

# TX-NR515 7.2-Channel Network A/V Receiver

BLACK SILVER













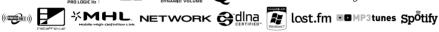




























### Feature-Loaded Network Receiver Offers Maximum Value for Money

The TX-NR515 receiver checks every box on your home cinema wishlist. In fact, we've over-delivered. Our acclaimed WRAT amplifier delivers room-filling sound through 7.2 channels with Dolby® Pro Logic® IIz expansion. Audyssey's 2EQ, Dynamic Volume®, and Dynamic EQ® systems are standard. A class-leading eight HDMI® inputs handle Dolby® TrueHD and Dolby DTS-HD Master Audio™, the latest games, and 3D movies; the front-panel HDMI Mobile High-Definition Link displays 1080p smartphone content; there are two HDMI outputs for connection of a TV and a movie projector; and Marvell's Qdeo™ technology upscales video to an astonishing 4K (4096 x 2160 pixels). Want music? There's home networking for playback of your multi-format PC-based library, and full integration of cloud streaming and internet radio services. You can connect your iPod, iPhone, or flash drive via USB and select tracks with the supplied remote controller. Input selection with InstaPrevue™ technology, overlaid OSD, multi-zone capability, and system control using iPod touch/iPhone and Android phone are all included. With the TX-NR515, the only thing missing is a hefty price tag.

#### **ADVANCED FEATURES**

- HDMI® Support for 3D, Audio Return Channel, DeepColor<sup>™</sup>, x.v.Color<sup>™</sup>, LipSync, Dolby<sup>®</sup> TrueHD, DTS-HD Master Audio<sup>™</sup>, DVD-Audio, Super Audio CD, Multichannel PCM, and CEC
- HDMI Video Upscaling to 4K with Qdeo™ Technology
- MHL™ (Mobile High-Definition Link) for Smart Phone Content on HDTV
- Direct Digital Connection of iPod/iPhone via Front-Panel USB Port
- Internet Radio and Cloud Music Streaming Service Connectivity (Last.fm, MP3tunes, Spotify, AUPEO!, Simfy, vTuner)\*
- Picture-in-Picture Input Source Preview with InstaPrevue™ Technology
- Playback of Audio Files Through Local Network
  (MP3,WMA,WMA Lossless, FLAC,WAV, Ogg Vorbis, AAC, LPCM)
- Supports Onkyo Remote Apps for iPod touch/ iPhone\*2 and Android Phone
- Dolby® Pro Logic® IIz for Expanded Surround
- Audyssey 2EQ for Room Acoustic Correction • Audyssey Dynamic EQ® for Loudness Correction
- Audyssey Dynamic Volume® to Maintain Optimal
- Listening Level and Dynamic Range
- Overlaid On-Screen Display (OSD) with Quick Set-Up and Home Menu

- Powered Zone 2 and Zone 2 Line-Out for Distributed Audio Playback in Another Room
- Hybrid Standby Function to Reduce Power Consumption
- \*I Availability of services depends on region. Some services may require firmware update. \*2 Compatible with iPod touch (3rd generation or late and iPhone 3GS or later. All models require iOS 4.2 or later. \*3 Requires Android OS 2 Lor later

#### **AMPLIFIER FEATURES**

- 130 W/Ch
- (6.9. LkHz, 1% THD, L Channel Driven, IEC) 160 W/Ch (6  $\Omega$ , I kHz, I 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

- TI Burr-Brown 192 kHz/24-Bit DACs for All Channels
- · Advanced 32-Bit Processing DSP Chip
- 4 DSP Modes for Gaming: Rock, Sports, Action, and RPG
- Advanced Music Optimizer for Compressed Digital
- Theater-Dimensional Virtual Surround Function
- CinemaFILTER
- Direct Mode and Pure Audio Mode

#### CONNECTION FEATURES

- 8 HDMI Inputs (I Front/7 Rear) and 2 Outputs
- 2 USB Ports (I Front/I Rear)
- Mass Storage Class USB Memory Playback Capability
- Compatible with Optional UWF-I Wireless LAN Adapter via USB
- HDTV-Capable (720p/1080i) Component Video Switching (I Input and I Output)
- 5 Composite Video Inputs (1 Front/4 Rear) and
- 4 Digital Audio Inputs (2 Optical and 2 Coaxial)
- 5 Analog Audio Inputs
- 2 Parallel Subwoofer Pre-Outs
- Color-Coded, Banana Plug-Compatible Speaker Posts (Except Zone 2)

#### OTHER FEATURES

- Independent Crossover Adjustment for Each Channel (40/50/60/70/80/90/100/120/150/200 Hz)
- A/V Sync Control (Up to 800 ms at 48 kHz)
- 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 Windows® 7 and DLNA Version 1.5
- Firmware Updates via Ethernet and USB
- RIHD (Remote Interactive over HDMI) for System
- Preprogrammed RI (Remote Interactive) Remote



#### Cloud-Based Audio Streaming and Internet Radio Over the Home Network

Connecting to the internet and your home PC via a local network, the TX-NR515 makes streaming audio and internet radio easy. You can also play MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, AAC, and LPCM audio files stored on your PC through your Onkyo system with stunning power and fidelity. The receiver offers access to internet radio channels from Last.fm and vTuner, plus cloudbased music streaming from Spotify, AUPEO!, Simfy, and MP3tunes\*. Internet connectivity has the added benefit of making firmware updates simpler than ever.

\*Availability of services depends on region. Some services may require a firmware

#### Mobile High-Definition Link for Smart Phone Movies and Photos on HDTV

The TX-NR515's front-panel HDMI port is designed for the connection of mobile phones and other portable electronic devices using the new MHL™ standard. MHL allows you to display full 1080p video and still images on your HDTV with up to 7.1 channels of surround sound. Use the receiver's remote to control playback from your phone as it receives a handy recharge.

#### InstaPrevue™ Technology Makes Switching Sources Easy

The TX-NR515 incorporates InstaPrevue visual port management technology, making input source selection much easier. InstaPrevue technology provides a live video thumbnail of the available content on your devices connected via HDMI. You no longer have to remember that your gaming console is connected to Port 3, or your Blu-ray player to Port 1, for example—you can see what's playing and choose accordingly.

#### Onkyo Remote Apps for iPod touch/iPhone and Android Phone

The Onkyo Remote App 2 for iPod touch/iPhone\*1 and Onkyo Remote for Android phone\*2 both provide an intuitive way to operate Onkyo network AVV receivers. Control input sources, adjust settings, and play audio stored in a smartphone wirelessly (Android phone only) using the application's interactive graphical display. The two Remote Apps are available separately as free downloads.

\*I Compatible with iPod touch (3rd generation or later) and iPhone 3GS or later.All models require iOS 4.2 or later, \*2 Requires Android OS 2.1 or later,

### Save Power with Hybrid Standby

Hybrid Standby provides 'HDMI through' functionality while the receiver sleeps, so you don't have to fully power up to watch a Blu-ray or play a game using just your TV's sound. The receiver also maintains a local network connection when on Hybrid Standby mode, so you can switch the unit on at any time using the Onkyo Remote Apps for iPod touch/iPhone and Android phone

#### 4K Video Upscaling and Processing via Qdeo™ Technology

The TX-NR515 offers full 4K (4096 x 2160) upscaling of standard video sources such as 480i/p, 720p, and 1080i/p. Interlaced-to-progressive conversion and scaling are performed by high-quality Qdeo technology from Marvell, Qdeo is a versatile video processor that uses algorithms designed to erase video noise and artifacts such as jaggies and feathering. Played back on a compatible wide-screen display, your Blu-ray Discs and DVDs will look more detailed and cinematic than ever.

Note: 4K video playback requires a 4K-compatible TV. HDMI pass-through of 4K content from source devices is not supported. 4K upscaling of analog video is only available at 480i.

#### WRAT (Wide Range Amplifier Technology) Delivers Higher Fidelity

Onkyo's WRAT concept was developed to improve signal-to-noise ratios, and enhance the fidelity of amplified audio. The technologies work to reduce noise across the frequency range, guaranteeing a clear, well-balanced performance. It does this by employing a low negativefeedback amplifier design; using "closed" ground-loop circuitry to cancel noise from individual circuits; and by ensuring high instantaneous-current capability to cancel reflex energy and impedance fluctuations from the speakers.

#### Overlaid On-Screen Display with Quick Set-Up Menu

The receiver's HDMI-linked On-Screen Display (OSD) makes initial set-up and in-program calibration very easy. The 'Q' button on your remote overlays a 'Quick Setup' menu on the program you're watching. This handy shortcut includes the most frequently used settings, and helps you optimize your home cinema's performance with the minimum of disruption. The 'Home' button accesses standard set-up menus for more detailed adjustment

### Dolby® Pro Logic® IIz for a More Enveloping

Pro Logic IIz creates a surround-sound experience from any movie or music source—even a stereo one. Pro Logic IIz also enables you to incorporate two "front height" speakers that carry ambient audio effects for games and movies.

## Audyssey Technologies Optimize Home Cinema

The TX-NR515 comes equipped with three soundenhancing Audyssey technologies.

(1) Audyssey 2EQ tailors multi-channel audio for your home theater speaker set-up by measuring three room positions and applying a resolution filter to the satellite speakers to correct for room acoustics.

(2) Audyssey Dynamic EQ® maintains a consistent bass response, tonal balance, and surround-sound effect at different volume levels, so you can enjoy the natural dynamics of your content regardless of the

(3) Audyssey Dynamic Volume® automatically compensates fo volume fluctuations in different audio content—for example, during commercial breaks—while optimizing the dynamic range.

#### **SPECIFICATIONS**

Power Output	
Front L/R	130 W/Ch (6 Ω, 1 kHz, 1%THD, 1 Channel Driven, IEC) 160 W/Ch
Center	(6 Ω, 1 kHz, 1 Channel Driven, JEITA) 130 W (6 Ω, 1 kHz, 1% THD, 1 Channel Driven, IEC) 160 W
Surround L/R	(6 Ω, 1 kHz, 1 Channel Driven, JEITA) 130 W/Ch (6 Ω, 1 kHz, 1% THD, 1 Channel Driven, IEC) 160 W/Ch
Surround Back L/F	(6 Ω, 1 kHz, 1 Channel Driven, JEITA) k, Front High L/R, or Zone 2 L/R 130 W/Ch (6 Ω, 1 kHz, 1%THD,
	I Channel Driven, IEC) 160 W/Ch (6 Ω, I kHz, I Channel Driven, JEITA)
Dynamic Power	180 W (3 Ω, Front)   160 W (4 Ω, Front)   100 W (8 Ω, Front)
THD+N (Total Harm	onic Distortion + Noise)
	0.08% (20 Hz–20 kHz, Half Power)
Damping Factor	60 (Front, I kHz, 8 Ω)
Input Sensitivity and I	mpedance
' '	200 mV/47 k <b>Ω</b> (Line)
Rated RCA Output L	evel and Impedance 200 mV/2.2 kΩ (Line Out)
Maximum RCA Outp	ut Level and Impedance
	2.0 \//2.2 \k\O. (Line Out)

#### Signal-to-Noise Ratio Speaker Impedance

Frequency Response

Tone Control

\			
'ideo Section			
put Sensitivity/O	utput Level and Impedance		
Video	I.0 Vp−p/75 Ω (Component Y)		
	0.7 Vp-p/75 Ω (Component PB/CB, PR/CR)		

±10 dB, 50 Hz (Bass)

100 dB (Line, IHF-A)

+10 dB, 30 kHz (Treble)

5 Hz=100 kHz/+1 dB, -3 dB (DSP Bypass)

1.0 Vp–p/75  $\Omega$  (Composite) Component Video Frequency Response

87.5 MHz-108 MHz
522 kHz-1,611 kHz
530 kHz-1,710 kHz
40 Stations
AC 230 V~, 50 Hz

	(Asian Model: AC 220-240 V~, 50/60 Hz)
Power Consumption	480 W (Asian Model: 540 W)
Standby Power Consum	ption
	0.2 W

Dimensions (W x H x D)  $435 \times 173.5 \times 328$  mm Weight 9.2 kg (Asian Model: 9.6 kg)

### 11.5 kg (Asian Model: 12.0 kg)

Dimensions (W x H x D) 570 x 297 x 423 mm

CARTON

- **Supplied Accessories** • Indoor FM antenna • AM loop antenna • Speaker cable labels • Speaker set-up microphone • Instruction manual • Quick start guide
- Remote controller AA (R6) batteries\* x 2



Due to a policy of continuous product improvement. Onlyo reserves the right to change specifications and appearance without notice. Manufactured under license from Dolby Laboratories. Dolby, Pro Logic, and the double-D symbol are trademarks of Dolby Laboratories. DTS, DTS-HD, the Symbol, & DTS or DTS-HD and the Symbol together are registered trademarks of DTS, inc. All rights reserved. Manufactured under license from Audyssey Laboratories, Inc. U.S, and foreign patents pending Audyssey Dynamic FQ, and Audyssey Dynamic Volume are registered trademarks of Audyssey Laboratories, Inc. HDMI, the HDMI logo, and High-Definition Multimeda Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries. HDMI of the Vision and States and the respirate of the Vision and States and States

