

Onkyo TX-NR656

Onkyo TX-NR656 7.2 Channel Network A/V Receiver User Manual

Model: TX-NR656 | Brand: Onkyo

INTRODUCTION

This manual provides comprehensive instructions for the setup, operation, and maintenance of your Onkyo TX-NR656 7.2 Channel Network A/V Receiver. Please read this manual thoroughly before using the receiver to ensure proper and safe operation.



Figure 1: Front view of the Onkyo TX-NR656 A/V Receiver, showcasing its sleek black finish and front panel controls.

SETUP GUIDE

1. Unpacking and Placement

Carefully remove the receiver from its packaging. Ensure all accessories are present, including the remote control, AAA batteries, indoor FM antenna, AM loop antenna, and speaker setup microphone. Place the receiver on a stable, level

surface with adequate ventilation to prevent overheating. Avoid placing it near heat sources or in direct sunlight.

2. Connecting Your Components

The TX-NR656 offers extensive connectivity options. Refer to the rear panel diagram for proper connection of your audio and video devices.





Figure 2: Rear panel of the Onkyo TX-NR656, illustrating various input and output ports for audio, video, and network connections.

- **HDMI Connections:** Connect your HDMI-compatible devices (e.g., Blu-ray player, game console, cable box) to the 8 HDMI inputs (1 front, 7 rear). Connect your TV or projector to one of the 2 HDMI outputs. This receiver supports 4K/60 Hz, 3D, Audio Return Channel (ARC), Deep Color, x.v.Color, Lip-sync, HDCP 2.2, and HDR.
- **Speaker Connections:** Connect your speakers to the appropriate terminals. The receiver supports 7.2 channel configurations and bi-amping for front channels. Ensure correct polarity (+ to + and - to -).
- **Network Connection:** For network features and streaming, connect an Ethernet cable to the LAN port or use the built-in Wi-Fi.
- **Audio Inputs:** Utilize various audio inputs including digital (optical/coaxial), analog RCA, and a dedicated Phono input for turntables.

3. Initial Power On and Speaker Calibration

After connecting all components, plug the receiver into a power outlet. Use the supplied speaker setup microphone and the receiver's on-screen display (OSD) to perform automatic speaker calibration (AccuEQ). This optimizes sound settings for your specific room acoustics and speaker placement.

OPERATING YOUR RECEIVER

1. Basic Operation

Press the **ON/STANDBY** button on the front panel or remote control to power on the receiver. Use the input selector buttons (e.g., BD/DVD, CBL/SAT, GAME) to switch between connected devices.



Figure 3: Angled view of the Onkyo TX-NR656, highlighting its front panel layout and large volume knob.

2. Audio and Video Playback

- **Streaming Services:** Access built-in services like Spotify, Tidal, Pandora, and Deezer via network connection.
- **Wireless Connectivity:** Utilize built-in Wi-Fi, Google Cast, AirPlay, and Bluetooth for seamless audio streaming from compatible devices.
- **Hi-Res Audio:** The AK4458 384 kHz/32-bit DAC supports playback of compressed, lossless, and Hi-Res Audio formats including MP3, WMA, FLAC, WAV, AAC, Apple Lossless, DSD 5.6 MHz, and Dolby TrueHD.
- **Surround Sound:** Experience immersive audio with DTS:X and Dolby Atmos decoding.

3. Remote Control and Mobile App

The receiver comes with a dedicated remote control for convenient operation. Additionally, Onkyo provides a mobile app for iOS and Android devices, allowing you to control the receiver from your smartphone or tablet via your home network. This app offers comprehensive control, including input selection, volume adjustment, and access to network features.



Figure 4: The Onkyo RC-911R remote control, providing direct access to various functions and input sources.

MAINTENANCE

To ensure the longevity and optimal performance of your Onkyo TX-NR656 receiver, follow these maintenance guidelines:

- **Cleaning:** Gently wipe the exterior surfaces with a soft, dry cloth. Do not use abrasive cleaners or solvents. Ensure ventilation openings are free from dust and obstructions.
- **Firmware Updates:** Periodically check for firmware updates via the receiver's network connection. Updates can improve performance, add features, and resolve issues. Refer to the on-screen menu for update procedures.

TROUBLESHOOTING

If you encounter issues with your Onkyo TX-NR656, refer to the following common troubleshooting tips. For more detailed solutions, consult the full user manual available as a PDF.

- **No Power:** Ensure the power cord is securely plugged into both the receiver and a working electrical outlet.
- **No Sound:**
 - Check speaker connections and ensure they are securely fastened.
 - Verify the correct input source is selected.
 - Adjust the volume level.
 - Ensure speakers are not muted or in a protection mode.
- **No Picture:**
 - Confirm HDMI cables are properly connected to both the source device and the TV/projector.
 - Ensure the correct HDMI input is selected on the receiver and the TV.
- **Network Connection Issues:**
 - Restart your router and the receiver.
 - Verify Wi-Fi password if using wireless connection.
 - Check Ethernet cable connection if using wired.

SPECIFICATIONS

Key technical specifications for the Onkyo TX-NR656 A/V Receiver:

Feature	Detail
Power Output	170 W/Ch (6 Ohms, 1 kHz, 0.9% THD, 1 Channel Driven, FTC); 100 W/Ch (8 Ohms, 20 Hz-20 kHz, 0.08% THD, 2 Channels Driven, FTC)
DAC	AK4458 384 kHz/32-bit
HDMI Inputs/Outputs	8 Inputs (1 Front/ 7 Rear) / 2 Outputs (4K/60 Hz, HDCP 2.2, HDR support)
Wireless Connectivity	Built-in Wi-Fi, Bluetooth, Google Cast, AirPlay

Supported Streaming Services	TuneIn Radio, Pandora, Spotify, Tidal, Deezer
Surround Sound Formats	Dolby Atmos, DTS:X, Dolby TrueHD, DTS-HD Master Audio
Dimensions (W x H x D)	435 x 201.5 x 395 mm (17.1 x 7.9 x 15.6 inches)
Weight	14.0 kg (30.9 lbs)
Included Accessories	Indoor FM antenna, AM loop antenna, Speaker setup microphone, Remote controller, AAA (R03) batteries x 2

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Onkyo website or contact Onkyo customer service directly. Keep your proof of purchase for warranty claims.

A detailed user manual in PDF format is available for download:

[Download User Manual \(PDF\)](#)