

## TX-NR636 7.2-Channel Network A/V Receiver

Dolby Atmos Upgradable

BLACK | SILVER



## Bringing Next-Generation Entertainment to Your Home

The TX-NR636 wins prime position on your gear rack for three reasons. Firstly, it's among one of the few A/V receivers to support Dolby Atmos® multidimensional sound following a quick firmware update. Dolby Atmos very accurately places and moves sound around the cinema, including overhead, for a breathtakingly realistic movie experience. This receiver is also ready for Ultra HD streaming and 4K gaming at 60 fps with the latest 4K/60 Hz HDMI® inputs and HDCP 2.2 compatibility. Qdeo™ upscaling technology is included to convert low-res video into pin-sharp Full HD or Ultra HD. Secondly, it sounds incredible, with high-current Three-Stage Inverted Darlington Circuitry on the L/R/C channels for all-enveloping surround sound and musical two-channel audio. Thirdly, it's simple to use with Wi-Fi® and Bluetooth for universal audio streaming via PC, NAS, and mobiles, plus there's a huge selection of music streaming services waiting for you to explore. Overlaid menus with InstaPrevue™ technology make loading content quick and easy. Throw in a phono equalizer and Powered Zone 2 and you've got a value-packed powerhouse ready for the next wave of high-resolution entertainment.

## ADVANCED FEATURES

- Supports New Dolby Atmos® Format for Exciting Multidimensional Sound
- 4K/60 Hz-Capable HDMI® Terminals for Ultra HD Entertainment<sup>1</sup>
- Supports HDCP 2.2 for Future 4K/Full HD Video Streaming and Broadcast<sup>2</sup>
- Built-in Wi-Fi® Certified Wireless LAN Capability
- Bluetooth Version 2.1 + EDR Capability (Compatible Profile: A2DP v1.2, AVRCP v1.3) with Advanced Music Optimizer DSP Technology
- Three-Stage Inverted Darlington Circuitry for Front and Center Channels
- HDMI® Video Upscaling to 4K with Qdeo™ Processing Technology by Marvel
- Internet Radio and Music Streaming Subscription Services Included (TuneIn Radio, Pandora®, Spotify, AUPEO!, and Deezer)<sup>3</sup>
- Playback Compressed, Lossless, and Hi-res Audio via Local Network (MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, AAC, Apple Lossless, DSD 5.6 MHz, LPCM<sup>4</sup>, and Dolby® TrueHD)
- Proprietary AccuEQ Room Calibration with Mic Included
- Advanced Music Optimizer to Improve Compressed Digital Audio Quality (Bluetooth Included)
- Control and Stream with Free Onkyo Remote Streaming Apps for iPod touch/iPhone<sup>5</sup> and Android Devices<sup>6</sup>
- Frontside MHL™ for 1080p Video and Stills from Smartphone and Tablet
- Input Source Preview with InstaPrevue™ Technology
- PM Bass Boost for Deep Bass and Clear Mid-Range
- Powered Zone 2 and Zone 2 Line-Out for Distributed Audio Playback in Another Room
- Bi-Amping Capability for Front Channels

<sup>1</sup> 4K/60 Hz video is supported on HDMI inputs 1/2/3/4, the frontside input, Main Out, and Sub Out. <sup>2</sup> HDCP 2.2 is supported on HDMI Input 3 and Main Out only. <sup>3</sup> Availability of services depends on region. Some services may require a paid subscription and firmware update. Availability of third-party services advertised here is accurate at the time of publication, but may be subject to change without notice. <sup>4</sup> LPCM is supported via DLNA only. <sup>5</sup> Compatible with iPod touch (3rd generation or later) and iPhone 3GS or later. All models require iOS 4.2 or later. <sup>6</sup> Requires Android OS 2.1 or later.

## AMPLIFIER FEATURES

- 160 W/Ch (6 Ω, 1 kHz, 1% THD, 1 Channel Driven, IEC); 175 W/Ch (6 Ω, 1 kHz, 1 Channel Driven, JEITA)
- WRAT (Wide Range Amplifier Technology)
- H.C.P.S. (High Current Power Supply) Massive High Power Transformer
- Discrete Output Stage Circuitry
- Optimum Gain Volume Circuitry
- PLL (Phase Locked Loop) Jitter-Cleaning Circuit Technology for S/PDIF Audio

## PROCESSING FEATURES

- HDMI Support for 4K/60 Hz, 3D, Audio Return Channel, DeepColor™, x.v.Color™, LipSync, Dolby Atmos®, Dolby® TrueHD, DTS-HD Master Audio™, DVD-Audio, Super Audio CD, Multichannel PCM, and CEC
- Dolby® TrueHD and DTS-HD Master Audio™ Decoding
- TI Burr-Brown 192 kHz/24-Bit DAC (8 Channels x 1)
- Dual 32-Bit Digital Signal Processing Engines
- 4 DSP Modes for Gaming: Rock, Sports, Action, and RPG
- Theater-Dimensional Virtual Surround Function
- CinemaFILTER™
- Direct Mode
- Pure Audio Mode
- Double Bass Function
- Non-Scaling Configuration
- A-Form Listening Mode Memory

## CONNECTION FEATURES

- 7 HDMI Inputs (1 Front/6 Rear) and 2 Outputs
- USB Port (Front)
- Mass Storage Class USB Memory Playback Capability
- HDTV-Capable (720p/1080i) Component Video Switching (1 Input and 1 Output)
- 3 Composite Video Inputs and 1 Output
- 3 Digital Audio Inputs (1 Optical and 2 Coaxial)
- 6 Analog Audio Inputs
- Phono Input for Turntable Connection
- 2 Parallel Subwoofer Pre-Outs
- Color-Coded, Banana Plug-Compatible Speaker Posts

## OTHER FEATURES

- Crossover Adjustment for Each Channel (40/50/60/70/80/90/100/120/150/200 Hz)
- A/V Sync Control (Up to 400 ms in 10 ms Steps at 48 kHz)
- Graphical Overlaid On-Screen Display (OSD) via HDMI with Quick Set-Up and Home Menu
- Hybrid Standby Function with HDMI Passthrough
- Smart Grid-Ready
- Tone Control (Bass/Treble) for Front L/R Channels
- 3-Mode Display Dimmer (Normal/Dim/Dimmer)
- RDS (PS/RT/PTY/TP) (European Model Only)
- 40 FM/AM Random Presets
- Certified with DLNA Version 1.5
- Firmware Updates via Ethernet and USB
- RIHD (Remote Interactive Over HDMI) for System Control
- Preprogrammed RI (Remote Interactive) Remote Control



# TX-NR636 7.2-Channel Network A/V Receiver

## Dolby Atmos® Multidimensional Sound

Onkyo is among the first to introduce Dolby Atmos sound to home cinemas. Dolby Atmos uses object-oriented mixing techniques to layer independent audio elements through discrete channels, placing and moving sound effects above and around the listener with astonishing realism. The format adapts to any home cinema layout augmented by two or more in-ceiling height speakers or Dolby Atmos-enabled front speakers to bring sound alive from all directions.

## Future-Ready with the Latest HDMI®

Imagine playing the latest RPG blockbuster on your Ultra HDTV at a breathtaking 60 frames per second. Now add thunderous 7.2-channel surround sound from Onkyo. With HDMI terminals on your TX-NR636 receiver supporting 4K/60 Hz, this dream can be your reality. Even if you're not planning on upgrading your current display right away, it's good to know your receiver is ready for the future.

## Supports HDCP 2.2 for 4K Streaming and TV

With Hollywood studios, satellite TV broadcasters, and video streaming services announcing a move to HDCP 2.2 copy protection for future 4K and Full HD releases, it's important that your A/V receiver can handle this new standard. The TX-NR636 is one of the first A/V receivers to support HDCP 2.2, making it ready for next-generation Ultra HD streaming and broadcasting.

## 4K Video Upscaling with Qdeo™ Technology

The TX-NR636 features Qdeo™ technology from Marvell to upscale low-res video to liquid-smooth 1080p (for HDTV) and 4K (3840 x 2160 pixels) with a compatible display. This means video from older gaming consoles and DVD players looks clean and sharp, giving old favorites a new lease on life.

## Wi-Fi® and Bluetooth Inside

The TX-NR636 has Wi-Fi and Bluetooth technology built in. Complete the setup, download our control app, and you've got a graphic remote control and range of streaming features in the palm of your hand. Or pair your Bluetooth-capable device and stream almost any audio to your home cinema. With Advanced Music Optimizer enhancement, music via Bluetooth has never sounded so good.

## Stream Direct from Smartphone and Tablet

For lossless audio streaming, just tap on the Onkyo Remote App icon on your smartphone to find your music loaded and ready to stream with all the controls you're used to. The receiver can switch on and select your preferred playback mode automatically.

## Stream Network-Attached Hi-res Audio

Onkyo A/V receivers are engineered for universal hi-res compatibility and ease of use. Use the remote app to locate your 192/24 and 96/24 albums (including 5.6 MHz DSD playback) on PC or NAS and bask in the clarity, depth, and detail of high-resolution music.

## Built-in Internet Radio and Streaming

If you can think of it, you'll most likely be able to stream it. The receiver includes Spotify, AUPEO!, TuneIn, and now Deezer; the music subscription service available in over 200

countries and boasting a library of 30 million songs. You can search for available music using your free Onkyo remote app.

## Play Lossless Music from USB

The front-panel USB port also plays almost any audio format from mass-storage-class drives. As well as compressed files, there's support for FLAC, WAV, ALAC, Dolby® TrueHD (48 kHz), and DSD. You can also connect a PC, smartphone, or music player using one of the many digital and analog inputs.

## Engineered for High Fidelity

WRAT (Wide Range Amplifier Technology) is all about high current. You need it to stay in control when speaker impedance fluctuates, and to grip without clipping as the soundtrack explodes into action. We use a massive high-power transformer driving ultra-low-distortion Three-Stage Inverted Darlington Circuitry\*. Combined with high-resolution processing, the TX-NR636 packs a colossal punch for movies while retaining musicality for two-channel playback.

\* Front and center channels only.

## MHL™ for Mobile Device Connection

An HDMI/MHL terminal is included to connect smartphones and other electronic devices, allowing you to display 1080p video and other media on your HDTV with 7.1 channels of surround sound.

## Powered Multi-Zone Audio and Bi-Amping

Powered Zone 2 speaker terminals (and a Zone 2 line-out) let you power audio in another room equipped with stereo speakers. You can also assign surround back channels to bi-amp your front loudspeakers.

## Fast Switching and Adjustment

If you want to quickly adjust a speaker level, switch DSP modes, or change inputs, the "Q" remote control button does it in seconds by overlaying a simple transparent menu on screen. Use InstaPrevue™ technology to preview content playing on any HDMI-connected component—the overlaid video thumbnails are great for keeping an eye on a cable channel while you're watching a Blu-ray, for example, and also make video switching very clear and simple.

## AccuEQ Room Calibration

AccuEQ optimizes surround-sound and two-channel audio to suit your listening space. In particular, AccuEQ extracts the best possible performance from your front speakers to make stereo listening more dynamic and exciting. The system analyzes speaker setup and room acoustics from one listening position (which simplifies the calibration process) and optimizes frequency response and output levels for maximum clarity.

## SPECIFICATIONS

### Amplifier Section

<b>Power Output</b>	
All Channels	160 W/Ch (6 Ω, 1 kHz, 1% THD, 1 Channel Driven, IEC)
	175 W/Ch (6 Ω, 1 kHz, 1 Channel Driven, JEITA)
<b>Dynamic Power</b>	
	240 W (3 Ω, Front)
	210 W (4 Ω, Front)
	120 W (8 Ω, Front)
<b>THD+N (Total Harmonic Distortion + Noise)</b>	
	0.08% (20 Hz–20 kHz, Half Power)
<b>Damping Factor</b>	
	60 (Front, 1 kHz, 8 Ω)
<b>Input Sensitivity and Impedance</b>	
	200 mV/47 kΩ (Line)
	2.5 mV/47 kΩ (Phono MM)
<b>Rated RCA Output Level and Impedance</b>	
	200 mV/2.2 kΩ (Line Out)
<b>Maximum RCA Output Level and Impedance</b>	
	2.0 V/2.2 kΩ (Line Out)
<b>Phono Overload</b>	
	70 mV (MM, 1 kHz, 0.5%)
<b>Frequency Response</b>	
	5 Hz–100 kHz/±1 dB, -3 dB (Direct Mode)
<b>Tone Control</b>	
	±10 dB, 20 Hz (Bass)
	±10 dB, 20 kHz (Treble)
<b>Signal-to-Noise Ratio</b>	
	106 dB (Line, IHF-A)
	80 dB (Phono MM, IHF-A)
<b>Speaker Impedance</b>	
	4 Ω – 16 Ω or 6 Ω – 16 Ω

### Video Section

<b>Input Sensitivity/Output Level and Impedance</b>	
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)
<b>Component Video Frequency Response</b>	
	5 Hz–100 MHz/±0 dB, -3 dB

### Tuner Section

<b>Tuning Frequency Range</b>	
FM	87.5 MHz–108 MHz
AM	522 kHz–1,611 kHz
	530 kHz–1,710 kHz
<b>FM/AM Preset Memory</b>	
	40 Stations

### General

<b>Power Supply</b>	
	AC 220–240 V~, 50/60 Hz (Taiwan Model: AC 120 V, 60 Hz)
<b>Power Consumption</b>	
	630 W
<b>No-Sound Power Consumption</b>	
	75 W
<b>Standby Power Consumption</b>	
	0.15 W
<b>Dimensions (W x H x D)</b>	
	435 x 173.5 x 329 mm
<b>Weight</b>	
	10.5 kg

### CARTON

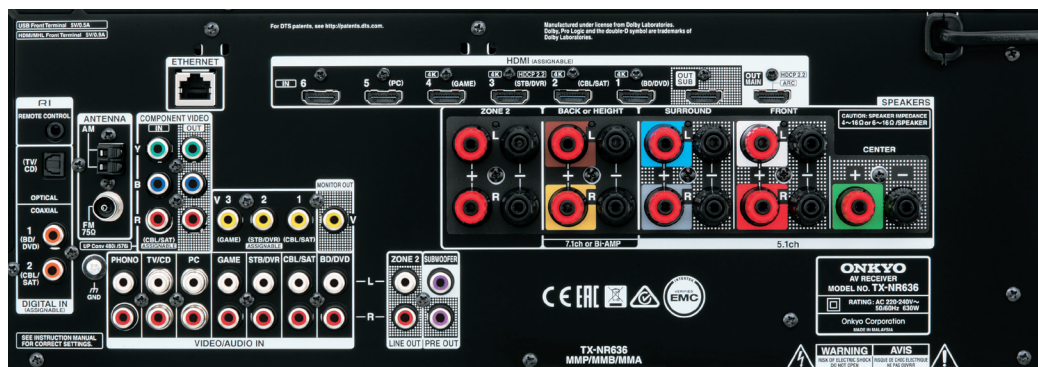
<b>Dimensions (W x H x D)</b>	
	570 x 297 x 423 mm
<b>Weight</b>	
	13.0 kg

### Supplied Accessories

• Indoor FM antenna • Antenna isolator\* • AM loop antenna • Color labels for speaker cables • Speaker setup microphone • Instruction manual • Remote controller • AA (R6) batteries\*\* x 2

\*Included with Chinese model only.

\*\*Not included with Chinese model.



Text on receiver may vary with region.

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