

AVR-791

AV Surround Receiver

DENON

A/V Home Theater Receiver with 3D Video Connectivity

Packed with advanced features, the AVR-791 is one of the first to include the latest HDMI 1.4a functionality, which provides 3D pass-through (Broadcast and Blu-ray) capability, for compatibility with advanced 3D HDTVs and 3D Blu-ray discs, and also includes Audio Return Channel. It also features the latest high resolution audio decoders, including Dolby TrueHD and DTS-HD Master Audio, and includes Dolby Pro Logic IIz decoding, which provides front channel height effects for a dramatically expanded front soundstage. The 7 channel amplifier section features discrete component technology, with each channel rated at a powerful 125 watts. The remote control features Glo-Key buttons for critical functions, and contains codes to control hundreds of other components. System setup is super easy, aided by Audyssey MultEQ automatic speaker configuration and room correction. The on-screen display lets you configure the remote control quickly and easily to control other components in your system.



Features

New Features

- Featuring 3D pass-through technology (supports Broadcast and Blu-ray)
- Supports HDMI 1.4a with 3D, Audio Return Channel, Deep Color, "x.v.Color", Auto Lipsync and HDMI control functions
- Direct play for iPod® and iPhone® via USB
- Newly developed pre-memory remote control handset with Glo-Key buttons
- Remote Setup Guidance via on-screen display

One-cable HD solution

- Supports HDMI 1.4a with Audio Return Channel
- All sources are up-scaled to 1080P; allows a single HDMI cable run to the TV
- 4 x HDMI in / 1 x HDMI out with On-Screen Display

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

- Fully discrete, identical quality and power for all 7 channels (125 W x 7ch)
- Stable power supply for high-quality sound and picture playback
- High definition audio support, Dolby TrueHD and DTS-HD Master Audio
- Supports Dolby Pro Logic IIz processing
- All sources are up-scaled to 1080P

Connectivity & Future-ready Expandability

- Dock connectivity for iPod and network streaming
- Power Amp Assign function, allows for surround back speakers, or front height effect speakers, or a pair of second zone speakers in another room in the home

Ease-of-Use

- On-Screen Display
- Audyssey Dynamic Volume, for real-time volume adjustment
- Audyssey MultEQ and Auto Setup
 - Tower type microphone for more accurate measuring
 - Up to six measurement points
 - High level resolution filters for satellite speakers and also subwoofer

Others

- 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-791'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 TV to the AVR-791, 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-791 to a TV with a single HDMI cable, it supports Audio Return Channel (ARC)^{**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-791's ARC feature, however, helps you keep cable connections neat and out of the way as you build your home theater.

*1: The TV must also support ARC.

• High-definition audio support

The AVR-791 features Dolby TrueHD and DTS-Master Audio, two high resolution formats found on many Blu-ray discs, powered by a 32 bit floating point high resolution DSP processor.

• Dolby Pro Logic IIz

To let you enjoy a dramatically expanded front soundstage, the AVR-791 is equipped with a Dolby Pro Logic IIz processor. By connecting Front Height speakers and using Dolby Pro Logic IIz playback, you will be able to enjoy surround sound in the vertical as well as horizontal directions.

• All sources are up-scaled to 1080P

The AVR-791 provides an HDMI Video Up-scaling function that scales analog input video signals to high-definition 1080p signals and outputs them via the HDMI port to the TV. This not only makes it unnecessary to connect the TV to the AVR-791 with additional cables besides a single HDMI cable run, it also lets you enjoy any video source with refreshingly detailed picture quality.

• 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.

• Compressed Audio Restorer to enhance digital music files with portable music players

Connectivity & Future-ready Expandability

- 4 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-791's USB port with the USB cable that came with the iPod. To start play, just press the iPod Play button on the AVR-791 or its remote control unit. Digital signals from the iPod are transmitted as is to the AVR-791 where they pass through the compressed audio restorer and are processed by advanced audio circuitry to produce a clean, high-quality sound.

• Dock connectivity for iPod and network streaming Network music can be enjoyed via the Denon Networked Control Dock. (Requires optional ASD-51W or ASD-51N iPod dock)

• Power Amp Assign function, for greater system configuration versatility

The AVR-791 supports up to 7.1 channels (FL/ FR/ C/ SL/ SR/ SBL/ SBR/ SW) for surround playback defined by the Blu-ray disc format. To enjoy surround playback with the AVR-791's Dolby Pro Logic IIz decoder, you can reassign the power amp from the two surround back channels (SBL/SBR) to the two front height channels (FHL/FHR). Or, by assigning the SBL/SBR power amp to Zone 2, you can enjoy multi-room audio playback, or to achieve higher-quality sound for 2-channel stereo playback, you can configure the AVR-791 for front bi-amp operation. These are just some of the ways you can configure the AVR-791's amplifier channels to suit various listening styles.

Ease-of-use

• On-Screen Display

With the AVR-791's on-screen display, you can easily make settings for your home theater system while viewing menus on the TV screen. You can check the status of each setting, such as the volume level when you're adjusting the volume, or the name of the input source when switching input sources.

• Newly developed pre-memory remote control handset 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 input device
- Variable subwoofer crossover switching

Main Specifications	
Power amplifier section	Preamplifier section
Rated output *THD figures are power amp stage values.	Input sensitivity/impedance 200 mV / 47 kΩ/kohms
Front L/R 90 W + 90 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %)	Frequency response 10 Hz ~ 100 kHz — +1, -3 dB (DIRECT mode)
125 W + 125 W (6 ohms, 1 kHz, THD 0.7%)	S/N Ratio 100 dB (IHF-A weighted, DIRECT mode)
Center 90 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %)	FM section
125 W (6 ohms, 1 kHz, THD 0.7%)	Tuning frequency range 87.5 - 107.9 MHz
Surround L/R 90 W + 90 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %)	Usable sensitivity 1.0 μV (11.2 dBf)
125 W + 125 W (6 ohms, 1 kHz, THD 0.7%)	AM section
Surround Back L/R 90 W + 90 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %)	Tuning frequency range 520 - 1710 kHz
125 W + 125 W (6 ohms, 1 kHz, THD 0.7%)	Usable sensitivity 18 μV
	General
	Power supply AC 120 V, 60 Hz
	Power consumption 460 W (Standby 0.1 W)
	Dimensions (W x H x D) 17-3/32" x 6-47/64" x 15"
	434 x 171 x 381 mm
	Weight 22 lbs 7.8 oz, 10.2 kg

Ports	
In	HDMI x 4
	Component x 1
	S-Video x 1
	Composite (Video) x 3
	Analog Audio (Tuner included) x 7
	Digital Optical x 1
	Digital Coaxial x 1
Out	HDMI Monitor x 1
	Composite Monitor x 1
	Audio Preout (SW) x 1
	Phones x 1
Other	USB port x 1
	Microphone Port x 1
	Dock Control Port x 1
	FM Tuner Antenna x 1
	AM Tuner Antenna x 1



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