# **DENON**

# **Support AirPlay and Network Functions**

The AVR-3312 has built-in AirPlay, and includes network functions that let you enjoy a wide variety of on-line digital content. It is also equipped with AL24 Processing Plus and Clock Jitter Reducer technology to dramatically improve sound quality, and a high-performance I/P converter and scaler to give you optimum picture quality. The AVR-3312 has been specifically designed to give you the ultimate experience in today's state-of-the-art home entertainment.



www.denon100.com

























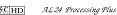
















# **Features**

# **New Features**

- AirPlay built in
- Supports "Denon Remote App" to simplify operation by an iPhone/ iPod touch
- Internet Radio and Preset buttons, for quick, easy enjoyment of Internet radio
- Four quick select buttons, quick access to frequently-used video or music sources
- Setup Wizard, providing easy-to-follow setup instructions
- Easy operation, Graphical User Interface with overlay on HD sources
- 7-HDMI inputs and 2-output (Simultaneous)

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

- Fully discrete, identical quality and power for all 7 channels (165 W x 7 ch)
- Stable power supply for high-quality sound and picture playback
- Dynamic Discrete Surround Circuit, D.D.S.C.-HD
  - AL24 Processing Plus, to dramatically enhance the music listening experience
- Clock Jitter Reducer
- Supports HDMI (V.1.4a with 3D, Audio Return Channel) Deep Color, "x.v.Color", Auto Lipsync and HDMI control function
- High definition audio support, Dolby TrueHD and DTS-HD Master Audio
- Audyssey DSX processing
- Supports Dolby Pro Logic IIz processing
- Dual subwoofers preout
- Extended picture adjustment possibilities
- I/P Converter and Scaler up to 1080p

# Connectivity & Future-ready Expandability

- Enhanced network capability(\*1)
- Internet Radio and network audio/photo streaming via Ethernet
- Last.fm, Napster and Flickr online support
- 'Party Mode Plus'
- FLAC HD, High-resolution audio format
- Compatible with Windows 7
- web control
- Direct play for iPod and iPhone via USB
- Power Amp Assign function, for versatility in using the AVR-3312 for different purpose (Surround Back, Front Height, Zone 2 & 3, Bi-Amp, Front Speaker B)

### Ease-of-Use

- Audyssey Dynamic Volume for real-time volume adjustment
- Audyssey MultEQ XT and Auto Setup

# Others

- Low power consumption at stand-by of 0.1W
- Control4, AMX or Crestron third party control support

#### More Features

#### · Fully discrete, identical quality and power for all 7 channels (165 W x 7ch)

To faithfully reproduce the original surround sound, each of the AVR-3312's 7 channels is equipped with the same power amp of equal power. Since these power amps also use discrete rcuits 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 3Dcompliant TV to the AVR-3312, you will have a 3D home theatre where you can enjoy high-definition sound and video on a level you've never experienced 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.

#### AL24 Processing Plus

The acclaimed AL24 Processing Plus processing improves the fidelity of 2ch and multi channel PCM sources by sophisticated DSP

processing algorithms that improves low level detail and enhances fidelity by adaptive filtering techniques. AL24 Processing Plus also provides increased dynamic range and spatial information, bringing out all the nuances with optimum clarity and natural fidelity.

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

Denon's audio technology for MP3, WMA and MPEG-4 AAC compressed format to reproduce higher frequency range and deeper bass sound. This technology provides better sound for internet radio. iPod or iPhone.

#### Denon Remote App

The Denon Remote App available for free on iTunes App store transfers your iPhone or iPod touch in a nice remote control supporting the key features of the AVR. But it doesn't stop here as you can control the network audio streaming from your PC and internet radio function supported by cover art. That's ease of use, that's fun

#### • Support AirPlay and Network Functions

When connected to a network, the AVR-3312 can play audio files and still images such as photographs that are stored on your computer. You can also listen to internet radio and a host of other online music sources that use network technology. The AVR-3312 also supports AirPlay that lets you stream your music library from an iPhone, iPad, iPod touch, or iTunes.

#### Picture Adjust

You can adjust the picture quality and reduce any noise appearing on the TV. (Contrast, Brightness, Chroma level, Hue, Reduce overall picture noise, Emphasise picture contours).

#### Advanced Graphical User Interface (GUI) overlay on HDMI

This nice function let you keep the full overview even while watching a movie. Just check your settings or get the volume and sorround mode indication overlayed on the film you watch. Don't miss any scene



\*An image of OverLay GUI

# • 3 source / 3 zone output + 2 dedicated preout

The AVR-3312 lets you enjoy a program source in the Main Zone (the room where the AVR-3312 is located) and in Zone 2 and Zone 3 (another room). The source can be the same for both zones, or you can enjoy different sources in those zones if you prefer. The AVR-3312 even has a separate preamp for Zone 2 or Zone 3 that lets you connect an independent power amp in that room.

- Phono input
- 7.2 ch preout
- 11 ch Speaker terminals
- Direct Mechanical Ground Construction
- · Digital audio into zone preout
- Zone 2 Video output
- 2-line fluorescent display on front panel
- Pre memory remote control handset with Glow-Key
- Remote Setup Guidance
- Auto surround mode
- Sleep timer function
- Audio Delay function (0 to 200 msec)
- Muting level settings (Full / -40 dB / -20 dB)
- · Audio level memory, capable of correcting different signal levels for each input device
- Variable subwoofer crossover switching
- Two Trigger outputs (150 mA)
- \*1) Requires contract with Internet service provider

Ports		
IN	HDMI (included front 1)	x 7
	Component	x 2
	S-Video	x 2
	Composite (video) (included front 1)	x 5
	Analogue Audio (included front 1)	x 8
	Digital Optical	x 2
	Digital Coaxial	x 2
	Phono	x 1
OUT	HDMI Monitor	x 2
	Component	x 1
	Composite Monitor (incl. Zone 2 Video)	x3
	Audio Preout (FL/ FR/ C/ SL/ SR/ SBL/ SBR/SW)	7.2ch
	Audio Preout (L/R for Zone 2 & 3)	x 2
	Audio Recout (L/R)	x 1
	Phones	x 1
OTHER	Ethernet	x 1
	USB port	x 1
	Microphone Port	x 1
	Dock Control Port	x 1
	FM Tuner Antenna	x 1
	AM Tuner Antenna	x 1
	Remote Control In/Out	In 1/Out 1
	RC232C	x 1
	DC12V 150mA MAX. trigger out	x 2
* D	1	

- Design and specifications are subject to change without notice.

  "Dolby", "Pro Logio" and the double-D symbol are trademarks of Dolby Laboratories.

  "DIS is a registered trademark and the DTS logos, Symbol, DTS-HD and DTS-HD Master Audio are trademarks of DTS, Inc.

  HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

  Windows Media and the Windows logo are trademarks or registered trademarks of Hicrosoft Corporation in the United States and/or other countries.
- NSV is a registered trademark of Analog Devices, Inc. Audyssey MultEQ XT is a registered trademark of Audyssey
- Laboratories
- Audyssey Dynamic EQ is a registered trademark of Audyssey Audyssey Dynamic Volume is a registered trademark of Audyssey
- "Audyssey Dynamic Volume is a registered trademark of Audyssey Laboratories."
  "Made for iPod," "Made for iPhone," and mean that an electronic accessory has been designed to connect specifically to iPod, or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Please note that the use of this accessory with iPod, or iPhone, may affect wireless performance.
  Apple is not responsible for the operation of this device or its compliance with safety and regulatory.

  AirPlay, the AirPlay logo, iPhone, iPod, iPod classic, iPod nano, iPod shuffle, iPod touch and Tunes are trademarks of Apple Inc., registered in the U.S. and other countries.

Main Specifications Power amplifier section

\*THD figures are power amp stage Rated output Front 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%)

Centre

Surround L/R

(8 ohms, 20 Hz - 20 kHz, THD 0.05 %) 165 W

(6 ohms, 1 kHz, THD 0.7%)

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 kQ/kohms

Frequency response  $10 \text{ Hz} \sim 100 \text{ kHz} - +1, -3 \text{ dB}$ DIRECT mode) S/N Ratio 102 dB (IHF-A weighted, DIRECT mode)

FM section

Tuning frequency range 87.5 - 108 MHz

# AM section

Tuning frequency range 522 - 1611 kHz

General

AC 230 V, 50 Hz Power supply Power consumption 670 W (Standby 0.1 W, CEC Standby 2.2 W) Dimensions (W x H x D) 434 x 167 x 382 mm

Weight 11.8 kg



DENON Europe Division of D&M Germany GmbH An der Kleinbahn 18 41334 Nettetal, Germany Tel: 0049 2157 1208-0 Fax: 0049 2157 1208-10

www.denon.eu

DENON UK Division of D&M Audiovisual Ltd First Floor, Imperial House 4-10 Donegall Square East Belfast BT1 5HD

www.denon.eu