

TX-SR304E

5.1-CHANNEL HOME THEATER RECEIVER

ONKYO
IMAGINATIVE SIGHT & SOUND



Available in Silver

Proving that Entry-Level Home Theater isn't about Limitations

You'll find very little differentiation between most entry-level home theater receivers: passable performance, negligible processing capabilities and little (if any) versatility. The TX-SR304E 5.1-channel home theater receiver doesn't follow that well-trodden path. By giving you the connections to the A/V components on everyone's lips today—HDTVs, digital video recorders, gaming consoles, etc—the TX-SR304E wants to broaden your entertainment possibilities, not limit them to basic DVD and CD playback. Naturally, you'll want the audio quality associated with the Onkyo name. That's why we've included the circuitry and quality parts found in other Onkyo home theater receivers: Optimum Gain Volume Circuitry, 192 kHz/24-bit DACs, a 32-bit DSP chip, and an H.C.P.S. (High Current Power Supply) transformer. Finally, keeping in line with what's really important, the TX-SR304E provides a user-friendly, accessible solution to home entertainment.

Component Video Switching (50 MHz) with Single Connection to HDTV

With three component video inputs, you can have up to three of today's latest A/V components—think DVD/universal players, cable/set-top boxes, DVRs and the latest gaming consoles like the Xbox®—connected simultaneously for output to the latest high-definition displays. With a frequency range out to 50 MHz, you have more than enough bandwidth to pass a progressive scan DVD signal (at least 12 MHz needed) and a 720p signal (at least 37 MHz needed) to high-definition displays with no deterioration on the video signal. Also, the convenience and simplicity of one component video output fit well with the TX-SR304E's focus on ease-of-setup.

Optimum Gain Volume Circuitry

Conventional volume attenuation methods must initially drop a signal close to the noise floor at low volumes. Even though the signal is only tainted with a little noise, the amount increases when the signal is amplified. Onkyo's Optimum Gain Volume Circuitry adjusts the gain so that less than half the amount of attenuation is necessary. This signal never comes close to the noise floor, and thereby eliminates the possibility of noise contamination that plagues conventional volume-attenuation designs.

192 kHz/24-Bit Digital-to-Analog Convertors (DACs) for All Channels

The TX-SR304E incorporates 192 kHz/24-bit DACs on every channel. With a much higher resolution than the incoming signal, these DACs enable the TX-SR304E to generate more accurate audio playback. Also, the DAC's 128x oversampling rate optimizes the signal-to-noise ratio and increases clock jitter tolerance. With Onkyo's emphasis on audio processing with minimal signal noise, the inclusion of quality parts is a definite plus at the entry level.

CinemaFILTER™

The tonal balance of a film soundtrack will be edgy and "bright" when played back over audio equipment in your home. This is because film soundtracks are designed to be played back in large theaters using different equipment. CinemaFILTER restores the correct tonal balance for watching a movie soundtrack in your smaller home theater. CinemaFILTER can be used with DTS and Dolby listening modes, and is easily activated from your remote control.

Wide-Ranging Crossover Adjustment

Crossover control determines the frequency at which the subwoofer takes over bass-reproducing responsibilities from the main speakers. If the crossover is too low, there'll be a dip in the mid-bass response. If it's too high, there'll be frequency duplication (resulting in a muddy bass sound). Your room's acoustical environment can also influence the crossover setting. The TX-SR304E lets you choose from a wide range of frequencies—40/50/60/80/100/120/150/200 Hz—which enables you to accurately set the correct crossover for different speaker packages. You'll also be able to better mix and match different manufacturers' speakers.

Rear Panel with Color-Coded Connections for Ease-of-Setup

To get up and running quickly, the TX-SR304E's rear panel is designed so that you can simply connect to your A/V components. You'll probably be making use of your component video inputs/output, which are conveniently located on the top left of the rear panel (as are the digital inputs for Dolby and DTS surround signals). You may also use the color-coded 5.1-multichannel inputs (perhaps to experience the splendor of Super Audio CD and DVD-Audio formats) to transfer a 5.1-multichannel signal. Last but not least, color-coded terminals aid in the stress-free connection of speakers.

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5.1-CHANNEL HOME THEATER RECEIVER



Amplifier Features

- 90 watts per channel minimum into 6 ohms, 1 kHz, DIN; 100 watts per channel minimum into 6 ohms, 1 kHz, IEC (1 channel driven)
- Optimum Gain Volume Control Circuitry
- H.C.P.S.—high current power supply
- Aluminum heatsink
- Auto-protection circuitry

Audio/Video Processing and Connectivity Features

- DTS, DTS Neo:6 5.1, Dolby Digital, Dolby Pro Logic II
- 192 kHz/24-bit DACs for all channels
- Advanced 32-bit processing DSP chip
- HDTV-capable (50 MHz) component video switching (3 inputs/1 output)
- 3 digital inputs (2 optical/1 coaxial)
- 4 composite video inputs and 2 outputs
- 2 audio inputs and 1 output
- Non-scaling configuration
- A-form listening mode memory
- CinemaFILTER
- Double Bass function
- Tone control (bass/treble) for front L/R channels
- Late night mode (high/low/off)
- Original Onkyo DSP listening modes
- Direct mode
- A/B speaker drive
- Color-coded 5.1-multichannel inputs
- Subwoofer pre out
- Color-coded speaker terminals

FM/AM Tuner Features

- Outstanding selectivity and sensitivity
- RDS (PS/RT/PTY/TP)
- 30 FM/AM random presets
- FM auto scan tuning
- FM stereo indicator
- 75-ohm antenna input
- FM indoor antenna supplied
- AM loop antenna supplied

Other Performance Features

- 3-Mode display dimmer (bright/normal/low)
- Headphone jack (standard)
- Audio mute (via remote)
- Sleep timer (via remote)
- Battery-free memory backup
- Heavy-duty power cord
- Non-resonant feet
- Heavy-gauge, anti-resonant, reinforced steel chassis
- Vibration-resistant cover
- "Easy-set" speaker configuration
- Crossover adjustment (40/50/60/80/100/120/150/200 Hz) for bass management
- Compatible with RI (Remote Interactive) Dock for the iPod
- A/V synchronization function (0/20/40 ms)
- Full-function RI (Remote Interactive) remote control



Full-function RI (Remote Interactive) remote

SPECIFICATIONS

AMPLIFIER SECTION

Power Output

Front L/R.....	90 W + 90 W (6 Ω , 1 kHz, DIN)
Center.....	100 W + 100 W (6 Ω , 1 kHz, 1 channel driven, IEC)
Surround L/R.....	100 W (6 Ω , 1 kHz, DIN)
	100 W (6 Ω , 1 kHz, 1 channel driven, IEC)

Dynamic Power.....	90 W + 90 W (6 Ω , 1 kHz, DIN)
	100 W + 100 W (6 Ω , 1 channel driven, IEC)
	160 W + 160 W (3 Ω , Front)
	125 W + 125 W (4 Ω , Front)
	85 W + 85 W (8 Ω , Front)

THD (Total Harmonic Distortion)..... 0.7 % (Rated Power)

Damping Factor..... 60 (Front, 1 kHz, 8 Ω)

Input Sensitivity and Impedance

Line..... 200 mV/47 k Ω (CD, Tape, etc.)

Output Level and Impedance

Rec out..... 200 mV/470 Ω (Tape, Video 1)

Frequency Response..... 10 Hz-50 kHz/+ 1 dB, - 3 dB (Direct mode)

Tone Control..... \pm 10 dB, 80 Hz (BASS)

..... \pm 10 dB, 20 kHz (TREBLE)

Signal-to-Noise Ratio..... 100 dB (Line in, IHF-A)

Speaker Impedance..... 6 Ω -16 Ω

VIDEO SECTION

Input Sensitivity/Output Level and Impedance

Video..... 1.0 Vp-p/75 Ω (Component)

..... 0.7 Vp-p/75 Ω (Component Pa/Ca, Pb/Cr)

..... 1 Vp-p/75 Ω (Composite)

Component Video Frequency Response..... 5 Hz-50 MHz

TUNER SECTION

[FM]

Tuning Frequency Range..... 87.5 MHz-108.0 MHz

Usable Sensitivity

Stereo..... 22.2 dBf (75 Ω , IHF)

Mono..... 15.2 dBf (75 Ω , IHF)

Signal-to-Noise Ratio

Stereo..... 67 dB (IHF-A)

Mono..... 73 dB (IHF-A)

Total Harmonic Distortion

Stereo..... 0.5 %, 1 kHz

Mono..... 0.3 %, 1 kHz

FM Stereo Separation..... 40 dB at 1 kHz

[AM]

Tuning Frequency Range..... 522 kHz-1.611 MHz

Usable Sensitivity..... 300 μ V/m

Signal-to-Noise Ratio..... 40 dB

Total Harmonic Distortion..... 0.7 %

GENERAL

Power Supply..... AC 230-240 V, 50 Hz

Power Consumption..... 220 W

Standby Power Consumption..... 0.3 W

Dimensions (W x H x D)..... 435 x 150 x 369 mm

Weight..... 8.4 kg

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