SPECIFICATIONS

Specifications

The main specifications of this product are provided below.

Input jacks

Analog Audio

- Stereo x 2

Digital Audio

- Optical x 1 (Supported frequencies: 32 kHz to 96 kHz)
- Coaxial x 1 (Supported frequencies: 32 kHz to 192 kHz)

HDMI Input

- HDMI x 4

Others

- USB x 1 (USB2.0)
- Network (Wired) x 1 (100Base-TX/10Base-T)
- Setup Microphone x 1

Output jacks

Analog Audio

- Speaker Out x 7 (Front L/R, Center, Surround L/R, Height L/R*)
  * Assignment is possible [Surround back, Bi-amp (Front L/R), ZoneB]
- Pre Out x 2 (Subwoofer [monaural] x 2)
- Headphone x 1

HDMI Output

- HDMI x 1

HDMI

HDMI Function

- 8K, 4K Ultra HD (include 8K/60 Hz, 4K/120 Hz), Audio Return Channel (ARC), enhanced Audio Return Channel (eARC), HDMI Control (CEC), Auto Lip Sync, Deep Color, x. v. Color, HD audio playback, HDR Compatible, Dolby Vision, Hybrid Log-Gamma

Video Format (Repeater Mode)

- VGA
- 480i/60 Hz
- 576i/50 Hz
- 480p/60 Hz
- 576p/50 Hz
- 720p/60 Hz, 50 Hz
- 1080i/60 Hz, 50 Hz
- 1080p/120 Hz, 100 Hz, 60 Hz, 50 Hz, 30 Hz, 25 Hz, 24 Hz
- 4K/120 Hz, 100 Hz, 60 Hz, 50 Hz, 30 Hz, 25 Hz, 24 Hz
- 8K/60 Hz ($8K60_B$)*, 50 Hz ($8K50_B$)*, 30 Hz, 25 Hz, 24 Hz
  * DSC (Display Stream Compression) only

Audio Format

- Dolby Atmos
- Dolby TrueHD
- Dolby Digital Plus
- Dolby Digital
- DTS:X
- DTS-HD Master Audio
- DTS-HD High Resolution
- DTS Express
- DTS
- PCM 2-ch to 8-ch (Max. 192 kHz/24-bit)

Content Protection: HDCP 1.4/2.3 compatible

Link Function: CEC supported

Tuner

Analog Tuner

- [U.K. and Europe models]
  DAB/FM with Radio Data System x 1 (Tuner)
- [Australia model]
  DAB/FM x 1 (Tuner)
- [U.S.A. and Canada models]
  FM x 1 (Tuner)

USB

Mass Storage Class USB Memory

Current Supply Capacity: 1.0 A

Bluetooth

Sink Function

- Bluetooth device (ex. Smartphone/Tablet) receiving function
- Supported profile
  - A2DP, AVRCP
- Supported codec
  - SBC, AAC

Bluetooth Version

- Ver.5.3

Wireless Output

- Bluetooth Class 2

Maximum Communication Distance

- 10 m (without interference)

Network

AirPlay 2 supported

Internet Radio

Podcasts

Spotify Connect

TIDAL Connect

Google Cast for audio

Qobuz Connect

Wireless Network

- Wireless LAN Standards: IEEE 802.11 a/b/g/n/ac
- Radio Frequency: 2.4 GHz/5 GHz
- WPS (Wi-Fi Protected Setup) (for the app only)
  - Push-Button-Method
  - PIN Method
- Available Security
  - WPA2
  - WPA3

Compatible Decoding Formats

Decoding Format

- Dolby Atmos
- Dolby TrueHD, Dolby Digital Plus
- Dolby Digital
- DTS:X
- DTS-HD Master Audio, DTS-HD High Resolution, DTS Express
- DTS-ES Matrix 6.1, DTS-ES Discrete 6.1
- DTS, DTS 96/24

Post Decoding Format

- Dolby Surround
- Neural:X

Audio Section

Rated Power Output (2 channels driven)	
• [U.K., Europe and Australia models] (20 Hz to 20 kHz, 0.09% THD, 6 Ω)	
・Front L/R	75 W/ch
• [U.S.A. and Canada models] (20 Hz to 20 kHz, 0.09% THD, 8 Ω)	
・Front L/R	75 W/ch
• [U.S.A. and Canada models] (1 kHz, 0.9% THD, 8 Ω)	
・Front L/R, Surround L/R, Height L/R	90 W/ch
・Center	90 W
Power Output (1 channel driven)	
• [U.K., Europe and Australia models] (1 kHz, 0.9% THD, 6 Ω)	
・Front L/R, Center, Surround L/R, Height L/R	110 W
• [U.S.A. and Canada models] (1 kHz, 0.9% THD, 8 Ω)	
・Front L/R, Center, Surround L/R, Height L/R	110 W
Maximum Effective Power Output (1 channel driven)	
• (1 kHz, 10%THD, 6 Ω)	
・Front L/R, Center, Surround L/R, Height L/R	145 W
• [U.S.A. and Canada models] (1 kHz, 10% THD, 8 Ω)	
・Front L/R, Center, Surround L/R, Height L/R	130 W
Damping Factor	
• Front L/R (1 kHz, 8 Ω)	100 or more
Input Sensitivity / Input Impedance	
• RCA 1 etc. (1 kHz, Rated Power Output)	200 mV/47 kΩ
Maximum Input Signal	
• RCA 1 etc. (1 kHz, 0.5% THD)	2.3 V
Rated Output Level / Output Impedance	
• Pre Out	
・Subwoofer (50 Hz)	1.0 V/1.8 KΩ
Maximum Output Level	
• Pre Out	
・Subwoofer	4.5 V
Headphone Impedance	16 Ω or more

Frequency Response	
• RCA 1 etc. (Pure Direct) (10 Hz to 100 kHz)	+0/-3 dB
Total Harmonic Distortion	
• RCA 1 etc. to Speaker Out (Pure Direct) (20 Hz to 20 kHz, 40 W, 6 Ω/8 Ω)	0.06% or less
Signal to Noise Ratio (IHF-A Network)	
• RCA 1 etc. to Speaker Out (Pure Direct) (Input 1 kΩ Shorted)	110 dB or more
Residual Noise (IHF-A Network)	
• Speaker Out	150 µV or less
Channel Separation	
• RCA 1 etc. (Input 1 kΩ Shorted, 1 kHz/10 kHz)	70 dB/50 dB or more
Volume Control	
• Main zone	MUTE, -80 dB to +16.5 dB (0.5 dB Step)
• ZoneB	MUTE, -80 dB to +16.5 dB (0.5 dB Step)
Tone Control Characteristics	
• Main zone	
・Bass (Boost/Cut)	±6 dB/0.5 dB Step at 50 Hz
・Bass (Turnover Frequency)	350 Hz
・Treble (Boost/Cut)	±6 dB/0.5 dB Step at 20 kHz
・Treble (Turnover Frequency)	3.5 kHz
・Support Channel	Front L/R
Bass Crossover Frequency (Cut Off Frequency: 40 Hz to 200 Hz (5 Hz Step))	
• H.P.F. (Front, Center, Surround, Height)	12 dB/oct.
• L.P.F. (Subwoofer)	24 dB/oct.

FM Tuner Section

Tuning Range	
• [U.K., Europe and Australia models]	87.50 MHz to 108.00 MHz
• [U.S.A. and Canada models]	87.5 MHz to 107.9 MHz
50 dB Quieting Sensitivity (IHF, 1 kHz, 100% MOD.)	
• Monaural	9 dBµV
Signal to Noise Ratio (IHF)	
• Monaural/Stereo	65 dB/64 dB
Harmonic Distortion	
• Monaural/Stereo	0.5%/0.6%

Antenna Input	75 Ω unbalanced

DAB Tuner Section (U.K., Europe and Australia models)

Tuning Range	174 MHz to 240 MHz (BAND III)
Support Audio Format	MPEG 1 Layer II /MPEG-4 HE-AAC v2 (aacPlus v2)
Antenna Input	75 Ω unbalanced

General

Power Supply	
• [U.S.A. and Canada models]	AC 120 V, 60 Hz
• [Australia model]	AC 230 to 240 V, 50 Hz
• [U.K. and Europe models]	AC 230 V, 50 Hz
Power Consumption	260 W
Standby Power Consumption*	
• HDMI Control Off, Standby through Off, Network Standby Off, Bluetooth Standby Off	0.3 W
• HDMI Control On, Standby through On, Network Standby Off, Bluetooth Standby Off	
・Input: RCA 1 (HDMI no signal)	1.6 W
• HDMI Control Off, Standby through Off, Network Standby On, Bluetooth Standby Off	
・Wired	1.2 W
・Wi-Fi	1.2 W
• HDMI Control Off, Standby through Off, Network Standby On, Bluetooth Standby On	
・Wired	1.2 W
• HDMI Control On, Standby through On, Network Standby On, Bluetooth Standby On	
・Wi-Fi	1.6 W
* This product in the standby mode may download the new firmware via the network. In this case, the standby power consumption is higher than the shown value.	
Dimensions (W x H x D)	
* Including legs and protrusions	
	434 x 157 x 319 mm
	(17-1/8" x 6-1/8" x 12-1/2")
Weight	8.0 kg (17.6 lbs)

* This content is based on the latest specifications available at the time of publication. For the most up-to-date information, please download the latest version from the Yamaha website.