

CD/DAB RECEIVER

CRX-M170

OWNER'S MANUAL

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.
- Install this sound system 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 and outdoor antennas disconnected from a wall outlet or the 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 in 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 the unit alone.
- 19 When using the unit for a long time, the unit may become warm. Turn the power off, then leave the unit alone for cooling.
- 20 Install this unit near the AC outlet and where the AC power plug can be reached easily.

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. This state is called the standby mode. In this state, this unit is designed to consume a very small quantity of power.

CAUTION

The use of optical instruments with this product will increase eye hazard.

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

WARNING

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

■ 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.

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

CONTENTS

INTRODUCTION	
FEATURES	2
About this manual	2
SUPPLIED ACCESSORIES	2
CONTROLS AND FUNCTIONS	3
Front panel	3
Remote control	4
INSTALLING BATTERIES	
IN THE REMOTE CONTROL	5
USING THE REMOTE CONTROL	5

PREPARATION	
CONNECTING SPEAKERS	
AND SUBWOOFER	6
Connecting speakers	6
Connecting a subwoofer	6
CONNECTING OTHER COMPONENTS	7
CONNECTING ANTENNAS	8
AM loop Antenna	8
Indoor FM Antenna	8
Indoor DAB Antenna	9
CONNECTING THE POWER CABLE	9

BASIC OPERATION	
TURNING THE POWER TO ON/STANDBY	10
SELECTING AN INPUT SOURCE	
ADJUSTING THE VOLUME LEVEL	. 11
MUTING THE SOUND (MUTE)	. 11
LISTENING THROUGH THE HEADPHONES	
ADJUSTING THE CLOCK	
SETTING THE ON/STANDBY TIMER	
SETTING THE SLEEP TIMER	. 13
CHANGING THE BRIGHTNESS OF THE	
DISPLAY	. 13
RESTORING TO THE	
FACTORY DEFAULTS	
ADJUSTING SOUNDS	. 14

ENJOYING MUSIC DISCS	
LISTENING TO A CD	15
Playing a CD	15
PROGRAMMING PLAYBACK	17
Customizing playback order (Program Play).	17
Playing back randomly	
(Random Play)	18
REPEAT PLAYBACK	19
TIME DISPLAY	20
LISTENING TO	
THE EXTERNAL SOURCES	20

ENJOYING RADIO

TUNING RADIO STATIONS2	1
Tuning radio stations automatically (Auto tuning) 2	1
Tuning radio stations manually (Manual tuning) 2	1
FM mode	2
Preset tuning 1	2
Preset tuning 2	3
RECEIVING RADIO DATA SYSTEM24	
PTY search mode2	5
DAB TUNER20	6
About DAB2	6
Setting up your DAB tuner	
Auto tuning2	
Using the channel list	7
Function mode	
Changing display setting	

APPENDIX	
TROUBLESHOOTING	32
General	32
Remote control	33
Disc playback	33
Radio reception	
ADDITIONAL INFORMATION	
Disc Information	35
Handling a disc	35
SPECIFICATIONS	36

FEATURES

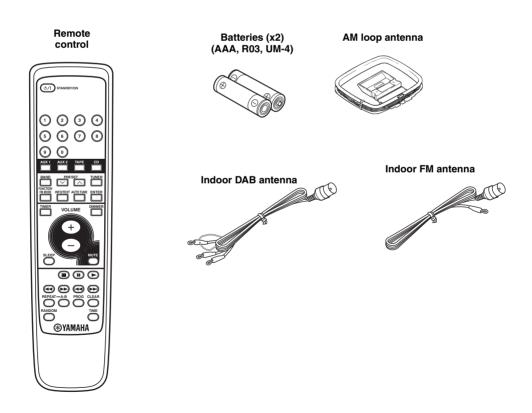
- Minimum RMS output power per channel 25W + 25W (6 Ω , 1 kHz, 0.1% THD).
- Plays Audio CDs, CD-Rs and CD-RWs.
- Receives DAB station as well as FM or Radio Data System.
- Easy operation with the MULTI JOG.
- DIGITAL OUTPUT jack.
- 30-station FM/AM, 10-station DAB preset tuning.

About this manual

- This manual provides information relevant only to the YAMAHA "CRX-M170". For information on speakers or other AV components, refer to the manual for that product.
- In this manual, operations that can be performed using either the CD player and tuner or its remote control are explained using the remote control.
- = 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.

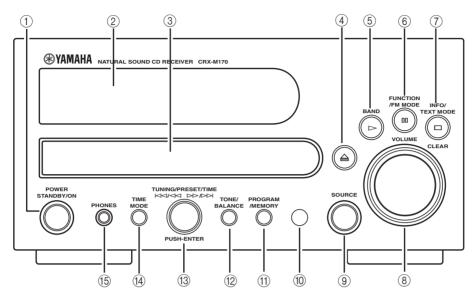
SUPPLIED ACCESSORIES

This product includes the following accessories. Before connecting speakers or other components to this product, make sure you received all of the following parts.



CONTROLS AND FUNCTIONS

Front panel



① STANDBY/ON

Turns this unit on or sets it to the standby mode (page 10). When this unit is in the standby mode, the Standby indicator around STANDBY/ON button lights up orange.

Note

The Standby mode uses a little power to receive an infrared signal from the remote control.

② Display

Displays playback information or settings.

③ Disc tray

Holds a disc to be played.

④ ♠ (Open/Close)

In CD mode, use to open and close the disc tray.

⑤ ► (Play), BAND

In CD mode, use to start playback.

In TUNER mode, use to select FM, AM or DAB.

⑥ □□ (Pause), FUNCTION/FM MODE

In CD mode, use to pause playback.

In DAB mode, activates features such as preset tune, local scan, full scan, manual tune etc.

In FM mode, use to select Stereo or Mono.

(7) □ (Stop), INFO/TEXT MODE, CLEAR

In CD mode, use to stop playback.

In DAB mode, use to change the text content (page 31). In FM mode, use to select the mode. Also use to cancel the entering or modes.

8 VOLUME

Turn this knob to adjust the volume.

9 SOURCE

Use to select a source.

(10) Remote control sensor

Receives signals from the remote control.

11) PROGRAM/MEMORY

In CD mode, use to enter the program mode.

In TUNER mode, use to memory the station manually.

12 TONE/BALANCE

Use to adjust the tone and balance with the MULTI JOG.

13 MULTI JOG

In CD mode, use to skip tracks etc.

In TUNER mode, adjusts various settings.

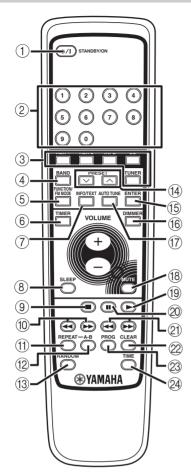
14) TIME MODE

Use to adjust clock and to set timer.

(5) PHONES jack

Connect headphones.

Remote control



1 STANDBY/ON

Turns this unit on, or sets it to the standby mode (page 10).

2 Number buttons (1 to 9, 0)

Use to select a track number or a preset channel after selecting CD or TUNER.

③ Input selector

Use to select a source.

4 BAND

In TUNER mode, use to select FM, AM or DAB.

5 FUNCTION/FM MODE

In DAB mode, activates features such as preset tune, local scan, full scan, manual tune, etc.

In FM mode, use to select Stereo or Mono.

(6) TIMER

Use to set the on/standby timer function.

(7) INFO/TEXT

In FM or DAB mode, use to change the text content (page 31).

® SLEEP

Use to set the sleep timer.

In CD mode, use to stop disc playback.

(1) ◀◀/ ►► (Search)

During playback of CD, use to search the part you want to listen to.

(1) REPEAT

Use to set the repeat play (one track or all tracks) (page 19).

① A-E

Use to set the A-B repeat (page 19).

(13) RANDOM

In CD mode, use to enter the random playback mode (page 18).

(14) PRESET

In TUNER mode, use to select the preset stations.

(15) ENTER

In DAB mode, use to enter the selection.

16 DIMMER

Use to dim the display.

(7) AUTO TUNE

In DAB mode, use to activate Local scan or Full scan. (page 27).

18 MUTE

Use to mute the sound.

(19) ► (Play)

In CD mode, use to start playback.

② II (Pause)

In CD mode, use to pause playback.

② |◄◄/►►| (Skip)

In CD mode, use to skip tracks.

22 CLEAR

Use to delete a programmed track.

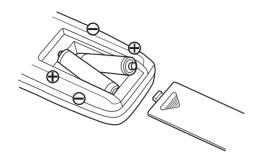
23 PROGRAM

In CD mode, use to enter the program mode. In program mode, use to enter the selection.

24 TIME

In CD mode, use to change the time display.

INSTALLING BATTERIES IN THE REMOTE CONTROL



- 1 Press the △ mark on the battery cover and slide off the cover.
- 2 Insert the two supplied batteries (AAA, R03, UM-4) into the battery compartment.

Make sure you insert the batteries according to the polarity markings (+ and –).

3 Close the battery cover.

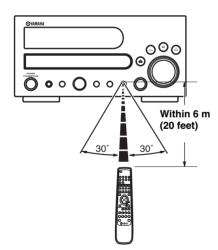
■ To replace the batteries

If the batteries grow old, the effective operation distance of the remote control decreases considerably. If this happens, replace the batteries with two new ones as soon as possible.

Notes

- Do not use an old battery together with new one.
- Do not use different types of batteries (for example, alkaline and manganese) together. Each type of battery has its own characteristics even if they are similar in shape.
- If the batteries run out, immediately remove them from the remote control to prevent an explosion or acid leak.
- Dispose of the batteries according to the regional regulations.
- If a battery starts leaking, dispose of it immediately. Be careful
 not to let leaking battery acid come into contact with your skin
 or clothing. Before inserting new batteries, wipe the
 compartment clean.

USING THE REMOTE CONTROL



Use the remote control within 6 m (20 feet) of this unit and point it toward the remote control sensor.

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

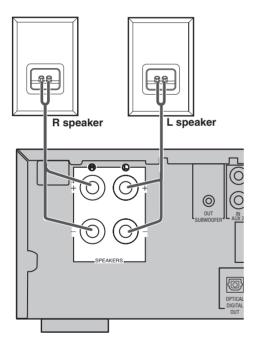
CONNECTING SPEAKERS AND SUBWOOFER

Connecting speakers

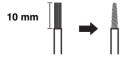
Follow the procedure below to connect speakers to this unit. For information on your speakers, refer to the owner's manual for the speakers.

Notes

- Do not connect the power cable of this unit until all cable connections are completed.
- Be sure to connect the left channel (L), right channel (R), "+" (red) and "-" (black) 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 lack 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 of insulation from the end of each speaker cable and twist the exposed wires of the cable together to prevent short circuits.

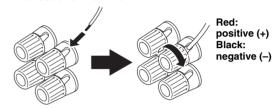


2 Unscrew the knob.



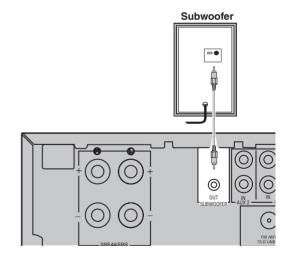
Red: positive (+) Black: negative (-)

Insert one bare wire into the hole in the side of each terminal. And then tighten the knob to secure the wire.



Connecting a subwoofer

Connect the SUBWOOFER OUT jack on this unit to the INPUT jack on the subwoofer using a subwoofer cable.



Note

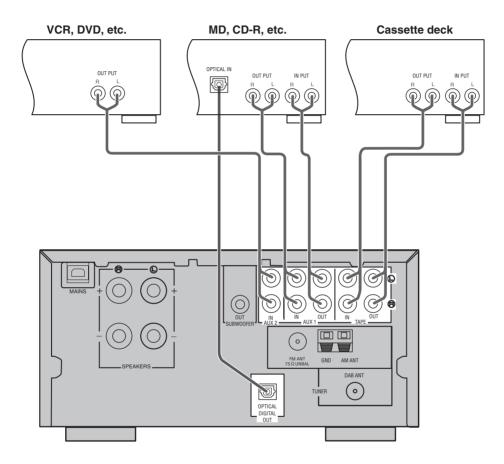
Do not connect the power cable of this unit or subwoofer until all cable connections are completed.

CONNECTING OTHER COMPONENTS

If you connect other components such as a VCR, DVD or MD to the following jacks on this unit, you can enjoy those sources with this unit. This section provides some examples of other AV component connections. For information about connecting to your AV components, refer to the owner's manual for it.

Notes

- Do not connect the power cable of this unit until all cable connections are completed.
- Turn off the audio component before connecting it to this unit.



■ TAPE/AUX jacks

Connect the AUX IN jacks on this unit to the output jacks of the each component. Then, connect the AUX OUT jacks on this unit to the each input jack of the component.

Be sure to insert each plug securely. To prevent humming and noise, do not bundle the connection cords with the power cord or speaker cord.

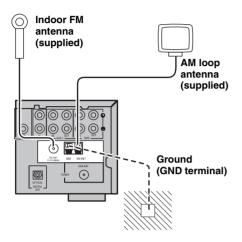
■ DIGITAL OUT terminal

Connect the DIGITAL OPTICAL OUT jack on this unit to the digital input jack on the MD or CD-R etc.

When inserting the optical cable plug, open the protective shutter of the terminal and insert the cable plug until it makes a click sound. Do not force the plug, because this could result in damage to the protective shutter, the cable or the unit itself.

CONNECTING ANTENNAS

To enjoy the tuner on this unit, you need to connect AM, FM and DAB antennas to this unit. This product includes an AM loop antenna, Indoor FM antenna and Indoor DAB antenna. 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.



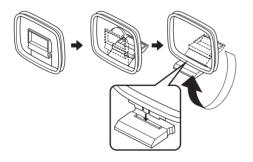
Note

The AM loop Antenna should be placed away from this unit.

AM loop Antenna

1 Attach the antenna stand to the AM loop antenna.

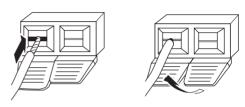
When attaching the antenna to the wall, you do not need to use the antenna stand.



2 Press and hold the tab.



3 Insert the AM loop antenna lead wires into the AM ANT terminal. Then release the tab.



- 4 Repeat steps 2 to 3 to insert the AM loop antenna lead wires into the GND terminal.
- 5 Extend the cord and place the AM loop antenna away from this unit and speaker cables.

While listening to the radio, rotate the antenna head to find the best angle for reception.



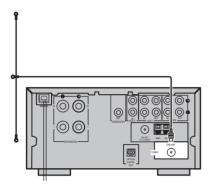
Indoor FM Antenna

- 1 Connect the supplied indoor FM antenna to the FM ANT jack on this unit.
- Place the antenna away from this unit and speaker cables.

It is recommended to use an outdoor FM Antenna in weak FM signal areas. In this case, disconnect the indoor FM antenna.

Indoor DAB Antenna

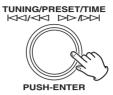
- 1 Connect the indoor DAB antenna to the DAB terminal.
- Extend the cord vertically and attach it to a window frame or wall using drawing pin etc., where the signal reception is best.





You can check the antenna adjustment or positioning for the best reception by viewing the signal strength on the display.

The signal strength is displayed as a bar graph by pressing MULTI JOG once.

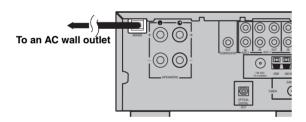




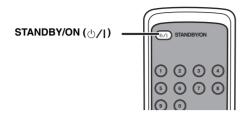
It is recommended to use outdoor DAB antenna in weak DAB signal areas.

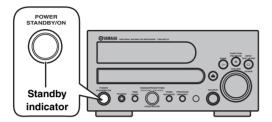
CONNECTING THE POWER CABLE

After you made all connections, connect the power cables of this to an AC outlet.



TURNING THE POWER TO ON/STANDBY



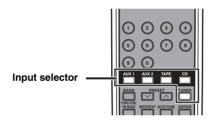


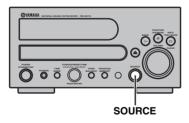
Press STANDBY/ON to turn on this unit or set it to the standby mode.

- When the unit is turned on, the display lights up and the standby indicator turns off.
- When the unit is in the standby mode, the display goes out and the standby indicator turns on.
- If the timer is set while the unit is in the standby mode, the standby indicator blinks slowly.

SELECTING AN INPUT SOURCE

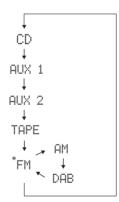
You can enjoy various sources with this unit. After connecting speakers, antennas, or other equipments, follow the procedure below to select an input source you want to play on this unit. For information on connection methods, refer to pages 6 to 9.





Press source (or one of the input selector buttons on the remote control) to select the input source you desire.

•Every time the SOURCE button is pressed, the mode changes as follows:

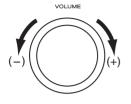


- * In the tuner mode, one for three you selected will be displayed.
- Listening to CDs: see page 15.
- Listening to External source: see page 20.
- Listening to tuners: see page 21.

Note

This unit itself does not provide recording features. To make recordings, you need to connect recording equipment to this unit.

ADJUSTING THE VOLUME LEVEL



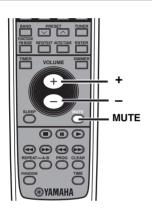


Rotate VOLUME to the right (or press VOLUME + on the remote control) to increase the volume level and to the left (or press VOLUME – on the remote control) to decrease it.

Note

To protect speakers from a sudden high-level signal, gradually turn up the volume to the required level with VOLUME.

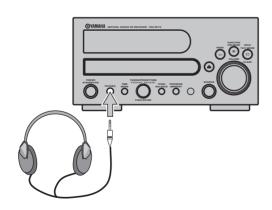
MUTING THE SOUND (MUTE)



Press MUTE on the remote control to mute the sound

To restore audio output to the previous volume level, press MUTE again or press VOLUME +/-.

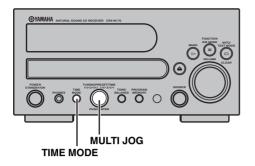
LISTENING THROUGH THE HEADPHONES



Connect the headphone plug to the PHONES jack, and adjust the volume.

The sound from speakers is cut off.

ADJUSTING THE CLOCK



2 Rotate MULTI JOG to select the current hour, then press MULTI JOG to set it.

The current time "minute" flashes on the display.

3 Rotate MULTI JOG to set the current minutes, then press MULTI JOG to set it.

To quit the time mode, press TIME MODE again.

Notes

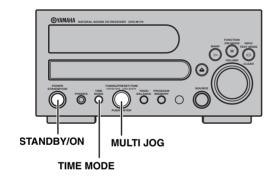
- You cannot set timer unless you adjust the clock.
- The clock is displayed in 24-hour format.

1 Press TIME MODE.

The current time "hour" flashes on the display.

SETTING THE ON/STANDBY TIMER

This unit turns on and switches to the standby mode at the specified time every day.



ડેલ્રેંટ Adjust the clock before setting the timer.

- 1 Press TIME MODE once, then press MULTI JOG repeatedly until "On time" is displayed. The "hour" value flashes.
- 2 Rotate MULTI JOG to select the hour, then press MULTI JOG to set it.

The "minute" value flashes.

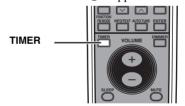
- 3 Rotate MULTI JOG to select the minutes, then press MULTI JOG to set it.
- 4 Repeat steps 2 and 3 to set the "off time". "Source select" appears on the display.

5 Rotate MULTI JOG to select the input source to be played, then press MULTI JOG.

The timer setting is stored in memory, and the current time "hour" flashes on the display.

6 Press Timer on the remote control.

The timer indicator "②" appears on the display.



7 Get ready for timer operation.

Adjust the volume, tune into a station, insert a CD, etc.

To deactivate the timer, press TIMER again to turn it off. (The timer indicator "①" disappears from the display.)

8 Press STANDBY/ON to switch the unit to the standby mode.

The timer indicator "④" disappears from the display. Then the standby indicator flashes slowly.

SETTING THE SLEEP TIMER

If you set the sleep timer, this unit automatically turns to the standby mode after the specified time.



Press SLEEP on the remote control repeatedly to set the duration for the sleep timer (90 to 10 minutes).

You can set the duration in 10-minutes steps.

``oʻ:

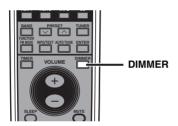
- When the sleep timer is activated, the brightness of the display goes down.
- To check the remaining time, press SLEEP once. The remaining time is displayed for three seconds, then the display returns to the normal display.

Notes

- The sleep timer only works for this unit. It does not turn off other equipment connected to this unit.
- The sleep timer is canceled if you turn this unit to the standby mode.

CHANGING THE BRIGHTNESS OF THE DISPLAY

You can change the brightness of the display.



Press DIMMER on the remote control.

Each time you press DIMMER, the brightness of the display switches between Dimmer on and Dimmer off.

RESTORING TO THE FACTORY DEFAULTS

Setting the DEFAULT function resets all options and your personal settings to the factory default.

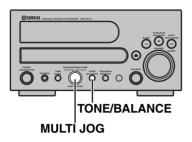
FUNCTION/FM MODE



Press and hold down FUNCTION/FM MODE for more than four seconds in standby mode to manually initialize.

ADJUSTING SOUNDS

You can adjust following sound settings: BASS,TREBLE and BALANCE.



These settings have no effect on the recorded sound during recording.

- 1 Press TONE/BALANCE.
- 2 Press MULTI JOG repeatedly to select the setting you want to adjust.

Each time you press MULTI JOG, the display changes as follows:

3 Rotate MULTI JOG to adjust the setting.

Note

Once a setting is displayed, you have three seconds to begin adjusting it (or else it will return to the normal display).

BASS: Adjust the low frequency sound range. (-10 to +10 dB)



TREBLE: Adjust the high frequency sound range. (-10 to +10 dB)



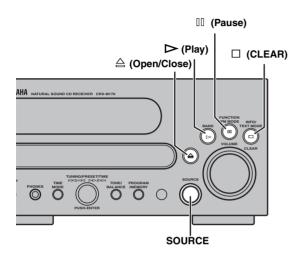
L/R BALANCE: Adjust the speaker balance. (0 to 16 for either left or right speaker)

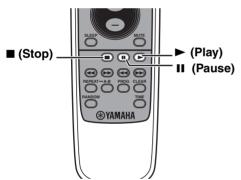


LISTENING TO A CD

You can enjoy music discs (CD, CD-R and CD-RW) with this unit. For information on supported disc standards and disc usage notes, refer to "Disc Information" (page 35) and "Handling a disc" (page 35).

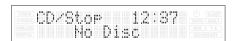
Playing a CD





1 Press SOURCE to select "CD".

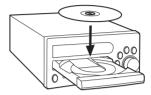
If there is no disc has been inserted, "No Disc" is displayed.



2 Press ≙.

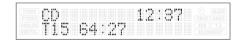
The disc tray opens.

3 Place a CD on the disc tray with the printed label facing up.



4 Press \triangleq to close the tray.

The CD is read, and the total numbers of the tracks and play time of the disc are displayed.



■ To start playback

Press ⊳.



`\o':

- Selecting the CD source starts playback automatically if a disc is set on the disc tray.
- When you turn on the power, this unit automatically starts playback if a CD has been inserted and the source is set to "CD".
- Whenever you change the source during playback, this unit automatically memorizes the stopping position. So if you return to CD source again, this unit resumes playback from where it was stopped.

■ To stop playback Press □ .

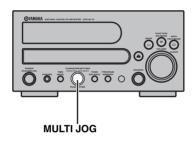
CD/Stop 12:37 T15 64:27

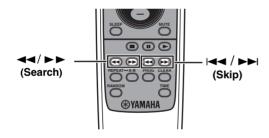
■ To pause playback

Press III.

To return to normal playback, press □ again. You can also return to playback by pressing ►.

■ To skip to the next or previous track





During playback, press MULTI JOG once. "Skip mode" is displayed.

2 Rotate MULTI JOG until the desired track is found (or press | ◄◄ or ▶► | the remote control).

``@<u>´</u>

- To play the current track from the beginning, press MULTI JOG during playback and rotate MULTI JOG once to the left (or press I◄◄ on the remote control).
- To play the previous track, press MULTI JOG once and rotate MULTI JOG twice to the left (or press ► twice on the remote control).

■ To search for a section of a track

1 During playback, press MULTI JOG twice. "Search mode" is displayed.

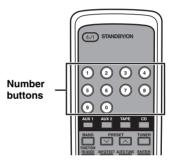
2 Rotate MULTI JOG to the right or left.

The display time of the track goes either forward or backward, and the volume decreases automatically.

3 Press MULTI JOG when the section you want to listen to is found (or press and hold ◄◄ or ►► on the remote control until the section you want to listen to is found).

■ To specify a track for playback

While in the stop or playback mode, you can use the number buttons on the remote control to select a track.



Press the number buttons to select a track.

Playback starts from the selected track.

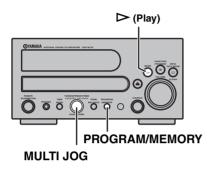
`\\ `\\

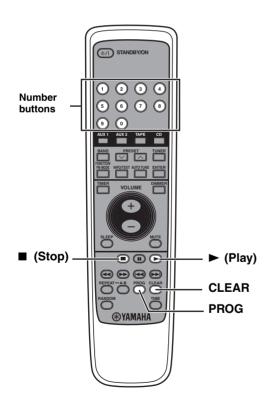
- To enter a 2-digit number, press the number button for the first digit, then the number button for the second digit. For instance, to select track number 26, press '2' and '6'.
- To select numbers less than 10, press '0' and then the number. For example, to select number 3, press '0' and '3'. (A simpler option is to press just the number '3' then wait a few seconds.)

PROGRAMMING PLAYBACK

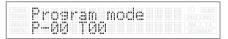
Customizing playback order (Program Play)

You can customize the playback order for tracks stored in the disc. Program play creates a custom play list of up to 32 tracks.

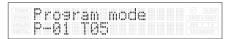




In the stop mode, press PROGRAM/MEMORY (or PROG on remote control).



Select the desired track by rotating MULTI JOG, and press MULTI JOG (or press the number buttons on the remote control) to enter.



3 Repeat step 2 until you store all desired tracks

"FULL" appears on the display and no more can be programmed, if you attempt to program more than 32 tracks.

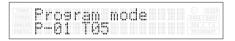
4 Press MULTI JOG (or PROG on the remote control) again to set the program.

The Program mode is finished.

To return to the normal display, press PROGRAM/
MEMORY (or ■ on the remote control) again.

- To playback the program
- 1 Press PROGRAM/MEMORY (or PROG on the remote control).

"Program mode" appears on the display.



- 2 Press ➤ to start programmed playback.
 - The programmed contents are not lost if the unit is turned off, but they are lost when the disc tray is opened.
 - The unit will stop automatically when the playback of all the programmed tracks is finished. The programmed contents disappear from the display, but it is not lost.

`\\\

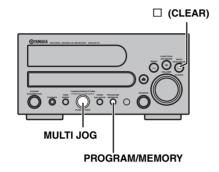
You can play the programmed tracks repeatedly (page 19).

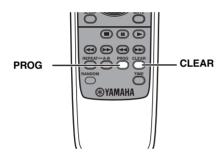
■ To check the programmed order

In the stop mode, press PROGRAM/MEMORY once, then press MULTI JOG (or press PROG on the remote control) repeatedly.

The track number and program number appear on the display.

■ To delete a track from the program





- In the stop mode, press PROGRAM/MEMORY once, then press MULTI JOG (or PROG on the remote control) repeatedly until the program number to be deleted appears on the display.
- 2 Press ☐ (or CLEAR on the remote control) to delete the selected track.
- To clear the program
- 1 In the stop mode, press PROGRAM/MEMORY (or PROG on the remote control).
- Press and hold ☐ for more than two seconds.

`\o'_

If OPEN/CLOSE is pressed, the programmed contents are also cleared.

- To add a track to the program
- In the stop mode, press PROGRAM/MEMORY once, then press MULTI JOG (or PROG on the remote control) repeatedly until the program number of the track you want to insert appears on the display.

If you want to add a track to the end of the program, press PROGRAM repeatedly until "P-END" briefly appears on the display.

2 Rotate MULTI JOG (or press |◄◄ or ▶►। on the remote control) to select a track number, then press PROGRAM/MEMORY (or PRG on the remote control).

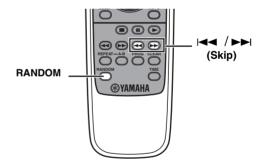
The track is added to the program.

Playing back randomly (Random Play)

You can playback the tracks randomly.

In the stop or play mode, press RANDOM on the remote control.

"RDM" appears on the display.

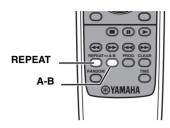


Notes

- If you press ►►I during random playback, the next track is randomly selected and played. If you press I◄◄, the currently played track is played from the beginning. A track cannot be replayed during random playback.
- \bullet To cancel random playback, press RANDOM or \square $\,$ again.

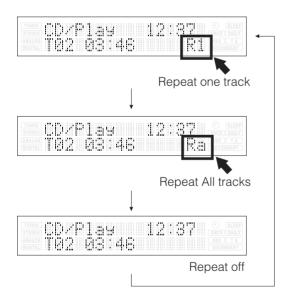
MUSIC DISCS

REPEAT PLAYBACK



- Repeat a currently selected track [R1] or all tracks [Ra].
- 1 Play back the disc (track) you want to repeat. For details, refer to "Playing a CD" (page 15).
- 2 Press REPEAT repeatedly.

Each time REPEAT is pressed, the mode is changed as follows:

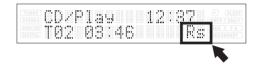


■ Repeat A-B [Rs]

This function repeats playback of any desired portion of the disc.

- 1 Press A-B to select the start point of repeat playback.
 - "Rs" blinks.
- 2 Press A-B to select the end point of repeat playback.

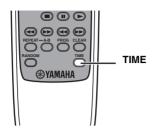
"Rs" lights up. The selected portion is played back repeatedly.



To cancel A-B repeat

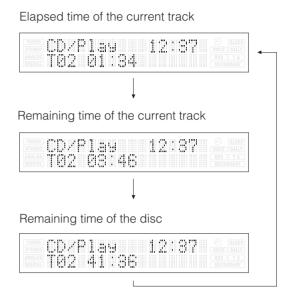
Press A-B repeatedly until "Rs" disappears from the display.

TIME DISPLAY



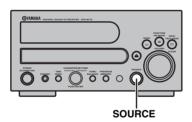
Press TIME during playback.

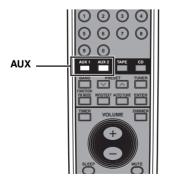
Each time TIME is pressed, the display changes as follows:



LISTENING TO THE EXTERNAL SOURCES

If you connect an other component such as VCR, TV or AUX to this unit, you can enjoy sources played back on that component with this unit.





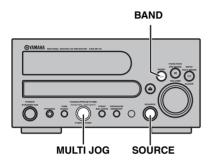
Press SOURCE (or AUX 1 or AUX 2 on the remote control) to select 'AUX 1' or 'AUX 2'.

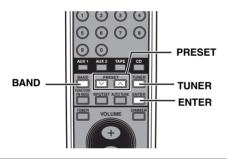
ENJOYING BADIO

TUNING RADIO STATIONS

Tuning radio stations automatically (Auto tuning)

If the radio wave reception is strong in your area, Auto Tuning is a quick and useful way to tune radio stations.





- 1 Press SOURCE (or TUNER on the remote control) repeatedly to select TUNER.
- 2 Press BAND to select FM or AM.
- 3 Press MULTI JOG (or ENTER on the remote control) to select the "Auto tune" mode.

 Each time TUNING MODE is pressed, the mode is changed as follows:

→ Manual tune → Auto tune → Preset tune —

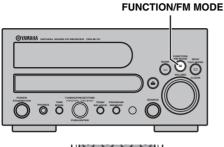
- 4 Select the station you want to listen to by rotating MULTI JOG (or press PRESET on the remote control).
 - When a station is located and tuned in, the Auto tuning process stops.
 - To stop the tuning process, press MULTI JOG.

Tuning radio stations manually (Manual tuning)

If the radio wave reception is weak in your area, tune radio stations manually.

- 1 Follow steps 1 and 2 described in "Auto Tuning".
- 2 Press MULTI JOG (or ENTER on the remote control) to select "Manual tune".
- 3 Rotate MULTI JOG (or keep pressing PRESET on the remote control) until the station you want to listen to is found (FM: 50 kHz steps, AM: 9 kHz steps).
 - "STEREO" appears on the display when a stereo broadcast is tuned in.
 - "TUNED" appears on the display when a broadcast is correctly tuned in.

FM mode





Press FUNCTION/FM MODE to switch between the Stereo mode and Mono mode.

Stereo

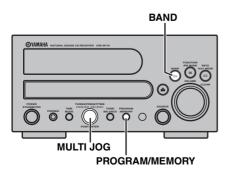
FM broadcasts of stereo signal are received in stereo.
 The STEREO indicator lights up in the display.

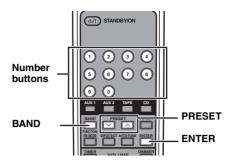
Mono

 When the FM stereo signals are week, select this mode to compensate for them. Reception will now be monaural, increasing signal quality and reducing unwanted noise.

Preset tuning 1

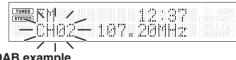
The unit can preset station frequencies selected by Automatic or Manual tuning. Up to 30 FM/AM stations and 10 DAB stations can be stored. With this function, you can select any desired station by pressing the corresponding preset station number.





- Preset stations manually (FM/AM/DAB)
- 1 Press BAND to select FM, AM or DAB reception band.
- 2 Tune into the station you want to store.
- 3 Press PROGRAM/MEMORY.

FM or AM example



DAB example



"CH01" or "01" flashes on the display.

4 Rotate MULTI JOG within four seconds after flashing started to select a desired preset number

You can also use the number buttons on the remote control.

`\o`

- For example, to select the preset number 32, first press the TUNER button, then press '3' and '2'.
- To select numbers less than 10, press '0' and then the number. For example, to select number 6, press '0' and '6'. (A simpler option is to press just the number '6', then wait a few seconds.)

5 Press PROGRAM/MEMORY within four seconds.

If you do not press PROGRAM/MEMORY within four seconds after selecting the channel, the selection is canceled.

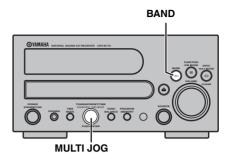
6 Repeat steps 1 to 5 until all desired stations are preset.

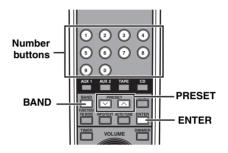
- Preset Automatically (FM/AM only)
- 1 Press BAND to select AM or FM.
- Press PROGRAM/MEMORY for more than three seconds.

"Auto memory" flashes on the display.

Up to 30 of the best received stations in your area are stored automatically.

Preset tuning 2



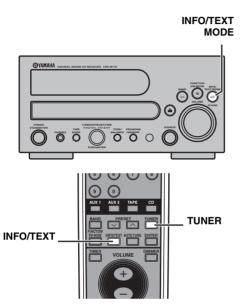


- To select FM/AM preset stations
- 1 Press BAND to select AM or FM.
- 2 Select "Preset tune" by pressing MULTI JOG (or ENTER on the remote control).
- 3 Rotate MULTI JOG (or press the number buttons or PRESET on the remote control) until the desired preset station is found.
- To select DAB preset stations

See "Preset tune" on page 28.

RECEIVING RADIO DATA SYSTEM

The Radio Data System is a transmission system for FM stations used mainly in the U.K. and Europe. The Radio Data System transmissions include various types of information such as PS (Program Service), PTY (Program Type), RT (Radio Text), and CT (Clock Time). Follow the procedure below to receive FM stations by the Radio Data System transmissions on this unit.



1 Turn into an FM station (page 21).

2 Press INFO/TEXT MODE.

Each time INFO/TEXT MODE (or INFO/TEXT on the remote control) is pressed, the mode is changed as follows:



`\<u>\</u>'

When a mode is selected, the display screen blinks for three seconds, then the information is displayed.

PROGRAM SERVICE

The name of the station being received is displayed. The frequency will be displayed, if there is no program service data.

CLOCK TIME

The current time is displayed and updated every minute.

"NO CT" is displayed if there is no time data.

PROGRAM TYPE

The program type is displayed (see page 25 for a list of program types).

RADIO TEXT

Information about the program (such as the title of the song or name of the singer) being received is displayed using a maximum of 64 alphanumeric characters.

The mode is automatically switched to PROGRAM SERVICE mode, if there is no radio text data.

TRAFFIC ANNOUNCE

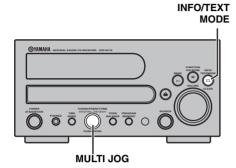
Traffic information is displayed. The TRAFFIC ANNOUNCE MODE switches to PROGRAM SERVICE mode, when a traffic program is found. The mode switches to PROGRAM SERVICE mode without searching for a traffic program, if the current selected station is transmitting a traffic program signal.

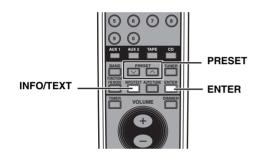
Notes

- The available Radio Data System information types vary depending on the station.
- If the FM Radio Data System station's signal transmission is too weak, this unit may not be able to receive Radio Data System information completely. In particular, RT (Radio Text) information uses a lot of bandwidth, so it may not be available even when other modes are selectable.

PTY Search mode

You can tune into FM Radio Data System stations by selecting a program type (genre). Once you select a program type, this unit automatically searches for FM Radio Data System stations currently broadcasting the corresponding programs.





- 1 Turn into an FM station (page 21).
- 2 Press INFO/TEXT MODE (or INFO/TEXT on the remote control) for more than three seconds.

3 Rotate MULTI JOG (or press PRESET on the remote control) to select the desired PTY program.

The available 31 program types are as follows:

Program Type (genre)

News	News
Current Affairs	Current Affairs
Information	Information
Sport	Sports
Education	Education
Drama	Drama
Cultures	Cultures
Science	Science
Varied Speech	Varied Speech
Pop Music	Pop Music
Rock Music	Rock Music
Easy Listenin9	Easy Listening
Li9ht Classics	Light Classics
Serious Classic	Serious Classic
Other Music	Other Music
Weather & Metr	Weather & Meteorology
Finance	Finance
Children's Pro9	Children's Program
Social Affairs	Social Affairs
Religion	Religion
Phone In	Phone In
Travel & Tourin	Travel & Touring
Leisure & Hobby	Leisure & Hobby
Jazz Music	Jazz Music
Country Music	Country Music
National Music	National Music
Oldies Music	Oldies Music
Folk Music	Folk Music
Documentary	Documentary
Alarm Test	Alarm Test
Alarm-Alarm!	Alarm-Alarm!

4 Press MULTI JOG (or ENTER on the remote control).

The program type stops flashing.

5 Rotate MULTI JOG (or press PRESET on the remote control) to start seeking.

- The unit stops searching when it finds a station broadcasting the selected type of program.
- PTY Search will stop at the beginning frequency if the program type is not found.
- To cancel search, press INFO/TEXT MODE.

DAB TUNER

About DAB

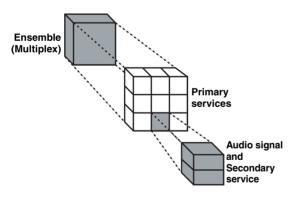


Digital Audio Broadcasting

DAB (Digital Audio Broadcasting), also known as digital radio, is a new way of radio broadcasting. DAB is broadcast using digital signals instead of analog signals, resulting in near CD-quality sound. Analog signals (i.e. AM/FM) are susceptible to interference (i.e. distortion and noise) caused by electrical equipment, weather conditions, tall buildings, mountains, etc.; digital signals are not. Thus, with DAB, there is virtually interference-free reception and no hiss or crackle.

Another advantage of DAB is that a large amount of information can be carried within the digital signal. DAB is broadcast in blocks of data called ensembles (also known as multiplexes). Several radio programs (called primary services) can be broadcasted simultaneously in each ensemble. This means that you can choose between several radio programs within one frequency.

In addition to the audio signal, secondary services are also broadcasted and displayed on this unit's front panel display. Part of the secondary services are text data information called DLS (Dynamic Label Segment). For more information, see page 31.



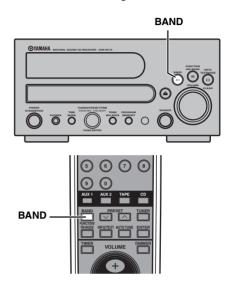
With DAB, there is no need to remember channel frequencies, either. All broadcasts are selected by simply selecting the service name.

Notes

- You can tune the range of channels are 10A to 12D in UK.
- The sound quality and PAD/SI information are controlled by the DAB broadcaster, not this unit. Not all DAB broadcasters transmit PAD/SI information.
- DAB signals are broadcast in Band-III (174 240 MHz).

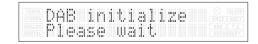
Setting up your DAB tuner

An initial scan for DAB services will need to be performed before the unit can tune into DAB broadcasts. A channel list is created during the initial scan.

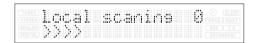


Press BAND to select DAB.

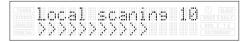
The following screen appears for 2 seconds.



The unit starts to scan for DAB services in the area and add them to the channel list as they are found. The scan takes about 10 seconds.



The number of channels found is displayed. The number is updated when new channels are found.



Once the initial scan is complete and DAB channel list created, the channels are listed in alphanumeric order.

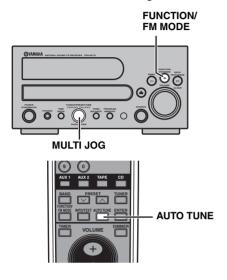
 If no broadcast services are found, check that the antenna is correctly connected to the unit.

Auto tuning

If the unit is moved to a new area or you want to check if there are new DAB channels available in your area, you can perform a scan.

There are two ways to scan certain ranges.

- Local scan: Use it to scan specified ranges in band III.
- Full scan: Use it to scan all ranges in band III.



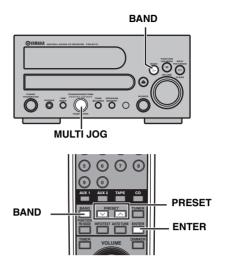
- 1 Press FUNCTION/FM MODE while listening to a DAB broadcast.
- 2 Rotate MULTI JOG, then press MULTI JOG to select either "Full scan" or "Local scan".
 With the remote control,

Local scan: press AUTO TUNE briefly.

Full scan: press and hold AUTO TUNE for several seconds.

The unit starts to scan for new DAB channels. If new DAB channels are found, they are added to the DAB channel list.

Using the channel list



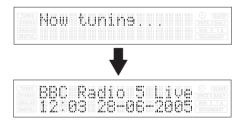
Follow procedure below to tune into the channels found by the unit.

- 1 Press BAND to select DAB.
- 2 Rotate MULTI JOG to the left or right (or press PRESET on the remote control) to scroll through the channels in the channel list.

The current channel being broadcasted is displayed on the first line. A channel from the channel list is displayed on the second line.

When you have found a channel that you want to tune into, press MULTI JOG once (or ENTER on the remote control).

The channel is broadcasted and channel information is displayed.



- Press ENTER to display the signal strength of a channel being broadcasted. Press ENTER again to cancel the signal strength display.
- In the channel list, channels are displayed in alphanumeric order, with numbers coming first. Stations such as 6 Music from the BBC will be listed early in the list; station each as Virgin Radio will be listed later.
- If the unit is unable to tune into a DAB channel (e.g. the channel is no longer broadcasting, the unit is moved out of broadcasting range), then a question mark (?) is displayed in front of the channel name. If you select a channel with a question mark, "No stations Available" is displayed.

`\oʻ:

 When the primary services including secondary services are broadcasting, the "SECONDARY" flashes on the display.

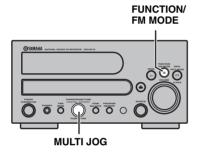


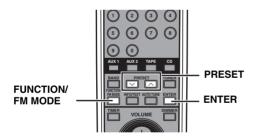
 When the secondary services are broadcasted, the "SECONDARY" is displayed.



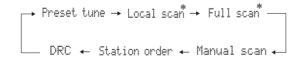
Function mode

Follow the procedure below to preset radio stations manually.





In DAB reception mode, use Function Control to set system options. There are six options in the function control.

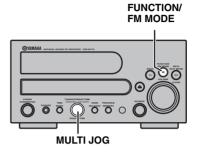


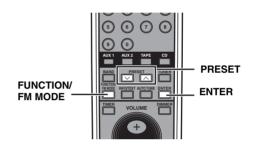
* Local scan and Full scan:

See "Auto tuning" (page 27).

Preset tune

Use this option to select the preset DAB stations. To preset the DAB station, See "Preset stations manually (FM/AM/DAB)" on page 22.





- 1 Press FUNCTION/FM MODE while listening to a DAB broadcast.
- 2 Rotate MULTI JOG (or press PRESET on the remote control) until "Preset tune" is displayed.



3 Press MULTI JOG (or ENTER on the remote control).

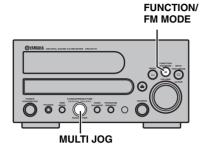
The currently tuned station is displayed.

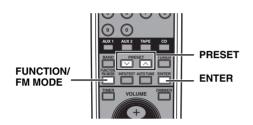
- 4 Rotate MULTI JOG (or press PRESET on the remote control) until the station you want to listen to is displayed.
- 5 Press MULTI JOG (or ENTER on the remote control) to select the preset station.



Manual tune

This option allows you to manually tune into a channel and view a continuously updated display of the signal strength. This is very useful when adjusting or positioning an antenna for better reception.





- 1 Press FUNCTION/FM MODE while listening to a DAB broadcast.
- 2 Rotate MULTI JOG (or press PRESET on the remote control) until "Manual tune" is displayed, then press MULTI JOG (or ENTER on the remote control).
- 3 Rotate MULTI JOG (or press PRESET on the remote control) to scroll through the channel list.
- 4 Press MULTI JOG (or Enter on the remote control) when the channel you wish to tune in is displayed.

The signal strength indicator is displayed.



- While viewing the indicator, adjust or reposition the antenna until the best reception is indicated.
- 6 Press MULTI JOG (or ENTER on the remote control) to cancel Manual tune and resume normal reception.

Station order

To set the order in which stations are listed, use station order. There are three items:

• Fav Station (Favorite station)

This unit keeps track of the top 10 stations you listen to. Favorite stations have a "♥" displayed after the station name and are listed at the top of the channel list.

Alphanumeric

This is the default order. Channels are listed in alphanumeric order (0-9, A-Z) by the first letter of the station name.

Active station

This option will list active stations (stations that can be received by the unit) at the top of the channel list. Channels that are in the list but have no service in your area are listed at the bottom of the channel list.

- 1 Press FUNCTION/FM MODE while listening to a DAB broadcast.
- 2 Rotate MULTI JOG (or press PRESET on the remote control) until "Station order" is displayed.

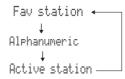


3 Press MULTI JOG (or ENTER on the remote control).

The current order option is displayed in the first line of the display.

4 Rotate MULTI JOG (or press PRESET on the remote control) to change between the orders.

Each time MULTI JOG is rotated (or PRESET is pressed), the mode changes as follows:



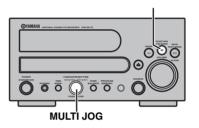
5 Press MULTI JOG (or ENTER on the Remote control).

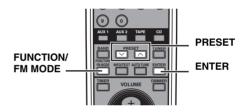
■ DRC value

Dynamic range is the decibel (dB) range between the highest and lowest sounds in a broadcast. Some DAB broadcasters transmit a wide dynamic range (enabling high quality sound), accompanied by Dynamic Range Control (DRC) data. The DRC can be used to compress the dynamic range of the broadcast, making softer sounds easier to hear. This is especially useful when listening to a DAB service in a noisy environment or at a low volume (such as at night).

There are three values of DRC you can apply.



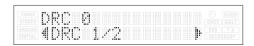




- 1 Press FUNCTION/FM MODE while listening to a DAB broadcast.
- 2 Rotate MULTI JOG (or press PRESET on the remote control) until "DRC value" is displayed.



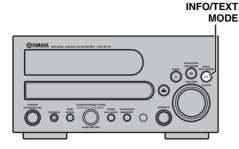
- 3 Press MULTI JOG (or ENTER on the remote control).
- 4 Rotate MULTI JOG (or press PRESET on the remote control) to select the desired DRC level.



5 Press MULTI JOG (or ENTER on the remote control).

Changing display setting

You can choose the information type displayed in the second line of the display while listening to a DAB channel.



Press INFO/TEXT MODE (or INFO/TEXT on the remote control).

Each time INFO/TEXT MODE is pressed, the information is displayed as follows:



DLS

The Dynamic Label Segment (DLS) is the scrolling text label supplied by the radio station. It may be information about the song or program being broadcasted.



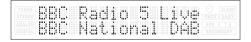
■ Program type

Displays the type of broadcast supplied by the DAB station, such as Pop, Rock or Classical music.



Multiplex name

Displays the name of the Multiplex that is broadcasting the program.



Date and time

Displays the current date and time.

No matter which DAB mode is selected, the unit receives clock time data from the DAB station and adjusts the clock.

 The clock setting is automatically adjusted to the clock time data being broadcast by the DAB station.

Note

Some functions (such as Sleep Timer) might be affected if the clock is readjusted.

■ Bitrate mode

Displays the bitrate of the currently playing broadcast.



Channel and frequency

Displays the channel and frequency of the currently playing broadcast.



■ Sig error rate (Signal error rate)

Displays the digital bit error rate (0-99) of the currently playing broadcast. This is for information only; no adjustment is available. The lower the figure, the better the quality of the received broadcast.



■ Sw version (Software version)

Displays the version number of the installed software. This is for information only; no adjustment is available.



TROUBLESHOOTING

If there is any problem with this unit, check the following items. If you cannot solve your problem with the following remedies or if your problem is not listed below, turn off and unplug the unit, then consult the nearest authorized YAMAHA dealer or service center.

General

Problem	Cause	Solution
Power turns on but	The power cable may be connected	Make sure the power cable is plugged
immediately shuts off.	improperly.	into the outlet firmly.
	The speaker cable may be shorted.	Make sure all speaker cables are
		connected properly.
	This unit may receive a strong	Set this unit to the Standby mode, then
	electrical shock such as from a	disconnect the power cable. Wait for
	lightening bolt or excessive static	about 30 seconds, then connect the
	electricity.	power cable and turn on this unit.
The speakers make no	The volume may be set to minimum	Adjust the volume level.
sound.	level.	
	The Mute function may be enabled.	Cancel the Mute function.
	The input source may be incorrect.	Select the correct input source.
	The cables may be connected	Make sure all cables are connected
	improperly.	properly. (page 8)
	The disc loaded into this unit may be	Make sure you use a disc supported by
	not compatible.	this unit.
Sound suddenly turns off.	The Sleep Timer might be set.	Turn on this unit and play the source
		again.
Sound is too low on one	The cables may be connected	Make sure all cables are connected
side.	improperly.	properly.
The volume does not	The power of the equipment	Turn on the power of the equipment
increase or sounds are	connected to this unit's output jack	connected to this unit's output jack.
distorted.	may be turned off.	
This unit does not operate	This unit may receive a strong	Set this unit to the Standby mode, then
properly.	electrical shock, such as from a	disconnect the power cable. Wait for
	lightening bolt or excessive static	about 30 seconds, then connect the
	electricity, or drop in power supply.	power cable and turn on this unit.
A digital equipment or high	This unit may be placed close to the	Place this unit further away from such
frequency equipment	digital equipment or high-frequency	equipment.
produces noises.	equipment.	TD 41 C4
The volume does not	The power of the component	Turn on the power of the component
increase or sounds are distorted.	connected to a this unit's output jack	connected to a this unit's output jack.
Sound played on this unit	may be turned off.	Usa propor audio sovress
cannot be recorded with an	You may be trying to make a digital	Use proper audio sources.
external recorder.	recording with an analog source, or analog recording with a digital source.	
externar recorder.	The recording equipment may be	Connect them with a digital connection.
	connected to this unit with an analog	Connect them with a digital connection.
	connection.	
The clock setting has been	The power to this unit may be lost	Make sure the power cable is plugged
cleared.	more than a week.	into outlet firmly, then set the clock
0.00.00.	more than a week.	again (page 12).
A digital equipment or high	This unit may be placed close to the	Place this unit further away from such
frequency equipment	digital equipment or high-frequency	equipment.
produces noises.	equipment.	- cqp.iiciii.
P 22200	- 1r	

Remote control

Problem	Cause	Solution
The remote control does not work for operating this unit.	The remote control may be operated outside the remote control operation range.	For information on the remote control operation range, refer to "USING THE REMOTE CONTROL" (page 5).
	The remote control sensor on this unit may be exposed to direct sunlight or lighting (inverted fluorescent lamps).	Change the lighting or this unit's orientation.
	The remote control mode selection may be improper. The batteries may be worn out.	Select the mode that suits your purpose. Replace the batteries with new ones.

Disc playback

Problem	Cause	Solution
Some button operations do not work.	Some discs do not support certain this unit functions.	
Playback does not start immediately when pressing	The disc may not be set in the disc tray properly.	Set the disc in the disc tray properly.
> .	The disc may be dirty.	Wipe the disc clean.
	The disc loaded into this unit may be not compatible.	Make sure you use a disc supported by this unit.
	When moved this unit from a cold place to warm one, condensation may be form on the disc reading lens.	Wait for one to two hours, then try again.
The message "No Disc" appears in this unit display even though a disc is inserted.	The disc may not be set in the disc tray.	Set the disc in the disc tray properly.

Radio reception

■ FM/AM

Problem	Cause	Solution
The Preset Tuning function	The preset (memory) may have been	Preset radio stations again.
(page 22) does not work.	erased.	
The preset station settings	The power to this unit may be lost	Make sure the power cable is plugged
have been cleared.	more than a week.	into outlet firmly, then preset the
		stations again.

■ FM

Problem	Cause	Solution
Too much noise is	The FM antenna may be connected	Make sure the FM antenna is connected
generated during stereo	improperly.	properly.
broadcast.	The radio station you selected may	Try Manual Tuning to increase the
	be far away from your area or radio	signal quality or use a
	wave reception is weak in your area.	multi-channel outdoor antenna.
Even with an outdoor	Multipath reflection or other radio	Change the antenna's height, direction,
antenna, radio wave	interferences may occur.	or placement.
reception is weak (audio is		
distorted).		
The Auto Tuning function	The radio station you selected may	Try Manual Tuning to increase the
(page 27) does not work.	be far away from your area or radio	signal quality or use a multi-channel
	wave reception is weak in your area.	outdoor antenna.

■ AM

Problem	Cause	Solution
Too much noise is generated.	The noises may be generated from atmospheric electricity, lightening, fluorescent lights, motors, or thermostat electric devices.	Connect an outdoor antenna and establish better grounding to decrease noises. However, it is difficult to eliminate these types of noises.
	If too much noise is generated especially in the evening, this unit may be placed close to a TV.	Place this unit further away from a TV.
The Auto Tuning function (page 27) does not work.	The AM loop antenna may be connected improperly.	Make sure the AM loop antenna is connected properly.
	The radio station you selected may be far away from your area or radio wave reception is weak in your area.	Try Manual Tuning to increase the signal quality.

■ DAB

Problem	Cause	Solution	
Cannot tune in to any DAB stations.	There is no DAB coverage in your area		
The service reception is weak.	The positioning of the indoor DAB antenna and/or the unit isn't optimal for DAB reception.	Use "Manual tune" (page 29) to locate the best DAB antenna and unit positioning for optimal DAB reception.	

34

ADDITIONAL INFORMATION

Disc Information

The following tables explain the disc types supported by this unit.

Music Discs

Type of Disc	Disc Logo Mark		
Music CD (Compact disc	COMPACT DIGITAL AUDIO		
digital audio)	DIGITAL AUDIO Recordable	COMPACT DIGITAL AUDIO ReWritable	Music CDs made by copying onto a CD-R or CD-RW.



Disc logo marks are printed on the disc and the disc jacket.

Notes

- Only use discs from a reputable manufacturer. Some discs cannot be played back, depending on recording conditions and disc characteristics.
- Do not use discs with non-standard shapes or sizes.



- This unit can play the disc types associated with the logos shown above. (Do not attempt to load any other type of disc into the unit, or the unit may be damaged.)
- Some discs cannot be played depending on the recording conditions such as PC environment and application software.
 Failure can also result from disc characteristics and condition, like material quality, scratches or curvature.

Handling a disc

- Do not touch the surface of the disc. Hold a disc by its edge and center hole.
- center hole.

 Do not leave a disc in the tray when you are not playing it.
- Do not write on the disc with a pencil or other marker.
- Do not stick tape, seals or other attachments to a disc, and do not bring into contact with glue.
- Do not use a protective cover to prevent scratches.
- Do not use a disc whose surface can be printed with a commercially available label printer.
- Do not put a disc in a place with direct sunlight, high temperature, high humidity or a lot of dust.



- If a disc becomes dirty, wipe it with a clean, dry cloth from the center out to the edge. Do not use record cleaner or paint thinner.
- To avoid malfunction, do not use a commercially available lens cleaner.



SPECIFICATIONS

AUDIO SECTION
Minimum RMS output power per channel
Input sensitivity/ Impedance
Tape, AUX 1, AUX 2 300 mV/47 k Ω
• Frequency Response
CD etc
Total Harmonic Distortion
CD etc. 1kHz
Signal to Noise Ratio (IHF-A Network)
CD etc. (300 mV Input shorted)
FM SECTION
• Tuning Range (50 kHz steps) 87.50 to 108.00 MHz
Signal to Noise Ratio (Mono)
AM SECTION
• Tuning Range (9 kHz steps) 522 to 1629 kHz
Signal to Noise Ratio
• Sensitivity 600 $\mu V/m$
DAB SECTION
• Tuning Range (BAND III)
• Input
• Sensitivity 96 dBm
• Selectivity
Audio out Stereo, 2.0 Vp-p
• Digital out

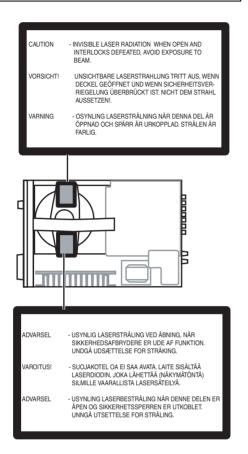
CD PLAYER SECTION

Signal to Noise Ratio	90 dB
• Total Harmonic Distortion	0.007%
Separation	90 dB
GENERAL	
Power Supply	AC 230V, 50 Hz
Power Consumption	75 W
Standby Power Consumption	0.9 W
Laser pick up Material Wavelength Laser output	789 nm
• Dimensions (W x H x D)	215 x 110 x 359 mm
• Weight	4.4 kg

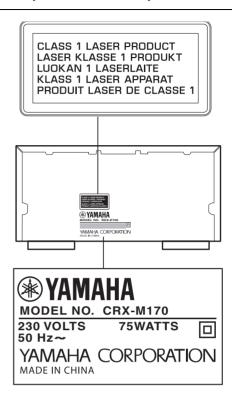
Specifications are subject to change without notice.

CAUTION

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



The name plate is located on the rear panel of the unit.





© 2005 YAMAHA CORPORATION All rights reserved.