SHARP

MUSIC SYSTEM FOR iPhone™

DK-AP7P

OPERATION MANUAL



iPod is a registered trademark of Apple Inc., registered in the U.S. and other countries.



iPhone is a trademark of Apple Inc.

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.



Accessories

Please confirm that only the following accessories are included.



SPECIAL NOTES

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.

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

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

"Works with iPhone" means that an electronic accessory has been designed to connect specifically to iPhone 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.

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	

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.

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.
- 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.



- 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.

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. Never spill liquid of any kind on the product.

IMPORTANT SAFETY INSTRUCTIONS (continued)

- 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) Outdoor Antenna Grounding If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article810 of the National Electrical Code, ANSI/NFPA 70, provides information with regards to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
- 24) 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.
- 25) 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.

ENERGY STAR® Program Information



Products that have earned the ENERGY STAR® are designed to protect the environment through superior energy efficiency.

ENERGY STAR® is a U.S. registered mark.

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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.



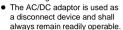
 Keep the unit away from direct sunlight, strong magnetic fields, excessive dust, humidity and electronic/ electrical equipment (home computers, facsimiles, etc.) which generate electrical noise.



- Do not place anything on top of the unit.
- Do not expose the unit to moisture, to temperatures higher than 140°F (60°C) or to extremely low temperatures.
- If your system does not work properly, disconnect the AC/DC adaptor from the AC outlet. Plug the AC/DC adaptor back in, and then turn on your system.
- In case of an electrical storm, unplug the unit for safety.

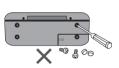


 Hold the AC/DC adaptor by the head when removing it from the AC outlet, as pulling the cord can damage internal wires.





Do not remove the outer cover, as this may result in electric shock. Refer internal service to your local SHARP service facility.



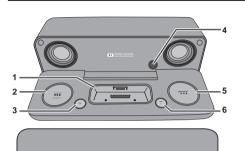
 This unit should only be used within the range of 41°F - 95°F (5°C - 35°C).

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, which occurs while turning the unit on with the volume control setting up high, or while continually listening at high volumes.



F	r۸	nt	Vi	iew

1.	iPod Dock	 	. 12
2.	ESOUND/TV Out Button	 	10
3.	Volume Down Button	 	10
4.	Subwoofer Port	 	10
5.	ON/STAND-BY Button	 	. 10
6	Volume IIn Button		10

■ Back View

	Reference pa
1.	Video Out Jack
2.	Auxiliary Input Jack
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■ Rottom View

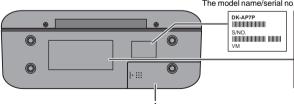
Bottom View	
	Reference page
Battery Compartment	

The model name/serial no. label (*)

The spec label (*)

MODEL NO. DK-AP7P

Reference nage



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The spec label illustration may be different from the actual label used.

(*) Label is located at the bottom of the unit.

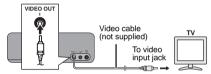
System connections

Make sure to unplug the AC/DC adaptor before making any connections.

■ Connecting iPod or iPhone to TV

Photo and video files from iPod or iPhone can be viewed by connecting the system to TV/monitor.

If the TV/monitor has a video input, connect it to the VIDEO OUT iack at the back of the unit and set the TV Out on the iPod or iPhone unit to "ON" position.



- Watching videos on a TV connected to iPod or **iPhone**
- Enter the iPod or iPhone menu. Press the ESOUND (TV OUT) button until the ESOUND LED blinks twice to display video on the TV screen.
- 2 Select the desired video from the iPod or iPhone unit.
- 3 Press the ►II button on the iPod unit to start playback. For iPod touch and iPhone, playback will automatically start once the desired video is selected

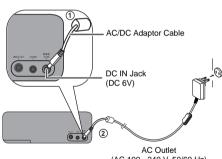
Notes:

- If the TV Out setting is already turned ON at video menu, the video is automatically displayed on the TV screen when iPod or iPhone starts playback.
- To return to watching video on iPod or iPhone screen, repeat steps 1 to 3.
- During iPod or iPhone video playback, pressing the ESOUND (TV OUT) button until the ESOUND LED blinks twice will not toggle video out display between iPod or iPhone and TV.

- Please make sure to set iPod or iPhone unit to either NTSC. or PAL to match your TV signal. Please visit Apple's home page for further information.
- Customer should also refer iPod or iPhone operation manual. before making video out setting.

Using with the AC/DC adaptor

- 1 Plug the AC/DC adaptor cable into the DC IN lack on the unit.
- 2 Plug the AC/DC adaptor into an AC outlet.



(AC 100 - 240 V, 50/60 Hz)

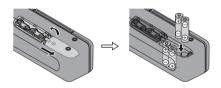
Notes:

- Unplug the AC/DC adaptor from the AC outlet if the unit will not be used for a prolonged period of time.
- Connecting the AC/DC adaptor to the unit disconnects the hatteries
- Use only the supplied AC/DC adaptor. Using other AC/DC adaptor may cause an electric shock or fire.

Using with the batteries

Use 4 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar). Batteries are not included.

- 1 Open the battery cover.
 - Slide the cover in the direction of the arrow.
- 2 Insert the batteries according to the direction indicated in the battery compartment.
- 3 Close the cover.



Note:

Remove the batteries if the unit will not be used for a long period of time to prevent battery leakage which may cause potential damage.

Battery replacement:

When batteries are low, sound may become distorted and unit may automatically turn off during high volume level. Reduce the volume level or replace the batteries.

Battery life:

•	
Battery type	ALKALINE (AA) (1.5V)
Usage time	Approx. 8 hrs.
Output Front	48mW + 48mW
Output Subwoofer	80mW

Note:

Battery life may vary depending on the temperature, battery types and usage conditions.

Precautions for battery use:

- Installing the batteries incorrectly may cause the unit to malfunction.
- Insert the batteries according to the direction indicated in the battery compartment.
- 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.
- When using batteries, the brightness of all illumination light (indicators) is reduced compared to using AC/DC adaptor.
- Replace all old batteries with new ones at the same time.
- Do not mix old and new batteries.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

Caution:

Do not use rechargeable batteries (nickel-cadmium battery, etc.).

Changing power source:

Turn off the unit before changing the power source. If the 6V DC power supply is directly plugged in during power on, the unit may automatically enter to stand-by mode. Press the ON/STAND-BY button again to turn on the unit.

General control



■ To turn the power on

Press the ON/STAND-BY button to turn the power on. The POWER and ESOUND indicator will turn on.

After use:

Press the ON/STAND-BY button to enter the power stand-by mode. The POWER indicator will turn off.

Note:

This unit consumes low current during stand-by mode. However, please remove the batteries if the unit will not be used for a long period of time.

■ Volume control

Press the VOL (+ or -) button to increase or decrease the volume.

POWER indicator will be blinking when the volume reaches maximum or minimum level.

■ Esound control

When ON/STAND-BY button is pressed, the ESOUND indicator turns yellowish orange. You are now in the ESOUND mode, where low bass and high frequency are automatically adjusted according to the volume input.

To turn off ESOUND, press the ESOUND (TV OUT) button. The ESOUND indicator will go off.

Listening to the iPod or iPhone

Supported iPod models:

- iPod nano (software 1.2 above)
- iPod mini (software 1.2 above)
- iPod (5th generation) (software 1.3 above) (Dock connector equipped Click Wheel model)
- iPod (4th generation) (software 3.0.2 above) (Dock connector equipped Click Wheel model)
- iPod nano (2nd generation) (software 1.0.0 above)
- iPod nano (3rd generation) (software 1.0.3 above)
- iPod nano (4th generation) (software 1.0.3 above)
- iPod classic (software 1.0.3 above)
- iPod touch (software 1.1 above)
- iPod touch (2nd generation) (software 2.1 above)
- iPhone (software 2.2.1 above)
- iPhone 3G (software 2.2.1 above)

Caution:

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

Notes:

- Once the iPod or iPhone is connected to the unit it will begin charging when AC/DC adaptor is used.
- The iPod or iPhone unit will not be charged while the main unit use the batteries as power supply.

■ iPod or iPhone adaptor connection

Choose adaptor that fits your iPod or iPhone. Your iPod or iPhone will fit snuggly into the correct adaptor. If your iPod is not mentioned below, an iPod adaptor may have been included with your iPod unit.

The marking shows which iPod or iPhone fits



iPod Adaptor No.	iPod or iPhone Description	Capacity
9	5G iPod (with video)	30GB
9	U2 iPod with video	30GB
9	iPod classic	80GB, 120GB
10	5G iPod with video	60GB & 80GB
10	iPod classic	160GB
Α	iPod mini	4GB & 6GB
Α	4G iPod & U2 iPod	20GB
Α	iPod photo & Color U2 iPod	20GB & 30GB
Α	iPod with color display	20GB
В	4G iPod	40GB
В	iPod photo	40GB & 60GB
В	iPod with color display	60GB
12	iPhone	4GB & 8GB & 16GB
15	iPhone 3G	8GB & 16GB

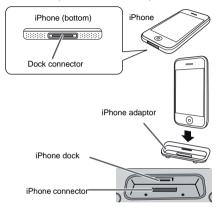
Notes:

- iPod nano (2nd generation), iPod nano (3rd generation), iPod nano (4th generation), iPod touch and iPod touch (2nd generation) are not compatible with the iPod adaptors listed above. Please use the adaptor supplied with your iPod unit.
- If you have an iPod that does not have an iPod 30 Pin connector, you can use an audio cable to connect it to the AUX IN jack.

Listening to the iPod or iPhone (continued)

■ To insert iPod or iPhone adaptor

1. Insert the adaptor into unit and connect your iPod or iPhone.



Caution:

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

To remove iPod or iPhone adaptor

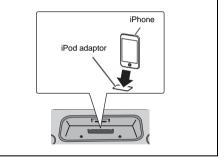
Insert the tip of a screwdriver ("-" type, small) into the adaptor hole as shown and lift upward to remove.



■ iPod or iPhone playback

- 1 Press the ON/STAND-BY button to turn the power on.
- 2 Insert iPod or iPhone unit in the dock of main unit.
- 3 Press the ▶II button on the iPod unit to start playback.

For iPod touch or iPhone, playback will automatically start once the desired file is selected.

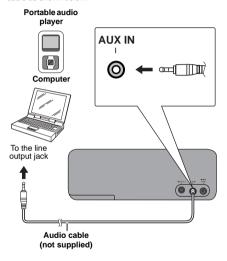


To disconnect iPod or iPhone

Simply remove the iPod or iPhone from the dock. It is safe to do so even during playback.

Enhancing your system

The audio cable is not included. Purchase a separate audio cable as shown below



- Listening to the audio/video sounds from portable audio player, computer, etc.
- 1 Use Audio cable to connect the portable audio player, computer etc. to the AUX IN jack. When using video equipment, connect the audio output to this unit and the video output to a television.
- 2 Press the ON/STAND-BY button to turn the power on.
- 3 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.

Notes:

- To prevent noise interference, place the unit away from the television.
- Make sure to undock the iPod or iPhone before making any connections to AUX IN. Otherwise, sound from AUX IN will not be heard.

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 authorized SHARP dealer or service center.

■ General

Symptom	Possible cause
 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.
No sound is heard.	 Is the volume level set to minimum?

■ iPod and iPhone

Symptom	Possible cause
No sound is produced. No image appears on the TV/monitor.	The iPod or iPhone is not playing. The iPod or iPhone is not properly connected to the unit. Is the AC/DC adaptor of the unit plugged in? The video cable is not properly connected. The TV/monitor's input selection is not properly set.
iPod or iPhone will not charge.	 The iPod or iPhone is not making full contact with the connector. The main unit is using batteries as power supply. Using 3rd generation iPod.

■ Condensation

Sudden temperature changes, storage or operation in an extremely humid environment may cause condensation inside the cabinet.

Condensation can cause the unit to malfunction. If this happens, leave the power on until normal playback is possible (about 1 hour) 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:

- 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, and then turn the power on.

Before transporting the unit

Undock the iPod or iPhone and close the unit. The unit will automatically enter stand-by mode.

CAUTION: Carrying the unit with iPod or iPhone docked might damage both systems.

Maintenance

Cleaning the unit

Periodically wipe the unit with a clean soft cloth.

Caution:

- Do not use chemicals for cleaning (gasoline, paint thinner, etc.). It may damage the unit finishing.
- 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	DC IN 6V $=$ 2000mA: AC/DC adaptor (AC 100 - 240 V ~ 50/60 Hz) DC IN 6V $=$ ["AA" size (UM/SUM-3, R6 or HP-7) battery x 4]
Power consumption	PW
Output power	Front speakers: 1.2 watts minimum RMS per channel into 8 ohms from 100 Hz to 20 KHz, 10% total harmonic distortion. Subwoofer: 2 watts minimum RMS into 4 ohms from 50 Hz to 120 Hz, 10% total harmonic distortion.

Speaker	2.1-way type speaker system Front speaker: 1-1/8" (3.0 cm) Subwoofer: 1-3/4" (4.6 cm)
Speaker maximum input power	Front speaker: 2.0 W/Channel Subwoofer: 4 W
Speaker rated input power	Front speaker: 1.2 W/Channel Subwoofer: 2 W
Output terminals	Video output: 1Vp-p
Input terminals	Auxiliary (audio signal): 500 mV/47 k ohms
Dimensions	Width: 7-4/5" (198 mm) Height: 2-7/10" (69.8 mm) Depth: 3" (77 mm)
Weight	1.4 lbs. (0.62 kg)

CONSUMER LIMITED WARRANTY

SHARP ELECTRONICS CORPORATION warrants to the first consumer purchaser that this Sharp brand product (the "Product"), when shipped 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 full satisfaction 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:

Warranty Period for this Product:

Where to Obtain Service:

What to do to Obtain Service:

DK-AP7P Music System for iPhone

(Be sure to have this information available when you need service for your Product.)

One (1) year parts and labor from the date of purchase.

Additional Item(s) Excluded from Warranty Coverage (if any): Non-functional accessories, supplies, and consumable items. At a Sharp Authorized Servicer located in the United States

To find a location of the nearest Sharp Authorized Servicer, call Sharp toll free at 1-800-BE-SHARP.

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

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SHARP CORPORATION



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