KENWOOD

COMPACT HI-FI COMPONENT SYSTEM

K-521

INSTRUCTION MANUAL

Kenwood Corporation

Made for iPod

COMPACT disc DIGITAL AUDIO

CD-R/RW PLAYBACK

DSP PERFORMANCE AUDIO

MP3 WMA

CONEQ™

© B60-5813-08/01 (E, X, K) GVT0294-002A

Safety Precautions

⚡	THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER 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 THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

Before Applying Power

⚠ **Caution: Read this page carefully to ensure safe operation.**

Units are designed for operation as follows.

Australia ....AC 240 V only
Europe ....AC 230 V only
U.S.A. ....AC 120 V only

Safety precautions

WARNING : TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

⚡ | **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.

Except for U.S.A.

The marking of products using lasers

**CLASS 1
LASER PRODUCT**

The marking this product has been classified as Class 1. It means that there is no danger of hazardous radiation outside the product.

Location: Back panel

IMPORTANT SAFETY INSTRUCTIONS

⚠ **Caution: Read this page carefully to ensure safe operation.**

Read These Instructions

– All the safety and operating instructions should be read before the product is operated.

Keep These Instructions

– The safety and operating instructions should be retained for future reference.

Heed All Warnings

– All warnings on the product and in the operating instructions should be adhered to.

Follow All Instructions

– All operating and use instructions should be followed.

1. Clean only with dry cloth

– Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

2. Attachments

– Only use attachments/accessories specified by the manufacturer.

3. Do not use this apparatus near water

– This product shall not be exposed to dripping and splashing – for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like. Do not place an object containing liquid, such as a flower vase, on the appliance.

4. Accessories

– Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

5. Ventilation

– Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

6. Power Sources

– This product should be operated only from the type of power source indicated on the product. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

7. **CAUTION** – Polarization

– Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

8. Power Cord Protection

– Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

English 3

IMPORTANT SAFETY INSTRUCTIONS

9. Lightning

– Unplug this apparatus during lightning storms or when unused for long periods of time.

10. Overloading

– Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

11. Object and Liquid Entry

– Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

12. Servicing

– Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

13. Damage Requiring Service

– Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

14.   Replacement Parts

 – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

15. Safety Check

– Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

16. Wall or Ceiling Mounting

– This product should be mounted to a wall or ceiling only as recommended by the manufacturer.

17. Heat

– Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not place a flaming object, such as a candle or lantern, or near the product.

18. Power Lines

– An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

Notes:

Item 7 is not required except for grounded or polarized equipment.

Note to CATV system installer U.S.A. only

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 or the building, as close to the point of cable entry as practical.

Information on Disposal of Old Electrical and Electronic Equipment and Batteries (applicable for EU countries that have adopted separate waste collection systems)

Products and batteries with the symbol (crossed-out wheeled bin) cannot be disposed as household waste.

Old electrical and electronic equipment and batteries should be recycled at a facility capable of handling these items and their waste byproducts.

Pb Contact your local authority for details in locating a recycle facility nearest to you.

Proper recycling and waste disposal will help conserve resources whilst preventing detrimental effects on our health and the environment.

Notice: The sign "Pb" below the symbol for batteries indicates that this battery contains lead.

What the K-521 Can Do

Various recording formats
Disc Playback

As well as music CDs, the system will also play discs containing recorded audio files (MP3/WMA).

High-quality sound reproduction of iPod music
iPod Playback Function

With this system, the amplifier receives digital signals of iPod music as input. This realizes the reproduction of high-quality sound minimizing the deterioration of sound quality.

Supports for USB connection, analog input and digital input
External Input

The system supports the playback of a USB flash memory and USB mass storage class compliant digital audio player. In addition, as well as analog input terminals for cassette decks, the K-521 also features a sampling rate converter compliant digital input terminal for digital tuners etc.

Choose your favorite audio quality
Digital Signal Processor Function

This includes "TONE", which you can use to select detailed audio characteristics for the low-, mid- and high-range bands, as well as "D-BASS" which allows you to adjust super-bass effect.

Contents

⚠ To ensure safety, read the items by this mark carefully.
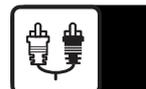
Before Using the System

Be sure to read these precautions.

Procedures by Input Source ▶▶ P.25

This chapter explains how to connect and use the system with the different input sources.

• CD
• Receiving Radio Broadcasts
• iPod
• USB
• External Components
• D.AUDIO

Audio Settings ▶▶ P.47

This chapter explains how to tailor the system to your audio preferences.

• CONEQ (Acoustic Equalizer)   • Supreme EX
• Digital Signal Processor   • BALANCE

Component Settings ▶▶ P.57

This chapter explains how to select the settings for the system.

• Setting the Timer   • Setting the System Clock
• Setting the Display   • Auto Power Save
   • Setting the Power Supply

Maintenance ▶▶ P.67

This chapter explains how to store and maintain your system so that it continues to give pleasure for many years to come.
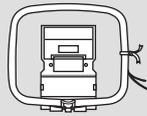
• Messages   • Care and Storage
• Troubleshooting   • Specifications
• Glossary of Terms

English 7

Accessories

Check that all accessories are present in the package.

AM loop antenna (1)
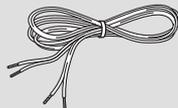
FM indoor antenna (1)

Remote control (1)

Batteries for Remote control (R03: 2)
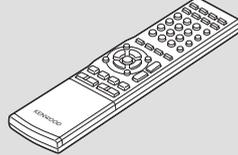
(Europe, Australia; RC-RP0502E)
(US; RC-RP0502)
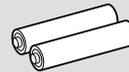
Speaker cords (2 m: 2)

If any accessories are missing, or if the unit is damaged or fails to operate, notify your dealer immediately. If the unit was shipped to you directly, notify your shipper immediately. Kenwood recommends that you retain the original carton and packing materials in case you need to move or ship the unit in the future. Keep this manual handy for future reference.

Installing the System

Notes on installing the system

● Always install the system on a flat, stable surface. When installing the system on a stand of some sort, be sure to check the strength of the stand.
● The magnets used in the speakers may cause color irregularities on TV or PC screens. Do not set up the speakers too close to a TV or PC.
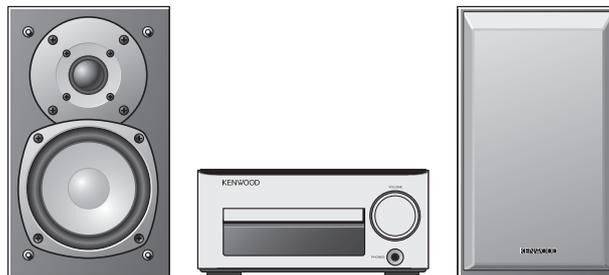
| Left speaker | Main unit | Right speaker |

⚠ **CAUTION**   Observe the following cautions when installing the system. Insufficient heat radiation may build up internal heat and cause a malfunction or fire hazard.

● Do not place any object on the system that may hinder heat radiation.
● Do not place the system upside-down or lay it on its side.
● Do not cover the system with a cloth or place it on a carpet or blanket.
● Do not place the system in a narrow space that hinders the ventilation.
● Leave the spaces specified below around the cabinets of the main unit.
    Top panel: 50 cm or more
    Side panel: 10 cm or more
    Back panel: 10 cm or more

Install the system so the power outlet is easily accessible, and unplug the power cord from the power outlet immediately in case of any trouble.
Note that the power supply to the system is not shut down completely by simply setting the power switch to OFF.
To shut down the power supply completely, unplug the power cord.

Getting the best acoustic effect

The sound will vary depending on the positioning of the speakers. To get the best possible sound quality, note the guidelines below.
● Ensure that the areas around the left and right speakers are as identical as possible. Set up the left and right speakers away from the wall and hang thick curtains on any windows to minimize echoes or reverberation.
● Place the left and right speakers as far apart as possible.
● Position the speakers at the same height as your ears when you are using the system.
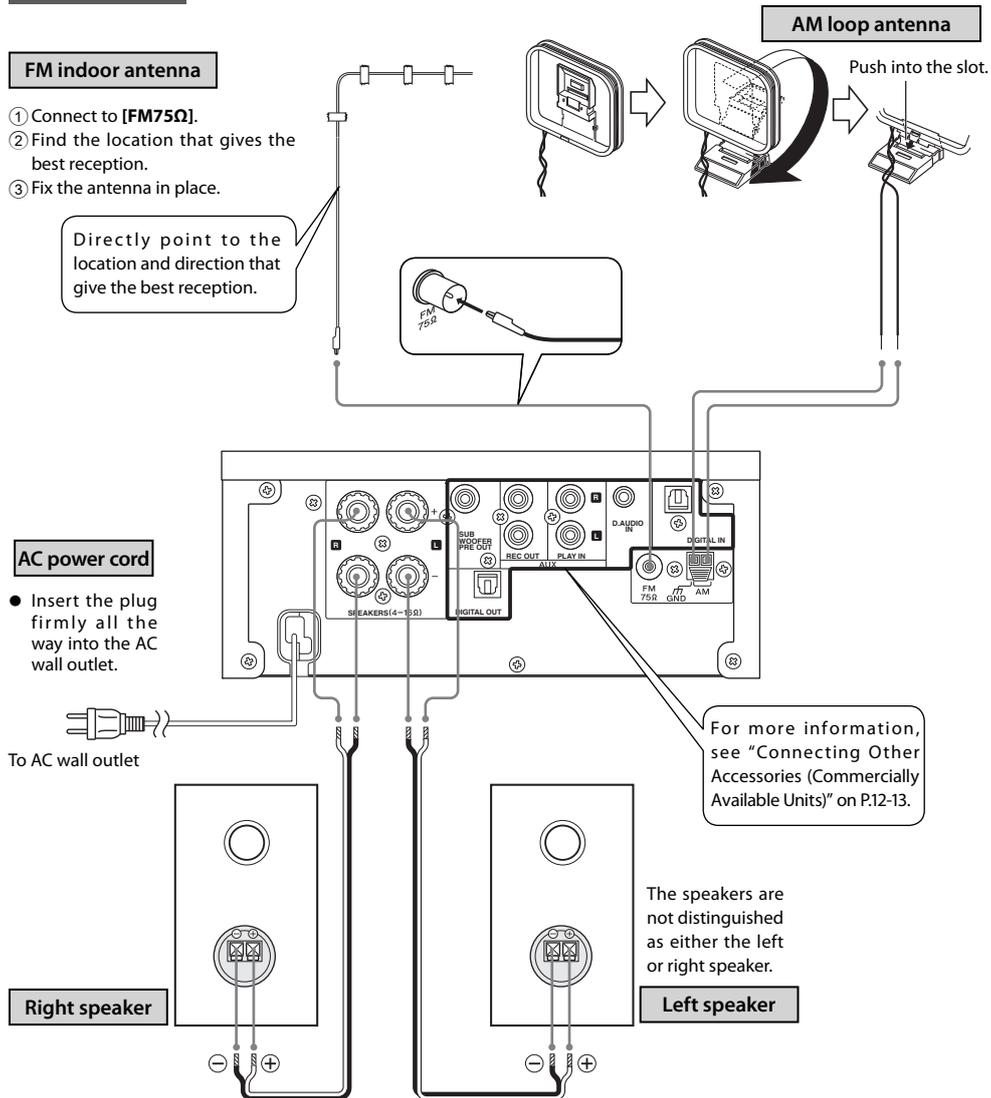
Connecting the System

Main Connections

Ensure that all the cords are securely connected. Loose or incomplete connections may result in noise interference or no sound at all.

Caution for Connection

Do not plug the AC power cord into an AC wall outlet until all the connections are completed. Before disconnecting any cords or cables, always turn the system off and unplug the power cord from AC wall outlet.

AM loop antenna

Push into the slot.

FM indoor antenna

① Connect to **[FM75Ω]**.
② Find the location that gives the best reception.
③ Fix the antenna in place.

Directly point to the location and direction that give the best reception.

FM 75Ω

AC power cord

● Insert the plug firmly all the way into the AC wall outlet.

To AC wall outlet

For more information, see "Connecting Other Accessories (Commercially Available Units)" on P.12-13.

The speakers are not distinguished as either the left or right speaker.

Right speaker

Left speaker

⚠ **Caution for outdoor antenna installation**

Since antenna installation requires skill and experience, always consult your dealer before installation. The antenna should be located away from power lines. If the antenna falls over, contact with a power line creates the risk of electric shock.

Microcomputer malfunctions	If the system is connected correctly and still does not operate normally or shows display errors, reset the microcomputer. (P.71)

Connecting the AM loop antenna

The antenna supplied with the system is for indoor use. Place it as far as possible away from the main unit, your TV set, the speaker cords and the power cord and point it in the direction that gives the best reception.

● **Connecting the antenna cord**

As shown on the right, connect the AM antenna cord **[AM]** and **[GND]** terminals.
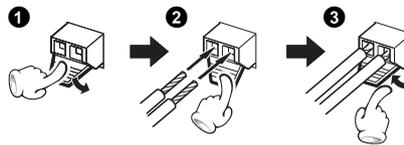
Connecting the FM indoor antenna

The antenna supplied with the system is a basic antenna for indoor use. For stable signal reception, the use of an outdoor antenna (commercially available) is recommended. To connect an outdoor antenna, first remove the indoor antenna.
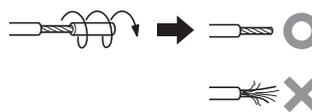
Connecting the speakers

Notes on connecting the speaker cords	Never short-circuit the positive (+) and negative (–) ends of the speaker cords. (Do not touch the + and - cords together.) Mistakenly reversing the positive and negative polarity will result in unnatural sound and unclear sound.

● **Preparing the ends of the speaker cords**

Twist the plastic sleeve on the end of the cord as you pull it off.

● **Connecting the speaker cords to the main unit**

● **Connecting the speaker cords to the speaker**

English 11

# Connecting Other Accessories (Commercially Available Units)

- When connecting a related system component, read the instruction manual that comes with the component too.
- Ensure that all the cords are securely connected. Loose or incomplete connections may result in noise interference or no sound at all.

iPod

Attach the Dock adapter supplied with the iPod to the system.
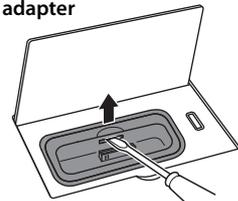
Open the cover on the main unit, and then push down the Dock adapter into the unit with its slit facing toward the unit until it clicks.
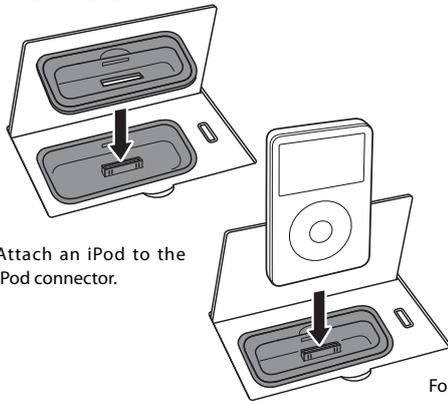
Attach an iPod to the iPod connector.

● **To remove the Dock adapter**

Insert a flat-blade screwdriver or a similar tool into the slit of the Dock adapter, and then remove it upward.

- You cannot attach an iPod to the system if it is in a cover, case, or with other accessories. Always remove it.
- Connecting an iPod to the system without using the Dock adapter may deteriorate or damage the connector. Always use the Dock adapter.
- Keep the iPod on a straight position while connecting/disconnecting it.
- Once the iPod is connected, it can be charged.

For more information on which models can be connected, see P.38.

USB

Connect USB flash memory or USB mass storage class compliant digital audio players to the [USB ⟵⟶] port after opening the cover on the main unit.

- Depending on the device being connected, it may take some time for the system to recognize it.
- Some USB devices may not be recognized or cannot play certain files.
- With some models, a USB connection mode selection screen will appear. Select "Storage Mode".

Digital audio player

USB flash memory
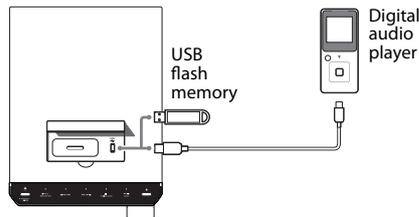
D.AUDIO IN

Connect digital audio players to the **[D.AUDIO IN]** terminal on the rear panel of the main unit.

- If you connect a Kenwood player that supports digital audio link using the dedicated cable PNC-150 (sold separately), you can control the player from the main unit and the remote control. (P.44) Other portable players can be connected using a 3.5 mm stereo mini-plug cable (commercially available).
- When you are not using the digital audio player, unplug the mini-plug cable from the main unit.

D.AUDIO IN

Digital audio player
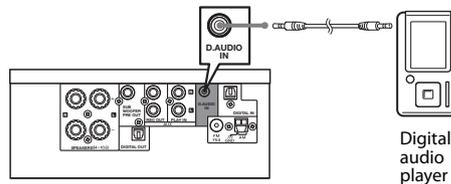
AUX IN

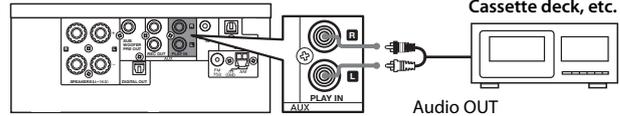Connect the audio OUT terminals on components such as cassette decks to the **[AUX IN]** terminal on the rear panel of the main unit.
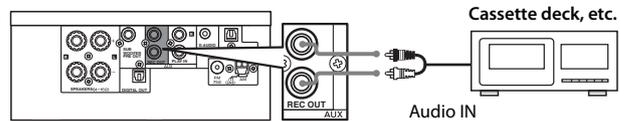
● **[AUX IN]** inputs an analog audio signal.

Cassette deck, etc.

Audio OUT

AUX REC OUT

Connect the audio IN terminals on components such as cassette decks to the **[AUX REC OUT]** terminal on the rear panel of the main unit.

● **[AUX REC OUT]** outputs an analog audio signal.

Cassette deck, etc.

Audio IN

DIGITAL IN (OPTICAL)(PCM signals)

Connect the optical digital output terminals on components such as digital tuners to the **[DIGITAL IN (OPTICAL)]** terminal on the rear panel of the main unit.

● Set the digital audio output on connected components to "PCM".

Digital tuner, etc.

Optical digital output
(PCM signals)
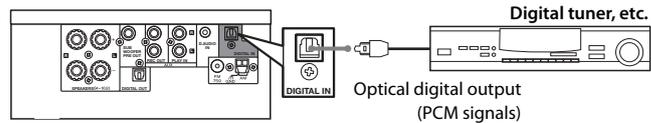
DIGITAL OUT (OPTICAL)(PCM signals)

Connect the optical digital input terminals on a digital audio component to the **[DIGITAL OUT (OPTICAL)]** terminal on the rear panel of the main unit.

Digital audio component

Optical digital input
(PCM signals)
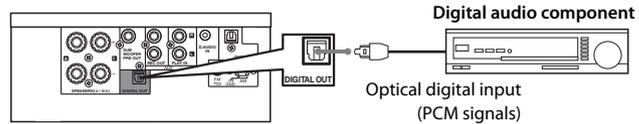
SUB WOOFER PRE OUT

Connect a subwoofer with a built-in amplifier (such as the optional SW-40HT/ sold separately) to the **[SUB WOOFER PRE OUT]** terminal on the rear panel of the main unit.

Powered subwoofer
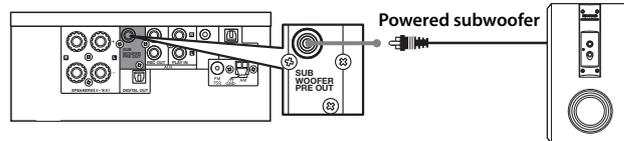
PHONES

Plug headphones equipped with a 3.5 mm stereo mini-plug into the **[PHONES]** jack on the front panel of the main unit.

A warning that excessive sound pressure from earphones and headphones can cause hearing loss.

⚠ CAUTION

Excessive sound pressure from earphones or headphones can cause hearing loss.

English **13**

Component Names and Functions

Main unit

Cover

Open the cover before attaching an iPod or USB device.

iPod connector (P.12, 38)

USB port (P.12, 40)

Power (P.21)
Turns the system on or off (Standby).

STANDBY/TIMER indicator
Red: Lights in normal Standby mode.
Orange: Lights in Timer Standby mode.

▲ CD tray open/close (P.21, 26)

► / II /BAND (P.21)

■ /TUNING MODE (P.33)

INPUT SELECTOR (P.21)

I◄◄ / ◄◄, ►► / ►►I (P.33, 39, 41, 45)

CD tray (P.21, 26)

Dial lighting (P.63)

Display (P.15)

VOLUME (P.20)

PHONES jack (P.13)

Remote sensor (P.17)

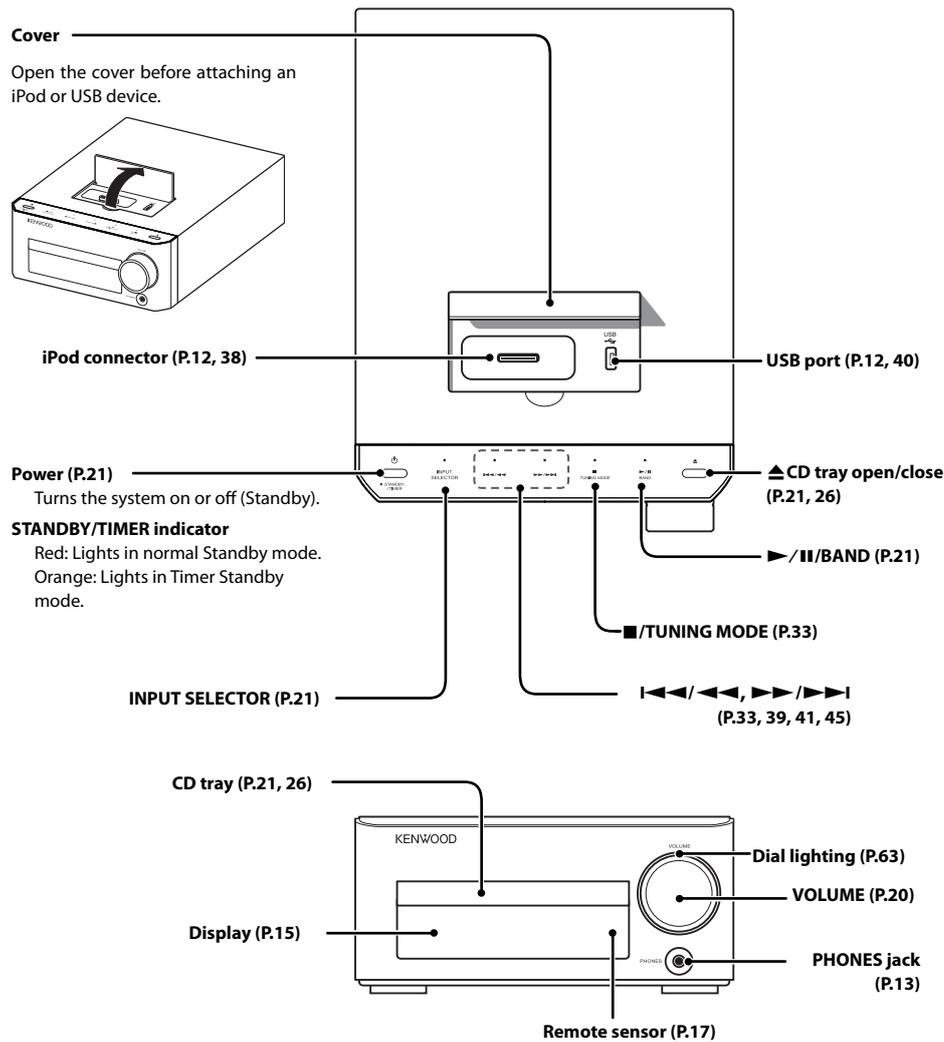| Standby Mode |
|---|

While the **[STANDBY/TIMER]** indicator on the main unit is lit, the system is using very weak current to maintain the built-in memory. This is called Standby mode. When system main unit is in this mode, you can turn it on using the remote control.

One-touch Operation

This system features a convenient one-touch operation function. In Standby mode, pressing any of the following keys will turn on system power: **[TUNER/BAND], [CD►/II], [iPod►/II], [USB►/II], [D.AUDIO►/II], [D-IN]** , or **[AUX]** of the remote control.

Display

**Displays shown in this manual
may differ from the actual displays.**

AUTO
Lights during auto tuning. Turns off during manual tuning. (P.33)

TUNED
Lights when you are tuned to the radio station. (P.33)

ST.
Lights when you are receiving the stereo broadcast. (P.33)

RDS
Lights when the RDS broadcast is received. (P.38)

Lights in folder playback mode. (P.41)

Lights in program playback mode. (P.30)
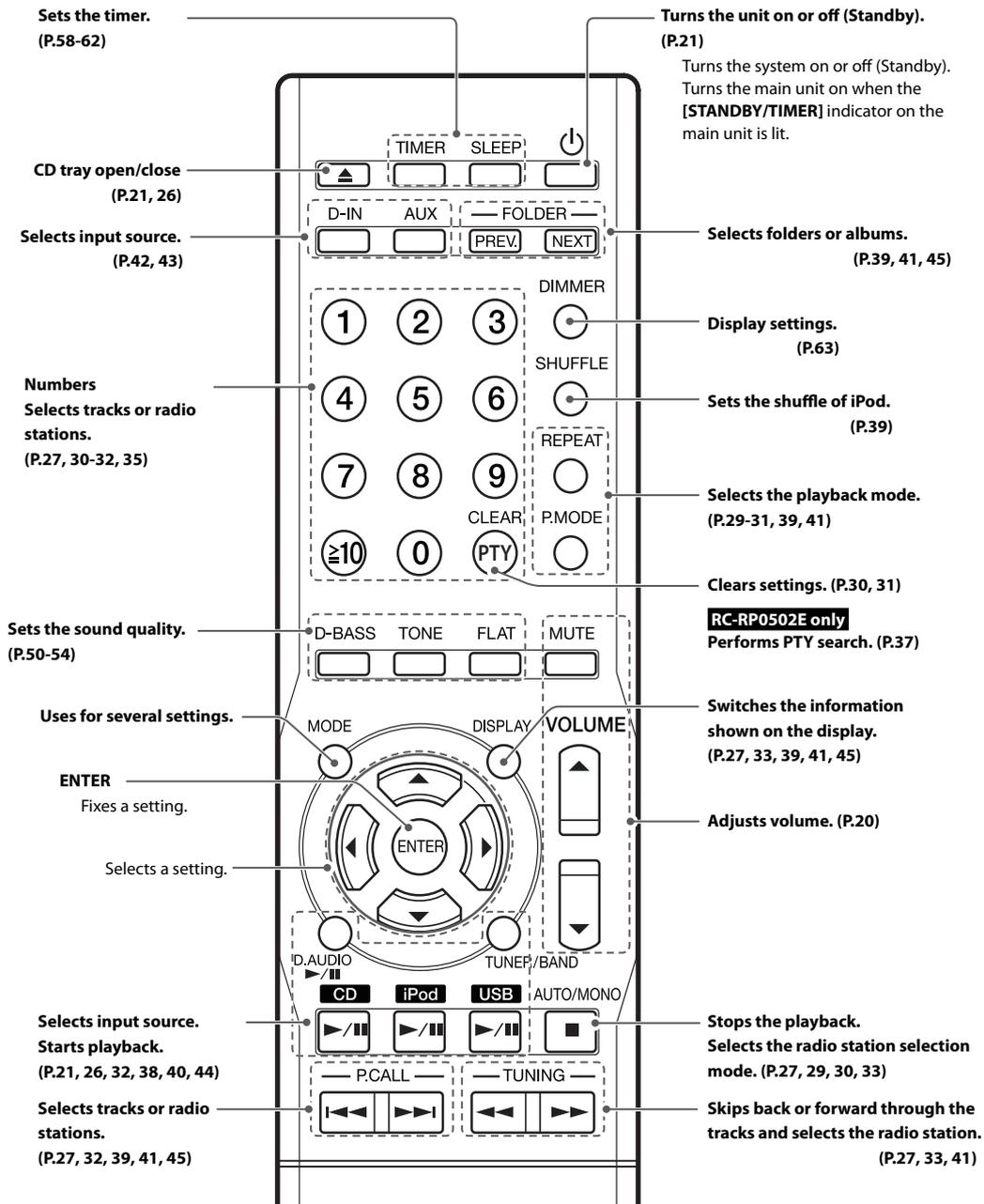
Lights in random playback mode. (P.29)

Lights during CD/USB all-tracks repeat playback. (P.29, 41)
The message "1" is also displayed during single-track repeat playback. (P.29, 41)

Lights when the audio file folder is displayed.

Lights in the PTY search mode. (P.39)

Lights when a track is displayed.

Displayed during stop of CD playback while the total elapsed time is displayed.

Displayed while the sleep timer is set. (P.58)

Displayed while the program timer is set. (P.59)

Lights when playback is paused. (P.27, 39, 41)

Shows numbers and text.

Flashes when the sound is muted. (P.20)

kHz
Displays the AM reception frequency.

MHz
Displays the FM reception frequency.

Lights during playback. (P.26, 40)

Lights when there is the disc in the CD tray. (P.26)

Lights when settings, such as the sound quality, are completed.

A.P.S.
Lights when Auto Power Save (A.P.S.) is set. (P.65)

TONE
Lights when a TONE is set. (P.51)

D-BASS
Lights when a super-bass (D-BASS) level is selected. (P.50)

SPRM EX
Lights when Supreme EX is on. (P.55)

Lights during iPod connection. (P.38)

Lights during USB connection. (P.40)

English **15**
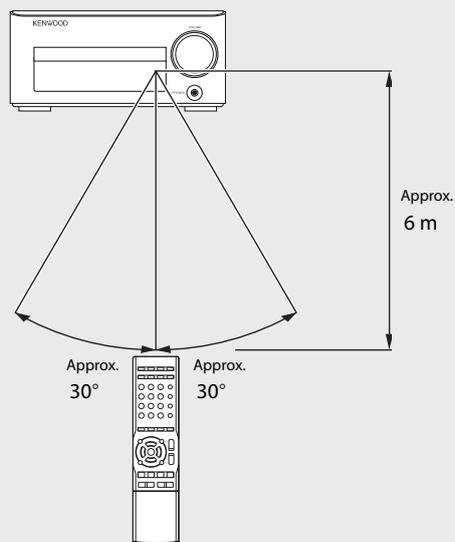
Remote control

Remote control keys with the same names as keys on the main unit have the same functions as the main unit keys.

Sets the timer.
(P.58-62)

Turns the unit on or off (Standby).
(P.21)

Turns the system on or off (Standby). Turns the main unit on when the **[STANDBY/TIMER]** indicator on the main unit is lit.

CD tray open/close
(P.21, 26)

Selects input source.
(P.42, 43)

Selects folders or albums.
(P.39, 41, 45)

Display settings.
(P.63)

Numbers
Selects tracks or radio stations.
(P.27, 30-32, 35)

Sets the shuffle of iPod.
(P.39)

Selects the playback mode.
(P.29-31, 39, 41)

Clears settings. (P.30, 31)

RC-RP0502E only
Performs PTY search. (P.37)

Sets the sound quality.
(P.50-54)

Uses for several settings.

Switches the information shown on the display.
(P.27, 33, 39, 41, 45)

ENTER
Fixes a setting.

Adjusts volume. (P.20)

Selects a setting.

Selects input source.
Starts playback.
(P.21, 26, 32, 38, 40, 44)

Stops the playback.
Selects the radio station selection mode. (P.27, 29, 30, 33)

Selects tracks or radio stations.
(P.27, 32, 39, 41, 45)

Skips back or forward through the tracks and selects the radio station.
(P.27, 33, 41)

TIMER SLEEP

D-IN AUX FOLDER PREV. NEXT

DIMMER

1 2 3

SHUFFLE

4 5 6

REPEAT

7 8 9

CLEAR P.MODE

≧10 0 PTY

D-BASS TONE FLAT MUTE

MODE DISPLAY VOLUME

ENTER

D.AUDIO ►/❚❚ TUNER/BAND CD iPod USB AUTO/MONO

P.CALL TUNING

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Using the remote control

After plugging the main unit into an AC wall outlet, press the power [⏻] key on the remote control unit to turn the system on.
After the system powers up, press the key for the function you want to use.
Point the remote control at the remote sensor when using it.

● The remote control may not operate correctly if direct sunlight or light from a high-frequency fluorescent lamp (such as an inverter type) is shining on the remote sensor. If this happens, move the system to a different location to avoid this type of malfunction.

Approx.
6 m

Approx.
30°

Approx.
30°

Loading the remote control batteries

① **Remove the battery cover.**
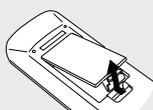
② **Load the AAA-size batteries supplied with the system.**
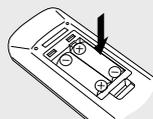
③ **Close the battery cover.**
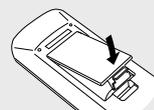
● Check the polarity of the batteries (⊕ ⊖) when loading them.

● The batteries supplied with the system are for operational testing and may last only for a short time.
● When replacing the batteries, always load 2 new batteries.

⚠ CAUTION   Do not leave the battery near fire or under direct sunlight. A fire, explosion or excessive heat generation may result.

English   **17**

How to Use This Manual

Operation procedure

While this system can be controlled from either the remote control or the main unit, the explanations in this manual primarily describe operation procedures using the remote control.

Remote control keys used in the procedure

Display shown during or after an operation

● The displays shown in this instruction manual may differ from the actual displays.

💿 CD

This section explains how to play a CD. As well as normal playback, you can use folder playback, random playback, repeat playback and program playback.

Playing a CD

Insert and play the CD.

● If a disc is already inserted, simply press the **[CD▶/II]** key to turn the system on and begin playback.

1 **Press the [⏏] key to open the CD tray and then insert the CD.**

● Insert the disc that the labeled side faces upwards and the disc sits snugly in the tray.

2 **Press the [⏏] key to close the CD tray.**

The "READING" message flashes while the unit is reading the information on the CD.

3 **Press the [CD▶/II] key.**
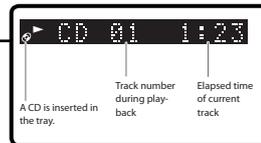
```
▶ CD 01  1:23
```

A CD is inserted in the tray.

Track number during playback

Elapsed time of current track

● Track numbers may not display correctly while following types of discs are playing.
 – Discs recorded in Mix mode *
 – Discs recorded in multiple sessions
 – Discs recorded in mixed formats of CD-DA format and formats that are not music data

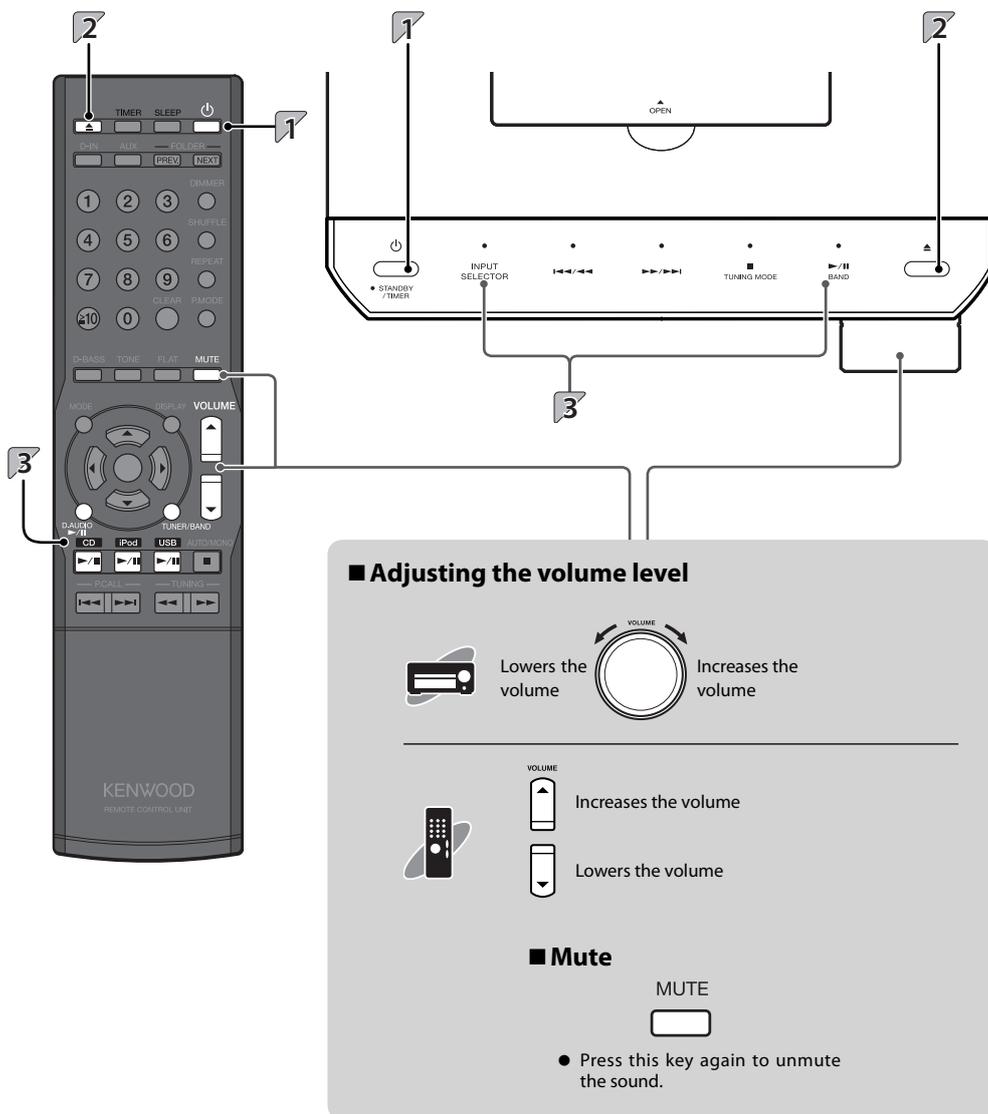* Mix mode combines the CD-DA format with audio files, such as MP3 and WMA.

Explanations of main unit procedures

Explanations of remote control procedures

Related functions that may also be helpful

| Related Information | ● Adjusting the Digital Audio Player Input Level → P.46
● Audio Settings → P.47 onwards |

D.AUDIO

■ **Operations during digital audio player playback**

Operation icons

Explains the procedure for CDs.

Explains the procedure for the radio.

Explains the procedures for iPods.

Explains the procedures for USB devices.

Explains the procedures for external components.

Explains the procedure for digital audio players.

Explains how to set the sound quality.

Explains how to set up component units.

Explains how to carry out system maintenance.

Playing the tracks in the previous/next folder

To go to the previous folder, press the [**PREV.**] key.

To go to the next folder, press the [**NEXT**] key.

● These functions may not work with some digital audio player models.

Skipping forward/back

Hold down the [I◄◄] or [►►I] key. | Hold down the [I◄◄/◄◄] or [►►/►►I] key.

Switching display contents

Press the [**DISPLAY**] key to shift the selection.

"D-IN" ▶ Day/Clock

Pausing and resuming playback

Press the [**D.AUDIO ►/II**] key. | Press the [►/II] key.

Stopping playback

Press the [■] key. | Press the [■] key.

Skipping tracks, skipping back, skipping to the start

Skip a track

Press the [►►I] key. | Press the [►►/►►I] key.

Skip back to the previous track

Press the [I◄◄] key two or more times in succession. | Press the [I◄◄/◄◄] key two or more times in succession.

Return to the start of the track

Press the [I◄◄] key once. | Press the [I◄◄/◄◄] key once.

English 45

Basic Operation

This section describes some basic procedures for using the system, such as tuning the radio and playing audio from a CD, iPod, USB device, a digital audio player.

Preparations Check the connections. (P.10-13)
Have the remote control ready. (P. 17)

■ Adjusting the volume level

Lowers the volume   VOLUME   Increases the volume

VOLUME
Increases the volume
Lowers the volume

■ Mute

MUTE

● Press this key again to unmute the sound.

1 Turn the system on (off).
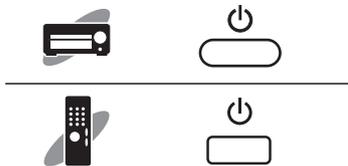
- On remote control **[D.AUDIO▶/II], [TUNER/BAND], [CD▶/II], [iPod▶/II], [USB▶/II]** key also turn on the power.
- Pressing the power **[⏻]** key when the system is on turns it off (Standby mode).

2 Insert a disc (when listening to a CD).

To use other components for playback, proceed to step 3.

| Open the tray. | Insert a CD. | Close the tray. |

Insert a CD with the label side upwards.

Press the [⏏] key.

3 Start playback.

Press the Play/Pause key for the input source. See <Procedures by Input Source> (P.25-46) for details.

INPUT SELECTOR ▶ ▶/II BAND

D.AUDIO ▶/II   TUNER/BAND   CD ▶/II   iPod ▶/II   USB ▶/II

- You can select the sound quality you want. See <Audio Settings> (P.47-56) for details.

English 21

Important Information

Supported Media

Media	Icon in this manual	Explanation
USB — USB flash memory / USB mass storage class compliant digital audio player		● Never connect any other device besides USB flash memory or a USB mass storage class compliant digital audio player to the [●⇄USB] terminal. Note that Kenwood will not be held liable for any losses related to malfunction, damage, or data loss due to connection of any other type of device.
CD — Commercially available music CDs		● You may not be able to play discs that do not conform to the CD standard, such as Copy Control CDs.
CD-R/CD-RW discs recorded in CD-DA format / MP3/WMA files recorded on CD-R/CD-RW discs		● Discs must be finalized during writing. ● Depending on the equipment or recording mode used for recording onto a CD-R or CD-RW disc, and depending on the type of CD-R or CD-RW disc used, you may not be able to play the disc on this system.

Precautions when writing data to media

● Discs recorded in Packet Write mode or UDF (Universal Disc Format) cannot be played.
● When writing data to a disc, always close the session or finalize the disc. The disc may not play properly if you do not close the session or finalize the disc.
● Depending on the specifications of the writing software used, the recorded folder names and file names may not be displayed correctly.
● Playback for multi-session discs or discs that contain large numbers of folders may take longer to begin than for normal discs.
● If you write audio files and music CD tracks (CD-DA format) to the same disc, the disc may not play correctly.
● Before writing audio files to a disc, check that the files play back correctly on the PC being used to write the files.
  After you finish writing, check that the written files are played back correctly.
● Use the correct file extensions (mp3, wma, m4a) in the names of audio files. Files without file extensions will not play. Also, do not use audio file extensions (mp3, wma, m4a) for files that are not audio files.
  For more information on file extensions, see <Supported Audio Files> on the right.

● In this manual, MP3, WMA and AAC files are referred to collectively as "audio files".

Supported Audio Files

On this system, you can play the audio file types listed below (MP3, WMA and AAC).

MP3 files (CD/USB)

File format:
MPEG 1 Audio Layer 3
MPEG 2 Audio Layer 3
MPEG 2.5 (MPEG 2 Audio Layer 3 Lower sampling rate)

Extension: .mp3

Sampling frequency
MPEG 1 Audio Layer 3: 32 / 44.1 / 48 kHz
MPEG 2 Audio Layer 3: 16 / 22.05 / 24 kHz
MPEG 2.5: 8 / 11.025 / 12 kHz

Bit rate
MPEG 1 Audio Layer 3: 32 – 320 kbps
MPEG 2 Audio Layer 3: 8 - 160 kbps
MPEG 2.5: 8 – 160 kbps

WMA files (CD/USB)

File format:
Windows Media™ Audio 9 compliant

- Files created using functions in Windows Media™ Player 9 or later cannot be played.
  - WMA Professional
  - WMA Lossless
  - WMA Voice

Extension: .wma

| CD | **Sampling frequency:** 22.05/ 32/ 44.1/ 48 kHz |
| | **Bit rate:** 16 - 320 kbps |

| USB | **Sampling frequency:** 32/ 44.1/ 48 kHz |
| | **Bit rate:** 5 - 384 kbps |

AAC files (USB only)

File format:
MPEG-4 AAC (created in iTunes™ 4.1 to 8.2)

Extension: .m4a

Sampling frequency:
8/ 11.025/ 12/ 16/ 22.05/ 24/ 32/ 44.1/ 48 kHz

Bit rate: 8 - 384 kbps

- Files encoded using Apple's Lossless Encoder cannot be played.
- AAC files contained in a CD-R or CD-RW cannot be played.

CD Disc formats

ISO 9660 Level 1, ISO 9660 Level 2, Joliet, Romeo

Number of file limits

CD	**Max. files/folders:** 512 in total
	Max. folders: 99
	Files per folder: 511

USB	**FAT16**	**Max. root folders:** 65534
		Max. sub-folders: 512
	FAT32	**Max. root folders:** 65534
		Max. sub-folders: 65536

Maximum number of displayable characters

CD	**File names:** 28
	Folder names: 28
	Tag display (Title/Album/Artist): 31
	Available ID3 tags: 1.0/ 1.1/ 2.2/ 2.3

USB	**File names:** 32 (including file extension)
	Folder names: 32
	Tag display (Title/Album/Artist):
	30 (ID3 Tag ver1.x)/ 64 (ID3 Tag ver2.x)
	Available ID3 tags: 1.0/ 1.1/ 2.2/ 2.3/ 2.4

- This system is capable of displaying alphanumeric characters. Other character types are displayed as asterisks (*).

Other notes

- Note that even where audio files comply with the above standards, playback may fail due to factors such as the disc characteristics or recording conditions.
- Playback also may fail depending on the specifications of the encoding software or the settings used for encoding.
- DRM (Digital Rights Management) files cannot be played.
- Audio files encoded using VBR (Variable Bit Rate) may use bit rates that fall outside the supported range. Audio files with bit rates outside the supported range cannot be played.
- Please backup audio files to be used in the system. Certain conditions while using a USB device can cause contents stored on the USB device to be lost. Please note that Kenwood will not be held liable for any losses arising out of loss of stored data.

- "Made for iPod" means that an electronic accessory has been designed to connect specifically to iPod and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

- iPod is a trademark of Apple Inc., registered in the U.S. and other countries.
- Windows Media is a trademark of Microsoft Corporation registered in the U.S. and other countries.

English 23

Handling Discs

Handling precautions

Hold a CD taking care not to touch the played surface.

Discs playable on the system

This system can play back a CD (12 cm, 8 cm), CD-ROM, CD-R, CD-RW or the audio part of a CD-EXTRA disc.

Notes on CD-ROM/CD-R/CD-RW discs

If the CD-ROM, CD-R or CD-RW disc being used has a printable label surface, the label surface may cause sticking that makes it impossible to remove the disc from the system. To prevent malfunction of the system, do not use such a disc.

Cautions on CD discs

Always use a disc carrying the [COMPACT disc DIGITAL AUDIO] marking.

A disc without this marking may be unable to be play back correctly.

The disc rotates at a high speed during playback. Never use a cracked, chipped or greatly warped disc. Otherwise, damage or malfunction of the player may result.
Also, do not use a disc with a non-circular shape as this may result in malfunction.

Notes on transporting or moving the system

Before transporting or moving this unit, take the following actions:

① **Remove any CDs from the unit.**

② **Press the [CD▶/Ⅱ] key and check to make sure that the message "NO DISC" appears on the display.**

③ **Wait a few seconds and then turn the system off.**

④ **If there are any other components connected to the system, check to make sure they are all turned off before disconnecting the cables.**

Procedures by Input Source

This chapter explains the operation procedures for each input source.
For information on the sound quality settings and component settings regardless of the input source,
see "Audio Settings" (P.47) and "Component Settings" (P.57).
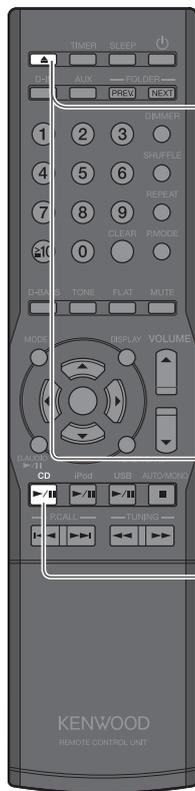If an error is displayed or a problem arises,
see "Maintenance" (P.67).

CD

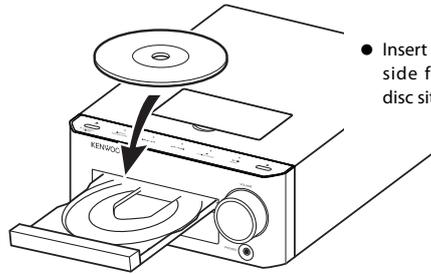This section explains how to play a CD. As well as normal playback, you can use folder playback, random playback, repeat playback and program playback.

Playing a CD

Insert and play the CD.

● If a disc is already inserted, simply press the **[CD▶/Ⅱ]** key to turn the system on and begin playback.

1 **Press the [⏏] key to open the CD tray and then insert the CD.**

● Insert the disc that the labeled side faces upwards and the disc sits snugly in the tray.

2 **Press the [⏏] key to close the CD tray.**

The "READING" message flashes while the unit is reading the information on the CD.

3 **Press the [CD▶/Ⅱ] key.**

```
▶  CD  01      1:23
```

Track number during play-back

Elapsed time of current track

A CD is inserted in the tray.

💡 ● Track numbers may not display correctly while following types of discs are play-ing.
  – Discs recorded in Mix mode [*]
  – Discs recorded in multiple sessions
  – Discs recorded in mixed formats of CD-DA format and formats that are not music data

  [*] Mix mode combines the CD-DA format with audio files, such as MP3 and WMA.

■ Operations during CD playback

Specifying a track number

To play the 3rd track, press the **[3]** key.
To play the 17th track, press the **[≧10]**, **[1]**, and then **[7]** key.
To play the 123rd track, press the **[≧10]**, **[≧10]**, **[1]**, **[2]**, and then **[3]** key.

Switching display contents

Press the **[DISPLAY]** key. The mode changes as shown below each time you press the key.

CD-R/CD-RW discs recorded in the commercially available music CD/CD-DA format

Time for 1 track ▶ Day/Clock

CD-R/CD-RW discs containing MP3/WMA files

Time for 1 track ▶ Folder name/Track name ▶ File name ▶ Folder name

TAG

Day/Clock ◀ Album name ◀ Artist name ◀ Title

Pausing and resuming playback

Press the **[CD▶/Ⅱ]** key.

Stopping playback

Press the **[■]** key.

Skipping forward/back

Hold down the **[◀◀◀]** key or **[▶▶▶]** key.

Skipping tracks, skipping back, skipping to the start

To skip to the next track: Press the **[▶▶I]** key.
To return to an earlier track: Press the **[I◀◀]** key two or more times in succession.
To return to the beginning of a track: Press the **[I◀◀]** key once.

💡 **MP3/WMA**

● When you stop playback by pressing the **[■]** key, the track being played is stored and pressing the **[CD▶/Ⅱ]** key restarts playback from the beginning of that track. (Resume function)

● The Resume function also works if you switch to another input source during playback.

● Press the **[NEXT]** key if you want to play tracks in the next folder, or press the **[PREV.]** key if you want to play tracks in the previous folder.

■ **Playback sequence for folders and track files**

MP3/WMA

When you play a disc containing recorded audio files, the track files on the disc are played sequentially beginning with the files in the ROOT folder, as shown in the figure.

Sample folder configuration

Folder name | Track file name
ROOT
F0_1.mp3
F0_2.mp3
F0_3.mp3

Folder name | Track file name
Folder 2
F1_1.mp3
F1_2.mp3

Folder name | Track file name
Folder 3   F2_1.mp3

Folder name | Track file name
Folder 4
F3_1.mp3
F3_2.mp3

Folder name | Track file name
Folder 5

Folder name | Track file name
Folder 6   F5_1.mp3
F5_2.mp3

Folder name | Track file name
Folder 7
F6_1.mp3
F6_2.mp3
F6_3.mp3
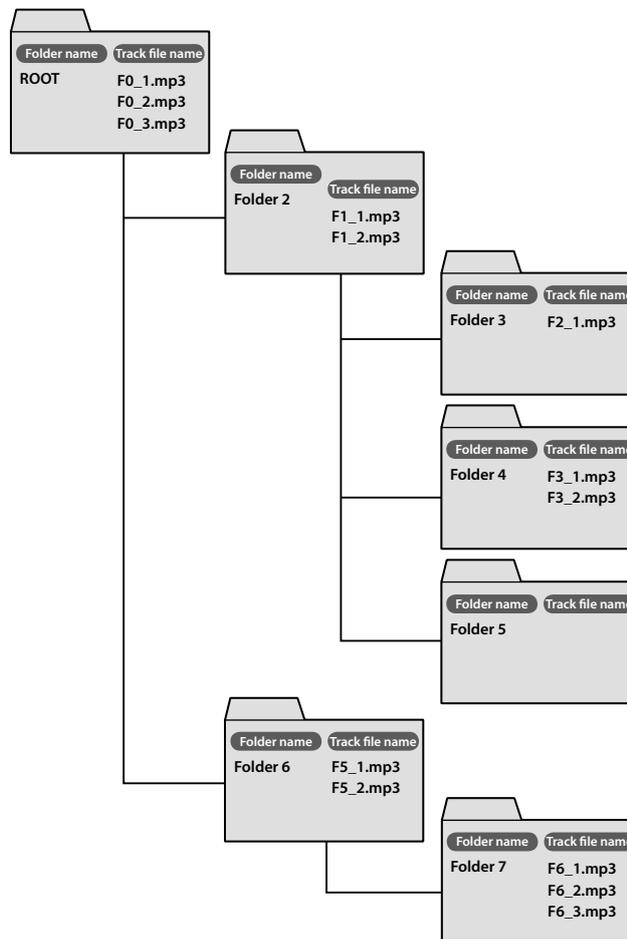
■ **Track file playback sequence**

Track 1 ....F0_1.mp3
Track 2 ....F0_2.mp3
Track 3 ....F0_3.mp3
Track 4 ....F1_1.mp3
Track 5 ....F1_2.mp3
Track 6 ....F2_1.mp3
Track 7 ....F3_1.mp3
Track 8 ....F3_2.mp3
Track 9 ....F5_1.mp3
Track 10 ....F5_2.mp3
Track 11 ....F6_1.mp3
Track 12 ....F6_2.mp3
Track 13 ....F6_3.mp3

● A folder that does not contain any tracks cannot be selected.

● Audio files are played back in accordance with the sequence where these files are recorded into the CD. You can specify the playback sequence by adding a number from "01" to "99" at the beginning of each folder and file name before you record the files onto the disc.

CD Random Playback Mode

This mode plays the tracks in the CD or in a folder in a random sequence.

● If the CD is already playing, press the [■] key to stop playback.

1 **Press the [P.MODE] key to select the random playback mode.**

The mode changes as shown below each time you press the key.

PGM lit	▶	✕ lit	▶	**PGM,** ✕ unlit
Programplayback mode		Randomplayback mode		Trackplayback mode
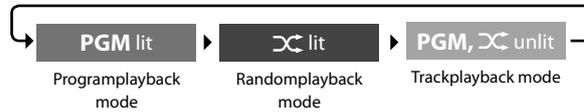
■ **To cancel random playback mode**

Press the [■] key to stop the playback, and then press the **[P.MODE]** key so that "✕" is no longer displayed.

● Pressing the [I◀◀] key skips back to the beginning of the track being played.

CD Repeat Playback Mode

This mode plays the tracks on a CD repeatedly.

1 **Press the [CD▶/II] key to play the tracks you want to repeat.**

2 **Press the [REPEAT] key to begin repeat playback.**

The mode changes as shown below each time you press the key.

⟲ 1 lit	▶	⟲ lit	▶	⟲ unlit
Single-track repeat playback		All-track repeat playback		Repeat playback off

■ **To cancel repeat playback mode**

Press the **[REPEAT]** key so that "⟲" is no longer displayed.

● If you press the **[REPEAT]** key during program playback, "⟲" and "PGM" light up on the display and repeat playback begins for the selected tracks.
● If you press the **[REPEAT]** key during random playback to activate all-track repeat playback, "⟲" and "✕" light up on the display and random playback begins with different sequence once the current random sequence ends.

CD

CD Program Playback Mode

You can select up to 50 tracks and play them in the order you like.

● Press the **[CD▶/❚❚]** key to switch the input source to CD. Playback begins when you switch the input source, so press the **[■]** key to stop playback.

● If the CD is already playing, press the **[■]** key to stop playback.
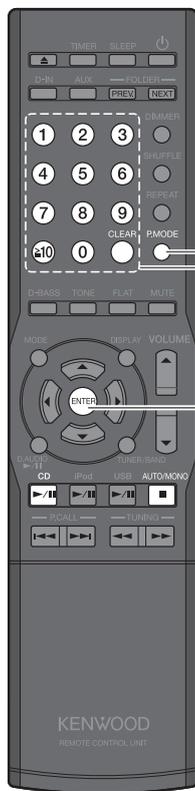
1 **Press the [P.MODE] key to select program playback mode.**

The mode changes as shown below each time you press the key.

PGM lit ▶ ⤧ lit ▶ **PGM,** ⤧ unlit

Program playback mode　　Random playback mode　　Track playback mode
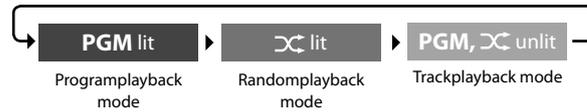
2 MP3/WMA

Use the number keys to select the folder to be used for program playback.

To play the folder number 3, press the **[3]** key.
To play the folder number 17, press the **[≧10]**, **[1]**, and then **[7]** key.
To play the folder number 123, press the **[≧10]**, **[≧10]**, **[1]**, **[2]**, and then **[3]** key.

▶ Press the **[ENTER]** key.

3 **Use the number keys to select the track or file you want to listen to.**

CD

P01←T10

When Track 10 selected as program track 1.

MP3/WMA

P01← 58 005

When file number 5 is selected.

4 **To select two or more tracks, repeat steps 3 (or steps 2 and 3 in case of MP3/WMA).**

● You can select up to 50 tracks for playback. If you attempt to select more tracks, the message "PGM FULL" appears on the display.

5 **Press the [CD►/Ⅱ] key to begin playback.**

■ **To cancel program mode**

Stop playback and press the **[P.MODE]** key so that "PGM" is no longer displayed.

■ **To remove a track from a program**

Stop playback and then press the **[CLEAR]** key. Each time you press the key, the last programmed track is cleared. Holding down the **[CLEAR]** key clears all the tracks in the program.

■ **To add a track to the end of the program**

If you are already playing a CD, stop playback and carry out steps 3 (or steps 2 and 3 in case of MP3/WMA).

● If you turn the system off or remove the CD for which program playback is set, the information in the specified program is erased.

Receiving Radio Broadcasts

This section explains how to listen to the FM/AM radio and set radio stations.

Listening to FM/AM Radio

● Simply pressing the **[TUNER/BAND]** key turns on the system and allows you to listen to the radio.
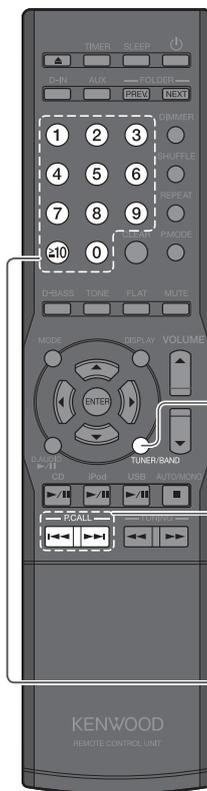
1 **Press the [TUNER/BAND] key to select "FM" or "AM".**

Each time you press the key, the band switches between "FM" and "AM".

2 **Select a station.**

Choosing from preset stations (Preset Call)

Select a preset station.

● See P.34 and P.35 for more information on presets.

■ **Selecting with the [P.CALL] keys**

To display the next stored station: Press the **[I◀◀]** or **[▶▶I]** key.

To run through the sequence of stored station at intervals of roughly 0.5 seconds: Press and hold the **[I◀◀]** or **[▶▶I]** key.

■ **Selecting with the number keys**

To select P3, press the **[3]** key.
To select P17, press the **[≧10]**, **[1]**, and **[7]** keys.

Choosing from stations that are not preset (Auto/ Manual Tuning)

❶ Select Auto tuning or Manual tuning.

[AUTO/MONO] key.

Press the **[TUNING MODE]**

The mode changes as shown below each time you press the key.

AUTO lit	▶	**AUTO** unlit
Auto tuning (Select this mode when reception is good.)		Manual tuning (Select this mode when reception is poor.)
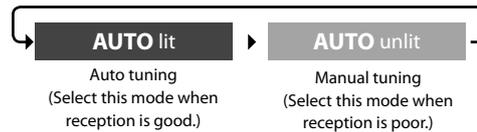
❷ Select a station.

Press the **[TUNING ◀◀/▶▶] key.**

Press the **[I◀◀/ ◀◀] or [▶▶/▶▶I] key.**

When the station is tuned, "TUNED" lights up on the display. If you are receiving a stereo signal, "ST." also lights up.

■ **Using Auto tuning**

The radio automatically tunes in to the next station each time you press the key. Repeat this step until you are tuned in to your preferred station.

■ **Using Manual tuning**

Press the key until the desired station is tuned or until you reach the desired frequency.

● There is no sound while Auto/Manual tuning is in progress.
● Auto tuning provides stereo reception while manual tuning provides monaural reception.
● The display changes as shown below each time you press the **[DISPLAY]** key.
  FM:
    Program service name → Preset No. → Day/Clock
  When the program service name is not stored:
    Preset No. → "NO PS" → Day/Clock
  AM:
    Preset No. → Day/Clock

Presetting Stations Automatically (AUTO MEMORY)

● Up to 40 stations can be preset in the system.

● For use of the RDS function, stations must be memorized by AUTO MEMORY.
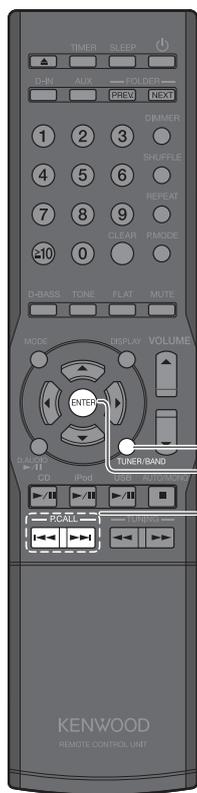
1 **Press the [MODE] key.**

2 **Select "AUTO MEMORY".**

Press the **[I◄◄◄]** or **[►►►I]** key.

AUTO MEMORY

▼

Press the **[ENTER]** key.

● "AUTO MEMORY" flashes on the display and the receivable radio stations are preset automatically.

● A preset frequency can be rewritten later.

● RDS stations are given priority during auto presetting. If there is memory left after presetting, this unit continues presetting regular FM and AM stations.

● A broadcast station that cannot be preset with AUTO MEMORY should be set with Manual preset. (P. 35)

Related
Information

Presetting Stations Manually (Manual Preset)

Use this procedure to make the station you are currently listening to a preset number. If the selected preset number is already assigned a station, the existing station is overwritten by the new station.

● You can preset up to 40 FM and AM stations.
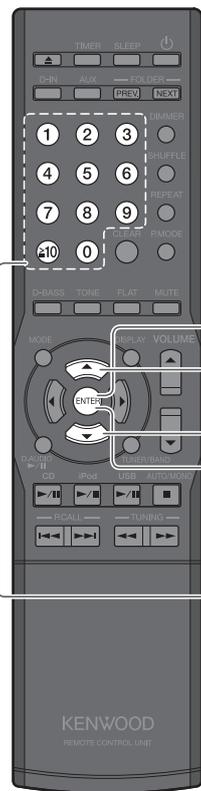
1 Tune in the station you want to preset, and then press the [ENTER] key.

Use Auto Tuning or Manual Tuning to tune in the desired station. (See P.33)

    -- FM   88.00 MHz

The preset number flashes.

2 Select the desired preset number (P01 to P40).

■ **Selecting with the [▲] or [▼] key.**

■ **Selecting with the number keys**

> To select P3, press the **[3]** key.
> To select P17, press the **[≧10]**, **[1]**, and **[7]** keys.

The currently selected preset number flashes.

    25FM   88.00 MHz

● If the selected preset number is already assigned a station, the existing station is overwritten by the new station.

3 Press the [ENTER] key.

    25FM   88.00 MHz

▼ 3 seconds later

    STATION1

RDS (Radio Data System)

This system is designed for RDS reception, it can extract the information from the broadcast signal for use with various functions such as automatic display of the station name.

- Select the FM band.

- Preset RDS stations with the AUTO MEMORY function. (P.34)

PS (Program Service) Name Display

When an RDS broadcast is received, the station name is automatically displayed.

STATION1

- The "RDS" lights up when an RDS broadcast (signal) is received.

■ **To switch the displays**

Press the **[DISPLAY]** key.

- The mode changes as shown below each time you press the key.

PS (Program Service Name) ▶ Preset Number ▶ Day/Clock

- Some stations may not be provided or be given different names depending on countries or areas.

Searching for a Desired Program Type (PTY Search)

The tuner automatically searches for a station which is currently broadcasting a specified program type (genre).

1 Press the [PTY] key.

Pop M

● When an RDS broadcast is received, the program type is shown on the display. If no PTY data is available, or if the station is not an RDS station, "None" is displayed.

2 Press the [▲] or [▼] key to select the desired program type.

● Select it while "PTY" is lit.
● Use program type table for your convenience.

Program type table

Program Type Name	Display	Program Type Name	Display
Pop Music	Pop M	Weather	Weather
Rock Music	Rock M	Finance	Finance
Easy Listening Music	Easy M	Children's programs	Children
Light Classical	Light M	Social Affairs	Social
Serious Classical	Classics	Religion	Religion
Other Music	Other M	Phone In	Phone In
News	News	Travel	Travel
Current Affairs	Affairs	Leisure	Leisure
Information	Info	Jazz Music	Jazz
Sport	Sport	Country Music	Country
Education	Educate	National Music	Nation M
Drama	Drama	Oldies Music	Oldies
Culture	Culture	Folk Music	Folk M
Science	Science	Documentary	Document
Varied	Varied		

3 Press the [ENTER] key.

● No sound is heard while "PTY" is flashing.
● If a program of the desired type is found, that program is received and the program type name display changes to the station name display.

■ **To cancel the PTY search**
Press the **[PTY]** key.

● If a program of the desired type cannot be found, "NO PROGRAM" flashes, then after several seconds the display returns to the original display.
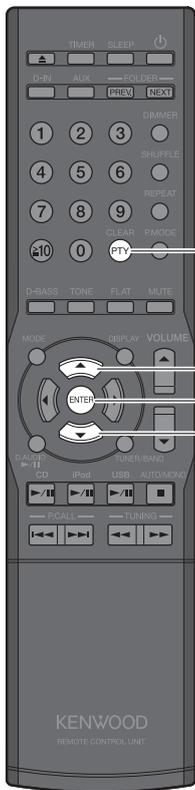
iPod

This section explains how to connect and play from an Apple iPod.

Playing from an iPod

Use this procedure to connect an iPod to the system for playback.

● Also refer to the instruction manual that comes with the iPod.

● Update the software for iPod to the latest version.

Supported models of iPod (As of September 2009)
- iPod classic
- iPod nano 2nd Generation
- iPod nano 3rd Generation
- iPod nano 4th Generation
- iPod nano 5th Generation
- iPod touch
- iPod touch 2nd Generation

1 Open the cover on the main unit, and then connect an iPod to the iPod connector.

● You cannot attach an iPod to the system if it is in a cover, case, or with other accessories. Always remove it.

● Connecting an iPod to the system without using the Dock adapter may deteriorate or damage the connector. Always use the Dock adapter. (P.12)

● Keep the iPod on a straight position while connecting/disconnecting it.

● Once the iPod is connected, it can be charged.
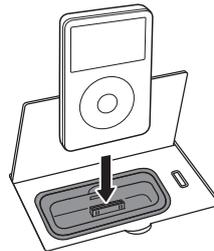
2 Press the [iPod ►/II] key to begin playback.

● Simply pressing the **[iPod ►/II]** key turns on the system and begins playback.

Related Information

■ Operations during iPod playback

You can also perform these operation on iPod.
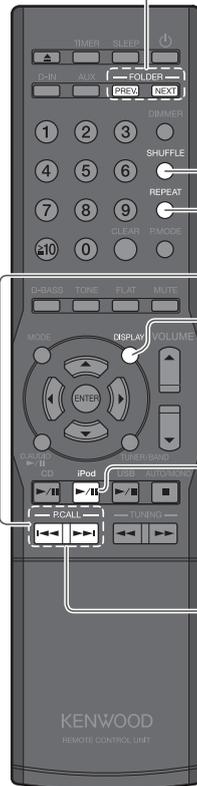
Playing the tracks in the previous/next album

Press the **[PREV.]** key to go to the previous album, while press the **[NEXT]** key to go to the next album.

Setting the shuffle

Press the **[SHUFFLE]** key. Each time you press the key, the shuffle setting is changed.

Setting the repeat playback

Press the **[REPEAT]** key. Each time you press the key, the repeat setting is changed.

Skipping forward/back

Hold down the **[I◄◄]** or **[►►I]** key.

Hold down the **[I◄◄/◄◄]** or **[►►/►►I]** key.

Switching display contents

Press the **[DISPLAY]** key to shift the selection.

"iPod" ▶ Day/Clock

Pausing and resuming playback

Press the **[iPod►/II]** key.

Press the **[►/II]** key.

Skipping tracks, skipping back, skipping to the start

Skip a track

Press the **[►►I]** key.

Press the **[►►/►►I]** key.

Skip back to the previous track

Press the **[I◄◄]** key 2 or more times in succession.

Press the **[I◄◄/◄◄]** key 2 or more times in succession.

Return to the start of the track

Press the **[I◄◄]** key once.

Press the **[I◄◄/◄◄]** key once.

USB

This section explains how to connect a USB flash memory or USB mass storage class compliant digital audio player ("USB device") and play back audio files from it.

Playing back from a USB device

Connect a USB flash memory or USB mass storage class compliant digital audio player to the USB port and play back audio files from it.
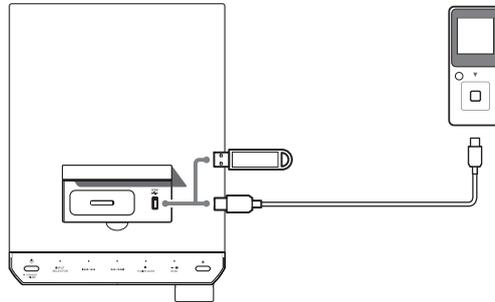
● Also refer to the instruction manual that comes with the USB device you are connecting.

● Supported Files

    AAC
    MP3
    WMA

See "Supported Audio Files" for details. (P.23)

1 **Open the cover on the main unit, and then connect a USB device to the [USB ●⟷] port.**

2 **Press the [USB▶/II] key to begin playback.**

● Simply pressing the **[USB▶/II]** key turns on the system and begins playback.

● After folders or files are searched, playback begins with the smallest file number. See P.28 for information on the playback sequence when there are multiple folders or files on the connected device.

```
T001        1:23
```

● If no playable files are found, playback does not start.

● When playback resumes on a digital HDD audio player, sound may jump due to the mechanism specific to HDD.

■ Operations during USB device playback

Playing the tracks in the previous/next folder

To go to the previous folder, press the **[PREV.]** key.
To go to the next folder, press the **[NEXT]** key.

● These functions may not work with some USB devices.

Repeat playback mode

Press the **[REPEAT]** key to shift the selection.

🔁 1 lit ▸ 🔁 lit ▸ 🔁 unlit

Single-track repeat playback | All-tracks/folders repeat playback | Repeat playback off

Selecting folder playback mode

Press the **[P.MODE]** key to shift the selection.

📁 lit ▸ 📁 unlit

Folder mode | Folder mode off

Switching display contents

Press the **[DISPLAY]** key to shift the selection.

Time for 1 track ▸ Folder name/Track name ▸ File name ▸ Folder name

TAG

Day/Clock ◂ Album name ◂ Artist name ◂ Title

Pausing and resuming playback

Press the **[USB ►/ II]** key. | Press the **[►/ II]** key.

Stopping playback

Press the **[■]** key. | Press the **[■]** key.

Skipping forward/back

Press the **[◄◄]** or **[►►]** key. | Press the **[I◄◄/◄◄]** or **[►►/►►I]** key.

Skipping tracks, skipping back, skipping to the start

Skip a track

Press the **[►►I]** key. | Press the **[►►/►►I]** key.

Skip back to the previous track

Press the **[I◄◄]** key 2 or more times in succession. | Press the **[I◄◄/◄◄]** key 2 or more times in succession.

Return to the start of the track

Press the **[I◄◄]** key once. | Press the **[I◄◄/◄◄]** key once.

KENWOOD
REMOTE CONTROL UNIT
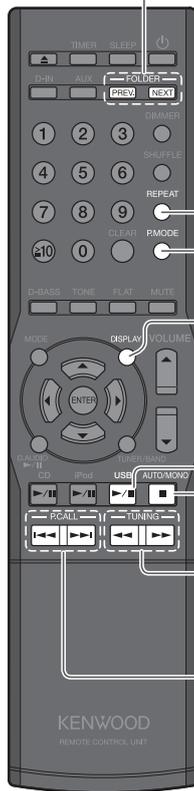
External Components

This section explains how to connect external components to the system and play back tracks.

Playback from External Components

Connect the external component to the system as described in <Connecting Other Accessories (Commercially Available Units)> (P.13).

● When connecting external components, always turn this system and the external components off beforehand.

● Also refer to the instruction manual that comes with the external component being connected.

1 **Press the [D-IN] key when playback is performed from a device connected to the [DIGITAL IN (OPTICAL)] terminal, while press the [AUX] key when playback is made performed from a device connected to the [AUX IN] terminal.**

D-IN   48 kHz

● When a digital component is selected, the input signal sampling frequency is displayed.

● The system will play PCM (32, 44.1, 48, 88.2, 96 kHz) digital signals.

2 **Begin playback on the connected external component.**

Perform the required operation on the connected external component to start playback.

3 **Adjust the volume level.**
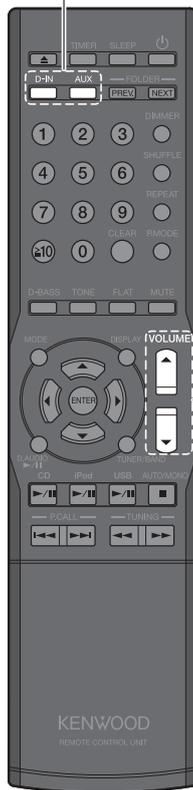
Adjusting the External Component Input Level

Use the procedure below to adjust the input level for the external component connected to the [AUX IN] terminal.
Use this adjustment when the volume from an external component is noticeably higher or lower than other input sources at the same volume setting.

1 **Press the [AUX] key.**

2 **Press the [MODE] key.**

3 **Select "INPUT LEVEL".**

Press the [◀] or [▶] key.

INPUT LEVEL

▼

Press the **[ENTER]** key.

4 **Adjust the Input Level.**

Press the [▲] or [▼] key.

LEVEL   –3

● You can adjust the input level in a range from -3 to 5.

▼

Press the **[ENTER]** key.

● If you adjust the input level for AUX, the output level from the **[AUX REC OUT]** terminal will also change.

English **43**
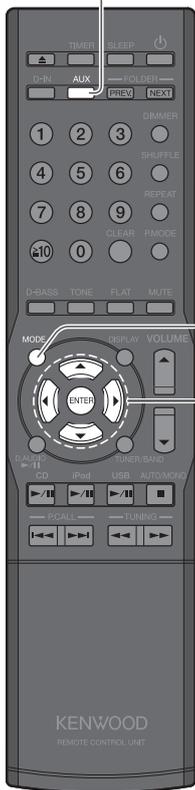
🔲 D.AUDIO

You can connect a Kenwood digital audio player (referred to hereafter simply as "digital audio player") to the system and use it to play tracks.

Playing from a digital audio player

**Use this procedure to connect a digital audio player to the system and play tracks.**

● Always turn this system and the digital audio player off before connecting the digital audio player.

● Also refer to the instruction manual that comes with the digital audio player you are connection.

● Connecting the digital audio player using the dedicated cable PNC-150 allows you to operate the digital audio player using the main unit or the remote control.

Compatible Kenwood digital audio players   **(Europe and Australia only)**

HDD audio player	Memory audio player
HD20GA7	M1GC7, MGR-A7
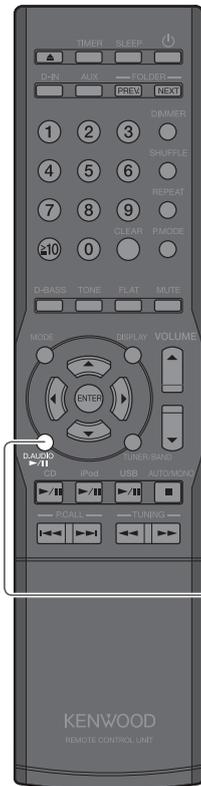
1 **Connect the digital audio player to the [D.AUDIO IN] terminal on the rear panel of the main unit.**
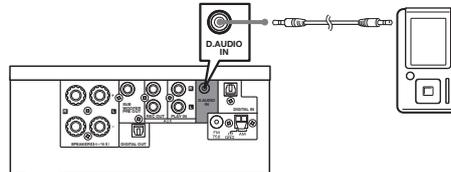
2 **Turn on the digital audio player.**

3 **Press the [D.AUDIO▶/II] key to begin playback.**

● Simply pressing the **[D.AUDIO▶/II]** key turns on the system and begins playback.

● If the digital audio player is not connected using the dedicated cable PNC-150, use the controls on the connected digital audio player.

💡 ● If you use the dedicated cable for the connection, the volume and sound quality settings on the digital audio player are disabled.

● When you have finished using the digital audio player, disconnect the player's connection cable from the **[D.AUDIO IN]** terminal.

Related Information	● Adjusting the Digital Audio Player Input Level → P.46
	● Audio Settings → P.47 onwards

■ Operations during digital audio player playback

Playing the tracks in the previous/next folder

To go to the previous folder, press the **[PREV.]** key.

To go to the next folder, press the **[NEXT]** key.

● These functions may not work with some digital audio player models.

Skipping forward/back

Hold down the **[I◄◄◄]** or **[►►►I]** key.

Hold down the **[I◄◄◄/ ◄◄◄]** or **[►►/►►►I]** key.

Switching display contents

Press the **[DISPLAY]** key to shift the selection.

"D.AUDIO" ► Day/Clock

Pausing and resuming playback

Press the **[D.AUDIO►/II]** key.

Press the **[►/II]** key.

Stopping playback

Press the **[■]** key.

Press the **[■]** key.

Skipping tracks, skipping back, skipping to the start

Skip a track

Press the **[►►►I]** key.

Press the **[►►/►►►I]** key.

Skip back to the previous track

Press the **[I◄◄◄]** key two or more times in succession.

Press the **[I◄◄◄/ ◄◄◄]** key two or more times in succession.

Return to the start of the track

Press the **[I◄◄◄]** key once.

Press the **[I◄◄◄/ ◄◄◄]** key once.

Adjusting the Digital Audio Player Input Level

Use the procedure below to adjust the input level for the external component connected to the [D.AUDIO IN] terminal.
Use this adjustment when the volume from an external component is noticeably higher or lower than other input sources at the same volume setting.

1 **Press the [D.AUDIO▶/❚❚] key.**

2 **Press the [MODE] key.**

3 **Select "INPUT LEVEL".**

Press the [◀] or [▶] key.

`INPUT LEVEL`

▼

Press the **[ENTER]** key.

4 **Adjust the Input Level.**

Press the **[▲]** or **[▼]** key.

`LEVEL     -3`

● You can adjust the input level in a range from -3 to 5.

▼

Press the **[ENTER]** key.

● If you adjust the input level for D.AUDIO, the output level from the **[AUX REC OUT]** terminal will also change.

Audio Settings

Use the procedures in this chapter to specify the sound quality settings for your stereo system.
You can use the system's sound quality function to customize the sound to your own preferences.

CONEQ (Acoustic Equalizer)

With the digital sound correction technology of Convolution Equalizer (CONEQ), you can select an Acoustic Effect suitable for your listening environment.

Matching the Acoustic Effect to the Environment of the Room
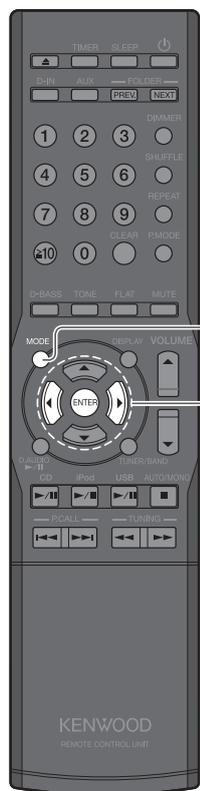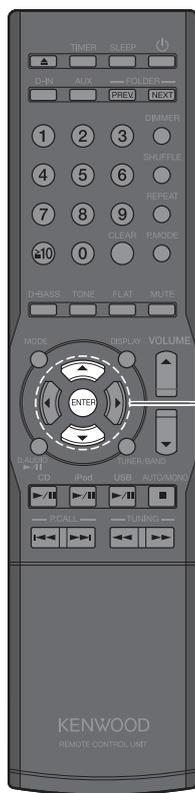
1 **Press the [MODE] key.**

2 **Select "CONEQ SET".**

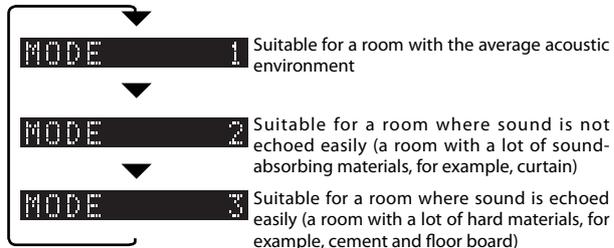Press the [◀] or [▶] key.

`CONEQ SET`

▼

Press the **[ENTER]** key.

3 **Select a CONEQ number.**

Press the [▲] or [▼] key.

The display changes as shown below.

MODE 1   Suitable for a room with the average acoustic environment

MODE 2   Suitable for a room where sound is not echoed easily (a room with a lot of sound-absorbing materials, for example, curtain)

MODE 3   Suitable for a room where sound is echoed easily (a room with a lot of hard materials, for example, cement and floor board)

Press the **[ENTER]** key.

Digital Signal Processor

The system has a digital signal processor (DSP), which allows you to adjust the impact of super-bass tones and the levels of low-, mid-, and high-range tones.
This provides more detailed settings that allow you to adjust the sound to your own preferences.

Adjusting Super-Bass Tones (D-BASS)

This feature lets you tailor the impact of super-bass tones to your own preferences.
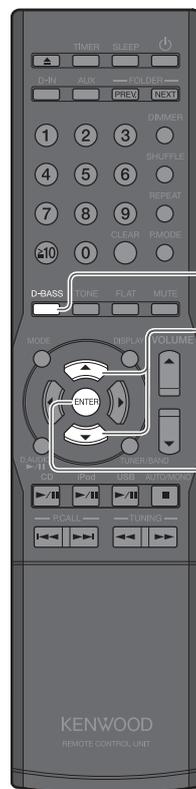
1 Press the [D-BASS] key.

2 Press the [▲] or [▼] key to adjust the level.

D-BASS   4

● While the "D-BASS" is flashing on the display, you can adjust the level in a range from 0 to 10.Higher numbers give more pronounced super-bass tones.
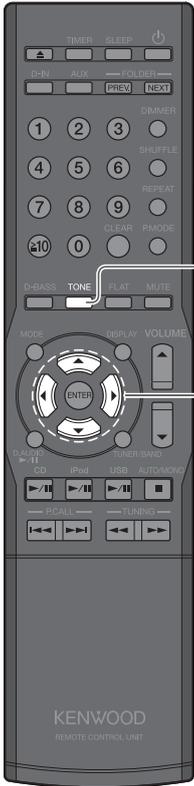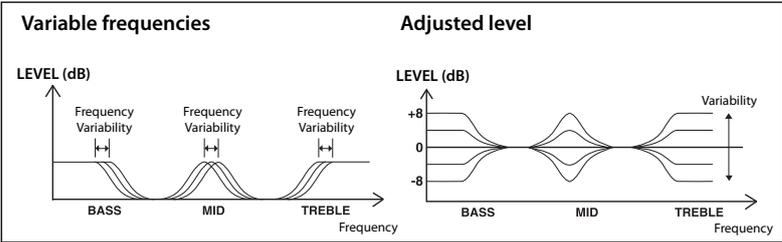
● The "D-BASS" flashes while setting is in progress.

3 Press the [ENTER] key.

● If you set level 1 or higher, the "D-BASS" lights.

Adjusting the Range Levels (TONE)

You can adjust the low-, mid- and high-range tones to match your preferences (TONE).

Variable frequencies

LEVEL (dB)

Frequency Variability

Frequency Variability

Frequency Variability

BASS   MID   TREBLE
Frequency

Adjusted level

LEVEL (dB)

Variability

+8

0

-8

BASS   MID   TREBLE
Frequency

1 **Press the [TONE] key, and then select [BASS] from the range levels (BASS: low-range tones, MID: mid-range tones, TREBLE: high-range tones, OFF: setting off).**

2 **Press the [◀] or [▶] key to select the frequency (Low: 100Hz, Mid: 150Hz, or High: 200Hz) of the low-range tones (BASS).**

FREQ   150Hz

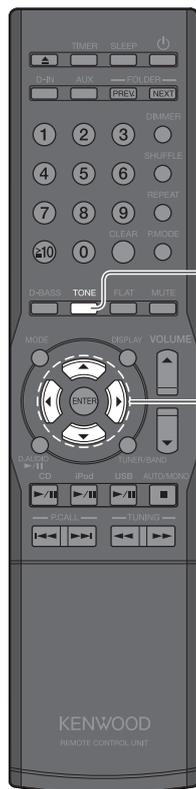**3** **Press the [▲] or [▼] key to adjust the low tones (BASS) level.**

BASS   +3

● The "TONE" flashes while setting is in progress. While the "TONE" is flashing, you can adjust the level in a range from -8 to +8.

4 Press the [TONE] key.

5 Press the [◀] or [▶] key to select the frequency (Low: 1kHz, Mid: 2kHz, or High: 3kHz) of the mid-range tones (MID).
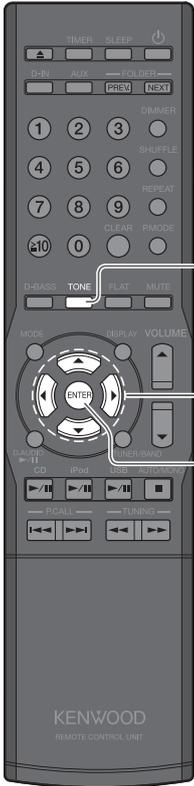
FREQ   2kHz

6 Press the [▲] or [▼] key to adjust the mid tones (MID) level.

MID   +5

● The "TONE" flashes while setting is in progress. While the "TONE" is flashing, you can adjust the level in a range from -8 to +8.

7 **Press the [TONE] key.**

8 **Press the [◀] or [▶] key to select the frequency (Low: 5kHz, Mid: 7kHz, or High: 10kHz) of the high-range tones (TREBLE).**

FREQ   10kHz

9 **Press the [▲] or [▼] key to adjust the high tones (TREBLE) level.**

TREBLE   −6

● The "TONE" flashes while setting is in progress.While the "TONE" is flashing, you can adjust the level in a range from -8 to +8.

10 **Press the [ENTER] key.**

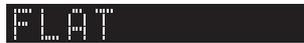● If you set a level other than 0, the "TONE" is displayed.

● If you do not need to adjust all the range levels, press the **[ENTER]** key to end the settings after you have finished the range level adjustments you want to make.

Disabling D-BASS, TONE effects (FLAT)
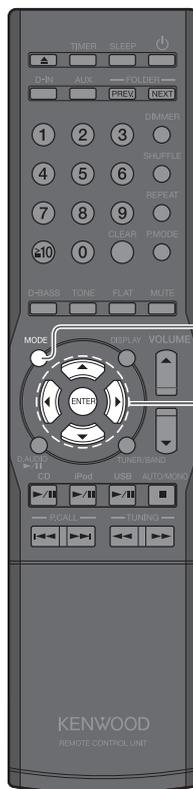
1 **Press the [FLAT] key.**

```
FLAT
```

● The "D-BASS" and "TONE" levels are set to 0.

Supreme EX

Supreme EX is Kenwood's original sound quality enhancement technology and is used for playing CDs and audio files or for playback using components connected to a digital input terminal.

Setting Supreme EX

1 Press the [MODE] key.

2 Select "SPRM SET".

Press the [◀] or [▶] key.

    SPRM SET

▼

Press the **[ENTER]** key.

● The "SPRM EX" flashes while setting is in progress.

3 Select "ON" or "OFF".

Press the [▲] or [▼] key.

    SPRM   ON

    SPRM   OFF

▼

Press the **[ENTER]** key.

● "SPRM EX" lights when "SPRM ON" is selected, while it turns off when "SPRM OFF" is selected.

● The Supreme EX function operates when "CD", "D-IN", "iPod", or "USB" is selected.
● Even when "D-IN" is selected, the "SPRM EX" does not light if the input signal frequency is 96kHz, 88.2kHz, or 48kHz.

BALANCE

Use this procedure to adjust the volume balance for the left and right speakers.

Adjusting the Speaker Volume Balance
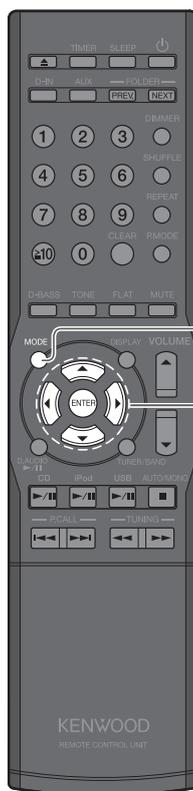
1 **Press the [MODE] key.**

2 **Select "BALANCE".**

Press the [◀] or [▶] key.

BALANCE

▼

Press the **[ENTER]** key.

3 **Adjust the balance.**

Press the [▲] or [▼] key.

L ━ ━ ━ +▤ ━ ━ R

▼

Press the **[ENTER]** key.

Component Settings

This chapter explains basic timekeeping settings, as well as settings for the timer, display, and other functions which provide more extensive usage of this product.

Setting the Timer

Display Settings

Setting the Timer

A Sleep Timer automatically turns the system off after a set interval, while a Program Timer starts playback at a specified time.

Setting the Sleep Timer (SLEEP)

This function automatically turns the system off after a set interval. You can set an interval from 10 to 90 minutes, in 10-minute increments.

1 **Press the [SLEEP] key.**

The interval increases by 10 minutes each time you press the key.

The next setting after 90 minutes is timer off.

```
  ┌─► 10 ▶ 20 ▶ 30 ▶ 40 ▶ 50
  │                            
  └── Off ◄ 90 ◄ 80 ◄ 70 ◄ 60 ◄┘
     ("🌙" unlit)
```

Sleep Timer on

```
SLEEP            10
```
Time setting
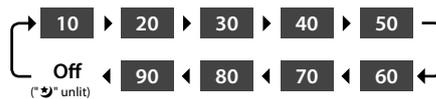
● While the Sleep Timer is running, you can check the remaining time by pressing the **[SLEEP]** key.

■ To cancel the Sleep Timer

Press the power **[⏻]** key to turn the system off (Standby) or press the **[SLEEP]** to turn off "🌙".

Setting the Program Timer (TIMER SET)

**This function allows you to use the timer to start playback automatically at a specified time. You can set two timers (PROG. 1 and PROG. 2) at the same time. You can play back from a radio, CD, iPod, USB device, or external component (AUX IN).**

● Set the system clock to the correct time before performing this procedure. (See P.64)

● Make sure the times for PROG. 1 and PROG. 2 are different by at least 1 minute to ensure that their operations do not overlap.
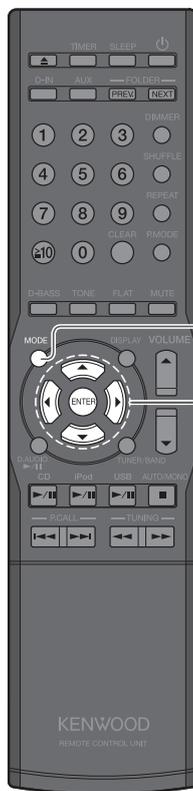
1 **Press the [MODE] key.**

2 **Select "TIMER SET".**

Press the [◀] or [▶] key.

TIMER SET

▼

Press the **[ENTER]** key.

3 **Select "PROG. 1" or "PROG 2".**

Press the [▲] or [▼] key.

PROG. 1 SET

▼

Press the **[ENTER]** key.
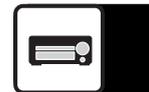
4 **Select "ON" or "OFF".**
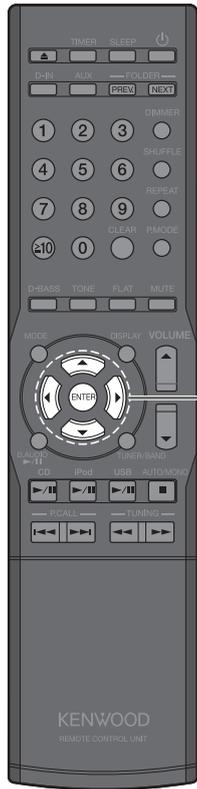
Press the [▲] or [▼] key.

PROG. 1 ON

PROG. 1 OFF

● Selecting "OFF" ends the procedure and restores the original display.

▼

Press the **[ENTER]** key.

Continued to next page

5 **Select the day (or days) on which the Program Timer will run.**

Press the **[▲]** or **[▼]** key.

The mode changes as shown below each time you press the key.

EVERYDAY ‹ SUNDAY ‹ MONDAY ‹ TUESDAY ‹ WEDNESDAY ‹ THURSDAY

SAT-SUN ‹ TUE-SAT ‹ MON-FRI ‹ SATURDAY ‹ FRIDAY

▼

Press the **[ENTER]** key.

● If you selected "EVERYDAY", "MON-FRI", "TUE-SAT" or "SAT-SUN", proceed to step 7.

6 **Select "EVERY WEEK" or "ONETIME".**

Press the **[▲]** or **[▼]** key.

EVERY WEEK

● The timer runs every week.

ONETIME

● The specified timer runs once only.

▼

Press the **[ENTER]** key.

7 **Specify the "ON" (start time) setting.**

Use the **[▲]** or **[▼]** key to set the "hour".

ON   9:00

● The "hour" flashes.

▶ Press the **[ENTER]** key.

▼

Use the **[▲]** or **[▼]** key to set the "minute".

ON   9:15

● The "minute" flashes.

▶ Press the **[ENTER]** key.

8 **Specify the "OFF" (end time) setting.**

Use the **[▲]** or **[▼]** key to set the "hour".

OFF 11:00

● The "hour" flashes.
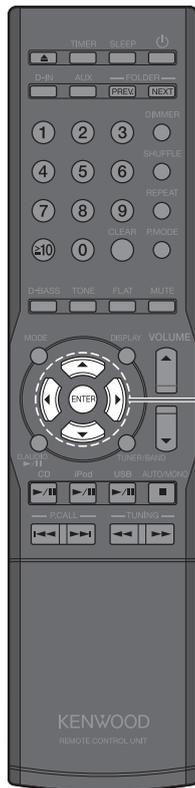
▶ Press the **[ENTER]** key.

▼

Use the **[▲]** or **[▼]** key to set the "minute".

OFF 11:03

● The "minute" flashes.

▶ Press the **[ENTER]** key.

9 **Select "PLAY" or "AI PLAY".**

Press the **[▲]** or **[▼]** key.

PLAY

- Playback is at the volume set in step 10.

AI PLAY

- Playback begins at the specified time and the volume gradually increases to the level set in step 10.

▼

Press the **[ENTER]** key.

10 **Set the volume.**

Press the **[▲]** or **[▼]** key.

VOLUME 30

▶ Press the **[ENTER]** key.

- You cannot use the **[VOLUME]** key to set the volume.

11 **Select the input source.**

Press the **[▲]** or **[▼]** key.

The mode changes as shown below each time you press the key.

TUNER	CD	iPod
AUX	D-IN	USB

▼
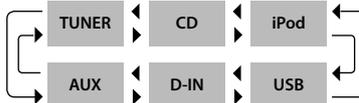
Press the **[ENTER]** key.

- If you select an input source other than "TUNER", this completes the settings and "COMPLETE" is displayed briefly, after which the original display reappears.
- If you select "TUNER", use the **[▲]** or **[▼]** to select a preset number and then press the **[ENTER]** key. This completes the settings and "COMPLETE" is displayed briefly, after which the original display reappears.

12 **Press the power [⏻] key to turn the power OFF.**

● The **[STANDBY/TIMER]** indicator on the main unit lights orange.

● If the indicator lights red, set the clock to the correct time.

■ **To turn a timer off or on**

● When the system is turned on, press the **[TIMER]** key.

The setting changes each time you press the **[TIMER]** key.

🕐 1 lit	▶	🕐 2 lit
PROG. 1 on		PROG. 2 on

🕐 1 2 unlit	◀	🕐 1 2 lit
Timer off		PROG. 1 and 2 on
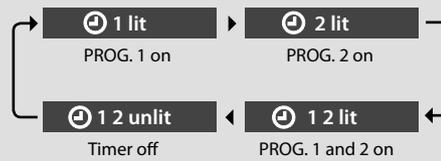
● The **[STANDBY/TIMER]** indicator will light red if there was a power failure or the system was unplugged from the wall outlet for some time. If this happens, set the system clock to the correct time again. (See P.64)

● To modify the program settings, reconfigure the timer settings from the beginning.

● When the system is in Standby mode, you can confirm the timer setting (on or off) for 5 seconds by pressing the **[■]** key on the remote control.

Display Settings

Use these settings to adjust the brightness of the display and to specify the settings for the main unit dial lighting.

Setting the Display Brightness (DIMMER)

Use this procedure to adjust the display brightness. Adjust the brightness according to your preferences and the conditions in the room.

1 **Press the [DIMMER] key.**

The mode changes as shown below each time you press the key.

"DIMMER OFF": Normal brightness
"DIMMER 1": Reduces the display brightness.
"DIMMER 2": Reduces the display brightness and turns off the dial lighting.
"DIMMER 3": Restores the normal display brightness and turns off the dial lighting.
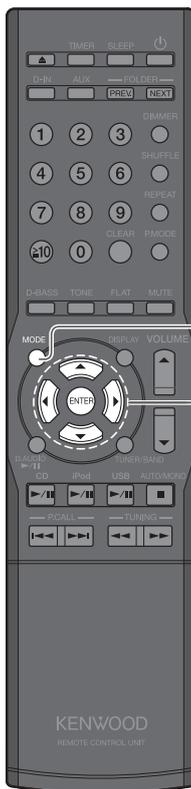
Turning the Display Saver ON/OFF

If the system is not used at all for a set period, this function scrolls the display to prevent burn-in of the text on the display and uneven display brightness.

1 **Press the [MODE] key.**

2 **Select "DISP. SAVER".**

Press the [◀] or [▶] key.

```
DISP. SAVER
```

▼

Press the **[ENTER]** key.

3 **Select "ON" or "OFF".**

Press the [▲] or [▼] key.

```
D.SAVER ON
```
● The display saver is active.

```
D.SAVER OFF
```
● The display saver is disabled.

▼

Press the **[ENTER]** key.

● When you are playing from a CD or USB, the display saver is activated if the system is not used at all for 10 minutes after the playback stops. If you selected another input source, the display saver is activated if the system is not used at all for 10 minutes after the last key is pressed.

Setting the System Clock

Set the system clock to the correct time.If the system clock time setting is not correct, the Program Timer will not start playback at the correct time.
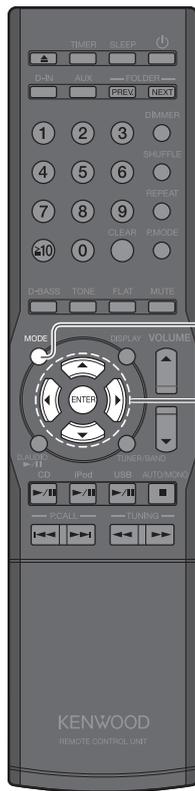
1 **Press the [MODE] key.**

2 **Select "TIME ADJUST".**
Press the [◀] or [▶] key.

TIME ADJUST ▶ Press the **[ENTER]** key.

3 **Set the day of the week.**
Press the [▲] or [▼] key.

SUN 12:00 ▶ Press the **[ENTER]** key.

4 **Set the time.**
Use the [▲] or [▼] key to set the "hour".

SUN 8:00 ▶ Press the **[ENTER]** key.

Use the [▲] or [▼] key to set the "minute".

SUN 8:07 ▶ Press the **[ENTER]** key.

● The currently set day of the week and time are displayed.

SUN 8:07

● If you make a mistake, repeat the procedure from the beginning.
● If there is a power failure or the system is unplugged from the wall outlet for some time, set the time again.
● Pressing the [■] key on the remote control while the system is in the Standby mode will display the time for 5 seconds.
● Time display differs (24 Hour clock display or AM/ PM display) according to area.

Auto Power Save (A.P.S)

Auto Power Save (A.P.S.) is automatically turns the system off if no operation is performed for 30 minutes after a CD or a USB connected device stops playing.
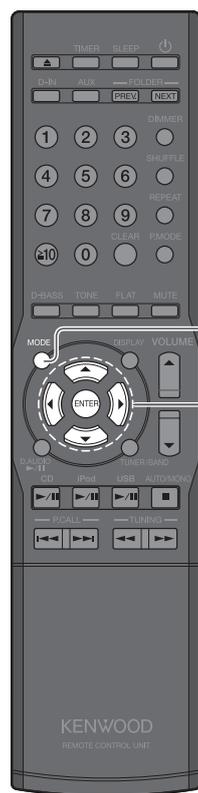
1 Press the [MODE] key.

2 Select "A.P.S. SET".

Press the [◀] or [▶] key.

A.P.S. SET

● "A.P.S." lights up on the display.

▼

Press the **[ENTER]** key.

3 Select "ON" or "OFF".

Press the [▲] or [▼] key.

A.P.S. ON

● "A.P.S." flashes on the display.

A.P.S. OFF

● "A.P.S." turns off.

▼

Press the **[ENTER]** key.

● If the input source is other than CD and USB, Auto Power Save operates when the volume is set to 0 (VOLUME 0) or MUTE is set to on. When recording on external components, turn A.P.S. off or adjust volume to above 0.

Setting the Power Supply

Specify whether power is supplied to an iPod or USB device, even when iPod or USB device is connected but not selected as an input source.
(Power is always supplied to a device selected as an input source, regardless of this setting.)
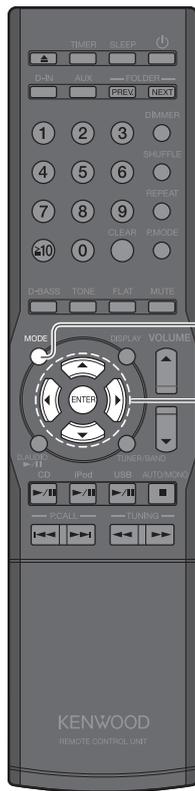
1 **Press the [MODE] key.**

2 **Select "P.SUPPLY".**

Press the [◀] or [▶] key.

P.SUPPLY

▼

Press the **[ENTER]** key.

3 **Select "ON" or "OFF".**

Press the [▲] or [▼] key.

SUPPLY ON

● Power is always supplied when the system is turned on.

SUPPLY OFF

● Power is supplied only when the device is selected as an input source.

▼

Press the **[ENTER]** key.

Maintenance

This chapter explains what to do when error messages appear on the display or when problems arise. It also describes how to store and maintain the system so it continues to give pleasure for many years to come.

Messages

Displayed Message	Meaning
NO DISC	There is no CD inserted. →Insert a CD.
NO PGM	No tracks are programmed. →Program the tracks you want to listen to. (See P.31) →Cancel program mode and use normal playback. (See P.32)
PGM FULL	An attempt was made to program a 51st CD track. →You can program only up to 50 tracks. (See P.32)
NOT SUPPORT	An iPod that is not supported with this device is connected. (See P.38)
NonPCM	The [DIGITAL IN (OPTICAL)] terminal on the rear panel of the main unit is receiving non-PCM input signals. (See P.13)
TRAY OPEN	The CD tray is open. →Close the tray.
UNLOCK	The component connected to the [DIGITAL IN (OPTICAL)] terminal on the rear panel of the main unit is not turned on. Alternatively, there is no signal input.
––– kHz	The sampling frequency of the input PCM signals is outside the playable range.
. . . .	There is no TAG information. (See P.23)

Troubleshooting

Whenever the system is not operating as expected, check the following tables to see if you can resolve the problem yourself before requesting service.

Amplifier/ Speakers

Symptoms	Solution	Ref. page
No sound output	● Check all connections as described in <Connecting the System>. ● Increase the volume. ● Cancel the MUTE setting. ● Unplug any headphones plugged into the main unit.	10-13 20 20 13
[STANDBY/TIMER] indicator is flashing red and there is no sound.	● One of the speaker cords is short-circuited. Unplug the power cord and then reconnect the speaker cord. ● There may be an internal problem. Turn off the power to the main unit, unplug the power cord and request repairs.	—
No sound from the headphones	● Check that the headphone plug is inserted correctly. ● Increase the volume. ● Cancel the MUTE setting.	13 20 20
There is no sound from "D-IN".	● Check all connections as described in <Connecting the System>. ● Check whether "PCM" is selected for the digital audio output setting on the connected component.	13
No sound from one of the speakers	● Check all connections as described in <Connecting the System>. ● Check the volume balance for the left and right speakers.	10 56
The clock display is flashing.	● Set the clock as described in <Setting the System Clock>.	64
The timer does not work.	● Set the clock as described in <Setting the System Clock>. ● Set a start time and end time for the program timer.	64 59

Tuner

Symptoms	Solution	Ref. page
No radio reception	● Connect the antennas. ● Select the broadcast band (AM or FM). ● Tune the radio to the frequency of the desired station.	10 33 32-35
Interference (noise)	● Install an outdoor antenna away from roads. ● Turn off any electrical appliances that may be causing interference. ● Move the system away from the TV.	—
I have used Auto Memory and pressed the [P.CALL] key, but I still can't get radio reception.	● Run Auto Memory again. ● Manually preset stations with frequencies that you can receive.	34 35

CD

Symptoms	Solution	Ref. page
A CD does not play back when loaded.	● Load the disc correctly with the label side facing upward. ● Clean the disc. (See <Care and Storage>.) ● Allow any condensation to evaporate. (See <Beware of condensation.)	**26** **73** **73**
No sound output	● Press the **[CD►/❚❚]** key. ● Clean the disc. (See <Care and Storage>.)	**26** **73**
Playback skips.	● Clean the disc. (See <Care and Storage>.)	**73**
Some audio files can't play back.	● The system will not play audio files that are corrupted. ● Make sure the audio file is supported for playback on the system.	**23**
Delay until playback starts.	● There may be a delay prior to playback if there are large numbers of folders.	**28**
TAG information is not displayed correctly.	● Refer to <Supported Audio Files> to check which TAG information can be displayed on this system.	**23**

iPod

Symptoms	Solution	Ref. page
The iPod cannot be attached firmly.	● Check to see whether the correct Dock adapter is used. Then check to see whether the connector between the iPod and the system is not damaged, and reconnect them.	**12**
The iPod does not provide sound.	● The iPod is not properly connected. Remove the iPod from the system, and then connect it again.	**12**
The iPod cannot be charged.	● The iPod is not properly connected. Remove the iPod from the system, and then connect it again.	**12**

USB

Symptoms	Solution	Ref. page
No sound output when USB flash memory or a USB audio player is connected.	● Plug in the USB flash memory correctly. ● Connect the USB cable correctly. ● Check to make sure the USB audio player is turned on.	**12** **40**

Components connected to the D.AUDIO IN terminal

Symptoms	Solution	Ref. page
The main unit and remote control cannot control a Kenwood digital audio player.	● Connect the player using the dedicated cable PNC-150. ● Check whether the connected model is compatible.	**12** **44**

Remote control

Symptoms	Solution	Ref. page
The remote control does not work.	● Load new batteries. ● Use the remote control within its effective range.	**17** **17**

Resetting the microcomputer

Symptoms	Solution
Microcomputer malfunction (the system does not work, the display is faulty, etc.).	● **Malfunctions may occur due to an external cause or because a connection cord was unplugged while the system was turned on.** **Use the procedure below to reset the microcomputer.** ❶ **Unplug the power cord from the AC wall outlet.** ❷ **Plug the power cord back in while holding down the power [⏻] key on the main unit.** ❸ **Upon the start of the microcomputer resetting, the display shown on the right appears.** ● During the resetting of microcomputer, the display goes out. ❹ **When finish resetting, it turns to Standby Mode.** ● Bear in mind that resetting erases any stored information and restores the system's default settings.
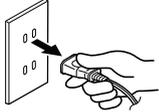
English 71

Glossary of Terms

Term	Meaning	Page
AAC	An abbreviation for "Advanced Audio Coding". This is a compression standard that applies only to the audio component in image compression methods used for digital broadcasting, etc.	23
Bitrate	A value indicating the amount of information processed per second. The higher the bitrate, the better the sound quality.	23
CD-DA	Refers to music CDs. Almost all discs normally referred to as "CDs" are actually CD-DA discs.	22
CONEQ	CONEQ equalizes acoustic power frequency response and corrects phase and time alignment errors of a speaker system. Speakers with CONEQ perform as electro-acoustic transducers providing true to the original sound with the highest musicality and intelligibility.	48
MP3	An audio compression method developed by Germany's Fraunhofer IIS, which achieves high rates of data compression by discarding data not readily audible to humans. MP3 can compress data down to rates of approximately 1/11 (128 kbps) while retaining sound quality equivalent to a music CD.	23
Sampling frequency	A value that indicates the number of times per second analog signals are sampled for conversion to digital signals. The sampling frequency for music CDs is 44.1 kHz. Normally, the higher the sampling frequency, the better the sound quality.	23
TAG information	Information included in audio files, such as title, artist, album, and genre.	23
USB	A standard for the interface to connect peripheral devices to a computer. This system supports USB 1.1 and 2.0.	22
USB mass storage class	A standard for computer control of a USB device. It also makes it possible for a computer to recognize a connected USB device as an external storage device.	22
WMA	An abbreviation for the "Windows Media™ Audio" audio compression and encoding system developed by Microsoft Corporation of the U.S.	23

Care and Storage

Care and storage of main unit

■ Keep the system out of the following locations

- Areas exposed to direct sunlight.
- Areas subjected to excessive humidity or dust.
- Areas exposed to direct heat from heating equipment.

■ Be careful against condensation

Extreme differences between system temperature and air temperature can cause water droplets (condensation) to form on the system. The system will not operate properly while condensation is present. If condensation forms, do not use the system for a few hours to allow the condensation to dry.

Take special care against condensation when the system is moved between two locations of very different temperatures, or into a room where high humidity is present.

■ Cleaning a CD

When the front panel or case gets dirty, wipe it with a soft dry cloth. Never use lacquer thinner, benzine, alcohol or contact revitalizer, which will cause discoloration or deformation.

Care and storage of CDs

■ Storing a CD

If you do not plan to use a CD for a long time, remove it from the main unit and store it in its case.

■ Cleaning a CD

- When a disc is contaminated with fingerprints or other stains, wipe gently in the radial direction using a soft dry cloth.
- Do not use a phonograph record cleaner, lacquer thinner, benzine or alcohol to clean CDs.
- Do not use any disc accessory (stabilizer, protective sheet, protective ring, etc.) or lens cleaner.

■ Other cautions

- Do not write on a CD with a pencil or ballpoint pen.
- Do not use a CD if its sticker or label is peeling or if any adhesive is coming out from under the sticker or label.
- Do not affix paper, stickers or labels to CDs.

Specifications

Main unit

[Amplifier]

Effective output power during STEREO operation..... 40 W+40 W
RMS (1kHz, 10%T.H.D., 4 Ω)
Total harmonic distortion...............................0.03% (1 kHz, 1 W, 4 Ω)
Tone control characteristics
BASS
    (TURN OVER 100 Hz) .... ±4.0 dB (at 100 Hz)
    (TURN OVER 150 Hz) .... ±6.6 dB (at 100 Hz)
    (TURN OVER 200 Hz) .... ±7.5 dB (at 100 Hz)
MID
    (TURN OVER 1 kHz)...±8.0 dB (at 1 kHz)
    (TURN OVER 2 kHz)...±8.0 dB (at 2 kHz)
    (TURN OVER 3 kHz)...±8.0 dB (at 3 kHz)
TREBLE
    (TURN OVER 5 kHz)...±7.6 dB (at 10 kHz)
    (TURN OVER 7 kHz)...±6.7 dB (at 10 kHz)
    (TURN OVER 10 kHz) ....±4.0 dB (at 10 kHz)
D-Bass (+10) .... +15.9 dB (60 Hz, Vol. 60)
Input terminals (Sensitivity/Impedance)
    LINE (AUX) .... 450 mV / 22 kΩ
    LINE (D.AUDIO).. 250 mV / 11 kΩ
Output terminals (Level/Impedance)
    SUB WOOFER PRE OUT..1 V / 10 kΩ

[Digital unit]

Sampling frequencies 32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz
Supreme EX (CD, D-IN, iPod, USB)
    Playable frequencies... 1 Hz - 24 kHz
Digital input terminals (Sensitivity/Wave length)
    Optical..–15 dBm – –24 dBm, 660 nm ±30 nm
Output terminals (Level/Wave length)
    Optical...–21 dBm - –15 dBm, 660 nm

[USB]

Usable USB device.. USB Mass storage class
Interface.............................. USB2.0 (Full speed) USB1.1 compatible
File system.. FAT 16/32
Supply current .... Max. 500 mA

[Tuner]

FM tuner
    Reception frequency range..................... 87.5 MHz to 108 MHz
    Antenna impedance ....75 Ω unbalanced
AM tuner
    Reception frequency range
        Europe/ Australia .... 531 kHz to 1,602 kHz
        US .... 530 kHz to 1,700 kHz

[CD player]

Scanning method...Semiconductor laser

[Power supply, etc.]

Standby power consumption ....1 W or less
Power consumption .... 35 W
Dimensions
    Width .... 200 mm
    Height...95 mm
    Depth.. 299 mm
Weight (net)..2.3 kg

[Speaker]

Enclosure...Bass-reflex
Speaker unit
    Woofer...110 mm Cone type
    Tweeter .... 25 mm Dome type
Rated impedance ....4 Ω
Max input power .... 40 W
Dimensions
    Width .... 140 mm
    Height... 237 mm
    Depth.. 236 mm
Weight (net)...3.4 kg (each)

Notes:
- Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
- Sufficient performance may not be exhibited at extremely cold locations (where water freezes).

CAUTION **U.S.A. only**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

Kenwood Corporation
2967-3, ISHIKAWA-MACHI,
HACHIOJI-SHI
TOKYO, JAPAN

KENWOOD CORP. CERTIFIES THIS EQUIPMENT
CONFORMS TO DHHS REGULATIONS N0.21 CFR
1040. 10, CHAPTER 1, SUBCHAPTER J.

Location : Back Panel

FCC WARNING **U.S.A. only**

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment may cause harmful interference to radio communications, if it is not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

Manufactured under license from Real Sound Lab, SIA.
CONEQ is a trademark of Real Sound Lab, SIA.

This symbol is labeled on the products whose impacts on the environment are minimized by Kenwood.

KENWOOD

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model _____

Serial Number