

AVR-991

AV Surround Receiver



Network A/V Receiver with 3D Video, Web Multi-media, Multi-Room, Multi-Source

Equipped with a full array of the latest high resolution audio decoders including Dolby TrueHD and DTS-HD Master Audio, the AVR-991 is among the first to feature Audyssey's new DSX processing, which provides a dramatically expanded front soundstage via front height or width channels. The AVR-991 is also prepared for the future, with six HDMI 1.4a inputs, which provide 3D (Broadcast and Blu-ray) compatibility, as well as Audio Return Channel. Featuring Denon's precision HD video processing, all analog video inputs are digitized and scaled up to HD, so that legacy sources such as DVD, video tape and other SD sources will look better than ever. Having all sources converted to HDMI also allows a single cable run to the HDTV, minimizing expensive cable costs and cable clutter.



Features

New Features

- Featuring 3D pass-through technology
- Supports HDMI 1.4a with 3D, Audio Return Channel, Deep Color, "x.v.Color", Auto Lipsync and HDMI control function
- Direct play for iPod® and iPhone® via USB
- Audyssey DSX Processing
- Enhanced network capability
 - Internet Radio and network audio/photo streaming via Ethernet
 - Pandora, flickr, Napster and Rhapsody online support
 - 'Party Mode Plus'
 - FLAC HD, High resolution audio format
 - Compatible with Windows® 7
 - Web control
- Newly developed pre-memory remote control with Glo-Key buttons
- iPod and iPhone playback for Zone 2
- Remote Setup Guidance via On Screen Display
- Dual subwoofer pre-outs

One-cable HD solution

- Supports HDMI 1.4a with 3D (Broadcast and Blu-ray) and Audio Return Channel
- All sources are up-scaled to 1080P
- 6 x HDMI in / 1 x HDMI out with GUI (Graphical User Interface)

State-of-the-art Denon Solutions for Maximizing Content Quality

- Fully discrete, identical quality and power for all 7 channels (165 W x 7ch)
- Stable power supplies for high quality sound and picture playback
- Dynamic Discrete Surround Circuit, D.D.S.C.-HD
- High definition audio support including Dolby TrueHD and DTS-HD Master Audio
- Supports Dolby Pro Logic IIz processing
- High-bit I/P Converter and Scaler up to 1080p via HDMI

Connectivity & Future-ready Expandability

- Sirius satellite radio ready (via optional adapter, subscription required)
- Power Amp Assign function allows re-configuration of the outputs to handle surround back speakers, front effects speakers, or 2nd zone multi-room speakers
- 2 source / 2 zone capability

Ease-of-Use

- On Board Graphical User Interface via HDMI output (up to 1080p)
- Audyssey Dynamic Volume, for real-time volume adjustment
- Audyssey MultEQ XT and Auto Setup and Calibration (microphone included)
- 2-line fluorescent display on front panel
- Sleep timer function

Other

- Lower power consumption at stand-by 0.1 W (Standby)



State-of-the-art Denon Solutions for Maximizing Content Quality

- Fully discrete, identical quality and power for all 7 channels (125 W x 7ch)

To faithfully reproduce the original surround sound, each of the AVR-991's 7 channels is equipped with the same power amp of equal power. Since these power amps also use discrete circuits configured with parts strictly selected for their contribution to high sound quality, rather than with low-cost integrated circuits (ICs), the surround sound playback is of impeccably high quality.

Featuring 3D pass-through technology

By connecting a 3D-compliant Blue-ray disc player and 3D-compliant HDTV to the AVR-991, you will have a 3D home theater where you can enjoy high-definition sound and video on a level you've never experienced before.

Supports HDMI 1.4a with 3D, Audio Return Channel, Deep Color, "x.v.Color", Auto Lipsync and HDMI control function

When you connect the AVR-991 to a TV with a single HDMI cable, it supports Audio Return Channel (*1) that can play back the TV audio in surround sound. Until now, if you wanted to enjoy surround sound from a TV, you needed to use an optical digital cable or coaxial digital cable to bring sound from the TV to the A/V receiver. The AVR-991's Audio Return Channel feature helps you keep cable connections minimized to reduce cable costs and eliminate excessive cable clutter.

*1: The TV must also support Audio Return Channel.

Dynamic Discrete Surround Circuit, D.D.S.C.-HD

- 32-bit floating point high precision DSP processor
- AL24 Processing Plus improves fine detail (Front L/R channels)
- High precision 24-bit/192-kHz D/A converters

Clock jitter reduction for all digital inputs

High-definition audio support, including Dolby TrueHD and DTS-HD Master Audio, formats found on many high resolution Blu-ray titles

Audyssey DSX processing

Audyssey DSX extends 5.1-channel and 7.1-channel sound sources to a wider and higher dimension. A sound that is wider to the left and right is achieved by adding a sound source (LW/RW) that is wider than the usual placement of the front (FL/FR) speakers, and a greater sense of height in sound space is achieved by adding a sound source (LH/RH) in the upper area between the FL (FR) and LW (RW) channels.

High-bit I/P Converter and Scaler up to 1080p

- Multi cadence detection for SD and HD video signals
The AVR-991 uses a high-performance video scaler to convert SD (standard definition) video material to HD (high definition) quality for picture quality like you've never seen before.

Minimum Signal Path for clear audio and video signal

The "simple and straight" design concept has been thoroughly implemented in the signal paths to contribute to immaculately clean audio and video playback. Signal paths are as short as possible to keep signal degradation in the audio and video circuitry to an absolute minimum

Direct Mechanical Ground Construction, embodying concepts for thorough vibration resistance

Vibration-resistant construction has been reviewed to thoroughly suppress the adverse influences of vibration on sound quality. The power transformers, a source of vibration, have been securely mounted on the highly rigid bottom chassis. Direct mounting of cast-iron feet to the radiator in near proximity to each other serves to suppress mutual vibration with the power transformers and other sources of vibration.

Connectivity & Future-ready Expandability

- 6 x HDMI in / 1 x HDMI out (Repeater)

Direct play for iPod and iPhone via USB

You can also listen to music files from your iPod by simply connecting it to the AVR-991's USB port with the USB cable that came with the iPod. To start play, just press the iPod Play button on the AVR-991 or its remote control unit. Digital signals from the iPod are transmitted as is to the AVR-991 where they pass

through Denon's exclusive Compressed Audio Restorer and are processed by advanced audio circuitry to produce a clean, high-quality sound that is much more faithful to the original source.

- Sirius satellite radio ready
- Power Amp Assign function allows configuring the AVR-991 for different system setups

Ease-of-use

• On Board GUI via HDMI output (up to 1080p)
The AVR-991 is equipped with an easy-to-view Graphical User Interface (GUI) featuring visual menu displays. These menu displays can also be output to the HDTV via HDMI.

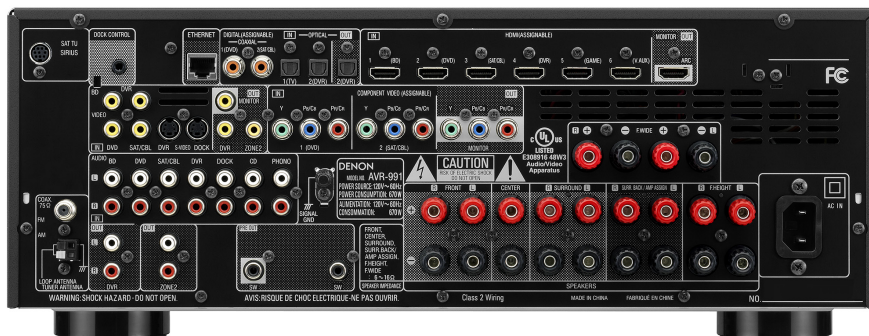
- Newly developed pre-memory remote control with Glo-Key buttons
- Remote Setup Guidance via On Screen Display
- Three Quick Select buttons
- Auto surround mode
- Sleep timer function
- Audio Delay function (max. 6 frames or 200 mSec)
- Muting level settings (Full/-40dB/-20dB)
- Audio level memory, capable of correcting different signal levels for each source device
- Variable subwoofer crossover switching

Others

- PC and iPhone setup via Ethernet (web control)
- Multi-Zone Management
- Remote Access & Maintenance
- IP Control

Ports		
In	HDMI	x 6
	Component	x 2
	S-Video	x 2
	Composite (Video)	x 5
	Analog Audio (Tuner included)	x 9
	Digital Optical	x 2
	Digital Coaxial	x 2
Out	HDMI Monitor	x 1
	Component Monitor	x 1
	Composite Monitor	x 1
	Composite (DVR/ Zone2)	x 2
	Audio Preout (SW)	x 2
	Audio Preout (Zone2 L/R)	x 1
	Audio REC out	x 1
Other	Phones	x 1
	Digital Optical	x 1
	USB port	x 1
	Ethernet	x 1
	Microphone Port	x 1
	Dock Control Port	x 1
	FM Tuner Antenna	x 1
AM Tuner Antenna	x 1	
Sirius connector	x 1	

Main Specifications	
Power amplifier section	
Rated output	*THD figures are power amp stage values. 125 W + 125 W
Front L/R	(8 ohms, 20 Hz - 20 kHz, THD 0.05 %) 165 W + 165 W (6 ohms, 1 kHz, THD 0.7%)
Center	125 W (8 ohms, 20 Hz - 20 kHz, THD 0.05 %) 165 W (6 ohms, 1 kHz, THD 0.7%)
Surround L/R	125 W + 125 W (8 ohms, 20 Hz - 20 kHz, THD 0.05 %) 165 W + 165 W (6 ohms, 1 kHz, THD 0.7%)
Surround Back L/R	125 W + 125 W (8 ohms, 20 Hz - 20 kHz, THD 0.05 %) 165 W + 165 W (6 ohms, 1 kHz, THD 0.7%)
Preamplifier section	
Input sensitivity/impedance	200 mV / 47 kΩ/kohms
Frequency response	10 Hz ~ 100 kHz — +1, -3 dB (DIRECT mode)
S/N Ratio	100 dB (IHF-A weighted, DIRECT mode)
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	670 W (Standby 0.1 W)
Dimensions (W x H x D)	17-3/32" x 6-47/64" x 15"
Weight	25 lbs, 5.6 oz, 11.5 kg



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 Audyssey Dynamic Volume™ is a trademark of Audyssey Laboratories.
 ***Made for iPod™ means that an electronic accessory has been designed to connect specifically to iPod and has been certified by the developer to meet Apple performance standards.
 ****Works with iPhone™ means that an electronic accessory has been designed to connect specifically to iPhone and has been certified by the developer to meet Apple performance standards.
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