Affordable Home Theater Just Got Better

With the addition of Onkyo’s acclaimed WRAT (Wide Range Amplifier Technology) to its entry-level A/V receivers, home cinema fans on a budget can now enjoy greater fidelity than ever before. This 5.1-channel AVR packs an array of features into a compact and stylish cabinet—all designed to perfect audio performance and seamlessly integrate your A/V components into one intelligent and powerful system. Four HDMI® inputs and one output provide connectivity for your 3D TV, gaming consoles, and BD player, while a USB port offers a clean digital link to your iPod/iPhone or flash memory drive. An HDMI-linked interactive on-screen display makes set-up and mid-program adjustment easy. Naturally, the AVR decodes a range of high-definition codecs such as Dolby® TrueHD and DTS-HD Master Audio™. But it’s the sound that really sets Onkyo apart, and you can rest assured that with the TX-SR313, you’re getting the precision build, power, and fidelity that you might expect from a more expensive component.
Audio Return Channel and 3D Video via HDMI®

Four HDMI inputs on the TX-SR313 allow you to easily integrate high-definition devices such as Blu-ray players, cable/satellite tuners, and gaming consoles. HDMI implementation on this receiver also supports an Audio Return Channel, allowing audio received directly by your TV’s tuner to be sent "upstream" to the AV receiver. That means you can enjoy television programs in magnificent Onkyo sound! HDMI also supports 3D video and numerous other high-resolution formats, and has the added advantage of reducing cable clutter for a cleaner and simpler install.

Direct Digital iPod/iPhone Connection for Cleaner Sound

The receiver’s front-panel USB port lets you play MP3 and AAC files stored on an iPod, iPhone, and MP3/WMA/AAC-FLAC audio files stored on a flash memory device using the system’s own remote for track selection and playback. Your music will also sound much cleaner and clearer, as the audio signal is transported in digital rather than analog form through the direct digital connection.

Enjoy Lossless High-Definition Movie Soundtracks

The TX-SR313 can decode Dolby TrueHD and DTS-HD Master Audio™—two “lossless” Blu-ray formats that deliver a soundtrack identical to the studio master, so you’re hearing it exactly as it’s meant to be heard. The TX-SR313 also handles Dolby Digital Plus and DTS-HD High-Resolution Audio™. Dolby Digital Plus is designed to accompany HD video delivered via disc media, television broadcasts, and online content. DTS-HD High-Resolution Audio, meanwhile, offers a higher bit and sampling rate than the core DTS technology.

WRAT (Wide Range Amplifier Technology) Gives Enhanced Fidelity

WRAT is a suite of innovative technologies Onkyo 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 well-balanced performance even with the most dynamic soundtracks. It achieves this by employing a low-negative-feedback 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. The WRAT design has helped make Onkyo AVRs the firm favorite among discerning audio enthusiasts, and is incorporated for the first time on the entry-level TX-SR313.

Discrete Output Stage Circuitry Boosts Audio Performance

A receiver’s ability to deliver high power into low impedances is a vital factor in its performance. If the current flow through the amplification circuit is inconsistent, audio quality will suffer. Rather than using inferior “all-in-one” amplification chips, Onkyo receivers feature separate components at the signal output stage. Discrete transistors are employed to achieve an open and assured performance, with less chance of distortion and cooler running temperatures.

Convenient Overlaid On-Screen Display via HDMI

The TX-SR313’s overlaid On-Screen Display (OSD) menu takes the work out of complex adjustments. Use the remote to select a setting, then use the up and down arrows to set the values, then press Enter to confirm. The OSD menus will remain overlaid on the picture without having to stop the program and switch to a different screen to access menus.

Get More Realistic Action with Four Gaming Modes

Select from four different optimized audio modes to match your gaming content for a highly realistic surround sound experience. Road, Sports, Action, and RPG game modes will help to bring out the best in any soundtrack, from subtle ambient effects to thundering explosions.

Top-Quality DACs Deliver Clearer Sound

Digital-to-Analog converters are of particular importance to audio fans seeking excellent sound reproduction, and the TX-SR313 features reliable, high-performance 192 kHz/24-bit chips from Burr-Brown. As well as optimizing analog performance, these DACs are highly resistant to “clock jitter,” a subtle form of digital distortion.

Advanced Music Optimizer to Enhance Compressed Digital Music Files

While MP3 or AAC files may sound fine through the headphones of your portable music player, the limitations of these files can be exposed when played back through a quality home entertainment system. This is because a significant amount of high-frequency bit information is lost during the file-compression process. To counter this, Onkyo has designed the Advanced Music Optimizer to compensate for lost bit information and improve the quality of compressed audio signals. This results in a cleaner and more expansive sound image you’re watching. This means you can adjust the settings immediately, without having to stop the program and switch to a different screen to access menus.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Amplifier Section</th>
<th>Power Output</th>
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<tbody>
<tr>
<td>Front L/R</td>
<td>100 W (6 Ω 1 kHz, 1% THD, 1 Channel Driver)</td>
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<tr>
<td>Center</td>
<td>125 W (4 Ω 1 kHz, 1% THD, 1 Channel Driver)</td>
</tr>
<tr>
<td>Left, Right, Center</td>
<td>120 W (6 Ω 1 kHz, 1 Channel Driver, IEC)</td>
</tr>
<tr>
<td>Surround L/R</td>
<td>100 W (6 Ω 1 kHz, 1 Channel Driver)</td>
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<tr>
<th>Dynamic Power</th>
<th>160 W (8 Ω Front)</th>
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<tbody>
<tr>
<td>THD+N (Total Harmonic Distortion + Noise)</td>
<td>0.08% (20 Hz–20 kHz, Half Power)</td>
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<tr>
<th>Input Sensitivity and Impedance</th>
<th>200 mV/2 kΩ (Line)</th>
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<tr>
<td>Maximum RCA Output Level and Impedance</td>
<td>200 mV/2 kΩ (Line)</td>
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Frequency Response 5 Hz–100 kHz/1 dB, 3 dB (CIPR, Bass) Time Control ±10 dB, 50 Hz (Bass) ±18 dB, 20 kHz (Treble) Signal-to-Noise Ratio 100 dB (Line, IIP-A) Speaker Impedance 6 Ω – 16 Ω

Video Section

Input Sensitivity/Output Level and Impedance Video 100 mV–ipts Ω (Component) Audio 0.97 V–ipts Ω (Component) 0.7 V–ipts Ω (Phono) 0.8 V–ipts Ω (Monaural)

Component/Video Frequency Response 5 Hz–100 kHz/0 dB, 3 dB

Tuner Section

Tuning Frequency Range FM 87.5 MHz–108 MHz AM 540 kHz–1.710 MHz

PEAK Memory Stereo 40 Stations


Power Consumption 300 W (Asian Model: 340 W)

Dimensions (W x H x D) 183,5 x 150 x 318 mm

Weight 7.6 kg

CARTON

Dimensions (W x H x D) 317 x 268 x 416 mm

Weight 8.6 kg (Asian Model: 9.1 kg)

Supplied Accessories

- Indoor FM antenna
- AM loop antenna
- Speaker cable labels
- Instruction manual
- Quick start guide
- Remote controller
- “AA (R6)” batteries x 2

Note: Includes Chinese model.

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