

# AVR-591

AV Surround Receiver

# DENON

## A/V Home Theater Receiver with 3D Video Connectivity

The AVR-591 is packed with exciting features that lets you experience superb surround sound. It's also equipped with the latest HDMI 1.4a technology, which for the first time provides for 3D pass-through (Broadcast and Blu-ray) capability, delivering thrilling 3D high definition viewing with 3D-compatible HDTVs. With 4 HDMI inputs, the AVR-591 also features upconversion of standard definition signals to HDMI output, allowing a single cable run to the TV, minimizing costs and reducing system complexity. Equipped with the latest high resolution audio decoders, including Dolby TrueHD and DTS-HD Master Audio, the AVR-591 also features Dolby Pro Logic IIz, which provides front height channels for a dramatically big front soundstage. The remote control features codes to control a wide variety of other components, and the AVR-591 even provides an easy-to-use on-screen remote control setup guide.



### 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
- 4 x HDMI in / 1 x HDMI out (Repeater)
- 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-converted to HDMI; allows a single 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 5 channels (120 W x 5 ch)
- 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-converted to HDMI

#### Connectivity & Future-ready Expandability

- Dock connectivity for iPod® and network streaming

#### Ease-of-Use

- On-Screen Display
- Audyssey Dynamic Volume, for real-time volume adjustment
- Audyssey MultEQ and Auto Setup
  - Tower type microphone included 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 5 channels (120 W x 5 ch)

To faithfully reproduce the original surround sound, each of the AVR-591's 5 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 Blu-ray disc player and 3D-compliant TV to the AVR-591, you will have a 3D home theatre 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-591 to a TV with a single HDMI cable, it supports Audio Return Channel (ARC)<sup>(\*)</sup> 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-591's ARC feature, however, helps you keep cable connections neat and out of the way as you build your home theatre.

\*1: The TV must also support ARC.

- High-definition audio support

The AVR-591 features a high resolution audio decoder that supports Dolby TrueHD and DTS-HD Master Audio, the high resolution audio formats found on many Blu-ray disc titles.

- Dolby Pro Logic IIz

To let you enjoy an even richer surround sound experience, the AVR-591 is equipped with a Dolby Pro Logic IIz processor. By adding a separate 2-channel power amp to the AVR-591's pre-out port and connecting a pair of Front Height speakers, you will be able to enjoy surround sound in the vertical as well as horizontal direction.

- 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)

The AVR-591 provides 4 HDMI inputs that let you simultaneously connect a variety of HDMI-equipped devices such as a game console and HD video camera as well as Blu-ray disc player.

- 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 dock)

## Ease-of-use

- On-Screen Display

With the AVR-591's on-screen display, you can easily make settings for your home theatre 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	
<b>Power amplifier section</b>	
Rated output	*THD figures are power amp stage values. 75 W + 75 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %) 120 W + 120 W (6 ohms, 1 kHz, THD 0.7%)
Center	75 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %) 120 W (6 ohms, 1 kHz, THD 0.7%)
Surround L/R	75 W + 75 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %) 120 W + 120 W (6 ohms, 1 kHz, THD 0.7%)
<b>Preamplifier section</b>	
Input sensitivity/impedance	200 mV / 47 kΩ/kohms
Frequency response	10 Hz - 100 kHz - +1, -3 dB (DIRECT mode)
S/N Ratio	98 dB (HF-A weighted, DIRECT mode)
<b>FM section</b>	
Tuning frequency range	87.5 - 107.9 MHz
Usable sensitivity	1.2 μV (12.8 dBf)
<b>AM section</b>	
Tuning frequency range	520 - 1710 kHz
Usable sensitivity	18 μV
<b>General</b>	
Power supply	AC 120 V, 60 Hz
Power consumption	360 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	20 lbs 4.5 oz, 9.2 kg

Ports		
In	HDMI	x 4
	Component	x 1
	S-Video	x 1
	Composite (Video)	x 3
	Analog Audio (Tuner included)	x 5
	Digital Optical	x 1
Digital Coaxial	x 1	
Out	HDMI Monitor	x 1
	Composite Monitor	x 1
	Audio Preout (Front height L/R/Surround Back L/R, SW)	x 2
	Phones	x 1
Other	Microphone Port	x 1
	Dock Control Port	x 1
	FM Tuner Antenna	x 1
	AM Tuner Antenna	x 1



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\*Audyssey MultEQ™ is a registered trademark of Audyssey Laboratories. Audyssey Dynamic EQ™ is a trademark of Audyssey Laboratories.

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\*iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

\*Power Amp Assign function, for versatility in using the AVR-591 for different purposes