

AVR-2309

AV Surround Receiver

DENON

High Definition A/V Surround Receiver featuring Dolby TrueHD, dts-HD Master Audio and 1080p HD Video to enhance your level of entertainment pleasure.

The AVR-2309 monitors the structural elements of sound sources and uses Audyssey Dynamic Volume to adjust volume without sacrificing dynamic range. This A/V receiver masterfully controls a variety of media for optimum playback of high-quality audio and video content.



Features

New Features

- **Dolby TrueHD and dts-HD Master Audio decoders**
- **Audyssey Dynamic Volume and Dynamic EQ**
- **4 HDMI inputs (Audio and Video)**
- **Versatile Entertainment**
 - Reproduce music just as the original artists intended. (DENON Circuitry and Construction for Hi-Fi Sound Quality / Compressed Audio Restorer)
 - Easy to use (QUICK SELECT / Audyssey DYNAMIC EQ + DYNAMIC VOLUME)
 - Connectivity (HDMI / Dock control terminal (Network ready))

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

High quality Sound

- Identical quality and power for all 7 channels, 135W x 7ch (6 ohms)
- Discrete devices for ultimate performance in each block
- New 32-bit floating point high precision DSP
- Minimum signal path design
- Direct Mechanical Ground for stable drive
- Dual power transformers
- DENON customized block capacitors
- Compressed Audio Restorer

High quality Video

- Discrete devices for ultimate HD video performance in each block
- DENON's High Picture Quality Circuitry, to enhance enjoyment of existing DVDs
 - > Faroudja DCDi Video Processing
- Analog video to HDMI scaling up to 1080p
- 1080p video pass through
- Digital Component (100 MHz) and HDMI video conversion

Connectivity & Future-ready Expandability

Digital Media Connectivity

- Network Audio/Photo Ready (optional ASD-3N/3W)
- iPod Audio/Photo and Video playback (optional ASD-11R/3N/3W)

Multi-Zone Capability

- 2 source / 2 zone capability with fixed pre amp output
- Assignable Surround Back amp for zone 2
- RS-232C control, 150mA Trigger output

Ease-of-Use

- Dynamic Volume and Dynamic EQ
- Mult EQ Auto setup and Room EQ
- HDMI Auto Lip Sync
- HDMI Control (CEC)

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

Robust power source for each block, for stable supply of current

To produce a clear, stable power circuit that prevents unwanted noise from affecting the sound, the AVR-2309 has a dedicated CPU and Standby transformers that are separate from the audio and video circuitry. The AVR-2309 is endowed with a powerful rectifier circuit with 12,000µF block capacitors and bridge diodes of 8A capacity, surpassing typical models in this price range, to supply stable current with negligible noise.

Minimum Signal Path

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

The 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

DENON's new audio technology for MP3/WMA/AAC compressed audio formats restores higher frequency sounds, along with rich, deeper bass.

Connectivity & Future-ready Expandability

- Power amplifier assign for zone 2 or Bi-Amping
- Remote in/out
- 2-Way remote ready (optional: DENON RC-7000CI/RC-7001RCI)
- 7.1 pre amplifier output for future extension

Ease-of-Use

Audyssey Dynamic Volume, for real-time volume adjustment

Large changes in volume sometimes occur between documentaries where the sound is mainly narrative, and movies which often contain loud sound effects. Viewers often raise the volume for documentaries to hear the narrative more easily, but then turn it down again when a commercial with loud sound effects comes on. They do this numerous times during a program of this type. Audyssey Dynamic Volume constantly monitors the sound sources and adjusts the volume to the optimum level for the particular source being heard without sacrificing dynamic range.

The AVR-2309 is also equipped with Audyssey Mult EQ which measures the acoustic characteristics of the room to obtain the optimum acoustic effects; and Audyssey Dynamic EQ which reproduces the high and low range with the optimum acoustic effect during low volume levels. Dynamic Volume combines these two functions to achieve maximum performance.

Mult EQ Auto setup and RoomEQ

- Tower type microphone for more accurate measuring
- Up to six measurement points
- High level resolution filters for satellite speakers and subwoofer

2-line fluorescent display on front panel

Current status, such as the input source or audio format, is displayed in two lines. It is also possible to check the name of the album or music track of the memory audio or other items without viewing the TV screen.

The 2-line display also makes it possible to easily change settings without the OSD (On-Screen Display) on TV monitor.

- Three Quick Select Buttons
- Auto Setup, auto signal detection
- Auto Surround mode
- Audio Delay function (max. 6 frames or 200 msec)
- Night Mode for neighbour friendly listening
- Muting level settings (Full/-40dB/-20dB)
- Audio Level Memory, capable of correcting different signal levels for each input device
- Volume Level Limiter, for setting maximum volume levels
- Power-ON Volume Level Memory
- Variable subwoofer crossover switching

Input / Output Terminals:

Category	Terminal	Count
IN	HDMI	4
	Component	3
	S-Video	5
	Composite	5
	Analog Audio (Tuner included)	9
	Analog EXT. Input	7.1ch
	Digital OPTICAL	3
	Digital COAXIAL	2
OUT	HDMI Monitor	1
	Component Monitor	1
	S-Video Monitor	1
	REC	1
	Composite Monitor	1
	REC	1
	Analog Audio REC	2
	Zone 2	1
	Audio PRE out (7.1)	1
Others	Dock Control Port	1
	FM Tuner Antenna	1
	AM Tuner Antenna	1
	Remote In/Out	1
	RS232C	1
	Trigger Output (+12V, 150mA)	1
	Digital output	1

Main Specifications:

Power amplifier section

Rated output	*THD figures are power amp stage values.
Front L/R	100 W + 100 W (8 ohms, 20Hz - 20kHz, THD 0.08 %) 135 W + 135 W (6 ohms, 1 kHz, THD 0.7%)
Centre	100 W (8 ohms, 20Hz - 20kHz, THD 0.08 %) 135 W (6 ohms, 1 kHz, THD 0.7%)
Surround L/R	100 W + 100 W (8 ohms, 20Hz - 20kHz, THD 0.08 %) 135 W + 135 W (6 ohms, 1 kHz, THD 0.7%)
Surround Back L/R	100 W + 100 W (8 ohms, 20Hz - 20kHz, THD 0.08 %) 135 W + 135 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

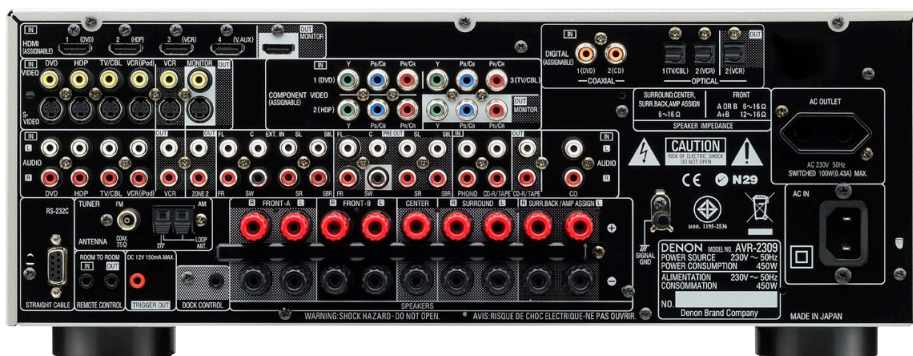
Tuning frequency range	87.5 - 108.0 MHz
Usable sensitivity	1.0 µV (11.2 dBf)

AM section

Tuning frequency range	522 - 1611 kHz
Usable sensitivity	18 µV

General

Power supply	AC 230 V, 50 Hz
Power consumption	450 W (Standby 0.1W)
Dimensions (W x H x D)	434 x 171 x 414 mm
Weight	12.3 kg



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