ONKYO®

TX-NR7100 9.2-Channel THX Certified Network A/V Receiver

SMART AV RECEIVER™

BLACK

THX CERTIFIED · IMAX ENHANCED · 8K4K · HDR10+ · COMPATIBLE WITH Dolby Vision · Dolby Atmos · dts X · DIRAC

Bluetooth · Wi-Fi CERTIFIED · Qualcomm® aptX™ HD · deezer · TIDAL · Spotify® · amazon music · TUNE IN

dts Play-Fi® · Chromecast built-in · Spotify · roon tested · Hi-Res AUDIO · dab+ · Dynamic Audio Amplification · VLSC

works with Ok Google · WORKS WITH alexa · Works with SONOS · POWERED ZONE 2 · POWERED ZONE 3 · ZONE 2 · ZONE B · ONKYO

A richer, better life in 8K Ultra HD

Turn your home into a living media sanctuary with 9.2-channel Dynamic Audio Amplification (DAA) supporting 3D surround-sound and powered multi-zone audio together with the SMART AV Receiver™ suite for effortless voice-controllable entertainment via a Google Assistant or Amazon Alexa enabled device. HDMI® supports 8K/60p and dynamic HDR (including HDR10+ and Dolby Vision™) passthrough to compatible TVs, projectors, or gaming monitors connected via eARC-ready Main Out. Be overwhelmed by the hyper-realistic THX® Certified Select reference experience, and explore the master-quality IMAX® Enhanced film library. Unique functions such as Front-to-Height stereo switching for ambient background listening, DSP vocal/dialog enhancement, and practical GUI functions simplify everyday operation. Whether you're gaming, watching a favorite TV series, or streaming Hi-Res Audio, a richer emotional life awaits inside the Onkyo signature sound.

PRODUCT HIGHLIGHTS

- 185 W/Ch THX® Certified Select DAA system
- IMAX® Enhanced certified for immersive signature sound by DTS:X®
- 5.2.4-ch/7.2.2-ch Dolby Atmos® and DTS:X playback
- Dirac Live® Room Correction
- AccuReflex phase-matching solution for Atmos-enabled speakers
- SMART AV Receiver™ Works with Sonos*1, Chromecast built-in™, AirPlay 2, and DTS Play-Fi®; includes Spotify®, Amazon Music HD*2, TIDAL, Deezer, and TuneIn streaming services*3
- Works with Ok Google or Alexa*4
- Stream over 5 GHz/2.4 GHz dual-band Wi-Fi® supporting the 802.11ac standard*5
- HDMI® inputs 1-3 and Main/Sub outpus 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*9 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 second display
- 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
- 5.2-ch Main + Powered Zone 2 + Powered Zone 3 speakers support synced/independent D/A audio playback (including HDMI/SPDIF/NET*6)
- Zone 2/Zone B line-out*7 (analog RCA) supports synced or independent D/A playback*8 on compatible audio systems or headphone docks

AMPLIFIER FEATURES

- 185 W/Ch (6 Ω, 1 kHz, 10% THD, 1 channel driven), 170 W/Ch (6 Ω, 1 kHz, 1% THD, 1 channel driven, IEC)
- THX Certified Select
- Certified for IMAX Enhanced
- 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 9 channels
- Precision 192 kHz/24-bit D/A conversion for Hi-Res Audio
- VLSC™ (Vector Linear Shaping Circuitry) noise filtering (Front L/R)
- PLL (Phase Locked Loop) anti-jitter technology for SPDIF audio
- Independent tone controls for all channels (excluding Zone 3)

VIDEO & AUDIO SUPPORT

- Supports features defined in HDMI 2.1*9 specification including 8K/60p(4:4:4/12-bit*10, 4:2:2/12-bit*10, 4:2:0/10-bit*11), 8K/30p(4:4:4/12-bit*10, 4:4:4/10-bit*11, 4:2:2/12-bit*11, 4:2:0/12-bit), 4K/120p(4:4:4/12-bit*10, 4:4:4/10-bit*11, 4:2:2/12-bit*11, 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 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 3D sound 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 AIFF*12
- SACD (Super Audio CD) playback via HDMI (2.8 MHz 2-ch/multichannel)
- IMAX Enhanced certified for immersive signature sound by DTS:X
- THX® listening modes for movies, music, and games
- 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 app*13
- Works with Alexa supporting multi-room music*14
- Works with Ok Google and Chromecast built-in
- Supports Apple AirPlay 2 enabling Siri voice control
- DTS Play-Fi supports Critical Listening mode via Onkyo Music Control App*13
- Control and manage multiroom playback with Onkyo Controller app*13
- Roon Tested certification for the Roon Core
- IP Control for AVR setup via PC and integration into a home automation system

CONNECTION FEATURES

- 7 HDMI inputs (1 front), 2 outputs (Main Out [eARC], Sub/Zone 2 Out)
- 1 component video input (assignable)
- 2 composite video inputs (assignable)
- 2 digital audio inputs (optical and coaxial, assignable)
- 6 analog RCA audio inputs (assignable)
- 3.5 mm mini-stereo analog input (front)
- 1 phono input with built-in MM phono equalizer
- 3.5 mm mic input for room acoustic correction setup
- 6.35 mm headphone jack
- 1 Front L/R speaker pre-out
- 2 subwoofer pre-outs
- Zone 2/Zone B analog RCA line-level out
- 9 speaker binding posts
- 10BASE-T/100BASE-TX Ethernet terminal for network connection
- USB input (DC 5 V/1 A) for audio playback (rear)
- RS-232C serial input and IR input for infrared repeaters
- 12 V trigger output (Main, 100 mA, assignable)
- AC inlet for detachable IEC power cord

ADVANCED FEATURES

- Dirac Live Room Correction for the full frequency range, 20Hz-20kHz
- 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
- Dedicated Zone 2 D/A converter supports simultaneous playback of independent sources (HDMI/SPDIF/NET)
- Zone 2 and Zone 3 speaker outputs enable 7.2-ch + Zone 2 / 5.2.2-ch + Zone 2 / 5.2.4-ch + Zone 2 + Zone 3 speaker connection and switching*12
- Zone 2 line-out*8 (analog RCA) connects compatible audio systems for independent D/A playback (HDMI/SPDIF/NET*9)
- Zone B line-out*8 (analog RCA) connects compatible wireless headphone transmitters for synced playback with MAIN Zone*8
- Front L/R pre-out supports external power amp connection
- Vocal Enhancer boosts vocals/dialog audibility via remote control or front panel keys
- Switch Front L/R speakers to Height 1/Height 2/Surround/Surround Back with Stereo Assign Mode*15 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 upscaling and 480i to 480p deinterlacing over HDMI
- OSD function shows Audio, Video and Network information
- FM and DAB/AM tuner with 40 random station memory presets
- 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*16)
- Various standby modes and HDMI pass-through
- 3-Mode display dimmer (Normal/Dim/Dimmer)
- Optional rack-mounting kit (IRK-155-3D)

*1 Requires a Sonos Connect or Port (sold separately). Connection of 1–3 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 Zone 3 supports analog/NET only. In Zone 2, HDMI and SPDIF support 2-ch PCM audio signals only, and HDMI audio is supported via HDMI inputs 1–3. Simultaneous playback of multiple audio sources is enabled. *7 Zone B and Zone 2 line-out modes are shared on the same analog RCA line-out terminal. *8 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 2-ch PCM audio playback for all inputs is enabled in MAIN and Zone B. *9 Features defined in HDMI 2.1 specification, HDR10+, and passthrough capabilities described are supported on HDMI inputs 1–6, Main Out, and Sub/Zone 2 Out in Sub Mode output. *10 DSC (Display Stream Compression) signals only. *11 DSC signals only when input via HDMI inputs 4–6. *12 Supported sampling-rates may vary depending on network environment. DSD is converted to PCM upon playback. ALAC is supported to a maximum 96 kHz. *13 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. *14 Multi-room music may require a firmware update. *15 Speaker-switching capabilities depend on the speaker layout. *16 Max. 400 ms (5 ms steps) at 96 kHz, and max. 200 ms (5 ms steps) at 192 kHz.

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THX® Certified Select cinema-reference sound

THX Certified Select guarantees the same reference volume of a commercial cinema in rooms where the screen-to-seat distance is about 3.5 m. Certified receivers must pass 2,000 bench-tests in 75 categories.

Discover the IMAX® experience

IMAX® Enhanced uses DTS:X® technology optimized for the IMAX signature experience and reproduces the full dynamic range of IMAX theatrical mixes. IMAX Mode delivers IMAX Enhanced content as the filmmakers intended. IMAX Enhanced films are available to stream or own on Ultra HD Blu-ray™.

IMAX ENHANCED

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 1–6, 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*, Spotify®, TIDAL, Deezer, and TuneIn, and works with Ok Google or Alexa. Share entertainment via Works with Sonos, AirPlay 2, DTS Play-Fi®, and Chromecast built-in.

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* Amazon Music HD is supported via DTS Play-Fi.

Works with Sonos

Expand your Sonos Home Sound System by pairing this AVR with up to three Sonos Connect or Port* devices. 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 Ok 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 on this and other supported devices 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 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 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. The TX-NR7100 supports 5.2.4-ch and 7.2.2-ch speaker layouts.

Enjoy 3D sound from any speaker layout

Dolby Atmos Height Virtualizer delivers 3D sound through any listener-level speaker layout. The technology works independently or with the Dolby Surround® upmixer to create a 3D sound-field.

Dirac Live® Room Correction

Dirac Live analyzes your audio system and listening environment by examining acoustic data measured by microphone and detecting deficiencies. It corrects both the timing and amplitude aspects of sound colorations using a mixed-phase correction filter throughout the listening area, not just a particular zone. Dirac Live automatically calibrates sound in your room using a smartphone or tablet* application and setup mic. Dirac Live unlocks your loudspeakers' full potential in any listening space and delivers a uniquely pristine listening experience.

DIRAC

* Device must be connected to the internet and the same network as your AVR.

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.

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.

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.

Three-Zone Whole Home Audio

Manage playback in up to three rooms using the Onkyo Controller app. This 9.2-ch AVR has a Zone 2 DAC supporting amplified D/A audio distribution (including HDMI, SPDIF, and NET) via Zone 2 and Zone 3 speaker posts, and supports layouts including 5.2.2-ch Main + Zone 2 or 5.2-ch + Zone 2 + Zone 3.

Note: Zone 3 supports analog/NET only. Zone 2 HDMI audio available on inputs 1–3. HDMI and SPDIF support 2-ch PCM audio signals only.

Multi-function Zone 2/Zone B line-out

Analog RCA line-out 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 D/A sources simultaneously. Zone B suits wireless headphone docks. Enjoy MAIN Zone audio 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 playback for all inputs is enabled in MAIN and Zone B.

Relax with Stereo Assign Mode

Stereo Assign Mode switches playback from Front to Height 1, Height 2, Surround, or Surround Back speakers (depending on your layout). It's ideal for ambient background listening.

Connections for custom installations

A 12 V trigger output syncs operation with an external component, such as a power amp, while IR input connects an IR repeater. Ethernet supports IP control for home automation and AVR configuration via PC browser. RS-232C control and OSD output are supported. Rack-mount kit is optionally available.

SPECIFICATIONS

Amplifier Section

Power output (All channels)	185 W/Ch (6 Ω, 1 kHz, 10% THD, 1-ch driven) 170 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 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, IHF-A) 80 dB (Phono, IHF-A)
Speaker impedance	4–16 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	
DAB (Europe)	174.928 MHz–239.2 MHz
FM	87.5 MHz–108 MHz
AM (Asia & Oceania)	522 kHz–1,611 kHz 530 kHz–1,710 kHz
FM/DAB/AM preset memory	40 stations

General

Power supply	AC 220–240 V~, 50/60 Hz
Power consumption (operating)	760 W
Power consumption (idle)	75 W
Power consumption (standby)	0.15 W
Dimensions (W x H x D)	435 x 173.5 x 379.5 mm
Weight	10.4 kg

CARTON

Dimensions (W x H x D)	534 x 265 x 468 mm
Weight	13.5 kg

Supplied Accessories

• Power cord • Indoor DAB/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/