ONKYO
IMAGINATIVE SIGHT & SOUND

TX-NR708 7.2-Channel Network A/V Receiver

BLACK

Microphone for Audyssey

THX SELECT 2 PLUS · HDMI · DOLBY TRUE HD PRO LOGIC IIz · dts-HD Master Audio · AUDYSSEY · AUDYSSEY MULTEQ DYNAMIC VOLUME · FAROUDJA DCDi CINEMA · WRAT WIDE RANGE AMP TECHNOLOGY · 192kHz/24bit · POWERED ZONE 2

dlna CERTIFIED · Compatible with Windows 7 · vTuner · USB · 7.1 CH INPUT · RIHD · Theater-Dimensional · RI · Made for iPod iPhone

Adding Network Prowess to Awesome Mid-Range Functionality

As the first—and most affordable—of Onkyo's new-season network-capable A/V receivers, the TX-NR708 brings the audio goldmine of internet radio to your living room. Now you can kick back on the sofa and surf thousands of different channels on vTuner. With seven HDMI® 1.4a inputs, the TX-NR708 offers copious connection possibilities, as well as 3D video compatibility. For your convenience, one of the HDMI inputs is located on the front panel, along with a USB input for flash memory devices and iPod models. If you want to connect a non-HDMI multichannel component—say, a legacy SACD or DVD player—the TX-NR708 sports a full complement of 7.1-channel analog inputs. The Onkyo name connotes serious audio quality, so it's no surprise to find low-jitter Burr-Brown DACs and sophisticated Audyssey MultEQ® room-correction onboard, along with lossless HD audio formats and the expansive surround dimensions of Audyssey DSX™ and Dolby® Pro Logic® IIz. All of this processing and connectivity power receives the coveted THX® Select2 Plus™ stamp of approval.

HDMI® 1.4a Support for 3D Video and Audio Return Channel

The seven HDMI 1.4a inputs on the TX-NR708 let you simultaneously connect high-def sources such as a Blu-ray player, a gaming console, and a cable/satellite tuner. A single output then sends a pristine signal to your connected high-resolution display. As the latest version of this connector, HDMI 1.4a adds the exciting possibilities of 3D video and an Audio Return Channel. 3D video is the next big thing in home entertainment, with movie, game, and broadcast content on the increase and 3D-compatible TVs entering the market. The TX-NR708 also offers the convenience of an Audio Return Channel via HDMI. Audio content received directly by your HDTV's tuner can be sent "upstream" to your A/V receiver, without the need for a separate S/PDIF audio cable.

PC Audio and Internet Radio via Network Function with DLNA 1.5 and Windows® 7 Compatibility

As one of Onkyo's new breed of receivers that can link directly to the internet or to your home PC via a local network, the TX-NR708 takes streaming audio and internet radio to a whole new level. MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, AAC, and LPCM audio files—whether on your PC or from the internet—can now be played back through your main system with unprecedented power and fidelity. The TX-NR708 brings to life a huge array of internet radio channels through vTuner*. As well as being compatible with earlier platforms, the receiver is compatible with Microsoft's new Windows 7 platform, which includes the DLNA 1.5-specified "Play To" media-streaming feature.

Another benefit of having the TX-NR708 connected to the internet is that you can then easily update its firmware.

*Availability of services depends on region.

Audyssey DSX™ and Dolby® Pro Logic® IIz Add New Dimensions to Surround Sound

The TX-NR708 handles two new surround-sound technologies from Audyssey and Dolby that offer exciting new ways to set up the speakers in your home theater system. Audyssey DSX lets you incorporate "front wide" speakers, in place of the usual surround back speakers, to expand the width of the soundstage. Set up at a recommended 60° off center, these channels help to produce a more realistic soundstage and a more immersive listening experience. Alternatively, Audyssey DSX can reconfigure the TX-NR708's surround back channels to deliver "front height" channels. These channels carry ambient, non-directional audio that adds a new vertical dimension to your movies and games. Dolby Pro Logic IIz provides a similar front-height speaker option that likewise works to create a more enveloping home theater experience.

THX® Select2 Plus™ Certified

THX Select2 Plus certification is specified for rooms where the screen-to-seat viewing distance is 3 to 4 meters and the room volume is around 56 cubic meters. To achieve THX Select2 Plus certification, the TX-NR708 had to meet the world's most demanding standards for home theater audio quality and performance, and play at reference volume levels with minimal distortion.

TX-NR708 — 7.2-Channel Network A/V Receiver

HDMI Video Upscaling to 1080p with Faroudja DCDi Cinema™

When it comes to video processing, Faroudja DCDi Cinema offers several advantages. This processor can accept any video signal, regardless of the source resolution, and upscale it to 1080p to match the native resolution of your high-definition display. What's more, DCDi Cinema effectively removes video artifacts such as jagged edges during the video signal deinterlacing process. You get to enjoy smooth progressive scan video images, even for fast-moving sports and action scenes.

A Suite of Audyssey Technologies for the Ideal Listening Environment

(1) Audyssey MultEQ® measures and removes distortion caused by room acoustics and calibrates speakers for optimal listening throughout the room.

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

(3) 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 volume.

PLL (Phase Locked Loop) Jitter-Cleaning Circuit Technology

Jitter is an unwanted side-effect of the digital-to-analog conversion process. Caused by fluctuations in the time domain of a digital signal, jitter has a detrimental impact on perceived audio quality. PLL jitter-cleaning circuit technology reduces jitter by comparing the input and output phases of the digital signal and creating an accurate clock waveform. This enhances the precision of digital signal processing and noticeably improves audio quality. Jitter-cleaning technology works both for digital signals input via HDMI and for digital signals converted from analog signals inside the receiver itself.

Preprogrammed RI Remote Control with On-Screen Setup and Macro Presets for Four Activities

The TX-NR708's remote controller offers the convenience of controlling a wide range of other devices connected to the receiver. You can select your connected devices from the on-screen list and then pre-program your desired settings for each device. Furthermore, the TX-NR708 lets you set up macro presets for up to four activity modes, which you can control via mode-key LEDs on the remote controller. A single button-press of "My Movie", for example, can simultaneously turn on the receiver, display, and Blu-ray player to your pre-programmed settings and start playing a disc automatically.

ADVANCED FEATURES

- THX® Select2 Plus™ Certified
- HDMI® (Version 1.4a to Support 3D and Audio Return Channel) with Deep Color™, x.v.Color™, LipSync, Dolby® TrueHD, DTS-HD Master Audio™, DVD-Audio, Super Audio CD, Multichannel PCM, and CEC
- 7 HDMI Inputs (1 Front/6 Rear) and 1 Output
- Audyssey DSX™ and Dolby® Pro Logic® IIz for New Surround Channels
- PLL Jitter-Cleaning Circuit Technology
- Audyssey MultEQ® for Room Acoustic Correction

- Network Capability for Streaming Audio Files (MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, AAC, and LPCM)
- Internet Radio Connectivity Through vTuner*
- Certified with Windows® 7 and DLNA Version 1.5
- Firmware Updates via Ethernet and USB
- Front-Panel USB Input for Memory Devices and iPhone/iPod Models (Enables Display of Album Artwork)

*Availability of services depends on region.

AMPLIFIER FEATURES

- 185 W/Ch at 6 Ω, 1 kHz, 1 Channel Driven, JEITA
- WRAT (Wide Range Amplifier Technology)
- Three-Stage Inverted Darlington Circuitry
- H.C.P.S. (High Current Power Supply) Massive High Power Transformer
- Linear Optimum Gain Volume Circuitry

PROCESSING FEATURES

- Burr-Brown 192 kHz/24-Bit DACs (PCM1690) for All Channels
- Two 32-Bit Processing DSP Chips (DA830 and CS49834)
- Dolby® TrueHD, DTS-HD Master Audio™, Dolby® Digital Plus, DTS-HD High-Resolution Audio™ Decoding
- HDMI Video Upscaling to 1080p with Faroudja DCDi Cinema™
- 4 DSP Modes for Gaming: Rock, Sports, Action, and RPG
- Music Optimizer™ for Compressed Digital Music Files
- Direct Mode and Pure Audio Mode
- A-Form Listening Mode Memory
- Theater-Dimensional Virtual Surround Function

CONNECTION FEATURES

- Universal Port for Single-Cable Connection of Optional Onkyo Dock for iPhone/iPod
- Component Video Switching (2 Inputs and 1 Output)
- 4 S-Video Inputs and 2 Outputs
- Analog RGB Video Input (D-sub, 15 pin) and Audio Input for PC
- Front-Panel Audio Input for Portable Devices
- 5 Digital Inputs (2 Optical and 3 Coaxial)
- 5 A/V Inputs (1 Front/4 Rear) and 1 Output
- Color-Coded, 7.1 Multichannel Inputs
- Video Output (Monitor)
- 1 Audio Input
- Phono Input
- Color-Coded, 7.2 Multichannel Pre Outs
- Powered Zone 2 and Zone 2 Line-Out for Distributed Audio Playback in Another Room
- RS232 Port, IR (Input), and 12 V Trigger Out (Zone 2)
- Bi-Amping Capability
- Color-Coded, Banana Plug-Compatible Speaker Posts
- RIHD (Remote Interactive over HDMI) for System Control

OTHER FEATURES

- Overlaid Graphical On-Screen Display (OSD) via HDMI
- Audyssey Dynamic Volume™
- Audyssey Dynamic EQ® for Loudness Correction
- Crossover Adjustment (40/50/60/70/80/90/100/120/150/200 Hz)

- A/V Sync Control Function (Up to 250 ms in 5 ms Steps)
- 40 FM/AM Random Presets
- Compatible with RI (Remote Interactive) Dock for iPod
- Preprogrammed and Customizable RI Remote Control with On-Screen Setup, Mode-Key LEDs, and Macro Presets for Four Activities

SPECIFICATIONS

AMPLIFIER SECTION

Power Output

Front L/R	185 W/Ch (6 Ω, 1 kHz, 1 channel driven, JEITA)
Center	185 W (6 Ω, 1 kHz, 1 channel driven, JEITA)
Surround L/R	185 W/Ch (6 Ω, 1 kHz, 1 channel driven, JEITA)
Surround Back L/R, Front High L/R, Front Wide L/R, or Zone 2 L/R	
	185 W/Ch (6 Ω, 1 kHz, 1 channel driven, JEITA)

Dynamic Power	250 W (3 Ω, Front)
	220 W (4 Ω, Front)
	130 W (8 Ω, Front)
THD (Total Harmonic Distortion)	
	0.08% (Rated power)
Damping Factor	60 (Front, 1 kHz, 8 Ω)
Input Sensitivity and Impedance	
	200 mV/47 kΩ (Line)
	2.5 mV/47 kΩ (Phono MM)
Rated RCA Output Level and Impedance	
	200 mV/470 Ω (Pre out)
Maximum RCA Output Level and Impedance	
	4.6 V/470 Ω (Pre out)
Phono Overload	70 mV (MM, 1 kHz, 0.5%)
Frequency Response	5 Hz–100 kHz/+1 dB, -3 dB (DSP bypass)
Tone Control	±10 dB, 50 Hz (Bass)
	±10 dB, 20 kHz (Treble)
Signal-to-Noise Ratio	106 dB (Line, IHF-A)
	80 dB (Phono, IHF-A)
Speaker Impedance	4 Ω–16 Ω or 6 Ω–16 Ω

VIDEO SECTION

Input Sensitivity/Output Level and Impedance	
Video	1.0 Vp–p/75 Ω (Component and S-Video Y)
	0.7 Vp–p/75 Ω (Component P_B/C_B, P_R/C_R)
	0.25 Vp–p/75 Ω (S-Video C)
	1.0 Vp–p/75 Ω (Composite)
Component Video Frequency Response	
	5 Hz–100 MHz/0 dB, -3 dB

TUNER SECTION

Tuning Frequency Range	
FM	87.5 MHz–108 MHz
	87.5 MHz–107.9 MHz
AM	522 kHz–1,611 kHz
	530 kHz–1,710 kHz
FM/AM Preset Memory	
	40 stations

GENERAL

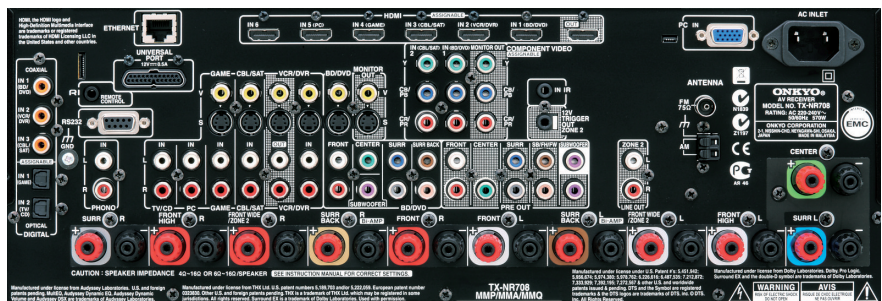|	
Power Supply	AC 220–240 V~, 50/60 Hz
	AC 120 V~, 60 Hz
Power Consumption	570 W
Dimensions (W x H x D)	435 x 175 x 379 mm
Weight	12.5 kg

■ CARTON

Dimensions (W x H x D)	570 x 298 x 469 mm
Weight	15.5 kg

■ 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

*Not included with Chinese model.

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