<u>ONKYO</u>

# TX-8390 Network Stereo Receiver



# Premium audio-video features with a hi-fi focus

This luxuriously appointed component fits a wealth of audio-video capabilities into robust stereo architecture, energizing TV entertainment, games, and music with 200 W + 200 W of speaker-driving power. The linage of the Onkyo Pure Hi-Fi family is reflected in the 5 mm-thick aluminum front panel and controls, custom power supply, and dual 10,000 µF capacitors. Quad-core SoC supports a multi-technology audio platform over 802.11ac 2x2 MIMO Wi-Fi® including Chromecast built-in, AirPlay 2, and DTS Play-Fi®. The receiver is Works with Sonos and Works with Alexa certified, and can be controlled by voice using Siri, Google Assistant, and Alexa-enabled devices. Popular music-streaming services are built in. Bluetooth® wireless technology, phono input, and Hi-Res Audio support including MQA expand your entertainment possibilities even further.

# **PRODUCT HIGHLIGHTS**

- 200 W + 200 W Dynamic Audio Amplification
- Works with Sonos, Chromecast built-in, DTS Play-Fi<sup>®</sup>, AirPlay 2, FlareConnect<sup>104</sup>, Spotify<sup>®</sup>, Amazon Music, TIDAL, Deezer, Tuneln<sup>\*2</sup>
- Control audio playback by voice using Google Assistant or Siri enabled devices
- Works with Alexa<sup>\*3</sup> and the Google Assistant • Hand-selected high-grade parts throughout with luxurious industrial design
- Large HDMI<sup>®</sup> grounds and isolated SoC
- Quad-core SoC supports 802.11ac (2x2 MIMO) Wi-Fi®4
- HDMI supports 4K/60p, 4K HDR, BT.2020, HDCP 2.3
- My Input preset selector with volume, tone/balance, and sound-mode memory
- AccuEQ Stereo with Subwoofer EQ • FM/RDS and DAB+ radio with 40-station
- memory presets

# AMPLIFIER FEATURES

- 200 W/Ch (6 Ω, I kHz, 10% THD, 2 channels driven), 180 W/Ch (6 Ω, I kHz, 1% THD, 2 channels driven, IEC)
- Customized High-Current Low-Noise Power Transforme
- Custom 10,000 µF high-current smoothing capacitors
- Non-phase-shift amp topology with discrete output stage · Dual output transistors on each channel support high
- current delivery · Anti-resonant extruded aluminum heat-sink with black
- alumite coating Large HDMI grounds and short signal-paths reduce noise
- AKM (AK4458) DAC supports 384 kHz/32-bit D/A conversion
- VLSC<sup>™</sup> (Vector Linear Shaping Circuitry) noise-filtering • PLL (Phase Locked Loop) anti-jitter technology for SPDIF audio
- Pure Audio Mode for flawless analog sound

# **VIDEO & AUDIO SUPPORT**

- Supports HDCP 2.3, 4K/60p, HDR (Dolby Vision™ HDR10, HLG), BT.2020, 4:4:4/24-bit, 3D Video, ARC (Audio Return Channel), DeepColor™, x.v.Color, and LipSync via HDMI pass-through
- 1080p to 4K Super Resolution upscaling via HDMI
- Supports Hi-Res Audio formats including MQA<sup>+5</sup>, DSD256, DSD128, DSD64 (DSD converted to 176.4 kHz/24-bit PCM); FLAC, WAV [RIFF], AIFF to 192 kHz/24-bit; and ALAC to 96 kHz/24-bit<sup>-6</sup>

## NETWORK FEATURES

- Supports multi-room streaming, internet streaming services, and Onkyo Controller<sup>\*7</sup> remote streaming app
- Works with Alexa (future firmware update required) Works with Sonos for the Sonos Home Sound System<sup>18</sup>
- · Chromecast built-in and voice control\*9 with the
- Google Assistant · AirPlay 2 multi-room audio and voice control\*10 with Siri
- DTS Play-Fi multi-room audio via Onkyo Music Control App\*7
- Quad-core SoC supports multiple processing functions including 802. I Iac (2x2 MIMO) 5 GHz/2.4 GHz Wi-Fi

# CONNECTION FEATURES

- 6 HDMI inputs and 2 outputs (Main [ARC], Sub/Zone 2)
- 3 digital audio inputs (2 optical and 1 coaxial, assignable) • 4 analog RCA inputs (assignable)
- · Phono input with built-in MM equalizer for
- turntable connection
- 3.5 mm setup mic input for AccuEQ Stereo (front)
- 6.35 mm headphone jack (front)
- Front L/R pre-out (analog RCA, shared with Zone 2 line-out)
- Zone 2 line-level output (analog RCA) • 2 subwoofer pre-outs
- 4 transparent gold speaker-posts (Speaker A+B) • Bi-directional Ethernet LAN terminal for IP control
- · I front USB input (no power on standby) for
- audio playback
- I rear USB input (5 V/I A including in Network Standby) IR (infrared) input/output for remote-control extenders
- RI (Remote Interactive) terminal for integrated control
- AC socket for detachable IEC power cord

# ADVANCED FEATURES

- · Bi-wire compatible loudspeakers for pristine mids and highs
- 5 mm-thick extruded aluminum front panel
- Aluminum volume and tone controls, balance, My Input, input selector, and cursor key
- My Input selector saves four input presets with listening mode, tone/balance, and volume
- FM/RDS and DAB+ tuners with 40-station memory presets
- GUI with OSD includes transparent A/V input/output information overlay to check playback conditions without program interruption
- Sub/Zone 2 HDMI output with modes supporting simultaneous distribution of the same or different video sources\*11
- A/B or A+B Speaker Drive plays an audio source through either or both pairs of connected speakers  $(8-16 \Omega \text{ speakers required for A+B drive})$
- AccuEQ Stereo with Subwoofer EQ Bluetooth<sup>®</sup> Ver. 4.2 wireless technology (SBC/AAC)
- Advanced Music Optimizer improves playback quality of compressed audio files
- Zone 2 line-out with Zone 2 DAC connects compatible audio systems for synced/independent D/A playback (including HDMI/SPDIF)\*12 in Main and Zone 2
- A/V Sync Control (up to 500 ms in 5 ms steps at 48 kHz)  $\bullet$  IP web browser control, support for AMX  $^{\otimes}$  and Control4  $^{\otimes}$  home automation
- 3-Mode display dimmer (Normal/Dim/Dimmer)
- Chic new slimline Simple Remote Control

• Chic new similar Simple Remote Control I. FareConnect is a proprietary network protocol that shares select audio sources between supported components. Please wisk the Onlyw website for product compatibility information. "2 Availability of services varies with region and services may require a paid subscription. "3 future Immare update required. "4 Some countries or regions have regulations that affect wireless signal strength and the use of Wi-Fi channels. "5 When playing WQA files, inrespective of the setting of the Direct function the Direct function is automatically enabled at all times. "6 DSD playback over the wireless home network cannot be guaranteed. Supported sampling rates may vary depending on the network environment. "7 Available free at the App for iPhone and Playd. and on Google Play store for Android devices. Please check device and OS requirements before installation. "8 Requires a Sonos Connect (gold separately). "9 Voice control requires a device featuring the Google Assistant. \*10 Voice control requires a device facturing the Google Assistant. \*10 Voice control requires a device facturing the Google Assistant. \*10 Voice control requires a device facturing the Google Assistant. \*10 Voice control requires a device facturing the Google Assistant. \*10 Voice control requires a device facturing the Google Assistant. \*10 Voice control requires a device facturing the Google Assistant. \*10 Voice control requires a device facturing the Google Assistant. \*10 Voice control requires a device facturing the Songle Simultaneously from MAIN OUT and Sub/Zone 2 Out. Input signals are Imired to HDMI inputs to both displays simultaneously via MAIN OUT and Sub/Zone 2 Out. \*10. Zone 2 2 mode - HDMI audio is available via HDMI inputs 1–3. SPDIF and HDMI support PCM signals only. Simultaneous playback of multiple audio sources is enabled.



## Connect your sources to sublime sound

Crafted in exacting detail to tempt hi-fi enthusiasts, the TX-8390 has connections to amplify all forms of TV-based entertainment, music, and audio sources. Inputs include HDMI®, analog and SPDIF audio, phono, Wi-Fi®, Bluetooth® wireless technology, and USB audio. A companion smartphone app gathers multi-room audio, streaming service management, and playback controls into one simple interface. GUI with transparent OSD simplifies setup and operation.

# Dynamic Audio Amplification

DAA is our original amplification system. It's been refined over decades to reproduce the source as-is while freeing the emotion in music. Compelling sound is achieved by tuning each custom part by ear, so the amp not only measures well, but sounds amazing too. Fast dynamics, wide frequency response, and an earth-shaking 200  $\overset{\cdot}{\mathsf{W}}$  + 200  $\overset{\cdot}{\mathsf{W}}$  of analog power are realized with a high-current drive and original amp topology. High current improves speaker control, extending driver travel to articulate the entire sound-wave while tracking each note with absolute precision.

## Original custom-built components

Parts such as the High-Current Low-Noise Power Transformer and 10,000  $\mu\text{F}$  high-current smoothing capacitors are fabricated to Onkyo's exclusive specification. Two transistors on the voltage-amplification stage of each power amp circuitry boosts current for deep, powerful bass, while the non-phase-shift amp topology focuses sound through layers of finely resolved detail. And the extruded aluminum heat sink, which has heat-dissipating anodized coating, helps suppress vibration together with the 5 mm-thick aluminum front panel This material is complemented by aluminum controls with a firm, fine actuation.



# Built to limit noise

A number of measures contribute to excellent S/N performance. HDMI board features short signal-paths and well-finished grounds to assure clean potential. The SoC is isolated to reduce interference on analog signals. VLSC output-filter circuitry, meanwhile, erases ultra-high-frequency pulse-modulation noise. The result is clearer sound, improved instrument separation, and a large, airy soundstage

#### Personalized listening with My Input

My Input front-panel selector gives easy access to any four inputs you choose. Save your desired start-up volume, listening mode, and tone settings to each so your audio starts playing exactly how you like it in seconds



# Hi-Res Audio in PCM, MQA, or DSD formats

D/A conversion by AKM supports Hi-Res Audio playback up to 384 kHz/32-bit as well as DSD256, DSD128, and DSD64. The receiver also includes MQA technology, which enables you to play back MQA audio files and streams, delivering the sound of the original master recording. Albums in MQA can be streamed from supported online services or downloaded to USB memory or PC/NAS and played back via the TX-8390. Note: DSD is converted to PCM. When playing MQA files, irrespective of the setting of the Direct function, the Direct function is automatically enabled at all times.

## Enjoy your choice of multi-room audio platform

The TX-8390 is the heart of your home entertainment. Streaming content from Amazon Music, Spotify®, TIDAL, Deezer, and Tuneln can be shared to the TX-8390 and other supported speakers as part of a multi-room system via Works with Sonos, Chromecast built-in, AirPlay 2, DTS Play-Fi®, and FlareConnect<sup>™</sup>. Alternatively, you can bring a world of high-quality digital radio to your living space with built-in DAB+/FM radio with station presets for instant enjoyment.

#### Chromecast built-in with the Google Assistant

Stream any music from your smartphone, laptop, or PC to the receiver with ease. Control playback with Chromecastenabled apps you know and love from your Android phone or tablet, Chromebook, Windows® PC, or iPhone, iPad, or Mac. If you have a device with the Google Assistant, you can find, play, and control music through this and other supported components just by using your voice.

#### Works with Alexa

Alexa lets you use your voice to control TX-8390 by directing your requests through an Alexa-enabled device. Just ask your Alexa-enabled device, such as an Amazon Echo, to play, pause, and skip titles or control the volume. You can enjoy music playback via Amazon Music and make selections by song title, artist name, release year, or genre. Note: Requires a future firmware update

#### Works with Sonos

The TX-8390 can fit seamlessly with your Sonos Home Sound System: just pair it with a Sonos Connect. The receiver wakes, changes inputs, and plays at the desired volume on command from the Sonos app.

Note: Sonos Connect sold separately. Sonos app is available free for iPad, iPhone, and Android at the App Store and Google Play.

# Music by voice with AirPlay 2 and Siri

AirPlay is an Apple technology designed to control home audio systems and speakers in any room — with a tap or by just asking Siri — right from iPhone, iPad, HomePod, or Apple TV

#### Quad-core SoC supports 802. I lac Wi-Fi®

A guad-core SoC (System on a Chip) processes multiple tasks at once and evolves network functions with support for the high-speed 802.1 I ac 2x2 MIMO 5 GHz/2.4 GHz Wi-Fi® Note: Some countries or regions have regulations that affect wireless signal strength and the use of Wi-Fi channels. Performance will vary depending on environment.

#### AccuEQ Stereo with Subwoofer EQ

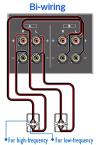
This is the first Onkyo hi-fi receiver to benefit from AccuEQ room-acoustic calibration, a technology developed for our multichannel A/V receivers. AccuEQ creates a harmonious sound-field even if your speakers aren't optimally placed. After detecting speaker size and distance from a measurement position and setting sound-pressure levels, the system selects a subwoofer crossover and applies EQ. Enjoy the ideal listening environment akin to a treated audio listening room.

#### HDMI Sub/Zone Out modes

The second HDMI output has two modes. Zone 2 mode shares video from players connected to the receiver to a second TV and you can watch the same or different content on either screen. In this mode, the sub display can access video from HMDI inputs 1-3 only. Sub Out mode is ideal for projector connection, as it supports signals from all HDMI inputs. Sub Out can play a single source to either or both displays simultaneously.

#### Speaker A/B Drive

Speaker A/B Drive lets you connect two pairs of speakers at once. Switch between the speakers you prefer for hi-fi music listening and those for general entertainment. Or place speakers in a different area and switch playback to that room (or both). Alternatively, speaker terminals can be used to bi-wire compatible loudspeakers for potential gains in mid- and high-range sound.



# **SPECIFICATIONS**

Amplifier Section	
Power output	200 W/Ch
	(6 Ω, 1 kHz, 10%, 2 channels driven)
	180 W/Ch
	(6 Ω, 1 kHz, 1% THD, 2 channels driven, IEC)
Dynamic power	300 W (3 Ω, Front)
,	250 W (4 Ω, Front)
	150 W (8 Ω, Front)
THD+N (Total Harmonic	Distortion + Noise)
	0.08% (20 Hz–20 kHz, half power)
Input sensitivity and imped	
input sensitivity and imped	200 mV rms/47 kΩ (Line)
5	
Rated RCA output level a	
	I V rms/470 Ω (Pre-out/Zone 2 line-out)
Phono overload	70 mV (MM, 1 kHz, 0.5%)
Frequency response	10 Hz–100 kHz/+1 dB, -3 dB
	(Direct Mode/Pure Audio)
Tone control	±10 dB, 20 Hz (Bass)
	±10 dB, 20 kHz (Treble)
Signal-to-noise ratio	106 dB (IHF-A, Line In, Speaker Out)
Signal-to-Hoise Fatto	80 dB (IHF-A, Phono In, Speaker Out)
Caralian increases	A/B 4–16 Ω
Speaker impedance	Α+Β 8–16 Ω
Headphone output impedance	
	330 Ω
Headphone rated output	80 mW + 80 mW (32 Ω, 1 kHz, 10%)
Tuner Section	
Tuning frequency range	
FM/RDS	87.5–108 MHz
FM/DAB+ preset memory	
······,	40 Stations
General	
Power supply	AC 220–240 V~, 50/60 Hz
Power consumption	340 W
Standby power consumpti	on
, Fr. er consumpti	0.15 W
No-sound power consum	
rao-sound power consum	45 W
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Network standby power of	
	2.0 W
Dimensions (W x H x D)	435 x 1/4 x 383 mm
Weight	11.8 kg
	••••••
CARTON	
Dimensions (W x H x D)	435 x 174 x 383 mm
Weight	.8 kg
Supplied Accessories	
DAB/FM antenna  Initial Setup Guide  Power cord	
Speaker setup microphone  Bemote controller	

eaker setup microphone • Remote controller • AAA (R03) batteries x 2



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