

# AVR-3310

AV Surround Receiver

# DENON

## A/V Surround Receiver featuring Advanced Connectivity, Network Audio and Photo Streaming and an interface that enhances your level of entertainment enjoyment

The AVR-3310 is a 7-channel A/V surround receiver that not only offers high-bit i/p conversion and scaling along with other acclaimed Denon audio and video technologies, but also lets users enjoy a wide variety of media such as Network Audio and Photo Streaming



### Features

#### Key Features

- **HDMI full compatibility**
  - 5 x HDMI inputs
  - HDMI one cable connection to your HDTV
  - Dolby TrueHD and DTS-HD master audio decoder
  - GUI
- **7ch Discrete Mono Amp Construction**
- **Clock Jitter Reducer** available for all digital inputs
- **High bit i/p converter and scaler up to 1080p**
  - Multi cadence detection for SD and HD video signal
  - Digital noise reduction and enhancer
- **Network capability**
  - Internet Radio and network audio/photo streaming from PC/MAC, server
  - Napster online support
  - 'Party Mode'
  - Web control
- **Dolby Pro Logic Iiz**

- Compressed Audio Restorer to enhance digital music files
- Dolby TrueHD and DTS-HD Master Audio decoders
- Denon's high picture quality circuitry
- Video digital noise reduction, to optimise effects for both SD and HD content
- Bi-amp capability

#### Connectivity & Future-ready Expandability

- Internet Radio and Network audio/photo streaming from PC/MAC, server
- Mass storage support USB for audio and photo playback (MTP compatible)
- 3 source / 3 zone capability
- Power amplifier, assign for zone 2 or 3
- Sleep timer function

#### Ease-of-use

- On-Board GUI via HDMI output (up to 1080p)
- Audyssey Dynamic Volume, for real-time volume adjustment
- Audyssey Dynamic EQ selects the correct frequency response and surround volume levels on a moment by moment
- Audyssey MultEQ Auto setup and Room EQ
- 2-line fluorescent display on front panel
- Three Quick Select Buttons
- Pre memory remote control unit + zone remote control unit

#### Others

- Remote Installer Access via DPMS
- PC setup via Ethernet (Web control)

#### State-of-the-art Denon Solutions for Maximising Content Quality

- **Identical quality and power for all 7 channels, 120 W x 7ch**
- **Dynamic Discrete Surround Circuit, D.D.S.C.-HD**
  - New 32-bit floating point high precision DSP processor
  - AL24 Plus processing, to dramatically enhance the music listening experience
  - Differential D/A Converters
- **Stable power supply for high-quality sound and picture playback**

## State-of-the-art Denon Solutions for Maximising Content Quality

### • Analog to HDMI up-conversion,

#### I/P converter and scaler on HDMI to HDMI

Analog video input signals (composite, S-video, component) are converted to digital video signals and transmitted to the HDMI output port. Digital video signals are sent to HDMI output even when multiple HDMI devices such as a video camera or a game console are connected to the AVR-3310. One HDMI cable is all that's needed to connect the AVR-3310 to a TV (monitor).

### • 7ch Discrete Mono Amp Construction

New construction design (discrete amp construction for each channel) is adopted for more precise sound reproduction.

### • Clock Jitter Reducer available for all digital inputs

The Clock Jitter Reducer thoroughly suppresses fluctuations on the clock waveform to remove distortion from the digital audio signal and minimize adverse influences on sound quality.

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

The AVR-3310 uses a high-performance video up-scaler to convert SD (standard definition) video material to HD (high definition) quality. This means that the 480i/480p (SD-quality) video signals of DVD programs and other material are converted to the high-quality 1080p signal of HD video, and output to the HDMI port. The fuzziness in the details of SD video is removed to produce a clear picture. Now you can enjoy not only your DVDs but also your VCR tapes and games with much greater clarity and detail.

### • Support for new surround extension

By assigning 7 channels of power from the AVR-3310's built-in power amp to individual channels, you can create and enjoy your own custom surround mode.

-Dolby Pro Logic IIz processing

Dolby Pro Logic IIz introduces a new dimension to home theatre entertainment through the addition of a pair of front height channels. Compatible with stereo, 5.1 and 7.1 content,

Dolby Pro Logic IIz provides enhanced spaciousness, depth and dimension to movies, concert video and video game playback while maintaining the full integrity of the source mix.

### • Minimum Signal Path for clear audio and video signal

### • Direct Mechanical Ground Construction, embodying concepts for thorough vibration resistance

### • Digital / analog separate windings

### • Compressed Audio Restorer to enhance digital music files

### • Pure Direct function

## Connectivity & Future-ready Expandability

### • Party Mode

The 'Party Mode' allow you to supply same music (iPod / Internet Radio / PC music / NAS) up to five rooms including its local music system at the same time among Denon 'Party Mode' compliant products on the network.

### • Audio/video playback and control for iPod with optional dock (ASD-11R)

### • Includes dedicated zone remote control unit (optional: Denon RC-7000CI/RC-7001RCI)

### • 2way remote ready

(optional: Denon RC-7000CI/RC-7001RCI)

## Ease-of-use

### • On-Board GUI via HDMI output (up to 1080p)

The AVR-3310 is equipped with an easy-to-view Graphical User Interface (GUI) featuring visual menu displays. These menu displays can also be output to the monitor over HDMI.

### • Audyssey Dynamic Volume, for real-time volume adjustment

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-3310 is also equipped with Audyssey MultEQ which measures the acoustic characteristics of the room to obtain the optimum acoustic effects, and 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.

### • MultEQ Auto setup and Room EQ

-Tower type microphone for more accurate measuring

-Up to six measurement points

-High level resolution filters for satellite speakers and also subwoofer

### • Auto surround mode

### • Audio level memory, capable of correcting different signal levels for each input device

### • Variable subwoofer crossover switching

### • Support CEC

## Others

### • AMX, Crestron third party IP control support with RS-232C port

### • 150mA Trigger output

### • IR Remote in/out ports

\*Premium silver version is also available.

## Main Specifications

Power amplifier section		Preamplifier section	
Rated output	*THD figures are power amp stage values.	<b>Input sensitivity/impedance</b>	
Front L/R	120 W + 120 W (8 ohms, 20 Hz - 20 kHz, THD 0.05 %) 160 W + 160 W (6 ohms, 1 kHz, THD 0.7%)	PHONO (MM)	2.5 mV
Centre	120 W (8 ohms, 20 Hz - 20 kHz, THD 0.05 %) 160 W (6 ohms, 1 kHz, THD 0.7%)	Audio inputs	200 mV / 12 kohms (except for EXT. IN (SW, S, SB), CD, PHONO, V. AUX) 200 mV / 47 kohms (EXT. IN (SW, S, SB), CD, PHONO, V. AUX)
Surround L/R	120 W + 120 W (8 ohms, 20 Hz - 20 kHz, THD 0.05 %) 160 W + 160 W (6 ohms, 1 kHz, THD 0.7%)	<b>Output level/Load impedance</b>	
Surround Back L/R	120 W + 120 W (8 ohms, 20 Hz - 20 kHz, THD 0.05 %) 160 W + 160 W (6 ohms, 1 kHz, THD 0.7%)	Audio outputs	1.2 V
		<b>FM section</b>	
		Tuning frequency range	87.5 - 108.0 MHz
		Usable sensitivity	1.0 µV (11.2 dBf)
		<b>AM section</b>	
		Tuning frequency range	522 - 1611 kHz
		Usable sensitivity	18 µV
		<b>General</b>	
		Power supply	AC 230 V, 50 Hz
		Power consumption	670 W (Standby 0.1 W)
		Dimensions (W x H x D)	434 x 171 x 414 mm
		Weight	12.9 kg



## Ports

In		
HDMI		x 5
Component		x 3
S-Video		x 7
Composite (Video)		x 7
Analog Audio (Tuner included)		x 10
Analog EXT. Input		7.1ch
Digital Optical		x 3
Digital Coaxial		x 3
Out		
HDMI Monitor		x 1
Component Monitor		x 1
S-Video Monitor		x 1
S-Video		x 2
Composite Monitor		x 1
Composite (Zone2)		x 1
Analog Audio REC		x 2
Audio Preout (Zone2 / Zone3 / 7.1ch)		x 3
Digital Optical		x 1
Phones		x 1
Other		
Microphone Port		x 1
Dock Control Port		x 1
FM Tuner Antenna		x 1
AM Tuner Antenna		x 1
Ethernet		x 1
USB		x 1
RS-232C		x 1
Remote Control In/Out		In 1 / Out 1
DC12V 150mA MAX. trigger out		x 2

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