



# MCR-640 (R-840 + CD-640 + NS-BP300) \*\*RECEIVER/CD PLAYER\*\*



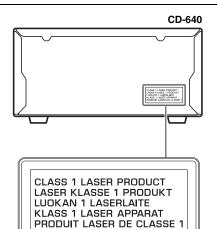


#### CAUTION

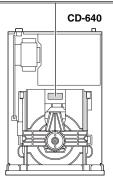
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION - VISIBLE AND / OR INVISIBLE LASER RADIATION WHEN OPEN.

AVOID EXPOSURE TO BEAM.



DANGER: AVOID DIRECT EXPOSURE TO THE BEAM INVISIBLE LASER RADIATION WHEN OPEN CAUTION: DO NOT STARE INTO BEAM INVISIBLE LASER RADIATION WHEN OPEN



#### ■ For U.K. customers

If the socket outlets in the home are not suitable for the plug supplied with this appliance, it should be cut off and an appropriate 3 pin plug fitted. For details, refer to the instructions described below.

#### Note

The plug severed from the mains lead must be destroyed, as a plug with bared flexible cord is hazardous if engaged in a live socket outlet.

#### Special Instructions for U.K. Model

#### **IMPORTANT**

THE WIRES IN MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

Blue: NEUTRAL Brown: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or

coloured RED.

Make sure that neither core is connected to the earth terminal of the three pin plug.

### CAUTION: READ THIS BEFORE OPERATING YOUR UNIT.

- 1 To assure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.
- 2 Install this sound system in a well ventilated, cool, dry, clean place and away from direct sunlight, heat sources, vibration, dust, moisture and cold. For proper ventilation, allow the following minimum clearances.

Top: 30 cm (R-840 Only)

Rear: 10 cm Sides: 10 cm

- 3 Locate this unit away from other electrical appliances, motors, or transformers to avoid humming sounds.
- 4 Do not expose this unit to sudden temperature changes from cold to hot, and do not locate this unit in an environment with high humidity (i.e. a room with a humidifier) to prevent condensation inside this unit, which may cause an electrical shock, fire, damage to this unit, and/or personal injury.
- 5 Avoid installing this unit where foreign object may fall onto this unit and/or this unit may be exposed to liquid dripping or splashing. On the top of this unit, do not place:
  - Other components, as they may cause damage and/or discoloration on the surface of this unit.
  - Burning objects (i.e. candles), as they may cause fire, damage to this unit, and/or personal injury.
  - Containers with liquid in them, as they may fall and liquid may cause electrical shock to the user and/or damage to this unit.
- 6 Do not cover this unit with a newspaper, tablecloth, curtain, etc. in order not to obstruct heat radiation. If the temperature inside this unit rises, it may cause fire, damage to this unit, and/or personal injury.
- 7 Do not plug in this unit to a wall outlet until all connections are complete.
- 8 Do not operate this unit upside-down. It may overheat, possibly causing damage.
- 9 Do not use force on switches, knobs and/or cords.
- 10 When disconnecting the power cable from the wall outlet, grasp the plug; do not pull the cable.
- 11 Do not clean this unit with chemical solvents; this might damage the finish. Use a clean, dry cloth.
- 12 Only voltage specified on this unit must be used. Using this unit with a higher voltage than specified is dangerous and may cause fire, damage to this unit, and/or personal injury. Yamaha will not be held responsible for any damage resulting from use of this unit with a voltage other than specified.
- 13 To prevent damage by lightning, keep the power cable and outdoor antennas disconnected from a wall outlet or this unit during a lightning storm.
- 14 Do not attempt to modify or fix this unit. Contact qualified Yamaha service personnel when any service is needed. The cabinet should never be opened for any reasons.
- 15 When not planning to use this unit for long periods of time (i.e. vacation), disconnect the AC power plug from the wall outlet.
- 16 Be sure to read the "TROUBLESHOOTING" section on common operating errors before concluding that this unit is faulty.
- 17 Before moving this unit, press (b) to set it to standby mode and disconnect the AC power plug from the wall outlet.

- 18 Condensation will form when the surrounding temperature changes suddenly. Disconnect the power cable from the outlet, then leave this unit alone.
- 19 When using this unit for a long time, this unit may become warm. Turn the power off, then leave this unit alone for cooling.
- 20 Install this unit near the AC outlet and where the AC power plug can be reached easily.
- 21 The batteries shall not be exposed to excessive heat such as sunshine, fire or the like.
- 22 Excessive sound pressure from earphones and headphones can cause hearing loss.

This unit is not disconnected from the AC power source as long as it is connected to the wall outlet, even if this unit itself is turned off by  $\circlearrowleft$ . This state is called the standby mode. In this state, this unit is designed to consume a very small quantity of power.

#### WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

#### LASER SAFETY

This unit employs a laser. Due to possible eye injury, only a qualified service person should remove the cover or attempt to service this device.

#### **DANGER**

This unit emits visible laser radiation when open. Avoid direct eye exposure to beam. When this unit is plugged into the wall outlet, do not place your eyes close to the opening of the disc tray and other openings to look into inside.

The laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

#### **LASER**

Type Semiconductor laser GaAs/GaAlAs

Wave length 780 nm Output Power 10 mW

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#### **FEATURES**

#### Receiver (R-840)

- Minimum RMS output power per channel 65W + 65W (6Ω, 1kHz, 10% THD)
- 30-station DAB preset tuning
- · 30-station FM preset tuning
- · iPod playability (with rechargeable function)
- · Pure Direct mode
- · Adjustable display brightness

#### CD player (CD-640)

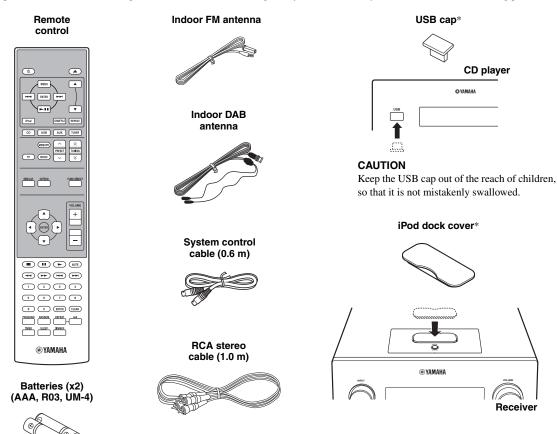
- Plays Audio CDs, MP3/WMA discs
- · CD-R, CD-RW Disc Playability
- · Plays MP3/WMA files stored on a USB device
- Linked operation with the receiver such as Pure Direct mode, adjustable display brightness and INPUT mode

#### About this manual

- In this manual, "R-840" is described as "receiver" and "CD-640" is described as "CD player".
- This manual describes how to operate the system using a remote control except when it is not available. Some of these operations are
  also available using the front panel buttons.
- = indicates a tip for your operation.
- Notes contain important information about safety and operating instructions.
- This manual is printed prior to production. Design and specifications are subject to change in part as a result of improvements, etc. In case of differences between the manual and the product, the product has priority.

#### **SUPPLIED ACCESSORIES**

This product includes the following accessories. Before connecting this system, make sure you received all of the following parts.



\* The USB cap and the iPod dock cover are supplied with this product to cover the USB port and the iPod dock when not in use.

### PLAYABLE DISC AND FILE FORMAT

# Playable MP3 and WMA files (USB device and Data Disc)

#### MP3

Format	Bitrate (kbps)	Sampling frequency (kHz)	
MPEG 1 Audio Layer-3	32-320 *	32/44.1/48	
MPEG 2 Audio Layer-3, 2	8-160 *	16/22.05/24	
MPEG-2.5 Audio Layer-2	8-160 *	8/11.025/12	

<sup>\*</sup> Variable bitrate is also supported.

#### **WMA**

- Version 8
- Version 9 (Standard and variable bitrates are supported.)
   Professional and Lossless are not supported.)

Profile	Bitrate (kbps)	Sampling frequency (kHz)
High Profile	32-320 *	32/44.1/48
Mid Profile	16-32	16/22.05

<sup>\*</sup> Variable bitrate is also supported.

#### Notes

- Playback for Data Disc starts in alphanumeric order.
- Playback for USB starts in order by date and time of creation.
- Copyright-protected WMA (DRM) files cannot be played back by the CD player.
- The disc must be ISO 9660 compatible.
- Elapsed time may not be displayed correctly while playing back variable bitrate contents.

	Data Disc	USB
Maximum total number of file and folder*	512	999
Maximum folder number*	255	255
Maximum file number per folder	511	255

<sup>\*</sup> The root is counted as one of the folders.

#### ■ Playable discs

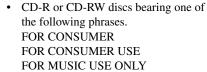
Use compact discs bearing the marks below.

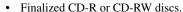


#### .... Compact discs (digital audio)



#### .... CD-R, CD-RW digital audio discs







#### Note

The CD player may not be able to play some CD-R/CD-RW discs or discs on which recording was not made correctly.



#### To play back an 8-cm (3-inch) CD

Place it in the inner recessed area of the disc tray. Do not put a normal (12-cm) CD on top of an 8-cm (3-inch) CD.

#### To prevent a malfunction of this unit:

 Do not use any nonstandard shaped disc (heart, etc.) available on the market because it might damage the unit.



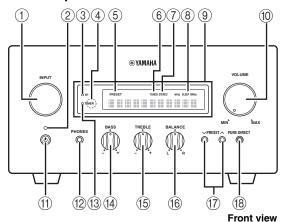
 Do not use a disc with tape, stickers, or paste on it. If you use such a disc, the disc may get stuck in the unit, or damage to the unit may result.

**Note:** Do not use any lens cleaners as they may be a cause of malfunction.

### **CONTROLS AND FUNCTIONS**

#### Receiver (R-840)

#### ■ Front panel



#### ① INPUT

Selects an input source.

#### 2 On/Standby indicator

Lights up in green when the receiver is turned on. Lights up in amber when the receiver is in standby mode.

#### ③ TP indicator

Lights up when the receiver is receiving a Radio Data System station which contains the TP (Traffic Program) data service (\$\mathbb{R}\$ p.25).

#### (4) Remote control sensor

Receives signals from the remote control.

#### (5) PRESET indicator

Lights up when you select preset radio stations (\$\sim\$p.19, p.23).

#### 6 TUNED indicator

Lights up when the receiver is tuned into a station.

#### (7) STEREO indicator

Lights up when the receiver is receiving a strong signal from a DAB/FM stereo broadcast.

#### (8) SLEEP indicator

Lights up when the sleep timer is on (\$\sip\$p.27).

#### 9 Front panel display

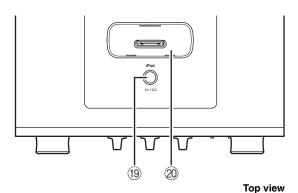
Shows the various information such as the tuning frequency.

#### 10 VOLUME

Adjusts the volume level.

#### ① (On/Standby)

Turns the receiver on or sets it to standby mode.



#### 12 PHONES jack

Outputs audio signals for private listening with headphones.

#### **13** TIMER indicator

Lights up when the timer is set (\$\simp\$p.26).

#### (14) BASS

Adjusts the low frequency response (\$\mathbb{E}\$p.13).

#### 15 TREBLE

Adjusts the high frequency response ( pp.13).

#### **16 BALANCE**

Adjusts the audio output balance of the left to right speakers to compensate for imbalances caused by speaker locations or listening room conditions.

#### 

Selects a preset station. The input source is changed to either DAB or FM, whichever was last selected. Operable even when the receiver is in standby mode (FSF p.19, p.23).

#### **18 PURE DIRECT**

Turns on or off Pure Direct mode (FSF p.13). When Pure Direct mode is on, the indicator lights up in blue

#### (19) ▷/□

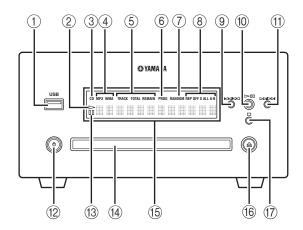
Starts and pauses the playback of iPod. The input source is changed to iPod. Operable even when the receiver is in standby mode.

#### 20 iPod dock

Connect your iPod (™p.10).

### CD player (CD-640)

#### ■ Front panel



#### 1) USB port

Connect your USB device.

#### ② ▷ (play) indicator

Appears during playback.

#### ③ CD indicator

Appears when an audio CD is loaded.

#### (4) Music data type indicator

Indicates the type of music data stored on the disc in the disc tray or on the USB device connected to the USB port.

#### (5) Time display mode indicators

Indicate the kind of time information displayed on the front panel display (FSF p.16).

#### 6 PROG indicator

Lights up when Program play mode is selected.

#### (7) RANDOM indicator

Lights up when Random play mode is selected.

#### (8) REP OFF S ALL A-B indicator

Lights up when Repeat play mode is selected.

#### 9 | | |

Returns to the beginning of the current track. Press and hold to fast reverse. Press twice to skip to the previous track (FSP.15).

#### (10) >/00

Starts or pauses playback (FSP p.15).

When this button is pressed during standby mode, the receiver automatically turns on and the input source changes to either CD or USB, whichever was last selected.

#### (11) >>/>>

Skips to the next track. Press and hold to fast forward ( $\mathbb{E}_{\mathbb{F}}$  p.15).

#### ① (On/Standby)

Turns on the CD player or sets it to standby mode. When this button is pressed during standby mode, the receiver automatically turns on and the input source changes to either CD or USB, whichever was selected last.

#### (13) III (pause) indicator

Lights up while the CD player is paused.

#### (14) Disc tray

Holds a disc to be played back.

#### (5) Front panel display

Shows the current status of the CD player.

#### (16) △

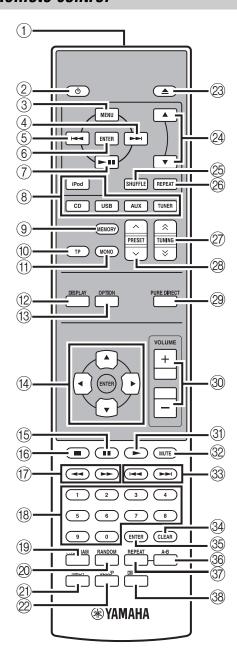
Opens and closes the disc tray.

When this button is pressed during standby mode, the receiver automatically turns on and the input source changes to CD.

#### 17 □

Stops playback (FSF p.15).

#### Remote control



This remote control can operate the system components (including tuner functions) and an iPod stationed in the iPod dock on the top of the receiver.

To operate the CD player, tuner functions, or an iPod using the remote control, you need to set the receiver to corresponding input mode (\*\*\*(8)Input selection keys).

#### To operate your iPod

Press the corresponding iPod operation key on the remote control.

The iPod operation keys are indicated with iPod in the section below. See page 29 for more information on the operation of your iPod.

#### 1 Infrared signal transmitter

Sends signals to the system you want to control.

#### ② (On/Standby)

Turns the system on or sets it to standby mode.

#### 3 MENU iPod

Returns to the upper level in the iPod menu.

#### (4) **►► iPod**

Skips to the next song. Press and hold to fast forward.

#### ⑤ I◄◄ iPod

Skips to the beginning of the current track. Press twice to skip back to the previous track. Press and hold to fast reverse.

#### 6 ENTER iPod

Press ENTER to enter the selected group. (Pressing ENTER starts playback when a song is selected.)

#### (7) ►/II iPod

Starts or Pauses Playback.

#### (8) Input selection keys

Select the input source on the receiver.

When selecting an input source, press the corresponding input selection key (or turn INPUT on the front panel).

The name of the corresponding input source appears on the front panel display of the receiver.

Each time you press TUNER, the input switches between DAB and FM.

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When CD or USB is selected as an input source, the CD player turns on automatically and when other input source is selected, the CD player sets to standby mode.

#### **9 MEMORY**

Stores a preset station in the memory (\*\*p.19, p.23). Starts Automatic preset tuning (\*\*p.22).

Enters TP (Traffic Program) data service receiving mode (\$\sigma\$p.25).

#### (11) MONO

Sets FM broadcasting receiving mode to monaural mode.

#### 12 DISPLAY

Switches the information shown on the front panel display of the receiver and CD player (\$\sigma\$p.16, p.19, p.24).

#### (13) OPTION

Enters option menu mode.

See pages 20, 23, 25 and 28 for option menu items.

#### **14 ▲**, **▼**, **◄**, **▶**, **ENTER**

For selecting and confirming an item.

#### 15

Pauses playback (FFp.15).

#### 16)

Stops playback (FSP p.15).

#### ⑰ ⊶, ►►

Rewind and fast-forward music.

#### (18) Numeric keys

Input numbers.

#### **19 PROGRAM**

Sets the CD player to the track program mode (FSP p.17).

#### 20 RANDOM

Turns on/off the Random Play (FFp.17).

#### 21 TIMER

Shows the current time on the front panel display of the receiver

And sets the clock (PSP.12) or the timer (PSP.26).

#### 22 SLEEP

Sets the sleep timer on the system (FFP.27).

#### 23 ▲

Opens and closes the disc tray.

#### 24 ▲, ▼ iPod

Press  $\blacktriangle$  or  $\blacktriangledown$  to switch an item in the selected group ( $\blacksquare$  p.29).

#### 25 SHUFFLE iPod

Selects mode of Shuffle Play (PPp.29).

#### 26 REPEAT IPod

Selects mode of Repeat Play (FSP p.29).

#### ② TUNING ♠/

Press TUNING  $\wedge/\otimes$  for manual tuning and press and hold TUNING  $\wedge/\otimes$  for automatic tuning (Fee p.18, p.22).

#### ② PRESET ∧ / ∨

Selects a preset station (FSP p.19, p.23).

#### **29 PURE DIRECT**

Turns on or off Pure Direct mode (FSP p.13).

#### 30 VOLUME +/-

Adjusts the overall volume level on the receiver.

#### 31) 🕨

Starts playback (FS p.15).

#### 32 MUTE

Turn off the volume (FSPp.14).

#### ③ ⊶, ►►

Skips to the beginning of the current track or next track.

#### **34 CLEAR**

Clears an entry.

#### 35 ENTER

Confirms an entry.

#### 36 A-B

Sets start and end points of a section and plays back the specified section repeatedly (1887 p. 17).

#### ③ REPEAT

Selects the Repeat Play mode (FFP.16).

#### 38 DIMMER

Changes the brightness of the front panel display (PSP p.14).

#### **PREPARATIONS**

#### Connecting speakers/external components/antennas

Make sure you read the following procedure and note carefully before connecting the system. **The remote control** and linked operation of the system only work when the receiver and the CD player are connected via the system control cable. For information on the speakers (NS-BP300), refer to the owner's manual supplied with it.

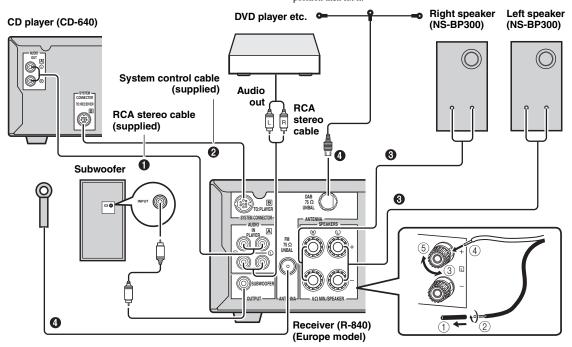
#### Connecting the system

- ① Connect the AUDIO IN (APLAYER L/R) jacks of the receiver to the AUDIO OUT (ALR) jacks of the CD player using the supplied audio RCA stereo cable.
- ② Connect the SYSTEM CONNECTOR (BTO:PLAYER) jack of the receiver to the SYSTEM CONNECTOR (BTO:RECEIVER) jack of the CD player using the supplied system control cable.
- **3** Connect the speaker terminals (L) of the receiver to the speaker terminals of the left speaker and the speaker terminals (R) of the receiver to the speaker terminals of the right speaker using the speaker cables supplied with the speaker set (NS-BP300).
- **4** Connect the supplied FM antenna to the FM jack, and DAB antenna to the DAB jack.

#### Indoor DAB antenna (supplied)

`@ʻ

Stretch out the antenna and place it to find the best reception position then fix it.



#### **CAUTION**

- Do not connect this unit or other components to the main power until all connections between components are complete.
- Do not let the bare speaker wires touch each other or any metal part of the receiver. This could damage the receiver and/or the speakers
- All connections must be correct: L (left) to L, R (right) to R, "+" to "+" and "-" to "-". If the connections are faulty, no sound will be heard from the speakers, and if the polarity of the speaker connections is incorrect, the sound will be unnatural and lack bass. Also, refer to the owner's manual for each of your components.

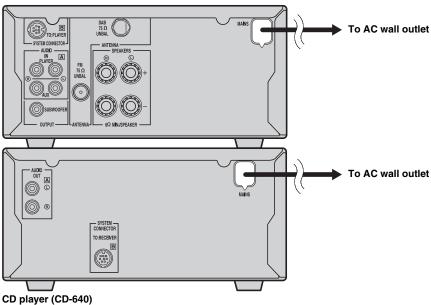
#### Notes

- The system control connection is used to transmit the remote control signals from the receiver to the CD player.
- When connecting speakers other than NS-BP300, use speakers having more than  $6\Omega$  impedance.
- If there is a problem of weak radio wave reception in your area or you want to improve radio reception, we recommend that you use commercially available outdoor antennas. For details, consult the nearest authorized Yamaha dealer or service center.

### Connecting power cables

After you made all connections, connect the power cables of this system and other components to AC wall outlets.

#### Receiver (R-840)

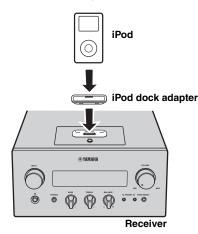


#### Connecting an iPod™

The receiver is equipped with the iPod dock on the top panel where you can station your iPod and control playback of your iPod using the supplied remote control. Use this receiver with iPod dock adapter (supplied with your iPod or commercially available) appropriate for your iPod. If you use this receiver without using an appropriate iPod dock adapter, loose connection may result.

#### `\\\

When the receiver is turned on or in standby mode, connect the iPod during the playback. The receiver automatically starts playback of iPod (for the fifth or later generation of iPod, iPod touch, iPod Classic, or iPod nano).

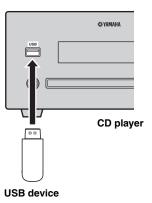


#### Notes

- Only iPod (Click and Wheel), iPod nano, iPod Classic, iPod mini and iPod touch are supported.
- Do not connect any iPod accessories (such as headphones, a wired remote control, or an FM transmitter) to your iPod when it is stationed in the iPod dock.
- Unless your iPod is firmly stationed in the iPod dock, audio signals may not be output properly.
- Once the connection between your iPod and the receiver is complete and the receiver is set to iPod mode (\*\*p.6), "CONNECTED" appears on the front panel display. If the connection between your iPod and the receiver fails, a status message appears on the front panel display. For a complete list of connection status message, see the iPod section in "TROUBLESHOOTING" (\*\*p.30).
- When your iPod is stationed in the iPod dock of the receiver, your iPod can be charged automatically even when the receiver is in standby mode.
- You can disconnect the iPod during the playback.

#### Connecting USB devices

This CD player has a USB port and can access MP3 or WMA files saved on your USB device. Connect your USB device to the USB port on the front panel of the CD player.



#### Supported USB devices

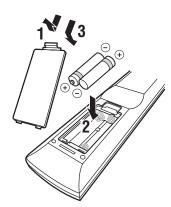
This CD player supports USB mass storage class devices (e.g., flash memories, card readers or portable audio players) using FAT16 or FAT32 format.

#### Notes

- Some devices may not work properly even if they meet the requirements.
- Do not connect devices other than the USB mass storage class devices.
- When you insert two or more memory cards at the same time using card readers, etc., only one of the memory cards is recognized.
- Yamaha and suppliers accept no liability for the loss of data saved on the USB devices connected to the receiver. As a precaution, it is recommended that the files are made backup copies.
- Playability of and power supply to all kind of USB devices are not guaranteed.
- When your USB device is connected to the USB port, your USB device can be charged automatically even when the CD player is in standby mode. Some USB devices cannot be charged in standby mode.
- You can disconnect the USB device during the playback.

# English

# Installing the batteries in the remote control

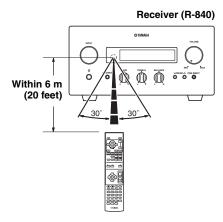


#### ■ Notes on batteries

- Change both batteries when the operation range of the remote control decreases.
- Use AAA, R03, UM-4 batteries.
- Make sure that the polarities are correct. See the illustration inside the battery compartment.
- Remove the batteries if the remote control is not to be used for an extended period of time.
- Do not use old batteries together with new ones.
- Do not use different types of batteries (such as alkaline and manganese batteries) together. Read the packaging carefully as these different types of batteries may have the same shape and color.
- If the batteries have leaked, dispose of them immediately. Avoid touching the leaked material or letting it come into contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.
- Do not throw away batteries with general house waste; dispose of them correctly in accordance with your local regulations.

### Using the remote control

The remote control transmits a directional infrared beam. Be sure to aim the remote control directly at the remote control sensor on the front panel of the receiver during operation.



#### Notes

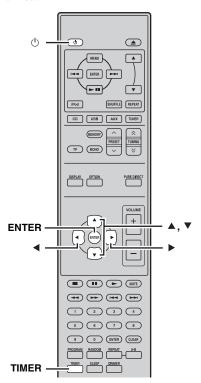
- The area between the remote control and the receiver must be clear of large obstacles.
- Do not spill water or other liquids on the remote control.
- Do not drop the remote control.
- Do not leave or store the remote control in the following types of conditions:
  - high humidity, such as near a bath
- high temperature, such as near a heater or a stove
- extremely low temperatures
- dusty places.
- Do not expose the remote control sensor to strong lighting, in particular, an inverter type fluorescent lamp; otherwise, the remote control may not work properly. If necessary, position the system away from direct lighting.

### Adjusting the Clock

Before starting playback operation, follow the procedure below to adjust the clock setting of the receiver.

#### Notes

- Use the remote control to set the clock. You cannot set the clock with the buttons on the receiver.
- The receiver supports 24-hour clock display.
- If you do not touch any key for 90 seconds, the receiver returns to normal mode.



#### 1 Press $\circlearrowleft$ to turn the receiver on.

The front panel display lights up.

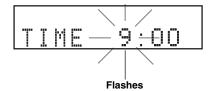
#### 2 Press TIMER to show the current time.

If the clock is not set, "SET TIME" flashes on the display.

Press ENTER to proceed to step 3.

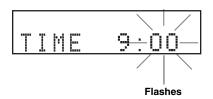
# 3 Press ▲/▼ to select "TIME", and press ENTER.

The receiver enters clock setting mode. The hour digits start flashing.



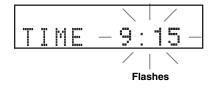
#### 4 Set the hour using ▲/▼, and press ▶.

The minute digits start flashing.



# 5 Set the minutes using ▲/▼, and press ENTER.

The hour and minute digits start flashing. To change the hour or minutes again, press  $\triangle$  or  $\nabla$ , do steps 4 and 5, and proceed to step 6.



#### 6 Press ENTER.

The clock is set.

The hour and minute segments stop flashing and remain on. The receiver returns to the normal mode.

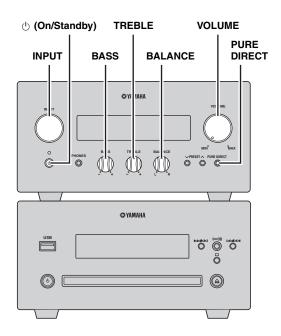


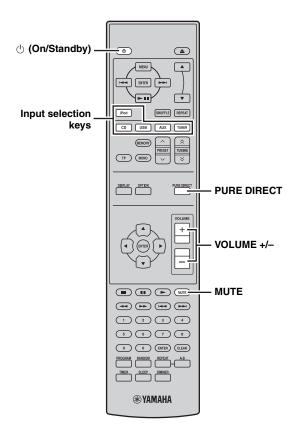
`\o'\_

You can return to the previous screen by pressing ◀.

#### SYSTEM OPERATIONS

Follow the procedure below to select an input source and adjust the sound settings on the system.





#### Basic system operations

1 Press ( (On/Standby) to turn on the receiver.

Depending on the input mode of the receiver, the CD player also turns on by the system control connection ( ( ). The front panel display lights up.

`\o':

This system has an auto-standby function (FSP).28) which automatically sets it to standby mode if not operated for 30 minutes while the receiver is set to CD or USB input mode.

- 2 Press one of the input selection keys (or rotate INPUT on the front panel) to select the desired input source.
- 3 Start playback on the selected source component or select a radio station.

For information on the disc/USB device playback, see page 15, and for information on tuning, see pages 18 and 22.

- 4 Press VOLUME +/- (or turn VOLUME on the front panel) to adjust the volume to the desired output level.
- 5 Rotate BASS, TREBLE, or BALANCE on the front panel of the receiver to adjust the following settings.

BASS: Adjusts the low frequency response.

TREBLE: Adjusts the high frequency response.

BALANCE: Adjusts the volume level of each left and right speaker channel.

#### ■ Pure Direct mode

Pure Direct mode bypasses the tone control circuit and turns off the front panel display, allowing you to enjoy pure high-fidelity sound.

# Press PURE DIRECT (or PURE DIRECT on the front panel) to turn on Pure Direct mode.

The front panel display automatically turns off. PURE DIRECT on the front panel is backlit in blue.

#### Notes

- If you carry out operations while Pure Direct mode is turned on, the front panel display lights up briefly to acknowledge the command.
- While the Pure Direct mode is turned on, neither BASS, TREBLE, nor BALANCE is available.

#### To turn off Pure Direct mode

Press PURE DIRECT again. The PURE DIRECT backlight turns off and the front panel display turns on.

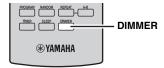
#### Muting the sound (MUTE)

# Press MUTE to reduce the current volume level by approximately 20dB.

"MUTE ON" appears on the front panel display. Press MUTE again to restore the audio output to the previous volume level.

# Changing the brightness of the front panel display

You can dim the front panel display of the receiver. The front panel display of the CD player also dims by the system control connection ( p.8). (The default setting is "DIMMER OFF".)



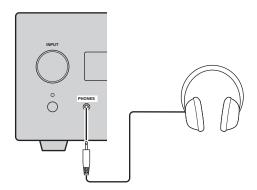
#### Press DIMMER.

You can choose your desired brightness of the front panel display between normal (bright), mid dim, and dim.

#### Using headphones

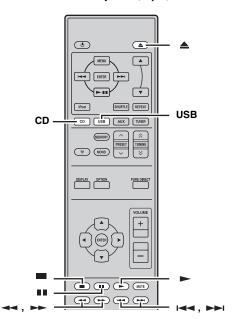
You can connect your headphones to the PHONES jack on the front panel of the receiver.

The sound from the speakers and the subwoofer stops.



### **DISC AND USB DEVICE OPERATIONS**

You can enjoy playing back your audio CDs, and MP3 or WMA files recorded on a disc/USB device. Some operations may be different or restricted depending on the disc/USB device. Before playing back, check the compatibility of your disc/USB device with this system (\*\*p.3).



#### Playback operations

#### ■ To start disc playback

1 Select CD as an input source (™p.13).

# Press ightharpoonup to the disc tray and load a CD.

#### 3 Press ►.

Playback starts automatically.

For an audio CD, playback starts from the first track, and for MP3 or WMA files, playback starts in alphanumeric order by the filename.

`\oʻ:

You can also close the disc tray by pressing  $\triangleq$  on the front panel of the CD player.

#### ■ To start USB device playback

1 Select USB as an input source (☞p.13).

# 2 Connect your USB device to the USB port on the CD player.

The total number of files are displayed. The reading time may exceed 30 seconds depending on the number of files/folders.

#### 3 Press ► to start playback.

The files are played back in the sequence of the date and time created.

#### Notes

- · Total time does not appear for USB device playback.
- If the USB device is partitioned, only the first partition is displayed.
- Some files may not work properly depending on the USB device specification.
- Copyright-protected files cannot be played back.
- This system can play back files of 4 GB in size or less.

#### To stop playback

Press .

For audio CD, the total track number and total time of the disc are displayed and for MP3/WMA disc or USB device, the total file number is displayed on the front panel.

#### To pause playback

Press ■■.

To return to normal playback, press ■■.

#### To skip tracks

- To return to the start of the current track, press
- To skip to the next track, press >> 1.
- To skip to the previous track, quickly press twice.

#### To fast reverse or fast forward

- To fast reverse, press -.
- To fast forward, press -.

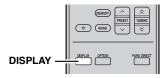
To return to normal playback, press ►.

``⊚′≟

Only a low sound is heard during fast-reverse or fast-forward.

# Switching the playback information display

You can switch the disc playback information shown in the CD player's front panel display. Available information differs depending on the type of the disc/USB device.



# Press DISPLAY repeatedly while playing back a disc/USB device.

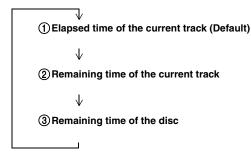
Each time you press the key, the information display changes as described in "Playback information for audio CDs" and "Playback information for MP3 or WMA files recorded on discs/USB devices".

#### Notes

- Some information may not be available depending on a disc/ USB device.
- · Some special characters may not be shown properly.

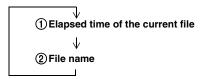
#### Playback information for audio CDs

The following information can be displayed during playback of an audio CD.



# ■ Playback information for MP3 or WMA files recorded on discs/USB devices

The following information is available during playback of an MP3 or WMA disc/USB device.

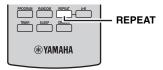


#### Note

After a file name is displayed for a few seconds, the screen automatically returns to the elapsed time display.

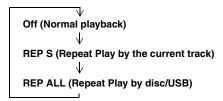
# Repeating playback (Repeat Play)

You can play back a single track or all tracks on a disc/ USB device repeatedly.



- Play back the disc/USB device you want to repeat.
- During the playback of the disc/USB device, press REPEAT to select the desired Repeat Play mode.

Each time you press the key, the Repeat Play mode indicator in the CD player's front panel display changes as follows.



#### To cancel Repeat Play

Press REPEAT repeatedly so that the Repeat Play mode indicator disappears from the front panel display.

#### Note

The Repeat play mode is canceled when the disc/USB device is removed.

`\o':

"REP OFF" appears when the system is set to Pure Direct mode.

# Repeating a specified section (Repeat A-B)

You can repeat a specified section of a track.



### Press A-B to set the start point of repeat play. "REP" and "A-" light up on the CD player's front panel display.

# Press A-B to set the end point of repeat play. "A-B" lights up on the display.

The selected section is played back repeatedly.

#### To cancel repeat A-B

Press A-B again to make "A-B" disappear from the front panel display.

#### Notes

- You cannot set repeat A-B to start in one track and end in another track.
- This operation is not available for MP3 or WMA files recorded on a disc/USB device.
- If you stop playback by pressing **\bigsim**, repeat A-B is canceled.
- You cannot use repeat A-B when this unit is in Pure Direct mode.

# Playing back randomly (Random Play)

You can play back tracks in the disc/USB device in random order.

#### Note

When playing back a disc/USB device with Random Play, the remaining time of the disc/USB device cannot be displayed.



#### Press RANDOM while playback is stopped.

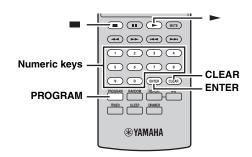
The RANDOM indicator lights up on the CD player's front panel display and Random Play starts.

#### To cancel Random Play

Press .

# Customizing playback order (Program Play)

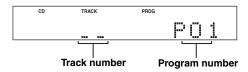
You can customize the playback order of up to 50 tracks stored on an audio CD. This operation is not available for data discs and USB devices.



#### 1 Press **to stop playback**.

#### 2 Press PROGRAM.

The CD player enters program input mode and the PROG indicator lights up on the front panel display.



#### 3 Use the numeric keys to enter the track number you want to program and press ENTER.

Example: To select the track number 8, press 8, and press ENTER to confirm the entry.

The front panel display shows the total number of tracks and then the program screen.

Repeat this step until you program all desired tracks.

#### 4 Press ► to start Program Play.

#### To clear the last programmed track

Press CLEAR during program input mode. The last programmed track is cleared.

#### To clear all programmed tracks

Press CLEAR after exiting program input mode. All programmed tracks are cleared.

#### The display is turned off after 2 seconds.

#### Note

If you open the disc tray or set the CD player to standby mode, the program is automatically cleared.

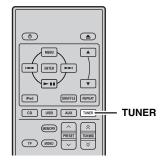
## **DAB (DIGITAL AUDIO BROADCASTING) TUNING**

DAB (Digital Audio Broadcasting) uses digital signals for clearer sound and more stable reception compared to analog signals.

This unit can also receive DAB+ (an upgraded version of DAB) that allows for more stations using MPEG-4 audio codec (AAC+), which has a more efficient transmission method.

#### Preparing the DAB tuning

Before tuning into DAB stations, an initial scan must be performed. The initial scan starts automatically when you select DAB as the input source for the first time.



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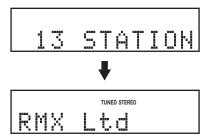
You can also perform the initial scan manually by INIT SCAN (FSP.20).

- 1 Press TUNER repeatedly to set the unit to the DAB mode.
- 2 The initial scan starts automatically.

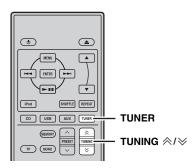
While the scan is in progress, "SCAN" and the percentage of the progress of scan appear on the front panel display.



When scanning is complete, the number of receivable DAB stations appears on the front panel display for a while, then the unit airs the first station as stored in station order.



#### **Tuning DAB stations**



- 1 Press TUNER repeatedly to set the unit to the DAB mode.



`\o^'=

You can change the order of DAB stations by STATION ORDER (FSP.20).

#### Note

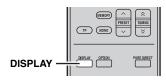
When the unit cannot receive the DAB signal, "OFF AIR" is displayed on the front panel display.

# nglish

#### DAB station information

#### ■ Switching the information of DAB

Use this feature to display various information about the DAB service currently being received.



#### Press DISPLAY repeatedly while receiving DAB.

#### > STATION LABEL

Displays the name of the current DAB station and preset number.

#### **DLS (Dynamic Label Segment)**

Displays information about the current DAB station, such as the name of the song, artist and speaker, etc. This data is continuously updated by the DAB broadcaster, thus changing often with every new song or program.

Other data, such as news, weather, and sports headlines, may be broadcast as well.

#### **ENSEMBLE LABEL**

↓ Displays the name of the current ensemble.

#### **PROGRAM TYPE**

- Displays the genre of the current DAB
- $\downarrow$  station.

#### TIME

↓ Displays the current time.

#### **BITRATE**

- Displays the bitrate of the current DAB
- $\downarrow$  station.

#### CHANNEL/FREQ

- Displays the channel label and frequency of
- $\checkmark$  the current DAB station ( $\mathbb{F}_{2}$ p.21).

#### **SIGNAL QUALITY**

- Displays signal reception quality (from 0
- (none) to 100 (best)) of current DAB tuning.

#### **AUDIO FORMAT**

Displays the audio format of the current station, and whether DRC (Dynamic Range Control)\* is activated.

"(DRC ON)" is displayed when DRC MODE (\$\sip\$p.20) is set to AUTO and DRC information is transmitted by DAB station.

\* Some DAB broadcasters transmit a wide dynamic range enabling high quality sound, accompanied by DRC information

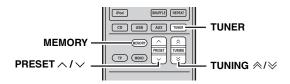
Use this feature to compress the dynamic range of the DAB broadcast. This is especially useful when you listen to a DAB station in a noisy environment or at low volume at night.

`\\\

You can change the DRC setting by DRC MODE (FSF p.20).

#### **Presetting DAB stations**

You can store your favorite DAB stations with the preset function.



- 1 Press TUNER repeatedly to set the unit to the DAB mode.
- 2 Press TUNING *∧*/*⊗* to tune into a favorite DAB station.
- 3 Press MEMORY.

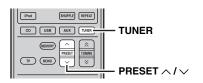
To cancel the preset, press MEMORY again.

4 Press PRESET ∧ / ∨ repeatedly to select a preset number you want to store, and press MEMORY.

`\\\

- · You can preset up to 30 DAB stations.
- You can delete a preset station by PRESET DELETE (FSP.20).

# Selecting preset DAB stations (Preset tuning)



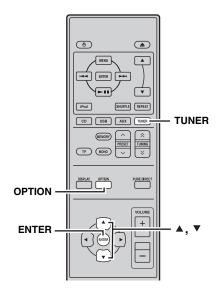
- Press TUNER repeatedly to set the unit to the DAB mode.
- 2 Press PRESET ∧ / ∨ to select a preset DAB station.

The PRESET indicator lights up in the front panel display.

#### Using DAB option menu

You can set the following functions in DAB option menu.

Function	Description
PRESET DELETE	Deletes unnecessary preset DAB stations.
STATION ORDER	Enables you to change the station order.
	ALPHA-NUMERIC: Stations are listed in alphabetical order. ENSEMBLE: Stations are listed in ensemble order. The default setting is "ALPHA-NUMERIC".
DRC MODE	Changes the DRC (®p.19) setting.
	AUTO: This unit utilizes DRC automatically if it is transmitted.  OFF: This unit does not utilize DRC.  The default setting is "AUTO".
DAB CLEAR	Deletes all DAB station information and preset settings stored in the unit. After DAB CLEAR is complete, the unit moves to the INIT SCAN functions automatically. Note that once DAB CLEAR is performed, the deleted information and preset settings cannot be restored.
INIT SCAN	Performs the initial scan manually. Each time you perform INIT SCAN, the newly received stations are added to the previously received stations.
TUNE AID	Measures reception strength of the received DAB signal (from 0 (none) to 100 (best)).  Refer to "TUNE AID" (ESP.21) for this operation.
AUTO CLOCK	Automatically adjusts the receiver clock using the DAB broadcast signal.



- PRESET DELETE, STATION ORDER and DRC MODE
- 1 Press TUNER repeatedly to set the unit to the DAB mode.
- Press OPTION to display the DAB option menu. Press ▲/▼ repeatedly to select the function you want to use and press ENTER.
- 3 Select and set the desired setting.

  For PRESET DELETE, press ▲/▼ repeatedly to select preset number you want to delete and press ENTER.
- **DAB CLEAR and INIT SCAN**
- 1 Press TUNER repeatedly to set the unit to the DAB mode.
- 2 Press OPTION to display the DAB option menu. Press ▲/▼ repeatedly to select DAB CLEAR or INIT SCAN and press ENTER. "Push ENTER" appears on the front panel display.
  - rush Ervi Erv appears on the front paner displa
- 3 Press ENTER to perform the function.

  If you select DAB CLEAR, all DAB information is deleted; when INIT SCAN, the initial scan starts.

#### ■ TUNE AID

- 1 Press TUNER repeatedly to set the unit to the DAB mode.
- Press OPTION to display the DAB option menu. Press ▲/▼ to select TUNE AID and press ENTER.
- 3 Press ▲/▼ to select a channel label you want to measure.

Adjust the indoor DAB antenna to the best position for receiving the DAB signal.

4 Press ENTER to finish measuring.

#### Note

To check the frequency corresponding to the channel label, refer to "DAB frequency information" to the right.

#### AUTO CLOCK

- 1 Press TUNER repeatedly to set the unit to the DAB mode.
- 2 Press OPTION to display the DAB option menu. Press ▲/▼ to select AUTO CLOCK and press ENTER.
- 3 Press ▲/▼ to select "ON" or "OFF", and press ENTER.

The "AUTO CLOCK" status is displayed.

The default setting is "ON".

ON: Automatically adjusts the receiver clock using the DAB broadcast signal.

OFF: Does not adjust the receiver clock.

#### Note

Changing the "AUTO CLOCK" setting also changes "AUTO CLOCK" on the RDS (FSP.25). You cannot set "AUTO CLOCK" on the DAB and RDS separately.

### DAB frequency information

This unit can receive Band III only.

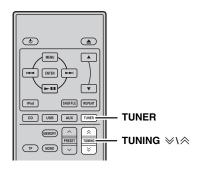
174.928 MHz	5A
176.640 MHz	5B
178.352 MHz	5C
180.064 MHz	5D
181.936 MHz	6A
183.648 MHz	6B
185.360 MHz	6C
187.072 MHz	6D
188.928 MHz	7A
190.640 MHz	7B
192.352 MHz	7C
194.064 MHz	7D
195.936 MHz	8A
197.648 MHz	8B
199.360 MHz	8C
201.072 MHz	8D
202.928 MHz	9A
204.640 MHz	9B
206.352 MHz	9C
208.064 MHz	9D
209.936 MHz	10A
211.648 MHz	10B
213.360 MHz	10C
215.072 MHz	10D
216.928 MHz	11A
218.640 MHz	11B
220.352 MHz	11C
222.064 MHz	11D
223.936 MHz	12A
225.648 MHz	12B
227.360 MHz	12C
229.072 MHz	12D
230.784 MHz	13A
232.496 MHz	13B
234.208 MHz	13C
235.776 MHz	13D
237.488 MHz	13E
239.200 MHz	13F

#### **FM TUNING**

There are 2 tuning methods: automatic and manual. You can also use the automatic and manual preset tuning features to store up to 30 stations.

#### **Automatic tuning**

Automatic tuning is effective when station signals are strong and there is no interference.



- 1 Press TUNER to set the receiver to FM mode.

When the receiver is tuned into a station, the TUNED indicator lights up and the frequency of the received station is shown on the front panel display.

- Press 

  ✓ to tune into a lower frequency.
- Press 
   to tune into a higher frequency.

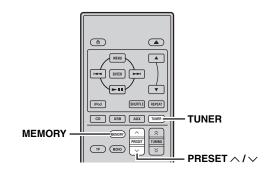
#### Manual tuning

If the signal received from the station you want to select is weak, tune into it manually.

- 1 Press TUNER to set the receiver to FM mode.

#### Automatic preset tuning

Follow the procedure below to preset radio stations automatically.



- 1 Press TUNER to set the receiver to FM mode.
- Press and hold MEMORY for more than 2 seconds.

The PRESET indicator starts flashing on the front panel display and automatic station preset starts. When all frequencies are searched, preset stops automatically.

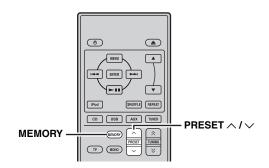
- The search starts at the lowest frequency and goes toward the highest frequency.
- The receiver automatically applies a preset number to each detected station.
- To cancel the search, press MEMORY.

#### Notes

- You can preset up to 30 FM stations.
- Any stored station data existing under a preset station number is cleared when you store a new station under the same preset station number.

#### Manual preset tuning

You can store up to 30 stations.



- Tune into a radio station you want to preset. See page 22 for tuning instructions.
- 2 Press MEMORY.

The PRESET indicator flashes on the front panel display for about 5 seconds.

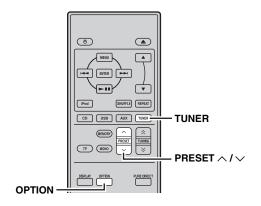
- 3 Press PRESET ∧ / ∨ repeatedly to select a preset station number while the PRESET indicator is flashing.
- 4 Press MEMORY to store while the PRESET indicator is flashing.

The PRESET indicator lights up on the front panel display.

5 Repeat steps 1 to 4 until all desired stations are preset.

#### Selecting preset stations

You can tune into any desired station simply by selecting the preset station under which it was stored (FEF), 22).



# Press PRESET $\wedge$ / $\vee$ repeatedly to select a preset station.

``⊚´:

- You can also use the front panel to select preset stations. Press PRESET ✓ / ∧ repeatedly to select a preset station.
- When you press PRESET \( \sim / \sim \) on the front panel of the
  receiver in standby mode, the receiver automatically activates
  the tuner and tunes in to the preset station that you selected
  previously.
- To delete the preset station
- 1 Press TUNER to set the unit to FM mode.
- Press OPTION to display the option menu. Press ▲/▼ to select "PRESET DEL" and press ENTER.
- 3 Press ▲/▼ to select the preset number you want to delete and press ENTER.

The preset station is now deleted.

You can continue to delete preset stations on this screen. Repeat steps 2 and 3 until all unnecessary stations are deleted.

#### To cancel deleting operation

Press OPTION.

### RADIO DATA SYSTEM TUNING (EUROPE MODEL ONLY)

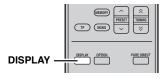
Radio Data System (Europe model only) is a data transmission system used by FM stations in many countries. The Radio Data System function is carried out among the network stations. This receiver can receive various Radio Data System information such as PS (program service), PTY (program type), RT (radio text), CT (clock time) and TP (traffic program) when receiving Radio Data System broadcasting stations.

# Displaying the Radio Data System information

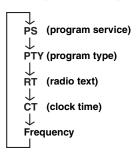
Use this feature to display the 4 types of the Radio Data System information: PS (program service), PTY (program type), RT (radio text) and CT (clock time).

#### **Notes**

- You can select only the available Radio Data System modes being offered by the station.
- If the signals being received are not strong enough, the receiver may not be able to utilize the Radio Data System data. In particular, "RT" mode requires a large amount of data and may not be available even when other Radio Data System modes are available.
- If the signal strength is weakened by external interference while the receiver is receiving the Radio Data System data, the reception may be cut off unexpectedly and "...WAIT" appears on the front panel display.
- When "RT" mode is selected, the receiver can display the program information by a maximum of 64 alphanumeric characters, including the umlaut symbol. Unavailable characters are displayed with the "\_" (underscore).



While tuning into a Radio Data System station, press DISPLAY repeatedly to select desired Radio Data System display mode.



For descriptions of program types, see the table below.

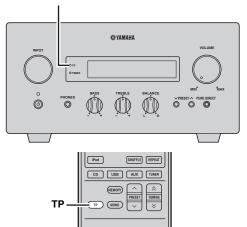
-	
Program type	Descriptions
News	News
Affairs	Current Affairs
Info	Information
Sport	Sport
Educate	Education
Drama	Drama
Culture	Culture
Science	Science
Varied	Varied
Pop M	Pop Music
Rock M	Rock Music
Easy M	Easy Listening Music
Light M	Light Classical Music
Classics	Serious Classical Music
Other M	Other Music

# Englis

# Using the TP (traffic program) data service

Use this feature to receive the TP (traffic program) data service of the Radio Data System station network.

#### **TP** indicator



# 1 Tune into the desired Radio Data System broadcasting station.

#### 2 Press TP.

"TP SEARCH" flashes on the front panel display for about three seconds, and the search starts.

The TP indicator on the receiver flashes during search.

When the traffic program is received, the TP indicator stays on and the search stops.

If you press TP, the search starts again.

If the receiver fails to receive the traffic program, the TP indicator turns off and "NO TP" appears on the display. The receiver returns to its previous state.

#### To cancel the search

Press TP during search.

#### CT (clock time) settings

You can use the CT information received from the Radio Data System stations to adjust the built-in clock of the receiver.

#### 1 Press OPTION.

An option menu item appears on the front panel display.

# Press ▲/▼ to select "AUTO CLOCK", and press ENTER.

# 3 Press ▲/▼ to select "ON" or "OFF", and press ENTER.

The "AUTO CLOCK" status is displayed. The default setting is "ON".

ON: Automatically adjusts the receiver clock using the CT information.

OFF: Does not adjust the receiver clock.

#### To exit the option menu

Press OPTION.

#### Note

Changing the "AUTO CLOCK" setting also changes "AUTO CLOCK" on the DAB (FSP,21). You cannot set "AUTO CLOCK" on the RDS and DAB separately.

#### **SETTING THE TIMER**

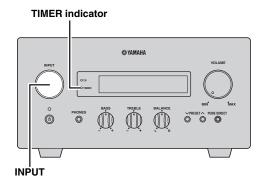
The receiver is equipped with 2 types of timer functions. The CD player also turns on or sets to standby mode automatically by the system control connection (\*\*p.8).

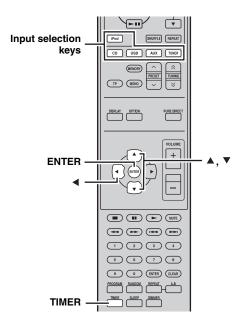
#### Setting the clock timer

The clock timer automatically turns the receiver on or sets it to standby mode at the specified time. You can also specify an input which the receiver automatically selects when the clock timer turns it on.

#### Notes

- You cannot set the clock timer unless you adjust the clock (FSP p.12).
- If you do not touch any key for more than 30 seconds after the previous key operation, the operations you made are cleared from the memory and the normal display reappears.





# 1 Press TIMER and ▲/▼ to select "TIMER", and then press ENTER.

The receiver enters timer setting mode. The TIMER indicator on the front panel flashes.

# 2 Press ▲ or ▼ to select "ON" (timer enabled) or "OFF" (timer disabled), and press ENTER.

ON: The timer clock setting screen appears. Proceed to step 3.

OFF: The TIMER indicator turns off and the receiver returns to normal mode.

#### Note

To disable the timer, select "OFF". Once the timer is enabled, the timer setting and the TIMER indicator remain on until "OFF" is selected.

#### 3 Set the starting time of the timer.

For details on how to set the clock, see steps 4 through 6 of "Adjusting the Clock" (PSP p.12).

# 4 Press ▲/▼ or an input selection key to select the input source to be used when the timer turns on the receiver, and press ENTER.

The receiver automatically selects the input source when it is turned on by the clock timer.

If FM is selected as the input source, the preset

number (e.g. "P01") is shown on the front panel display. Press ▲/▼ to select the preset number of the station you want to hear when the timer is activated, and press ENTER.

If you select "---" (default), the receiver selects the station that you previously tuned in to.

If no station is registered as a preset station, "---" is shown. Press ENTER and proceed to step 5.

You can only select a preset station. Register a station that you want to hear when the timer is activated as a preset station in advance ( ).

#### Note

You cannot select AUX as an input source.

#### 5 Press ▲/▼ to set the operation time length of the receiver.

You can select a length of time from 30 to 90 minutes in 10-minute steps. Select "--" if you do not want the receiver to automatically go to standby mode.

# **6** Press ENTER to complete the timer setting. The TIMER indicator lights up.

# 7 Press (b) to set the receiver to standby mode.

The receiver will be turned on automatically at the specified time.

#### To cancel the timer setting operation

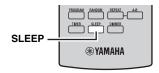
Press TIMER during the operation.

`\\\

You can return to the previous screen by pressing ◀.

#### Setting the sleep timer

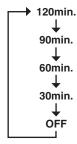
The sleep timer sets the receiver to standby mode after the specified time elapses.



# Press SLEEP repeatedly to select the desired duration.

Each time you press the key, the duration changes as follows

The SLEEP indicator lights up on the front panel display.



`\o'\_

- The sleep timer is canceled if you set the receiver to standby mode.
- If you press SLEEP once while the sleep timer is set, the ongoing duration appears on the front panel display.

#### To cancel the sleep timer

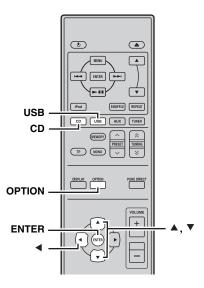
Press SLEEP repeatedly to select "OFF".

### **SETTING THE AUTO-STANDBY MODE**

The auto-standby function automatically sets the system to standby mode when CD or USB is selected as input source and the system is not operated for 30 minutes.

#### Notes

- Unless you connect the receiver and the CD player with the supplied system control cable properly (PSP), this feature does not function for the system.
- This feature does not function for the system during playback.



# 1 Press CD or USB to select an input source, and press OPTION.

"AUTO STBY" appears on the front panel display of the receiver.

#### 2 Press ENTER.

The current setting is displayed.

#### 3 Press ▲/▼ to select "ON" or "OFF".

The default setting is "ON".

#### 4 Press ENTER to confirm the setting.

"AUTO STBY" reappears on the display.

#### 5 Press OPTION.

The receiver returns to normal mode.

#### To cancel the setting operation

Press OPTION during the operation.

<u>``@</u>′:

You can return to the previous screen by pressing ◀.

#### **CONTROLLING iPod™**

In addition to controlling the receiver (R-840) and CD player (CD-640), you can operate your iPod stationed in the iPod dock using the supplied remote control.

#### Using iPod™

Once you have stationed your iPod to the iPod dock, you can enjoy playback of your iPod using the supplied remote control.

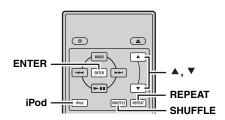
When connecting the iPod during the playback, this system automatically changes to iPod mode.

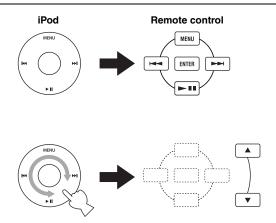
#### Notes

- Only iPod (Click and Wheel), iPod nano, iPod Classic, iPod mini and iPod touch are supported.
- · Some features may not be compatible depending on the model or the software version of your iPod.

1

For a complete list of status messages that appear on the front panel display of the receiver, see the "iPod" section in "TROUBLESHOOTING" (#8\*p.32).





The supplied remote control has the same function keys with your iPod. So, these keys are corresponding with each other.

- 1 Press iPod to select the iPod as the input source.
- 2 Station your iPod to the iPod dock.
- 3 Press ▲/▼ to operate the iPod menu, and then press ENTER to start playback of the selected song (or group).
  - View the screen of the iPod to control the menu.

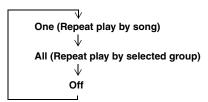
 Operate the iPod using the iPod controls or the supplied remote control.

#### ■ Repeating playback (Repeat Play)

You can play back a single track or a group of tracks on your iPod repeatedly.

#### Press REPEAT.

Each time you press the key, mode of Repeat Play changes. The following chart is an example of how mode changes as you press the key. Check currently selected mode on your iPod screen.

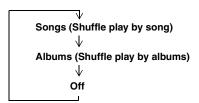


#### ■ Playing back randomly (Shuffle Play)

You can play back songs or albums on your iPod randomly.

#### Press SHUFFLE.

Each time you press the key, mode of Shuffle Play changes. The following chart is an example of how mode changes as you press the key. Check currently selected mode on your iPod screen.



# **TROUBLESHOOTING**

Refer to the table below when this system does not function properly. If the problem you are experiencing is not listed below or if the instruction below does not help, turn off this system, disconnect the power cable, and contact the nearest authorized Yamaha dealer or service center.

#### Receiver (R-840)

#### ■ General

Problem	Cause	Remedy	See page
The receiver fails to turn on or enters	The power cable is not connected or the plug is not completely inserted.	Connect the power cable firmly.	8
standby mode soon after the power is turned on.	The receiver has been exposed to a strong external electric shock (such as lightning or strong static electricity).	Set the receiver to standby mode, disconnect the power cable, plug it back in after 30 seconds and then use it normally.	_
	The cable is short-circuited and the protection circuity has been activated.	Make sure that all speaker wire connections on the receiver and on all speakers are secure and that the wire for each connection does not touch anything other than its respective connection.	8
	The internal temperature is too high, the protection circuity has been activated.	Wait about 1 hour for the receiver to cool down and then turn it back on.	8
No sound	Incorrect input or output cable connections.	Connect the cables properly. If the problem persists, the cables may be defective.	8
	No appropriate input source has been selected.	Select an appropriate input source with the INPUT selector on the front panel (or the input selection keys on the remote control).	_
	Speaker connections are not secure.	Secure the connections.	8
	The volume is turned down.	Turn up the volume.	_
	The sound is muted.	Press MUTE or VOLUME +/- to resume audio output and then adjust the volume.	7
	Signals the receiver cannot reproduce are being input from a source component, such as a CD-ROM.	Play a source whose signals can be reproduced by the receiver.	_
The sound suddenly goes off.	The timer has turned off the receiver.	Turn on the receiver, and play the source again.	_
Sound is heard from the speaker on one side only.	Cables are not connected properly.	Connect the cables properly. If the problem persists, the cables may be defective.	8
There is noise interference from digital or radio frequency equipment.	The receiver is too close to the digital or high-frequency equipment.	Move the receiver further away from such equipment.	_
The sound is distorted.	The volume level is too high.	Adjust the volume level.	13
"CHK SP WIRE" appears on the display.	Speaker cables are short-circuited.	Make sure speaker cables are connected correctly.	8

#### **■** DAB reception

Problem	Cause	Remedy	See page
Cannot tune into	The initial scan operations were not performed.	Perform the initial scan operations	20
any DAB stations.	There is no DAB coverage in your area.	Check with your dealer or WorldDMB online at http://www.worlddab.org for a listing of the DAB coverage in your area.	_
	The DAB signals are too weak.	Use the TUNE AID feature to locate the best positioning of the indoor DAB antenna.	21
The initial scan operations are not	The DAB signals are too weak.	Use the TUNE AID feature to locate the best positioning of the indoor DAB antenna.	21
successful and "Not found" appears on the front panel display.	There is no DAB coverage in your area.	Check with your dealer or WorldDMB online at http://www.worlddab.org for a listing of the DAB coverage in your area.	_
The DAB station reception is weak.	The positioning of the indoor DAB antenna and/or this unit is not optimal for DAB reception.	Use the TUNE AID feature to locate the best positioning of the indoor DAB antenna and this unit for optimal DAB reception	21
	The DAB signals are too weak.	Use the TUNE AID feature to locate the best positioning of the indoor DAB antenna.	21
There is noise	The indoor DAB antenna needs to be repositioned.	Readjust the position of the indoor DAB antenna.	8
interference (e.g. hiss, crackle or jitter)	The DAB signals are too weak.	Use the TUNE AID feature to locate the best positioning of the indoor DAB antenna.	21
The DAB station information does not appear or is inaccurate.	The DAB station may be temporarily out of service, or the DAB station information is not provided by the DAB broadcaster.	Contact the DAB broadcaster.	_

#### ■ FM

Problem	Cause	Remedy	See page
FM stereo reception is noisy.	The characteristics of FM stereo	Check the antenna connections.	8
	broadcasts may cause this problem when the transmitter is too far away or the antenna input is poor.	Try using a high-quality directional FM antenna.	_
There is distortion, and clear reception cannot be obtained even with a good FM antenna.	There is multi-path interference.	Adjust the antenna position to eliminate multi-path interference.	_
The desired station cannot be	The signal is too weak.	Use a high-quality directional FM antenna.	_
tuned into with the automatic tuning method.		Use the manual tuning method.	22
Previously preset stations can no longer be tuned into.	The receiver has been disconnected for a long period.	Set preset stations.	22

#### TROUBLESHOOTING

#### ■ iPod

#### Note

If a transmission error occurs but no status message is displayed on the front panel display of the receiver, check the connection between the receiver and your iPod ( $\mathbb{F}_{3}$ ).

Status message	Cause	Remedy	See page
CONNECT ERR	There is a problem with the signal path from your iPod to the receiver.	Turn off the receiver and try resetting your iPod.	10
UNKNOWN TYP	The iPod being used is not supported by the receiver.	Only iPod (Click and Wheel), iPod nano, iPod Classic, iPod mini and iPod touch are supported.	_
CONNECTED	Your iPod is properly stationed in the iPod dock, and the connection between your iPod and the receiver is complete.		
NOT CONNECT	Your iPod was removed from the iPod dock of the receiver.	Station your iPod back to the iPod dock of the receiver.	10
CAN'T PLAY	The receiver cannot play back the songs currently stored on your iPod.	Check that the songs currently stored on your iPod are playable.	_
		Store some other playable music files on your iPod.	_

### Remote control

Problem	Cause	Remedy	See page
The remote control does not work nor function properly.	The remote control may be operated outside its operation range.	For information on the remote control operation range, see "Using the remote control".	11
	The remote control sensor on this system may be exposed to direct sunlight or lightening (invented fluorescent lamps).	Change the lighting or orientation of this system.	11
	The battery may be worn out.	Replace the battery with new one.	11
	There are obstacles between the sensor of this system and the remote control.	Remove the obstacles.	11
	The system control cable is disconnected from the system connector jack of the receiver and/or the CD player.	Connect the receiver and the CD player securely with the system control cable.	8

# CD player (CD-640)

Problem	Cause	Remedy	See page
Power does not turn	The plug is not completely inserted.	Connect the power cable firmly.	8
on.	The receiver and the CD player are connected incorrectly.	Connect the system control cable properly between the receiver and the CD player.	8
	The receiver is set incorrectly.	Check the setting (INPUT/Volume/MUTE/ Headphone) of the receiver.	_

Problem	Cause	Remedy	See page
Power suddenly shuts off during playback.	The auto-standby function of the receiver works when the receiver does not receive a playing signal transmitted from the CD player via the system control cable for 30 minutes.	Check the connection of the system control cable between the receiver and the CD player.	8
No sound or distorted sound	The sampling rate of a MP3 or WMA file may not be compatible with the CD player.	Check the sampling rate and bit rate of the MP3 or WMA file are compatible with the CD player.	3
Disc playback does not start.	You may use a CD-R/RW that is not finalized.	Finalize the CD-R/RW.	_
	The disc label may not be facing up.	Place the disc in the disc tray with the label facing up.	_
	The disc may be defective.	Try to play back another disc. If the same problem does not occur, the disc you want to play back is defective.	_
	MP3/WMA disc may not contain sufficient music tracks to be played back.	Check that your MP3/WMA disc contains at least 5 MP3/WMA music files.	_
	The sampling rate of a MP3 or WMA file may not be compatible with the CD player.	Check the sampling rate and bit rate of an MP3 or WMA file are compatible with the CD player.	3
The USB device cannot be recognized.	The USB device is not connected correctly.	Connect the USB device correctly.	10
The CD player is not linked with the receiver.	The system control cable is disconnected from the system connector jacks of the receiver and/or the CD player.	Connect the system control cable properly to the system connector jacks of the receiver and the CD player.	8

#### USB

#### Note

If a transmission error occurs but no status message is displayed on the front panel display of the receiver, check the connection between the CD player and the USB device (FSF p.10).

Status message	Cause	Remedy	See page
NO USB	The USB device is not connected.	Connect a playable USB device.	10
OVER CURRENT	The USB device is either unplayable on this system or connected at an incorrect angle.	Disconnect the USB device. Change the input source to a device other than USB and back to USB. Then, correctly connect a playable USB device to the CD player.	_

### **NOTES ABOUT HANDLING COMPACT DISCS**

#### ■ Handling compact discs

 Always handle with care so that the playing surface is not scratched. Do not warp discs.



 To keep clean the playing surface, wipe with a clean, dry cloth. Do not use any type of disc cleaner, spray, or any other chemical-based liquid.  Do not wipe with a circular motion; wipe straight outward from the center.



- Use a soft-tipped pen when writing on the label side of the disc.
- When a disc is not being used, remove it from this unit and store in an appropriate case.
- Do not expose discs to direct sunlight, high temperature or high humidity for a long time.

#### GLOSSARY

#### Audio information

#### **■** MP3 (MPEG Audio Layer-3)

One of the audio compression methods used by MPEG. It employs the irreversible compression method, which achieves a high compression rate by thinning out the data of hardly audible part to the human ears. It is said to be capable of compressing the data quantity by about 1/11 (128 kbps) while maintaining a similar audio quality to music CD.

#### ■ PCM (Pulse Code Modulation)

A signal that is changed to digital format without compression. A CD is recorded with 16-bit sound at 44.1 kHz. This signal also has a type called Packed PCM (PPCM) that can be compressed without any loss of data.

#### Sampling frequency

The number of sampling (process for digitalizing analog signals) per second. In principle, the higher the sampling rate, the wider the frequency range that can be played back, and the higher the quantized bit rate, the finer the sound that can be reproduced.

#### ■ Track

A CD can be divided into a number of segments (tracks). Each division is called a track number.

#### ■ WMA (Windows Media Audio)

An audio compression method developed by Microsoft Corporation. It employs the irreversible compression method, which achieves a high compression rate by thinning out the data of hardly audible part to the human ears. It is said to be capable of compressing the data quantity by about 1/22 (64 kbps) while maintaining a similar audio quality to music CD.

### Copyright and logo marks

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson Multimedia.

#### iPod™

"iPod" is a trademark of Apple Inc., registered in the U.S. and other countries.

"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.



Digital Audio Broadcasting

This unit supports DAB tuning.

# **SPECIFICATIONS**

#### ■ R-840

AMPLIFIER SECTION
Minimum RMS output power per channel
$(6 \Omega, 1 \text{ kHz}, 10 \% \text{ THD})$ 65 W + 65 W
Input sensitivity/Impedance
PLAYER, etc
Frequency response
PLAYER, etc
Total harmonic distortion
PLAYER, etc. (30 W/6 $\Omega$ )
• Signal to noise ratio (IHF-A network)
PLAYER (200 mV, Input shorted) 100 dB or more
TUNER SECTION
• DAB
27.50

#### **GENERAL**

Power supply	AC 230 V, 50 Hz
Power consumption	
• Dimensions (W × H × D)	
	$(8 \ ^{1}/_{2} \times 4 \ ^{3}/_{8} \times 13 \ ^{3}/_{4} \ in)$
• Weight	5.7 kg (12.6 lbs)
Standby power consumption	less than 0.3 W

#### **■** CD-640

#### **PLAYBACK SYSTEM**

• CD, CD-R/RW

#### **AUDIO PERFORMANCE**

• Signal-noise (1 kHz)	110 dB or more
Dynamic range (1 kHz)	100 dB or more
Distortion and noise (1 kHz)	0.003 % or less

#### **GENERAL**

<ul> <li>Power supply</li> </ul>	AC 230 V, 50 Hz
Power consumption	
<ul> <li>Dimensions (W × H × D)</li> </ul>	
, , , , , , , , , , , , , , , , , , ,	$(8^{1}/2 \times 4^{1}/4 \times 12^{1}/2 \text{ in})$
Weight	
Standby power consumption	, ·

Specifications are subject to change without notice.

#### Limited Guarantee for European Economic Area (EEA) and Switzerland

Thank you for having chosen a Yamaha product. In the unlikely event that your Yamaha product needs guarantee service, please contact the dealer from whom it was purchased. If you experience any difficulty, please contact Yamaha representative office in your country. You can find full details on our website (http://www.yamaha-hifi.com/ or http://www.yamaha-uk.com/ for U.K. resident).

The product is guaranteed to be free from defects in workmanship or materials for a period of two years from the date of the original purchase. Yamaha undertakes, subject to the conditions listed below, to have the faulty product or any part(s) repaired, or replaced at Yamaha's discretion, without any charge for parts or labour. Yamaha reserves the right to replace a product with that of a similar kind and/or value and condition, where a model has been discontinued or is considered uneconomic to repair.

#### Conditions

- 1 The original invoice or sales receipt (showing date of purchase, product code and dealer's name) MUST accompany the defective product, along with a statement detailing the fault. In the absence of this clear proof of purchase, Yamaha reserves the right to refuse to provide free of charge service and the product may be returned at the customer's expense.
- 2 The product MUST have been purchased from an AUTHORISED Yamaha dealer within the European Economic Area (EEA) or Switzerland.
- 3 The product must not have been the subject of any modifications or alterations, unless authorised in writing by Yamaha.
- The following are excluded from this guarantee:
  - a. Periodic maintenance and repair or replacement of parts due to normal wear and tear.
  - b. Damage resulting from:
  - (1) Repairs performed by the customer himself or by an unauthorised third party.
  - (2) Inadequate packaging or mishandling, when the product is in transit from the customer. Please note that it is the customer's responsibility to ensure the product is adequately packaged when returning the product for repair.
  - (3) Misuse, including but not limited to (a) failure to use the product for its normal purpose or in accordance with Yamaha's instructions on the proper use, maintenance and storage, and (b) installation or use of the product in a manner inconsistent with the technical or safety standards in force in the country where it is used.
  - (4) Accidents, lightning, water, fire, improper ventilation, battery leakage or any cause beyond Yamaha's control.
  - (5) Defects of the system into which this product is incorporated and/or incompatibility with third party products.
  - (6) Use of a product imported into the EEA and/or Switzerland, not by Yamaha, where that product does not conform to the technical or safety standards of the country of use and/or to the standard specification of a product sold by Yamaha in the EEA and/or Switzerland.
- 5 Where the guarantee differs between the country of purchase and the country of use of the product, the guarantee of the country of use shall apply.
- 6 Yamaha may not be held responsible for any losses or damages, whether direct, consequential or otherwise, save for the repair or replacement of the product.
- 7 Please backup any custom settings or data, as Yamaha may not be held responsible for any alteration or loss to such settings or data.
- 8 This guarantee does not affect the consumer's statutory rights under applicable national laws in force or the consumer's rights against the dealer arising from their sales/purchase contract.

# Information for Users on Collection and Disposal of Old Equipment and Used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.



By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.



For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.



#### [Information on Disposal in other Countries outside the European Union]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

#### Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

