

Micro Component System composed of Receiver, CD Player and two Speakers that delivers sound quality equal or better than many larger and more expensive systems.

Draws on Yamaha's music instrument experience for fine looks and sound, and on Yamaha's advanced technology for superb performance from compact units.


MP3

Receiver Section

- 65W x 2 high power output
- Discrete amplifier configuration, advanced electronic volume control
- Pure Direct (engaged for both receiver and CD player)
- iPod direct docking on the top panel
- High dynamic power, low-impedance drive capability
- Subwoofer out
- 30-station FM tuning*
- Aluminium front panel (CD player also) and volume/input selector knobs

CD Player Section

- Extremely sophisticated circuitry and layout
- Short signal paths and high quality parts
- Differential D/A Converter for high conversion precision
- USB port (USB device charges even in standby)
- MP3 and WMA compatibility

Speaker Section

- Elegant and environmentally friendly Yamaha Piano Finish
- VCCS (Vibration Control Cabinet Structure) technology
- Anti-vibration feet for prevent additional oscillation

* Including Radio Data System (for Europe) and DAB (Band III for UK)

Main Specifications

Receiver (R-840)

Output Power (6 ohms, 1 kHz, 10% THD)	65 W + 65 W*
Dynamic Power/Channel	75/100 W (4/2 ohms)**
Frequency Response	±0.5 dB (20 Hz–20 kHz)
Total Harmonic Distortion	0.04% (20 Hz–20 kHz, 30 W/6 ohms)
Signal-to-Noise Ratio	100 dB (200 mV)
Standby Power Consumption	0.3 W
Dimensions (W x H x D); Weight	215 x 110 x 348 mm; 5.7 kg

CD Player (CD-640)

Signal-to-Noise Ratio	110 dB (CD)
Dynamic Range	100 dB (CD)
Harmonic Distortion	0.003% (CD)
Standby Power Consumption	0.3 W
Dimensions (W x H x D); Weight	215 x 108 x 318 mm; 3.2 kg

Speakers (NS-BP300)

Driver	13cm cone woofer and 2.5cm dome tweeter
Input Power (Max/Nominal)	110 W/60 W
Frequency Response	55 Hz–28 kHz (–10 dB)
Dimensions (W x H x D); Weight	176 x 318 x 305 mm; 4.3 kg/unit

* 60 W + 60 W for Southeast Asia. ** 70/92 W(4/2 ohms) for Southeast Asia.



The R-840 receiver and CD-640 CD player are available with black and silver finish. The NS-BP300 speakers are available with Piano Black and Piano White finish. The MCR-640 does not include iPod.

The MCR-640 offers superb audio performance via the small units of a micro component system. This was made possible by developing entirely new circuit designs, CD Player mechanism and many of the parts. Its advanced technologies include one-point earth, short signal routing, electronic volume control and Pure Direct. The speakers are also extremely high quality and feature Yamaha's elegant piano finish.

RECEIVER (R-840)

A New Approach to Achieving High Performance

In order to achieve truly high quality audio performance in a micro component, our technicians had to rethink circuit layouts and parts positioning, in effect compressing a full size receiver into a much smaller unit. They were able to achieve this with a design that features short signal paths, high thermal efficiency and excellent anti-noise and anti-vibration characteristics.

Top-Class Analogue Amplifier

Using discrete parts for all major components, this exceptionally high performance analogue amplifier delivers Yamaha's traditional high analogue sound quality. The aluminium-extruded heat sink is large enough to effectively dissipate heat.



Aluminium-extruded heat sink

Advanced Electronic Volume Control

The R-840 employs an advanced electronic volume control circuit. The audio analogue element does not transmit the audio signal, but instead is used in a rotary potentiometre, with the results processed through a microcomputer to the electronic volume. The benefits of this system are that it eliminates the static prone to occur found in analogue controls as well as gang error, and provides higher precision volume control.

One-Point Earth and Short Signal Routing

Rather than each section having its own earth, which can lower S/N ratio due to common impedance, the earth is located in one position, extending out to each section (power amp, power supply, preamp, motor drive and digital circuitry). In addition, signal paths are painstakingly laid out to be as short as possible, greatly reducing the chance of electromagnetic interference.

High Quality Parts

Many parts were custom-developed for this receiver, including the large, low-impedance transformer and large capacity block capacitors and resistors. In addition, high-grade gold speaker terminals are used.



Custom-made block capacitors (left), large speaker terminals (centre), and high quality resistors, capacitors and other parts.

Pure Direct for Highest Sound Quality

Pure Direct results in the highest possible sound quality by turning off the display and causing the audio signal to bypass all non-essential circuits so it travels the shortest possible path from input to output. Pressing the button engages Pure Direct for both the receiver and CD player

iPod Direct Docking on the Top Panel

A universal iPod dock is on the top of the receiver. When the receiver is in standby mode and you insert your iPod while it is playing, the receiver turns on and you can enjoy your music with enhanced power and clarity. A Play/Pause button is also provided. You can operate the iPod from the system remote, and the iPod charges while in use.

CD PLAYER (CD-640)

New Mechanism and Circuitry

Like the components in the other systems, the CD-640 incorporates a new mechanism and circuitry that were developed to fit into the small interior space. We realised this with a compact disc loader positioned at the bottom of the chassis to minimise vibration and a high efficiency power supply. The power supply and digital and analogue sections are completely isolated, eliminating electromagnetic interference among them.

One-Point Earth

Rather than each section having its own earth, which can cause distortion due to shared impedance, the earth is located in one position, extending out to each section (power supply, DAC, CD module and digital circuitry).

Power Supply

The CD-640 uses an analogue power supply to avoid any negative effects of digital noise on sound quality. The transformer has been custom designed for this player, and the wiring from the power board to the other boards is extra thick.

Differential D/A Converter for High Conversion Precision

Yamaha chose the Burr-Brown DSD1791, an extremely high performance DAC with differential output for reducing digital noise. It uses advanced segment DAC architecture to achieve excellent dynamic performance and high tolerance to clock jitter. With this DAC, you hear the fine sound quality you expect from a high-grade component.



SPEAKERS (NS-BP300)

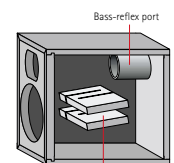
Elegant and Environmentally Friendly Yamaha Piano Finish

As one of the world's leading piano manufacturers, Yamaha has a long history of wood-working expertise. The NS-BP300 speakers feature the same luxurious and environmentally friendly finish as our fine grand pianos.

VCCS Technology

No matter how good the music source, amplifier and speakers are, speaker cabinet vibration will affect the sound, usually for the worse. Simply adding internal reinforcements and conventional damping materials is ineffective. Yamaha solved the problem with VCCS, (Vibration Control Cabinet Structure) which uses strategically placed pieces of wood whose shapes, positions and angles were arrived at after a long process of experimentation. We also spent a great deal of effort finding a special foam rubber material that provides excellent vibration isolation performance.

VCCS Image



Strategically positioned composite material

Anti-Vibration Feet

The NS-BP300 is unusual in having feet, which use high quality damping material to prevent external vibrations from affecting the sound and which also align the bottom with the other components for a neater design.



Extensive Connections

The R-840 rear panel offers two analogue audio inputs, high grade gold speaker terminals (Lch/Rch) and subwoofer output. The CD-640 rear panel offers a gold-plated, analogue audio output.

• "Made for iPod" means that an electronic accessory has been designed to connect specifically to iPod 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. • iPod is a trademark of Apple Inc., registered in the U.S. and other countries. • Products designs and specifications are subject to change without notice.