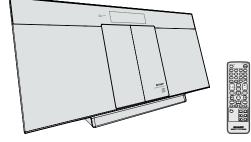


DK-KP80P SLIM MICRO SYSTEM

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.





iPad, iPhone, iPod, iPod classic, iPod nano, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

"Made for iPod," "Made for iPhone," and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone, or iPad may affect wireless performance.



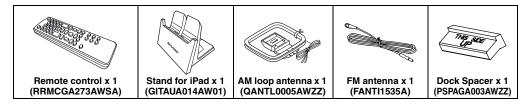






Accessories

The following accessories are included.



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://mg3licensing.com

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.



Printed in Malaysia 11J R MW ①

SPECIAL NOTES



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



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

Explanation of Graphical Symbols:



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.

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

This product is classified as a CLASS 1 LASER PRODUCT.

Caution - Use of any controls, adjustments or procedures other than those specified herein may result in hazardous radiation exposure.

Note to CATV system installer:

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

NOTE

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

FOR YOUR RECORDS

For your assistance in reporting this unit in case of loss or theft, please record below the model number and serial number which are located on the bottom of the unit. Please retain this information.

Model number	
Serial number	
Date of purchase	
Place of purchase	

IMPORTANT SAFETY INSTRUCTIONS

Electricity is used to perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of this product, please read the following precautions carefully before use.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10)Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11)Only use attachments/accessories specified by the manufacturer.
- 12)Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.



- 13)Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14)Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

IMPORTANT SAFETY INSTRUCTIONS (continued)

Additional Safety Information

- 15)Power Sources This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For product intended to operate from battery power, or other sources, refer to the operating instructions.
- 16)Overloading Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
- 17)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.

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.

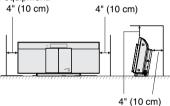
- 18)Damage Requiring Service Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a) When the AC cord or plug is damaged,
 - b) If liquid has been spilled, or objects have fallen into the product,
 - c) If the product has been exposed to rain or water,
 - d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation,
 - 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.
- 19)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.
- 20)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.
- 21)Wall or ceiling mounting When mounting the product on a wall or ceiling, be sure to install the product according to the method recommended by the manufacturer.
- 22)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.

- 23)Protective Attachment Plug The product is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
- 24)Stand Do not place the product on an unstable cart, stand, tripod or table. Placing the product on an unstable base can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.

Precautions

General

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



- Use the unit on a firm, level surface free from vibration.
- Place the unit at least 12" (30 cm) away from any CRT TV to avoid color variations across the TV screen. If the variations persist, move the unit further away from the TV. LCD TV is not prone to such variation.
- 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 104°F (40°C) or to extremely low temperatures.
- If your system does not work properly, disconnect the AC power cord from the AC outlet. Plug the AC power cord 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 AC outlet, as pulling the cord 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.
- This unit should only be used within the range of 41°F - 95°F (5°C - 35°C).

CONSUMER LIMITED WARRANTY

SHARP ELECTRONICS CORPORATION warrants to the first consumer purchaser that this Sharp brand product (the "Product"), when ship in its original container, will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period(s) set forth below.

This warranty does not apply to any appearance items of the Product nor to the additional excluded item(s) set forth below nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the steps set forth below and provide proof of purchase to the servicer.

The limited warranty described herein is in addition to whatever implied warranties may be granted to purchasers by law. ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE PERIOD(S) FROM THE DATE OF PURCHASE SET FORTH BELOW. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time period described herein on behalf of Sharp.

The warranties described herein shall be the sole and exclusive warranties granted by Sharp and shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and responsibilities of Sharp to the purchaser with respect to the Product, and shall constitute fulfillment of all liabilities and responsibilities of Sharp to the purchaser with respect to the Product, and shall constitute fulfillment of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall Sharp be liable, or in any way responsible, for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than an authorized servicer. Nor shall Sharp be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Model Specific Section Your Product Model Number & Description: **DK-KP80P Slim Micro System** (Be sure to have this information available when you need service for your Product.) Warranty Period for this Product: One (1) year parts and labor from the date of purchase. Non-functional accessories, supplies, and consumable Additional Item(s) Excluded from Warranty Coverage items. (if any): At a Sharp Authorized Servicer located in the United States. Where to Obtain Service: To find a location of the nearest Sharp Authorized Servicer, call Sharp toll free at 1-800-BE-SHARP. What to do to Obtain Service: Ship prepaid or carry in your Product to a Sharp Authorized Servicer. Be sure to have Proof of Purchase available. If you ship the Product, be sure it is insured and packaged securely.

TO OBTAIN SUPPLY, ACCESSORY OR PRODUCT INFORMATION, CALL 1-800-BE-SHARP

SHARP ELECTRONICS CORPORATION

Sharp Plaza, Mahwah, New Jersey 07495-1163

Precautions (continued)

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.

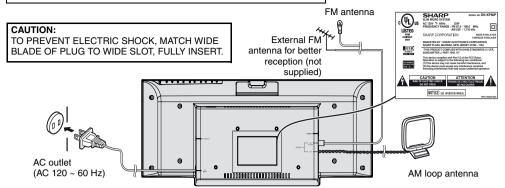
Volume control

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.

E-3

System connections

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



Antenna connection

Supplied FM antenna:

Connect the FM antenna wire to the FM 75 OHMS jack and position the FM antenna wire in the direction where the strongest signal can be received.

External FM antenna:

Use an external FM antenna (75 ohms coaxial cable) for better reception. When an external FM antenna is used, disconnect the supplied FM antenna wire.

Note:

Placing the antenna on the unit or near the AC power cord may cause noise pickup. Place the antenna away from the unit for better reception.

AC power connection

After checking all the connections have been made correctly, plug the AC power cord of this unit into the AC outlet.

Remote control

Battery installation

Use 1 "AA" size battery (UM/SUM-3, R6, HP-7 or similar). Battery is not included.

- **1** Open the battery cover.
- 2 Insert the supplied battery according to the terminal indicated in the battery compartment.

When inserting or removing the battery, push it towards the (-) battery terminals.

3 Close the cover.



Note:

Unplug the AC power cord from the AC outlet if the unit will not be in use for a prolonged period of time.

Demonstration mode

- The first time the unit is plugged in, the unit will enter the demonstration mode.
- To cancel the demonstration mode, press the DEMO button (remote control) during power stand-by mode. The unit will enter the low power consumption mode.
- To return to the demonstration mode, press the DEMO button again.
- If iPod or iPhone is docked, the unit will begin charging. "Charge Mode" will be displayed. Demonstration mode is invalid during charge mode.

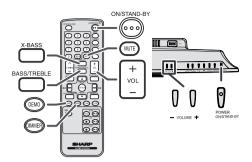
Caution:

- Remove the battery 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 battery (nickel-cadmium battery, etc.).
- Installing the battery 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 battery if the operating distance is reduced or if the operation becomes erratic. Purchase an "AA" size battery (UM/SUM-3, R6, HP-7 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 POWER ON/STAND-BY button to turn the power on.

After use:

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

Display brightness control

To dim the display brightness, press the DIMMER button on the remote control.

- →Dimmer 1 (Display is dim).
- Dimmer 2 (Display gets dimmer).
- Dimmer off (Display is bright).

Volume auto fade-in

If you turn off and on the main unit with the volume set to 27 or higher, the volume starts at 16 and fades in to the last set level.

Volume control

Press VOL +/- to increase or decrease the volume.

Direct key power on function

When you press any of the following buttons, the unit turns on. • iPod. CD/USB. AUDIO IN. TUNER on the remote control: Selected function is activated

►/II button on the main unit: The unit turns on and playback of the last function will start (CD, TUNER, USB, iPod. AUDIO IN)

Auto power off function

The main unit will enter the stand-by mode (when iPad, iPod or iPhone is not connected) after 15 minutes of inactivity during:

- iPod : Not docked.
- Audio In : No detection of input signal.
- CD : In the stop mode or no disc. USB :
- In the stop mode or no media.

Note:

However, if iPod or iPhone is docked, the unit will begin charging.

"Charge Mode" will be displayed.

Muting

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

X-Bass control

When the power is first turned on, the unit will enter the extra bass mode which emphasises the bass frequencies, and "X-BASS" indicator will appear. To cancel the extra bass mode, press the X-BASS button on the remote control.

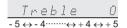
Bass control

- 1 Press the BASS/TREBLE button to select "Bass"
- Ż Within 5 seconds, press the VOLUME (+ or -) button to adjust the bass. "X-BASS" indicator will disappear.

$$\frac{B a s s \qquad 0}{-5 \leftrightarrow -4 \cdots \leftrightarrow +4 \leftrightarrow +5}$$

Treble control

- 1 Press the BASS/TREBLE button to select "Treble".
- 2 Within 5 seconds, press the VOLUME (+ or –) button to adjust the treble. "X-BASS" indicator will disappear.



Function

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

CD \longrightarrow FM STEREO \longrightarrow FM MONO АŃ Audio In \leftarrow iPod \leftarrow USB \leftarrow

Note:

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

Listening to the iPod, iPhone or iPad

Made for:

- iPod touch (4th generation)
 iPod touch (3rd generation)
 iPod touch (3rd generation)
 iPod touch (2rd generation)
 iPod touch (2rd generation)
 iPod touch (2rd generation)
 iPod touch (2rd generation)
- iPod touch (1st generation)
- iPod classic
- iPhone 4 iPhone 3GS iPhone 3G
 - iPhone
- iPad 2
- iPod classic
 iPod nano (6th generation)
 iPod nano (5th generation)
 iPod nano (4th generation) iPad

Caution:

Please update your iPod, iPhone and iPad unit to the latest software version before using it. Please visit Apple's homepage to download the latest version for your iPod, iPhone and iPad.

Notes:

Charging terminal for iPod, iPhone and iPad:

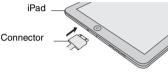
Condition	DOCK	USB
USB function	YES	YES (without iPod or iPhone docking)
Other function (iPod / CD / Tuner / Audio In)	YES	NO
Stand-by	YES	NO

Listening to the iPod, iPhone or iPad (continued)

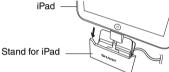
- The message "This accessory is not made to work with iPhone" or similar, may appear on the iPhone screen when:
 - battery is low.
 - the iPhone is not properly docked (eg. slanting).
 - If this occurs, remove and re-dock the iPhone.
- This product is made for iPod, iPhone and iPad. To prevent random interference when iPod, iPhone or iPad is connected, the headphone output is disabled, and "HP INVALID" will be displayed. You may also experience brief audio interference
- during incoming calls. The headphone output is switched off during inserting
- iPod, iPhone and iPad unit. This is an Apple product specification.

iPod, iPhone and iPad connection via USB terminal

1 Insert the connector to the iPod, iPhone or iPad.



2 Place the iPad to the stand for iPad.



3 Connect the iPod, iPhone or iPad to the unit via USB connector.



iPod, iPhone or iPad playback via USB terminal

- 1 Press the POWER ON/STAND-BY button to turn the power on.
- 2 Press the USB button on the remote control or FUNCTION button repeatedly on the main unit to select USB function.
- 3 Connect iPod, iPhone or iPad to the unit. "USB/iPod" will appear.



File name

4 Press the ►/II (USB ►/II) button to start playback.

Note:

Stop button (\blacksquare) is invalid during iPod, iPhone or iPad playback

iPhone playback

- Sound will only switch from iPhone to the main unit after authentication process is completed in approximately 10 seconds.
- Incoming calls will pause the playback.
- Once the calls are answered, the conversation can only be heard through the built-in iPhone speaker. Turn on the iPhone speaker or undock the iPhone to start conversation.

iPod and iPhone connection (Dock only)

Caution:

Unplug all accessories from the iPod or iPhone before inserting it into the dock.

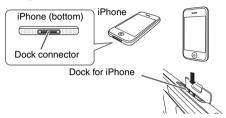
Note:

Docking station is not recommended for iPad connection.

1 Open the docking station for iPod and iPhone by pulling up the cover.

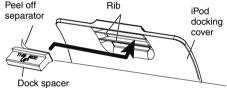


2 Dock your iPod or iPhone into the unit.



For iPod nano or iPod touch :

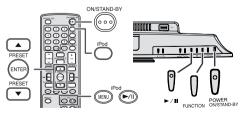
For additional support, apply dock spacer (supplied) as shown.



- **1** Peel off the double sided tape separator.
- 2 Place the spacer between the two ribs of the iPod docking cover as shown.

iPod or iPhone playback

- 1 Press the POWER ON/STAND-BY button to turn the power on.
- 2 Press the iPod button on the remote control or FUNCTION button repeatedly on the main unit to select iPod function.
- **3** Insert iPod or iPhone unit into the dock of main unit. "DOCK OK" will appear.
- 4 Press the ►/II (iPod ►/II) button to start playback.



Navigating the iPod, iPhone or iPad menus

- 1 Press the MENU button to view the menu on iPod, iPhone or iPad unit. Press it again to go back to previous menu.
- 2 Use the PRESET (▼ or ▲) button to select an item on the menu and then press ENTER button.



Listening to the iPod, iPhone or iPad (continued)

Note:

When navigating the iPod, iPhone or iPad menu with remote control, do not operate any of the buttons on the iPod or iPhone unit. The volume level is adjusted by pressing the VOL (+ or -) button on the main unit or the remote control. Adjusting the volume on the iPod, iPhone or iPad units give no effect.

iPod, iPhone and iPad operations:

The operations described below depend on the generation iPod, iPhone and iPad you are using.

System on operation:

When the main unit is powered on, the iPod, iPhone or iPad units will automatically power on when docked or connected in the unit.

System off (stand-by operation):

When the main unit is turned to stand-by mode, the docked iPod, iPhone or connected iPad unit will automatically turn to stand-by mode.

To disconnect iPod, iPhone or iPad

Simply remove the iPod or iPhone from the docking station or iPad connector from USB terminal. It is safe to do so even during playback.

Caution:

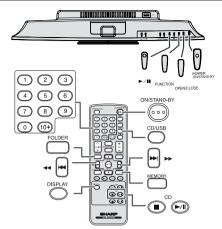
П

- Unplug all accessories for the iPod or iPhone before inserting it into the docking station.
- Stop button (■) at main unit is invalid during iPod function.

Various iPod, iPhone and iPad functions

Function	Main unit	Remote control		Operation
	Dock/USB	Dock	USB	
Play	•	iPod	USB	Press in the pause mode.
Pause	►/II			Press in the playback mode.
Track up/ down	0			Press in the playback or pause mode. If you press the button in the pause mode, press the ►/ " button to start the desired track.
Fast forward/ reverse	0			Press and hold down in the playback mode.
	** **			Release the button to resume playback.
Repeat		PLAY MODE		Press to toggle repeat mode.
Shuffle				Press and hold to toggle shuffle mode.
Menu		MENU		Press to view the iPod menu during iPod function.
Enter		ENTER		Press to confirm the selection.
Cursor Up/Down		PRESET		Press to select the iPod menu.

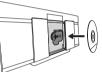
Listening to a CD or MP3/WMA disc



Disc playback

- 1 Press the POWER ON/STAND-BY button to turn the power on.
- 2 Press the CD button on the remote control or FUNCTION button repeatedly on the main unit to select CD function.
- 3 Press the OPEN/CLOSE button to open the disc compartment.
- 4 Place the disc in the disc compartment, label side front.5 Press the OPEN/CLOSE button

to close the disc compartment.



6 Press the ►/II (CD ►/II) button to start playback. After the last track is played, the unit will stop automatically.

Caution:

- Do not place two discs in the disc compartment.
- Do not play discs of special shapes (heart, octagon, etc). It may cause malfunctions.
- Do not push the disc compartment while it is moving.
- If the power fails while the compartment is open, wait until the power is restored.
- If TV or radio interference occurs during CD operation, move the unit away from the TV or radio.
- Be sure to place 8 cm (3") disc in the middle of the disc compartment.
- Due to the structure of the disc information, it takes longer to read an MP3/WMA disc than a normal CD (approximately 20 to 90 seconds).

Notes for CD or MP3/WMA disc:

- When the end of the last track is reached during fast forward, "END" will appear on the display and CD operation will be paused. When the beginning of the first track is reached during fast reverse, the unit will enter the playback mode (only for CD).
- Rewritable multi-session discs with unfinished writing, can still be played.

Direct track search

E-7

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

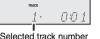
Use the Numeric buttons on the remote control to select the desired track while playing the selected disc.

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

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

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 ■ (CD ■) button.

Various disc functions

Function	Main unit	Remote control	Operation
Play Pause	0 ►⁄11	CD	Press in the stop mode. Press in the playback mode. Press the ►/II button to resume playback from the paused point.
Stop	0	CD	Press in the playback mode.
Track up/ down	0	*	Press in the playback or stop mode. If you press the button in the stop mode, press the >/II button to start the desired track.
Fast forward/ reverse	0	**	Press and hold down in the playback mode. Release the button to resume playback.

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 "Repeat One" appears. Press the \blacktriangleright/II (CD \triangleright/II) button.

To repeat all tracks:

Press the PLAY MODE button repeatedly until "Repeat All" appears. Press the \blacktriangleright/II (CD \triangleright/II) button.

To repeat desired tracks:

Perform steps 1 - 5 in "Programmed play" section on page 7 and then press the PLAY MODE button repeatedly until "Repeat All" appears.

To cancel repeat play:

Press the PLAY MODE button repeatedly until "Normal" appears and " • " disappears.

Caution:

After performing repeat play, be sure to press the \blacksquare (CD \blacksquare) button. Otherwise, the disc will play continuously.

Programmed play (CD)

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

- 1 While in the stop mode, press the MEMORY button on the remote control to enter the programming save mode.
- 2 Press the numeric button or l←4 or ▶►I buttons 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 want to check the programmed tracks, press the MEMORY button repeatedly. If you make a mistake, the programmed tracks can be cleared by pressing the CLEAR button.
- 5 Press the ►/II (CD ►/II) button to start playback.

Random play

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

To random play all tracks:

Press and hold the PLAY MODE button on the remote control until "Random" appears. Press the \blacktriangleright/II (CD \blacktriangleright/II) button.

To cancel random play:

Press the PLAY MODE button again. "RDM" indicator will disappear.



Notes:

- If you press the ▶▶I button during random play, you can move to the track selected next by the random operation. On the other hand, the I ← button does not allow you to move to the previous track. The beginning of the track being played will be located.
- In random play, the unit will select and play tracks automatically. (You cannot select the order of the tracks.)

Programmed play (MP3/WMA)

- 1 While in the stop mode, press the MEMORY button to enter the programming save mode.
- 2 Press the PRESET (▼ or ▲) button on the remote control to select the desired folder.

	TOTAL			E	NEN PLE	FOLD	473 WIA			
S	ΝG	ΟN	S	Ľ		2	1	0	P	
	ΜĠ	UΜ	5	- <u>1</u>		2	1	U	Ľ	

Then press the $i \triangleleft \triangleleft$ or by button on the remote control to select the desired tracks.

POI 2 5WE AR

- **3** Press the MEMORY button to save the folder and track number.
- **4** Repeat steps 2 3 for other folder/tracks. Up to 32 tracks can be programmed.
- 5 Press the ►/II (CD ►/II) button to start playback.

To cancel the programmed play mode:

During programmed stop mode, press the \blacksquare (CD \blacksquare) button. The display will show "Memory Clear" and all the programmed contents will be cleared.



15:1

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

Adding tracks to the program:

If a program has been previously stored, the "MEM" indicator will be displayed. Press the MEMORY button. Then follow steps 2 - 3 to add tracks.

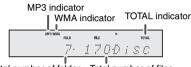
Notes:

- When the disc compartment is opened, the program is automatically canceled.
- If you press the POWER 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 program operation, random play is not possible.

Procedure to playback MP3/WMA disc with folder mode on

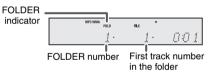
To play back CD-R/RW.

 Press the CD button, and load an MP3/WMA disc. Press the FOLDER button and disc info will be displayed.



Total number of folder Total number of files

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 i◄ or ►►I button.
- 4 Press the ►/𝔅 (CD ►/𝔅) button. Playback will start and file name will be displayed.
 - Title, Artist and Album name are displayed if they are recorded on the disc.
 - In case of playback with the folder mode on, press the PRESET (▼ or ▲) button, and the folder can be selected even though it is in playback/pause mode. It will continue playback/pause mode in the 1st track of the selected folder.
 - Display content can be changed by pressing the DISPLAY button.

File name display	→ Folder display
t	Ļ
Counter display	Title display
L Album display 🔶	Artist display

Note:

If "Not Support" is displayed, it means "Copyright protected WMA file" or "Not supported playback file" is selected.

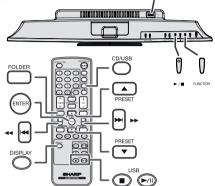
Listening to USB mass storage device/MP3 player

Caution:

At USB mode, once the iPod or iPhone is docked onto the unit, the iPod or iPhone will automatically start charging. 'iPod DOCK Charge Mode' will be displayed. In order to listen to any USB mass storage device / MP3 player, the iPod or iPhone must be removed from the docking station.

Notes:

- 1. Remove the USB terminal cover before use. Keep it away from children as it may be swallowed.
- Cover the USB terminal if it is not used for a long period of time to prevent dust or rust.



Note:

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

To play back USB/MP3 player with folder mode off

- 1 Press the USB button on the remote control or FUNCTION button repeatedly on main unit 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.
- 2 Select desired file to be played back by pressing the I≪ or ►►I button.
- 3 Press the ►/II (USB ►/II) button. Playback will start and the file name will be displayed.
 - Title, Artist and Album name are displayed if they are recorded in the USB memory device.
 - Display content can be changed by pressing the DISPLAY button.

Note:

To pause playback: Press the ►/II (USB ►/II) button.



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

To play back USB/MP3 player with folder mode on

- 1 Press the USB button on the remote control or FUNCTION button repeatedly on main unit 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.
- 2 Press the FOLDER button, and press the PRESET (▼ or ▲) button to select desired playback folder. To start playback with folder mode on, go to step 4. To change the playback folder, press the PRESET (▼ or ▲) button to select another folder.
- 3 Select desired file to be played back by pressing the I≪ or ►►I button.
- 4 Press the ►/II (USB ►/II) button. Playback will start and the file name will be displayed.
 - Title, Artist and Album name are displayed if they are recorded in the USB memory device.
 - Display content can be changed by pressing the DISPLAY button.

To remove USB memory device

- 1 Press the (USB ■) button to stop playback.
- 2 Disconnect USB memory device from the USB terminal.

Notes:

- SHARP will not be held liable for the loss of data while 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. iPod, iPhone and iPad is not prone to this condition.
- 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.
- 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, "Not Support" is indicated and 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.
- During CD function, MP3 player will not be charging.

Advanced USB playback

The following functions are the same as CD operations:

	raye
Direct track search	7
Repeat play	8
Random play	8
Programmed play (MP3/WMA)	8

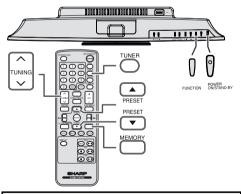
Note:

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

Notes:

- This unit only supports "MPEG-1 Audio Layer-3" format. (Sampling Frequency is 32, 44.1, 48kHz)
- 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 32 characters.
- Maximum total number of MP3/WMA files is 65025.
- Total number of folders read is 999 including folder with non-playable file. However, the display shows only folder with MP3 files.
- 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 POWER ON/STAND-BY button to turn the power on.
- 2 Press the FUNCTION button on the main unit or TUNER button on the remote control repeatedly to select FM Stereo, FM Mono or AM.
- **3** Press the TUNING (\checkmark or \land) button on the remote control to tune in to the desired station.

Listening to the radio (continued)

Manual tuning:

Press the TUNING (\checkmark or \land) button repeatedly to tune in to the desired station.

Auto tuning:

When the TUNING (\lor or \land) button is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station.

Notes:

- When radio interference occurs, auto scan tuning may stop automatically at that point.
- Auto scan tuning will skip weak signal stations.
- To stop the auto tuning, press the TUNING (∨ or ∧) button again.

To receive an FM stereo transmission:

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

Memorising a station

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

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



- 3 Within 30 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 Within 30 seconds, 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 cord becomes disconnected.

To recall a memorised station

Press the PRESET (\checkmark or \blacktriangle) button for less than 0.5 seconds to select the desired station.

To scan the preset stations

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

- 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.

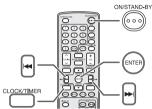
Listening to the radio (continued)

To erase entire preset memory

- 1 Press the POWER ON/STAND-BY button to enter the stand-by mode.
- 2 While pressing down the I button, press the POWER ON/ STAND-BY button until "Tuner Clear" appears.



Setting the clock (Remote control only)



In this example, the clock is set for the 24-hour (0:00) display.

- 1 Press the POWER ON/STAND-BY button to turn the power on.
- 2 Press the CLOCK/TIMER button.
- 3 Within 10 seconds, press the ENTER button. To adjust the day, press the I≪I or INI button and then press the ENTER button.
- 4 Press the I≪ or ►►I button to select 24-hour or 12-hour display and then press the ENTER button.

→ "0:00" ↓	\rightarrow	The 24-hour display will appear. (0:00 - 23:59)	
"AM 12:00" ↓	\rightarrow	The 12-hour display will appear. (AM 12:00 - PM 11:59)	
"AM 0:00"	\rightarrow	The 12-hour display will appear. (AM 0:00 - PM 11:59)	

- 5 To adjust the hour, press the I◄ or ► button and then press the ENTER button. Press the I◄ or ► button once to advance the time by 1 hour. Hold it down to advance continuously.
- 6 To adjust the minutes, press the I≪I or ►►I button and then press the ENTER button. Press the I≪I or ►►I button once to advance the time by 1 minute. Hold it down to advance the time by 5 minutes interval.

To confirm the time display:

Press the CLOCK/TIMER button. The time display will appear for about 5 seconds.

Note:

When power supply is restored after unit is plugged in again or after a power failure, reset the clock.

To readjust the clock:

Perform "Setting the clock" from step 1. If the "Clock" does not appear in step 2, step 4 (for selecting the 24-hour or 12-hour display) will be skipped.

To change the 24-hour or 12-hour display:

- 1 Clear all the programmed contents. [Refer to "Factory reset, clearing all memory" on page 14 for details.]
- 2 Perform "Setting the clock" from step 1 onwards.

Timer and sleep operation (Remote control only)

Timer playback:

TIMER.

The unit turns on and plays the desired source (CD, TUNER, USB, iPod, AUDIO IN) at a preset time. This unit has 2 types of timer: ONCE TIMER and DAILY

Once timer ("@" indicator):

Once timer play works for one time only at a preset time.

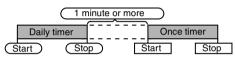
Daily timer ("DAILY" indicator):

Daily timer play works at the same preset time every day that we set. For example, set the timer as a wake-up call every morning.

Using the once timer and daily timer in combination:

For example, use the once timer to listen a radio program, and use the daily timer to wake up.

- 1 Set the daily timer.
- 2 Set the once timer.



Timer playback

Before setting timer:

- Check that the clock is set to the correct time (refer to page 11). If it is not set, you cannot use the timer function.
- For timer playback: Plug in USB or load discs or dock iPod to be played.
- 1 Press the POWER ON/STAND-BY button to turn the power on.
- 2 Press and hold the CLOCK/TIMER button.
- 3 Within 10 seconds, press the I◄ or ►►I button to select "Once" or "Daily", and press the ENTER button.
- 4 Within 10 seconds, press the I or ►► button to select "Timer Set", and press the ENTER button.
- 5 To select the timer playback source (CD, TUNER, USB, iPod, AUDIO IN), press the I◄◀ or ►►I button. Press the ENTER button. When you select the tuner, select a station by pressing the I◄◀ or ►►I button, and then press the ENTER

button. If a station has not been programmed, "No Preset" will be displayed and timer setting will be canceled.

- 6 To adjust the day, press the I ← or ►►I button and then press the ENTER button.
- 7 Press the ENTER button to adjust the hour. Press the I≪ or ►►I button and then press the ENTER button.
- 8 To adjust the minutes, press the I◄ or ►►I button and then press the ENTER button.
- 9 Set the time to finish as in steps 7 and 8 above.
- 10 Adjust the volume using the VOLUME control, and then press the ENTER button. Do not turn the volume up too high.
- 11 Press the POWER ON/STAND-BY button to enter the power stand-by mode. The "TIMER" indicator lights up and the unit is ready for timer playback.



- 12 When the preset time is reached, playback will start. The volume will increase gradually until it reaches the preset volume. The timer indicator will blink during timer playback.
- **13** When the timer end time is reached, the system will enter the power stand-by mode automatically.

Once timer:

The timer will be canceled.

Daily timer:

The timer operates at the same time every selected day. It will continue until the daily timer setting is canceled. Cancel the daily timer when it is not in use.

Notes:

- When performing timer playback using another unit connected to the USB terminal or AUDIO IN jack, select "USB" or "AUDIO IN" in step 5.
- 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" of this page.

Checking the timer setting:

- Turn the power on and press and hold down the CLOCK/TIMER button.
- 2 Within 10 seconds, press the Idd or ►►I button to select "Once" or "Daily", and press the ENTER button.
- **3** Within 10 seconds, press the I◄◄ or ►►I button to select "Timer Call", and press the ENTER button.

Cancelling the timer setting:

- 1 Turn the power on and press and hold down the CLOCK/TIMER button.
- 2 Within 10 seconds, press the Idd or ►►I button to select "Once" or "Daily", and press the ENTER button.
- 3 Within 10 seconds, press the I◄◄ or ►►I button to select "Timer Off", and press the ENTER button. Timer will be canceled (the setting will not be canceled).

Reusing the memorised timer setting:

The timer setting will be memorised once it is entered. To reuse the same setting, perform the following operations.

- 1 Turn the power on and press and hold down the CLOCK/TIMER button.
- 2 Within 10 seconds, press the I◄◄ or ►►I button to select "Once" or "Daily", and press the ENTER button.
- 3 Within 10 seconds, press the I◄◄ or ►►I button to select "Timer On", and press the ENTER button.
- **4** Press the POWER ON/STAND-BY button to enter the power stand-by mode.

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

Sleep operation

The radio, compact disc, iPod, USB, Audio In can all be turned off automatically.

- 1 Play back the desired sound source.
- 2 Press the SLEEP button.
- **3** Within 5 seconds, press the Numeric button to set the time. (1 minute ~ 99 minutes)
- 4 "SLEEP" will appear.
- 5 The unit will enter the power stand-by mode automatically after the preset time has elapsed. The volume will be turned down 1 minute before the sleep operation finishes.

To confirm the remaining sleep time:

While "SLEEP" is indicated, press the SLEEP button.

To cancel the sleep operation:

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

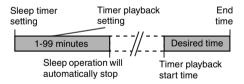
- 1 While "SLEEP" is indicated, press the SLEEP button.
- **2** Within 5 seconds, press the "0" button twice until "SLEEP 00" appears.

To use timer and sleep operation together

Sleep and timer playback:

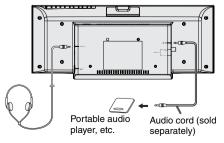
For example, you can fall asleep listening to the radio and wake up to CD in the next morning.

- 1 Set the sleep time (see above, steps 1 5).
- **2** While the sleep timer is set, set the timer playback (steps 2 9, page 12).



Enhancing your system

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



Enhancing your system (continued)

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

- Use a connection cord to connect the portable audio player etc. to the AUDIO IN jack. When using video equipment, connect the audio output to this unit and the video output to a television.
- 2 Press the POWER ON/STAND-BY button to turn the power on.
- 3 Press the AUDIO IN button on the remote control or FUNCTION button repeatedly on main unit 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.
- Be sure your headphone has a 1/8" (3.5 mm) diameter plug and impedance between 16 and 50 ohms. The recommended impedance is 32 ohms.
- Before plugging in or unplugging the headphone, reduce the volume.
- Plugging in the headphone disconnects the speakers automatically. Adjust the volume using the VOLUME control.

Troublshooting 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 11)
 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?

CD player

Symptom	Possible cause
 Playback does not start. Playback stops in the middle or is not performed properly. 	 Is the disc loaded face 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?

Troublshooting chart (continued)

Remote control

Symptom	Possible cause
 The remote control does not operate. 	 Is the AC power cord of the unit plugged in? Is the battery polarity correct? Is the battery 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 antenna placed properly? Move the antenna away from the AC power cord if it is located nearby.

USB 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?

 iPod, iPhone or iPad 	
Symptom	Possible cause
 No sound is produced. 	 The iPod, iPhone or iPad is not playing. The iPod, iPhone or iPad is not properly connected to the unit. Is the AC power cord of the unit plugged in?
 iPod, iPhone or iPad will not charge. 	 The iPod, iPhone or iPad is not making full contact with the connector. Using iPod (3rd generation). The iPod or iPhone is not supported. Refer to page 4 for compatible models.
 "This accessory is not made to work with iPhone" or "This accessory is not supported by iPhone" appears on iPhone screen. 	 The iPhone battery is low. Please charge the iPhone. iPhone is not properly docked.

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.

Factory reset, clearing all memory

- 1 Press the POWER ON/STAND-BY button to enter the power stand-by mode.
- 2 While pressing down the OPEN/CLOSE button, press the POWER ON/STAND-BY button until "Clear All" appears.

Caution:

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

Before transporting the unit

Remove the iPod, iPhone, iPad, USB memory device and disc from the unit. Then, set the unit to the power stand-by mode. Carrying the unit with iPod, iPhone, iPad or USB memory device left connected or discs left inside might 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.





E-14

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 (gasoline, 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 120 ~ 60 Hz
Power consumption	Power on: 22 W
Speaker	1-way speaker system Speaker: 2-1/2" (6.5 cm)
Speaker maximum input power	50 W/channel
Speaker rated input power	25 W/channel
Dimensions	Width: 18 - 11/16" (475 mm) Height: 7 - 1/2" (191 mm) Depth: 3 - 1/4" (83 mm)
Weight	5.5 lbs. (2.5 kg)

Amplifier

Output power		Total 50 W (25 W per channel into 6 ohms at 1 kHz, 10% T.H.D.)
	FTC:	22 W minimum RMS per channel into 6 ohms from 100 Hz to 20 kHz, 10% T.H.D.
Output terminals	Headp (recon	ohones: 16 ohms nmended: 32 ohms)
Input terminals	Audio 500 m	In (audio signal): V/47 k ohms

CD player	
Туре	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)

USB (MP3 / WMA)

USB host interface	 Complies with USB 1.1 (Full Speed)/2.0 Mass Storage Class. Support Bulk only and CBI protocol.
Support file	 MPEG 1 Layer 3 WMA (Non DRM)
Bitrate support	 MP3 (32 ~ 320 kbps) WMA (64 ~ 160 kbps)
Other	 Maximum total number of MP3/WMA files is 65025. Maximum total number of folders is 999 INCLUSIVE of root directory. The ID3TAG information supported are TITLE, ARTIST and ALBUM only. Supports ID3TAG version 1 and version 2.
File system support	 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 AM: 530 - 1,710 kHz	
Preset	40 (FM and AM station)	