



CRX-330

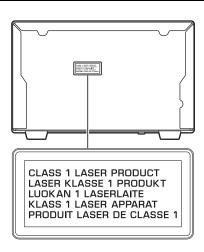
CD RECEIVER

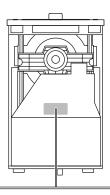


CAUTION

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 unit in a well ventilated, cool, dry, clean place with at least 10 cm on the top, 10 cm on the left and right, and 10 cm at the back of this unit away from direct sunlight, heat sources, vibration, dust, moisture, and/or cold.
- 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 cord 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 STANDBY/ON to set this unit to the 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 STANDBY/ON. 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.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

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FEATURES

- Maximum RMS output power per channel 20W + 20W (10% THD, 1 kHz, 6Ω)
- 30-station DAB preset tuning
- 30-station FM preset tuning
- · iPod playability

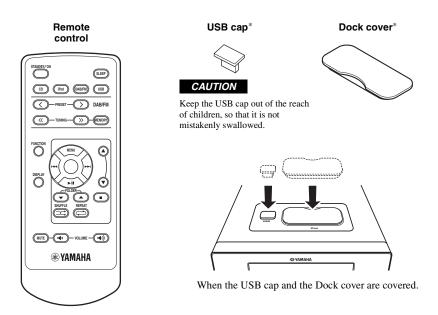
- Plays Audio CDs, MP3/WMA discs
- · CD Text data display
- MP3/WMA file playability stored on USB device
- Multi function remote control

■ About this manual

- This manual describes how to operate this unit using a remote control except when it is not available. Some of these operations are also available using the front panel buttons.
- The round shaped button on the center of the remote control is called Center in this manual.
- 🕍 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

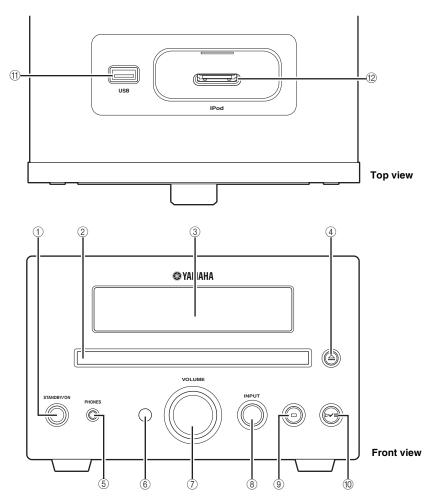
This product includes the following accessories. Before connecting speakers, make sure you received all of the following parts.



^{*}The USB cap and the Dock cover are supplied with this unit to cover the USB port and the iPod terminal when not using.

CONTROLS AND FUNCTIONS

Front panel



1 STANDBY/ON

Turns this unit on or sets it to the standby mode.

② Disc Tray

Loads a disc to be played back.

3 Front panel display

Shows the various information such as the tuning frequency.

④ 🚖

Opens and closes the disc tray.

⑤ PHONES

Outputs audio signals for private listening with headphones.

6 Remote control sensor

Receives signals from the remote control.

7 VOLUME

Adjusts the volume level.

(8) INPUT

Selects an input source.

9 🗆

Stops playback (see page 15).

10 🖂 🗆

Starts or pauses playback (see page 15).

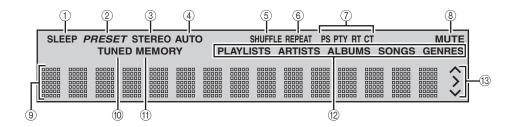
(1) USB port

Connect your USB device (see page 12).

(2) iPod terminal

Connect your iPod (see page 12).

Front panel display



1 SLEEP indicator

Lights up when the sleep timer is on (see page 14).

2 PRESET indicator

Lights up when you preset radio stations (see pages 21, 25).

③ STEREO indicator

Lights up when this unit is receiving a strong signal from a DAB/FM stereo broadcast.

(4) AUTO indicator

Lights up when this unit is in the FM Automatic Tuning mode (see page 24).

⑤ SHUFFLE indicator

Lights up when you set your iPod/CD/USB in shuffle mode.

6 REPEAT indicator

Lights up when you set your iPod/CD/USB in repeat mode

7) Radio Data System indicators

The name of the Radio Data System data offered by the currently received Radio Data System station lights up.

(8) MUTE indicator

Lights up when the sound is muted.

Multi information display

Shows the various information such as the tuning frequency.

10 TUNED indicator

Lights up when this unit is tuned into a station.

11) MEMORY indicator

Lights up when you preset radio stations automatically or manually.

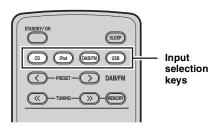
12 Multi information indicator

Light up the menu currently selected (see page 28).

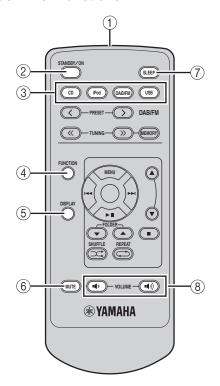
(3) Operation indicators

Show operable cursor keys when operating with the FUNCTION or iPod menu with the menu browse mode (see page 28).

Remote control



■ Common functions



This remote control can operate the system components and an iPod stationed in a terminal on the top panel of this unit.

To operate the CD, USB device, tuner functions, or an iPod using the remote control, you need to set this unit to the corresponding input mode.

To switch the input mode of this unit

Press the corresponding input selection key on the remote control (or INPUT on the front panel). The input mode automatically changes to iPod when you connect the iPod during the playback (see page 12).

The name of the corresponding input source appears in the front panel display of this unit.

Operations common to all modes

The following operations are available for this unit when it is set to any input mode.

1) Infrared signal transmitter

Sends signals to the component you want to control.

② STANDBY/ON

Turns this unit on or sets it to the standby mode.

③ Input selection keys

Select the input source. Each time you press DAB/FM, the input switches between DAB and FM.

(4) FUNCTION

By pressing FUNCTION, you can select DIMMER, TREBLE, BASS, BALANCE, or ECO MODE.

(5) DISPLAY

Switches the information shown in the front panel display (see pages 16, 20, 26).

6 MUTE

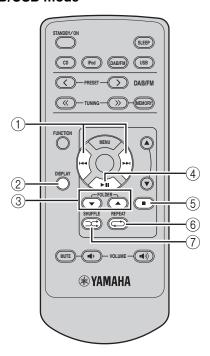
Turn off the sound. To restore the sound, press MUTE again or press VOLUME (down)/ (down)/ (up).

Sets the sleep timer (see page 14).

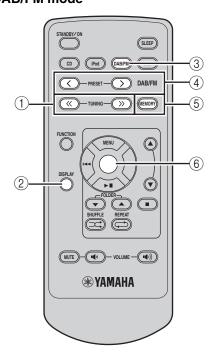
(a) VOLUME (down) / (up) (up)

Adjusts the overall volume level.

■ CD/USB mode



■ DAB/FM mode



Operations available in CD/USB mode

The following operations are available for this unit when the CD or USB mode is selected.

① ► . ►

Skips to the beginning of the current track or next track. Press and hold to fast reverse or fast forward (see page 15). Press ** twice to skip to the beginning of the previous track.

② DISPLAY

Switches the disc/USB information shown in the front panel display (see page 16).

③ FOLDER ▼ / ▲

Press FOLDER ▼ / ▲ to playback a first file of selected folder for an MP3 or a WMA folder recorded on disc/USB device (see page 15).

*During Shuffle Play, these buttons cannot be used.

(4) ► II

Starts or pauses playback (see page 15).

(5) **I**

Stops playback (see page 15).

Selects the Repeat Play mode (see page 17).

Select the Shuffle Play feature (see page 17).

Operations available in DAB/FM mode

The following operations are available for this unit when the DAB mode or FM mode is selected.

① TUNING $\langle \langle / \rangle \rangle$

For DAB mode, press TUNING $\langle \langle \rangle \rangle$ to select station (see page 19).

For FM mode, press $\langle \langle \ / \ \rangle$ to manual tuning and press and hold TUNING $\langle \langle \ / \ \rangle$ to automatic tuning (see page 24).

② DISPLAY

Switches the DAB/FM information shown in the front panel display (see pages 20, 26).

③ DAB/FM

Switches between the DAB mode and FM mode.

4 PRESET

Press PRESET $\langle \ / \ \rangle$ to select a preset station (see pages 21, 25).

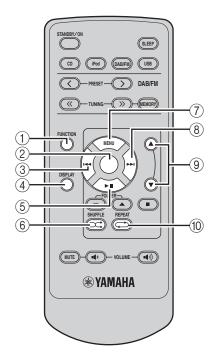
⑤ MEMORY

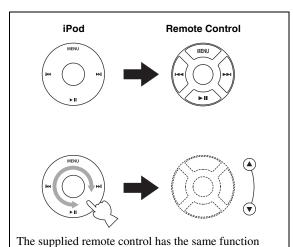
Starts preset memory mode (see page 25).

6 Center

Press Center to fix the current setting.

■ iPod mode





keys with your iPod. So, these keys are corresponding

with each other.

Operations available in iPod mode

The following operations are available for the iPod stationed in the terminal. For details on iPod operations, see "Using iPodTM" on page 27.

1 FUNCTION

Switches between the simple remote mode and menu browse mode.

② Center

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

③ ►

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

(4) DISPLAY

Displays the song information while iPod is in menu browse mode (see page 28).

⑤ ▶Ⅱ

Starts or pauses playback.

⑥ SHUFFLE ≍

Selects the shuffle playback mode (see page 28).

7 MENU

Returns to the upper level in the iPod menu.

(8) ▶▶■

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

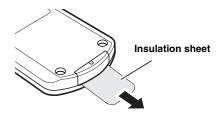
9 ▲ / ▼

Press \blacktriangle or \blacktriangledown to select an item in the selected group.

Selects the repeat playback mode (see page 28).

Preparing the remote control

The remote control comes with the battery already installed. Before using the remote control for the very first time, pull out the insulation sheet, as shown.



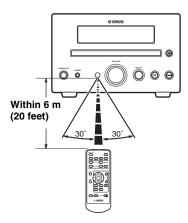


Remove the transparent sheet before using the remote control.



Using the remote control

Use the remote control within 6 m (20 feet) of the component you want to control and point it toward its remote control sensor (see page 3).



Notes

- Be careful not to spill liquid on the remote control.
- Be careful not to drop the remote control.
- Do not leave the remote control in the following places:
- hot or humid places, such as near a heater or in a bathroom
- extremely cold places
- dusty places

Replacing the battery in the remote control

Change the battery when the operation range of the remote control decreases.



Notes

- \bullet Insert the battery according to the polarity markings (+ and -).
- · If the battery runs out, immediately remove it from the remote control to prevent an explosion or acid leak.
- If the battery starts leaking, dispose of it immediately. Be careful not to let the leaking battery acid touch your skin or clothing.
- Before inserting a new battery, wipe the compartment clean.
- Dispose of batteries according to your regional regulations.

CONNECTING SPEAKERS

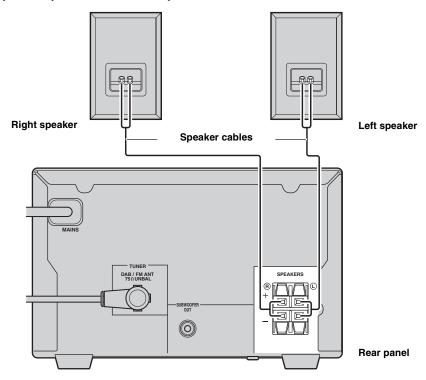
Follow the procedure below to connect speakers to this unit. For information on your speakers, refer to the owner's manual supplied for the speakers.

CAUTION

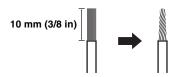
Do not connect the power cable of this unit until all cable connections are completed.

Notes

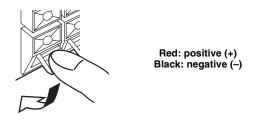
- Be sure to connect the left channel (L), right channel (R), "+"(red terminal) "-"(black terminal) properly. If the connections are faulty, no sound will be heard from the speakers, and if the polarity of the speaker connections is incorrect, the sound will be unnatural and lacks bass.
- Do not let the bare speaker wires touch each other or do not let them touch any metal part of this unit. This could damage this unit and/or the speakers.
- Use speakers with the specified impedance shown on the rear panel of this unit.



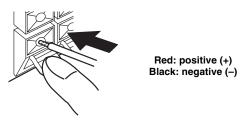
1 Remove approximately 10 mm (3/8 in) of insulation from the end of each speaker cable and then twist the exposed wires of the cable together to prevent short circuits.



2 Press and hold the lever.



Insert one bare wire. By releasing the lever, the lever is replaced.



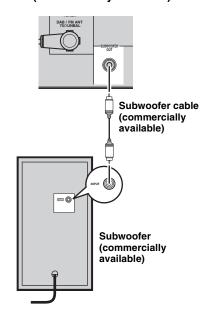
Notes on the speaker cord

A speaker cord is actually a pair of insulated cables running side by side. One cable is colored or shaped differently, perhaps with a stripe, groove or ridge. Connect the striped (grooved, etc.) cable to the "+"(red) terminals on this unit and your speaker. Connect the plain cable to the "-"(black) terminals on this unit and your speaker.

Connecting a subwoofer

The low frequency range of the left channel and the right channel are mixed to output at the SUBWOOFER OUT jack.

Connect the SUBWOOFER OUT jack on this unit to the INPUT jack on the subwoofer using the subwoofer cable (commercially available).

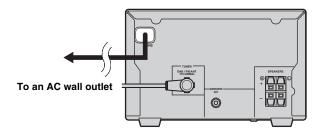


Note

Do not connect the power cable of this unit and the subwoofer until all cable connections are completed.

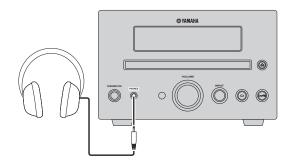
CONNECTING THE POWER CABLES

After you made all connections, connect the power cables of this unit and subwoofer (optional).



CONNECTING HEADPHONES

You can connect your headphones to the PHONES jack on the front panel of this unit. The sound from the speakers and the subwoofer stop.



CONNECTING EXTERNAL COMPONENTS

You can connect a USB device or an iPod to this unit. For information on your component, refer to the owner's manual supplied with the component.

Connecting a USB device

This unit 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 top panel of this unit. For playback information of a USB device, see page 15.



■ Supported USB devices

This unit supports USB mass storage class devices (e.g., flash memories) using FAT16 or FAT32 format.

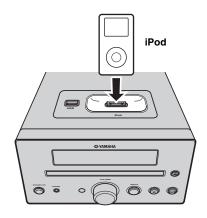
Notes

- Some devices may not work properly even if they meet the requirements.
- If your USB device is not played back after you connected it to this unit, follow any of the procedures below.
- Set this unit to the standby mode, and turn it on again.
- Disconnect the device while this unit is in the standby mode.
- Then connect the device again and turn on this unit.
- Connect an AC adapter if supplied with the device.
- If the USB device is not played back even after you performed the procedure(s) above, the device may not be playable on this unit.
- Do not connect devices other than USB mass storages class devices.
- Yamaha and suppliers accept no liability for the loss of data saved on the USB devices connected to this unit.
 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.
- Your USB device is automatically charged when your USB device is connected to the USB port even when this unit is in standby mode and ECO MODE is OFF.
- To remove USB device safely, disconnect after the playback is stopped.

Connecting an iPod™

This unit equips the iPod terminal on the top panel where you can directly station your iPod and control playback of your iPod using the supplied remote control.

Use this unit with the iPod dock adapter (supplied with your iPod or commercially available) appropriate for your iPod. If you use this unit without using an appropriate iPod dock adapter, loose connection may result.

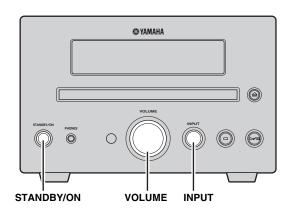


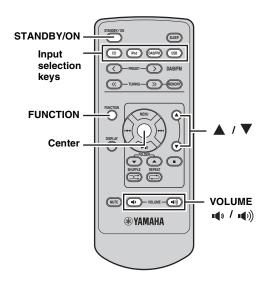
Notes

- Only iPod (Click and Wheel), iPod nano, 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 our iPod when it is stationed in the terminal.
- Unless your iPod is firmly stationed in the terminal, audio signals may not be output properly.
- Once the connection between your iPod and this unit is complete, "iPod" appears in the front panel display. If the connection between your iPod and this unit fails, a status message appears in the front panel display. For a complete list of connection status message, see the iPod section in "TROUBLESHOOTING" on page 30.
- Your iPod is automatically charged when your iPod is stationed in the terminal even when this unit is in standby mode and ECO MODE is OFF.
- To remove iPod safely, disconnect after the playback is stopped.

BASIC RECEIVER OPERATIONS

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





- 1 Press STANDBY/ON to turn on this unit.
 The front panel display lights up.
- 2 Press one of the input selection keys. For DAB/FM, each time you press the key, DAB and FM switches alternately. Press INPUT on the front panel to select the desired input source. Each time you press INPUT, the input source changes in order of CD, iPod, DAB, FM and USB.
- 3 Start playback on the selected source component or select a radio station.
 For information on the disc playback, see page 15,

and for information on tuning, see pages 21, 24.

- 4 Press (down) / (up) to adjust the volume to the desired output level.
- To adjust the audio quality
- 1 Press FUNCTION to display the function menu.
- 2 Press ▲ / ▼ repeatedly to select TREBLE, BASS, or BALANCE and press Center.
- 3 Press ▲ / ▼ repeatedly to adjust the setting and press Center.

TREBLE: Adjusts the high frequency response. **BASS:** Adjusts the low frequency response. **BALANCE:** Adjusts the volume level of each left

and right speaker channel.

`\\\

TREBLE, BASS, and BALANCE are not adjustable when using the headphones.

■ To dim the display

You can dim the front panel display of this unit.

- 1 Press FUNCTION to display the function menu.
- 2 Press ▲ / ▼ repeatedly to select DIMMER and press Center.

Press \blacktriangle / \blacktriangledown to select the brightness and press Center.

To use the ECO mode

This mode reduces power consumption during the standby mode. Your iPod or USB device cannot be charged during standby mode and ECO MODE is ON.

The default setting is OFF.

- Press FUNCTION to display the function menu.
- 2 Press ▲ / ▼ repeatedly to select ECO MODE and press Center.
- 3 Press ▲ / ▼ to select ON or OFF and press Center.

SETTING THE SLEEP TIMER

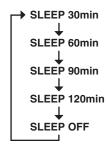
The sleep timer sets this unit to the standby mode after the specified time elapses.



Press SLEEP repeatedly to select the desired duration.

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

The SLEEP indicator lights up in the front panel display.



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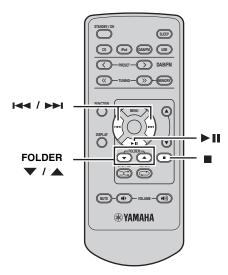
- The sleep timer is canceled if you set this unit to the standby mode
- If you press SLEEP while the sleep timer is set, the remaining time appears in the front panel display.

To cancel the sleep timer

Press SLEEP repeatedly to select "SLEEP OFF".

BASIC PLAYBACK OPERATIONS FOR DISCS AND USB DEVICES

You can enjoy playback your audio CDs, USB devices, 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 unit (see page 32).



To start disc playback

1 Select CD as the input source (see page 13).

2 Press ►II while a disc is loaded.

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

`\o':

- You can open and close the disc tray by pressing

 on the front panel of this unit.
- You can also start disc playback by pressing on the front
- When the input source is CD and this unit is turned on with a disc loaded, disc playback starts automatically.

To start USB device playback

Select USB as the input source (see page 13).

2 Connect your USB device to the USB port on this unit.

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

For a USB device, playback starts automatically in order by the date and time of creation if playable files are in the USB device.

Notes

- Total time does not appear on the front panel 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 unit can play back files of 4 GB in size or less.
- When the input source is USB and this unit is turned on with the USB device connected, playback starts automatically.

To stop playback

Press .

To pause playback

Press .

To return to normal playback, press ▶ II.

To fast reverse or fast forward

To fast reverse, hold down ► .

To fast forward, hold down ► .

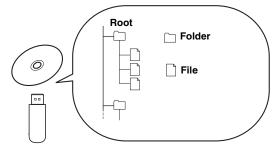
To skip tracks

To skip to the start of the current track, press $\vdash \blacktriangleleft$. To skip to the next track, press $\vdash \blacktriangleright \blacktriangleleft$.

To skip a folder for an MP3 or WMA file

To skip a folder, press FOLDER ▼ / ▲.

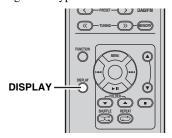
■ About MP3 and WMA discs/USB device



You can play back MP3 or WMA files recorded on your CD-R, CD-RW or USB device. This unit regards files in the disc/USB device as tracks (as shown above).

Switching the playback information display

You can switch the disc playback information shown in the front panel display of this unit. Available information differs depending on the type of the disc/USB device.



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

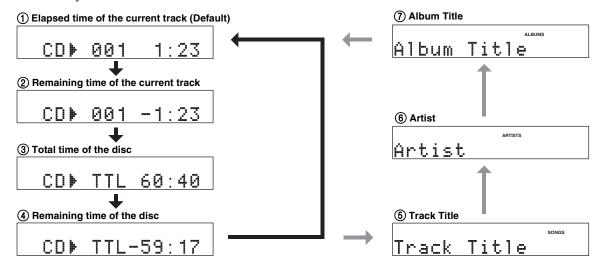
Each time you press the key, the information display changes as described in "Playback information for audio CDs" and "Playback information for MP3 or WMA files recorded on discs/USB devices" on page 16.

Note

Some special characters may not be shown properly.

Playback information for audio CDs

The following information is available during playback of an audio CD. "Track Title", "Artist", and "Album Title" are available only for a CD TEXT disc.

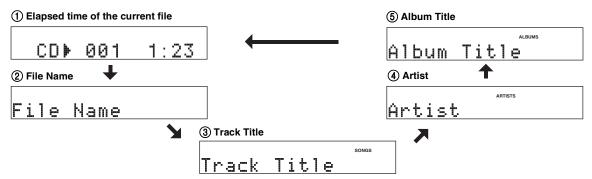


Note

You can switch the playback information ① ② ⑤ ⑥ ⑦ above during playback of your iPod in the menu browse mode (see page 28).

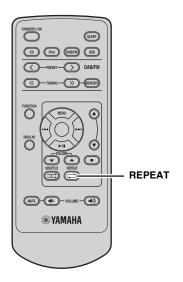
■ Playback information for MP3 or WMA files recorded on discs/USB devices

The following information is available during playback of an MP3 or WMA files recorded on discs/USB device.



Repeating playback (Repeat Play)

You can repeat the playback of the selected item in your disc/USB device.



1 Play back the disc or track you want to repeat.

2 Press REPEAT to select the desired Repeat Play mode.

Each time you press the key, the Repeat Play mode in the front panel display changes as follows.

Audio CD

→
REPEAT ONE (Repeat Play by track)

↓
REPEAT ALL (Repeat Play by disc)

↓
Off (Normal playback)

MP3/WMA disc/USB device

REPEAT ONE (Repeat Play by track)

REPEAT FOLDER (Repeat Play in the folder)

REPEAT ALL (Repeat Play by disc)

V

Off (Normal playback)

To cancel Repeat Play

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

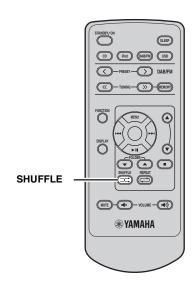
.

Playing back randomly (Shuffle Play)

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

Note

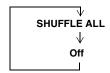
When playing back with Shuffle Play, the remaining time of the disc cannot be displayed.



Press SHUFFLE.

Each time you press the key, the Shuffle play mode in the front panel display changes as follows.

Audio CD



MP3/WMA disc/USB device



^{*} The SHUFFLE FOLDER means tracks in the folder is play back in randomly.

To cancel Shuffle Play

Press SHUFFLE repeatedly so that the SHUFFLE indicator disappears from the front panel display or press

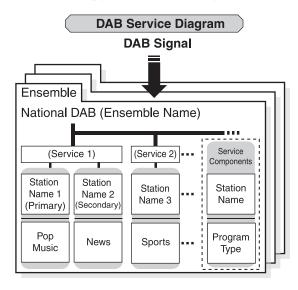
-ngiisn

DAB (DIGITAL AUDIO BROADCASTING) TUNING

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

DAB is broadcasted in blocks of data called 'ensembles' containing up to several radio stations that are simultaneously broadcasted.

DAB can also include an extensive amount of text information - called DLS (Dynamic Label Segment, see page 20) - which is displayed on the front panel display of the unit, enabling you to select a station by name.



Notes

- Be sure to check the DAB coverage in your area in that not all areas are currently being covered. For a list of nationwide DAB statuses and worldwide DAB frequencies, check WorldDMB online at http://www.worlddab.org/.
- The sound quality and station information are controlled by the DAB broadcaster, not this unit. Not all DAB broadcasters transmit station information.
- DAB signals are broadcast in Band III (174 240 MHz) and Band L (1452 - 1492 MHz). This unit can receive Band III only.

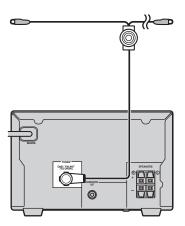
Setting the antenna

To enjoy DAB and FM on this unit, set the antenna.

CAUTION

Do not replace or remove the antenna. It may damage the unit, or cause a fire.

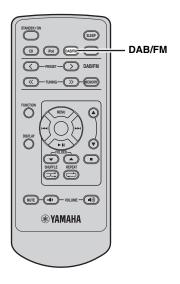
Indoor DAB/FM antenna



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

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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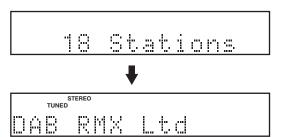
You can also perform the initial scan manually by INIT SCAN (see page 22).

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

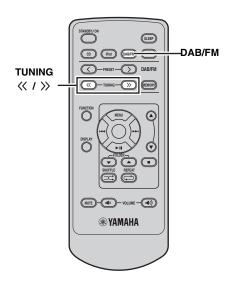
While the scan is in progress, "Scanning" and the percentage of the progress of scan appear on the front panel display.



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.

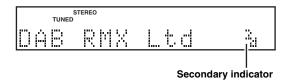


Tuning DAB stations



- 1 Press DAB/FM repeatedly to set the unit to the DAB mode.
- 2 Press TUNING « / » to select a DAB station.

Some stations have sub (secondary) stations. The secondary indicator lights up when a secondary audio station is selected.



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You can change the order of DAB stations by STATION ORDER (see page 22).

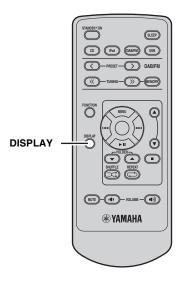
Note

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

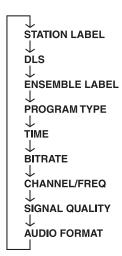
DAB station information

■ 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.



Description of information type

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 station.

TIME

Displays the current time.

BITRATE

Displays the bitrate of the current DAB station.

CHANNEL/FREQ

Displays the channel label and frequency of the current DAB station (see page 23).

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 (see page 22) is set to AUTO and DRC information is transmitted by DAB station.

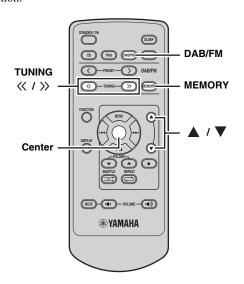
* Some DAB broadcasters transmit a wide dynamic range enabling high quality sound, accompanied by DRC information. Use this feature to compress the dynamic range of the DAB broadcast. This is especially useful when you listen to a DAB station in a noisy environment or at low volume at night.



You can change the DRC setting by DRC MODE (see page 22).

Presetting DAB stations

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



- 1 Press DAB/FM repeatedly to set the unit to the DAB mode.
- **2** Press TUNING \ll / \gg to tune into a favorite DAB station.
- 3 Press MEMORY.

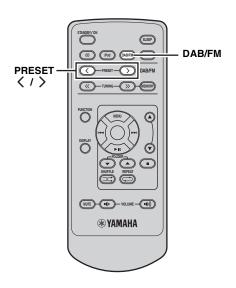
To cancel the preset, press MEMORY again.

4 Press ▲ / ▼ repeatedly to select a preset number you want to store, and press Center.

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- You can preset up to 30 DAB stations.
- You can delete a preset station by PRESET DELETE (see page 22).

Selecting preset DAB stations (Preset tuning)



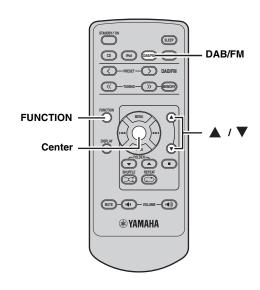
- 1 Press DAB/FM repeatedly to set the unit to the DAB mode.
- 2 Press PRESET < / > to select a preset DAB station

The PRESET indicator lights up in the front panel display.

Using DAB function

You can set the following functions in DAB function menu

Function	Description
PRESET DELETE	Deletes unnecessary preset DAB stations
STATION ORDER	Enables you to change the station order.
	ALPHANUMERIC: Stations are listed in alphabetical order. ENSEMBLE: Stations are listed in ensemble order. The default setting is "ALPHANUMERIC".
DRC MODE	Changes the DRC (see page 20) 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 signal (from 0 (none) to 100 (best)). Refer to "TUNE AID" (see page 23) for this operation.



- PRESET DELETE, STATION ORDER and DRC MODE
- 1 Press DAB/FM repeatedly to set the unit to the DAB mode.
- Press FUNCTION to display the DAB function menu. Press ▲ / ▼ repeatedly to select the function you want to use and press Center.
- 3 Select and set the desired setting.
 For PRESET DELETE, press ▲ / ▼ repeatedly to select preset number you want to delete and press Center.
- **DAB CLEAR and INIT SCAN**
- 1 Press DAB/FM repeatedly to set the unit to the DAB mode.
- Press FUNCTION to display the DAB function menu. Press ▲ / ▼ repeatedly to select DAB CLEAR or INIT SCAN and press Center. "Push Center Key" appears in the front panel display.
- 3 Press Center 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 DAB/FM repeatedly to set the unit to the DAB mode.
- Press FUNCTION to display the function menu. Press ▲ / ▼ to select TUNE AID and press Center.
- 3 Press ▲ / ▼ to select a channel label you want to measure.
- 4 Press Center to finish measuring.

Note

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

DAB frequency information

This unit can receive Band III only.

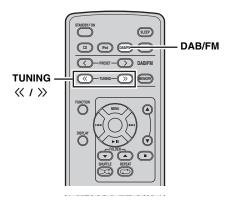
Frequency	Channel label
174.928 MHz	5A
176.640 MHz	5B
178.352 MHz	5C
180.064 MHz	5D
181.936 MHz	6A
183.648 MHz	6B
185.360 MHz	6C
187.072 MHz	6D
188.928 MHz	7A
190.640 MHz	7B
192.352 MHz	7C
194.064 MHz	7D
195.936 MHz	8A
197.648 MHz	8B
199.360 MHz	8C
201.072 MHz	8D
202.928 MHz	9A
204.640 MHz	9B
206.352 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. Automatic tuning is effective when station signals are strong and there is no interference. If the signal from the station you want to select is weak, tune into it manually. You can also use the automatic and manual preset tuning features to store up to 30 stations. Before FM tuning, set the antenna. For details, see "Setting the antenna" on page 18.

Automatic tuning

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



- Press DAB/FM repeatedly to set the unit to the FM mode.
- 2 Press and hold TUNING « / » to begin automatic tuning.

The AUTO indicator lights up on the front panel display.

This unit automatically detects radio stations that have strong signals for your selection, and automatically ends automatic tuning.

The AUTO indicator disappears from the front panel display.

Manual tuning

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

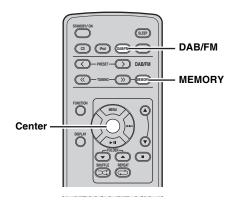
- 1 Press DAB/FM repeatedly to set the unit to the FM mode.
- 2 Press TUNING « / » repeatedly to tune into the desired station manually.

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Manually tuning into an FM station automatically switches the tuner to monaural reception to increase the signal quality.

Automatic preset tuning

Follow the procedure below to preset radio stations automatically.



- 1 Press DAB/FM repeatedly to set the unit to the FM mode.
- 2 Press and hold MEMORY for more than 2 seconds.

The "AUTO PRESET" and "Push Center Key" appear in the front panel display alternately. To cancel, press MEMORY.

- 3 Press Center to start searching automatically.
 - Auto Preset starts at the lowest frequency toward the highest frequency.
 - This unit automatically applies a preset number to each detected station.
- 4 Search will stop after finding appropriate station and stores as a preset station.
- 5 Search will start again to find a next station.

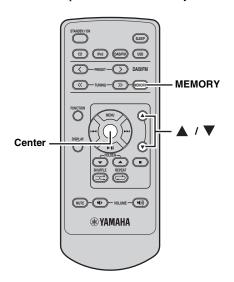
Notes

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

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Manual preset tuning

You can also store up to 30 stations manually.



- 1 Tune into a radio station you want to preset. See page 24 for tuning instructions.
- 2 Press MEMORY.

The MEMORY and PRESET indicators light up in the front panel display until you cancel manual preset.

To cancel, press MEMORY.

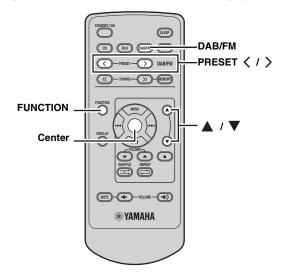
- 3 Press ▲ / ▼ repeatedly to select a preset station number.
- 4 Press Center while the preset station number you selected is flashing.

The MEMORY indicator disappears from the front panel display.

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

Selecting preset stations

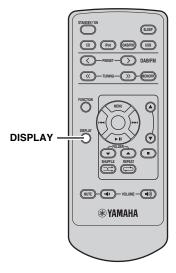
You can tune into any desired station simply by selecting the preset station under which it was stored (see page 24).



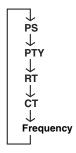
- 1 Press DAB/FM repeatedly to set the unit to the FM mode.
- 2 Press PRESET < / > to select a preset station.
- To delete the preset station
- 1 Press DAB/FM repeatedly to set the unit to the FM mode.
- 2 Press FUNCTION to display the function menu. Press ▲ / ▼ to select PRESET DELETE and press Center.
- 3 Press ▲ / ▼ to select the preset number you want to delete and press Center.

Displaying the Radio Data System information

Radio Data System is a data transmission system used by FM stations in many countries. The Radio Data System function is carried out among the network stations. 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). The corresponding indicators light up in the front panel display.



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



- Select "PS" to display the name of the Radio Data System program currently being received.
- Select "PTY" to display the type of the Radio Data System program currently being received.
- Select "RT" to display the information on the Radio Data System program currently being received.
- Select "CT" to display the current time.

Notes

- You can select one of the Radio Data System modes only when the corresponding Radio Data System indicator lights up in the front panel display. It may take a while for this unit to receive all of the Radio Data System data from the station.
- You can select only the available Radio Data System modes being offered by the station.
- If the signals being received are not strong enough, this unit
 may not be able to utilize the Radio Data System data. In
 particular, the "RT" mode requires a large amount of data and
 may not be available even when the other Radio Data System
 modes are available.
- In case of poor reception conditions, hold down TUNING ⟨⟨ / ⟩⟩ so that the AUTO indicator disappears from the front panel display.
- If the signal strength is weakened by external interference while this unit is receiving the Radio Data System data, the reception may be cut off unexpectedly and "...Wait" appears in the front panel display.
- When the "RT" mode is selected, this unit can display the program information by a maximum of 64 alphanumeric characters, including the umlaut symbol. Unavailable characters are displayed with the "_" (underscore).

■ Available program types

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

CONTROLLING iPod™

In addition to controlling this unit, you can operate your iPod stationed in a terminal using the supplied remote control.

Using iPod™

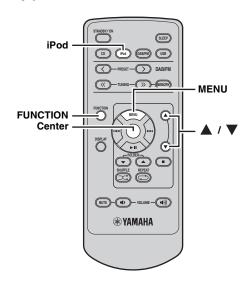
Once you have stationed your iPod in a terminal on the top panel of this unit (see page 12), you can enjoy playback of your iPod using the supplied remote control. The operations of your iPod are available with the aid of front panel display (menu browse mode) or without it (simple remote mode).

Notes

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

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- For a complete list of the remote control functions used to control your iPod, refer to "iPod mode" (see page 7).
- For a complete list of status messages that appear in the front panel display, refer to the "iPod™" section in "TROUBLESHOOTING" (see page 30).



■ Simple remote mode

In the simple remote mode, you can operate the iPod menu by viewing the iPod using the iPod controls or the supplied remote control.

- 1 Press iPod to set this unit to the iPod mode.
- Press FUNCTION and ▲ / ▼ to show iPod MODE on the front panel display and press Center.
- 3 Press ▲ / ▼ to select SIMPLE REMOTE. Press Center while SIMPLE REMOTE is blinking on the front panel display.
 - You can also select the menu browse mode by pressing ▲ / ▼ so, MENU BROWSE appears on the front panel display. For details, refer to page 28.
- 4 Use MENU/ ▲ / ▼ / Center to operate the iPod menu, and then press Center to start playback of the selected song (or group).

■ Menu browse mode

In the menu browse mode, you can operate the iPod menu using the front panel display.

Note

There are some characters that cannot be displayed in the front panel display of this unit. Those characters are replaced with underscore "_".

iPod menu



Select the menu browse mode.

To choose the menu browse mode, please refer to step 3 of "Simple remote mode" in page 27. The top of the iPod menu appears in the front panel display.



Operation indicators

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The operation indicators (see page 4) show the operable cursor keys in each step.

2 Press ▲ / ▼ to select the menu, and then press Center to enter the selected menu.

The name of the first item stored in the selected menu appears.



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- The Multi information indicators (see page 4) show the iPod menu currently selected.
- To return to the upper level in the iPod menu, press MENU.

3 Repeat step 2 until you select the desired item, and then press Center to start playback of the desired item (group or song).

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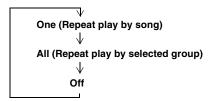
While playing back a track (or group) with the menu browse mode, you can switch the playback information (such as song name, elapsed time, artist name, or album name) displayed in the front panel display by pressing DISPLAY.

■ Repeating playback (Repeat Play)

You can repeat playback of the selected items in your iPod.

Press REPEAT to select the desired Repeat Play mode.

Each time you press the key, the Repeat Play mode changes as follows. To use properly, please check it with your iPod.

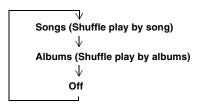


■ Playing back randomly (Shuffle Play)

You can play back tracks in your iPod in random order.

Press SHUFFLE.

Each time you press the key, the Shuffle Play mode changes as follows. To use properly, please check it with your iPod.



Note

You cannot set Albums when you use an iPod touch.

TROUBLESHOOTING

Refer to the table below when this unit 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 unit, disconnect the power cable, and contact the nearest authorized Yamaha dealer or service center.

General

Problem	Cause	Remedy	See page
This unit fails to turn on or enters	The power cable is not connected or the plug is not completely inserted.	Connect the power cable firmly.	11
the standby mode soon after the power is turned on.	This unit has been exposed to a strong external electric shock (such as lightning or strong static electricity).	Set this unit to the standby mode, disconnect the power cable, plug it back in after 30 seconds and then use it normally.	_
No sound	No appropriate input source has been selected.	Select an appropriate input source with the INPUT on the front panel (or the input selection keys on the remote control).	_
	Speaker connections are not secure.	Secure the connections.	9
	The volume is turned down.	Turn up the volume.	_
	Signals this unit cannot reproduce are being input from a source component, such as a CD-ROM.	Play a source whose signals can be reproduced by this unit.	_
Sound is heard from the speaker on one side only.	Incorrect cable connections.	Connect the cables properly. If the problem persists, the cables may be defective.	9
There is noise interference from digital or radio frequency equipment.	This unit is too close to the digital or high-frequency equipment.	Move this unit further away from such equipment.	_

DAB reception

Problem	Cause	Remedy	See page
Cannot tune into	The initial scan operations were not performed.	Perform the initial scan operations	22
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/FM antenna.	23
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/FM antenna.	23
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/FM 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/FM antenna and this unit for optimal DAB reception	23
	The DAB signals are too weak.	Use the TUNE AID feature to locate the best positioning of the indoor DAB/FM antenna.	23

TROUBLESHOOTING

DAB reception (continuous from previous page)

Problem	Cause	Remedy	See page
There is noise interference (e.g.	The indoor DAB/FM antenna needs to be repositioned.	Readjust the position of the indoor DAB/FM antenna.	18
hiss, crackle or jitter)	The DAB signals are too weak.	Use the TUNE AID feature to locate the best positioning of the indoor DAB/FM antenna.	23
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 reception

Problem	Cause	Remedy	See page
FM stereo reception is noisy.	The characteristics of FM stereo broadcasts may cause this problem when the transmitter is too far	Change the height, direction, or placement of the indoor DAB/FM antenna.	18
	away or the antenna input is poor.	Use the manual tuning method.	24
The desired station cannot be tuned into with the automatic tuning method.	The signal is too weak.	Use the manual tuning method.	24

iPod™

Note

In case of a transmission error without a status message appearing in the front panel of this unit, check the connection to your iPod (see page 12).

Status message	Cause	Remedy	See page
iPod Connecting	This unit is in the middle of recognizing the connection with your iPod.		
	This unit is in the middle of acquiring song lists from your iPod.		
Connect error	There is a problem with the signal path from your	Turn off this unit and reconnect the iPod.	12
iPod to this unit.	Try resetting your iPod.		
Unknown iPod	The iPod being used is not supported by this unit.	Only iPod (Click and Wheel), iPod nano, iPod mini, and iPod Touch are supported.	
iPod	Your iPod is properly stationed in an iPod terminal.		
iPod Unplu99ed	Your iPod was removed from an iPod terminal.	Station your iPod back in an iPod terminal.	12

USB

Note

In case of a transmission error without a status message appearing in the front panel of this unit, check the connection to the USB device (see page 12).

Status message	Cause	Remedy	See page
Not Connected	The USB device is not connected firmly.	Connect the USB device again.	12
Not Supported	Connected the USB device not playable on this unit.	Connect playable USB device.	12
Over Current	Connected the USB device not playable on this unit. Connected the USB device diagonally.	Disconnect the USB device. Change input source other than USB and select USB as input source again. Then connect playable USB device again.	12

Disc Playback

Problem	Cause	Remedy	See page
Power turns on but immediately shuts off.	The power cable is not connected or the plug is not completely inserted.	Connect the power cable firmly.	11
No sound or distorted sound	The sampling rate of a MP3 or WMA file may not be compatible with this unit.	Check the sampling rate and bit rate of an MP3 or WMA file are compatible with this unit.	32
Disc playback does	You may use a CD-R/RW that is not finalized.	Finalize the CD-R/RW.	_
not start.	The disc label may not be facing up.	Check that the disc label is facing up.	_
	The disc may be defective.	Try to play back another disc. If the same problem does not happen, 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. If the number of files is small, the disc may not be recognized.	_
	The sampling rate of a MP3 or WMA file may not be compatible with this unit.	Check the sampling rate and bit rate of an MP3 or WMA file are compatible with this unit.	32
USB playback does	Improper USB device connections.	Connect the USB device again.	12
not start.	The MP3 or WMA formats are not compatible with this unit.	Replace the file with a correctly recorded file playable with this unit.	32

Remote control

Problem	Cause	Remedy	See page
The remote control does not work nor	The remote control may be operated outside its operation range.	For information on the remote control operation range, refer to "Using the remote control".	8
function properly.	The remote control sensor on this unit may be exposed to direct sunlight or lighting (invented fluorescent lamps).	Change the lighting or orientation of this unit.	_
	The battery may be worn out.	Replace the battery with new one.	8
	There are obstacles between the sensor of this unit and the remote control.	Remove the obstacles.	_

NOTES ABOUT DISCS/MP3, WMA FILES

■ Discs (audio CDs) playable with this unit

This player is designed for playing back compact discs bearing the marks shown below. Never attempt to load any other type of disc into the unit. The unit can also play back 8-cm (3-inch) compact discs.



OMPACT Compact discs (digital audio)

The most popular discs for commercially available audio CDs.



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

Music CDs made by copying onto a CD-R or CD-RW (including MP3 or WMA format files).



Notes

 Be sure to use a CD-R or CD-RW disc made by a reliable manufacture.



 Be sure to use a CD-R or CD-RW disc which has at least one of the following phrases on the disc or disc case.



Be sure to use a finalized CD-R or CD-RW

diea



.... CD-TEXT discs

The discs recorded with text data such as album titles, track titles and artist names.

Note

This compact disc player may not be able to play back some CD-RW discs or discs on which recording was not made correctly.

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.

■ About MP3 and WMA files

You can play back MP3 and WMA files recorded on a CD-R/CD-RW and those stored on a USB device.

MP3

MP3 is a standard technology and format for compressing an audio sequence into a small-sized file. However, the original level of sound quality is preserved during playback.

The playable formats are:

• (MPEG-1 Audio Layer-3) Bitrate*: 32-320 kbps Sampling frequency: 44.1/48/32 kHz

• (MPEG-2 Audio Layer-3, 2) Bitrate*: 8-160 kbps Sampling frequency: 24/22.05/16 kHz

* Variable bitrate is supported.

WMA

"WMA (Windows Media Audio)" is a Microsoft file format for encoding digital audio files similar to MP3 though can compress files at a higher rate than MP3. The playable formats are:

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

Bitrate*: 32-320 kbps

Sampling frequency: 48/44.1/32 kHz

Mid Profile

Bitrate: 16-32 kbps

Sampling frequency: 22.05/16 kHz

* Both constant and variable bitrates are supported.

Notes

- Playback for Data Disc starts in alphanumeric order of files.
- Playback for USB starts in order by date and time of file creation.
- Copyright-protected WMA (DRM) files cannot be played back by this unit.
- The disc must be ISO9660 compatible.
- The maximum file and folder numbers are as follows.

	Data Disc	USB
Maximum total number of file and folder*	512	9,999
Maximum folder number*	255	255
Maximum file number per folder	511	255

^{*} The root is counted as one of the folders.

Notes about handling compact discs

 Always handle a disc with care so that its surface is not scratched.



- Compact discs are not subjected to wear during playback, but damage to the disc surface when the disc is being handled can adversely affect the disc playback.
- Be sure to use a felt-tip pen or similar writing tool
 when writing on the label side of the disc. Do not use a
 ballpoint pen, pencil, or other hard-tipped writing tool,
 as these may damage the disc and may adversely affect
 the disc playback.
- Do not warp discs.
- When a disc is not being used, remove it from the unit and store in an appropriate case.
- When removing or storing a disc, be careful not to scratch the playing surface.
- Compact discs are not affected by small particles of dust or fingerprints on their playing surface, but even so they should be kept clean. Wipe by using a clean, dry cloth.

Do not wipe with a circular motion; wipe straight outward from the center.



- Do not try to clean the disc's surface by using any type
 of disc cleaner, record spray, anti-static spray or liquid,
 or any other chemical-based liquid because such
 substances might irreparably damage the disc's
 surface.
- Do not expose discs to direct sunlight, high temperature or high humidity for a long period of time, as these might warp or otherwise damage the disc.



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.

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

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

■ PLAYER SECTION

Playback System

• CD, CD-R/RW

Laser

•	Type	Semiconductor laser GaAs/GaAlAs
•	Wave length	780 nm
•	Output power	10 mW

Audio Performance

AMPLIFIER SECTION

 Maximum RMS output power per channel 	
(6 Ω , 1 kHz, 10% THD)	- 20 W
• Total harmonic distortion (1 kHz)	
CD 10W, 6Ω	0.03 %
Output level/Impedance	
PHONES (volume max)	V/32 Ω

■ TUNER SECTION

Tuning Range

•	DAB	174 to 240 MHz (Band III)
•	FM	87.50 to 108.00 MHz

■ GENERAL

Power Supply	AC 230 V, 50 Hz
Power consumption	25 W
Standby Power consumption*	1 W or less
• Dimensions (W x H x D)	180 x 117 x 331 mm
	(7-1/8 x 4-5/8 x 13 in)

• Weight 3.0 kg (6.6 lbs.)

* When ECO MODE is ON.

Specifications are subject to change without notice.

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.
 - (7) Non AV (Audio Visual) related products.
 - (Products subject to "Yamaha AV Guarantee Statement" are defined in our website at http://www.yamaha-hifi.com/ or http://www.yamaha-uk.com/ for U.K. resident.)
- 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.



Pb

[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.

