

User Manual

HC700-G & HCe700-G

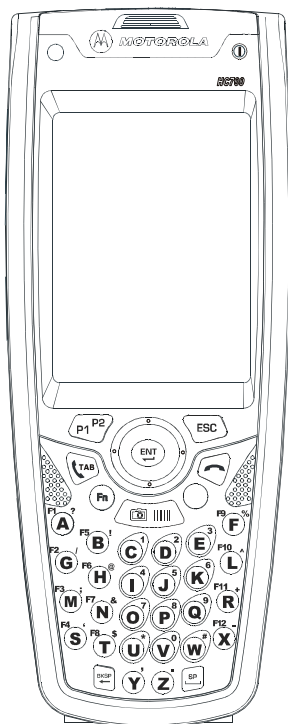
**Handheld
Computer**

Draft February 92006

Models F3133A & F3131A



MOTOROLA



6802978C65-A



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Limited Warranty

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Product Accessories	One (1) Year

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- C. Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
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- E. A Product subjected to unauthorized Product modifications, disassemblies or repairs (including, without limitation, the addition to the Product of non-Motorola supplied equipment) which adversely affect performance of the Product or interfere with Motorola's normal warranty inspection and testing of the Product to verify any warranty claim.
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 - any of the seals on the battery enclosure of cells are broken or show evidence of tampering.
 - the damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.
- H. Freight costs to the repair depot.
- I. A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA's published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.
- J. Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.
- K. Normal and customary wear and tear.

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- B. that MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and
- C. should the Product or parts become, or in MOTOROLA's opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes noninfringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

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This Warranty is governed by the laws of the State of Illinois, USA.

EPS – 48759 – O

Notational Conventions

Throughout this publication, you will notice the use of cautions and notes. These notations are used to emphasize that safety hazards exist, and care must be taken.

CAUTION



Caution

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. CAUTION may also be used to alert against unsafe practices and property-damage-only accident hazards.

Do not proceed beyond a CAUTION until the indicated conditions are fully understood and met.

Grant of Equipment Authorization

IMPORTANT: Unauthorized repairs or modifications could result in permanent damage to the equipment and void your warranty and your authority to operate this device under Part 15 of the FCC Rules.

FCC Grant of Equipment Authorization

FCC ID: AZ489FT7018

Canada Grant of Equipment Authorization

IC: 109U-89FT7018

Radio	Network	Freq Band	Rated Power
GPRS	WAN	824.2 - 848.8 MHz / 1850.2 - 1909.8 MHz	1.585 W / 0.794 W
Wi-Fi 802.11b	W-LAN	2412 - 2462 MHz	32 mW
Bluetooth	W-PAN	2402 - 2480 MHz	1 mW



Caution

Changes or modifications made in the handheld computer, not expressly approved by Motorola, will void the user's authority to operate the equipment.

FCC INTERFERENCE

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.

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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

For detailed product safety and RF exposure refer to Safety and General Information leaflet, Motorola publication Number 6802979C37.

HC700-G (US) Transmission Modes

HC700-G contains (GPRS-GSM850/PCS1900, WLAN and BT).

Below please find the radios transmitting combinations:

- The GPRS (both bands) and WLAN transmitters will not work simultaneously when used in the present configuration.
- The GPRS (both bands) and Bluetooth transmitters may work simultaneously when used in the present configuration.
- The WLAN and Bluetooth transmitters may work simultaneously when used in the present configuration.

Voice recording is enabled while data is transmitted by the WLAN or by Bluetooth

European Union Directives Conformance Statement

Hereby, Motorola declares that this product is in compliance with:



- The essential requirements and other relevant provisions of Directive 1999/5/EC
- All other relevant EU Directives

You can view your product's Declaration of Conformity (DoC) to Directive 1999/5/EC (the R&TTE Directive) at www.motorola.com/rtte - to find your DoC, enter the product Approval Number from your product's label in the "Search" bar on the Web site.

HCe700-G (EU) Transmission Modes

HC700-G contains (GPRS-EGSM900MHz 1.5W / DCS1800MHz 0.8W, WLAN and BT).

Below please find the radios transmitting combinations:

- The GPRS (both bands) and WLAN transmitters will not work simultaneously when used in the present configuration.
- The GPRS (both bands) and Bluetooth transmitters may work simultaneously when used in the present configuration.
- The WLAN and Bluetooth transmitters will not work simultaneously when used in the present configuration.

Voice recording is enabled while data is transmitted by the WLAN or by Bluetooth radio.

France Indoor Only



Note: Bluetooth features and Bluetooth Class 1 power levels are not allowed for outdoor operation in France. To avoid unlawful interference with radio signals, do not use the Bluetooth features in France unless you are indoors.

Waste (Disposal) of your Electronic and Electric Equipment



European Union (EU) Waste of Electrical and Electronic Equipment (WEEE) directive

The European Union's WEEE directive requires that products sold into EU countries must have the crossed out trashbin label on the product (or the package in some cases). As defined by the WEEE directive, this cross-out trashbin label means that customers and end-users in EU countries should not dispose of electronic and electrical equipment or accessories in household waste. Customers or end-users in EU countries should contact their local equipment supplier representative or service centre for information about the waste collection system in their country.

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SD is a registered trademark of SanDisk Corporation.

Microsoft and Windows are registered trademarks of Microsoft Corporation.

ActiveSync is a registered trademarks of Microsoft Corporation.

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Welcome

Welcome to the world of Motorola digital wireless communications! We are pleased that you have chosen the Motorola HC700-G GSM wireless Handheld Computer.

The HC700-G unique functionality and features make this state-of-the-art device, superior for use in a wide range of data collection and management applications.

This manual covers the basic operations and use of the HC700-G. However, evaluation of the HC700-G performance can be fully achieved by referring to Microsoft® Windows® Mobile 2003 SE for Pocket PC Phone Edition documentation and using the demo software applications provided with the HC700-G.

What is the HC700-G Handheld Computer?

The HC700 is a rugged handheld computer. The HC700 is designed for field applications where fast data acquisition and exchange is required.

The HC700-G has two models: the HC700-G model is the USA version and the HCe700-G model is the European/Asian version. This manual refers to all models as HC700-G.

The HC700-G serves as a Personal Digital Assistant (PDA) that enables portable access to Microsoft® Windows® Mobile 2003 SE for Pocket PC Phone Edition applications. It contains a built-in imager (camera) capable of reading 1D and 2D barcode (optional) labels. The imager can also capture handwritten images such as signatures and correlate the signature to an adjacent barcode.

Wireless communication enables access to the outside world through Global System for Mobile communication (GSM), General Packet Radio Service (GPRS) and 802.11b Wireless Local Area Network (WLAN, WiFi).

Data exchange with peripheral wireless equipment can be established through Wireless Personal Area Network

(WPAN) using Bluetooth® radio. Personal wireless equipment may include printers and body-worn devices such as the Hands Free Imager HFI200 - a small size imager/barcode reader, worn on two fingers.

When docked in a cradle, the HC700-G supports full RS232 and USB (1.1 Client) serial communication with a host computer (USB via Microsoft® ActiveSync®) or a dial-up modem. Ethernet connection can be established through 10/100 base T interface via multi-slot communication cradles. The HC700-G can also communicate through a built-in IrDA port.

The HC700-G is equipped with a QVGA 3.5 inch transfective TFT display, built to withstand high impact. Display backlight is designed to enable clear screen visibility under varied light conditions.

A touch-screen enables easy on-screen menu navigation, in addition to using keypad navigation. The keypad uses an adjustable backlight illumination, designed for low-light working conditions.

The HC700-G is powered by an 1800 mAh 7.2V Lithium-Ion battery pack. The battery is fully recharged within four hours when the HC700-G is docked in a cradle.

A drained battery can be replaced without data loss from the HC700-G memory ("hot swap"). A built-in power source, independent of the battery pack, maintains the data in the HC700-G memory for at least 5 minutes until a fresh battery is placed.

The HC700-G may use a line of Motorola docking cradles for network communications and power charging.

The personal desktop cradle is designed for office use of the HC700-G. The 8 and 4 slot charging/communication cradles provide multi-slot docking in large operations. The vehicle cradle is used for the mobile applications of the HC700-G, allowing charging while driving.

For detailed installation and operation of each cradle, refer to the specific user manual of each cradle.

Unpacking

The HC700-G basic package includes the following items:

- 1800 mAh 7.2V Lithium-Ion battery pack
- Stylus
- Hand-strap
- This Owner's Manual
- Safety and General Information leaflet, Motorola P.N., 6802979C37

Optional items include:

- Spare stylus (pack of 5)
- Tethered stylus
- Cigarette lighter power cable
- Vehicle DC cable
- Mini Secure Digital (SD) memory card
- Software Development Kit (SDK)

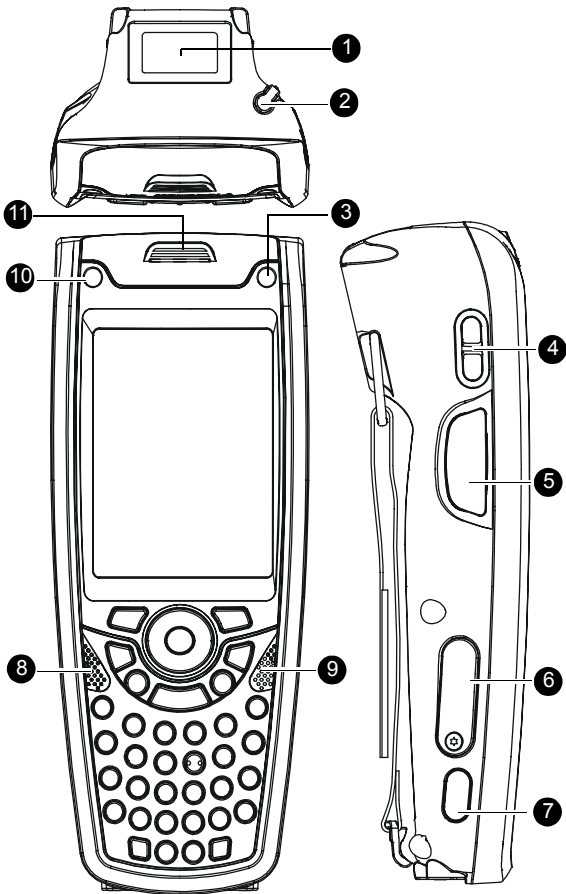
Carefully unpack each item from the shipping carton. Check all items for shipping damage, and check that you have received all items ordered.

Note: Retain the original carton packaging in the event that the HC700-G should need to be returned for service.

The HC700-G is shipped with a plastic film, protecting the screen. Before usage, remove the film and use a soft cloth to buff the screen. A clean screen ensures smooth gliding of the stylus over the surface.

HC700-G Features

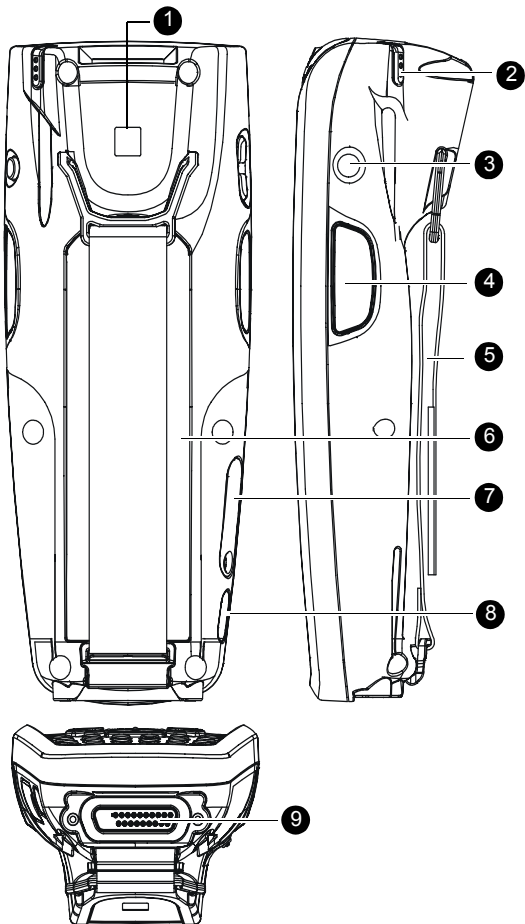
Front Panel and Top Side Features



1. Imager Window (see page 19)
2. Stylus
3. Power Button with Status LED (see page 10) & (see page 11)
4. Earpiece Volume Keys (see page 13)
5. Scan/Picture Key (see page 19)
6. Mini SD Card Door (see page 22)
7. IrDA Window
8. Microphone (see page 14)
9. Sound Emitter (see page 18)
10. Application LED (see page 13)
11. Earpiece

Figure 1. HC700 - Front and Top Views

Rear and Bottom Side Features



1. Identification label (Used to link HC700-G with HFI200 by Bluetooth)
2. Stylus Compartment
3. Voice Recording Button (see page 14)
4. Scan/Picture Key
5. Hand-strap
6. Battery Pack (see page 7)
7. Access Door to the Mini SD Memory Card (see page 22)
8. IrDA Window
9. Cradle Interface Connector

Figure 2. HC700 - Rear and Bottom Views

Charging the Battery

The battery is charged when the HC700-G is docked in the cradle. When using a Personal Desktop Cradle, a stand-alone battery can be charged in the battery charging slot.

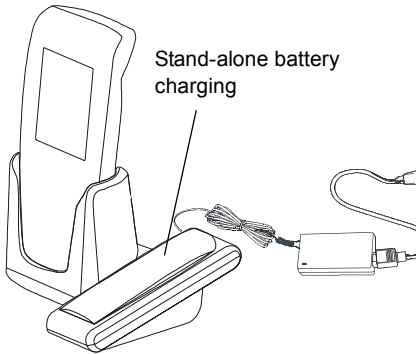


Figure 3. HC700-G Personal Desktop Cradle

A fully charged battery provides 10 continuous hours of typical usage or 24 hours in Standby mode.

New batteries are shipped partially charged.

Always use Motorola HC700-G original batteries and battery chargers.

The HC700-G warranty does not cover damage caused by using non-Motorola batteries and/or battery chargers.

The following sections describe the installation and charging of the battery of the HC700-G.

The battery or HC700-G may carry warning symbols, defined as follows:



Important safety information will follow.



Your battery or HC700-G should not be disposed of in a fire.

Battery Replacement

When the battery is drained, the HC700 automatically enters "Critical Low Battery" state and shuts down all functions (the screen turns off) to preserve the data in its memory.

The HC700-G allows you to replace batteries without losing information stored in its memory ("hot swap"). To avoid losing data stored in the memory, a fresh battery must be installed within five minutes after removing the drained battery.

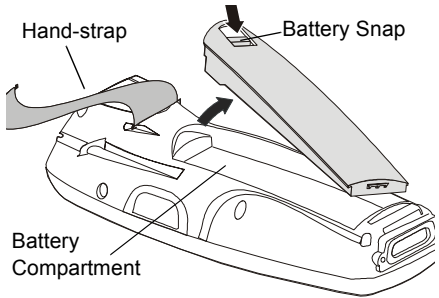


Figure 4. Battery Installation and Removal

To replace a battery perform the following steps:

1. Hold down the Power Button for at least four seconds until the HC700-G screen turns off.
2. Remove the HC700-G hand-strap (see Figure 4).
3. Press the battery snap on the battery (see Figure 4) and pull away the battery from the HC700-G.
4. Insert a fresh battery, bottom end first, into the battery compartment.
5. Carefully, press the battery top downward until it clicks and locks in place.
6. Press the Power Button - the HC700-G is now ready for use.

First Time Battery Charge

Charge the battery before using the HC700-G for the first time until the status LED inside the Power Button shows steady green. While charging for the first time, the Status LED starts flashing orange and turns to steady read. When battery is fully charged, the LED shows steady green.

The HC700-G Cradle charges the battery most effectively when it is at room temperature [approx. 68°F (20°C)]. The rec-

ommended battery charging temperature range is 32°F to 95°F (0°C to 35°C).

Routine Battery Charge

A battery is recharged to 90% of its full capacity after approximately three and a half hours. The battery is fully charged after four hours. During the charge, the Status LED inside the Power Button shows steady red and turns green when charging is completed.

Important: The battery will not charge if the HC700-G is not properly docked in the cradle.

Battery Maintenance

The performance of the battery depends on the way the battery is treated. Therefore, to comply with Motorola Warranty for batteries and to assure high performance and a long life for the rechargeable battery, please read and follow the battery maintenance instructions described in the following sections.

Battery Storage

Do not store the battery in locations where the temperature exceeds 140°F (60°C) or falls below -4°F (-20°C).

Batteries that have never been charged before may be stored uncharged for up to three months in well-ventilated, cool, dark, and dry areas without significant loss of lifespan.

Batteries which have already been charged and then stored for more than two months should be recharged before use.

New batteries or batteries that have been stored for a long time may require a longer charging time.

Extending Battery Life

Battery performance depends on many factors, including the temperature at which you operate your handheld computer; the features and/or settings you select and use; peripherals

attached to the computer and other application usage patterns.



To prevent injuries or burns, do not allow metal objects to come in contact with or short-circuit the battery contacts.

The HC700-G cradles will charge the battery most effectively when it is at room temperature [approx. 68°F (20° C)]. Recommended battery charging temperature range is 32°F to 95°F (0°C to 35°C).

Batteries are expendable parts and gradually wear down and require longer charging times. This is normal. If you charge your battery regularly and notice a decrease in usage time or an increase in charging time, then it is probably time to switch to a new battery.

To ensure maximum service life of the HC700-G, always replace the battery with a genuine Motorola replacement.

Battery Disposal

Batteries must be recycled or disposed of properly in accordance with local requirements. Recycling facilities may not exist in all areas. Please contact your local environmental agency for more information regarding proper disposal.

To Prevent Injury or Burns

- USE ONLY SPECIFIED BATTERIES AND CHARGERS - RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE!
- DO NOT DISPOSE OF ANY BATTERIES IN FIRE, AS THEY MAY EXPLODE!
- DO NOT PUNCTURE OR ALLOW METAL TO CONTACT THE BATTERY CONTACTS
- DO NOT DISPOSE OF IN WATER
- DO NOT DISASSEMBLE

Using the HC700-G

Starting to Work

Place the battery in the HC700-G to boot-up and press the Power Button (see Figure 1) to turn on the HC700-G; the Motorola logo will show for about 30 seconds and Windows Mobile screen will appear. The Windows Mobile screen will ask the user to tap on the screen and will instruct to follow the Align Screen procedure (touch screen calibration).

Turning On

Whenever the HC700-G screen is off, press the Power Button (see Figure 1) to turn on the HC700-G and resume operation.

Important: do not press the Power Button when the HC700-G is out of the cradle and the Status LED (inside the Power button) is red.

Turning Off

Turn off the HC700-G when not in use for long duration and when charging is not available.

To turn off the HC700-G perform the following:

While the HC700-G is turned on, hold down the Power Button for at least four seconds - the HC700-G will store the information of the last used program screen and will shift to off mode - no information will be lost.

Once turned on again, the HC700-G will return to the last program screen that was in use.

Suspend Mode

Use Suspend mode as often as possible during daily use to conserve battery power. For power saving, the HC700-G will automatically turn to Suspend after 1 minute (default). To configure the time duration before the HC700-G enters Suspend mode, go to: *Start Menu->Settings->System->Power->Advanced* (duration range is 0 to 5 minutes).

To manually shift to Suspend mode - while the HC700-G is turned on, momentarily press the Power Button (see Figure 1).

During Suspend mode the display turns off and the status LED inside the Power Button slowly flashes green. To resume operation, momentarily press the Power Button again.

In Suspend mode, the battery power is conserved by automatically turning off the display and the computer sections of the HC700-G. During Suspend mode, the Bluetooth radio continues to operate. When the HC700-G resumes operation, it returns to the program screen shown prior to entering Suspend mode.

The Status LED

The status LED, located inside the Power Button (see Figure 5), may show three colors to indicate the HC700-G power status.

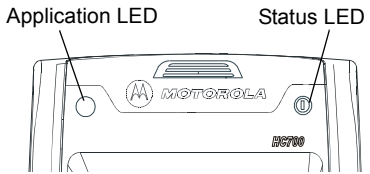


Figure 5. HC700-G - Status LED

The LED indications are not identical and have different meaning when the HC700-G is used outside of the cradle and when docked in the cradle.

LED indications when HC700-G is used out of the cradle

Table 1: Status LED indications when HC700-G is used out of the Cradle

LED Indication	Description
Slowly flashing green	HC700-G is in Suspend mode
Fast flashing green	HC700-G display is off
Steady red for 5 seconds	HC700-G is booting-up following battery replacement Important!: to avoid system failure, <u>do not remove the battery during boot-up</u>
Flashing yellow	Low battery voltage or battery temperature or is out of range

LED Indications when HC700-G is docked in the cradle

Table 2: Status LED indications when HC700-G is docked in the Cradle

LED Indication	Description
Steady red	Battery is charging
Steady green	Battery is fully charged
Flashing yellow	Battery temperature or voltage is out of range - battery charging has stopped. Charging will resume when temperature or voltage is back within range
Flashing red	Charging error/defective battery. Re-install the HC700-G in the cradle If the LED continues to flash red, replace the battery
Steady orange	HC700-G is communicating with host

The Application LED

The Application LED may be used for any kind of application notification. For example; the LED may show communication indication when the application establishes connection with a host computer or indicate an alert that needs to be handled. For more information, refer to your software application guide and the HC700 Software Development Kit (SDK).

Making a Call

To make a call, press the <TAB> key or go to: *Start Menu-> Phone*.

Important: Before using the HC700-G as a phone, communication settings must be made (Go to: *Start Menu-> Settings-> Connections*). Make sure that your phone is equipped with a SIM (Subscriber Identity Module) card. SIM card is a small smart card that fits inside the HC700-G (see "SIM Card Installation" on page 22). The SIM card holds the personalized

information about its user including the network activation and even phone book entries.

Adjusting the Phone Volume

Use the Earpiece Volume keys to increase or decrease ear-piece volume during a call. You may also the keypad keys - hold down the <SHIFT> and <SP> keys and press the up and down bumps on the 4-Way Navigation key.

Voice Recording

To record sound, press the Voice Recording button - the Notes application will run, enabling you to record and play sounds.

To assign different functionality to this button, go to: *Start Menu->Settings->Personal->Buttons.*

Using the Keypad

The HC700-G keypad enables the user to enter both alphabetic and numeric data to the software application. However, since the keypad can only contain a limited number of keys, some special keys are assigned to perform special tasks that are usually found on full-size computer keyboards. These are produced using a combination of the existing keys on the HC700-G keypad.

Two sets of keys exist on the HC700-G:

1. Keys active when in Alphabetic mode, which are those seen on overlay of the HC700-G keypad.
2. Keys active when in Shift or Function mode which are those seen next to each key on the HC700-G keypad panel.

Press the <SHIFT> key to toggle between the Alphabetic and Numeric keypad modes. Figure 6 shows the HC700-G keypad and Table 3 describes the HC700-G keys assignment.

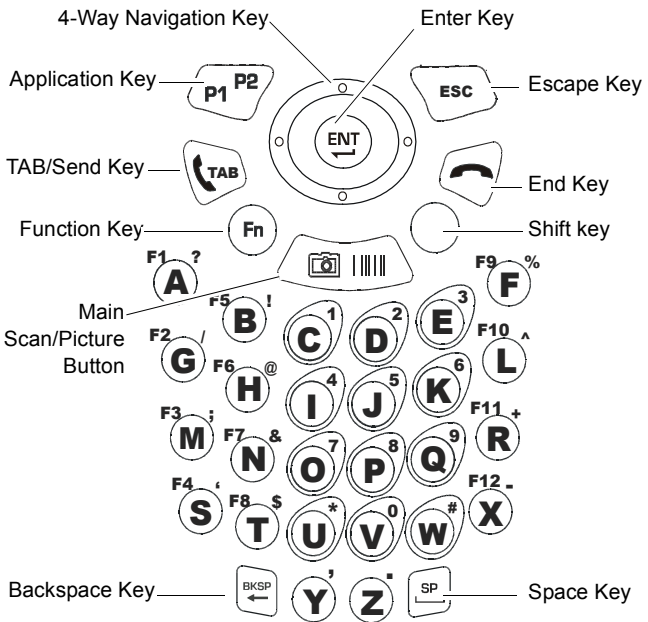


Figure 6. HC700-G - Keypad

Key Assignment

Table 3: HC700-G - Key Assignment

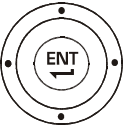
Key	Function
	Use the <TAB/Send> key to make & answer phone calls. The key also serves as <TAB> key when editing text.
	Use the <Esc> key to exit from a menu or an application.
	The <End> key turns the phone off and end calls.
	The Main Scan/Picture Button is used for scanning images/taking pictures (refer to “Scanning Barcodes and Capturing Images” on page 19).
	The 4-Way Navigation key is used for screen navigation. The <Up bump> and <Down bump> keys are used to scroll up and down. The <Right bump> and <Left bump> are used for horizontal navigation between action buttons and entry fields.
	The <ENT> key is used to continue to the next field/screen (i.e., continue processing).
	The <SP> key enables entering blank space(s) within a text field. The <SP> key is active only on those text entry screens which contain fields that allow spaces to be entered.

Table 3: HC700-G - Key Assignment

Key	Function
	The <BKSP> key moves the cursor to the previous character in the field, and while doing so, erases the character. Any remaining characters to the right of the cursor are shifted to the left. If there are no more characters to erase, the unit beeps. The <BKSP> key is only active on data entry screens.
	The Function <Fn> key changes the alphabetic keypad to preset function keys. For example, the <A> key in <Fn> mode becomes <F1>.
	When pressed once, the yellow <SHIFT> key toggles between alphabetic and numeric keypad modes, shifting between letter entry and digit entry (pressing a key produces the yellow number/symbol). For example, pressing the <SHIFT> key and then the <P> key types the digit "8". Pressing the <SHIFT> again and then the <P> key types the letter "P". Hold down the <SHIFT> key and press on any alphabet key for uppercase letter (default mode is lowercase letters). The <SHIFT> is also used for screen and keypad illumination (see page 18).
	The Application <P1/P2> key functionality is set by the software application running on the HC700-G. Use the <SHIFT> key to toggle between P1 and P2. To learn more about these keys, consult the software application guide. To set the Application key functionality, go to: <i>Start Menu->Settings->Personal->Buttons.</i>

Direct Action Keys

The direct action keys enable the user a quick access to basic operations of the HC700-G without exploring the HC700-G software programs.

Screen Backlight Adjustment

The screen backlight can be adjusted by holding down the

<SHIFT> key and pressing the up or down bumps  to increase or decrease the screen backlight.

Turning the Screen Backlight On & Off

Hold down the <SHIFT> for two seconds - the screen backlight will turn on. To turn off - hold down for another two seconds.

When not in use, the backlight turns off automatically. To configure the screen illumination duration, go to: *Start Menu->Settings->System->Backlight*.

Keypad Backlight Adjustment

The keypad backlight can be adjusted by holding down the

<SHIFT> key and pressing the right or left bumps  to increase or decrease the keypad backlight.

Turning the Keypad Backlight On & Off

Hold down the <SHIFT> key for four seconds - the keypad backlight will turn on.

To turn off - hold down the <SHIFT> key for another two seconds.

When not in use, the backlight turns off automatically. To configure the keypad illumination duration, go to: *Start Menu->Settings->System->Backlight*.

Calibrating the Touch Screen

To calibrate the touch screen - hold down the <SHIFT> and <SP> and <C> keys and follow the calibrate application instructions to complete your touch screen calibration.

Virtual Keyboard

To display the virtual keyboard - hold down the <SHIFT> and <SP> and Scan/Picture Button.

Scanning Barcodes and Capturing Images

The HC700-G houses a digital camera (imager) that captures pictures and scans the most commonly used 1D and 2D barcodes. The HC700-G supports 360° omni-directional capture for easy use in daily work. The imager captures digital images, such as signatures, text or pictures of any object or paper form. The images are stored in the HC700-G memory.

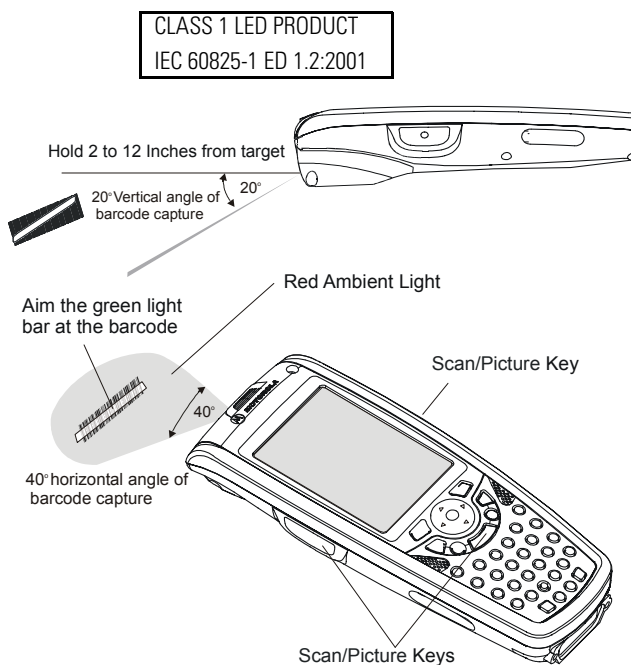


Figure 7. Capturing Images with the HC700-G Imager

To capture an image:

1. Run the Bcr barcode reader application: *Start Menu->Programs->Sample Applications->Bcr.*
2. Aim and hold the HC700-G at 2 to 12 inches (5 to 30 cm) distance from the target.
3. Press one of the Scan keys and aim the green aiming bar towards the target to adjust your position. Note that when the HC700-G is held closer to the barcode the green aiming bar appears smaller and when held farther from the barcode it appears larger. Barcode symbols with dense symbol elements should be read closer to the HC700-G while large barcodes with larger symbol elements should be read at a larger distance (Depth-of-Field) from the HC700-G.

To capture a barcode, aim the green aiming bar at any angle across the barcode symbol, as shown in Figure 8

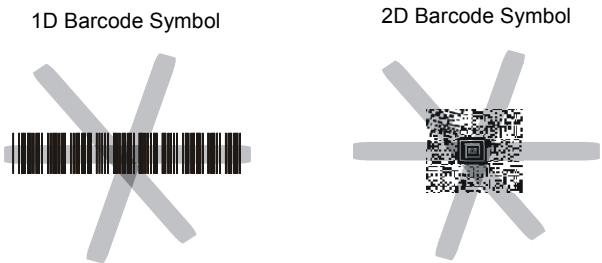


Figure 8. HC700-G Imager - Barcode Capture Positions

Note: When adjusting your position, you may move back and forth from the target to capture the entire object - a successful scan is indicated by a beeping sound.

Resetting the HC700-G

You may need to reset the HC700-G; for example, you may need to reset due to communication cut-off, or if the operating system or the application stops responding.

If the HC700-G stops responding, perform the following steps:

Step 1: Warm Reset

Important Note: When the HC700-G performs Warm Reset, all recorded information remains stored in memory.

Hold down the **<ESC>** and **<A>** and **<F>** keys (see Figure 9) for at least 5 seconds - the Motorola logo will show on the screen for about 30 seconds and then Windows Mobile desktop or application screen will appear - the HC700-G functions again.

If the HC700-G still does not respond, perform "Step 2: Cold Reset":

Step 2: Cold Reset

Cold Reset restarts the HC700-G by erasing all stored records and entries.

Do Not perform Cold Reset unless Warm Reset fails to solve the problem.

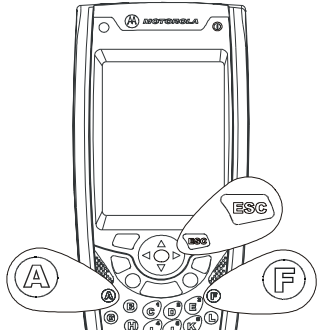


Figure 9. Warm Reset - Key Combination

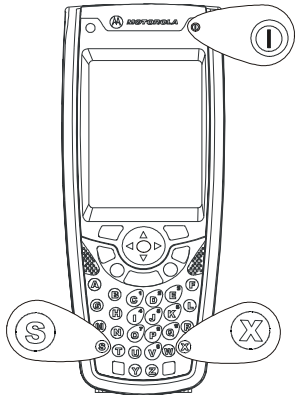


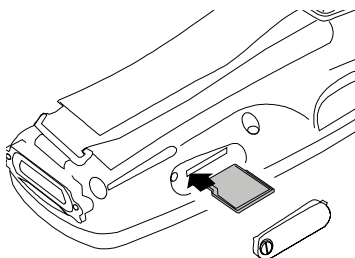
Figure 10. Cold Reset - Key Combination

Hold down the **Power Button** and **<S>** and **<X>** keys for at least 5 seconds (see Figure 11); the HC700-G will restart its operating system.

Mini SD Memory Card

Installing a Mini SD Card

Important: Turn the HC700-G power off before removing or installing the Mini SD (Secure Digital) card.



1. Turn off the HC700-G.
2. Remove the cover screw to access the Mini SD card slot (see Figure 11).
3. Insert the Mini SD card as shown in Figure 11.

Figure 11. Mini SD Card Installation

Mini SD Card Handling Precautions

- Use only the supplied Mini SD card.
- Do not bend or apply force to the Mini SD card.
- Do not store the Mini SD card in locations subjected to high humidity or temperatures.

SIM Card Installation

To install or replace a SIM card, perform the following steps:

1. Remove the battery.
2. Open the SIM card door
3. Slide the SIM card holder forward to unlock the SIM card
4. Slide the new SIM card in the holder with the cut corner on the upper right and the gold plate facing down

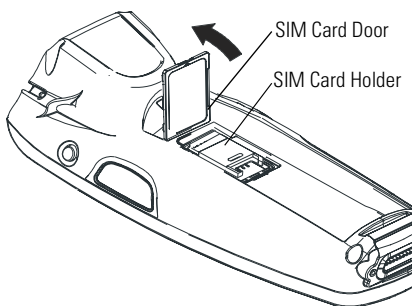


Figure 12. SIM Card Installation

5. Lower the SIM card holder and press downward to lock the SIM card holder
6. Close the SIM card door
7. Install the battery

Service

The HC700-G does not contain user serviceable parts. However, the following sections provide maintenance guidelines.

Maintaining the HC700-G

In order to maintain the HC700-G in good working order:

- Do not scratch the screen. Use only Motorola supplied stylus.
- Never use a pen or pencil or any sharp object on the screen.
- Protect the HC700-G from temperature extremes. Do not leave the HC700-G on the dashboard of a car on a hot day, and keep the HC700-G away from hot places.
- Do not store or use the HC700-G in any location that is extremely dusty, damp or wet.

Cleaning

This section details the cleaning instructions for the battery contacts, screen and any other part of the HC700-G.



Caution

Before using any of the materials detailed below, refer to the safety instructions shown on the product's label or package.

Cleaning Materials

To clean the HC700-G, use Chemical Pure grade (C.P) "Isopropyl Alcohol (IPA)" also named "Iso Propanol".

You may use Isopropyl Alcohol (IPA) manufactured by Merck, Riedel-de Haen, or any other reputable chemical manufacturer.

It is recommended to use a soft lint free cloth such as Tex-wipe TX512, BlueWipe cleaning rag/cloth. It is also possible to use optic lens wiping paper such as "rice paper".

Cleaning Procedure

If the battery contacts, screen or surface of the HC700-G becomes dirty, use a soft lint cloth moistened with diluted Isopropyl Alcohol (IPA) solution to remove dirt. The Isopropyl Alcohol (IPA) can be diluted with water up to 20%.

ActiveSync (USB) Connectivity

The ActiveSync over USB enables the user to explore and manage the HC700-G from remote, transfer files (data images etc.) and surf the Internet via host PC.

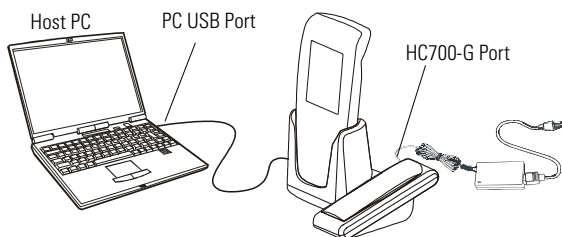


Figure 13. USB Connectivity

First Time Connection

In order to enable USB communication with your host PC, Microsoft ActiveSync program must be installed on your PC.

The HC700-G is provided with the ActiveSync program installed. However, the program can be obtained from Microsoft web site. To learn more about most up-to-date version of the ActiveSync and its operation, refer to ActiveSync help.

Connect the USB cable between the HC700-G and PC. Your PC will identify the new connection and will request you to point to the HC700-G software driver (*wceusbsh.inf*) provided with this product.

Routine Connection

Just hook the USB cable from the HC700-G to your PC - the ActiveSync icon will become green and a Partnership window will show. Check the Guest Partnership and click Next to popup the ActiveSync program.

Troubleshooting

Table 4: Troubleshooting the HC700-G

Problem	Cause	Solution
HC700-G does not turn on	HC700-G in Suspend mode	Press the Power Button
	battery is drained	Replace with fresh battery
	Battery is not installed properly or not charged	Ensure proper battery installation in HC700-G. Charge or replace the battery
	Battery contacts are dirty.	Remove the battery and clean the battery contacts as described in “Cleaning” on page 23.
Battery does not charge in HC700-G Cradle	HC700-G is not locked in the HC700-G Cradle	Re-install the HC700-G in the HC700-G Cradle. Place the HC700-G properly in HC700-G Cradle. (Verify that the HC700-G Cradle LED is On and charge for three hours)
	HC700-G Cradle contacts are not clean	Clean contacts and remove dust and objects from within the HC700-G Cradle
	Battery temperature is out of range (Status LED flashes yellow)	Ensure that the battery temperature is within range. (refer to “Charging the Battery” on page 6). If battery remains hot, replace battery (defective battery).
	Defective battery	Replace battery

Table 4: Troubleshooting the HC700-G

Problem	Cause	Solution
HC700-G does not detect scan input	Aiming pattern not directed at the barcode symbol	Scan again and make sure that the green light is aimed across the barcode Check for readable barcode (not covered, or abstracted)
	Unreadable barcode	Be sure the barcode symbol is not covered, damaged or obstructed. Make sure the barcode symbology is configured. For a list of symbologies configured by default, refer to the Specifications section.
HC700-G does not respond	Problem in the HC700-G operating system or communications network	Ensure proper battery installation in HC700-G. Charge or replace the battery
		Execute Warm Reset "Resetting the HC700-G" on page 21. The HC700-G should function again If HC700-G still does not respond, perform Cold Reset (see "Resetting the HC700-G" on page 21). The operating system will reboot in 30 seconds
HC700-G randomly shuts off	Unclean battery contacts.	Clean the battery contacts, see "Cleaning" on page 23.

Table 4: Troubleshooting the HC700-G

Problem	Cause	Solution
Incomplete or no data transmission between HC700-G and HC700-G Cradle	HC700-G is not docked properly in the cradle	Make sure that the HC700-G is properly docked in the cradle
	IrDA communication window is obscured	Make sure that the IrDA window of the HC700-G is clean and has a clear line of sight with the IrDA window of the cradle
	Communication software was incorrectly installed or configured	Refer to the HC700-G Cradle user manual or see your system administrator

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