

TX-DS696

DIGITAL SURROUND HOME THEATER RECEIVER

ONKYO
IMAGINATIVE SIGHT & SOUND



Shown: North American model (Black only) Europe: Black/Silver Asia: Black/Gold

Ranks Up There With the Best in Features, Connectivity and Performance

Each Onkyo A/V receiver has improved upon its predecessor, and the TX-DS696 admirably continues this tradition by offering impressive refinements that clearly improve home theater performance. Notable upgrades include more power, two component-video inputs & one output, composite to S-video conversion, Onkyo-exclusive Optimum Gain Volume Circuitry, and a new learning backlit remote that is also preprogrammed. The TX-DS696 also incorporates much of the same advanced technology, design expertise, and high-grade parts as used in Onkyo's high-end models, making it a premium-quality A/V surround receiver aimed directly at those looking for something a notch above the rest.

Ready for HDTV and Progressive-Scan DVD

Broadcast-quality component-video switching (2 inputs and 1 output)—virtually unheard of at this price—delivers the highest quality, unaltered wide-bandwidth video-signal transfer you can get from DVD players, HDTV & HDTV set-top boxes, DTV decoders, DSS, or Digital VCRs.

Dolby Pro Logic II

This new surround-sound decoding process delivers Dolby Digital-like, quasi-5.1-channel sound from stereo music recordings, and from stereo- and Dolby Surround-encoded movie soundtracks. It also provides significantly better channel separation than standard Dolby Pro Logic, and offers stereo surround channels, which is a big improvement over plain Pro Logic's single, mono surround channel.

Composite to S-Video Conversion

A hard-to-find custom-installation feature that simplifies video connections by eliminating the need to match video-connection formats. It allows a single output to your TV, which does not have to be switched, regardless of the type of video connection to the receiver. So if you have a VCR with a composite video (RCA) output, but are running everything else (DVD, DBS receiver, laserdisc, etc.) via S-video cables, including the monitor output to your TV, you won't have to make a separate composite video connection from your VCR to your TV.

Powered Zone 2 Capability

Unlike other receivers, you don't need an external amplifier to enjoy a stereo audio source (radio, CD, MD, LP or cassette) in the main room, while at the same time your partner listens to a different stereo source in another room.

Optimum Gain Volume Circuitry

Conventional volume-attenuation methods drop a signal close to the noise floor to produce volume at low levels. This often taints the signal with a small amount of noise, which becomes amplified when the signal is amplified. Onkyo's Optimum Gain Volume Circuitry solves this problem by adjusting the gain so that less than half the typical amount of attenuation is needed. This ensures that the signal never comes close to the noise floor, and thereby eliminates the possibility of noise contamination that plagues conventional volume-attenuation designs.

Designed to Handle Today's and Tomorrow's High-Resolution Multichannel A/V Sources

A stereo frequency response from 10 Hz to 100,000 Hz ensures that the TX-DS696 can accommodate the wide dynamic range of sources like DVD-Audio and Super Audio CD. The unit also features a 5.1-channel input, meaning it's ready for new multichannel formats down the road.

A-Form

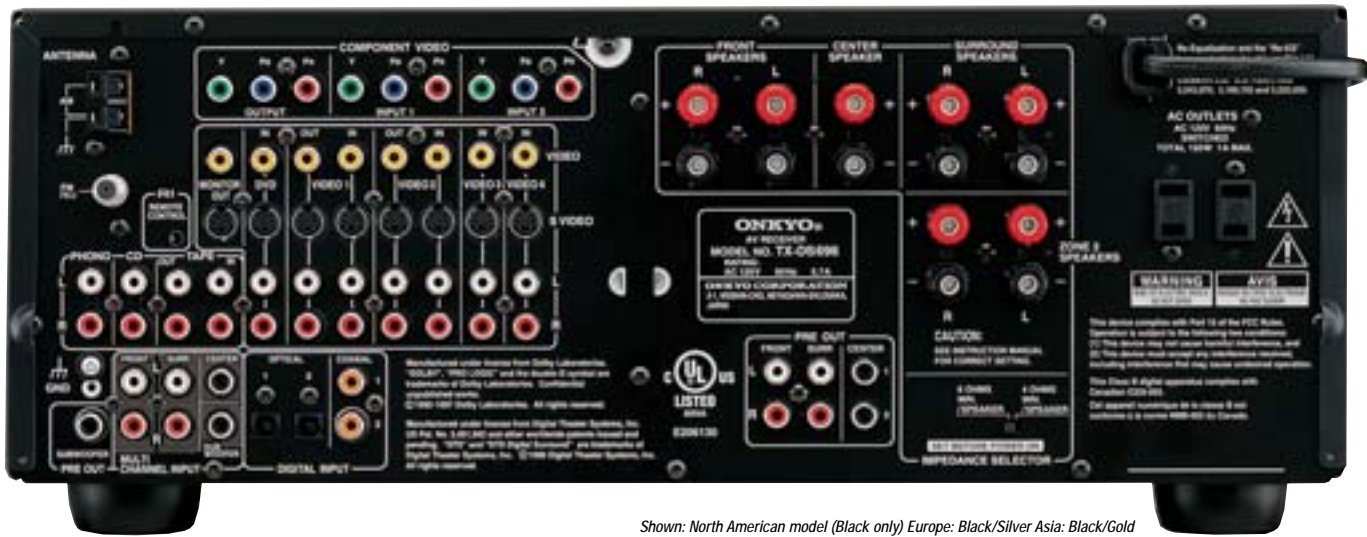
Another Onkyo-exclusive—it not only remembers the surround mode and subwoofer setting you entered during the configuration process for each input source, but also the settings you made for each signal type at that source—and automatically selects your settings when you choose that source. So if your DVD player doubles as your CD player, you can set the receiver's DVD input to always playback digital surround sources (DTS/Dolby Digital) directly in 5.1-channel surround sound and 2-channel CDs in, say, *All-Channel Stereo* mode, for example.

Outstanding Value

The TX-DS696 offers the performance of high-end receivers at a fraction of the price by sharing many of the same precision parts (extruded heat sink, bus bars, metal work, etc.) and circuit design (WRAT, Non-Scaling Configuration, high-current low-impedance drive) as its more expensive siblings. This drastically reduces tooling costs, and the savings are passed on.

TX-DS696

DIGITAL SURROUND HOME THEATER RECEIVER



Shown: North American model (Black only) Europe: Black/Silver Asia: Black/Gold

Amplifier Features

- 100 Watts minimum of continuous RMS power to each of the five channels into 8 Ω from 20 Hz to 20 kHz with no more than 0.08% THD (North American models, FTC rated)
- 130 Watts minimum of continuous RMS power to each of the five channels into 6 Ω at 1 kHz (European models, DIN)
- 160 Watts minimum to each of the five channels into 6 Ω at 1 kHz (Asian models, JEITA)
- Wide Range Amplifier Technology (WRAT)
- Extended Frequency Response (10 Hz to 100 kHz)
- DVD-Audio Capability
- Powered Zone-2 Capability
- Full bandwidth power to all 5 main channels
- High-current, low-impedance 4-Ohm drive for all five channels
- Oversized electrolytic capacitors
- State-of-the-art linear PCM 96 kHz/24-bit DACs for all channels
- Fully discrete output stages for all five channels
- Optimum Gain Volume Circuitry
- Massive isolated transformer
- High-grade extruded-aluminum heat sink
- Tone control (bass, treble) for front L/R speakers
- Low Frequency Effect (LFE) level control
- Separate standby and power switches
- 6/4-Ohm speaker impedance selector
- Auto-protection circuitry

Audio/Video Features

- Dolby® Digital, DTS® Dolby Pro Logic II decoding
- A-Form Listening Mode Memory
- Non-Scaling Configuration
- 2 Component-Video Inputs/1 Output
- Y/C Composite signal separation

- Cinema Re-EQ™
- 9 DSP soundfields
- All Channel stereo
- High Definition DSP
- Front effect function
- Late night mode (high, low, off)
- Extensive bass management circuitry
- Onscreen graphical displays in 7 colors and a superimpose mode
- Smart Scan Navigator with LEDs
- Automatic signal detection
- 5.1-Channel input
- Full set of multichannel pre outputs
- 4 Assignable digital inputs (2 coaxial, 2 optical)
- 5 S-video inputs
- 5 A/V inputs
- 3 Audio inputs
- Phono input
- Rec out selector (sound)
- Full input/output cassette and 2-VCR loops
- 7 Sets of heavy-duty multiway speaker binding posts (dual banana-plug compatible)

FM/AM Tuner Features

- Outstanding selectivity and sensitivity
- 40 FM/AM random presets
- FM auto tuning
- FM/cable TV simulcast recording/playback
- RDS (European models only) with PS, PTY, RT, TP
- FM stereo indicator
- 75-Ohm antenna input
- FM indoor antenna supplied
- AM loop antenna supplied

Other Performance Features

- IntelliVolume
- Precision digital speed-sensitive volume control
- Absolute volume display

- Separate PC (printed circuit) boards for audio and video sources
- 35-Segment dot-matrix display
- Individual input selectors for each source
- 3-Mode display dimmer (bright, normal, low)
- Headphone jack (standard size)
- Audio mute (remote)
- Sleep timer (remote)
- Battery-free memory backup
- 2 Switched AC convenience outlets with a total 120 watts max (100 watts max for European/Asian models)
- Heavy-duty power cord
- Large non-resonant feet
- Heavy-gauge, anti-resonant, reinforced-steel chassis
- Vibration-resistant cover
- Brushed aluminum front panel
- Powerful backlit/programmed learning remote with macro and mode-key LEDs



(Illustration)

SPECIFICATIONS

AMPLIFIER SECTION

Power Output	
North American Models	
Front Main L/R	100 W/ch min. RMS, (8 Ω, 20 Hz-20 kHz, FTC, 0.08 % THD)
Center	100 W min. RMS, (8 Ω, 20 Hz-20 kHz, FTC, 0.08 % THD)
Surround L/R	100 W/ch min. RMS, (8 Ω, 20 Hz-20 kHz, FTC, 0.08 % THD)
Front Main L/R	125 W/ch min. RMS, (6 Ω, 1 kHz, FTC, 0.1 % THD)
Center	125 W min. RMS, (6 Ω, 1 kHz, FTC, 0.1 % THD)
Surround L/R	125 W/ch min. RMS, (6 Ω, 1 kHz, FTC, 0.1 % THD)
European Models	
Front Main L/R	130 W/ch min. RMS, (6 Ω, 1 kHz, DIN)
Center	130 W/ch min. RMS, (6 Ω, 1 kHz, DIN)
Surround L/R	130 W/ch min. RMS, (6 Ω, 1 kHz, DIN)
Asian Models	
Front Main L/R	160 W/ch (6 Ω, 1 kHz, JEITA)
Center	160 W (6 Ω, 1 kHz, JEITA)
Surround L/R	160 W/ch (6 Ω, 1 kHz, JEITA)
Dynamic Power (front)	
(Calculated on basis of IHF dynamic headroom)	
3 Ω/4 Ω/8 Ω	230 W/ch / 170 W/ch / 115 W/ch
Total Harmonic Distortion 0.08 % at rated power/0.08 % at 1 W output	
Frequency Response 10 Hz-100 kHz + 1 dB, -3 dB	
Signal-to-Noise Ratio	
Phono	80 dB (IHF-A, 5 mV input)
CD/TAPE	100 dB (IHF-A, 0.5V input)
Phono Overload 100 mV RMS, (1 kHz, 0.5 % THD)	
Damping Factor 60 at 8 Ω	
Input Sensitivity and Impedance	
PHONO	2.5 mV, 50 kΩ
LINE (CD, TAPE, DVD, VIDEO-1, 2, 3, 4)	200 mV, 50 kΩ
MULTI CH INPUT	
FRONT L/R, CENTER, SURROUND L/R	200 mV, 50 kΩ
SUBWOOFER	36 mV, 50 kΩ
COAXIAL-1, 2	0.5 Vp-p, 75 Ω
DVD, VIDEO-1, 2, 3, 4	1 Vp-p, 75 Ω
	0.28 Vp-p, 75 Ω (C)
COMPONENT VIDEO IN-1, 2	1 Vp-p, 75 Ω (Y)
	0.7 Vp-p, 75 Ω (C)
	(Cb/Pb, Cr/Pr)
Output Level and Impedance	
Rec out (TAPE, VIDEO-1, 2)	200 mV, 2.2 kΩ
Pre out (SUBWOOFER)	1 V, 470 Ω
VIDEO (VIDEO-1, 2, MONI)	1 Vp-p, 75 Ω
	1 Vp-p, 75 Ω (Y)
	0.28 Vp-p, 75 Ω (C)
COMPONENT VIDEO OUT	1 Vp-p, 75 Ω (Y)
	0.7 Vp-p, 75 Ω (C)
	(Cb/Pb, Cr/Pr)
Tone Control	
BASS/TREBLE	± 10 dB at 50 Hz ± 10 dB at 20 kHz
TUNER SECTION	
Usable Sensitivity	
FM Mono	11.2 dBf, 1.0 μV (75 Ω IHF), 0.9 μV (75 Ω DIN)
FM Stereo	17.2 dBf, 2.0 μV (75 Ω IHF), 23 μV (75 Ω DIN)
AM	30 μV
Signal-to-Noise Ratio	
FM Mono/FM Stereo/AM	76 dB, IHF/70 dB, IHF/40 dB
Harmonic Distortion	
FM Mono/FM Stereo/AM	0.2 %/0.3 %/0.7 %
FM Stereo Separation	45 dB at 1 kHz/30 dB at 100 Hz-10 kHz
GENERAL	
Dimensions (W x H x D)	17-1/8" x 6-7/8" x 16-15/16" / 435 x 175 x 431 mm
Weight	27.8 lbs / 12.6 kg (North American Models)
	13.5 kg / 29.8 lbs. (European/Asian Models)

Due to a policy of continuous product improvement, Onkyo reserves the right to change specifications and appearance without notice.

*Dolby®, "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories. "DTS" is a trademark of Digital Theater Systems, Inc. Re-Equalization and the Re-EQ logo are trademarks of Lucasfilm Ltd.



ONKYO CORPORATION Sales & Product Planning Div.: 2-1, Nissin-cho, Neyagawa-shi, OSAKA 572-8540, JAPAN Tel: 072-831-8111 Fax: 072-833-5222
 ONKYO U.S.A. CORPORATION 18 Park Way, Upper Saddle River, N.J. 07458, U.S.A. Tel: 201-785-2600 Fax: 201-785-2650 <http://www.onkyousa.com>
 ONKYO EUROPE ELECTRONICS GmbH Industriestrasse 20, 82110 Germering, GERMANY Tel: 089-849-320 Fax: 089-849-3226 <http://www.onkyo.net>
 ONKYO CHINA LIMITED Units 2102-2107, Metrol Plaza Tower 1, 223 Hing Fong Road, Kwai Chung, N. T., HONG KONG, SAR of China Tel: 852-2429-3118 Fax: 852-2428-9039 <http://www.onkyochina.com>
 ONKYO INDIA PVT. LTD., No. 1, Sriram Nagar, South Street, Alwarpet, Chennai 600 018, INDIA Tel: 91-44-467-2152/2304 (Telefax)

<http://www.onkyo.co.jp/>