

The AVR-987 is Denon's latest addition of versatile A/V Receivers, which incorporate all current surround formats and enhanced installation flexibility, all with great simplicity of setup and operation.



### Audio section

#### ■ Full discrete 7-channel high power amplifier

Front	110 W + 110 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)
Center	110 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)
Surround	110 W + 110 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)
Surround back	110 W + 110 W	(8 ohms, 20Hz - 20kHz, 0.05 % THD)

#### ■ Latest 32-bit floating point DSP for the decoder

- 24-bit/192-kHz D/A converter
- 96kHz A/D converter

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

#### ■ Digital interface receiver supporting 24-bit/192-kHz signals

#### ■ Large-output power amp section and power supply configuration, for stable high-power output

#### ■ Stable power supply for high-quality sound and picture playback

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

#### ■ Supports the most advanced surround playback formats

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

#### ■ Configurable surround back amplifiers

- Multi-zone system: a 5.1-channel theater in the main room and a stereo environment in a second room.
- "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.

### Video section

#### ■ HDMI digital video interface supporting high-quality video of 1080p (\*1)

The AVR-987 has HDMI digital video interface terminals (2 inputs and 1 output) that can be switched for high-resolution 1080p video signal transmission. These HDMI terminals also support digital input of multi-channel audio signals.

\*1) Version 1.1 compliant. Since HDCP is also supported, video cannot be viewed on a non-HDCP display connected to the AVR-987; please connect a HDCP-compliant display when viewing video material.

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

The AVR-987 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 (\*2), component video, & S-video;
- 2) S-video signals are converted to HDMI (\*2), component video, & composite video;
- 3) Component video signals are converted to HDMI (\*2), composite video (\*3), & S-video (\*3).

\*2. I/P conversion from 480i/576i to 480p/576p

\*3. Down-conversion from component video to composite or S-video applies only to 480i input signals.

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

#### ■ 3 sets of component video inputs

#### ■ Dual component outputs

#### ■ High definition quality video switching

#### ■ Composite and S-video signal processing

The AVR-987 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.

### Connectivity/ Expandability

#### ■ ASD-1R Control Dock for iPod® (option): Supports iPod playback when connected to the AVR-987

iPod (\*4) playback can be enjoyed through the AVR-987 when the ASD-1R, Denon's original Control Dock for iPod (sold separately), is connected to the dedicated control terminal of the AVR-987. The iPod can also be controlled via the remote controller supplied with the AVR-987.

\*4) Supports 3rd-generation and later iPods equipped with a Dock connector. Some functions may not work depending on the generation of the iPod and the version of the software..



Black version is also available.

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

#### ■ XM Satellite Radio Ready

Optional XM plug n' play antenna and subscribes are required.

#### ■ 8ch Analog EXT IN terminal

# AVR-987

## Other Functions

- Variable subwoofer crossover switching  
(40/60/80/90/100/110/120/150/200/250Hz)
  - Room EQ Memory
  - Assignable Room EQ
  - Auto Surround Back Channels ON function, for auto-detection of supporting sources
  - Auto Surround mode
- The AVR-987 can automatically store the surround mode for any of three inputs signals: (1) Analog and PCM 2 channel, (2) Bit stream 2-channel (Dolby Digital, DTS) and (3) Bit stream multi-channel. If the type of input signal changes, the most appropriate surround mode is automatically selected for the signal.

### ■ Audio Delay function (max. 6 frames or 200 msec)

The Audio Delay function corrects slight lags between sound and picture that can occur when a video signal is processed, such as in a Progressive Scan DVD player or outboard video processor.

- 3 User Mode Buttons
- Night Mode for not disturbing others
- A/B switching between front speakers
- RS-232C terminal, for external 3rd party control systems and possible future upgrades
- Remote IN/OUT ports
- +12 V Trigger Output x 2 (Assignable)

- Muting level settings ( $\infty$ /-40dB/-20dB)
- Personal Memory Plus
- Audio Level Memory, for correcting different signal levels from each input device
- Volume Level Limiter, for limiting the maximum volume value
- Power-ON Volume Level Memory
- On-screen Display
- Function Rename
- Setup Lock, for locking the system setup
- New user-friendly remote
- Detachable AC power cord
- Frequency synthesis tuning
  - 56-Station AM/FM Random Preset Memory Tuning
  - Auto Preset Memory



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

### Audio Inputs

- 11 sets of Analog Inputs  
PHONO, CD, (TUNER), DVD, VDP, TV, DBS, VCR-1, VCR-2, CDR/TAPE, V.AUX (FRONT)
- 1 set of 8-ch Analog EXT. Inputs  
FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUBWOOFER
- 7 Digital Inputs  
OPTICAL x 5 (including FRONT x 1) (Assignable)  
COAXIAL x 2 (Assignable)

### Audio Outputs

- 1 set of 8-ch Analog PRE Outputs  
FRONT L/R, CENTER, SURROUND L/R, SURROUND BACK L/R, SUBWOOFER
- 3 sets of Analog REC Outputs  
VCR-1, VCR-2, CDR/TAPE
- 1 Analog Multi Zone LINE Output  
ZONE2 L/R
- 2 Digital Outputs  
OPTICAL x 2

### Video Inputs

- 2 HDMI Inputs
- 3 sets of Component Video Inputs  
VIDEO-1, VIDEO-2, VIDEO-3
- 7 S-Video Inputs  
DVD, VDP, TV, DBS, VCR-1, VCR-2, V.AUX (FRONT)
- 7 composite Video Inputs  
DVD, VDP, TV, DBS, VCR-1, VCR-2, V.AUX (FRONT)

### Video Outputs

- 1 HDMI Output
- 2 sets of Component Video Outputs  
MONITOR1, MONITOR2
- 4 S-Video Outputs  
VCR-1, VCR-2, ZONE2, MONITOR
- 4 composite Outputs  
VCR-1, VCR-2, ZONE2, MONITOR

## Specifications

### Power Amplifier Section

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

Front	110 W + 110 W	(8 ohms, 20 Hz - 20 kHz, 0.05 % THD)
Center	110 W	(8 ohms, 20 Hz - 20 kHz, 0.05 % THD)
Surround	110 W + 110 W	(8 ohms, 20 Hz - 20 kHz, 0.05 % THD)
Surround Back	110 W + 110 W	(8 ohms, 20 Hz - 20 kHz, 0.05 % THD)

### Preamplifier Section

#### Analog

Input sensitivity / impedance	200mV/47kohms
Frequency response	10Hz-100kHz (+0, -3dB direct mode)
S/N	102dB (direct mode)
Rated output	1.2V

#### Digital

D/A output

2.0V

#### Phono

Input sensitivity / impedance	2.5mV
RIAA deviation	+/-1dB (20Hz to 20kHz)
Rated output	150mV

### Video Section

Frequency response	5Hz-10MHz (+0, -3dB)
Composite video/S-video	5Hz-100MHz (+0, -3dB)
Component video	5Hz-100MHz (+0, -3dB)

### 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	AC120V, 60Hz
Power consumption	6.0 A (1W max at standby mode)
Dimensions	434 (W) x 171 (H) x 429 (D) mm 17-3/32 (W) x 6-47/64 (H) x 16-57/64(D)
Weight	14.0 kg, 30 lbs 13.84 oz



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