

# KENWOOD

COMPACT HI-FI COMPONENT SYSTEM

## M-505USB

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### INSTRUCTION MANUAL

Kenwood Corporation

**Declaration of Conformity with regard to the EMC Directive  
2004/108/EC**

**Manufacturer:**

Kenwood Corporation

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Amsterdamseweg 37, 1422 AC UITHOORN, The Netherlands



**MP3/WMA RDS**

## ***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

### **Safety precautions**

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

	<b>CAUTION</b> 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.		
	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.	

### ***The marking of products using lasers***

**CLASS 1 LASER PRODUCT  
LASER KLASSE 1  
APPAREIL A LASER DE CLASSE 1  
LUOKAN 1 LASERLAITE  
KLASS 1 LASERAPPARAT**

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

Location: Bottom

## **IMPORTANT SAFETY INSTRUCTIONS**

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

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

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

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

**Follow Instructions** – All operating and use instructions should be followed.

- 1. Cleaning** – 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** – Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- 3. Water and Moisture** – 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** – Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.  
A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



- 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, and these openings must not be blocked or covered. 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** – This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

**8. Power Cord Protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

**9. Lightning** – For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

**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** – Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) When the power-supply cord or plug is damaged,
- b) If liquid has been spilled, or objects have fallen into the product,
- c) If the product has been exposed to rain or water,
- d) If the product does not operate normally by following the operating instructions.
- e) If the product has been dropped or damaged in any way, and
- f) When the product exhibits a distinct change in performance – this indicates a need for service.
- g) If an abnormal smell or smoke is detected.

**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.

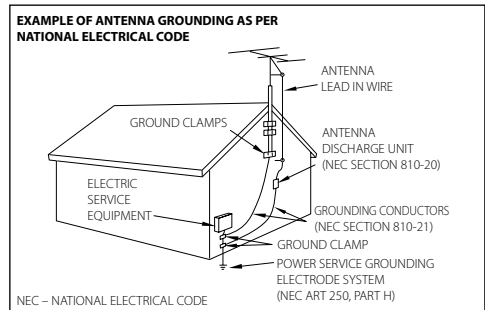
**15. Safety Check** – Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

**16. Wall or Ceiling Mounting** – This product should be mounted to a wall or ceiling only as recommended by the manufacturer.

**17. Heat** – This product should be situated away from heat sources such as radiators, heat registers, stoves, or other products 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.


**19. Outdoor Antenna Grounding** – If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.






Notes:

1. Item 7 is not required except for grounded or polarized equipment.
2. Item 19 complies with UL in the U.S.A.

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## Unpacking

Unpack the unit carefully and make sure that all accessories are present.

FM indoor antenna .....(1)  
AM loop antenna .....(1)  
Remote control unit .....(1)  
Battery (AAA/R3) .....(2)

If any accessories are missing, or if the unit is damaged or falls to operate, notify your dealer immediately. If your 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.**

## Connections

### Connecting the FM antenna

Connect the FM antenna to FM 75Ω COAXIAL terminal on the back.

Adjust the position of the FM antenna for the best reception and fix it.

### Connecting the AM antenna

Set up the AM loop antenna, and then connect it to AM LOOP terminal on the back.

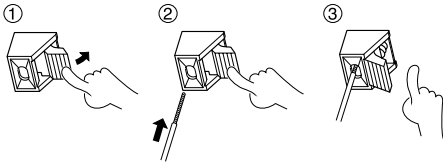
Setup the antenna in the position and the direction to be able to receive AM broadcast.

### Speakers connection

**1** Connect the right speaker to terminal marked "R", with the red wire to + and the black wire to -.

**2** Connect the left speaker to terminal marked "L", with the red wire to + and the black wire to -.

Clip the stripped portion of the speaker wire as shown.



- For optimal sound performance, it is recommended to use the supplied speakers.
- Do not connect more than one speaker to any one pair of +/– speaker terminals.

### CAUTION


**Be sure to adhere to the following, or proper ventilation will be blocked causing damage or fire hazard.**

- Do not place any objects impairing heat radiation onto the top of the unit.
- Leave some space around the unit (from the largest outside dimension including projection) equal to or greater than, shown below.

**Top panel : 50 cm Back panel : 10 cm**

## Preparing the remote control unit

### Operation

When the power cord is plugged in, **standby** indicator is lit. The power turns ON by pressing  button on the remote control unit pointing at the remote sensor. When the power comes on, press the button you want to operate.

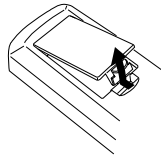


- The supplied battery may have shorter live than ordinary battery due to use during operation checks.
- When the remote-controllable distance gets shorter than before, replace the battery with a new one.
- Placing the remote sensor in direct sunlight, or in direct light from a high frequency fluorescent lamp may cause a malfunction.  
In such a case, change the location of the system installation to prevent malfunction.

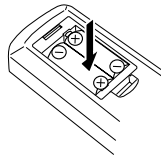
### Loading batteries

Use two "AAA"/"R3"-size batteries.

**1** Remove the cover.



**2** Insert batteries.



**3** Close the cover.

### CAUTION

The power in this equipment will not be completely cut off from the wall outlet when the standby switch is turned off. Install the equipment so that the wall outlet is easily accessible and, in case of emergency, immediately unplug the power cord from the wall outlet.

# About MP3 and WMA

The playable MP3/WMA file (hereafter called **Audio file**) and the media format has the following limitation. The Audio file, which is not conforming to the specification, may not play normally.

## Playable Audio file : MP3, WMA



- Attach the correct extension for the Audio file. (MP3: ".MP3", WMA: ".WMA")
- Do not attach the extensions to files other than the Audio file. If the extension is attached, the file, which is not the Audio file, will play and outputs a loud noise, causing damage to the speaker.
- The files with copy protection cannot be played.
- Audio files cannot be played depending on the encoding software setting, USB device type, and/or recording conditions.
- The unit may not be compatible with upgrade of compression format standard and additional specifications.

## Playable MP3 file

- MPEG 1/2 Audio Layer 3 file
- Transfer bit rate: 8/ 16/ 24/ 32/ 40/ 48/ 56/ 64/ 80/ 96/ 112/ 128/ 144/ 160/ 192/ 224/ 256/ 320 kbps
- Sampling frequency: 48/ 44.1/ 32/ 24/ 22.05/ 16/ 12/ 11.025/ 8 kHz

## Playable WMA file

- The file in accordance with Windows Media Audio 9
- Transfer bit rate: 32-192 kbps
- Sampling frequency: 48/ 44.1/ 32 kHz

## Playable storage media

- CD-ROM, CD-R, CD-RW
- USB device (USB version 1.1/2.0)



- CD-RW discs which are quick formatted by the writing software cannot be used.
- When recording to the maximum CD-R/RW media capacity at once, the writing software is set to "Disc at once".
- For details on the available USB devices, refer to <About USB device> (page 7).

## Playable CD-R/RW format

- ISO 9660 Level 1/2
- Joliet

## Playable file format of USB device

- For the formats supported by USB devices, refer to <About USB device> (page 7).

## The maximum number of characters for display

- File/Folder name: 30/30 characters
- MP3 ID3 Tag/ WMA Contents property: 30 characters  
(The information which can be displayed with this unit: title, artist name, and album name)



- File/Folder name is the number of the characters including the extensions.
- This unit can display the following versions of MP3 ID3 tag: version 1.0/ 1.1/ 2.2/ 2.3

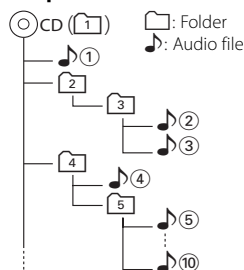
## Limitation of structure for the file and the folder

- Maximum number of folders: 250 (including root folder)
- Maximum number of files per folder: 900 (including the number of folders)

## Playing order of the audio file

- Audio files are played in the order the files are written. You can specify the order of playback by numbering files in a folder and writing them by folder.

### Example



### • Playing order

Playing order after 1 play:

⇒ 2, 3, 4, 5...

## About USB device

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### Notes on use of the USB device

This unit can play audio files stored in the flash memory and digital audio player that have a USB port (these devices are referred to as USB devices in this document).

The following restrictions are placed on the types and usage of available USB devices:

### Available USB devices

- USB devices belonging to the USB mass storage class.
- USB devices whose maximum current consumption is 500 mA or less.
- Supported formats and USB device types : FAT 12/ 16/ 32



- **USB Mass Storage Class :** USB devices that the PC can recognize as an external storage without using any special driver or application software.
- Contact the sales agent as to whether your USB device conforms to the USB mass storage class specs.
- Using an unsupported USB device can result in abnormal playback or display of the audio file.  
Even if you use the USB device conforming to the above specs, audio files cannot be played normally depending on the type or condition of the USB device.

## Description of the button name in this manual

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Most of the functions are designed to be able to operate from the remote control unit. Therefore, in this manual, the button names are described using the names on the remote control unit first, followed by names on the main unit put in parenthesis.

Example:

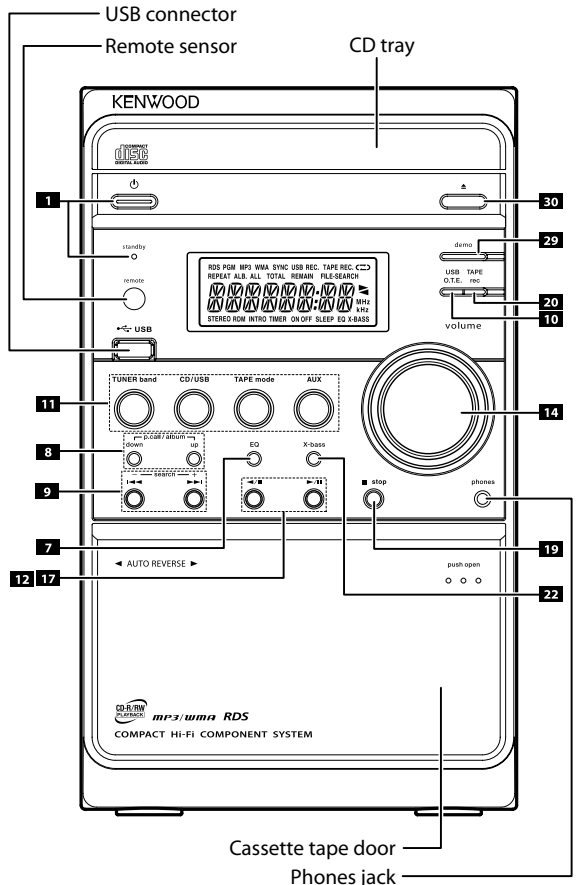
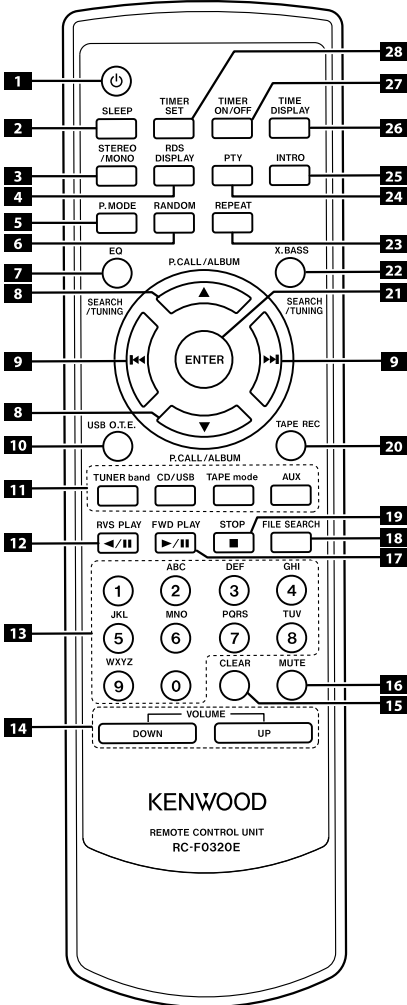
**STOP ■ (■ stop)** button



Button on the main unit


Button on the remote control unit

# Names and functions of parts





## Buttons both on the remote control unit and the unit

- 1**  button  
To switch the system on or to standby mode.  
**standby indicator (on the main unit only)**
- 7** **EQ (EQ)** button  
To switch the desired sound effect : POP, CLASSIC, ROCK, JAZZ, or FLAT (off).
- 8** **P.CALL/ALBUM ▲/▼ (p.call/album up/down) buttons**  
To select a preset radio station for TUNER.  
To select an album (folder) of audio files.
- 9** **SEARCH/TUNING ◀◀◀/▶▶▶ (◀◀◀/▶▶▶) search +/-) buttons**  
To search forward/backward to next/previous track for CD.  
To skip tracks for CD.  
To search forward/backward or to skip to the next/previous files for audio files.  
To fast forward or rewind a tape.  
To tune to higher/lower radio frequency or search radio stations for TUNER.
- 10** **USB O.T.E (USB O.T.E)** button  
To record from CD to a USB device.
- 11** **Source buttons**  
To select the source you want, or to turn the system on to the selected source.
- 12** **RVS PLAY ◀/|| (◀/||) button**  
To start or interrupt playback for TAPE.  
To start recording for TAPE.
- 14** **VOLUME UP/DOWN (volume knob) buttons**  
To increase or decrease the volume.
- 17** **FWD PLAY ▶/|| (▶/||) button**  
To start or interrupt playback for CD, USB and TAPE.  
To start recording for TAPE.  
To start and interrupt recording for USB.
- 19** **STOP ■ (■ stop) button**  
To stop playback for CD, USB and TAPE.  
To stop program playback and recording for CD and USB.  
To stop recording for USB and TAPE.
- 20** **TAPE REC (TAPE rec) button**  
To start or interrupt recording from TUNER, CD, USB, or AUX to a cassette tape.
- 22** **X.BASS (X-bass) button**  
To switch on/off bass enhancement.

## Buttons only on the remote control unit

- 2** **SLEEP** button  
To select the delay time until switching to the standby mode.
- 3** **STEREO/MONO** button  
To switch between stereo mode and mono mode (on FM band only) for TUNER.
- 4** **RDS DISPLAY** button  
To change the display for RDS.

- 5** **P.MODE** button  
To program tracks/files for CD/USB.  
To program preset radio stations for TUNER.
- 6** **RANDOM** button  
To playback in random order for CD and USB.
- 13** **digit 0 – 9/A – Z** buttons  
To select a track/file number for CD/USB.  
To select a preset radio station for TUNER.  
To enter file names in file search mode for audio files.
- 15** **CLEAR** button  
To delete the file name entered during file search.
- 16** **MUTE** button  
To interrupt and resume sound reproduction.
- 18** **FILE SEARCH** button  
To select a desired file in audio files.
- 21** **ENTER** button  
To confirm the selection in file search mode for audio files.
- 23** **REPEAT** button  
To repeat one track/file or all tracks/files for CD and USB.
- 24** **PTY** button  
To carry out PTY search.
- 25** **INTRO** button  
To play first several seconds for each track of CD.
- 26** **TIME DISPLAY** button  
To view the current status of the system.  
To change the time display for CD.  
To change the information display for audio files.
- 27** **TIMER ON/OFF** button  
To turn the sleep timer on. The delay time is same as the previous setting.  
To cancel the sleep timer if working.
- 28** **TIMER SET** button  
To set the delay time and turn the sleep timer on.

## Buttons only on the main unit

- 29** **(demo) button**  
To activate/deactivate the demonstration in power on mode.
- 30** **(▲) button**  
To open or close the CD tray.

## Standby mode


While the standby indicator is lit, a small amount of power is supplied to the system to back up the memory. This is called standby mode. Under the condition, the system can be turned ON by the remote control unit.

# Basic function

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## Demonstration mode

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The system is equipped with a demonstration function (only display). When the power cable is plugged in and  button is pressed to turn the system on for the first time, the demonstration automatically starts. The demonstration consists of sequential change of display and indicators showing the operations, but the audio itself does not change. The demonstration function can be cancelled as follows.

### To deactivate the demonstration

Press (demo) button on the unit during demonstration.

### To activate the demonstration


After turning the power on, press (demo) button on the unit.



- The demonstration operates automatically when; a power has failed and then recovered, or the plug of the power cable has been pulled out while the power was on and then plugged back in.

## Switching the system on

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
Press , CD/USB (CD/USB), TUNER band (TUNER band), TAPE mode (TAPE mode), AUX (AUX) button.

The **standby** LED will go out.

The system will switch to the last selected source or the selected source.

## Switching the system to standby mode

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Press  button.

Standby indicator is lit.

## Volume control

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Press **VOLUME UP** (turn (volume) knob to the right) button to increase, or press **VOLUME DOWN** (turn (volume) knob to the left) to decrease the volume level.

“VOL XX” is displayed. “VOL XX” denotes the volume level.

### To switch off the volume temporarily

Press **MUTE** button.

Playback continues without sound, and the icon “MUTE” appears on the display.



- To restore the volume, press **MUTE** button again or adjust the volume.

## Sound control

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The sound control system feature enables you to enjoy special sound effects; preset equalizer settings and bass enhancement, providing the best music reproduction.

### To switch on preset equalizer settings

Press **EQ** (EQ) button to select the desired sound effect: POP, CLASSIC, ROCK, JAZZ or FLAT (off).

### To switch on the bass enhancement

Press **X.BASS** (X-bass) button. The icon “X-BASS” appears on the display.



- To switch off X-BASS, press **X.BASS** (X-bass) button. The icon “X-BASS” disappears.
- EQ and X-BASS functions are not applied to the recording sound.

## Headphones

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To listen to your stereo with headphones (separately available), use the 3.5 mm phones jack on the unit.



- Excessive sound pressure from earphones and headphones can cause hearing loss.

# Using the CD/MP3-CD/WMA-CD/USB device

## Preparation

### Loading a disc

- 1 Press **CD/USB (CD/USB) button** to select CD mode.
- 2 Press **(▲)** button to open the CD tray.
- 3 Place a disc into the tray with the label facing up.
- 4 Press **(▲)** button to close the CD tray.

For a CD, the total playtime and total number of tracks will appear in the display.

For an MP3-CD and WMA-CD, the total album number and total file number will appear on the display.



- To remove the disc, press **(▲)** button, grasp the disc by its edges, and carefully pull it out.

### Inserting a USB device

- 1 Press the **(⏻)** button to select standby mode.
- 2 Insert a USB device to the USB connector on the front panel.
- 3 Press **CD/USB (CD/USB) button** to select USB mode.



- To ensure good system performance; wait until the unit completely reads the disc/USB device before proceeding.
- If the disc compartment is not loaded with a disc, "NO DISC" is displayed. If the disc is unreadable, "ERR DISC" is displayed.
- If the disc is unreadable or there is no playable audio file in the USB device, "NO DATA" is displayed.
- For audio files, reading time may exceed 10 seconds due to the large number of songs compiled into one disc/USB device.
- For audio files, "A" on the display represents ALBUM.
- For audio files, the total album number on the display indicates the number of all the albums recorded in the disc/USB device.
- The icon "MP3" appears only when an MP3-file is played. The icon "WMA" appears only when an WMA-file is played.
- Insert or remove the USB device while in the standby mode. Sound may be interrupted when inserting or removing the USB device. This may occur even when the sound is not played or recorded from/to the USB device.

When playing or recording from/to the USB device, removing it or turning the power off may corrupt the sound source and get it unplayable.

## Playing a disc/USB device

Press **FWD PLAY ▶/II (▶/II) button** to start playback.

The track/file number and elapsed playing time of the current track/file appear on the display.



- To interrupt playback, press **FWD PLAY ▶/II (▶/II) button**. The playing time starts flashing. To resume playback, press **FWD PLAY ▶/II (▶/II) button** again.
- To stop playback, press **STOP ■ (■ stop) button**.

## Selecting a desired track/passage

### To select a desired track

Press **SEARCH/TUNING ◀◀◀ or ▶▶▶ (◀◀◀ or ▶▶▶) search +/- button** repeatedly until the desired track appears on the display.



- If playback is stopped, press **FWD PLAY ▶/II (▶/II) button** to start playback.
- The digit buttons, 0–9 on the remote control unit can also be used to select a track. Press the digit buttons as shown below:  
To select track 2 : **2** and **ENTER**  
To select track 23 : **2**, **3** and **ENTER**  
To select track 120 (Audio file only) : **1**, **2** and **0**

### To search for a particular passage during playback

Press and hold **SEARCH/TUNING ◀◀◀ or ▶▶▶ (◀◀◀ or ▶▶▶) search +/- button** for more than 3 seconds. Press the **FWD PLAY ▶/II (▶/II) button** when the desired passage is located.

## Selecting a desired album/file (For audio file only)

### To select a desired album

Press **P.CALL/ALBUM ▲** or **▼** (p.call/album up or down) button until the desired album number appears on the display during playback.

"Axxx xxx" appears on the display. "Axxx" indicates album number and "xxx" indicates the file number.

### To select a desired file

Press **SEARCH/TUNING |◀◀** or **▶▶|** (|◀◀ or ▶▶| search +/-) button repeatedly until the desired file from the current album appears on the display during playback.

"Axxx xxx" appears on the display. "Axxx" indicates album number and "xxx" indicates the file number.



- **Only for USB devices:** The digit buttons, 0–9 on the remote control unit can also be used to select a file.

### To search a desired file by file name

#### 1 In stop mode, press **FILE SEARCH** button.

The icon "FILE-SEARCH" appears on the display.

#### 2 Press the digit buttons **A-Z** to input the first character of the file name you want to search.

#### 3 Press **ENTER** button.

"A" appears and flashes on the next of the first character.

#### 4 Repeat step 2 and 3 to enter the characters until the one before the last character.

#### 5 For the last character, press the digit buttons **A-Z** to input.

#### 6 Press **FILE SEARCH** button.

"SEARCH" appears on the display.

#### 7 Press **FWD PLAY ▶/II (▶/II)** button to start playback.



- If the unit finds an appropriate file, the album number and track number will be displayed. Press **TIME DISPLAY** button. Then the route name and the file name will be scrolled on the display.
- If there is no appropriate file, "NO FILE" is displayed.

## Programming tracks

Programming tracks of a disc is possible when playback is stopped. Up to 60 tracks can be stored in the memory in any order.

#### 1 In stop mode, press **P.MODE** button to enter program setting.

The icon "PGM" and "– – P-01" appears on the display. "– –" indicates track number and "P-01" indicates program number.

The icon "PGM" starts flashing.

#### 2 Press **SEARCH/TUNING |◀◀** or **▶▶|** (|◀◀ or ▶▶| search +/-) button to select the desired track.

The program number starts flashing.

#### 3 Press **P.MODE** button to store the selected track.

The track number returns to "– –" and the next program number appears on the display.

#### 4 Repeat steps 2 to 3 to select and store other desired tracks in this way.

The icon "PGM" appears on the display.

#### 5 Press **FWD PLAY ▶/II (▶/II)** button to play the programmed tracks.



- The digit buttons, 0–9 on the remote control unit can also be used to select tracks.
- "FULL" starts flashing if you attempt to program more than 60 tracks.
- To review the program sequence, press **P.MODE** button in stop mode.
- If you press **REPEAT** button during programmed playback, the current track or all programmed tracks is/are played repeatedly. The icon "REPEAT" or "REPEAT ALL" and the icon "PGM" appear on the display.

## Programming files (For audio file only)

Programming files of an MP3-CD/WMA-CD/USB device is possible when playback is stopped. Up to 60 files can be stored in the memory in any order.

### 1 In stop mode, press P.MODE button to enter program setting.

The icon "PGM" and "-- P-01" appear on the display. "--" indicates file number of the disc/USB device and "P-01" indicates program number. The icon "PGM" starts flashing.

### 2 Press SEARCH/TUNING (◀◀ or ▶▶) (◀◀ or ▶▶) search +/-) button to select the desired file.

The program number starts flashing.

### 3 Press P.MODE button to store the selected file.

The file number returns to "--" and the next program number appear on the display.

### 4 Repeat steps 2 to 3 to select and store other desired files in this way.

The icon "PGM" appears on the display.

### 5 Press FWD PLAY ▶/II (▶/II) button to play the programmed files.



- The digit buttons, 0–9 on the remote control unit can also be used to select files.
- "FULL" starts flashing if you attempt to program more than 60 files.
- Audio files can only be programmed within the same source.
- To review the program sequence, press P.MODE button in stop mode.
- If you press REPEAT button during programmed playback, the current file or all programmed files is/are played repeatedly.  
The icon "REPEAT" or "REPEAT ALL" and the icon "PGM" appear on the display.

## To clear the program

Press STOP ■ (■ stop) button once in stop mode, and twice during program playback.

The icon "PROGRAM" disappears from the display.



- "P" represents PROGRAM.
- The program is automatically cleared as soon as the CD tray is opened.
- The function of program setting cannot be used in PLAY/PAUSE mode.

## Random play

You can play all the tracks/files in random order.

### 1 During playing, pause or stop mode, press RANDOM button to enable random play mode.

The icon "RDM" appears on the display.

### 2 To exit random mode, press RANDOM button again.

The icon "RDM" disappears from the display.



- If the program function or the repeat function is on, random play cannot be used.

## Repeat play

You can play the current track/file/album or the whole disc/USB device repeatedly.

### To repeat a single track/file

Press REPEAT button once in play or pause mode.

The icon "REPEAT" appears on the display.



- To cancel repeat play, press REPEAT button twice for a CD and 3 times for audio files.

### To repeat all the tracks/files

Press REPEAT button twice for a CD and 3 times for audio files in play or pause mode.

The icon "REPEAT ALL" appears on the display.



- To cancel repeat play, press REPEAT button once.
- All tracks/files are repeated continuously.

### To repeat one album (For audio file only)

Press REPEAT button twice in play or pause mode.

The icon "REPEAT ALB." appears on the display.



- To cancel repeat play, press REPEAT button twice.
- This function cannot be used in program mode.

## Intro scan

This function let you listen to the first 10 seconds of each track throughout the CD.

**Press INTRO button to start scanning.**

The icon "INTRO" appears on the display.

### To stop the intro scan

**Press INTRO button again.**

The unit enters normal play mode and starts playing from where you stop the scanning.

## Recording on a USB device

Records songs in the CD to the USB device in MP3 format.

**1 Insert a USB device to the USB connector on the front panel.**

**2 Press SEARCH/TUNING I◀◀ or ▶▶I (I◀◀ or ▶▶I search +/-) button to select the first CD track you want to record.**

**3 Press USB O.T.E. (USB O.T.E.) button to begin recording.**

The icon "USB REC." appears on the display.

**4 To end recording, press STOP ■ (■ stop) button.**



- If you press **USB O.T.E. (USB O.T.E.)** button during playback of a CD, the recording will start from the beginning of the current track.
- To interrupt recording, press **FWD PLAY ▶/II (▶/II)** button. Press **FWD PLAY ▶/II (▶/II)** button to resume recording.
- During recording, it is not possible to listen to another source.
- Recorded music is saved with sequential number "track001" through "track900" in "KWD folder" on USB device.
- Music is encoded according to specification below.
  - Format: MP3
  - Transfer bit rate: 128 kbps
  - Sampling frequency: 44.1 kHz
- Recordable USB device
  - USB standard: USB 1.1/2.0
  - File system: FAT 16/32

## Program recording

Desired CD tracks can be programmed in the desired sequence and recorded onto a USB device.

**1 Insert a USB device to the USB connector on the front panel.**

**2 Program the desired sequence of CD tracks.**

See page 12 and 13 for programming procedure.

**3 Press USB O.T.E. (USB O.T.E.) button to begin recording.**

The icon "USB REC." appears on the display.



- To end recording, press **STOP ■ (■ stop)** button.

## Changing the display of the disc/USB device information

Pressing **TIME DISPLAY** button shows various display information of the disc/USB device, such as time information of the current track or a whole disc, file and artist name of audio files, and etc.

# Using the radio

## Tuning in radio stations

- 1 Press **TUNER band (TUNER band) button** to select the desired waveband: FM or AM.
- 2 Press and hold **SEARCH/TUNING** **◀◀** or **▶▶** (**◀◀** or **▶▶** search +/-) button to tune in to the desired frequency.



- To tune to a weak station, briefly press **SEARCH/TUNING** **◀◀** or **▶▶** (**◀◀** or **▶▶** search +/-) button repeatedly until the display shows the desired frequency or when the best reception has been obtained.

## Storing preset

You can store up to 20 for FM and 20 for AM radio stations in the memory. When a preset radio stations selected, the preset number appears on the display.

- 1 Press **TUNER band (TUNER band) button** to select the desired waveband: FM or AM.
- 2 Press **SEARCH/TUNING** **◀◀** or **▶▶** (**◀◀** or **▶▶** search +/-) button to tune in to the desired frequency.
- 3 Press **P.MODE** button so that “- -” starts flashing.
- 4 If you want to store the radio station to another preset number, press **P.CALL/ALBUM** **▲** or **▼** (**p.call/album up or down**) to select the desired preset number.
- 5 Press **P.MODE** button again to store the radio station.
- 6 Repeat steps 2 to 5 to store other preset radio stations.



- During program, if no button is pressed within 20 seconds, the system will exit program mode automatically.

## Tuning to a preset radio station

Press **P.CALL/ALBUM** **▲** or **▼** (**p.call/album up or down**), or **digit buttons 0–9** on the remote control unit to select the desired preset number.

The preset number and radio frequency appear on the display.

### STEREO/MONO

Press the **STEREO/MONO** button to select mono or stereo mode.

When stereo mode is selected, the icon “STEREO” appears on the display (if current station is FM stereo).



- You are able to select stereo or mono mode in FM band only.

## Using RDS (Radio Data System)

RDS is a system that transmits useful information (in the form of digital data) for FM broadcasts along with the broadcast signal. Tuners and receivers designed for RDS reception can extract the information from the broadcast signal for use with various functions, such as automatic display of the station name.

### RDS functions

#### PTY (Program TYPe Identification) Search:

Automatically tunes to a station that is currently broadcasting the specified program type (genre).

#### PS (Program Service Name) Display:

Automatically displays the station name transmitted by the RDS station.

#### Radio Text function:

Displays the radio text data transmitted by some RDS stations when you press the **RDS DISPLAY** button. There is “NO TEXT” display if no text data is transmitted.

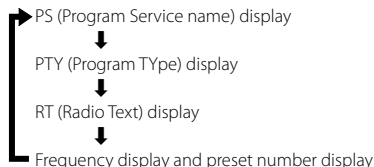


- Some functions and function names may differ in certain countries and areas.

## Changing the RDS display information

While receiving a RDS station, pressing the **RDS DISPLAY** button changes the contents of the display.

Every time the button is pressed, the display changes in the following order:



## Tuning by Program TYpe (PTY search)

This function lets you set the tuner to automatically search for stations which are currently broadcasting the type of program (genre) you want to listen to.

**1 Press TUNER band (TUNER band) button to select FM.**

**2 Press PTY button.**

If the current station is with RDS, the program type of the station is displayed.

**3 Press PTY button to select your desired program type.**

### Program type table

Program Type Name	Display
News	NEWS
Current Affairs	AFFAIRS
Information	INFO
Sport	SPORT
Education	EDUCATE
Drama	DRAMA
Culture	CULTURE
Science	SCIENCE
Varied Speech	VARIED
Pop Music	POP M
Rock Music	ROCK M
Easy Music	EASY M
Light Classical Music	LIGHT M
Serious Classical Music	CLASSICS
Other Music	OTHER M
Weather	WEATHER
Finance	FINANCE
Children's Program	CHILDREN
Social Affairs	SOCIAL

Religion	RELIGION
Phone In	PHONE IN
Travel	TRAVEL
Leisure	LEISURE
Jazz Music	JAZZ
Country Music	COUNTRY
National Music	NATION M
Oldies Music	OLDIES
Folk Music	FOLK M
Documentary	DOCUMENT

**4 Press SEARCH/TUNING |◀◀ or ▶▶| (|◀◀ or ▶▶| search +/-) button to start searching.**



- Under certain receiving conditions, it may take more than 1 minute to complete the search.
- If the desired program type cannot be found, "NO MATCH" is displayed, then after several seconds the display returns to the original display.



# Using the cassette

## Playing a cassette tape

- 1 Press **TAPE mode (TAPE mode) button** to TAPE.
- 2 Press the area marked [push open] to open the cassette tape door.
- 3 Insert cassette tape into the compartment with the open edge facing down.
- 4 Close the door securely.
- 5 Press **TAPE mode (TAPE mode) button** to select the desired reverse mode.  
→ icon : plays only one side of the tape and stops.  
⇒ icon : plays both sides and stops.  
↔ icon : plays both sides endlessly.
- 6 Press **SEARCH/TUNING** |◀◀ or ▶▶| (|◀◀ or ▶▶| search +/-) button to move tape to the desired starting point.
- 7 Press **FWD PLAY ▶/II (▶/II)** or **RVS PLAY ◀/II (◀/II)** button to begin playing the tape.

## Recording on a cassette tape

You can record from a radio, a disc, or a USB device. About the recording from an external equipment connected to AUX IN terminal, refer to <Using an external equipment> (page 18).

For the best recording, use a normal bias tape (Type 1 only).

### Recording from a radio

- 1 Insert a cassette tape into the tape compartment and close the door.
- 2 Press **TUNER band (TUNER band) button** to TUNER and select a radio station.
- 3 Press **TAPE REC (TAPE rec) button** to set the unit into recording standby mode.  
The icon "TAPE REC." appears on the display.
- 4 Press **FWD PLAY ▶/II (▶/II)** or **RVS PLAY ◀/II (◀/II)** button to begin recording.



- To end recording, press **STOP ■ (■ stop)** button.

### Radio recording tip

To temporarily pause the recording, press **TAPE REC (TAPE rec) button**. Press **FWD PLAY ▶/II (▶/II)** or **RVS PLAY ◀/II (◀/II)** button to resume recording.

### Recording from a CD/MP3-CD/WMA-CD/USB device

- 1 Insert a disc or a USB device.
- 2 Insert a blank cassette tape into the tape deck.
- 3 Press the desired source button to select the source you want to record from.  
For CD/MP3-CD/WMA-CD : Press **CD/USB (CD/USB)** button to select CD input.  
For USB device : Press **CD/USB (CD/USB)** button to select USB input.
- 4 Make sure that the unit is in playback mode.
- 5 Press **SEARCH/TUNING** |◀◀ or ▶▶| (|◀◀ or ▶▶| search +/-) button to select the first track/file you want to record.
- 6 Press **TAPE REC (TAPE rec) button** to set the unit into recording standby mode.  
The icon "TAPE REC." appears on the display.
- 7 Press **FWD PLAY ▶/II (▶/II)** or **RVS PLAY ◀/II (◀/II)** button to begin recording.  
The icon "SYNC" appears on the display.



- To ensure good system performance, wait until the unit completely reads the disc/USB device before recording.
- To interrupt recording, press **TAPE REC (TAPE rec) button**. Press **FWD PLAY ▶/II (▶/II)** or **RVS PLAY ◀/II (◀/II)** button to resume recording.
- To end recording, press **STOP ■ (■ stop)** button.
- For a CD/MP3-CD/WMA-CD : If you perform step 6 and 7 during playback, the recording will start from the beginning of the current track/file.
- During recording, it is not possible to listen to another source.

### Program recording from a CD/MP3-CD/WMA-CD/USB device

Desired CD tracks/MP3 files/WMA files can be programmed in the desired sequence and recorded onto a tape.

- 1 Insert a disc or a USB device.
- 2 Insert a blank cassette tape into the tape deck.
- 3 Press the desired source button to select the source you want to record from.  
For CD/MP3-CD/WMA-CD : Press **CD/USB (CD/USB)** button to select CD input.  
For USB device : Press **CD/USB (CD/USB)** button to select USB input.
- 4 Make sure that the unit is in stop mode.
- 5 Program the desired sequence of CD tracks/MP3 files/WMA files.  
See page 12 and 13 for programming procedure.
- 6 Press **TAPE REC (TAPE rec)** button to set the unit into recording standby mode.  
The icon "TAPE REC." appears on the display.
- 7 Press **FWD PLAY ►/II (►/II)** or **RVS PLAY ◀/II (◀/II)** button to begin recording.  
The icon "SYNC" appears on the display.



- To end recording, press **STOP ■ (■ stop)** button.

You can connect an external equipment such as a CD player, a cassette deck, and etc. to this unit and use it as an extra source.

### Connecting an external equipment

Connect the audio cable of the equipment to **AUX IN** terminal on the back of the unit.



- Make sure the markings (L, R) on the equipment match that of on the unit when connecting.

### Playing the external equipment

- 1 Press **AUX (AUX)** button to select AUX mode.
- 2 Play the equipment.



- For details on how to use the equipment, refer to the instruction manual of the equipment.

### Recording on a cassette tape

- 1 Insert a cassette tape into the tape compartment and close the door.
- 2 Press **AUX (AUX)** button to select AUX mode.
- 3 Play the equipment connected to this unit.
- 4 Press **TAPE REC (TAPE rec)** button to set the unit into recording standby mode.  
The icon "TAPE REC." appears on the display.
- 5 Press **FWD PLAY ►/II (►/II)** or **RVS PLAY ◀/II (◀/II)** button to begin recording.



- To end recording, press **STOP ■ (■ stop)** button.

# Sleep timer operation

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## Sleep timer ON/OFF

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If the sleep timer turns on, the system will switch to the standby mode after the current setting time has expired.

### 1 Press TIMER ON/OFF button.

The sleep timer turns on and "SLEEP" icon appears.  
If the sleep timer has been on, it is canceled.



- Initial setting of the delay time is 90 minutes.
- To change the delay time, see below.

## Changing and Turning Sleep timer on

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The delay time can be changed within the range of 10 to 90 minutes.

### 1 Press SLEEP button.

Current setting time appears.  
Each pressing it changes the delay time in order of following:  
90 → 80 → 70 → ... 20 → 10 → off → 90 → 80 → 70...

### 2 Press TIMER SET button while the desired delay time.

The sleep timer turns on and "SLEEP" icon appears.



- The delay time selection is changed and the display returns to last mode if no operation for 20 seconds.

# General information

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## Maintenance

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### ***Cleaning the cabinet***

- Use a soft cloth slightly moistened with a mild detergent solution. Do not use a solution containing alcohol, spirits, ammonia or abrasive.

### ***Cleaning discs***

- When a disc becomes dirty, clean it with a cleaning cloth, wipe the disc from the center out. Do not wipe in circular motion.
- Do not use solvents such as benzene, thinner commercially available cleaners, or antistatic spray intended for analogue records.

### ***Cleaning the heads and tape path***

- To ensure good recording and playback quality, clean the heads, the capstans and pressure rollers after every 50 hours of tape operation.
- Use a cotton swab slight moistened with cleaning fluid.
- You also can clean the heads by playing a cleaning tape once.

### ***Caution on condensation***

Condensation (of dew) may occur inside the unit when there is a great difference in temperature between this unit and the outside. This unit may not function properly if condensation occurs. In this case, leave the unit for a few hours and restart the operation after the condensation has dried up.

Be specially cautious against condensation in the following circumstances:

When this unit is carried from one place to another across a large difference in temperature, when the humidity in the room where this unit is installed increases, etc.

### ***Warning notice***

In most cases it is an infringement of copyright to make copies of tapes or discs without the permission of the copyright owners. Anyone wishing to copy commercially available tapes or disc should contact the mechanical copyright protection society limited or the performing rights society limited.



# In case of difficulty

## Resetting the Microcomputer

The microcomputer may malfunction (unit cannot be operated, or shows an erroneous display) if the power cord is unplugged while the power is ON, or due to some other external factor. If this happens, execute the following procedure to reset the microcomputer and return the unit to its normal operating condition.

**When the power is on and TUNER input is selected, press and hold down the (■ stop) button on the unit for more than 2 seconds.**

**Unplug the AC cord and plug it back in if "INIT.OK" is appears.**

- Please note that resetting the microcomputer will clear the contents of the memory and return the unit to the state it was in when it left the factory.

Check that following guide for problem resolution.

## General

### No sound.

- ➔ Plug in AC cord securely.
- ➔ Set the VOLUME control to proper sound level.
- ➔ Make sure the source is set to the source you want to operate.
- ➔ Pull out the headphones plug from the headphones jack.

### The left and right sound outputs are reverse.

- ➔ Check the speaker connections and location.

### The system displays features automatically.

- ➔ Switch off the demo operation.

### The system does not operate by pressing any buttons.

- ➔ Unplug the AC cord and plug it back in.

## CD player operation

### "NO DISC" is displayed.

- ➔ Insert a disc correctly (label side up).
- ➔ Clean the disc.
- ➔ Use a new or readable disc.
- ➔ Wait until the moisture condensation at the lens has cleared.

## USB operation

### "NO USB" is displayed.

- ➔ Insert the USB device properly.

### Cannot play.

- ➔ The USB device is removed during playing or recording. Record songs again after formatting the USB device.

## Radio reception

### Noise in radio.

- ➔ Tune to a correct frequency.
- ➔ Adjust the direction of the FM antenna.
- ➔ Adjust the position and direction of the AM antenna.
- ➔ Increase the distance between the system and TV or VCR.

## Cassette deck operation

### Cannot record.

- ➔ Replace the tape or cover tabs with adhesive tape.
- ➔ Clean the head.
- ➔ Use only NORMAL (IEC I) tape.
- ➔ Do not use a cassette with more than 90-minute recording time, for the tape used in such a cassette is very thin and tends to cause problem such as entanglement around the pinch roller or could be easily cut off.

## Remote control unit

### Does not function properly.

- ➔ Replace the batteries.
- ➔ Remove the obstacles.
- ➔ Move closer to the system when using the remote control and make sure that you are pointing at unit's remote sensor.

# Specifications

## Main unit

### Amplifier section

Rated output power  
.....30 W + 30 W (1 kHz, 10% T.H.D., at 4  $\Omega$ )

### Tuner section

FM tuner section  
Tuning frequency range  
.....87.5 MHz ~ 108 MHz  
AM tuner section  
Tuning frequency range  
.....531 kHz ~ 1,602 kHz

### CD player section

Laser.....Semiconductor laser  
Over sampling.....8 fs (352.8 kHz)  
Laser wave length.....760 ~ 800 nm  
Laser power class.....Class 1 (IEC)  
D/A conversion.....1 Bit

### USB interface

USB standard.....USB 1.1/2.0  
Maximum supply current.....500 mA  
File system.....FAT 12/ 16/ 32  
MP3 decode  
.....Compliant with MPEG-1/2 Audio Layer-3  
WMA decode  
.....Compliant with Windows Media Audio 9  
Recording format  
.....MP3, 128 kbps/44.1 kHz

### Cassette deck section

Track.....4-track, 2-channel stereo

### AUX section

Input (Sensitivity/ Impedance)  
.....1000 mV/10 k $\Omega$

### General

Power consumption.....75 W  
Dimensions.....W : 160 mm (6-5/16")  
H : 269 mm (10-9/16")  
D : 345 mm (13-15/16")  
Weight (net).....5.5 kg (11.7 lb)

## Speakers

Enclosure .....Bass-reflex type  
Speaker configuration  
Woofer.....100 mm, cone type  
Tweeter.....35 mm, cone type  
Impedance .....4  $\Omega$   
Maximum input level.....60 W  
Dimensions.....W : 160 mm (6-5/16")  
H : 268 mm (10-9/16")  
D : 218 mm (8-9/16")  
Weight (net).....2.2 kg (4.9 lb) (1 piece)

### 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).

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



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

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

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.

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***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 \_\_\_\_\_

# KENWOOD