

AVENTAGE Wi-Fi Built-In AV Receiver with 11.2ch expandability, highest grade construction and CINEMA DSP HD<sup>3</sup> for enjoying the ultimate in audio and video performance. Outstanding features include super-high quality ESS DACs, High-Resolution audio support, 4K 50/60p support and Advanced HDMI Zone Switching.



Microphone base for 3D and angle measurement



**Oil-Damped Hidden Control Panel**  
Includes HDMI/MHL Input Terminal, USB port, Video Aux input terminals, Zone 2/3/4 switches, YPAO microphone jack, and more.



**Audio Features**

- 9-channel powerful surround sound  
150W per Channel (8 ohms, 20 Hz-20 kHz, 0.06% THD, 2 ch driven)  
165W per Channel (8 ohms, 1 kHz, 0.9% THD, 2 ch driven)
- H-shape cross member frame and rigid bottom frame/double bottom construction
- Symmetrical power amplifier layout
- Heat sink with anti-vibration and anti-thermal properties
- Ultra-high performance 192kHz/32bit ESS ES9016 DACs for 7 main channels.
- High-quality ESS ES9006 DACs for presence channels
- DAC on Pure Ground circuitry
- High speed thermal feedback power amplifier
- Ultra Low Jitter PLL circuitry helps optimize sound imaging
- Extra 5th foot with Anti-Resonance Technology (A.R.T. Wedge) to reduce vibration
- High Resolution Music Enhancer further heightens musicality from the original content
- Intelligent assignable amplifiers for Surround Back <-> Rear Presence or Zone2/3
- Phono input for vinyl playback
- FLAC or WAV 192kHz/24-bit audio playback
- Apple Lossless audio playback

**Video Features**

- 4K Ultra HD Pass-Through for super high resolution images
- 4K Ultra HD upscaling boosts lower resolution images to super high-definition resolution
- The latest HDMI version support for 4K 50/60p input
- HDMI: 8 inputs (1 on front) and 2 outputs (assignable for zone 2/4) with 3D and Audio Return Channel
- Yamaha original video processing that optimizes processing for each type of video content
  - Motion adaptive and edge adaptive deinterlacing
  - Multi-cadence (incl. 3-2 pull-down) detection
  - Resolution enhancement (detail and edge enhancement)
  - Video signal control (Contrast, Brightness, Saturation)

**Advanced Features**

- SCENE PLUS - simple and versatile functionality
    - HDMI CEC powers up compatible TVs and Blu-ray Disc™ players
    - 12 SCENE choices (4 on front panel and others on GUI)
    - Zone SCENE - 4 SCENE buttons for Zone 2/3/4
    - Versatile parameters can be stored into each SCENE
  - Network functions
    - Wi-Fi Built-in
    - Wireless Direct connects a mobile device directly without home network
    - 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 an iPod, iPhone, iPad or Android phones/tablets
    - Access to: Internet Radio (vTuner): MP3, WMA Streaming Services (Pandora®, Rhapsody®, Spotify®, SiriusXM)
- \*Music service availability varies by region.  
Music files on PC/NAS: WAV, MP3, WMA, AAC, FLAC, Apple Lossless

- Gapless playback compatibility allows play without interruption
- HTC Connect™ for music streaming from HTC Connect™ compatible smartphones
- MHL supports full HD video and audio from mobile phones and portable devices
- HD Radio™ (for USA only)
- Front panel USB Digital Connection for iPod, iPhone, iPad and USB device
- YPAO-R.S.C. (Reflected Sound Control) with 3D, multi-point and angle measurement
- High sensitivity YPAO microphone for more precise measurement
- Advanced multi-language GUI on-screen display with album art
- Background Video feature

**Surround Realism**

- CINEMA DSP HD<sup>3</sup> expands the sound field vertically for more thrilling and realistic surround sound
- HD Audio decoding with CINEMA DSP HD<sup>3</sup> (23 DSP programs)
- Compressed Music Enhancer with CINEMA DSP
- Dialogue Lift ensures that dialogue comes from the center of the screen
- Dialogue Level Adjustment for proper sound balance with dialogue and vocals
- Virtual Presence Speaker function for CINEMA DSP HD<sup>3</sup> surround without Front Presence Speakers
- Virtual Rear Presence Speaker reproduces more realistic sound field without Rear Presence Speakers
- Virtual CINEMA FRONT provides virtual surround sound with 5 speakers in front
- YPAO Volume to ensure natural sounds even at low volume
- Extra Bass enriches the powerful bass sound even with small speakers
- Channel expandability with external amplifier (11-channel expandability, bi-amping)
- Adaptive DRC (Dynamic Range Control) and Adaptive DSP Level
- SILENT CINEMA to enjoy surround sound with headphone

**Versatile Zone Control**

- Advanced HDMI Zone Switching allows various input sources to be output via HDMI and enjoyed in different rooms
- Zone 2/3/4 on/off and control on front panel
- Zone GUI (song/station selection, album cover art display, Zone tone controls/Zone balance, short message)
- System Backup / Recovery function
- Zone mono, Zone volume, tone controls and balance
- Party mode

**Eco-Friendly Design**

- ECO mode operation for about 20%\* less power consumption  
\*Compared to power consumption when ECO mode is off (Yamaha measurement).
- Auto power standby function with variable time setting
- Low standby power consumption of 0.1W

**Ultimate Audio Experience**

Yamaha's incredible CINEMA DSP HD<sup>3</sup> literally takes the surround sound experience to new heights, using two CINEMA DSP engines to produce higher and wider sound fields. YPAO 3D provides automatic sound parameter optimization that measures the direction of the front, surround and presence speakers, as well as the height of the presence speakers and applies appropriate compensation. This maximizes the 3D sound field effectiveness of the CINEMA DSP HD<sup>3</sup> programs.



**Ultra-high Performance DACs for Superior Sound Quality**

Ultra-high performance ESS Technology 192 kHz/32 bit ES9016 DACs for the seven main channels produce an unsurpassed sound stage with 124dB dynamic range and super low distortion and noise levels. High-quality ESS ES9006 DACs power the presence channels. This AV receiver's sound reproduction will satisfy the most demanding listeners.



**Wi-Fi Built-in Provides Superior Functionality with Easy Setup**

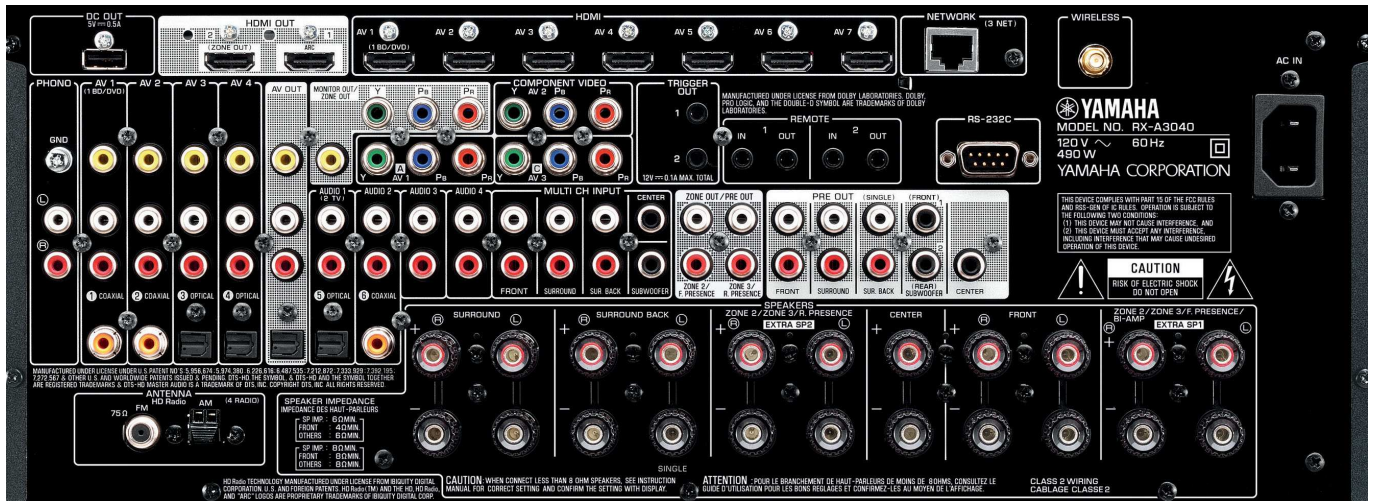
Wi-Fi Built-in improves installation flexibility. WPS and other types of Wi-Fi setup are supported. By using Wireless Direct, you can connect the AV Receiver wirelessly and directly to a smartphone, making it possible to enjoy music files on the phone via AirPlay or HTC Connect™, and to operate the receiver via AV CONTROLLER App.



**Main Specifications**

Audio Section	
Rated Output Power (8 ohms, 1 kHz, 0.9% THD, 2 ch driven)	
Front L/R	165 W / 165 W
Center	165 W
Surround L/R	165 W / 165 W
Surround Back L/R	165 W / 165 W
Front Presence L/R	165 W / 165 W
Rated Output Power (8 ohms, 20 Hz-20 kHz, 0.06% THD, 2 ch driven)	
Front L/R	150 W / 150 W
Center	150 W
Surround L/R	150 W / 150 W
Surround Back L/R	150 W / 150 W
Front Presence L/R	150 W / 150 W

Dynamic Power/Ch (Front L/R, 8/6/4/2 ohms)	175/220/295/410 W
<b>General</b>	
Standby Power Consumption	
HDMI Control off, Standby Through off	0.1 W
HDMI Control on, Standby Through on	2.5 W
Network Standby on	3.1 W (Wired)
Dimensions (W x H x D)	17-1/8" x 7-1/2" x 18-3/8" (with antenna: 17-1/8" x 9-7/8" x 18-5/8) 435 x 192 x 467 mm (with antenna: 435 x 252 x 474 mm)
Weight	39.9 lbs.; 18.1 kg



**Extensive Connections**

Inputs	Outputs	Others
HDMI*1 [Audio Input Assignable*2, Front HDMI : MHL input compatible]	HDMI	Zone 2 Out with Volume and Tone Controls
Network (Ethernet / Wi-Fi)	Optical Digital	Zone 3 Out with Volume and Tone Controls
USB*1	Analog Audio	Remote In/Out
Radio Antenna (FM/AM) incl. HD Radio*3	Pre Out	+12V / Total 100 mA Trigger Out*6
Optical Digital (Assignable)	Component Video Monitor*4	RS-232C
Coaxial Digital (Assignable)	Composite Monitor*4	Terminal for Detachable Power Cable
Analog AV*1 / Audio (with Phono)	AV Out (Composite)	
Component Video (Assignable)	Speaker	*1 Including front panel terminals.
Composite*1	Subwoofer	*2 Front HDMI input is not assignable.
Multi-Channel Input	DC Out*5	*3 For USA only.
	Headphone Jack*1	*4 Assignable to monitor out or Zone 2/3 out.
		*5 For optional accessories.
		*6 Yamaha subwoofer system control support.

\*1 Made for iPod, \*2 Made for iPhone, and \*3 Made for iPad mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, 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, iPhone, or iPad 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. AirPlay works with iPhone, iPad, and iPod touch with iOS 4.3.3 or later, Mac with OS X Mountain Lion or later, and PC with iTunes 10.2.2 or later. • 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. • The HTC Connect™ Logo is a trademark of HTC Corporation. • HD Radio Technology manufactured under license from iBiquity Digital Corporation, U.S. and Foreign Patents. HD Radio™ and the HD, HD Radio, and "Arc" logos are proprietary trademarks of iBiquity Digital. • Spotify and Spotify logo are registered trademarks of the Spotify Group. • Pandora and Pandora Internet Radio logo are registered trademarks or trademarks of Pandora Media, Inc. in the United States and/or other countries. • Rhapsody and the Rhapsody logo are registered trademarks of Rhapsody International, Inc. • SIRIUS, XM and all related marks and logos are trademarks of Sirius XM Radio Inc. and its subsidiaries. All rights reserved. Service not available in Alaska and Hawaii. • Dolby and the double-D symbol are registered trademarks of Dolby Laboratories. • DTS, DTS-HD, the Symbol, & DTS or DTS-HD and the Symbol together are registered trademarks of DTS, Inc. • 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. • MHL and the MHL logo are a trademark, registered trademark or service mark of MHL, LLC in the United States and/or other countries. • 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.