

## 1D IMAGER USER GUIDE

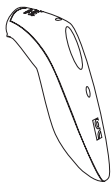


Model shown: CHS 7Ci

*Bluetooth*<sup>®</sup> wireless technology  
Barcode Scanner

# CHS 7Ci & 7Di

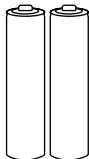
# PACKAGE CONTENTS



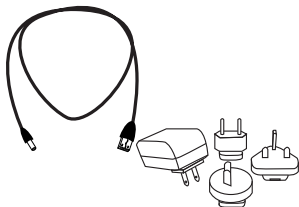
Scanner 7Ci/7Di



Lanyard



NiMH  
rechargeable  
batteries



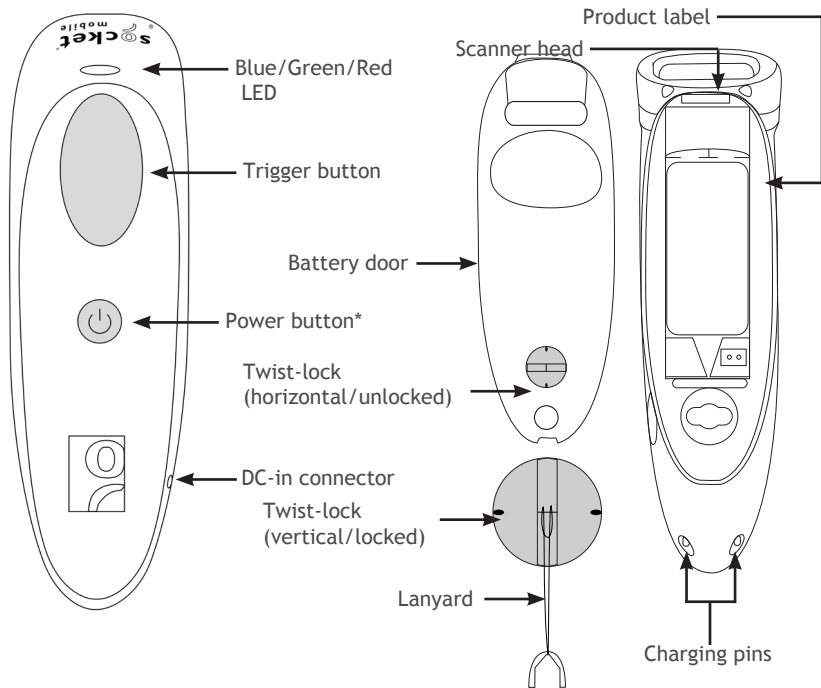
AC adapter\* & USB  
to DC plug cable

\*Use the plug that is regionally  
appropriate

Thank you for choosing Socket Mobile!  
Let's get started!

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# PRODUCT INFORMATION



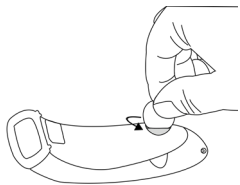
The CHS 7Ci & 7Di is made with antimicrobial additives to help protect against bacteria.

\*Also used to display the on-screen keyboard in Basic Mode (iOS only).

Socket Mobile's barcodes scanners can be wiped clean with a cloth dampened with isopropyl alcohol or water. Or, the barcode scanners can be wiped clean with a Sani-Cloth.

**Warning:** DO NOT IMMERSE IN WATER (scanner's mechanics could be damaged)  
DO NOT USE BLEACH FOR CLEANING (scanner's material property may be affected)

# SCANNER SETUP

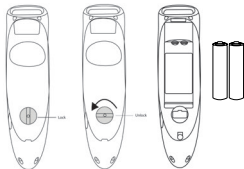


**1**

## Insert the Batteries

Unlock the Battery door by using a thin coin to turn the lock under the scanner to a horizontal position (turn 90 degrees).

Install the batteries in their correct position as indicated by the +/- symbols.

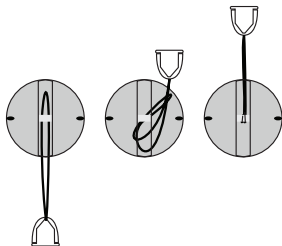


**Important: Only use NiMH Rechargeable batteries. Do NOT use Alkaline Batteries**

**2**

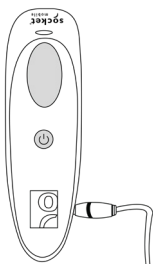
## Attach the Lanyard (optional)

Detach the string loop of the tether from the lanyard. Then feed the string loop through the slot in the Twist-lock and then through the end of the loop. Pull tight so the string loop is secure to the Twist-lock, Reattach the string loop to the tether from the Lanyard.



If desired, attach the tether to a lanyard or belt.

# CHARGE THE BATTERY



- 3** Charge the Scanner  
The scanner must be fully charged before first use. Please allow 5 hours uninterrupted charging for the initial battery charge.

For the 7Di, lift the rubber flap to access the power connector.

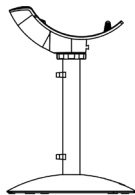
- Red LED = Charging
- Green LED = Fully charged

5 Hours

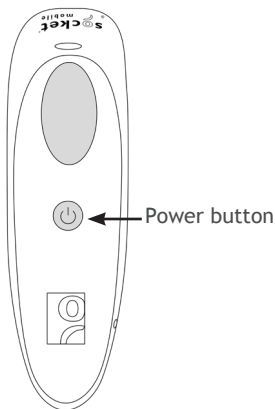


- i** Charging from a computer USB port is not reliable and not recommended.

Charging Cradle & Charging Stand available separately.

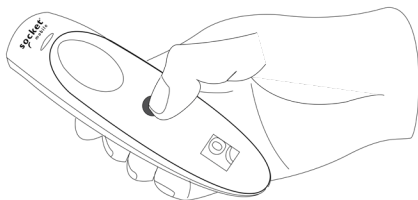


# POWERING ON/OFF



## Powering On:

Press and hold down the small power button until the LED turns blue and the scanner beeps twice (low-high).



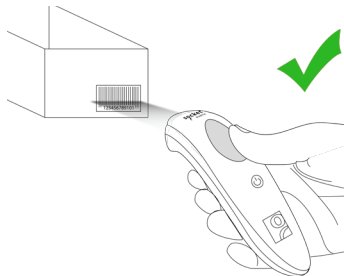
## Powering Off/ Disconnecting:

Press and hold down the small power button until the scanner beeps twice (high-low) and lights turn off.

The scanner will power off automatically if device is not connected within 5 minutes. Scanner connected to a device will power off within 2 hours if idle/inactive.

# USING THE SCANNER

Aim the scan beam straight across the entire barcode



Not recommended scanning techniques



## Scanning Barcodes

After connecting the scanner to your device, open an application. Place the cursor where you want to enter the scanned data.

1. Hold the scanner a few inches from the barcode.
2. Aim, press and hold the trigger button.

By default, the scanner will beep, vibrate, and the LED will flash green to confirm successful scan.

# BLUETOOTH CONNECTION MODES

Connect your Scanner using one of the following Bluetooth modes:

## Bluetooth Connection Profiles

Bluetooth Mode	Description
<b>Basic Mode (HID) (Default)*</b> Human Interface Device Profile	<ul style="list-style-type: none"><li>• NO software installation required</li><li>• Connects to most devices</li><li>• Good for barcodes containing small amounts of data</li><li>• Scanner interacts with host device like a keyboard</li></ul>
<b>Application Mode (SPP)</b> Serial Port Profile	<ul style="list-style-type: none"><li>• Software installation required</li><li>• More efficient and reliable data communications for barcodes containing lots of data</li></ul>
<b>Application Mode (MFi-SPP) for iOS</b> Apple Specific Serial Profile	<ul style="list-style-type: none"><li>• Must use with an App developed for iOS devices</li><li>• Apple MFI tested and certified</li><li>• If you have an application that supports Socket Mobile Scanners, this is the mode you want to use</li></ul>

\*By default, the Scanner is set to Basic Mode (HID)



# BLUETOOTH CONNECTION MODES



## Operating System Connection Options

Operating Systems (OS)	Devices	Bluetooth Basic Mode (HID) Support	Bluetooth Application Mode (SPP) Support	Bluetooth Application Mode (MFi-SPP) for iOS
Android	Android 4.0.3 & later	Yes	Yes	N/A
Apple iOS	iPod, iPhone, & iPad	Yes	N/A	Yes
Windows PC	Windows 7, 8, 10	Yes	Yes	N/A
Mac OS	Mac OS X 10.4 to 10.X Mac Books, Mac Mini, & iMac	Yes	N/A	N/A

**Note:** To switch from one mode to the other, you must remove the pairing information from both devices - host computer and the scanner. (See un-pairing procedure, page 18)



## Android: Connect Android Device in Basic Mode (HID)

1. Power on the scanner. Make sure the scanner is discoverable (unpaired).
2. Touch Home  | Menu  | Settings | Wireless & Networks | Bluetooth settings
3. Make sure the device has Bluetooth “On”. Scan for devices.
4. In the list of found devices, select Socket CHS [xxxxxx]. Tap Pair.
5. The scanner will connect to the Android device.
6. The scanner will beep once after it has connected and is ready to scan bar-codes.



## Apple: Connect Apple iOS Device or Mac OS Device in Basic Mode (HID)

In this mode, the scanner interacts with the device like a keyboard. Therefore, the scanner will work with Safari, Notes, and any other applications that supports an active cursor.

1. Power on the scanner. Make sure the scanner is discoverable (unpaired).
2. Start a Bluetooth device search.
  - iOS: Tap Settings | General | Bluetooth. Turn on Bluetooth. A Bluetooth device search will begin.
  - Mac OS: Click System Preferences | Internet & Wireless | Bluetooth. In Bluetooth preferences, select the “On” checkbox. Click Set up New Device... A Bluetooth device search will begin.

3. In the device list, tap on CHS [xxxxxx]. Tap Pair.
4. The scanner will connect to the Apple device.
5. The scanner will beep once after it has connected and is ready to scan.

## Windows: Connect Windows PC

Power on the scanner. Make sure the scanner is discoverable (unpaired).

1. Use your computer's Bluetooth Settings to connect to the scanner.
2. Open Devices and Printers and select "Add a device".
3. In the device list, select Socket CHS [xxxxxx]. Click Next.
4. If a passkey is requested, enter 0000 (four zeroes). Click OK.  
Or Pair Now.
5. Follow the remaining screens to complete the wizard.



## Connect Android & Windows Device Quickly:

SocketScan 10 software installation required.

1. Power on the scanner and scan this barcode. The scanner will beep 3 times.



#FNB00F40000#

2. Turn Bluetooth on for your device. Go to Settings > Bluetooth. A Bluetooth Devices search will begin.
3. Tap Socket CHS[xxxxxx] in the list of Devices found. After a few seconds the “Not Paired” status will change to “Connected” and the scanner’s Blue LED will blink every 3 seconds confirming the connection.

*(Continue instructions on page 13)*



## Connect Android device in Application Mode (SPP) using EZ Pair

1. Go to Google Play Store, search for “SocketScan”.
2. Download & install. Follow the on screen instructions.

### Getting Started

3. Follow the on screen instructions.
4. Tap on screen the ON SCREEN button.
5. Tap on screen the 1D SCANNER button.
6. Scan the barcode on the device screen. Wait a few seconds. The scanner will beep 3 times indicating it has accepted the command to connect to your device.
7. When notified of a pairing request, swipe the notification icon down, then tap Pairing request.
8. On the next screen, tap Pair.
9. The scanner will beep once to indicate connected state and is ready to scan barcodes. Tap Back to close Socket EZ Pair.
10. If you are connecting a scanner which is not registered, a scanner registration icon will appear on top of the screen. Swipe the icon down to open the registration screen. Follow the instructions to register your Scanner. Socket Mobile highly recommends that all customers register their products, but registration is optional.

**Now you are ready to scan barcodes!**



## Connect Windows PC in Application Mode (SPP)

**Note:** Make sure you have administrative privileges.

1. Download the latest SocketScan 10 software from Socket Mobile's support web page.
2. Follow the on-screen instructions to install the software.
3. In SocketScan 10 Settings, select an incoming Bluetooth serial COM port.

**Note:** If there is none please click "Ports" to create a new incoming COM port in Bluetooth settings.

4. Click Finish.
5. Restart your system.

### To pair the Scanner with the PC using EZ Pair:

1. Power on the scanner. Make sure the scanner is discoverable (unpaired).
2. Launch SocketScan 10 and click on the SocketScan 10 icon in the task tray. In the pop-up menu, click Socket EZ Pair.
3. Scan the barcode on the screen to switch set your scanner in Application Mode (SPP). The scanner will beep 3 times.
4. Click **1D Scanner** accordingly.
5. Scan the barcode that appears on the screen.
6. The PC will automatically try to pair with the scanner. If prompted to allow the pairing, click Yes. If prompted for a passkey, enter 0000 (four zeroes).
7. After the scanner connects, it will beep once. Close Socket EZ Pair.
8. If you are connecting a scanner which is not registered, a scanner registration icon will appear on top of the screen. Follow the instructions to register your scanner. Socket Mobile highly recommends that all customers register their products for future updates, but registration is not necessary.
9. The task tray icon will change to indicate the connection.

*Now you are ready to scan barcodes.*

# APPLICATION MODE (MFi-SPP) FOR iOS



## Connect Apple device in Application Mode (MFi-SP) for iOS:

Please check with your scanner application vendor or visit [www.socketmobile.com/appstore](http://www.socketmobile.com/appstore) to confirm your Scanner-enabled application supports the scanner.

If you are using the scanner with an Apple iOS device and a Scanner-enabled Application that does not provide instructions how to connect with the scanner, please use the following steps.

1. Power on the scanner. Make sure the scanner is discoverable (unpaired).
2. To change the profile to Application Mode (MFi-SPP) for iOS, scan this barcode.  
The scanner will beep 3 times.

Use with iPad, iPod touch, and iPhones.



*(Continue on page 17)*



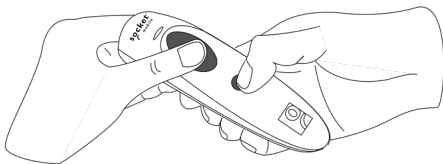
## APPLICATION MODE (MFI-SPP) FOR iOS

3. Turn Bluetooth on the Apple device. Go to Settings > Bluetooth.  
A Bluetooth Devices search will begin.
4. Tap Socket CHS[xxxxxx] in the list of Devices found. After a few seconds the “Not Paired” status will change to “Connected” and the scanner’s Blue LED will blink every 3 seconds, confirming the connection.

**Note:** The characters in brackets are the last 6 characters of the Bluetooth address. The full Bluetooth address is printed on the product label.

5. Open the Scanner-enabled Application. The scanner will beep once indicating that it is connected to the appropriate application.

*Now you are ready to scan barcodes.*



**Note:** This procedure will put the scanner in discoverable mode.

## Step 1: Unpairing the Scanner: Delete the Bluetooth Pairing

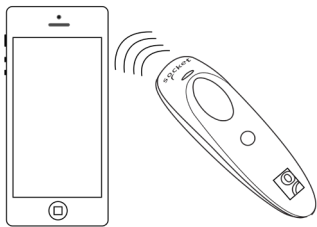
**i** If the scanner is paired with a device, unpair it before trying to connect to a different device.

- Power on the scanner.
- Press and hold down the trigger button.
- Press and hold down the power button.
- After you hear 3 beeps, release both buttons.

The scanner will unpair and automatically power off. The next time you power on the scanner, it will be discoverable.

## Step 2: Remove the Scanner from the Bluetooth list on the host device

**Important:** Both steps above must be done to complete the unpairing.



## Automatic Reconnections

After you power on the scanner, it will automatically try to connect to the last device it was connected to.

- Make sure the device is in range with Bluetooth On.
- If using Basic Mode (HID), pressing the trigger button will enforce the connection.
- If using Basic Mode for iOS, make sure the Scanner-enabled Application is active.
- If using Application Mode (SPP), make sure SocketScan 10 software or an application developed with SocketScan 10 SDK is running.

Make sure the device is on and in range. While the scanner is attempting to connect, the Blue LED will blink every second.

- If a connection is made, the Blue LED will blink every 3 seconds.
- If a connection is not made after 30 attempts, the scanner will emit a long beep.

# COMMAND BARCODES

Scan command barcode(s) to quickly configure the scanner.






**Make sure the Scanner is not connected to a device before scanning a command barcode! (See page 18 for unpairing instructions)**

For a complete set of command barcodes, download the Command Barcodes Sheet: <http://www.socketmobile.com/support/downloads>



# COMMAND BARCODES (CONTINUED)

**Important! Make sure the Scanner is not connected to a host computer or device before scanning a command barcode!**

Bluetooth Connection Modes	
<p><b>Basic Mode (HID)-Keyboard</b> <i>(default)</i></p> <p>Configures the scanner to Human Interface Device (HID) Basic Mode as a Keyboard class device.</p>	 <p>#FNB00F40001#</p>
<p><b>Application Mode (SPP)</b></p> <p>Changes the scanner to Serial Port Profile (SPP) mode.</p>	 <p>#FNB00F40000#</p>
<p><b>Application Mode for iOS</b></p> <p>Changes the scanner to Basic Mode for iOS.</p>	 <p>#FNB00F40002#</p>

# COMMAND BARCODES (CONTINUED)

**Important! Make sure the Scanner is not connected to a host computer or device before scanning a command barcode!**

Beep Settings	
<p><b>Beep after Scanner Decodes Data ON</b> (default)</p> <p>Enables scanner to beep to indicate successful scans.</p>	 <p>#FNB01190E000100030078004B#</p>
<p><b>Beep after Scanner Decodes Data OFF</b></p> <p>Disables scanner from beeping to indicate successful scans.</p>	 <p>#FNB01190E000100000078004B#</p>

# COMMAND BARCODES (CONTINUED)

## Vibrate Settings

**Vibrate ON (default)**  
Enables scanner to vibrate to indicate successful scans.



**Vibrate OFF**  
Disables scanner from vibrating to indicate successful scans.



## Factory Default

**Factory Reset**  
Revert all settings to factory defaults. The scanner will power off after scanning this barcode.



# STATUS INDICATORS

Status	LED Activity	Meaning
Bluetooth	1 Blue blink every second	Bluetooth is On but not connected
	1 Blue blink every 3 seconds	Scanner is connected to device
Good Read	Green Constant (while scanning)	Data successfully scanned
Battery Status	Red Blinking (while scanning, but not plugged into power supply)	20% or less battery capacity remaining
	Red Constant (when plugged into Power Supply)	Battery is charging
	Off (when plugged into power supply)	Battery is fully charged
	Off (when not plugged into power supply)	Scanner is Off





# STATUS INDICATORS (CONTINUED)

Beep Pattern	Meaning
Low-high tone	Power On
High-low tone	Power Off
1 Low beep	Keyboard pop-up enabled
1 Beep	Scanner connected to device and ready to scan barcodes
1 Beep	Data successfully scanned
2 Beeps, same tone	Scanner disconnected from device
1 Long beep	Scanner tried multiple unsuccessful connections to the last paired device (after 5 minutes, scanner will power off)
3 Beeps with escalating tone	Scanner recognized the Command Barcode and implemented the change
3 Beeps with escalating tone followed by a long tone	Scanner recognized the Command Barcode, but could not implement the change (verify the Command Barcode is valid and retry)

# STATUS INDICATORS (CONTINUED)


Vibrate	Meaning
Vibrate	Power On or data successfully scanned

 Command Barcodes are available on pages 21-25 to modify the LED, beep, and vibrate settings.

 If you are using a Scanner-enabled Application, typically the application provides settings for LED, beep, and vibrate settings.

## Bluetooth Mode Sequence

Time after powering on Scanner	Bluetooth mode
0-5 minutes	Discoverable and connectable
5 minutes	If a connection is not made the scanner will power off

 If a device connects to the scanner, it stays on for 2 hours then turns off, if idle. If a button is pressed, timer is reset to expire in another 2 hours.

# PRODUCT SPECIFICATIONS

Specifications	Scanner 7Ci	Scanner 7Di
Dimensions	5.07 x 1.57 x 1.36 in. (129 x 40.1 x 34.6 mm)	5.2 x 1.77 x 1.49 in. (132 x 45.1 x 37.9 mm)
Total Mass	2.7 oz (76.5 g)	3.2 oz (91.5 g)
Antimicrobial	Antimicrobial additive in all external surfaces	
Operating Temp	+32 to +122°F (0 to + 50°C)	
Battery Life	14 hours or 15,000 scans	
Charge Time	5 hours fully charged	
Bluetooth Version	Bluetooth v2.1 + EDR with 56 bit data encryption	
Wireless Range	10 m (33 ft) Line of sight	100 m (330 ft) Line of sight
Scanner Type	Imager (1D)	
Symbologies	All major 1D barcodes	
Supported Language Settings (Basic Mode)	English, French, German, Spanish	
Supported Language Settings (Basic Mode for iOS)	All languages supported by Apple	

# SAFETY AND HANDLING INFORMATION



**WARNING:** Failure to follow these safety instructions could result in fire or other injury or damage to the barcode scanners or other property.

**Carrying and Handling the Socket Mobile barcode scanners:** The Socket Mobile barcode scanner contains sensitive components. Do not disassemble, open, crush, bend, deform, puncture, shred, microwave, incinerate, paint, or insert foreign objects into this unit.

Do not attempt to disassemble the product. Should your unit need service, contact Socket Mobile technical support at <https://support.socketmobile.com/>

Changes or modifications of this product, not expressly approved by Socket Mobile may void the user's authority to use the equipment.

Do not charge the Socket Mobile barcode scanner using an AC adapter when operating the unit outdoors, or in the rain.

**Operating Temperature** - this product is designed for a maximum ambient temperature of 50° degrees C or 122° degrees F.

**Pacemaker Disclaimer:** For now, we do not have specific information on the effect(s) of vibration or Bluetooth devices on pacemakers.

Socket Mobile cannot provide any specific guidance.

Individuals who are concerned with using the barcode scanner should immediately turn the device off.

# HELPFUL RESOURCES

**Technical Support & Product Registration:**

<http://support.socketmobile.com>

Phone: 800-279-1390 +1-510-933-3020 (worldwide)

**Warranty Checker:**

<http://www.socketmobile.com/support/warranty-checker>

**Socket Mobile Developer Program:**

Learn more at: <http://www.socketmobile.com/developers>

Command Barcodes (Advanced Scanner Configurations) can be downloaded at:

<http://www.socketmobile.com/support/downloads>

# REGULATORY COMPLIANCE

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 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.

## CANADIAN DOC STATEMENT

This digital apparatus does not exceed the Class B limits for radio noise for digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

# REGULATORY COMPLIANCE

## CE MARKING AND EUROPEAN UNION COMPLIANCE

Testing for compliance to CE requirements was performed by an independent laboratory. The unit under test was found compliant with all the applicable Directives, 2004/108/EC and 2006/95/EC.

## WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT

The WEEE directive places an obligation on all EU-based manufacturers and importers to take-back electronic products at the end of their useful life. 2012/19/EC

## ROHS STATEMENT OF COMPLIANCE

This product is compliant to Directive 2011/95/EC.

## NON-MODIFICATION STATEMENT

Changes or modifications not expressly approved by the party responsible for compliance.



# LIMITED WARRANTY

Socket Mobile Incorporated warrants this product against defects in material and workmanship, under normal use and service, for one (1) year from the date of purchase. Product must be purchased new from a Socket Mobile authorized distributor or reseller. Used products and products purchased through non-authorized channels are not eligible for this warranty support.

Warranty benefits are in addition to rights provided under local consumer laws. You may be required to furnish proof of purchase details when making a claim under this warranty.

***Consumables such as batteries, removable cables, cases, straps, and chargers: 90-day coverage only***

For more warranty information, please visit:  
<http://www.socketmobile.com/support/downloads>



## Extend Your Warranty...



Receive Priority Service and Personal Care.

You have 60 Days from purchase date to enroll in a SocketCare Service Program!

For detailed information visit:  
<http://www.socketmobile.com/socketcare>