

VOLUM

# CRX-E150

CD Receiver Ampli-Tuner CD







UCA

OWNER'S MANUAL MODE D'EMPLOI

## SAFETY INSTRUCTIONS



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

#### **IMPORTANT!**

Please record the serial number of this unit in the space below.

Model:

Serial No .:

The serial number is located on the rear of the unit. Retain this Owner's Manual in a safe place for future reference.

- 1 Read Instructions All the safety and operating instructions should be read before the unit is operated.
- **2** Retain Instructions The safety and operating instructions should be retained for future reference.
- **3** Heed Warnings All warnings on the unit and in the operating instructions should be adhered to.
- **4** Follow Instructions All operating and other instructions should be followed.
- **5** Water and Moisture The unit should not be used near water for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
- **6** Carts and Stands The unit should be used only with a cart or stand that is recommended by the manufacturer.
- **6A** A unit and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit and cart combination to overturn.



- 7 Wall or Ceiling Mounting The unit should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8 Ventilation The unit should be situated so that its location or position does not interfere with its proper ventilation. For example, the unit should not be situated on a bed, sofa, rug, or similar surface, that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
- **9** Heat The unit should be situated away from heat sources such as radiators, stoves, or other appliances that produce heat.
- **10** Power Sources The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.

#### Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

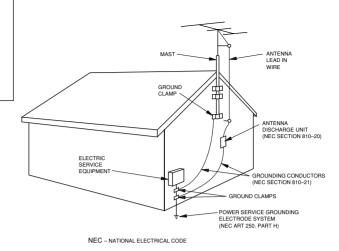
#### WARNING

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

- 11 Power-Cord Protection Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- **12** Cleaning The unit should be cleaned only as recommended by the manufacturer.
- **13** Lightning For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time. Unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
- 14 Object and Liquid Entry Care should be taken so that objects do not fall into and liquids are not spilled into the inside of the unit.
- **15** Damage Requiring Service The unit should be serviced by qualified service personnel when:
  - **A.** The power-supply cord or the plug has been damaged; or
  - **B.** Objects have fallen, or liquid has been spilled into the unit; or
  - **C.** The unit has been exposed to rain; or
  - **D.** The unit does not appear to operate normally or exhibits a marked change in performance; or
  - **E.** The unit has been dropped, or the cabinet damaged.
- **16** Servicing The user should not attempt to service the unit beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.
- **17** Power Lines An outdoor antenna should be located away from power lines.
- **18** Grounding or Polarization Precautions should be taken so that the grounding or polarization is not defeated.

#### Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.



EXAMPLE OF ANTENNA GROUNDING

#### FCC INFORMATION (for US customers only)

#### 1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

- 2. IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
- 3. NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices.

This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/ s.

In the case of radio or TV interference, relocate/ reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to coaxial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Electronics Corp., U.S.A. 6660 Orangethorpe Ave, Buena Park, CA 90620.

The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

#### We Want You Listening For A Lifetime

YAMAHA and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion – and, most importantly, without affecting your sensitive hearing. Since hearing damage from loud sounds is often undetectable until it is too late, YAMAHA and the Electronic Industries Association's Consumer Electronics Group recommend you to avoid prolonged exposure from excessive volume levels.



#### SUPPLIED ACCESSORIES ACCESSOIRES FOURNIS

- After unpacking, check that the following parts are contained.
- Après le déballage, vérifier que les pièces suivantes sont incluses.

- · Remote control
- Télécommande

POWER ふ **WYAMAHA** 

- AM loop antenna
- Antenne cadre AM



- Indoor FM antenna
- Antenne intérieure FM

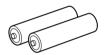




(U.S.A. and Canada models) (Modèles pour les Ètats-Unis et le Canada)

(Australia model) (Modèles pour l'Australie)

- Batteries (size AA, R06, UM-3)
- Piles (format AA, R06, UM-3)



## ENGLISH

#### INTRODUCTION

Thank you for purchasing this YAMAHA product. We hope it will give you many years of trouble-free enjoyment. For the best performance, read this manual carefully. It will guide you in operating your YAMAHA product.

#### FEATURES

#### <Tuner>

- Minimum RMS Output Power per Channel 40 W + 40 W (6Ω, 20 Hz to 20 kHz, 0.1% THD)
- Full Operation System Remote Control
- 40-Station FM/AM Preset Tuning
- SUBWOOFER Output Terminal

### <CD player>

- S-bit DAC and 8fs Digital Filter
- Optical Digital Output
- Random, Repeat, and Program Play
- CD TEXT Display
- Tape Programming
- CD-RW Compatible

The CD receiver CRX-E150 is the main unit of the YAMAHA PianoCraft Series. You could upgrade the system by adding the cassette deck (KX-E100) and MD recorder (MDX-E100)\*.

\* MD recorder (MDX-E100) may not be available for some areas.

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#### ADD KX-E100 AND/OR MDX-E100 TO YOUR SYSTEM

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Before recording
Dubbing setting
TAPE programming

#### **ADDITIONAL INFORMATION**

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#### PRECAUTIONS: READ THIS BEFORE OPERATING THIS UNIT

#### CAUTIONS

- **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, and clean place with at least 10 cm above, behind and on both sides of this unit away from direct sunlight, heat sources, vibration, dust, moisture, and/or cold.
- **3** Position this unit away from other electrical appliances, motors and transformers to avoid humming sounds, do not place this unit where it may get exposed to rain or any kind of liquid to prevent fire or electrical shock.
- 4 Avoid extreme temperature swings or excessive use of humidifier in the room where this unit is installed to prevent condensation inside this unit, which may cause an electrical shock, fire damage to this unit, and/or personal injury.
- **5** Do not cover this unit with a newspaper, a tablecloth, a 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.
- 6 Avoid installing this unit in a place where foreign objects and liquid might fall. It might cause a fire, damage to this unit and/or personal injury. Do not place the following objects on this unit:
  - 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 cause an electrical shock to the user and/or damage to this unit.
- 7 Be sure to place this unit on a level surface. If not so, this unit will fail to work normally and cause damage to the disc(s) and this unit itself.
- **8** Do not use force on switches, controls or connection cables. Never pull the cables when disconnecting them.
- **9** Only voltage specified on this unit must be used. Using this unit with a higher voltage than specified is dangerous and may result in fire or other accidents. YAMAHA will not be held responsible for any damage resulting from the use of this unit with a voltage other than that specified.
- **10** Do not attempt to clean this unit with chemical solvents; this might damage the finish. Use a clean, dry cloth.
- **11** Disconnect the power cord from the wall outlet when not planning to use this unit for a long period of time, or during an electrical storm, as they may cause damage by lightning.
- **12** Do not attempt to modify or fix this unit. Contact the qualified YAMAHA service personnel when any service is needed. Cabinet should never be opened for any reasons.
- **13** Be sure to read "Troubleshooting" section regarding common operating errors before concluding that this unit is faulty.

The 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 FOR CARRYING THE UNIT

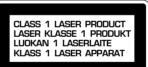
Before carrying the unit, first remove all discs from the unit, press STANDBY/ON to turn the unit off, then disconnect the AC power plug from the wall outlet.

## VOLTAGE SELECTOR (General model only)

The voltage selector (on the rear panel of this unit) must be correctly set to the voltage used locally before making any connection to the AC power supply.

#### FOR CANADIAN CUSTOMERS

To prevent electric shock, match wide blade of plug to wide slot and fully insert. This Class B digital apparatus complies with Canadian ICES-003.



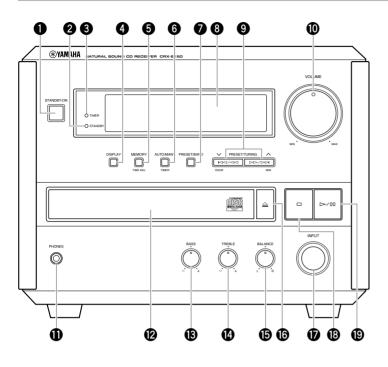
This compact disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the rear exterior.

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

#### NAMES OF BUTTONS AND CONTROLS

## English





- **1** STANDBY/ON (P.8)
- **2 STANDBY** indicator (P.8)
- **3** TIMER indicator (P.16)
- OISPLAY
- G MEMOEY/TIME ADJ (P.10,15)
- **6** AUTO/MAN'L/TIMER (P.9,16)
- **PRESET/BAND** (P.9)

8 Display (P.3)

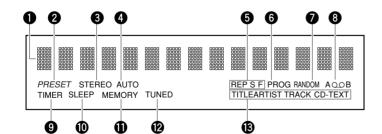
**9** PRESET/TUNING // (P.9)

When TUNER is selected as an input source

When CD is selected as an input source

- **(P.8**) **VOLUME** (P.8)
- **D PHONES** (P.8)
- Disc Tray
- **BASS** (P.8)
- **(P.8**) **TREBLE** (P.8)
- **BALANCE** (P.8)
- Open/Close (P.11)
- **(P.8**) **INPUT** (P.8)
- **1** (Stop) (P.11)
- **(P**)/□□ (Play/Pause) (P.11)

## Display



- Multi information display
- **2 PRESET** indicator (P.10)
- **3** STEREO indicator (P.9)
- **4 AUTO** indicator (P.9)
- **3 RER S/F** (repeat single/full) indicator (P.13)
- **6 PROG** (program) indicator (P.13)
- **RANDOM** indicator (P.12)
- **8** A OO B Tape side indicator (P.20)
- **9 TIMER** indicator (P.16)
- **O** SLEEP indicator (P.17)
- **WEMORY** indicator (P.10)
- **12 TUNED** indicator (P.9)
- **(B)** CD Text indicators (P.12)

#### NAMES OF BUTTONS AND CONTROLS

#### POWER ᠆᠕ 0 2 з 6 5 2 9 8 +10 100 Г REF PROG RANDOM С 3 B. TIME ⊳⁄00 Г ٦ Г TAPE DIRECTION Г 6 PRESE TUNER RESET $\square$ $\square$ 4 TAPE MD CD 6 1 ٢ 8 AUX 9 TAPE REC/PAUSE MD REC/PAUSE ſ MODE - DUBBING - START Г DISPLAY 0 Ð Ð 12 VOLUME **WYAMAHA**

## **Remote control**

- **1 POWER** (P.8)
- **2** Preset numbers (P.10)
- **3** A/B/C/D/E (P.10)
- ④ PRESET ∧/∨ (P.10)
- **5 TUNER** (P.10)
- **6** MD (MDX-E100) (P.18)
- **TAPE** (KX-E100) (P.18)
- **8 CD** (P.11)
- **9 AUX** (The equipment connected to the AUX terminal)
- **O** SLEEP (P.17)
- **() DISPLAY** (P.16)
- **VOLUME** + (P.8)

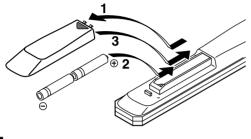
#### Note

• ⑤-⑥ are operation buttons and input selectors for each component.

## The remote control

This remote control controls a whole system: not only CRX-E150 but also a cassette deck (KX-E100) and MD recorder (MDX-E100) that level up your system.

## Loading the batteries for the remote control



Remove the battery compartment cover.

Insert batteries into the battery compartment.

Replace the battery compartment cover.

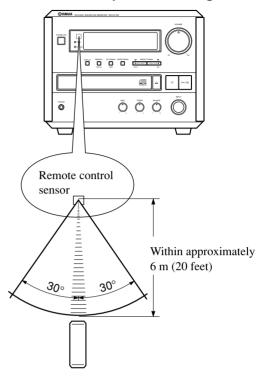
#### **Battery replacement**

If you find that the remote control must be used closer to the main unit than usual, the batteries are weak. Replace batteries with new ones.

#### Notes

- Use only AA, R06, UM-3 batteries for replacement.
- Be sure the polarities are correct. (See the illustration inside the battery compartment.)
- Remove the batteries if the remote control will not be used for an extended period of time.
- If batteries leak, dispose of them immediately. Avoid touching the leaked material or letting it come in contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.

#### **Remote control operation range**



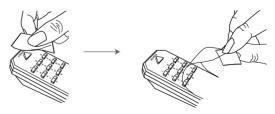
#### Notes

- There should be no large obstacles between the remote control and the main unit.
- If the remote control sensor is directly illuminated by strong lighting (especially an inverter type of fluorescent lamp, etc.), it might cause the remote control not to work correctly. In this case, reposition the main unit to avoid direct lighting.

#### Removing the protection sheet

The remote control is shipped with a protection sheet to prevent the surface from being scratched during transportation.

When removing the sheet, first put adhesive tape on an edge of the remote control so that the tape sticks to the sheet. Then peel the sheet off with the tape.



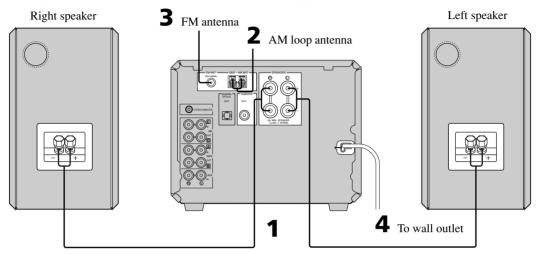
#### Note

• Do not scratch the remote control surface when peeling the sheet off.

## **Connecting the speakers**

## Never plug the AC power cord to the wall outlet until all connections are completed.

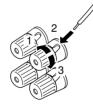
Follow the steps as shown below to connect the system using the supplied cords and accessories.



Connect the Speakers.

- ① Unscrew the knob.
- (2) Remove approx. 10 mm (3/8") of insulation from each of the speaker wires and insert the bare wire into the terminal.
- (3) Tighten the knob to secure the wire.

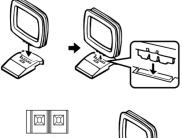
Red: positive(+) Black: negative(-)



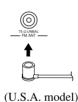
2

Connect the AM Antenna.

Set up the AM loop antenna, then connect it.







**4** Connect the AC power cord to a wall outlet.

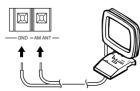
#### Notes

- Use external FM/AM antennas if you need better reception. Consult your dealer.
- The AM loop antenna should be placed apart from the main unit. The antenna may be hung on a wall.

#### To Connect the Subwoofer (optional)

You can reinforce the bass frequencies by adding a subwoofer (optional).

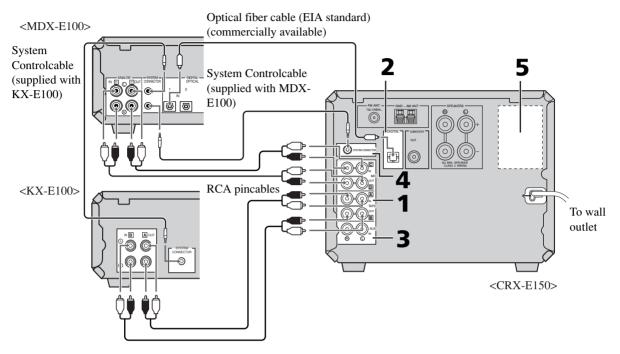
Connect the **SUBWOOFER OUT** terminal of the unit to the INPUT terminal of the subwoofer.



## **Connecting other components**

To enhance your system, you can connect other component. Refer to the instructions of each component.

#### Connecting KX-E100 and MDX-E100



Connect A to A, and B to B (for connecting KX-E100), C to C and D to D (for connecting MDX-E100) using RCA pin cable.

#### **2** Connect **DIGITAL OPTICAL OUT** of CRX-E150 to **DIGITAL OPTICAL IN** of MDX-E100.

Take off the covers of the optical fiber cable plug, the **DIGITAL OPTICAL OUT** jack, and the **DIGITAL OPTICAL IN** jack before making digital connections. Be sure to replace the terminal's cover when the terminal on the rear panel is not being used, in order to protect from dust.

Connect an external component to the AUX terminal of CRX-E150.

4 Connect CRX-E150 and KX-E100 or MDX-E100 with the system control cable. The connection using the SYSTEM CONNECTOR jack allows you to control this unit as well as the connected components of YAMAHA PianoCraft series.

• If your system does not include MDX-E100, connect CRX-E150 and KX-E100 directly.

#### **5** AC OUTLET <Except for the U.K. model>

Connect the AC power plug of MDX-E100 to the AC outlet of CRX-E150. Then connect the plug of KX-E100 to the AC outlet of MDX-E100.

• If your system does not include MDX-E100, connect the plug of KX-E100 to the AC outlet of CRX-E150.

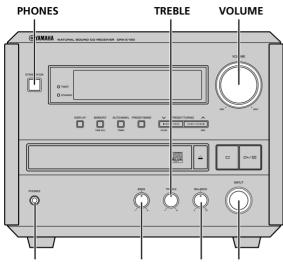
#### Caution

3

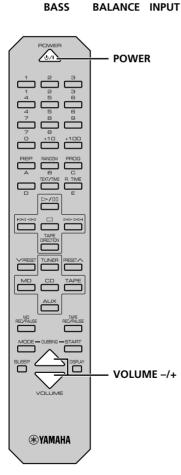
- Never turn CRX-E150 on until all connections between components have been completed.
- Never connect or disconnect the system control cable and/or power cord while the system components are turned on.

#### LISTENING TO A SOURCE

This chapter explains the basic operations common to tuning, playing CD and other connected components.



STANDBY/ON



- **1** Set the volume to "**MIN**" by turning **VOLUME**.
- **2** Turn on the power by pressing **STANDBY/ON** on the front panel, or **POWER** on the remote control.
  - PianoCraft series components that have correct system connections made to CRX-E150 can be controlled to turn into the on or standby mode by CRX-E150. However, once the connected components are turned into the standby mode with their respective STANDBY/ON button, they cannot be controlled by CRX-E150 STANDBY/ ON button.
- **3** Select the desired input source by turning **INPUT** so that the source appears on the display.
  - When you operate the component connected to the **AUX** terminal, turn **INPUT** to select AUX.
- **4** Play the source. (Refer to the owner's manual supplied with each selected component.)
- **5** Adjust the volume level by turning **VOLUME** on the front panel or pressing **VOLUME +** on the remote control.
- **6** If desired, adjust **BASS**, **TREBLE**, and **BALANCE**.

**BASS:** Turn this control clockwise to increase (or counterclockwise to decrease) the low frequency response.

**TREBLE:** Turn this control clockwise to increase (or counterclockwise to decrease) the high frequency response.

**BALANCE:** Adjust the balance of the output volume from the left and right speakers to compensate for sound imbalance caused by the speaker location or listening room conditions.

#### When you use headphones

Connect the headphones to the **PHONES** jack. You can listen to the sound to be output from the main speakers through the headphones.

## When you have finished using this unit

Press **STANDBY/ON** on the front panel again or **POWER** on the remote control to set this unit to the standby mode.

The STANDBY indicator lights up.

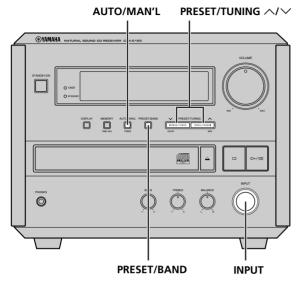
#### Auto standby function

CRX-E150 will be put automatically into the standby mode under the following conditions:

- CRX-E150 and the components connected to it are in stop mode and not operated for 30 minutes.
- TUNER or AUX is not selected as an input source.

## Listening to the radio

You can find radio stations automatically and manually.



#### **Automatic tuning**

- **1** Select TUNER by turning **INPUT** so that the frequency of a radio station appears in the display.
- 2 Press **PRESET/BAND** to select the reception band. Do not select the preset tuning mode (in which "PRESET" appears on the display).
- **3** Press **AUTO/MAN'L** so that "AUTO" appears in the display.
- 4 Press PRESET/TUNING ∧ (For a higher frequency) or ∨ (For a lower frequency).

**5** The unit starts searching for a station.

101.5 MH7 FΜ STEREO AUTO TUNED

When the unit finds a station, the unit stops searching and "TUNED" appears on the display.



If the located station is not the one you want, repeat steps 4 and 5 until a station you want is tuned.

#### Notes

- If automatic tuning search does not find the desired station, try manual tuning as described next.
- When an FM stereo broadcast with sufficient signal strength is received, "STEREO" appears on the display and you can listen to stereo sound.

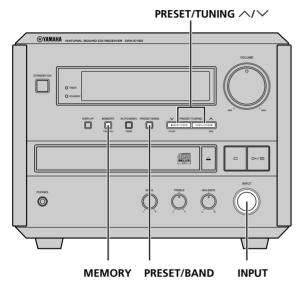
### Manual tuning

- **1** Follow steps 1 and 2 described in "Automatic tuning."
- **2** Press **AUTO/MAN'L** so that "AUTO" disappears from the display.
- Press PRESET/TUNING ∧ (For a higher frequency) or ∨ (For a lower frequency) to select your desired station.
  - Each time you press PRESET/TUNING ∧ or ✓, the frequency changes step by step.

#### **TUNER OPERATIONS**

## **Presetting stations**

The unit can preset station frequencies selected by Automatic tuning or Manual tuning. Up to 40 stations can be stored. With this function, you can select any desired station by pressing the corresponding preset station number.



#### To preset stations manually

Tune in a desired station. (Refer to the previous page for the tuning procedure.)

#### **2** Press **MEMORY**.

3 Within about 5 seconds, use **PRESET/TUNING** ∧/ ∨ to select a desired preset number. Continue pressing **PRESET/TUNING** ∧/∨ to select the group of the preset stations (A, B, C, D, and E).



#### 4 Press MEMORY.

• "MEMORY", "PRESET", and preset number will appear on the display.

The arrow will appear for a second when it is preset.

PRESET STEREO MEMORY TUNED

5

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

#### Notes

- A new setting can be preset in place of a previous one.
- The preset stations are retained for a week after you disconnect the AC power cord or a power failure occurs.

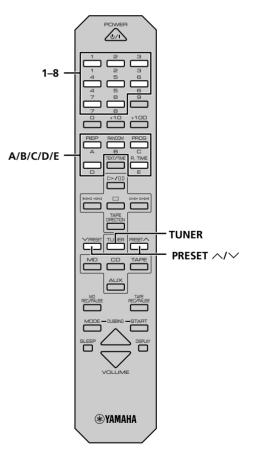
#### To preset stations automatically

- **1** Select TUNER as input source by turning **INPUT**.
- **2** Press **MEMORY** for about 2 seconds.
  - The unit starts presetting stations, "AUTO" and "MEMORY" will flash on the display.

Received stations are stored to A1, A2...A8 sequentially. After 40 stations or all FM and AM stations are stored, the display will show the preset station A1.

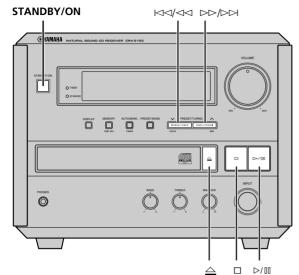
#### To recall a preset station

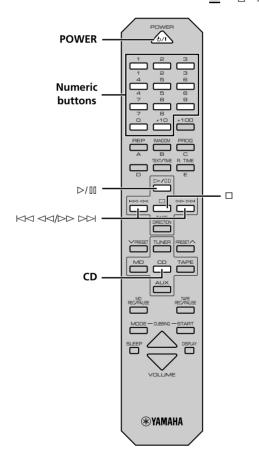
Press **TUNER** and select the desired number by pressing **PRESET/BAND** and **PRESET/TUNING**  $\wedge/\sim$  on the front panel or **PRESET**  $\wedge/\sim$ , **A/B/C/D/E** and **1–8** on the remote control.



#### **COMPACT DISC PLAYER OPERATIONS**





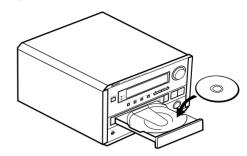


#### To play CDs

1 Press **STANDBY/ON** to turn on this unit.

**2** Press **CD** on the remote control in order to operate the CD player by the remote control.

3 Press  $\triangle$  to open the disc tray, and place a CD on the tray.





**4** Press  $\triangleright/00$  to start play. This unit starts play.

#### To pause play

Press ⊳/00. To resume play, press  $\triangleright/\mathbb{II}$  again.

#### To stop play

Press □.

#### To eject the CD

Press  $\triangleq$  to open the disc tray, and remove the CD from the trav.

#### To play a specific track on the disc (Skip)

#### Direct play

Select a desired track using the numeric button. (Example: To select 35, press +10 three times so that "3 –" appears in the display, then press 5.)

#### Skip play

Press  $\triangleright \triangleright / \triangleright \triangleright$  to skip forward or  $\mid \triangleleft \triangleleft / \triangleleft \triangleleft$  to skip backward. Press once for each track to be skipped.

#### Notes

- You cannot enter a number that is higher than the last track number on the disc.
- These operations can also be performed when the unit is in the • pause or stop mode.
- During stop mode, if  $\triangleright \triangleright / \triangleright \triangleright$  or  $\bowtie / \triangleleft \triangleleft$  is pressed, the track number successively changes to higher numbers (or lower numbers).

#### To advance or reverse playback rapidly (Search)

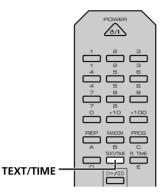
Press and hold DD/DD to advance playback rapidly, and 

#### Note

• This unit cannot play a CD-R or CD-RW disc unless the disc is finalized. Please make sure to finalize the disc on the CD recorder before playing on this unit.

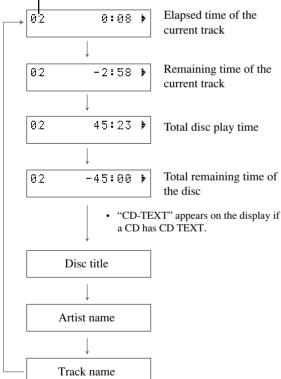
## Selecting the time display and CD TEXT

You can select any of four time displays by pressing **TEXT/TIME**. When you play a CD with CD TEXT, the disc title, artist name, and track name are also displayed.



Each time you press **TEXT/TIME**, the display changes as follows:

The current track number

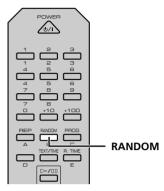


#### Note

 The disc title, artist names, or track names may not be displayed with some CD TEXT discs. In this case, "(NO ENTRY)" appears on the display for about two seconds and then go back to the time display.

## **Random-sequence play**

The unit can play all the tracks in a random sequence.



#### Press RANDOM.

• "RANDOM" indicator lights up on the display. The unit starts random sequence play.

## To cancel random-sequence play mode

#### Press $\Box$ or **RANDOM**.

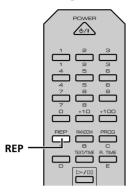
• "RANDOM" disappears from the display.

#### Notes

- This feature will not function during programming, or during programmed play.
- If ▷▷/▷▷ is pressed during random-sequence play, the next randomly programmed track will be played.
  If ▷⊲
  ⊲⊲ is pressed, play will return to the beginning of the current track.
- Total remaining time on the disc will not be displayed during random-sequence play.

## **Repeat play**

You can play any desired track or disc repeatedly. Press **REP** to select the repeat mode.



#### SINGLE REPEAT

The current track is played repeatedly.



#### **FULL REPEAT**

The current disc is played repeatedly.

• In random-sequence play mode, all randomly sequenced tracks are played repeatedly in the same order.

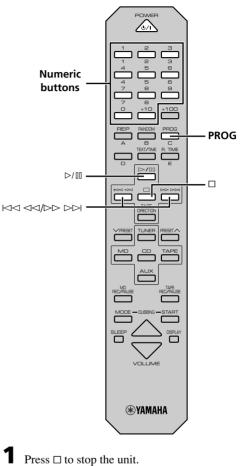


#### To cancel repeat play mode

Press **REP** successively until "REP F" disappears from the display.

## **Program play**

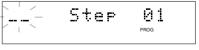
By creating a program, you can enjoy listening to your favourite tracks in any desired order. As many as 20 tracks can be programmed in sequence.



3

Press PROG.

Use the numeric buttons to select a track number until the desired track number appears on the display.



**4** Repeat step 3 to program more tracks. You can select the same track again.

**5** Press  $\triangleright/\square$  to start program play.

#### To stop program play mode

Press □.

#### Note

• ▷▷/▷▷ or I<I</i>I or I<I<I</p>

#### To check program data

- 1. Press  $\Box$  to stop program play.
- 2. Press **PROG**. Then each time you press ▷▷/▷▷ / ▷⊲⊲/⊲⊲, the track number and the program number are displayed in the order of the program.

#### To change program data

- 1. Follow the preceding procedure described in "To check program data."
- 2. Display the track number to be changed by pressing ▷▷/▷▷//└⊲⊲.
- Press the numeric button of the desired track. The previously programmed track will be cleared from memory and the new one will be programmed.

#### To delete all program data

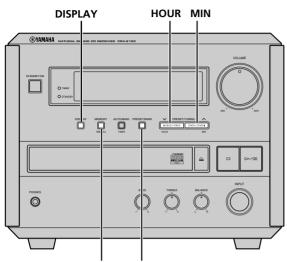
When program play is stopped, press  $\Box$ .

#### Note

• Turning the unit to the standby mode or opening the disc tray also deletes the program data.

## Setting the clock

You must set the clock before you use the timer functions. The clock is based on a 12-hour system for U.S. and Canada models, and 24-hour system for Australia model.



TIME ADJ PRESET/BAND

- While the power is on, press **DISPLAY** to display the time.
- **2** While holding **TIME ADJ**, press **HOUR** to set the hour.
  - If you want to move the time in the reverse direction, press **HOUR** while holding **TIME ADJ** and **PRESET/BAND**.
- **3** While holding **TIME ADJ**, press **MIN** to set the minutes.
  - If you want to move the time in the reverse direction, press **MIN** while holding **TIME ADJ** and **PRESET/BAND**.

#### To display the clock

#### Press **DISPLAY**.

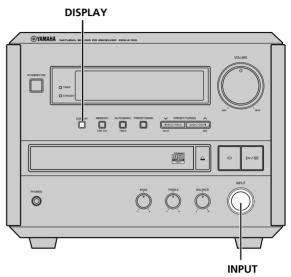
The current time appears for about 8 seconds, then the normal display returns.

#### Note

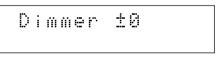
• In the event of a power failure or when the AC power cord is disconnected for more than five minutes, you must reset the clock.

## Adjusting the brightness of the display

You can adjust the brightness of the display. If you have connected cassette deck (KX-E100) and/or MD recorder (MDX-E100) to this unit, the brightness of the displays is automatically adjusted to that of this unit.



Press and hold **DISPLAY** for about two seconds so that "Dimmer ±0" appears on the display. While holding **DISPLAY**, turn **INPUT** clockwise to increase or counterclockwise to decrease brightness.



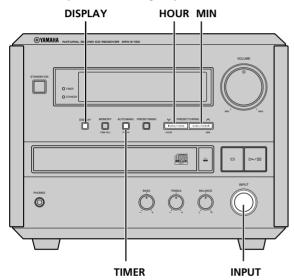
Control Range:  $\pm 0$  to -6 (Preset value:  $\pm 0$ )

## Before using the timer

If you want to use the cassette deck, KX-E100 or the MD Recorder, MDX-E100 for timer play or recording, you must first make the connections as shown in "Connecting other components" on page 7. For details, refer to the instructions supplied with the MDX-E100 or KX-E100.

## Timer play and recording

By using the built-in timer, you can have the unit turn on at a specified time and begin playing or recording automatically. You can also specify the turn off time.



#### Press **DISPLAY**.

Whenever **DISPLAY** is pressed, the display mode changes as follows:

- 1. Clock Time (TIMER on/off mode) If you have not set the clock yet "Set Clock" appears. You need to set the current time as described on page 15.
- 2. Timer Input

Select the source to be played by turning INPUT.

• Timer recording is possible only when you select TUNER or AUX.

3. Timer REC

Select the recording component by turning **INPUT**. If you like to enjoy timer play with TUNER or AUX, select "REC Mode OFF".

#### (Example)



4. ON Time

"ON Time" appears on the display for a second, and changed to the time setting mode. Press **HOUR** to set the hour.

Press MIN to set the minute.

#### 5. OFF Time

Set the time the same way as above. If you set the ON time but not OFF time, the timer play or recording will finish automatically after an hour.

#### Notes

- The display mode will change in about 8 seconds. If the mode is changed before the setting is completed, call the mode again by pressing **DISPLAY** once or more.
- If you select the input other than TUNER and AUX on "2. Timer Input", "3. Timer REC" is skipped.
- **2** Press **TIMER** to complete the timer setting. The system is put in the standby mode.
  - The **STANDBY** and **TIMER** indicators light up.

If you continue using the system, press **STANDBY/ON** to turn on this unit.

#### To cancel the timer play setting

Press **DISPLAY** to show the current time, then press **TIMER** so that "TIMER" goes off from the display. You can also cancel by pressing **TIMER** in standby mode.

#### Note

• In the event of a power failure or when the AC power cord is disconnected for more than five minutes, you must reset the clock.

## **Sleep timer**

The unit can be turned off automatically at a selected SLEEP time.

Play the desired sound source.

2 Press **SLEEP** repeatedly until the desired sleep time appears in the display. Each time you press SLEEP, the sleep time changes as follows:

SLEEP 2h00m

SLEEP 1h30m

SLEEP 1h00m SLEEP 0h30m

SLEEP OFF

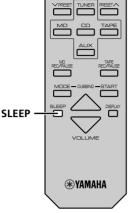
About 4 seconds after setting, the normal display will resume.

• "SLEEP" will appear in the display.



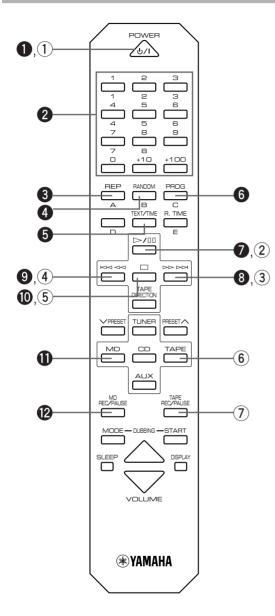
1

The unit will turn off automatically when the selected sleep time is reached.





## Operating the cassette deck, KX-E100 and MD recorder, MDX-E100 with the remote control



MDX-E100

- POWER
- **2** Numeric buttons
- **3 REP** (Repeat)
- **4** RANDOM
- **5** TEXT/TIME
- 6 PROG (Program)
- **7** ⊳/ □ (Play/Pause)
- **8** ⊳⊳ ⊳⊳ (Skip/Search Forward)
- $\textcircled{O} \Box (Stop)$
- **MD** input
- MD REC/PAUSE

#### KX-E100

- 1 POWER
- ② ▷/00 (Play)
- $\textcircled{3} \vartriangleright \vartriangleright \lor \lor (Fast-foward)$
- ⑤ □ (Stop)
- 6 TAPE input
- **⑦ TAPE REC/PAUSE**

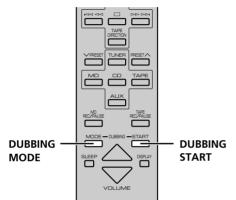
#### ADD KX-E100 AND/OR MDX-E100 TO YOUR SYSTEM

## **Before recording**

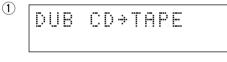
When you record by using MDX-E100 or KX-E100, you must first make the connections as shown in "Connecting other components" on page 7. For details, refer to the instructions supplied with the MDX-E100 or KX-E100. A source from the component which is connected to the **AUX** terminal component can be recorded on a tape or MD.

## **Dubbing setting**

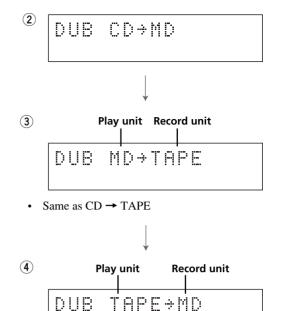
There are six different combinations of components. Once you choose a certain mode, recording starts and ends automatically in a certain way for each mode.



Decide the combination of the components. Each time you press **DUBBING MODE**, the mode will change in the below order.



- Recording automatically starts from the beginning of the tape. (By pressing **DUBBING START**, the tape automatically rewinds to the beginning if it is in the middle.)
- When the recording on side A finishes while a track is being played back, the recording on side B starts from the beginning of the same track.
- The sound is automatically faded out when it gets close to the end of side B.



- Recording automatically starts at the beginning of the tape. (By pressing **DUBBING START**, the tape automatically rewinds to the beginning if it is in the middle.)
- **2** Press **DUBBING START** to start recording.

#### Note

• The displays ①~④ which include the component you have not connected to CRX-E150 will be skipped.

#### To stop dubbing

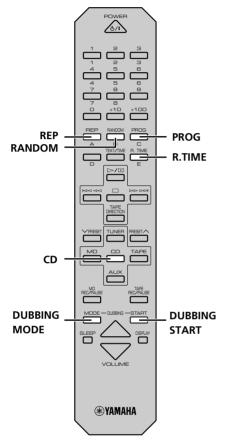
Press  $\Box$  on the recording component (MDX-E100 or KX-E100).

#### ADD KX-E100 AND/OR MDX-E100 TO YOUR SYSTEM

## **TAPE programming**

By specifying the length of the tape, CDX-E150 programs tracks or helps you to program tracks so they will fit onto the tape with the least amount of unrecorded space remaining at each end of the tape.

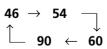
#### 1 Manual TAPE programming



Insert the desired disc into the CD player, and load a blank tape into the KX-E100.

2 Press CD.

Press **R.TIME** repeatedly to select the length of tape to be used. Each time you press **R.TIME**, the length of the tape changes as follows:



• You can use numeric buttons to input the length of the tape.

#### **4** Press **PROG** to start programming.

• "A QO B" appears in the display to indicate the direction of the tape.

- **5** Select the desired track number using numeric buttons.
  - Repeat step 5 to continue programming tracks.
  - The remaining time is shown on the display. If the track is longer than the remaining time, "Adj Over" appears on the display.
- **6** Press **R.TIME** to continue programming tracks on side B.
  - Repeat step 4.
  - Choose CD  $\rightarrow$  TAPE by pressing **DUBBING MODE**, and press **DUBBING START** to start recording.
- 2 Automatic TAPE programming
  - Repeat steps 1 and 3 of "Manual TAPE programming".
- **2** Press **REP** to start programming.
  - Programming is done in the order on the CD from side A to side B. When complete, the following display appears.

(Example) when 11 tracks has been programmed



You can change the program data following the steps described on page 14, "To change program data".

Choose  $CD \rightarrow TAPE$  by pressing **DUBBING MODE**, and press **DUBBING START** to start recording.

#### To stop dubbing

Press □ on KX-E100.

#### To cancel tape programming

Press  $\Box$  on CDX-E150 when dubbing is stopped.

#### Note

3

• If the loaded CD has more than 20 tracks, CRX-E150 programs only the first 20 tracks. The rest cannot be programmed even if the length of the tape is sufficient.

### **ADDITIONAL INFORMATION**

## **CD preventive care**

• This compact disc player is designed for use with following types of disc only. Never attempt to load any other type of disc into the unit. The unit will also play 8-cm (3-inch) compact discs.



- Compact discs are not subjected to wear during play, but damage to the disc surface when the disc is being handled can adversely affect the disc's play.
- Do not use cleaning discs or warped discs. All of these could damage the unit.

#### To prevent a malfunction of this unit

• Do not use any non standard shaped CD (heart, etc.) available on the market, because it may damage the unit.



• Do not use a CD with tape, seals, or paste on it, because damage to the unit may result.

• 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, antistatic 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, because these might warp or otherwise damage the disc.



### Troubleshooting

If the unit fails to operate normally, check the following points to determine whether the fault can be corrected by the simple measures suggested. If it cannot be corrected, or if the fault is not listed in the SYMPTOM column, disconnect the power cord and contact your authorized YAMAHA dealer or service center for help. When taking the service, the MDX-E100 or KX-E100 may be needed. For details, contact your authorized YAMAHA dealer or service center.

SYMPTOM	CAUSE	REMEDY
The unit does not switch ON when the STANDBY/ON switch is pressed.	The AC power cord is not connected or not completely connected.	Securely connect the power cord.
No sound from one speaker.	Loose speaker connections.	Connect properly.
The sound suddenly goes off.	The protection circuit has been activated because of a short circuit, etc.	Check the speaker wires are not touching each other and then turn the unit back on.
No sound from an external unit connected with this unit or play does not begin.	Incorrect cord connections.	Connect the cords properly. If the problem persists, the cords may be defective.
not begin.	Input source selection is not proper.	Make a proper input source selection.
Sound distorted.	The component connected to this unit is disconnected from AC outlet.	Connect the AC power cord of the component to an AC outlet.

SYMPTOM	CAUSE	REMEDY
Excessive static in FM broadcasts.	Interference from starting motor of a nearby car.	Position the FM antenna as high and as far away from nearby roads as possible. Connect using a coaxial cable.
	Interference from the thermostat of a nearby electrical appliance.	
Noise increases during stereo proadcasts.	Antenna input is too weak due to obstructions or excessive distance from the broadcasting	Check the antenna connection.
bioaucasis.	station.	Install a multi-element type FM antenna if possible.
Stereo broadcasts are noisy and STEREO indicator blinks on and off.	Insufficient antenna input.	Install an antenna appropriate for the electric field strength of your area.
Cannot select preset stations.	Preset memory has been erased.	Reprogram memory presets.
Buzzing or static during AM broadcasts.	Interference from sources such as lightning, fluorescent lights, electric motors or thermostat of nearby electrical appliance.	The problem is difficult to eliminate, but can be lessened by grounding AM loop antenna.
	TV or microprocessor is being used nearby.	Move away from TV or microprocessor.
AM broadcast sensitivity is poor.	Radio signal is weak or the antenna is not	Properly connect the AM loop antenna.
	properly connected.	Change orientation of the AM loop antenna.
		Install an external AM loop antenna.
Cannot set timer.	Current time is not set.	Set current time.
The unit does not work normally.	The internal microcomputer has been frozen by an external electric shock (lightning, excessive static electricity, etc.) or the power supply with low voltage.	Unplug the AC power cord from the wall outlet, and then plug in again after about one minute.
Play does not begin.	The disc is damaged.	Check the disc carefully; replace it if necessary.
	There is moisture on the laser pick-up.	Wait 20 to 30 minutes after switching the unit ON before trying to play a disc.
	The disc has been loaded upside down.	Reload the disc with the label side facing up.
	The disc is dirty.	Clean the disc.
Play is delayed, or begins at the wrong place.	The disc may be scratched or damaged.	Check the disc carefully; replace it if necessary.
CD synchronized recording or Automatic recording function does not work.	The system cable is not connected securely.	Connect the system cable properly.
Sound "skips."	The unit is being subjected to vibrations or impacts.	Relocate the unit.
	The disc is dirty.	Clean the disc.
Sound "hums."	Improper cable connections.	Securely connect the audio cables. If the problem persists, the cables may be defective.
Noise from inside of the unit.	The disc may be warped.	Replace the disc.
The remote control does not work.	The batteries of the remote control are too weak.	Replace the batteries with new ones.
	Remote control is too far away or is being used at an incorrect angle.	Use within 6 meters and 60 degree radius.
	Direct sunlight or lighting (of an inverter type of fluorescent lamp, etc.) is striking the remote control sensor of the unit.	Change the position of the unit.
TV functions strangely when the remote control is being used.	Remote control is being used near TV set with a remote control sensor.	Relocate this unit away from the TV or cover the TV's remote control sensor.

#### **ADDITIONAL INFORMATION**

## **Specifications**

#### **Amplifier section**

Minimum RMS output power per channel
DIN Standard output power per channel (Europe model)
Input sensitivity/Impedance
TAPE/MD/AUX 170 mV/47 kΩ
Frequency Response
MD etc 20 Hz to 20 kHz, ±0.5 dB
Total Harmonic Distortion (20 Hz to 20 kHz)
MD etc. 20 W, 6 Ω0.04%
Signal-to-Noise Ratio (IHF-A Network)
MD etc. (250 mV, Input Shorted) 98 dB
Output Level
REC OUT 170 mV/1.2 kΩ
SUBWOOFER 2.0 V/1.2 kΩ
PHONES Output

#### **Tuner section**

Tuning range
FM
[U.S.A. and Canada models]
[U.K., Europe, Australia, China and General models]
AM
[U.S.A. and Canada models]
[U.K., Europe and Australia models]
[China and General models]
530/531 – 1710/1611 kHz
Sensitivity
FM (IHF, MONO)
1.0 μV
AM

#### **CD** player section

D/A converter	
	S-bit DAC

Laser Diode Properties

- Material: GaAIAs
- Wavelength: 780 nm
- Emission duration: continuous
- Laser output: max. 44.6 µW\*
- \* This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.

#### General

Power supply
[U.S.A. and Canada models]
[Australia model]
[U.K. and Europe models] 
[China and General models]
Power consumption
Power Consumption (standby mode)
[U.S.A. and Canada models]
[U.K., Europe and Australia models]
Dimensions (W x H x D)
Weight
Accessories Remote control
Batteries
Indoor FM antenna
AM loop antenna

Specifications are subject to change without notice.



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