

# TX-DS797

DIGITAL SURROUND HOME THEATER RECEIVER

**ONKYO**  
IMAGINATIVE SIGHT & SOUND



THX SURROUND EX™



192 kHz/24 bit

WRAT  
WIDE RANGE AMP TECHNOLOGY



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

## How Do You Improve on Greatness? Add More!

At last, a receiver that will be able to handle all mainstream decoding formats presently known to man, without breaking the bank. Onkyo is proud to present the TX-DS797. Improving on our great line of receivers, the TX-DS797 is our lowest priced receiver that gives you DTS-ES Extended Surround, Dolby Pro Logic II, THX Surround EX and 192 kHz/24 Bit DACs. Combine these with other features such as a Zone 2 Line Out with a 12-Volt Trigger, 7.1-Multichannel Input, HDTV-Ready component video inputs and outputs, and Onkyo-exclusive Linear Optimum Gain Volume Control, and you have a system ready for today's home theater demands.

### Lucasfilm THX Select Certified

The TX-DS797 boasts the distinction of the exclusive THX Select badge of approval. This gives you assurance that this receiver passed (and often exceeds) THX's numerous requirements in such areas as frequency response, distortion, power output, and stability.

### Linear Optimum Gain Volume Control

In conventional amplifiers, amplification is fixed. So when conventional volume attenuation methods are used, the signal drops close to the noise floor and is tainted with a small amount of noise. Onkyo's Linear Optimum Gain Control makes amplification the signal adjustable, not fixed. Therefore, little to no attenuation is needed at normal listening levels. Giving you remarkably clear, distortion-free sound.

### A-FORM (Listening Mode Memory)

This Onkyo exclusive not only remembers the surround mode and subwoofer setting you entered during the configuration process for each input source, but also the settings when you choose that source. So all you have to do is input the listening mode once, and the TX-DS797 automatically selects that listening mode again when a CD or DVD is played.

### Zone 2 Line-outs and 12-Volt Trigger

This trigger allows you to set up an external amp/receiver and speakers in another room, push the Zone 2 button, select another source and you're done. If the amp/receiver in the Zone 2 room has a trigger, when Zone 2 is selected, the TX-DS797 will automatically send a signal via its 12 V trigger to the amp/receiver turning it on.

### 192 kHz/24-bit DACs

Conventional receivers give you 96 kHz/24-Bit DACs. The 192 kHz/24-Bit DACs for the L/R/C/SW/SL/SR channels found in the TX-DS797 ensure that you are provided with a smoother, clearer signal by taking more cuts per second.

### Fitted with all Decoding Formats Known to Man

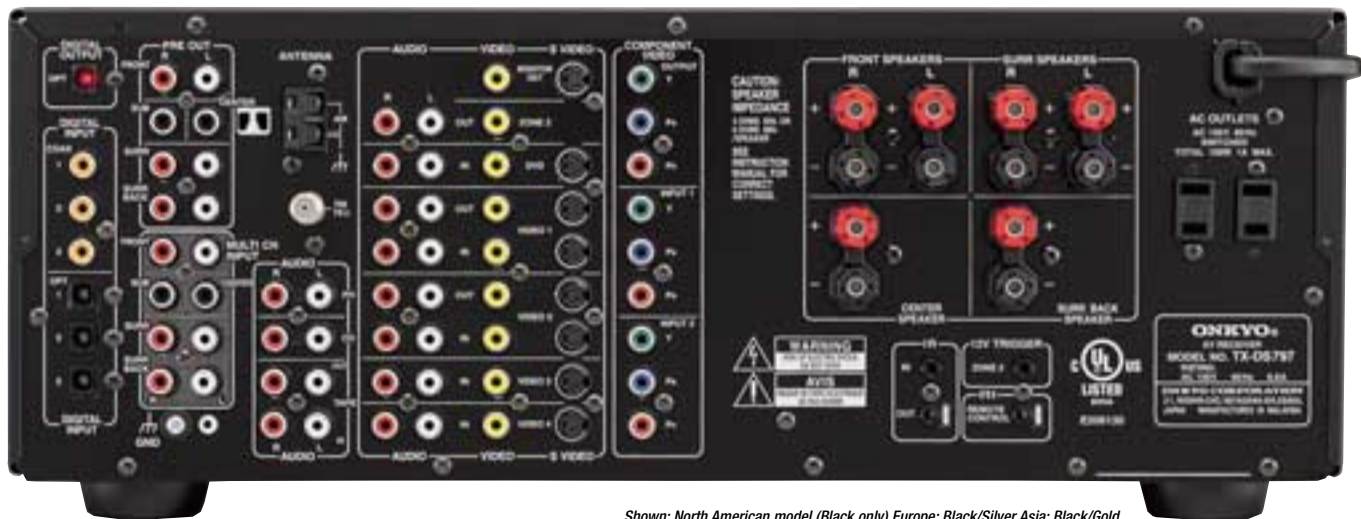
In addition to the sound decoding formats you've come to expect from your receiver, we've added the latest and greatest. Here you'll find THX Surround EX, Dolby Pro Logic II, DTS-ES Extended Surround, DTS Neo:6 and DTS 5.1 and Dolby Digital decoding.

### 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 separated composite video connection from your VCR to your TV.

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## Amplifier Features

- 100 Watts minimum of continuous RMS power to each of the six channels into 8 ohms from 20 Hz to 20 kHz (North American models, FTC rated)
- 135 Watts minimum of continuous RMS power to each of the six channels into 6 ohms at 1kHz (European models, DIN)
- 160 Watts minimum to each of the six channels into 6 ohms at 1 kHz (Asian models, JEITA)
- Wide Range Amplifier Technology (WRAT)
- Extended Frequency Response (10 Hz to 100 kHz)
- Full bandwidth power to all 6 main channels
- High-current, low-impedance 6 Ohm drive for all 6 channels
- Zone 2 capability (audio & video)
- Reduced NFB (Negative Feedback) Design
- Non-scaling configuration
- Digital upsampling
- Discrete power amplifier circuitry for all channels
- Linear Optimum Gain Volume Control
- Absolute ground plate
- Thick bus bars
- Massive isolated transformer
- High-grade extruded-aluminum heat sink
- Bass and treble tone control (L/C/R/SW)
- Low Frequency Effect (LFE) level control

## Audio/Video Features

- THX Select Certified
- THX Surround EX, DTS, DTS-ES, DTS NEO:6, Dolby Pro Logic II, Dolby Digital (AC-3)
- Theater Dimensional Virtual Surround
- DVD-Audio capability
- Composite to S-video conversion
- 7.1 Multichannel input
- Cinema Re-EQ
- Advanced 24-bit dual CRYSTAL DSP chips
- 36 DSP modes
- HD DSP (High Definition DSP)
- 192 kHz/24-bit audio D/A converters x 6
- A-Form Listening Mode Memory
- 96 kHz/24-bit audio A/D converters
- 3 Audio (including phono) and 6 A/V Inputs
- 6 S-video inputs and 3 S-video outputs
- HDTV-Ready 2 Component-video inputs and 1 component-video output
- Front panel Video Input (with S-Video)/ Camcorder input
- Digital inputs assignable 4 optical (1 front panel)/3 coaxial
- Digital output (optical)
- Heavy-duty, multi-way, dual banana-plug compatible binding posts
- Pre Out terminals for front L/R, center, surround L/R, surround back L/R and subwoofer
- Rec selector (audio/video)
- Character input
- NTSC (North American models)
- NTSC/PAL compatible (European and Asian models)
- Late night mode
- AV Sync delay

## FM/AM Tuner Features

- Outstanding selectivity and sensitivity
- 40 FM/AM presets
- Automatic FM scan tuning
- AM loop antenna
- S/N ratio 76 dB (FM mono), 70 dB (FM stereo), 40 dB (AM)
- RDS (European models only)

## Other Performance Features

- Large 35-segment dot-matrix fluorescent display
- High resolution onscreen display
- 3-Mode display dimmer
- Precision digital speed-sensitive volume control
- IntelliVolume
- Absolute/Relative switchable volume display
- Audio muting, sleep timer (operable via remote)
- Battery-free memory backup
- A/V separate PC boards
- Headphone jack
- Brushed aluminum front panel
- Backlit/programmed learning remote with macro functions



Backlit/programmed learning remote with macro functions

## SPECIFICATIONS

### AMPLIFIER SECTION

#### Power Output

##### North American Models

Front L/R.....	100 W/ch (8 Ω, 20 Hz-20 kHz, 0.08 % THD, FTC)
Center.....	100 W (8 Ω, 20 Hz-20 kHz, 0.08 % THD, FTC)
Surround L/R.....	100 W/ch (8 Ω, 20 Hz-20 kHz, 0.08 % THD, FTC)
Surround Back L/R.....	100 W/ch (8 Ω, 20 Hz-20 kHz, 0.08 % THD, FTC)
Front L/R.....	130 W/ch (6 Ω, 1 kHz, 0.1 % THD, FTC)
Center.....	130 W (6 Ω, 1 kHz, 0.1 % THD, FTC)
Surround L/R.....	130 W/ch (6 Ω, 1 kHz, 0.1 % THD, FTC)
Surround Back L/R.....	130 W/ch (6 Ω, 1 kHz, 0.1 % THD, FTC)

##### European Models

Front L/R.....	135 W/ch (6 Ω, 1 kHz, DIN)
Center.....	135 W (6 Ω, 1 kHz, DIN)
Surround L/R.....	135 W/ch (6 Ω, 1 kHz, DIN)
Surround Back L/R.....	135 W/ch (6 Ω, 1 kHz, DIN)

##### Asian Models

Front 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)
Surround Back L/R.....	160 W/ch (6 Ω, 1 kHz, JEITA)

#### Dynamic Power (front)

3 Ω/4 Ω/8 Ω.....	250 W/ch/210 W/ch/130 W/ch
Total Harmonic Distortion.....	0.08% (all channels)
Frequency Response.....	10 Hz-100 kHz (+1 dB, -3 dB)

#### Signal-to-Noise Ratio

Phono.....	80 dB (IHF-A, 5 mV input)
CD/TAPE.....	110 dB (IHF-A, 0.5 V input)
Phono Overload.....	120 mV RMS, (1 kHz, 0.5% THD)
Damping Factor.....	60 at 8 Ω

#### Input Sensitivity and Impedance

Phono MM.....	2.5 mV, 50 kΩ
CD and TAPE Play.....	200 mV, 50 kΩ

#### Output Level and Impedance

TAPE REC.....	200 mV, 470 Ω
PREOUT.....	1.0 V 470 Ω

#### Tone Control

BASS.....	± 10 dB at 50 Hz
TREBLE.....	± 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.....	76 dB, IHF-A
FM Stereo.....	70 dB, IHF-A
AM.....	40 dB

#### Total Harmonic Distortion

FM Mono.....	0.2 %
FM Stereo.....	0.3 %
AM.....	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 18 1/16" 435 x 175 x 459 mm
Weight.....	35.9 lbs./16.3 kg (North American Models) 17.3 kg/38.1 lbs (European and Asian Models)

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