

TX-NR6050 7.2-Channel Network A/V Receiver



BLACK

8K4K



COMPATIBLE WITH



Massive 3 Dimensional sound and filmlike 8K resolution

Building key noise-reduction refinements into high-current amplification, the TX-NR6050 sets the bar for reference sound while bringing 8K/60p and HDR10+ video to your compatible display over HDMI®. Enjoy Dolby Atmos® and DTS:X® soundtracks through your height-enabled surround system or use upmixing and virtualization solutions from DTS® and Dolby® to create a 3D sound-field from any layout. Cue and control music around your home with voice assistants Hey Google or Alexa, and connect a second display via HDMI Sub/Zone 2 output. Chromecast built-in™, AirPlay 2, DTS Play-Fi®, and Works with Sonos cover every multi-room situation, and if you connect passive loudspeakers, you can switch between a 7.2/5.2.2-ch and 5.2-ch + Zone 2 layout at the touch of a button thanks to dedicated Zone 2 speaker terminals. Features such as a quality MM phono equalizer and bi-directional Bluetooth® wireless technology make this value proposition even more persuasive.

PRODUCT HIGHLIGHTS

- 200 W/Ch Dynamic Audio Amplification system
- 5.2.2-ch Dolby Atmos® and DTS:X® playback
- SMART AV Receiver™ Works with Sonos¹, Chromecast built-in™, AirPlay 2, and DTS Play-Fi®; includes Spotify®, Amazon Music HD², Pandora®, TIDAL, Deezer, and Tunes streaming services³
- Works with Hey Google or Alexa⁴
- Stream over 5 GHz/2.4 GHz dual-band Wi-Fi® supporting the 802.11ac standard⁵
- HDMI® inputs 1-3 and Main/Sub output support 8K/60p(4:2:0/10-bit), 8K/30p(4:4:4/10-bit), 4K/120p(4:4:4/10-bit) video pass through
- HDMI terminals* support HDR10+, Dolby Vision and BT.2020 color; VRR (Variable Refresh Rate), ALLM (Auto Low Latency Mode), and QFT (Quick Frame Transport) passthrough; eARC (Main Out), and HDCP 2.3
- HDMI Sub/Zone 2 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)
- Refined chassis, HDMI board, DAC, Digital/Analog inputs, power-amp grounds and power lines
- Dedicated Zone 2 speaker posts for powered D/A audio distribution (including HDMI/SPDIF/NET™) to passive speakers
- Zone 2/Zone B line-out (analog RCA) with Zone 2 DAC supports independent or synced D/A playback (including HDMI/SPDIF/NET™) on compatible audio systems
- AccuEQ with AccuReflex™ and subwoofer EQ

AMPLIFIER FEATURES

- 200 W/Ch (6 ohms, 1 kHz, 10% THD, 1 channel driven), 90 W/Ch (8 ohms, 20 Hz–20 kHz, 0.08% THD, 2 channels driven, FTC)
- Onkyo Dynamic Audio Amplification (DAA)
- Discrete 2-stage non-phase-shift amplifier circuitry
- Custom High-Current Low-Noise Power Transformer
- Large custom-made audio-grade power capacitors
- Strengthened power supply line supports high-current dynamics
- Refined chassis, HDMI board, DAC, Digital/Analog inputs, power-amp grounds and power lines
- 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
- VLSC™ (Vector Linear Shaping Circuitry) filtering (Front L/R)
- 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 2.1⁷ specification including 8K/60p(4:4:4/12-bit⁸, 4:2:2/12-bit⁸, 4:2:0/10-bit), 8K/30p(4:4:4/12-bit⁸, 4:4:4/10-bit, 4:2:2/12-bit), 4K/120p(4:4:4/12-bit⁸, 4:4:4/10-bit, 4:2:2/12-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 technologies
- Hi-Res Audio playback via network and USB including DSD256, DSD128, DSD64 (DSDIFF/DSF) and 192 kHz/24-bit FLAC, ALAC, WAV (RIFF), and AIFF⁹
- SACD (Super Audio CD) playback via HDMI (2.8 MHz 2-ch/multichannel)
- Theater-Dimensional virtual surround-sound function
- 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 app¹⁰
- Works with Alexa supporting multi-room music¹¹
- Works with Hey Google and Chromecast built-in
- Supports Apple AirPlay 2 enabling Siri voice control
- DTS Play-Fi supports Critical Listening mode via Onkyo Music Control App¹⁰
- Control and manage multiroom playback with Onkyo Controller app¹⁰
- Room Tested certification for the Room Core
- IP Control for setup via PC and integration into a home automation system

CONNECTION FEATURES

- 6 HDMI inputs and 2 outputs (Main Out [eARC], Sub/Zone 2 Out)
- 2 digital audio inputs (optical and coaxial, assignable)
- 4 analog RCA audio inputs (assignable)
- 1 phono input with built-in MM phono equalizer
- 1/8" (3.5 mm) mic input for AccuEQ setup
- 1/4" (6.35 mm) headphone jack
- 2 subwoofer pre-outs
- Zone 2/Zone B analog RCA line-level out
- 9 banana-plug-ready speaker posts (including dedicated Zone 2 posts)
- 10BASE-T/100BASE-TX Ethernet terminal for network connection
- USB inputs (front:DC 5 V/500 mA, rear:DC 5 V/1 A) for audio playback

ADVANCED FEATURES

- AccuEQ Room Acoustic Calibration with AccuReflex and subwoofer EQ
- Bluetooth wireless technology supports 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
- Zone 2 DAC for independent D/A audio distribution (HDMI/SPDIF/NET)
- 7.2-ch/5.2.2-ch speaker layout connection with 5.2-ch + Zone 2 switching
- Zone 2 line-out¹² connects compatible components for independent or synced D/A playback (including HDMI/SPDIF/NET¹³)
- Zone B line-out¹² connects compatible wireless headphone docks for synced playback with MAIN Zone¹³
- Switch from Front L/R speakers to Height/Surround/Surround Back speakers using Stereo Assign Mode¹³ for BGM listening
- My Input Volume one-touch startup volume assignment to individual inputs
- High-definition GUI with overlaid OSD over HDMI
- 4K to 8K, 1080p to 8K/4K video upscaling via HDMI
- OSD function shows source data and playback settings
- 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 kHz¹⁴)
- 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 1–2 Sonos devices 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 streaming services depends on the respective technology and the country or region. *5 Some countries or regions have regulations that affect wireless signal-strength and use of Wi-Fi channels. *6 Features defined in HDMI 2.1 specification, HDR10+, and passthrough capabilities described are supported on HDMI inputs 1–3, Main Out, and Sub/Zone 2 Out in Sub Mode output. *7 When set to Zone 2 mode, HDMI audio is available on inputs 1–3; SPDIF and HDMI support 2-ch PCM signals only; and simultaneous playback of multiple audio sources is enabled. When set to Zone B mode, encoded and PCM audio playback for all inputs is enabled in MAIN and Zone B. *8 DSC (Display Stream Compression) signals only. *9 Supported sampling-rates may vary depending on network environment. DSD is converted to PCM upon playback. ALAC is supported to a maximum 96 kHz. *10 Available free for iPhone and iPad at the App Store, Available free for Android devices on Google Play. Please check device and OS requirements before installation. *11 Multi-room music may require a firmware update. *12 Zone 2 line-out and Zone B line-out are exclusive modes shared on the same analog RCA output. *13 Speaker-switching capabilities depend on the speaker layout. *14 Max. 400 ms (5 ms steps) at 96 kHz, and max. 200 ms (5 ms steps) at 192 kHz.

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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.

Note: Features defined in HDMI 2.1 specification, HDR10+, and passthrough capabilities described are supported on HDMI inputs 1-3, Main Out, and Sub/Zone 2 Out in Sub Mode output.

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 Tunes, 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. Sonos app available free for iPhone and iPad from the App Store, and for Android™ devices 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 from 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 AV 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.

** 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 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™ deliver 3D sound through any listener-level speaker layout. The technologies can work independently or with Dolby Surround® or DTS® Neural:X upmixers to create a 3D sound-field with any audio signal (excluding Dolby Atmos, DTS:X, and DTS® Express).

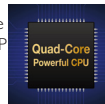
5 GHz/2.4 GHz dual-band Wi-Fi® supports the 802.11ac standard*

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 vocal level can be raised or lowered using keys on the remote control.



AccuEQ room acoustic calibration

Detects speaker size, crossover frequency, and distance from the listening position and sets appropriate sound-pressure levels. Sets crossover and EQs all speakers including the subwoofers. AccuReflex™ optimizes 3D sound through Dolby Atmos-enabled speakers by correcting phase 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.

Zone 2 outputs for powered multi-room audio

Deploy a 7.2-ch or 5.2.2-ch layout in MAIN with Zone 2 speakers connected via dedicated Zone 2 speaker posts and switch to 5.2-ch + Zone 2 playback anytime. Sync one source or play two sources (including analog, HDMI, SPDIF, and NET) in both rooms simultaneously.

Note: HDMI and SPDIF supports 2-ch PCM only. HDMI available on inputs 1-3. Output from Zone 2 line-out is enabled.

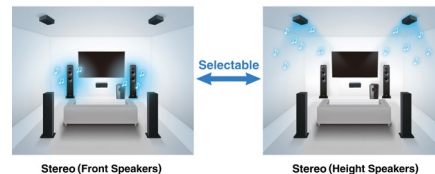
Multi-function Zone 2 or Zone B line-out

Analog RCA line-out terminal is served by a Zone 2 D/A converter and supports two Zone audio modes: Zone 2 supports active speaker or hi-fi system connection. Sync a source in MAIN and Zone 2, or play two unique sources simultaneously. Zone B suits wireless headphone docks. Enjoy MAIN Zone audio source through your wireless headphones.

Note: in Zone 2 mode, HDMI audio is available on inputs 1-3 and SPDIF and HDMI support 2-ch PCM signals only. In Zone B mode, encoded and 2-ch PCM audio (all inputs) is enabled in MAIN and Zone B.

Relax with Stereo Assign Mode

Stereo Assign Mode switches playback from Front to Height, Surround, or Surround Back speakers depending on your layout. Ideal for ambient background listening.



SPECIFICATIONS

Amplifier Section	
Power output (All channels)	200 W/Ch (6 ohms, 1 kHz, 10% THD, 1-ch driven) 90 W/Ch (8 ohms, 20 Hz-20 kHz, 0.08% THD, 2-ch driven, FTC)
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 rms/47 k-ohms (Line) 3.5 mV rms/47 k-ohms (Phono MM)
Rated RCA output level and impedance	1 V rms/470 ohms (Subwoofer pre-out) 200 mV rms/2.2 k-ohms (Zone 2/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, IIF-A) 80 dB (Phono, IIF-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)	635 W
Power consumption (idle)	65 W
Power consumption (standby)	0.1 W
Dimensions (W x H x D)	17 1/8" x 6 13/16" x 14 13/16" (435 x 173.5 x 379.5 mm)
Weight	21.6 lbs (9.8 kg)
UPC CODE	
(B)	88995 1003489
CARTON	
Dimensions (W x H x D)	21" x 10 7/16" x 18 7/16" (534 x 265 x 468 mm)
Weight	27.6 lbs. (12.5 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.

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