 4 HDMI inputs and 2 outputs (Main Out [eARC], Sub Out)
- 2 digital audio inputs (optical and coaxial, assignable)
- 3 analog RCA audio inputs (assignable)
- 1/8″ (3.5 mm) mic input for AccuEQ setup
- 1/4″ (6.35 mm) headphone jack
- 2 subwoofer pre-outs
- Zone B analog RCA pre/line-level out
- Banana-plug-ready (Front L/R) and lever-type (C/SL/SR/HL/HR) speaker posts
- 10BASE-T/100BASE-TX Ethernet terminal for network connection
- USB input (DC 5 V/1 A) for audio playback (rear)

ADVANCED FEATURES

- AccuEQ Room Acoustic Calibration with AccuReflex phase correction and subwoofer EQ
- *Bluetooth* wireless technology supports wireless audio reception from mobile devices and PC, audio transmission to supported headphones (RX mode: SBC/AAC, TX mode: SBC/aptX/aptX HD)
- Advanced Music Optimizer™ improves compressed audio playback quality
- Wake on Play standby for *Bluetooth* and Network with auto input-switching
- Vocal Enhancer boosts vocals/dialog audibility via remote control or front panel keys
- FM/AM tuner with 40 random station memory presets
- Height/Surround Back/Powered Zone B/Front Bi-Amp speaker terminals
- Zone B pre-/line-out shares MAIN audio source to a wireless headphone dock, hi-fi system, or active speaker system equipped with an analog RCA input
- My Input Volume one-touch startup volume assignment to individual inputs
- High-definition GUI with overlaid OSD over HDMI
- 1080p to 4K upscaling over HDMI
- OSD function shows source data and playback settings
- 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*10)
- Various standby modes and HDMI pass-through
- 3-Mode display dimmer (Normal/Dim/Dimmer)

*1 Requires a Sonos Connect or Port (sold separately). Connection of 1 Sonos device is supported with volume control enabled via the Sonos app for iOS and Android™ devices. *2 Amazon Music HD is supported via DTS Play-Fi. *3 Streaming service availability may vary by region. An account and subscription may be required for some streaming services. *4 Voice control requires an Alexa built-in or Google Assistant-enabled device, such as a smart speaker or smartphone. Interoperability with

* Multi-room music may require a firmware update.

Dolby Atmos and DTS:X
– celebrate a new world of sound
Dolby Atmos and DTS:X translate 3D soundtracks from the studio mixing desk to your living room. Sounds are no longer

Powered Zone B or Front L/R bi-amping
Multi-function speaker terminals can play any amplified audio in MAIN and Zone B at the same time. Alternatively, assign them to bi-amp compatible front speakers or expand a 5.2-ch layout with Surround Back speakers (7.2-ch) or Height speakers (5.2.2-ch).

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Welcome to the 8K Ultra HD experience
Features defined in HDMI® 2.1 specification enable 8K/60p video passthrough to your compatible display. As well as HDR10 and HLG, HDR10+ and Dolby Vision™ formats optimize brightness, contrast, and color scene-by-scene or frame-by-frame. All HDMI terminals support HDCP 2.3, while eARC on Main Out passes encoded multichannel audio (including Dolby Atmos® or DTS:X®) from your compatible TV's tuner, video streaming apps, or connected media players to the AVR for amplification. QMS (Quick Media Switching) for movies and video eliminates the delay that can result in a blank screen before content is displayed.

New enhancements for gamers
Transform your playtime with 3D surround-sound and gain the winning edge with new gamer-friendly features defined in HDMI 2.1. VRR (Variable Refresh Rate) eliminates lag, stutter, and frame-tearing for fluid gameplay. ALLM (Auto Low Latency Mode) optimizes latency from source to screen while QFT (Quick Frame Transport) limits lag for a smoother experience.

SMART AV Receiver™ multi-room audio streaming
SMART AV Receiver shares audio around your home. It includes Amazon Music HD*, Pandora®, Spotify®, TIDAL,
Deezer, and TuneIn, and works with Hey Google or Alexa. Share entertainment via Works with Sonos, AirPlay 2, DTS Play-Fi®, and Chromecast built-in.
* Amazon Music HD is supported via DTS Play-Fi.

Works with Sonos
Expand your Sonos Home Sound System by pairing this AVR to a Sonos Connect or Port*. The receiver ties into the Sonos ecosystem, waking, changing inputs, and playing at the desired volume on command from the Sonos app*.
* Sonos Connect and Port sold separately. The Sonos app is available free for iPhone and iPad from the App Store, and for Android™ phones and tablets on Google Play Store.

Chromecast built-in™ works with Hey Google
Stream music from your smartphone, laptop, or PC to the receiver via Chromecast built-in and control playback from Chromecast-enabled apps you know and love from your iPhone, iPad, Android™ phone or tablet, Mac or Windows® PC, or Chromebook™. Cue, play, and control audio just by using your voice.

Works with Alexa
Alexa lets you use your voice to control the A/V receiver by speaking commands through an Alexa built-in device. Whether you want to listen to music, radio stations, or podcasts, all you have to do is ask. It also supports multi-room music* played on multiple devices.

tied to specific channels, and are free to move around and above your audience, placing them at the heart of the action.

Enjoy legacy formats with 3D sound
Dolby Atmos Height Virtualizer and DTS Virtual:X™ are sound virtualization solutions that deliver 3D sound through any listener-level speaker layout. The technologies can work independently or in conjunction with Dolby Surround® or DTS® Neural:X upmixers to create an immersive 3D sound-field with any audio signal (excluding Dolby Atmos, DTS:X, and DTS® Express).

5 GHz/2.4 GHz dual-band Wi-Fi® supports the 802.11ac standard*
A powerful quad-core SoC (System on a Chip) performs multiple processing tasks at once. It evolves network functions and supports the 802.11ac (2x2 MIMO) standard for stable multi-room audio streaming.
* Note: some countries or regions have regulations that affect wireless signal strength and the use of Wi-Fi channels.

Clearer dialog at the touch of a button
Vocal Enhancer solves the problem of inaudible dialog in movies and TV programs by using DSP algorithms to elevate vocal frequencies in the soundtrack. The effect level can be raised or lowered using keys on the remote control.

AccuEQ with AccuReflex™
AccuEQ detects speaker size, crossover frequency, and distance from the listening position and sets sound-pressure levels appropriate to their location. It selects the ideal crossover for the subwoofers and applies EQ to all speakers including the subs. AccuReflex optimizes 3D sound through Dolby Atmos-enabled speakers by resolving phase-shift arising from differences in directional and non-directional sound-paths. The result is a clear and cohesive sound-field.

Bi-directional *Bluetooth*® wireless technology
This AVR can send and receive audio via *Bluetooth* wireless technology. Stream from your device to the receiver using SBC or AAC codecs, or transmit audio playing through the AVR to compatible wireless headphones using SBC, aptX™, or aptX HD codecs including 24-bit audio over aptX HD.
Note: supports MAIN Zone source transmission (excludes Chromecast built-in and Works with Alexa). Lossless 24-bit audio requires headphones supporting aptX HD.

Share music or listen privately
Zone B pre-/line-out shares MAIN Zone audio to an audio system with an RCA line input. Enjoy what's playing in the MAIN Zone on a hi-fi (or active speaker) system in a nearby space, or connect a compatible wireless headphone dock to enjoy entertainment at any time of day in privacy.

SPECIFICATIONS

Amplifier Section

Power output (All channels)	165 W/Ch (6 ohms, 1 kHz, 10% THD, 1-ch driven) 80 W/Ch (8 ohms, 20 Hz–20 kHz, 0.08% THD, 2-ch driven, FTC)
Dynamic power	160 W (3 ohms, Front) 125 W (4 ohms, Front) 85 W (8 ohms, Front) THD+N
(Total Harmonic Distortion + Noise)	0.08% (20 Hz–20 kHz,) Input
sensitivity and impedance	200 mV rms/32 k-ohms (Line)
Rated RCA output level a d impedance	200 mV rms/2.2 k-ohms (Zone B line-out)
Frequency response	10 Hz–100 kHz/+1 dB, -3 dB (Direct/Pure Audio)
Tone control	±10 dB, 20 Hz (Bass) ±10 dB, 20 kHz (Treble)
Signal-to-noise ratio	106 dB (Line, IHF-A)
Speaker impedance	4–16 ohms

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 (operating)	490 W
Power consumption (idle)	45 W
Power consumption (stan lby)	0.1 W
Dimensions (W x H x D)	17 1/8″ x 6 5/16″ x 12 15/16″ (435 x 160 x 328 mm)
Weight	18.5 lbs. (8.4 kg)

UPC CODE

(B)	889951003564

CARTON

Dimensions (W x H x D)	20 11/16″ x 9 7/16″ x 15 15/16″ (525 x 240 x 405 mm)
Weight	23.1lbs. (10.5 kg)

Supplied Accessories
• 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.onkyousa.com/