DTS-ES and Dolby Digital EX A/V Receiver

# DENON AVR-785

# DTS-ES Discrete 6.1 and Dolby Digital EX with Power Amps for 7 Channels









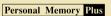














#### ■ High-Quality Sound Reproduction

- NEW High Resolution 32bit Floating Point DSP
- 24 bit, 192 kHz High Resolution D/A Conversion Capability

#### ■ High-grade Up Conversion

This video transcoding (up-conversion) allows you to enjoy high picture quality from all video sources connected to the AVR-785. Since composite and S-video signals are up-converted into component video signals and output to the monitor, all you need to do is connect a monitor that has component video input jacks.

#### ■ 3 Sets of Component Video Inputs

The AVR-785 is equipped with 3 sets of component video inputs and 1set of monitor outputs.

#### ■ DENON's Basic Design for High-Quality Sound Reproduction

#### • Power Transformer for High Power Driven

The chassis that supports the large transformer has been designed to absorb vibration, and the transformer is housed inside a highly rigid frame to secure it more solidly to the chassis. In addition, a cushioning material has been placed around the core of the transformer to minimize interference on the signal and enable more faithful reproduction of the original sound. The AVR-785 inherits these low-noise design from higher-end models not to mention the use of short ring.



#### • Twin Drive Rectifier

DENON's Twin Drive Rectifier design uses two rectifying diodes in parallel to bring out the maximum potential of the large transformer. Since the rectifiers recharge the large block capacitors at low impedance, they are able to supply ample current to accurately reproduce deep basses as well as sudden bursts of sound from percussion or other musical instruments.



#### Large Aluminum Extruded Heatsink

DENON uses a large heatsink made of extruded aluminum. It is placed in a design that ensures mostly uniform temperatures throughout the heatsink. This will ensures that all channels respond with equal performance to the demands of the audio signals.



#### ■ Fully Discrete, Equal Power 7 Amplifier Channels, 115 Watts Each

Front	115 W + 115 W	(6 ohms, 1 kHz, 0.7 % THD)
Center	115 W	(6 ohms, 1 kHz, 0.7 % THD)
Surround	115 W + 115 W	(6 ohms, 1 kHz, 0.7 % THD)
Surround Back	115 W + 115 W	(6 ohms, 1 kHz, 0.7 % THD)

For optimum Dolby Digital and dts reproduction, the AVR-785 features high quality, wideband audio amplification, providing 115 watts power output for each of the seven main channels. A large capacity power supply includes a high current power transformer along with discrete power output devices on all seven amplifier channels for highest dynamic range and superb reproduction clarity.

#### ■ Wide-Range Play Capability for DVD-Audio and Super Audio CD

The power amp circuits of the AVR-785 have been meticulously designed to reproduce the exceptionally high sound quality with wide frequency response from 10 Hz to 100 kHz.

#### ■ Dual-Channel Surround Back Power Amp for 7.1 Surround

The AVR-785 is equipped with a total of 7 power amps including 2 for the Surround Back channel speaker to give you more clearly defined sound localization at the rear for 6.1-channel surround sources such as DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, Dolby Digital EX, and DTS-ES NEO:6.

#### **■** Cinema Equalizer

The sound from movie sources recorded in Dolby Digital, DTS or other formats emphasizes high-frequency range due to a theater's front speakers being placed behind the movie screen. If this sound is reproduced in the home theater without correction, the high-frequency range is too strong. The AVR-785 features a Cinema Equalizer to correct these high-frequency components so that the sound is clearer and easier to listen to. (For Dolby Digital, Dolby Pro Logic IIx, Dolby Digital EX and DTS surround modes)

#### ■ Personal Memory Plus, for Easy Operation

The AVR-785 includes the Personal Memory Plus function that automatically remembers the surround mode you last used for each program source, so that you do not need to select the mode again for that program.

#### ■ On Screen Display

The AVR-785 lets you make system settings via diaplays on your TV screen from the comfort of your chair.

## DENON

#### ■ Acclaimed Customization Feature

As with all of DENON's high-grade A/V receiver, the AVR-785 lets you adjust delay times and other parameters so that you can customize the performance of the AVR-785 to suit your own home theater and enhance operating ease. These customized features are then stored, for each source input and surround mode, in Personal Memory Plus so constant readjustments are not required.

#### ■ Multi-Function Preset Memory Remote Controller with GLO-Keys

The supplied system remote controller features a large selection of remote control codes to operate other components in your home theater system, including codes for selected DENON models, along with remote control codes from other manufacturers. The most frequently used buttons are laid out separately for TV, VCR and DVD, for maximum ease-of-use.

\* Remote control codes may not be available for some products of other manufacturers

#### ■ DENON's Latest Surround Technology Faithfully Recreates the Surround Sound Produced at the Dubbing Stage.

- DTS 96/24 Decoding for DVD-Video
- DTS-ES Discrete 6.1 and Matrix 6.1
- DTS NEO:6
- Dolby Digital EX
- Dolby Pro Logic IIx

#### ■ 5 Channel/7 Channel Stereo Mode

DENON's popular 7 Channel Stereo mode transforms your favorite 2-channel sources such as CD, tape, stereo radio and stereo video sources into exciting surround sound, free of delay effects and unnatural artifacts, from all 7 speakers. This 7 Channel Stereo mode was originally developed by DENON to enhance music lovers' enjoyment with home theater ambience.

#### ■ Adjustable Cross-Over Switching

The AVR-785 supports subwoofer cross-over switching with a choice of 8 cross-over frequencies: 40/60/80/100/120/150/200/250 Hz. This lets you more accurately match the performance characteristics of the subwoofer to the main speaker system.

#### **■** Support for Multi-Zone Configurations

The AVR-785 provides a Multi Zone Output function and a Select function that let you output different sources to multiple zones. Sources can be selected for output to an additional zone, in addition to the main room.

#### ■ Multi Zone Power Amplifier Assign

The AVR-785's Power Amplifier Assign function lets you assign the Surround Back amplifier channels when the system is not configured for 7.1 to instead drive the Multi-room Zone 2 speakers, with 115 Watts per channel output power, while still providing 5 discrete amplifier channels to drive all speakers in a 5.1 configured home theater room.

#### ■ REC OUT Selector

- All ch Preout
- Front Panel Inputs (with Digital Optical Input)
- Front A/B Speaker Terminals
- High-grade 7 Channel Speaker Terminals (All ch)

### ■ Frequency Synthesis Tuning

- 56-Station AM/FM Random Preset Memory Tuning
- Auto Preset Memory

#### **Specifications**

#### ■ Input/Output Terminals For Every A/V System

Audio Inputs	
8 Analog Inputs	CD, (TUNER), DVD/VDP, TV/DBS, AUX,
	VCR CDR/TAPE V ALIX(FRONT)

6 Analog EXT. Inputs..... FRONT L/R, CENTER, SURROUND L/R. SUBWOOFER OPTICAL x 3 (incl. FRONT x 1) 4 Digital Inputs..... COAXIAL x 1

Audio Outputs

Analog PRE OUT Terminals..... FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUBWOOFER 2 Analog REC OUT Terminals...... VCR, CDR/TAPE 1 Analog Multi Zone 2 Output......L/R

Video Inputs

V.AUX (FRONT) 

Video Outputs

1 Component Video Output ...... MONITOR 2 Composite Outputs......VCR, MONITOR 2 S-Video Outputs ...... VCR, MONITOR

1 Digital Output...... OPTICAL x 1

■ Power Amplifier Section

Rated output	*THD figures a	are power amp stage values.
Front	80 W + 80 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)
	115 W + 115 W	(6 ohms, 1 kHz, 0.7 % THD)
Center	80 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)
	115 W	(6 ohms, 1 kHz, 0.7 % THD)
Surround	80 W + 80 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)
	115 W + 115 W	(6 ohms, 1 kHz, 0.7 % THD)
Surround Back	80 W + 80 W 115 W + 115 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD) (6 ohms, 1 kHz, 0.7 % THD)

#### ■ Preamplifier Section

Input sensitivity/Impedance CD, DVD/VDP, TV/DBS, VCR, CDR/TAPE, AUX, V.AUX(FRONT)...... 200 mV/47 kohms

Output level/Load impedance SUBWOOFER...... 1.2 V/10 kohms

CDR/TAPE, VCR, ZONE2

...... 200 mV/47 kohms

Signal-to-noise ratio.............. 98 dB (IHF-A weighted) (Tone Defeat On) 

■ FM Section

Tuning frequency range....... 87.5 - 107.9 MHz Usable sensitivity ...... 1.0 µV (11.2 dBf)

■ AM Section

Tuning frequency range...... 520 - 1710 kHz

Usable sensitivity ...... 18 µV

■ General

Power supply ...... AC 120 V, 60 Hz Power consumption ...... 5.0 A

Dimensions ...... 434 (W) x 147 (H) x 417 (D) mm 17-3/32" (W) x 5-25/32" (H) x 16-9/64" (D)

Weight...... 11.4 kg, 25 lbs 2 oz



<sup>\*</sup>Design and specifications are subject to change without notice

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