

## THX Ultra2 Certified 7.1-channel A/V Surround Receiver

Denon's AVR-4806 has technology, the reference sound quality and an extensive feature set, that previously was only available on its critically acclaimed sibling, the AVR-5805. But it also stands alone with the introduction of some exciting new technologies, not found on any previously released Denon receivers. The AVR-4806 is the first product from Denon to offer XM Satellite Radio Ready 'Connect and Play' capability. And for the ultimate in connection flexibility and ease of use, the AVR-4806 is the first A/V receiver to offer Analog Video to digital HDMI output conversion, which allows all video sources input through the AVR-4806 to be output on one HDMI cable. The highly regarded Audyssey MultEQ setup system is included, to give more realism and higher sound reproduction to any environment the AVR-4806 may be installed. Denon original technologies are present as well, DDSC-Digital, AL24 Processing Plus and the latest Denon Link 3rd digital interface.



## Audio Section

## ■ THX Ultra2 Certified 7-channel High Power Amplifier

Front	140 W + 140 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)
Center	140 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)
Surround	140 W + 140 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)
Surround back	140 W + 140 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)

The AVR-4806 proudly bears the THX Ultra2 logo, certifying that it satisfies the strict standards of Lucasfilm, Inc., governing performance, features, sound quality, power, stability into low-impedance speaker loads (3.2 ohms and higher), and ease of operation.

## ■ 'New DDSC-Digital,' for dramatically improved processing performance

The New DDSC (Dynamic Discrete Surround Circuit)- Digital is a high-quality surround sound reproduction circuit designed by Denon, and forms the core of the design concept that Denon pursues for all its A/V amps: to faithfully reproduce the original intent of content producers. Denon has succeeded in developing a fully discrete design for the New DDSC-Digital in which high-performance ICs are used in independent blocks to form a signal processor that reproduces surround sound, and the discrete design ensures that all channels are endowed with identical response and quality of sound.

## ■ New 32-bit floating point DSP

Three of the latest 32-bit floating point DSPs for the decoder.

## • 24-bit/192-kHz D/A Converter

The latest high-accuracy 24-bit/192-kHz D/A converter has been employed for the audio DAC.

## • High-performance A/D Converter

A high-performance A/D converter of 24-bit/192-kHz quality has been used to significantly boost S/N and dynamic range.

## ■ 'AL24 Processing Plus,' for high sound quality

## ■ DENON Link, enabling high-speed, high-grade digital signal transmission

## ■ IEEE 1394 digital interface

## ■ Large-output Power Amp Section and Power Supply Configuration, for stable high-power output

## ■ Stabilized, independent power supplies for each circuit

## ■ Chassis construction to suppress internal/external vibration

## ■ Pure Direct mode, for the pure enjoyment of music in high-quality sound

## ■ Configurable Center, Surround and Surround Back Amplifiers

- Multi-zone system: a 5.1-channel theater in the main room and a monaural environment in a second and third rooms.
- "Bi-amp" system: Front (L/R) channels are bi-wired in a 5.1-channel theater to improve playback quality in the front for enhanced listening enjoyment.

## ■ Pre-amp with Variable Gain Volume

## ■ New Auto Set-up and Room EQ, featuring MultEQ from Audyssey, for overall listening area support using supplied microphone

## ■ Full support for the most advanced surround playback formats

- Dolby Digital EX • Dolby Digital • Dolby Pro Logic IIx
- Dolby Headphone • DTS-ES • DTS 96/24 • DTS Neo:6 • DTS • HDCD

## ■ THX, THX Surround EX, THX Ultra2 Post Processing Modes

## ■ Original surround modes from Denon

## ■ XM Satellite Radio Ready with optional 'Connect and Play' antenna\*

\*Subscription to XM services also required.



## Video Section

## ■ Video Up/Down Conversion capable of output to HDMI port

The AVR-4806 includes a video up/down conversion function that allows the unit to be connected to the video monitor via a single cable regardless of the video input signal's format as follows:

- 1) Composite video signals are converted to HDMI (\*1), component video, & S-video;
- 2) S-video signals are converted to HDMI (\*1), component video, & composite video;
- 3) Component video signals are converted to HDMI (\*1), composite video (\*2), & S-video (\*2).

\*1. Output signal up-converted to HDMI retains the resolution of the input signal.

\*2. Down-conversion from component video to composite or S-video applies only to 480i input signals.

## ■ Component video switching

The AVR-4806 is equipped with 3 sets of component video inputs. There are also 2 sets of component video outputs capable of simultaneous output, allowing component video with high picture quality to be enjoyed on two monitors at the same time.

Settings do not need to be changed each time a monitor is switched. These component video circuits achieve sharp HDTV video quality in a frequency range up to 100 MHz.

## ■ High-speed, high-accuracy 12-bit/216-MHz Video DAC

A high-speed, high-accuracy 12-bit/216-MHz video DAC is used in the video circuitry for component video, S-video, and composite video signals. This DAC enhances the reproducibility of delicate-level video signals, allowing high-definition video to be played back with greater fidelity to the original images. In addition, noise shaped video (NSV) technology improves video S/N for greater signal linearity.

## ■ Composite and S-video signal processing

The AVR-4806 uses a time base corrector (TBC) in converting composite video & S-video signals to component video to suppress jitter in the video signal during playback.

## Expandability

## ■ Analog EXT IN terminal

## ■ 3 Source and Zone Capability

## ■ Ethernet and RS-232C terminals, for external 3rd party control systems and possible future upgrades

# AVR-4806

## Other Functions

- Auto Surround Back Channels ON function, for auto-detection of supporting sources
- Auto Surround mode
- New design and ease-of-use
  - Front panel's large display.
  - A cursor key and Buttons on the front panel
- EL remote controller for easy operation
- On-screen display, for easier, error-free operation
- Variable subwoofer crossover switching  
(40/60/80/90/100/110/120/150/200/250 Hz)

- Muting level settings ( $\infty$ /-40dB/-20db)
- Audio Delay function (max. 6 frames or 200 msec)
- 3 User Mode Buttons



Inside of the trapdoor

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

### Audio Inputs

- 12 Sets Analog Input  
PHONO, CD, TUNER, DVD, VDP, TV, DBS, VCR-1, VCR-2, VCR-3, V.AUX, CDR/TAPE
- 1 Set 8-ch Analog EXT. Input  
FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUBWOOFER
- 8 Digital Inputs  
OPTICAL x 5  
COAXIAL x 3

### Audio Outputs

- 1 Set 8-ch Analog PRE Output  
FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUBWOOFER
- 4 Sets Analog REC Output  
VCR-1, VCR-2, VCR-3, CDR/TAPE
- 2 Sets Analog Multi Zone Output  
ZONE2 L/R, ZONE3 L/R
- 3 Digital Outputs  
OPTICAL x 3

### Video Inputs

- 1 Set DVI-D Video Input
- 3 Sets HDMI Video Input (with Digital Audio) 1, 2, 3
- 3 Sets Component Video Input 1, 2, 3
- 8 Sets Composite Input  
DVD, VDP, TV, DBS, VCR-1, VCR-2, VCR-3, V.AUX
- 8 Sets S-Video Input  
DVD, VDP, TV, DBS, VCR-1, VCR-2, VCR-3, V.AUX
- 1 Set DVI Input

### Video Outputs

- 1 Set HDMI Video Output (with Digital Audio)  
MONITOR
- 2 Set Component Video Output  
MONITOR-1, MONITOR-2
- 4 Sets Composite Output  
VCR-1, VCR-2, VCR-3, MONITOR
- 4 Sets S-Video Output  
VCR-1, VCR-2, VCR-3, MONITOR
- 2 Sets Multi Zone Output  
ZONE2 (Composite& S-Video), ZONE3 (Composite& S-Video)

### Video/Audio Inputs

- 3 Sets of HDMI

### Video/Audio Outputs

- 1 Set of HDMI

## Specifications

### Power Amplifier Section

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

Front	140 W + 140 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)
	165 W + 165 W	(6 ohms, 20Hz - 20kHz, 0.05 % THD)
Center	140 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)
	165 W	(6 ohms, 20Hz - 20kHz, 0.05 % THD)
Surround	140 W + 140 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)
	165 W + 165 W	(6 ohms, 20Hz - 20kHz, 0.05 % THD)
Surround back	140 W + 140 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)
	165 W + 165 W	(6 ohms, 20Hz - 20kHz, 0.05 % THD)

### Preamplifier Section

Input sensitivity/impedance

PHONO(MM)	2.5 mV/47 kohms
CD, DVD, VDP, TV, DBS, VCR-1, VCR-2, VCR-3, V.AUX, CDR/TAPE, FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK, SUBWOOFER	200 mV/47 kohms

Output level/Load impedance

FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUBWOOFER, MULTI ZONE L/R	1.2 V/10 kohms
VCR-1, VCR-2, VCR-3, V.AUX, CDR/TAPE	200 mV/47 kohms

Frequency response

10 Hz - 100 kHz: +0, -3 dB (DIRECT MODE)

Signal-to-noise ratio

102 dB (DIRECT MODE)

RIAA deviation

$\pm 1$  dB (20 Hz - 20 kHz)

Tone control

Treble:  $\pm 10$  dB at 10 kHz, Bass:  $\pm 10$  dB at 100 Hz

### FM Section

Tuning frequency range

87.5 - 107.9 MHz

Usable sensitivity

1.0  $\mu$ V (11.2 dBf)

### AM Section

Tuning frequency range

520 - 1710 kHz

Usable sensitivity

18  $\mu$ V

### General

Power supply

AC 120 V, 60 Hz

Power consumption

10.6A

Dimensions

434 (W) x 178 (H) x 500 (D) mm  
17-3/32" (W) x 7-0" (H) x 19-11/16" (D)

Weight

23.8 kg, 52 lbs 8oz



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

\* "Dolby", "Dolby Digital-EX", "Pro Logic IIx", and the double-D device are registered trademarks of Dolby Laboratories Licensing Corporation.

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