

High-end 7.2-channel Receiver with incredible audio capabilities and extensive video functionality.

MusicCast



Oil-Damped Hidden Control Panel
Includes HDMI input terminal, USB port, Audio input terminals, Zone 2 switch, YPAO microphone jack, and more.



Audio Features

- 7-channel powerful surround sound
 - 110 W per channel (8 ohms, 20 Hz-20 kHz, 0.06 % THD, 2-ch driven)
 - 165 W per channel (8 ohms, 1 kHz, 10 % THD, 1-ch driven)
 - 170 W per channel (4 ohms, 1 kHz, 0.9 % THD, 1-ch driven)
- Symmetrical power amplifier layout
- Heat sink with anti-vibration and anti-thermal properties
- Rigid chassis with additional bottom frames
- H-shaped Cross Frame for additional chassis rigidity
- ESS SABRE™ 9006AS 8-channel DAC featuring true professional digital audio quality
- High speed thermal feedback power amplifier
- High quality Volume IC and Independent Pure Power Supply
- Ultra Low jitter PLL circuitry helps optimise sound imaging
- DSD 2.8 MHz / 5.6 MHz direct playback
- FLAC or WAV 192 kHz / 24-bit audio playback
- High Resolution Music Enhancer further heightens musicality from the original content
- Apple Lossless audio playback
- Compressed Music Enhancer for Bluetooth®
- Phono input for vinyl playback

Video Features

- Latest HDMI® (8 in / 2 out) with 4K Ultra HD Full Support (4K / 60p [4:4:4]), HDR Video including Dolby Vision and Hybrid Log-Gamma, and BT.2020 pass-through* **NEW**
 - * Dolby Vision and Hybrid Log-Gamma will be available via future firmware update
- 4K video upscaling from analogue and HDMI® input
- Yamaha original video processing that optimises 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

- MusicCast for audio enjoyment in every room
- Bluetooth® for wireless music streaming (SBC / AAC)
- DAB* tuner for enjoying high quality digital radio broadcasts **NEW**
- DAB* and FM tuners both have 40 station preset memories **NEW**
- 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 (airable radio): MP3, WMA
 - Streaming Services (Spotify®, Pandora®, Tidal®, Deezer®) **NEW**
 - Music files on PC / NAS: WAV, MP3, WMA, AAC, FLAC, Apple Lossless, AIFF, DSD
- DLNA® 1.5 certified
- Triggered Auto Playback with MusicCast devices **NEW**
- Gapless playback compatibility allows play without interruption
- Front panel USB Digital Connection for USB thumbdrives
- Advanced GUI on-screen display with HD capability
- eARC (via firmware update) **NEW**
- YPAO™-R.S.C. sound optimisation with 64-bit precision EQ calculation and multi-point measurement

- Video out feature (for TUNER / USB / NET / Bluetooth) simple and versatile functionality
- SCENE PLUS -
 - 12 SCENE choices (4 on front panel and others on GUI)
 - Selectable BD/DVD, TV, FM/AM radio and Net Radio stations, tune-in NAS **NEW**
 - Zone SCENE - 4 SCENE buttons for Zone 2
 - HDMI® CEC powers up compatible TVs and Blu-ray Disc™ players
 - Versatile parameters can be stored into each SCENE

Surround Realism

- Dolby Atmos® and DTS:X™ with CINEMA DSP HD3 **NEW**
- CINEMA DSP HD3 with Rear VPS (Virtual Presence Speaker) **NEW**
- New CINEMA DSP Programme: Enhanced **NEW** (Total 44 DSP programmes)
- Rear presence channel support for maximum 3D sound effect
- 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
- Zone Extra Bass for more powerful bass sound in another room (Zone 2)
- Zone Volume Equalizer for optimum sound balance in another room (Zone 2)
- Extra Bass enriches the powerful bass sound even with small speakers
- SILENT CINEMA to enjoy surround sound with headphone

Versatile Zone Control

- Pre-out terminal for Zone 2 with volume control
- Advanced HDMI® Zone Switching allows various input sources to be output via HDMI® and enjoyed in different rooms
- Zone 2 on/off and control on front panel
- Zone GUI (song / station selection, album cover art display)
- System Backup / Recovery function
- Zone mono, Zone volume, Zone tone controls, Zone balance and Zone audio delay
- 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
- With an advanced energy saving design, this AV receiver achieves a low power consumption of under two watts when in Network Standby mode.



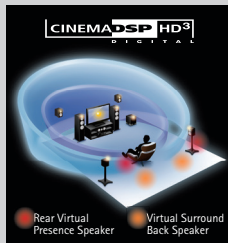
Yamaha Eco-Label

Yamaha Eco-Label is a mark that certifies products of high environmental performance.

Powered by music

CINEMA DSP HD³ with Rear VPS (Virtual Presence Speaker)

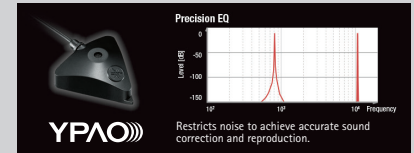
Three Yamaha high performance DSPs achieve high speed and large capacity audio signal processing. By using front, centre and surround speakers to create a rear virtual speaker, CINEMA DSP HD³ can produce 11.1 channels even with a 7.1-channel speaker configuration. The total reproduction of spatial data, including the vertical axis, helps create an overwhelmingly realistic sound field.

**New CINEMA DSP Programme, Dolby Atmos[®] and DTS:X[™] with CINEMA DSP HD³**

This receiver offers the new Enhanced CINEMA DSP sound field programme, featuring a new sound field processing algorithm that increases the sound source motion tracking and spatial representation power of the latest formats, including 3D surround. It also supports Dolby Atmos and DTS:X playback with CINEMA DSP HD³, taking the surround sound experience to new heights.

**YPAO[™]-R.S.C. with Precision EQ and Multi-point measurement**

YPAO-R.S.C. analyses the room acoustics and measures various speaker characteristics, then calibrates audio parameters to achieve optimum sound at any of eight listening positions. It uses Precision EQ to provide full-bandwidth 64-bit accuracy, as well as Reflected Sound Control to correct early reflections for studio-quality sound. It also provides DSP Effect Normalisation, which varies the CINEMA DSP parameters according to the reflected sounds.

**Main Specifications****Audio Section**

Rated Output Power (8 ohms, 20 Hz-20 kHz, 0.06 % THD, 2-ch driven)

Front L/R	110 W + 110 W
Centre	110 W
Surround L/R	110 W + 110 W
Surround Back L/R	110 W + 110 W

Rated Output Power (4 ohms, 1 kHz, 0.9 % THD, 1-ch driven [European Model])

Front L/R	170 W + 170 W
-----------	---------------

Maximum Effective Output Power (8 ohms, 1-kHz, 10 % THD, 1-ch driven, JEITA)

Front L/R	165 W + 165 W
Centre	165 W
Surround L/R	165 W + 165 W
Surround Back L/R	165 W + 165 W

Dynamic Power/Ch (Front L/R, 8/6/4/2 ohms)

135 / 165 / 210 / 280 W

General

Standby Power Consumption

HDMI Control Off, Standby Through Off	0.1 W
HDMI Control, Standby Through On, Network Standby Off	1.3 W
Network Standby On	1.8 W (Wireless)

Dimensions (W x H x D)

435 x 182 x 439 mm
(with antenna up: 435 x 247 x 439 mm)

Weight

14.7 kg

**Extensive Connections****Inputs**

HDMI* ¹ (Audio Input Assignable* ² , HDMI1-7 HDCP2.2 compatible)	8
Network (Ethernet / Wi-Fi)	1 / 1
USB* ¹	1
Radio Antenna* ³ (FM / DAB+)	1 / 1
Optical Digital	3
Coaxial Digital	3
Analogue Audio* ¹ (with Phono)	9
Component Video (Audio Input Assignable)	2
Composite Video* ¹	4

Outputs

HDMI (HDCP2.2 compatible)	2 (Zone assignable)
Pre Out	7.2-ch
Speaker* ^{4/5/6}	7-ch / 9 ter
Subwoofer	2 x mono
Headphone Jack* ¹	1

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

Others

Zone 2 Audio Out with Volume and Tone Controls	1
Remote In/Out	1 / 1
+12V / Total 0.1 A Trigger Out	2
RS-232C	1
Terminal for Detachable Power Cable	1

*⁴ Assignable for surround back L/R to Zone 2.

*⁵ Assignable for front presence L/R to bi-amp (front L/R) or Zone 2.

*⁶ Banana-plug compatible speaker terminals are available in some areas.

European Model

Although care is taken to ensure the accuracy of information presented, some variations may occur. Yamaha Music Australia Pty Ltd reserves the right to correct any errors, omissions or misprints. Errors and omissions excepted.

• AirPlay works with iPhone, iPad, and iPod touch with iOS 4.3.3 or later, Mac with OS X Mountain Lion or later, and Mac and PC with iTunes 10.2.2 or later. Supports iOS 7 or later for setup using Wireless Accessory Configuration. "Made for iPod," "Made for iPhone," and "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 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 licence. Other trademarks and trade names are those of their respective owners. • 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. "Wi-Fi," "Wi-Fi Protected Setup," "Wi-Fi Direct" and "Miracast" are marks or registered marks of the Wi-Fi Alliance. • 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. • Napster and the Napster logo are trademarks and registered trademarks of Rhapsody International. • JUKE and JUKE logo are registered trademarks of Media-Saturn-Holding GmbH. • TIDAL and TIDAL logo are registered trademarks of Aspiro AB in the European Union and other countries. • Deezer and Deezer logo are international trademarks of Deezer S.A., registered in France and other countries. • DLNA[™] and DLNA CERTIFIED[™] are trademarks or registered trademarks of Digital Living Network Alliance. All rights reserved. Unauthorized use is strictly prohibited. • Dolby, Dolby Atmos, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories. • For DTS patents, see <http://patents.dts.com>. Manufactured under licence from DTS, Inc. DTS, the Symbol, DTS in combination with the Symbol, DTS:X and the DTS:X logo are registered trademarks or trademarks of DTS, Inc. in the United States and/or other countries. • 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. • 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.