

MODEL

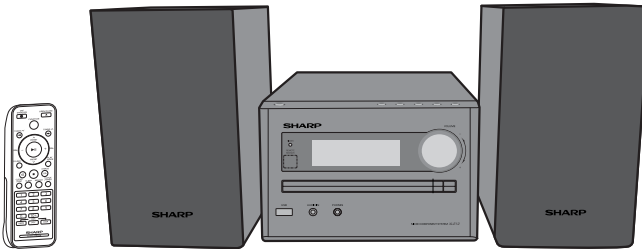
XL-E12H

MICRO COMPONENT SYSTEM

OPERATION MANUAL

Thank you for purchasing this SHARP product. To obtain the best performance from this product, please read this manual carefully. It will guide you in operating your SHARP product.

- XL-E12H Micro Component System consisting of XL-E12H (main unit) and CP-E12H (speaker system).

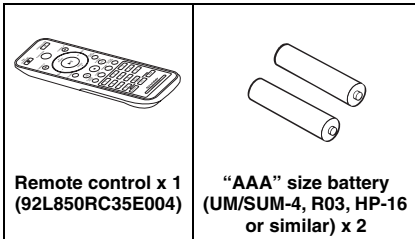


X-BASS



Accessories

Please confirm that the following accessories are included.



Volume control

The sound level at a given volume setting depends on speaker efficiency, location and various other factors. It is advisable to avoid exposure to high volume levels. Do not turn the volume on to full at switch on. Listen to music at moderate levels. Excessive sound pressure from earphones and headphones can cause hearing loss.

Special note

Supply of this product does not convey a license nor imply any right to distribute content created with this product in revenue-generating broadcast systems (terrestrial, satellite, cable and/or other distribution channels), revenue generating streaming applications (via Internet, intranets and/or other networks), other revenue-generating content distribution systems (pay-audio or audio-on-demand applications and the like) or on revenue-generating physical media (compact discs, digital versatile discs, semiconductor chips, hard drives, memory cards and the like). An independent license for such use is required. For details, please visit <http://mp3licensing.com>
MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.



92LME12H0016RR

SHARP ELECTRONICS (Europe) GmbH

SonninstraÙe 3, D-20097 Hamburg

SHARP CORPORATION

12F R MW ①

Special notes

WARNINGS:

- When the ON/STAND-BY button is set at STAND-BY position, mains voltage is still present inside the unit. When the ON/STAND-BY button is set at STAND-BY position, the unit may be brought into operation by remote control.
- This unit contains no user serviceable parts. Never remove covers unless qualified to do so. This unit contains dangerous voltages, always remove mains plug from the socket before any service operation and when not in use for a long period.
- To prevent fire or shock hazard, do not expose this appliance to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the apparatus.

CAUTION:

- This product is classified as a CLASS 1 LASER product.
- This product contains a low power laser device. To ensure continued safety, do not remove any cover or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.

Note:

Audio-visual material may consist of copyrighted works which must not be recorded without the authority of the owner of the copyright. Please refer to the relevant laws in your country.

PŘED SEJMUTÍM KRYTU NUTNO VYJMOUT VIDLICI ZE SÍŤOVÉ ZÁSUVKY.

PRED ZLOŽENÍM KRYTU JE NUTNÉ ODPOJIŤ PRÍSTROJ ZO SIETE.

DENNA APPARAT ÄR ANSLUTEN TILL 230 V VÄXELSTRÖM NÄR STICKPROPPEN ÄR INSKJUTEN I VÄGGUTAGET. FÖR ATT FULLSTÄNDIGT KOPPLA IFRÅN APPARATEN, V.G. DRAG UT STICKPROPPEN.

PRÍSTROJ NEVYSTAVUJTE KAPAJÍCÍ NEBO STŘÍKAJÍCÍ VODĚ.

PRÍSTROJ NEVYSTAVUJTE KVAPKAJÚCEJ ALEBO STRIEKAJÚCEJ VODE.

Urządzenie należy chronić przed zalaniem i wilgocią.

Tento výrobek je klasifikován jako LASEROVÝ VÝROBEK TŘÍDY 1.

Tento výrobek je klasifikovaný ako LASEROVÝ VÝROBOK TRIEDY 1.

VÝSTRAHA: VÝROBEK JE VYBAVEN LASEREM. PŘI NESPRÁVNÉ MANIPULACI S PRÍSTROJEM V ROZPORA S TÍMTO NÁVODEM MŮŽE DOJÍT K NEBEZPEČNÉMU OŽÁŘENÍ. NEOTVÍREJTE A NESNÍMEJTE ŽÁDNÉ KRYTÍ A PRÍSTROJ NEOPRAVUJTE. OPRAVU A SERVIS SVĚŘTE ODBORNÉMU SERVISU.

VÝSTRAHA: VÝROBOK JE VYBAVENÝ LASEROM. PRI NESPRÁVNO MANIPULOVANÍ S PRÍSTROJOM V ROZPORE S TÝMTO NÁVODOM MÔŽE DOJŤ K NEBEZPEČNÉMU OŽIARENÍ. NEODKRYVAJTE PRETO ŽIADNE KRYTÍ A PRÍSTROJ NEOPRAVUJTE. OPRAVU A SERVIS PRENECHAJTE ODBORNÉMU SERVISU.

Information on Proper Disposal



Attention:

Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste.

There is a separate collection system for these products.

A. Information on Disposal for Users (private households)

1. In the European Union

Attention: If you want to dispose of this equipment, please do not use the ordinary dustbin!

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*.

In some countries* your local retailer may also take back your old product free of charge if you purchase a similar new one.

*) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

2. In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

For Switzerland: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product. Further collection facilities are listed on the homepage of www.swico.ch or www.sens.ch.

B. Information on Disposal for Business Users

1. In the European Union

If the product is used for business purposes and you want to discard it:

Please contact your SHARP dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities. For Spain: Please contact the established collection system or your local authority for take-back of your used products.

2. In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.



Information on Battery Disposal

The battery supplied with this product contains traces of Lead.

For EU: The crossed-out wheeled bin implies that used batteries should not be put to the general household waste! There is a separate collection system for used batteries, to allow proper treatment and recycling in accordance with legislation. Please contact your local authority for details on the collection and recycling schemes.

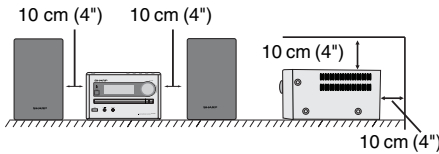
For Switzerland: The used battery is to be returned to the selling point.

For other non-EU countries: Please contact your local authority for correct method of disposal of the used battery.

Precautions

General

- Please ensure that the equipment is positioned in a well ventilated area and ensure that there is at least 10 cm (4") of free space along the sides, top and back of the equipment.



- Use the unit on a firm, level surface free from vibration.
- Keep the unit away from direct sunlight, strong magnetic fields, excessive dust, humidity and electronic/electrical equipment (home computers, facsimiles, etc.) which generate electrical noise.
- Do not place anything on top of the unit.
- Do not expose the unit to moisture, to temperatures higher than 60°C (140°F) or to extremely low temperatures.
- If your system does not work properly, disconnect the AC power lead from the wall socket. Plug the AC power lead back in, and then turn on your system.
- In case of an electrical storm, unplug the unit for safety.

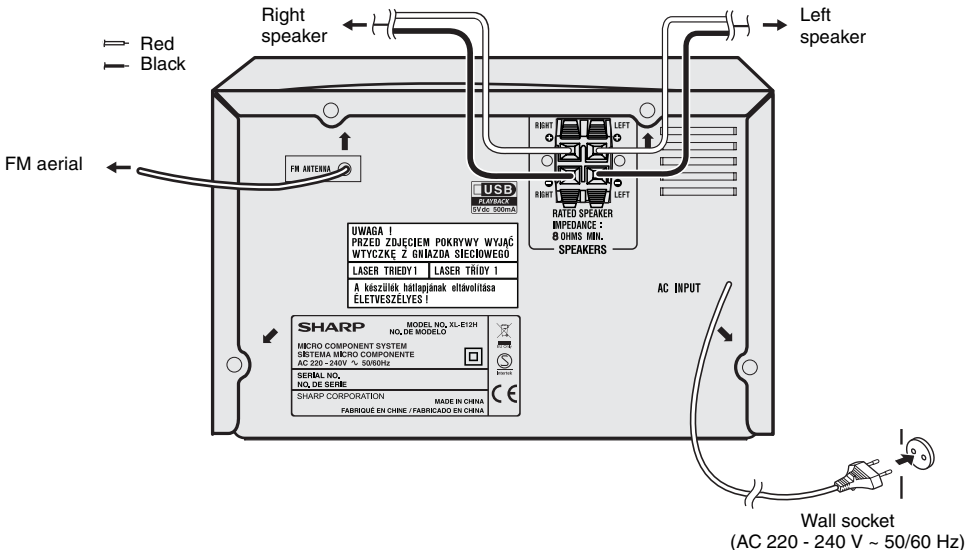
- Hold the AC power plug by the head when removing it from the wall socket, as pulling the lead can damage internal wires.
- The AC power plug is used as a disconnect device and shall always remain readily operable.
- **Do not remove the outer cover, as this may result in electric shock. Refer internal service to your local SHARP service facility.**
- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Attention should be drawn to the environmental aspects of battery disposal.
- This unit should only be used within the range of 5°C - 35°C (41°F - 95°F).
- The apparatus is designed for use in moderate climates.

Warning:

The voltage used must be the same as that specified on this unit. Using this product with a higher voltage other than that which is specified is dangerous and may result in a fire or other type of accident causing damage. SHARP will not be held responsible for any damage resulting from use of this unit with a voltage other than that which is specified.

System connection

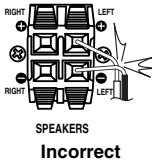
Make sure to unplug the AC power lead before making any connections.



System connection (continued)

Speaker connection

- Connect the black wire to the minus (-) terminal, and the red wire to the plus (+) terminal.
- Use speakers with an impedance of 8 ohms or more, as lower impedance speakers can damage the unit.
- Do not mistake the right and the left channels. The right speaker is the one on the right side when you face the unit.
- Do not let the bare speaker wires touch each other.
- Do not allow any objects to fall into or to be placed in the bass reflex ducts.
- Do not stand or sit on the speakers. You may be injured.



AC power connection

After checking all the connections have been made correctly, plug the AC power lead of this unit into the wall socket. If you plug in the unit first, the unit will enter the stand-by mode.

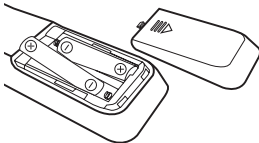
Note:

Unplug the AC power lead from the wall socket if the unit will not be in use for a prolonged period of time.

Remote control

Battery installation

- 1 Open the battery cover.
- 2 Insert the batteries according to the direction indicated in the battery compartment. When inserting or removing the batteries, push them towards the (-) battery terminals.
- 3 Close the cover.



Caution:

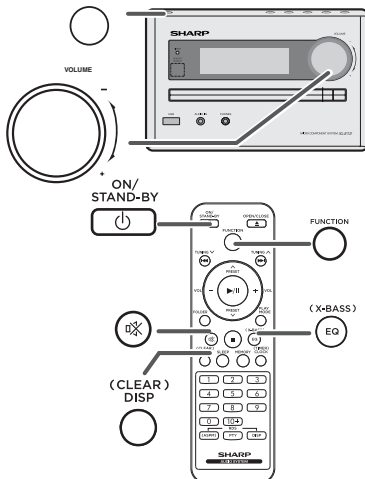
- Replace all old batteries with new ones at the same time.
- Do not mix old and new batteries.

- Remove the batteries if the unit will not be used for a long period of time. This will prevent potential damage due to battery leakage.
- Do not use rechargeable batteries (nickel-cadmium battery, etc.).
- Installing the batteries incorrectly may cause the unit to malfunction.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

Notes concerning use:

- Replace the batteries if the operating distance is reduced or if the operation becomes erratic. Purchase 2 "AAA" size batteries (UM/SUM-4, R03, HP-16 or similar).
- Periodically clean the transmitter on the remote control and the sensor on the unit with a soft cloth.
- Exposing the sensor on the unit to strong light may interfere with operation. Change the lighting or the direction of the unit if this occurs.
- Keep the remote control away from moisture, heat, shock, and vibrations.

General Control



To turn the power on

Press the ON/STAND-BY button to turn the power on.

After use:

Press the ON/STAND-BY button to enter the power stand-by mode.

Volume auto set-in

- If you turn off and on the main unit with volume set to 16 or higher, the volume will start at 16.
- If you turn the unit off then on again with the volume level set to less than 16, it will turn on again at the level set.

Volume control

Turn the volume knob towards VOLUME +/- (on main unit) or press VOL +/- (on remote control) to increase or decrease the volume.

General Control (continued)

■ Extra bass control (X-BASS)

Press and hold down (X-BASS)/EQ button, the unit will enter the extra bass mode which emphasises the bass frequencies and "X-BASS" indicator will light up. To cancel the extra bass mode, press and hold down (X-BASS)/EQ button again.

■ Equaliser

Press (X-BASS)/EQ button, the current mode setting will be displayed. To change to a different mode, press the (X-BASS)/EQ button repeatedly until the desired sound mode appears.

→ FLAT	No equalisation.
↓ ROCK	For rock music.
↓ CLASSIC	For classical music.
↓ POPS	For pop music.
↓ VOCAL	Vocals are enhanced.
↓ JAZZ	For jazz.


■ Auto power off function

The main unit will enter the stand-by mode after 15 minutes of inactivity during:

CD / USB: In the stop or pause mode.

AUDIO IN: No detection of input signal or very low sound audibility.

■ Muting

The volume is muted temporarily when pressing the  button on the remote control. Press again to restore the volume.

■ Function

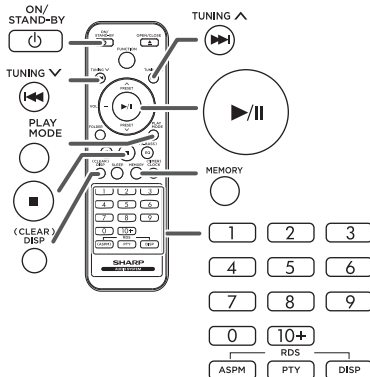
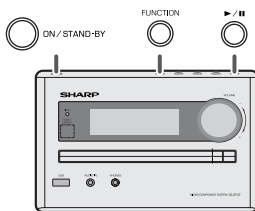
When the FUNCTION button is pressed, the current function will change to different mode. Press the FUNCTION button repeatedly to select desired function.




Note:

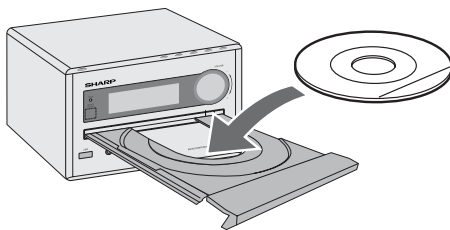
The backup function will protect the memorized function mode for a few hours should there be a power failure or the AC power lead becomes disconnected.



Listening to a CD or MP3/WMA disc



■ Disc playback

- 1 Press the ON/STAND-BY button to turn the power on.
- 2 Press the FUNCTION button repeatedly to select CD function.
- 3 Press the OPEN/CLOSE button on the remote control or  button on the main unit to open the disc tray.
- 4 Place the disc on the disc tray, label side up.















- 5 Press the OPEN/CLOSE button or  button to close the disc tray.
- 6 Press the  button to start playback. After the last track is played, the unit will stop automatically.

Notes for CD or MP3/WMA disc:

- When the end of the last track is reached during fast forward, the CD operation will be stopped. When the beginning of the first track is reached during fast reverse, the unit will enter the playback mode.

Listening to a CD or MP3/WMA disc (continued)

■ Various disc functions

Function	Main unit	Remote control	Operation
Play 			Press in the stop mode.
Stop			Press in the playback mode.
Pause 			Press in the playback mode. Press the ►/ button to resume playback from the paused point.
Track up/down			Press in the playback or stop mode. If you press the button in the stop mode, press the ►/ button to start the desired track.
Fast forward/reverse			Press and hold down in the playback mode. Release the button to resume playback.

■ Direct track search

By using the Direct Search buttons, the desired tracks on the current disc can be played.

Use the Direct Search buttons on the remote control to select the desired track whilst playing the selected disc.

- The Direct Search buttons allow you to select up to number 9.
- When selecting number 10 or higher, use the "10+" button.

A. For example, to choose 13

- 1 Press the "10+" button once.
- 2 Press the "1" button.
- 3 Press the "3" button.



B. For example, to choose 130

- 1 Press the "10+" button twice.
- 2 Press the "1" button.
- 3 Press the "3" button.
- 4 Press the "0" button.

Notes:

- A track number higher than the number of tracks on the disc cannot be selected.
- During random play, direct search is not possible.


To stop playback:

Press the ■ button on the main unit or remote control.


■ Repeat play

Repeat play can play one track, all tracks or a programmed sequence continuously.


To repeat one track:

Press the PLAY MODE button repeatedly until "REP ONE" appears. Indicator  1 will light up. Press the ►/|| button.

To repeat all tracks:

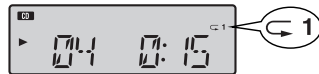
Press the PLAY MODE button repeatedly until "REP ALL" appears. Indicator  will light up. Press the ►/|| button.

To repeat all desired tracks:

Perform steps 1 - 6 in "Programmed play" section on page 6 and then press the PLAY MODE button until "REP ALL" appears. Indicator  will light up. Press the ►/|| button.

To cancel repeat play:

Press the PLAY MODE button again until "NORMAL" disappears. Indicator "1" or "10+" disappears.



■ Random play

The tracks on the disc can be played in random order automatically.

To random play all tracks:

Press and hold down PLAY MODE button on the remote control until "RDM ON" appears and "RDM" icon light up. Press the ►/|| button.

To cancel random play:

Press and hold down the PLAY MODE button until "RDM ON" appears. "RDM" icon will disappear.



Notes:

- During random playback, repeat function is not possible.
- Playback will stop after all the tracks is played randomly.
- If you press the ►► button during random play, you can move to the track selected next by the random operation. On the other hand, the ◀◀ button does not allow you to move to the previous track.
- In random play, the unit will select and play tracks automatically. (You cannot select the order of the tracks.)

■ Procedure to playback CD or MP3/WMA disc with folder mode off

- 1 Select the CD function, and load a CD or an MP3/WMA disc. After disc is loaded, disc info will be displayed.
- 2 Select desired file to be played back by pressing the ◀◀ or ►► button.
- 3 Press the ►/|| button. Playback will start.
 - File name, Title, Artist and Album name are displayed if they are recorded on the disc.
 - Display content can be changed by pressing the (CLEAR)/DISP button.

Note:

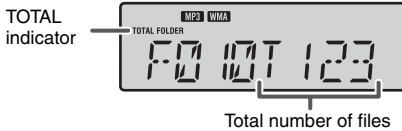
If the track is skipped during playback, it means "Copyright protected WMA file" or "Not supported playback file" is selected.

Listening to a CD or MP3/WMA disc (continued)

■ Procedure to playback CD or MP3/WMA disc with folder mode on

To play back CD-R/RW.

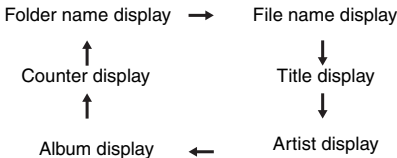
- 1 Select the CD function, and load a CD or an MP3/WMA disc. After disc is loaded, disc info will be displayed. Press the FOLDER button



- 2 Press the PRESET (▲ or ▼) button, to select desired playback folder. (Folder mode on)



- 3 Select desired file to be played back by pressing the ◀◀ or ▶▶ button.
- 4 Press the ▶/⏮ button. Playback will start.
 - Folder name, File name, Title, Artist and Album name are displayed if they are recorded on the disc.
 - Press the PRESET (▲ or ▼) button, and the folder can be selected even though it is in playback mode. It will continue playback mode in the 1st track of the selected folder.
 - Display content can be changed by pressing the (CLEAR)/DISP button.



Note:

If the track is skipped during playback, it means "Copyright protected WMA file" or "Not supported playback file" is selected.

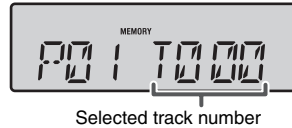
■ Programmed play (CD or MP3/WMA with folder mode off)

You can choose up to 32 selections for playback in the order you like.

- 1 Whilst in the stop mode, press the MEMORY button on the remote control to enter the programming save mode.



- 2 Press the ◀◀ or ▶▶ button on the remote control to select the desired track.



- 3 Press the MEMORY button to save the track number.



- 4 Repeat steps 2 - 3 for other tracks. Up to 32 tracks can be programmed. If you make a mistake, press the MEMORY button repeatedly to select the wrong track and then press the (CLEAR)/DISP button.

- 5 Press the ▶/⏮ button to start playback.

- 6 Press the ■ button. The total number in memory will appear.



To cancel the programmed play mode:

Whilst in the stop mode and the "MEMORY" indicator is lit, press again the ■ button on the remote control. The "MEMORY" indicator will disappear and all the programmed contents will be cleared.

Adding tracks to the programme:

If a programme has been previously stored, the "MEMORY" indicator will be displayed. Follow steps 1- 4 to add tracks. The new tracks will be stored after the last track of the previous programme.

■ Programmed play (CD or MP3/WMA with folder mode on)

You can choose up to 32 selections for playback in the order you like.

- 1 Whilst in the stop mode, press the MEMORY button on the remote control to enter the programming save mode.



Listening to a CD or MP3/WMA disc (continued)

- Press the PRESET (∨ or ∧) button to select the desired folder, a then press the ◀◀ or ▶▶ button on the remote control to select the desired track.



Selected track number

- Press the MEMORY button to save the track number.

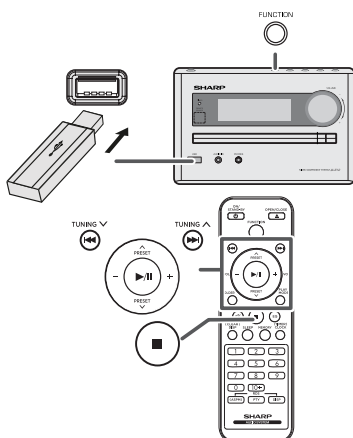


- Repeat steps 2 - 3 for other tracks. Up to 32 tracks can be programmed.
- Press the ▶/|| button to start playback.
- During programmed playback, press the ■ button to stop programmed playback.

Notes:

- When a disc is ejected, the programme is automatically cancelled.
- If you press the ON/STAND-BY button to enter the stand-by mode or change the function from CD to another, the programmed selections will be cleared.
- During the programme operation, random play is not possible.

Listening to USB mass storage device/MP3 player



Note:

This USB mass storage device or MP3 player is not compatible with MTP and AAC file systems.

■ To play back USB/MP3 player

- Press the FUNCTION button repeatedly to select USB function. Connect the USB memory device that has MP3/WMA format files on the unit. When the USB memory is connected to the main unit, the device information will be displayed.
- Select desired file to be played back by pressing the ◀◀ or ▶▶ button.
- Press the ▶/|| button. Playback will start.
 - Title, Artist and Album name are displayed if they are recorded in the USB memory device.
 - Display content can be changed by pressing the (CLEAR)/DISP button.

Note:

To pause playback:
Press the ▶/|| button.

The following functions are the same as CD operation:

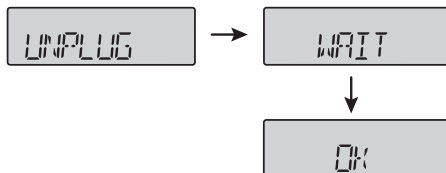
	Page
Direct track search	5
Repeat play	5
Random play	5
Playback	6
Programmed play	6

Note:

If USB memory device is not connected, "NO MEDIA" will be shown on the display.

■ To remove USB memory device

- Press the ■ button to stop playback.
- Press the ■ button again and wait until "OK" is displayed.



- Disconnect USB memory device from the USB terminal.

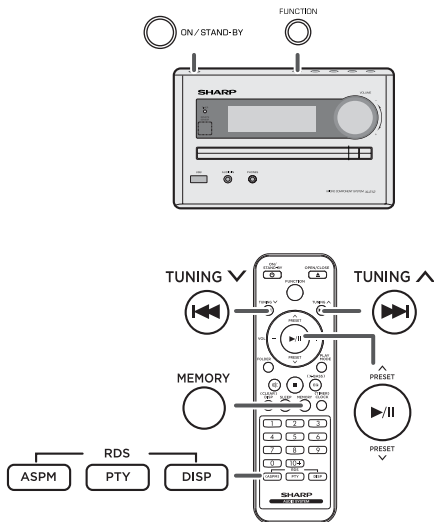
Notes:

- SHARP will not be held liable for the loss of data whilst the USB memory device is connected to the audio system.
- Files compressed in MP3 and/or WMA format can be played back when connected to the USB terminal.
- This USB memory's format supports FAT 16 or FAT 32.
- SHARP cannot guarantee that all USB memory devices will work on this audio system.
- USB cable is not recommended for use in this audio system to connect to USB memory device. Use of the USB cable will affect the performance of this audio system.
- This USB memory cannot be operated via USB hub.
- The USB terminal in this unit is not intended for a PC connection but is used for music streaming with a USB memory device.
- External HDD-storage cannot be played back via USB terminal.
- If the data inside the USB memory is large, it may take longer time for the data to be read.

Listening to USB mass storage device/MP3 player (continued)

- This product can play WMA and MP3 files. It will automatically detect the file type being played. If unplayable file is played on this product, the file will be automatically skipped. This will take a few seconds. If abnormal indications appear on the display due to the unspecified file, turn off the unit and then turn it on again.
- This product relates to USB mass storage devices and MP3 players. It may however face some irregularities due to various unforeseen reasons from some devices. Should this happen, turn off the unit and then turn it on again.
- The USB port is only intended for direct connection to a USB memory device without any cable.
- This unit only supports "MPEG-1 Audio Layer-3" format. (Sampling Frequency is 32, 44.1, 48kHz)
- "MPEG-2 Audio Layer-3", "MPEG-2.5 Audio Layer-3" and MP1, MP2 format are not supported.
- Playback order for MP3 files may differ depending on the writing software used during file download.
- Bitrate which is supported by MP3 is 32-320 kbps, WMA is 64-160 kbps.
- For MP3/WMA files, please put ".MP3" ".WMA" extension. Files cannot be played back if there is no MP3/WMA extension.
- Playlists are not supported on this unit.
- This unit can display Folder Name or File Name up to 16 characters.
- Maximum total number of MP3/WMA files is 65280. Maximum total number of folders is 255 inclusive of root directory.
- Folders with non playable files are also counted.
- The display playback time may not be displayed correctly when playing back a variable bitrate file.
- The ID3TAG information supported are TITLE, ARTIST and ALBUM only. Title name, artist name and album name can be displayed by pressing the DISPLAY button during file playback or pause mode.
- WMA meta tag also supports title, artist and album name which are recorded in WMA files. Copyright protected WMA files cannot be played back.

Listening to the radio



Tuning

- 1 Press the ON/STAND-BY button to turn the power on.
- 2 Press the FUNCTION button repeatedly to select FM ST (FM stereo) or FM Mono.
- 3 Manual and Auto tuning to the desired station.
 - **Manual tuning:**
Press the TUNING (∨ or ∧) button on the remote control repeatedly to tune in to the desired station.
 - **Auto tuning:**
When the TUNING (∨ or ∧) button on the remote control or (◀ or ▶) on the main unit is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station. Press the button again to stop the auto tuning.

Notes:

- When radio interference occurs, auto scan tuning may stop automatically at that point.
- Auto scan tuning will skip weak signal stations.

To receive an FM stereo transmission:

- Press the FUNCTION button to select FM ST (FM STEREO) mode and "ST" indicator will be displayed. "∞" will appear when an FM broadcast is in stereo.
- If the FM reception is weak, press the FUNCTION button to extinguish the "ST" indicator. The reception changes to monaural, and the sound becomes clearer.

Memorising a station

You can store 40 FM stations in memory and recall them at the push of a button. (Preset tuning)

- 1 Perform steps 2 - 3 in "Tuning".
- 2 Press the MEMORY button.



- 3 Within 5 seconds, press the PRESET (∨ or ∧) button to select the preset channel number. Store the stations in memory, in order, starting with preset channel 1.
- 4 Press the MEMORY button to store that station in memory. If the "MEMORY" and preset number indicators disappear before the station is memorised, repeat the operation from step 2.
- 5 Repeat steps 1 - 4 to set other stations, or to change a preset station. When a new station is stored in the memory, the station previously memorised for that preset channel number will be erased.

Note:

The backup function protects the memorised stations for a few hours should there be a power failure or the AC power lead become disconnected.

To recall a memorised station

Press the PRESET (∨ or ∧) button for less than 0.5 seconds to select the desired station.

Listening to the radio (continued)

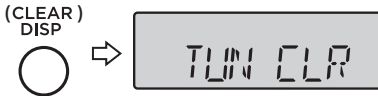
To scan the preset stations

The stations saved in the memory can be scanned automatically. (Preset memory scan)

- 1 Press the PRESET (✓ or ^) button for more than 0.5 seconds. The preset number will flash and the programmed stations will be tuned in sequentially, for 5 seconds each.
- 2 Press the PRESET (✓ or ^) button again when the desired station is located.

To erase entire preset memory

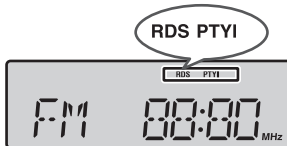
- 1 Press and hold down the (CLEAR)/DISP button until "TUN CLR" appears.



Using the Radio Data System (RDS)

RDS is a broadcasting service which a growing number of FM stations provide. These FM stations send additional signals along with their regular programme signals. They send their station names, and information about the type of programme such as sport, music, etc.

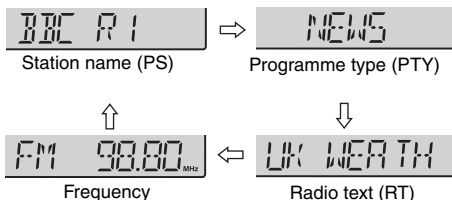
When tuned to an RDS station, "RDS" and the station name will be displayed. "PTYI" (Dynamic PTY Indicator) will appear whilst the Dynamic PTY station is received.



You can control the RDS by using the buttons on the remote control only.

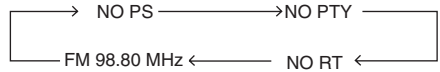
Information provided by RDS

Each time the RDS DISPLAY button is pressed, the display will switch as follows:



Using the Radio Data System (RDS) (continued)

When tuning in to a station other than an RDS station or to an RDS station which sends weak signal, the display will change in the following order:



Using the Auto Station Programme Memory (ASPM)

Whilst in the ASPM operation mode, the tuner will automatically search for new RDS stations. Up to 40 stations can be stored.

If you have already stored some stations in memory, the number of new stations you can store will be less.

- 1 Press the FUNCTION button repeatedly to select TUNER function.
- 2 Press and hold down the RDS ASPM button on the remote control for at least 3 seconds.
 - 1 After "ASPM" has flashed for about 4 seconds, scanning will start (87.50 - 108.00 MHz).



- 2 When an RDS station is found, "RDS" will appear for a short time and the station will be stored in memory.



- 3 After scanning, the number of stations stored in memory will be displayed for 4 seconds, and then "END" will appear for 4 seconds.



To stop the ASPM operation before it is complete:

Press the RDS (ASPM) button whilst it is scanning for stations. The stations which are already stored in memory will be kept there.

Notes:

- Any station which has the same frequency as the one stored in memory will not be stored.
- If 40 stations have already been stored in memory, the scan will be aborted. If you want to redo the ASPM operation, erase the preset memory.
- If no station have been stored in memory, "00 MEM" and "END" will appear for about 4 seconds.
- If the RDS signals are very weak, station names may not be stored in memory.
- The same station name can be stored in different channels.
- In a certain area or during certain time periods, the station names may temporarily be different.

Using the Radio Data System (RDS) (continued)

■ Notes for RDS operation

If any of the following events occur, it does not mean that the unit is faulty:

- "PS", "NO PS" and a station name appear alternately, and the unit does not operate properly.
- If a particular station is not broadcasting properly or a station is conducting tests, the RDS reception function may not work properly.
- When you receive an RDS station whose signal is too weak, information like the station name may not be displayed.
- "NO PS", "NO PTY" or "NO RT" will be displayed for few seconds, and then the frequency will be displayed.

Notes for radio text:

- The first 8 characters of the radio text will appear for 4 seconds and then they will scroll across the display.
- If you tune in to an RDS station which is not broadcasting any radio text, "NO RT" will be displayed when you switch to the radio text position.
- Whilst radio text data is received or when the text contents change, "RT" will be displayed.

■ To recall stations in memory

To specify programmed types and select stations (PTY search):

You can search a station by specifying the programme type (news, sports, traffic programme, etc.) from the stations in memory.

- 1 Press the FUNCTION button repeatedly to select TUNER function.
- 2 Press the RDS PTY button on the remote control.



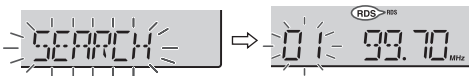
Selected PTY code (blinking) will appear for about 6 seconds.

- 3 Within 6 seconds, press the ◀◀ or ▶▶ button to select the PTY code.



Each time the button is pressed, the PTY code will appear.

- 4 Whilst the selected PTY code is displayed (within 6 seconds), press the RDS PTY button again.



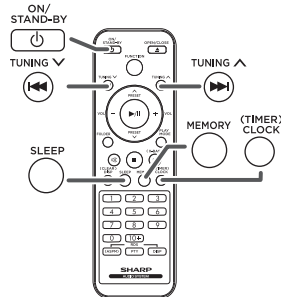
- The unit searches the all preset stations and stops when it finds a station of the selected category then tunes into the stations. The RDS indicator lights up.
- If no programme is found in the all preset stations, "NO PTY" appear on the display and returns to the previous station.

Using the Radio Data System (RDS) (continued)

Notes:

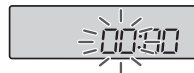
- If the display has stopped flashing, start again from step 2. If the unit finds a desired programme type, the corresponding channel number will lit for about 4 seconds, and then the station name will remain lit.
- If you want to listen to the same programme type of another station, press the RDS PTY button and start again from step 2. The unit will look for the next station.

Setting the clock (Remote control only)



In this example, the clock is set for the 24-hour (00:00) display.

- 1 Press the ON/STAND-BY button to turn to stand-by mode.
- 2 Press and hold the (TIMER)/CLOCK button until "00:00" appear.



- 3 Within 10 seconds, press the ◀◀ or ▶▶ button to adjust the hour and then press the MEMORY button. Press the ◀◀ or ▶▶ button once to advance the time by 1 hour. Hold it down to advance continuously.
- 4 Press the ◀◀ or ▶▶ button to adjust the minutes and then press the MEMORY button. Press the ◀◀ or ▶▶ button once to advance the time by 1 minute. Hold it down to advance continuously.

To confirm the time display:

[When the unit is in the stand-by mode]
Press the (TIMER)/CLOCK button. The time display will appear for about 5 seconds.

[When the power is on]
Press the (TIMER)/CLOCK button. The time display will appear for about 5 seconds.

Note:

The "00:00" will appear when the AC power supply is restored after a power failure or unplugging the unit. Readjust the clock as follows.

To readjust the clock:

Perform "Setting the clock" from step 1.

Timer and sleep operation (Remote control only)

Timer playback:

The unit turns on and plays the desired source (CD, USB, TUNER or AUDIO IN) at a preset time.

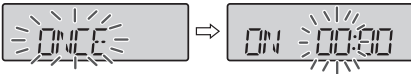
■ Timer playback

Before setting timer:

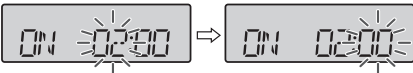
- 1 Check that the clock is set to the correct time (refer to page 10).
If it is not set, you cannot use the timer function.
- 2 For timer playback, load the disc to be played back.



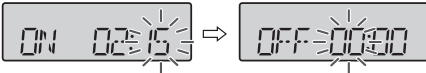
- 1 Press ON/STAND-BY button to turn the power on.
- 2 Press and hold (TIMER)/CLOCK button for about 2 seconds.
- 3 Within 10 seconds, press the ◀ or ▶ button to select "ONCE" or "DAILY" and then press the MEMORY button.



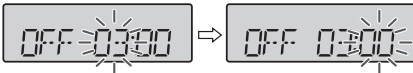
- 4 Press the ◀ or ▶ button to set hour then press the MEMORY button.



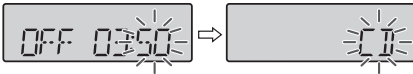
- 5 Press the ◀ or ▶ button to set minute and then press the MEMORY button.



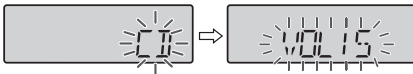
- 6 Press the ◀ or ▶ button to set hour and then press the MEMORY button.



- 7 Press the ◀ or ▶ button to set minute and then press the MEMORY button.



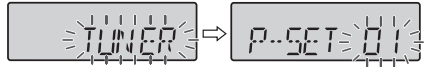
- 8 Press the ◀ or ▶ button to select wake up source (CD, USB, TUNER, AUDIO IN) then press the MEMORY button.
When you select TUNER, select a preset station by pressing the ◀ or ▶ button, and then press the MEMORY button. If a station has not been programmed, timer setting will be canceled.



- 9 Adjust the volume using ◀ or ▶ and then press the MEMORY button. (Do not turn the volume too high).



- 10 If "TUNER" is selected, press the MEMORY button to enter the preset selection mode.



- 11 To select a preset channel number, press the ◀ or ▶ button and then press the MEMORY button.



- 12 The "⊙" or "⊙ DAILY" indicator lights up.

- 13 Press the ON/STAND-BY button to enter the power stand-by mode. The TIMER LED indicator light up and the unit is ready for timer playback.

- 14 When the preset time is reached, playback will start. "⊙" indicator will blink to show timer playback. The volume will increase gradually until it reaches the preset volume level.

- 15 When the timer end time is reached, the system will enter the power stand-by mode automatically.

Note:

This unit will turn on or enter the power stand-by mode automatically. However, the connected unit will not turn on or off. To stop the timer playback, follow step "Cancelling the timer setting" on this page.

Checking the timer setting:

- 1 Press and hold down the (TIMER)/CLOCK button repeatedly to view the TIMER ON and TIMER OFF setting.

Cancelling the timer setting:

Press the (TIMER)/CLOCK button until "ONCE" or "DAILY" appears and then press MEMORY button. The unit display shows "OFF".

■ Sleep operation

The radio, compact disc, USB and AUDIO IN can all be turned off automatically.

- 1 Play back the desired sound source.
- 2 Press the SLEEP button.
- 3 Within 10 seconds, press the SLEEP button repeatedly to select the time.

90 → 80 → 70 → ... → 20 → 10

Timer and sleep operation (Remote control only) (continued)

- 4 "SLEEP" will appear.
- 5 The unit will enter the power stand-by mode automatically after the preset time has elapsed.

To confirm the remaining sleep time:

- 1 Whilst "SLEEP" is indicated, press the SLEEP button. The remaining time is displayed for about 10 seconds.

To cancel the sleep operation:

Press the ON/STAND-BY button whilst "SLEEP" is indicated. To cancel the sleep operation without setting the unit to the stand-by mode, proceed as follows.

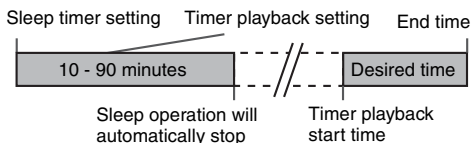
- 1 Whilst "SLEEP" is indicated, press the SLEEP button.
- 2 Within 10 seconds, press the SLEEP button repeatedly to select "SLEEP 00" until "SLEEP" indicator disappears.

■ To use timer and sleep operation together

Sleep and timer playback:

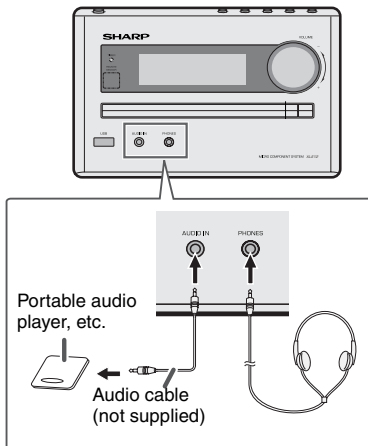
For example, you can fall asleep listening to the radio and wake up to CD in the next morning.

- 1 Set the sleep time (see above, steps 1 - 5).
- 2 Whilst the sleep timer is set, set the timer playback (steps 2 - 10, page 11).



Enhancing your system

The connection lead is not included. Purchase a commercially available lead as shown below.



■ Listening to the playback sounds of portable audio player, etc.

- 1 Use a connection lead to connect the portable audio player etc. to the AUDIO IN socket.
- 2 Press the ON/STAND-BY button to turn the power on.
- 3 Press the FUNCTION button repeatedly to select AUDIO IN function.
- 4 Play the connected equipment. If volume level of the connected device is too high, sound distortion may occur. Should this happen, lower the volume of the connected device. If volume level is too low, increase the volume of the connected device.

Note:

To prevent noise interference, place the unit away from the television.

■ Headphones

- Do not turn the volume on to full at switch on and listen to music at moderate levels. Excessive sound pressure from earphones and headphones can cause hearing loss.
- Before plugging in or unplugging the headphones, reduce the volume.
- Be sure your headphones have a 3.5 mm (1/8") diameter plug and impedance between 16 and 50 ohms. The recommended impedance is 32 ohms.
- Plugging in the headphones disconnects the speakers automatically. Adjust the volume using the VOLUME control.

Troubleshooting chart

Many potential problems can be resolved by the owner without calling a service technician.

If something is wrong with this product, check the following before calling your authorised SHARP dealer or service centre.

■ General

Symptom	Possible cause
● The clock is not set to the correct time.	● Did a power failure occur? Reset the clock. (Refer page 10)
● When a button is pressed, the unit does not respond.	● Set the unit to the power stand-by mode and then turn it back on. ● If the unit still malfunctions, reset it. (Refer page 14)
● No sound is heard.	● Is the volume level set to "MIN"? ● Are the headphones connected? ● Are the speaker wires disconnected?

■ CD player

Symptom	Possible cause
● Playback does not start. ● Playback stops in the middle or is not performed properly.	● Is the disc loaded upside down? ● Does the disc satisfy the standards? ● Is the disc distorted or scratched?
● Playback sounds are skipped, or stopped in the middle of a track.	● Is the unit located near excessive vibrations? ● Is the disc very dirty? ● Has condensation formed inside the unit?

■ Remote control

Symptom	Possible cause
● The remote control does not operate.	● Is the AC power lead of the unit plugged in? ● Is the battery polarity correct? ● Are the batteries dead? ● Is the distance or angle incorrect? ● Does the remote control sensor receive strong light?

■ Tuner

Symptom	Possible cause
● The radio makes unusual noises continuously.	● Is the unit placed near the TV or computer? ● Is the FM aerial placed properly? Move the aerial away from the AC power lead if it is located nearby.

■ USB

Symptom	Possible cause
● Device cannot be detected.	● Is there any MP3/WMA file available? ● Is the device properly connected? ● Is it an MTP device? ● Does the device contain AAC file only?
● Playback does not start.	● Is it a copyright protected WMA file? ● Is it a false MP3 file?
● Wrong time display. ● Wrong file name display.	● Is Variable Bitrate file being played back? ● Is the File Name written in Chinese or Japanese characters?

■ Condensation

Sudden temperature changes, storage or operation in an extremely humid environment may cause condensation inside the cabinet (CD pickup, etc.) or on the transmitter on the remote control. Condensation can cause the unit to malfunction. If this happens, leave the power on with no disc in the unit until normal playback is possible (about 1 hour). Wipe off any condensation on the transmitter with a soft cloth before operating the unit.

■ If problem occurs

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:

- 1 Set the unit to the stand-by mode and turn the power on again.
- 2 If the unit is not restored in the previous operation, unplug and plug in the unit again, and then turn the power on.

Note:

If neither operation above restores the unit, clear all the memory by resetting it.

Troubleshooting chart (continued)

■ Factory reset, clearing all memory

- 1 Press the ON/STAND-BY button to turn the power on.
- 2 Press the FUNCTION button repeatedly to select AUDIO IN function.
- 3 Press the ◀◀ button on the main unit and then press and hold down the ▶/|| button until "RESET" appears.



Caution:

This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

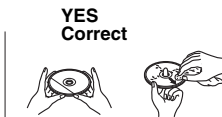
■ Before transporting the unit

Remove the USB memory device and disc from the unit. Then, set the unit to the power stand-by mode. Carrying the unit with the USB memory device or disc left inside can damage the unit.

■ Care of compact discs

Compact discs are fairly resistant to damage, however mistracking can occur due to an accumulation of dirt on the disc surface. Follow the guidelines below for maximum enjoyment from your CD collection and player.

- Do not write on either side of the disc, particularly the non-label side from which signals are read. Do not mark this surface.
- Keep your discs away from direct sunlight, heat, and excessive moisture.
- Always hold the CDs by the edges. Fingerprints, dirt, or water on the CDs can cause noise or mistracking. If a CD is dirty or does not play properly, clean it with a soft, dry cloth, wiping straight out from the centre, along the radius.



Maintenance

■ Cleaning the cabinet

Periodically wipe the cabinet with a soft cloth and a diluted soap solution, then with a dry cloth.

Caution:

- Do not use chemicals for cleaning (petrol, paint thinner, etc.). It may damage the cabinet.
- Do not apply oil to the inside of the unit. It may cause malfunctions.

Specifications

As part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

■ General

Power source	AC 220 - 240 V ~ 50/60 Hz
Power consumption	Power on: 18 W Power stand-by: 0.4 W (*)
Dimensions	Width: 180 mm (7 - 3/32") Height: 121 mm (4 - 49/64") Depth: 239 mm (9 - 13/32")
Weight	1.60 kg (3.53 lbs.)

(*) This power consumption value is obtained when the main unit is in stand-by mode.

■ Amplifier

Output power	MPO: 16 W (8 W + 8 W) (10% T.H.D.) RMS: 10 W (5 W + 5 W) (10% T.H.D.)
Output terminals	Speakers: 8 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	AUDIO IN (Analogue input): 500 mV/47 k ohms

■ CD player

Type	Single disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	Multi bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

Specifications (continued)

■ USB

USB host interface	<ul style="list-style-type: none"> ● Complies with USB 1.1 (Full Speed)/ 2.0 Mass Storage Class. ● Support Bulk only and CBI protocol.
Support file	<ul style="list-style-type: none"> ● MPEG 1 Layer 3 ● WMA (Non DRM)
Bitrate support	<ul style="list-style-type: none"> ● MP3 (32 ~ 320 kbps) ● WMA (64 ~ 160 kbps)
Other	<ul style="list-style-type: none"> ● Maximum total number of MP3/WMA files is 65280. ● Maximum total number of folders is 255 INCLUSIVE of root directory. ● The ID3TAG information supported are TITLE, ARTIST and ALBUM only. ● Supports ID3TAG version 1 and version 2.
File system support	<ul style="list-style-type: none"> ● Support USB devices with Microsoft Windows/DOS/FAT 12/ FAT 16/ FAT 32. ● 2 kbyte block length for sector.

■ Tuner

Frequency range	FM: 87.5 - 108 MHz
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■ Speaker

Type	1-way type speaker system 9 cm (3 - 35/64") Full range
Maximum input power	10 W
Rated input power	5 W
Impedance	8 ohms
Dimensions	Width: 110 mm (4 - 21/64") Height: 195 mm (7 - 11/16") Depth: 149 mm (5 - 7/8")
Weight	0.98 kg (2.16 lbs./each)