

7.2-channel AVENTAGE Network AV Receiver featuring Wi-Fi and *Bluetooth*[®] Built-In, high sound quality ensured by new low noise volume IC, Independent pure power supply and latest Burr-Brown DAC. In addition, 4K Ultra HD compatible HDMI with HDCP2.2 and Versatile Zone Control are also provided.



Audio Features

- 7-channel powerful surround sound
 - 90W per Channel (8 ohms, 20 Hz-20 kHz, 0.06 % THD, 2 ch driven)
 - 150W per Channel (4 ohms, 1 kHz, 0.9 % THD, 1 ch driven [European Model])
 - 150W per Channel (8 ohms, 1 kHz, 10 % THD, 1 ch driven)
- HD Audio format decoding: Dolby TrueHD and DTS-HD Master Audio
- Extra 5th foot with Anti-Resonance Technology (A.R.T. Wedge) to reduce Vibration
- Aluminium Front Panel Offers Visual and Aural Benefits
- Selected high quality parts to achieve optimum audio performance
- Pure Direct for pure HiFi sound quality enjoyment
- Latest Burr Brown DirectPath™ DA Converters
- New high quality Volume IC and Independent Pure Power Supply
- Low jitter PLL circuitry helps optimise sound imaging
- Assignable amplifiers for front speaker bi-amp connection
- Intelligent assignable amplifiers for Surround Back <-> Front Presence or Zone 2
- DSD 2.8MHz/5.6MHz audio playback
- FLAC or WAV 192kHz/24-bit audio playback
- Apple Lossless audio playback
- Compressed Music Enhancer for *Bluetooth*

Video Features

- 4K60p 4:4:4 Pass through
- 4K video upscaling from analogue and HDMI input
- HDMI: 6 (1 on front) and 1 output with HDCP2.2 (3 in/1 out), 3D and Audio Return Channel
- Supports Deep Colour (30/36 bit), xv.Colour, 24 Hz Refresh Rate and Auto Lip-Sync compensation
- High quality video processing with precise deinterlacing
 - Motion adaptive and edge adaptive deinterlacing
 - Multi-cadence (incl. 3-2 pull-down) detection

Advanced Features

- *Bluetooth* for wireless music streaming (SBC/AAC)
- Network functions
 - Wi-Fi Built-in (802.11b/g/n)
 - Easy Wi-Fi setup i.e. iOS Wi-Fi settings sharing, WPS etc.
 - AirPlay® allows music streaming from Mac, PC, iPod, iPhone, iPad
 - AV Controller app for operating various functions from iOS or Android smartphones and tablets
 - Access to: Internet Radio (vTuner): MP3, WMA
 - Streaming Services (Spotify®, Pandora®) Music files on PC/NAS: WAV, MP3, WMA, AAC, FLAC, Apple Lossless, AIFF, DSD
 - DLNA 1.5 certified
- Gapless playback compatibility allows play without interruption
- Front panel USB Digital Connection for iPod and iPhone
- Advanced multi-language GUI on-screen display with HD Font

- HDMI CEC with versatile control from AV Receiver remote control
- YPAO R.S.C. (Reflected Sound Control) sound optimisation for automatic speaker setup
- HDMI front panel input for devices such as camcorders and digital cameras
- Ability to change HDMI input while in Standby Through mode
- Background Video feature (for Radio/USB/*Bluetooth*/AUDIO/NET/AUX input)
- SCENE buttons with direct power on (BD/DVD, TV, Net and Radio)
 - Quick and simple to use
 - HDMI CEC powers up compatible TVs and Blu-ray Disc™ players

Surround Realism

- HD Audio decoding with CINEMA DSP 3D (17 DSP programmes)
- Compressed Music Enhancer with CINEMA DSP
- Dialogue Lift ensures that dialogue comes from the centre of the screen
- Dialogue Level Adjustment for proper sound balance with dialogue and vocals
- Virtual Presence Speaker function for CINEMA DSP 3D surround without Front Presence Speakers
- Virtual CINEMA FRONT provides virtual surround sound with 5 speakers in front
- Virtual Surround Back Speaker for playing 7.1-channel content with a 5.1-channel system
- YPAO Volume to ensure natural sounds even at low volume
- Extra Bass enriches the powerful bass sound even with small speakers
- SILENT CINEMA to enjoy surround sound with headphone
- Two subwoofer outputs (simultaneous outputs)

Versatile Zone Control

- Versatile Zone 2 Control i.e. Power/Volume/Control by App
- Party mode
- Remote input/output
- Programmable +12V trigger output

Eco-Friendly Design

- ECO mode operation for about 20%* less power consumption
 - *Compared to power consumption when ECO mode is off (Yamaha measurement)
- Low standby power consumption of 0.1W
- Auto power standby function with variable time setting
- Improved Network and HDMI Standby Power Consumption

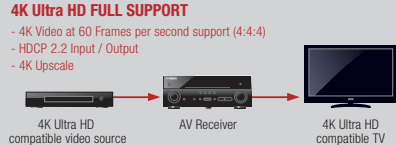
Wireless Audio Streaming and Hi-Res Audio

Bluetooth support gives you the convenience of wireless music playback, while Wi-Fi Built-in improves installation flexibility. These two features provide easy access to countless music sources. In addition, compatibility with FLAC/WAV/AIFF 192kHz/24bit, Apple Lossless and DSD 2.8MHz/5.6MHz formats means that you can easily play high resolution audio from a networked NAS, PC or USB.



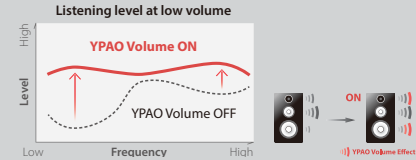
4K Ultra HD Full Support with 4K60p, HDCP2.2

This unit completely supports with the latest HDMI standards. It can perform 4K Ultra HD upscaling to boost a lower resolution image and supports 4:4:4 video signal for more vibrant and lifelike images, so you can fully enjoy the high definition video quality of 4K. It also adheres to the HDCP2.2 copyright protection standard for 4K video transmission. Multiple HDCP2.2 compliant inputs and outputs design (3 in / 1 out) is ready for future system expansion.



YPAO R.S.C (Reflected Sound Control) and YPAO Volume

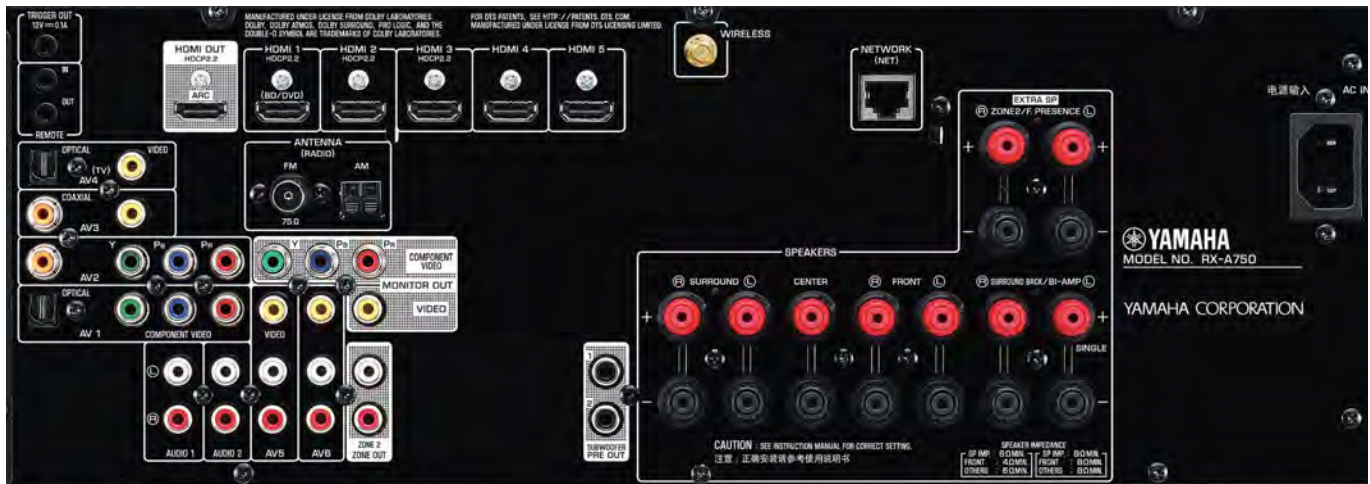
YPAO analyses the room acoustics and your system, then precisely adjusts various audio parameters to provide optimum sound. YPAO R.S.C. (Reflected Sound Control) enhances the sound to studio-grade quality. YPAO Volume automatically adjusts the high and low frequency levels at any volume level so that you hear natural sounds even at low volume.



Main Specifications

Audio Section	
Rated Output Power (8 ohms, 20 Hz-20 kHz, 0.06% THD, 2 ch driven)	
Front L/R	90 W + 90 W
Rated Output Power (4 ohms, 1 kHz, 0.9% THD, 1 ch driven [European Model])	
Front L/R	150 W + 150 W
Maximum Effective Output Power (8 ohms, 1 kHz, 10% THD, 1 ch driven)	
Front L/R	150 W + 150 W
Centre	150 W
Surround L/R	150 W + 150 W
Surround Back L/R	150 W + 150 W
Dynamic Power/Ch (Front L/R, 8/6/4/2 ohms)	
	125/165/190/235 W

General	
Standby Power Consumption	
HDMI Control off, Standby Through off	0.1 W
HDMI Standby Through on	1.3 W
Network Standby on	2.4 W (wired)
Dimensions (W x H x D)	
	435 x 171 x 380 mm (with antenna up: 435 x 234 x 380 mm)
Weight	10.5 kg



European Model

Extensive Connections

Inputs	
HDMI*1 (Audio Input Assignable**)	6
Network (Ethernet / Wi-Fi)	1 / 1
USB*1	1
Radio Antenna*3 (FM / AM)	1 / 1
Optical Digital	2
Coaxial Digital	2
Analog Audio	4
Component Video (Audio Input Assignable)	2
Composite Video	4

*1 Including front panel terminals.
*2 Front HDMI input is not assignable.
*3 The shape of the FM antenna terminal varies according to area.

Outputs	
HDMI (HDCP2.2 compatible)	1
Component Video Monitor	1
Composite Monitor	1
Speaker*4/*5/*6	7ch / 9 ter
Subwoofer	2 x mono
Headphone Jack	1

*4 Assignable for surround back L/R to bi-amp (front L/R).
*5 Extra speaker terminals are assignable to Zone 2 or Presence.
*6 Banana-plug compatible speaker terminals are available in some areas.

Others	
Zone 2 Audio Out	1
Remote In/Out	1 / 1
+12V/0.1A Trigger Out	1
Terminal for Detachable Power Cable	1

• "Made for iPod" and "Made for iPhone" 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. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod or iPhone may affect wireless performance. AirPlay®, iPad, iPhone, iPod, iPod classic, iPod nano, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. • The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Yamaha Corporation is under license. Other trademarks and trade names are those of their respective owners. • Spotify and Spotify logo are registered trademarks of the Spotify Group. • Napster and the Napster logo are trademarks and registered trademarks of Rhapsody International. • Pandora and Pandora Internet Radio logo are registered trademarks or trademarks of Pandora Media, Inc. in the United States and/or other countries. • The Wi-Fi CERTIFIED Logo is a certification mark of the Wi-Fi Alliance. The Wi-Fi Protected Setup Identifier Mark is a mark of the Wi-Fi Alliance. • DLNA™ and DLNA CERTIFIED™ are trademarks or registered trademarks of Digital Living Network Alliance. All rights reserved. Unauthorized use is strictly prohibited. • Dolby, Pro Logic, and the double-D symbol are registered trademarks of Dolby Laboratories. • For DTS patents, see http://patents.dts.com. Manufactured under license from DTS Licensing Limited. DTS, DTS-HD, the Symbol, & DTS and the Symbol together are registered trademarks, and DTS-HD Master Audio is a trademark of DTS, Inc. © DTS, Inc. All Rights Reserved. • HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries. • Burr-Brown products are trademarks of Texas Instruments, Inc. • "x.v.Colour" is a trademark of Sony Corporation. • CINEMA DSP is a trademark of Yamaha Corporation. • SILENT CINEMA is a trademark of Yamaha Corporation. • Product designs and specifications are subject to change without notice.