



YAMAHA

RX-V1800

7.1-Channel Digital Home Theatre Receiver

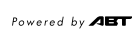
NEW
PRODUCT
BULLETIN

High-performance Home Theatre Receiver with many impressive features including Dolby TrueHD and DTS-HD Master Audio decoders, latest HDMI 1.3a specification support, video upscaling to 1080p, iPod compatibility, YPAO Auto Setup with Quick Start, and multi-zone custom installation facility.



Oil-Damped Hidden Control Panel includes S-Video input and optical digital input terminals, Main/Zone 2/Zone 3 power on/off switches, rec out/Zone 2 selector, YPAO optimized microphone jack, and more.

Direct-access (macro-command, learning and preset capable) remote unit with luminescent buttons (right) and dedicated zone remote unit (left)



1 High Sound Quality

- 7-channel powerful surround sound: 910W=130W x 7 RMS; 1,225W=175W x 7 Max
- HD audio format signals capability: Dolby Digital Plus, Dolby Digital TrueHD, DTS-HD High Resolution Audio and DTS-HD Master Audio
- Digital ToP-ART with extremely audio-grade parts and devices used throughout
- Pure Direct for higher fidelity sound reproduction
- Burr-Brown 192 kHz/24-bit DACs for front channels and 192 kHz/24-bit ADC for Main Zone

2 High Picture Quality

- Analogue video (480i/576i or 480p/576p) upscaling to full HD 1080p
- Latest HDMI 1.3a (4 in/1 out) specification supports with Deep Color (30/36 bit) transmission, Refresh Rates (120Hz/100Hz and 24Hz) and Auto Lip-Sync compensation
- Analogue video to HDMI digital video upconversion with TBC

3 Advanced Features

- iPod compatibility via optional Yamaha YDS-10
- Improved YPAO short-cut setup function and System Memory buttons on remote unit
- Superior zone control with additional zone remote unit
- Assignable amplifiers for bi-amp connection
- Support for a digital connection to a Blu-ray Disc and HD DVD players

4 Surround Realism

- Fine-tuned CINEMA DSP and Adaptive DSP Level
- Improved Compressed Music Enhancer with Straight Enhancer programme
- Adaptive DRC (Dynamic Range Control)

22 DSP Programmes Compatible Decoder Straight

Dolby Digital
Dolby Digital EX
Dolby Digital Plus
Dolby Digital TrueHD
DTS Digital Surround
DTS 96/24
DTS-ES Matrix 6.1
DTS-ES Discrete 6.1
DTS-HD High Resolution Audio
DTS-HD Master Audio
Dolby Pro Logic
Dolby Pro Logic II Music
Dolby Pro Logic II Movie
Dolby Pro Logic II Game
Dolby Pro Logic IIx Music
Dolby Pro Logic IIx Movie
Dolby Pro Logic IIx Game
DTS Neo:6 Music
DTS Neo:6 Cinema

HiFi DSP Programmes 11

CLASSICAL
Hall in Munich
Hall in Vienna
Hall in Amsterdam
Church in Freiburg
Chamber
LIVE/CLUB
Village Vanguard
Warehouse Loft
Cellar Club
The Roxy Theatre
The Bottom Line
STEREO
7 Channel Stereo

CINEMA DSP Programmes 11

Standard
Spectacle
MOVIE
Sci-Fi
Adventure
Drama
Mono Movie
Sports
Action Game
Roleplaying Game
ENTERTAINMENT
Music Video
Recital/Opera

DSP Programme Total 22



Titanium and gold finish
available in some areas

High Sound Quality

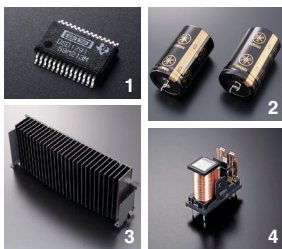
HD Audio Format Signals Capability

This receiver lets users enjoy the best possible and newest surround sound from Blu-ray Disc players and HD-DVD players. It supports the two lossy formats: Dolby Digital Plus and DTS HD High Resolution, as well as the lossless formats: Dolby TrueHD and DTS-HD Master Audio.



Digital ToP-ART and High Current Amplification

Yamaha's Digital ToP-ART concept combines the latest and best technologies, parts and circuit designs to maximize sound quality. An interior layout completely isolates the digital, analogue and video sections and provides the shortest possible signal routes. Top quality parts include Burr-Brown 192kHz/24-bit DACs and 192kHz/24-bit ADC, a low-noise discrete power supply, custom-made 12,000µF block capacitors, low-jitter PLL circuitry, and a large, arch-shaped heat sink. Heavy-duty top and bottom chassis provide greater rigidity for vibration damping. High Current Amplification circuitry achieves high current power with low impedance for superior amplifier performance.



1 High grade Burr-Brown DAC
2 Custom made block capacitors (12,000µF)
3 Large, arch-shaped heat sink
4 Two direct signal path speaker relays

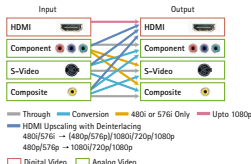
High Picture Quality

Latest HDMI 1.3a (4 In/1 Out)

The HDMI 1.3a interface upgrades the transmission of standard, enhanced and high-definition video signals via HDMI for higher than ever quality through a single cable. With four HDMI input terminals, users can connect a variety of high-definition sources such as a Blu-ray Disc or HD-DVD player and switch easily among them.

Full HD 1080p Video Upscaling

The RX-V1800 has not only analogue video to HDMI digital video upconversion (i.e., composite video <-> S-Video <-> component video -> HDMI) capability for monitor out, but also analogue video upscaling from 480i/576i or 480p/576p to 1080i, 720p or even 1080p.



Deep Color (30/36 Bit) Transmission

The receiver supports the latest HDMI 30- and 36-bit colour depths, improved from the 24-bit depth of previous versions. This "Deep Color" allows the rendering of billions of colours for far greater accuracy.

Refresh Rates (120Hz/100Hz and 24Hz)

• High Refresh Rate (120Hz/100Hz)

The standard refresh rate (frame rate) for video displays is 50Hz (PAL) or 60Hz (NTSC). Recently, however, LCD TVs and monitors are being introduced that use a double refresh rate (120Hz/100Hz) to prevent flicker and delay problems. The RX-V1800 is capable of transmitting this high refresh rate signal via HDMI.

• Low Refresh Rate (24Hz)

Blu-ray Discs are mastered at 24 frames per second (the same as 35mm movie film) with 1080p resolution. In order to make the most of this high quality, 1080p/24Hz compliant displays and players are being introduced. The RX-V1800 is capable of transmitting the 1080p/24Hz signal to ensure highest quality throughout the reproduction chain.

Auto Lip-Sync Compensation

When video and audio signals are transferred via HDMI and the video shown on a display and the audio output by an AV receiver, the video delay time (time from signal input until it is seen) and the audio delay time (time from signal input until it is heard) are different, so the video and audio slip out of sync. The Auto Lip-Sync compensation function monitors the video delay time, and automatically adjusts the amount of audio delay to eliminate the difference, so you hear the dialogue just as the person is speaking.

Advanced Features

YPAO Sound Optimisation with Quick Start

Yamaha's YPAO Sound Optimisation system analyses the acoustics of the room and adjusts various speaker parameters to provide optimum sound quality at the listening position — in less than three minutes! A new Quick Start function displays the YPAO Auto Setup menu when the microphone jack is inserted, so Start can be immediately selected. Six YPAO settings can be memorised.

Superior Custom Zone Control

Convenient operation is assured thanks to control of Main/Zone 2/Zone 3 power, FM/AM tuning, volume and input select on the front panel, along with extensive information, Zone 2/3 tone and L/R balance control for ceiling- or wall-mount speakers and even a separate Zone Remote Unit. There is also an RS-232C interface for a touch-panel controller.

Surround Realism

Fine-Tuned CINEMA DSP and Adaptive DSP Level

Yamaha's much-praised CINEMA DSP programmes have been fine-tuned for even better sound with

the latest generation CINEMA DSP technology and with the new HD Audio surround sound.

When volume is low, CINEMA DSP effects may be difficult to hear. Adaptive DSP Level overcomes this problem by evaluating the difference between the volume level and a reference level, and adjusting the DSP level to ensure optimum effectiveness, that is, the best possible sound.

Improved Compressed Music Enhancer

Yamaha's Compressed Music Enhancer is a popular feature that restores the sound of the original music from digitally compressed formats such as MP3. This receiver offers an upgraded version that processes multi-channel signals with a DSP algorithm, so all channels (rather than just two) are enhanced. This provides more accurate reproduction and a more expansive sound.

Adaptive DRC

Adaptive DRC (Dynamic Range Control) is a new volume control technology that is effective for low-volume listening, such as at night or with headphones. It applies DRC processing to eliminate the volume differences between loud commercials and ordinary programming and to take into account our ears' loss of sensitivity as volume decreases.

Other Notable Features

- Pure Direct for highest sound quality
- Surround Back terminal's amplifiers can be assignable for bi-amplification connections
- System Memory buttons on remote unit
- 40-station FM/AM preset and direct preset tuning / Auto preset tuning
- Linear Damping
- High dynamic power, low-impedance drive capability
- Aluminium front panel and volume knob/input selector
- SILENT CINEMA and Virtual CINEMA DSP
- Initial Volume Setting and Maximum Volume Setting (including for Zone 2/Zone 3)
- Dialogue Lift for dialogue to screen center
- iPod song titles displayed on front panel
- Selectable 9-band subwoofer frequencies
- Subwoofer Phase Select
- 8ch or 6ch external decoder input
- Analogue downmix
- Sleep timer
- Detachable power cable

YDS-10 Universal Dock for iPod

The optional YDS-10 Universal Dock lets you connect your iPod to the receiver.

iPod not included



Main Specifications

| | |
|--|-------------------------|
| Minimum RMS Output Power | |
| (8 ohms, 20 Hz–20 kHz, 0.04% THD) | |
| Front Channels | 130 W + 130 W |
| Centre Channel | 130 W |
| Surround Channels | 130 W + 130 W |
| Surround Back Channels | 130 W + 130 W |
| Maximum Power (8 ohms, 1 kHz, 10% THD) | |
| Front L/R Channels | 175 W |
| Centre Channel | 175 W |
| Surround L/R Channels | 175 W |
| Surround Back L/R Channels | 175 W |
| Dynamic Power/Ch (Front Ch, Speaker-1) | |
| 8/6/4/2 ohms | 160/195/255/335 W |
| Damping Factor | |
| (8 ohms, 20 Hz–20 kHz) | 150 (speaker-1) |
| Frequency Response | |
| | 10 Hz–100 kHz +0, -3 dB |
| Total Harmonic Distortion (20 Hz–20 kHz) | |
| CD (Front Sp Out) | 0.04% |
| Signal-to-Noise Ratio (CD) | |
| | 100 dB |
| Video Monitor Out Frequency Response | |
| Component Video Signal | 5 Hz–100 MHz -3 dB |
| Dimensions (W x H x D) | |
| | 435 x 171 x 439 mm |
| Weight | |
| | 17 kg |

• Banana-plug compatible speaker terminals are not available in some areas.

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d-cinema "d-cinema" is the slogan of Yamaha A/V products and technology, reflecting our focus on digital technology and our leadership in creating and refining digital home theatre.