

## 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
- 96 kHz Processing Circuit
- 24 bit, 192 kHz Capability High Resolution D/A Conversion

### ■ Auto Setup and RoomEQ with Microphone

The AVR-2106 includes an Auto Set-up function that performs basic settings for the speakers based on frequency response data for the speakers and the listening room that was measured by a supplied high-performance microphone, and a Room EQ (equalizer) function that optimizes frequency response characteristics for the listening room.



### ■ 3 Sets of Component Video Inputs

The AVR-2106 is equipped with 3 sets of component video inputs and 1 set of monitor outputs (all RCA terminals).

### ■ Fully Discrete, Equal Power 7 Amplifier Channels, 100 Watts Each

Front	100 W + 100 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)
Center	100 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)
Surround	100 W + 100 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)
Surround Back	100 W + 100 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)

For optimum Dolby Digital and dts reproduction, the AVR-2106 features high quality, wideband audio amplification, providing 90 watts power output for each of the 7 main channels. A large capacity power supply includes a high current power transformer along with discrete power output devices on all 7 amplifier channels for highest dynamic range and superb reproduction clarity.

### ■ 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-2106 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 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 ensure that all channels respond with equal performance to the demands of the audio signals.



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

The AVR-2106 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.

### ■ Assignable surround back (L/R) amplifiers for front (L/R) channel bi-amping, or for Multi-zone playback

Amplifiers initially reserved for Surround back (L/R) channels can be assigned to bi-wire Front (L/R) channels to improve playback quality in the front for enhanced listening enjoyment. Or the amplifiers can be assigned to Zone 2 speakers (with multi-source), in addition to PREOUT for Zone 2.

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

The power amp circuits of the AVR-2106 have been meticulously designed to reproduce the exceptionally high sound quality with wide frequency response from 10 Hz to 100 kHz.

### ■ 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-2106 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)

### ■ On Screen Display

The AVR-2106 lets you make system settings via displays on your TV screen from the comfort of your chair.

### ■ Personal Memory Plus, for Easy Operation

The AVR-2106 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.

### ■ Acclaimed Customisation Feature

As with all of Denon's high-grade A/V receiver, the AVR-2106 lets you adjust speaker configuration, delay times and other parameters so that you can customize the performance of the AVR-2106 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.

# AVR-2106

- Multi-Function Preset Memory Remote Controller with Glo-keys
- 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 favourite 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-2106 supports subwoofer cross-over switching with a choice of 8 cross-over frequencies: 40/60/80/100/120/150/200/250Hz. This lets you more accurately match the performance characteristics of the subwoofer to the main speaker system.

- XM Satellite Radio Ready with optional 'Connect and Play' antenna\*
  - \*Subscription to XM services also required.
- Component video circuits which maintain flat response up to 100MHz, ensuring sharp image quality
- Video Up/Down conversion function (Composite <-> S-Video, Composite /S-Video-> Component)
- Audio Delay Function (0 - 200 msec.)
- Pure Direct mode, for the pure enjoyment of music in high-quality sound

## Other features

- Night Mode for not disturbing others
- Function Rename
- AC Inlet
- Input Function Level
- REC OUT Selector
- Front Panel Inputs (with S-Video, Digital Optical Input)
- Front A/B Speaker Terminals
- High-grade 7 Channel Speaker Terminals (all ch)
- RS-232C Port
- Frequency Synthesis Tuning
  - 56-Station AM/FM/XM Random Preset Memory Tuning
  - Auto Preset Memory (AM/FM)

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

### Audio Inputs

#### 9 Analog Inputs

PHONO, CD, (TUNER), DVD/VDP, TV/DBS, VCR-1, VCR-2, CDR/TAPE, V.AUX(FRONT)

#### 6 Analog EXT. Inputs

FRONT L/R, CENTER, SURROUND L/R, SUBWOOFER

#### 6 Digital Inputs

OPTICAL x 4 (incl. FRONT x 1)  
COAXIAL x 2

### Audio Outputs

#### 1 Analog PRE OUT Terminals

7.1 ch

#### 3 Analog REC OUT Terminals

VCR-1, VCR-2, CDR/TAPE

#### 1 Digital Output

OPTICAL x 1

### Video Inputs

#### 3 Component Video Inputs

VIDEO1, VIDEO2, VIDEO3

#### 5 Composite Inputs

DVD/VDP, TV/DBS, VCR-1, VCR-2, V.AUX(FRONT)

#### 5 S-Video Inputs

DVD/VDP, TV/DBS, VCR-1, VCR-2, V.AUX(FRONT)

### Video Outputs

#### 1 Component Video Output

MONITOR

#### 3 Composite Outputs

VCR-1, VCR-2, MONITOR

#### 3 S-Video Outputs

VCR-1, VCR-2, MONITOR

## Specifications

### Power Amplifier Section

Rated output \*THD figures are power amp stage values.

Front	100 W + 100 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)
	130 W + 130 W	(6 ohms, 1 kHz, 0.7 % THD)
Center	100 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)
	130 W	(6 ohms, 1 kHz, 0.7 % THD)
Surround	100 W + 100 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)
	130 W + 130 W	(6 ohms, 1 kHz, 0.7 % THD)
Surround Back	100 W + 100 W	(8 ohms, 20 Hz - 20 kHz, 0.08 % THD)
	130 W + 130 W	(6 ohms, 1 kHz, 0.7 % THD)

### Preamplifier Section

#### Input sensitivity/Impedance

PHONO(MM)	2.5 mV/47 kohms
CD, DVD/VDP, TV/DBS, VCR-1, VCR-2, CDR/TAPE, V.AUX(FRONT)	200 mV/47 kohms

#### Output level/Load impedance

SUBWOOFER	1.2 V/10 kohms
CDR/TAPE, VCR-1, VCR-2	200 mV/47 kohms
Frequency response	10 Hz - 100 kHz (+1, -3 dB) (Tone Defeat On)
Signal-to-noise ratio	100 dB (IHF-A weighted) (Tone Defeat On)
Tone control	Treble: ±6 dB at 10 kHz Bass: ±6 dB at 100 Hz

### 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	5.3 A
Dimensions	434 (W) x 171 (H) x 417 (D) mm 29 lbs5oz
Weight	13.0 kg



\*Design and specifications are subject to change without notice.

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