

Introduction

Thank you for purchasing this SHARP mobile handset. Before and while using the handset, please read this manual thoroughly and retain it for future reference. This handset is your partner. Handle it carefully at all times to ensure its long-term performance.

About this Operation Manual

Instruction scheme

Instructions in this manual are carefully designed to help you operate the handset smoothly and easily. At the beginning of each section, the steps that have to be followed to reach the function you wish to utilise are shown (Example 1). The steps for all subsequent subsections are simplified (Example 2). Make sure to press  to enter your selection.

Example 1:
(Excerpt from "Using the Camera")

- 1** Press .
The main menu appears.
- 2** Press , , , or  to highlight "Camera" press .
- 3** Press  or  to highlight "Create picture" and press .

The each step to reach camera mode is shown.

Example 2:
(Excerpt from "Capturing Still Images")

- 1** At the main menu, select in the following order: "Camera" "Create picture."
- 2** Press  [].
The "Options" menu appears.

The steps to reach camera mode are simplified as shown above (step 1).

 , , , , , and  [Options] indicate the operation keys in this manual. For information on the keys and handset operations, refer to "Parts and Controls" on page 4-18.

Symbols

-  This indicates useful extra information for operating the handset.
-  This indicates important background information or items that need to be recognised when operating the handset.
-  This indicates operations that require extreme caution before performing on the handset.

Powered by JBlend™, Copyright1997-2004 Aplix Corporation. All rights reserved.
Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.
JBlend and all JBlend-based trademarks and logos are trademarks or registered trademarks of Aplix Corporation in Japan and other countries.

In this product, JBlend™ is incorporated.
JBlend™ is a Java execution environment that Aplix developed for implementing advanced performance and fast operation on small-memory systems. JBlend and JBlend logo are trademarks or registered trademarks of Aplix Corporation in Japan and other countries.



Licensed by Inter Digital Technology Corporation under one or more of the following United States Patents and/or their domestic or foreign counterparts and other patents pending, including U.S. Patents: 4,675,863; 4,779,262; 4,785,450 & 4,811,420.

Licensed under U.S. Patent 4,558,302 and foreign counterparts.

T9 Text Input is licensed under one or more of the following:
U.S. Pat. Nos. 5,818,437, 5,953,541, 5,187,480, 5,945,928, and 6,011,554; Australian Pat. No. 727539; Canadian Pat. No. 1,331,057; United Kingdom Pat. No. 2238414B; Hong Kong Standard Pat. No. HK0940329; Republic of Singapore Pat. No. 51383; Euro. Pat. No. 0 842 463 (96927260.8) DE/DK, FI, FR, IT, NL,PT,ES,SE,GB; Republic of Korea Pat. Nos. KR201211B1 and KR226206B1; and additional patents are pending worldwide.



Introduction

Introduction

Battery

Use your handset only with batteries, chargers and accessories recommended by the manufacturer. The manufacturer disclaims any liability for damage caused by the use of other chargers, batteries or accessories.

Network configuration and handset usage will affect talk time and standby time. Using the games or camera will hasten battery consumption.

When the battery charging alert is displayed on the screen, charge the battery as soon as possible. If you continue using your handset ignoring the alert, the handset may malfunction, and all data and settings you have stored may be lost at any moment.

Before removing the battery from the handset, make sure the handset is switched off.

Charge the new battery as soon as possible after removing the old one.

Do not touch the battery terminals. Batteries can cause damage, injury or burns if a conductive material touches exposed terminals. When the battery is detached from the handset, use a cover made of nonconductive material for keeping and carrying the battery safely.

Recommended temperature for using and storing batteries is approximately 20°C.

The battery's performance is limited in low temperatures, particularly below 0°C and the handset

may not work temporarily regardless of the amount of remaining battery power.

Exposing the handset to extreme temperatures will shorten battery life.

The battery can be charged and discharged hundreds of times but it will eventually wear out. When the operating time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.

Use only the standard accessory battery (CE-BL150).

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

See "Battery Disposal" below.

Battery Disposal

Take the Used battery to the local waste depot.

Do not expose the used battery to an open flame. Do not dispose in water or dispose with household waste.

RF Connector

This RF connector is for connecting Sharp-approved antennas to the handset. Do not connect unapproved or modified equipment as this may damage the handset or cause the SAR limit to be exceeded.

Do not touch or crowd the connector unnecessarily as this may affect standby and call times.

To avoid interfering with blasting operations, turn off the handset in a blasting area or in a place where a "turn off two-way radio" sign is posted.

Camera Operation

Learn picture quality, file formats, etc. beforehand.

Pictures can be saved in JPEG format.

Be careful not to move your hand while taking pictures.

If the handset moves while taking a picture, the picture can be blurred. When taking a picture, hold the handset firmly to prevent it from moving, or use the delay timer.

Clean the lens before taking a picture. Fingerprints, oil, etc. on the lens hinder clear focusing. Wipe with a soft cloth before taking a picture.

Miscellaneous

As the handset uses an electronic storage unit, data may be lost or corrupted under various circumstances.

Before connecting the handset to a PC or a peripheral unit, read the operation manual for the other unit carefully.

If the handset's battery has been removed for some time, or the handset has been reset, the unit's clock and calendar may be reinitialised. The date and time should be updated.

Use only the attached hands free. Some handset's functions may not work when unauthorised hands free are used.

The handset uses the magnet to recognise that the handset is closed. Do not place magnetic cards near your handset or get the card caught in the handset as it may damage the recorded data.

Environment

Keep your handset away from extreme heat. Do not leave it on the dashboard of a car or near a heater. Do not leave it in any place that is extremely damp or dusty.

Since this product is not waterproof, do not use it or store it where fluids can splash onto it. Raindrops, water spray, juice, coffee, steam, perspiration, etc. may also cause a malfunction.

Precautions Concerning Vehicle Use

It is the user's responsibility to verify if local laws permit the use of a handset in a vehicle. Give full attention to driving. Pull off onto the side of a road and park the car before making or answering a call. If local laws permit, we recommend that you use your handset with the attached hands free. Use of your handset's function may interfere with the vehicle's electronic systems, such as the ABS antilock brakes or the air-bag. To ensure no such problem occurs, please check with your dealer or car manufacturer before connecting your handset. Only allow qualified service maintenance personnel to install the vehicle accessories. The manufacturer disclaims any liability for damage which may result as a consequence of improper use or use contrary to the instructions contained herein.

SAR

Your handset has been designed, manufactured and tested so as not to exceed the limits for exposure to electromagnetic fields recommended by the Council of the European Union. These limits are part of comprehensive guidelines developed by independent scientific organisations. The guidelines include a substantial safety margin designed to assure the safety of the handset user and others and to take into account variations in age and health, individual sensitivities and environmental conditions. European standards provide

for the amount of radio frequency electromagnetic energy absorbed by the body when using a handset to be measured by reference to the Specific Absorption Rate (SAR). The SAR limit for the general public is currently 2 watts per kilogram averaged over 10 grams of body tissue. Your handset SAR value is 0.327 watts per kilogram.

This has been tested to ensure that this limit is not exceeded even when the handset is operating at its highest certified power. In use however your handset may operate at less than full power because it is designed to use only sufficient power to communicate with the network.

FCC Declaration of conformity

Triple-band phone: TM150 with USB cable(CE-UC30) and AC charger(CE-EA32)
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party:
SHARP ELECTRONICS CORPORATION
Sharp Plaza, Mahwah, New Jersey 07430
TEL:1-800-BE-SHARP

Tested To Comply With FCC Standards
FOR HOME OR OFFICE USE



FCC Notice

The phone may cause TV or radio interference if used in close proximity to receiving equipment. The FCC can require you to stop using the phone if such interference cannot be eliminated.

Information To User

This equipment has been tested and found to comply with the limits of 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:

- 1 Reorient/Relocate the receiving antenna.
- 2 Increase the separation between the equipment and receiver.

- 3 Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4 Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

Exposure to Radio Waves

THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted level of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for

wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, SAR. The SAR limit set by the FCC is 1.6W/kg. * Tests for SAR are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands.

Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by FCC for each model. The highest SAR value for this model phone when tested for use at the ear is 0.823W/kg and when worn on the body, as described in this operation manual is 0.733W/kg.

Body-worn Operation; This device was tested for typical body-worn operations with the back of the phone kept 15mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 15mm separation distance between the user's body and the back of the phone. The use of belt-clips, holsters and similar accessories should not contain metallic

components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID APYNAR0057.

Additional information on Specific Absorption rates (SAR) can be found on the Cellular Telecommunications & Internet Association (CTIA) web-site at <http://www.phonefacts.net>.

* In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6Watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.