Socket *Bluetooth*® Cordless Ring Scanner
Series 9

User's Guide

Bluetooth®

socket
Business Mobility Now!™

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IMPORTANT!

The information in this *User's Guide* is based on version 3 of the *Bluetooth* Cordless Ring Scanner hardware, which includes devices with any of the following part numbers:

Bluetooth CRS version	Ring Unit Part Number	Wrist Unit Part Number
9M	8550-00032	8550-00028
9P	8550-00027	8550-00028

The features described in this manual that do not apply to older hardware versions of the *Bluetooth* Cordless Ring Scanner will be noted as such.

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1 | INTRODUCTION

Thank you for purchasing the Socket *Bluetooth* Cordless Ring
Scanner (CRS) Series 9 with *Bluetooth* wireless technology. This
wearable device provides hands-free bar code scanning to boost
productivity in warehousing, inventory control, shipment tracking,
and other data capture applications.

The *Bluetooth* CRS features a durable design that is IP54 compliant,
with an exclusive Liquidmetal® construction that is twice as strong as
titanium, extremely rugged and scratch-resistant.

The Battery Friendly® design uses minimal power, so you can use the
Bluetooth CRS for up to 10 hours on a single charge.

The *Bluetooth* CRS features a Class 1 *Bluetooth* radio so you can
scan bar codes while wirelessly connected to computer located up to
300 feet (100 m) away. Socket offers multiple wireless connection
tools, including Connect!Agent™ software and ActivePairing™, which
automate the connection process.

ABOUT THE SOFTWARE

SocketScan™ software feeds scanned data into any open program,
as if the data were manually typed. A configuration utility that
enables you to select Prefix/Suffixes, sounds, and other special
settings for the *Bluetooth* CRS.

Connect!Agent™ software for Windows Mobile simplifies *Bluetooth* by
automatically setting up and managing the wireless connection.

PERFORMANCE LEVELS

Performance Level	Features	Ring Unit Part Number

9M Mid-range	Class 1 laser for normal indoor use	8550-00032 8550-00025 8550-00022
9P Performance	Class 2 laser for demanding requirements like scanning outdoors in sunlight, over long distances or through Mylar, auto windshields, or other glass	8550-00027 8550-00024 8550-00018

SYSTEM COMPATIBILITY REQUIREMENTS

Windows Mobile:

- Any of the following Windows Mobile versions:
  - Windows Mobile 2003, 2003SE or 5.0 for Pocket PC/Pocket PC Phone
  - Windows Mobile 6.0 or 6.1 Classic/Professional

- *Bluetooth* radio and any of the following *Bluetooth* stacks:
  - Broadcom 1.5 or greater
  - Microsoft *Bluetooth* stack for Windows Mobile
  - Stonestreet One 1.2.4 (Build 1783) for Windows Mobile

Note: Software installation requires a host PC, connection cable/ cradle, and ActiveSync or Windows Mobile Device Center software, available free from the Microsoft website. Alternatively, advanced users can install a CAB file (please see Readme file for instructions).

Windows XP and Vista:

- Windows XP Professional/Tablet PC (SP1, SP2, SP3) or Windows Vista Business/Ultimate (SP1)

- *Bluetooth* radio and any of the following *Bluetooth* stacks:
  - Broadcom 5.1.0.1700 or greater
  - Microsoft *Bluetooth* stack
  - Toshiba 4.00.34, 5.00.06F or greater

Note: For information and instructions on using the Bluetooth CRS with the Intermec CK30, please contact Socket technical support.

PACKAGE CONTENTS

Wrist unit	Ring unit	Coiled cable
Finger straps (2)	Wrist strap	Wrist unit case
Li-ion battery	Battery charger	AC adapter with plugs for USA and Europe
CD with software and documentation		

PRODUCT REGISTRATION

Socket recommends that all customers register their products. Registered users benefit from priority technical support and can choose to get special offers, and product/upgrade information. Register online at: www.socketmobile.com/support/support/new

SOCKETCARE™ SERVICE PROGRAM

The SocketCare service program is available for the *Bluetooth* CRS. For more information, please visit: www.socketmobile.com/support/

ADVANCED PROGRAMMING GUIDE

The *SocketScan Advanced Programming Guide* is available online at: www.socketmobile.com/support/downloads/

PRODUCT DIAGRAM

Left Trigger Button

Right Trigger Button

Ring Unit

Good Read LED

Coiled cable

Power button

Battery Status LED

Wrist Unit

Bluetooth Status LED

Battery Door Lock
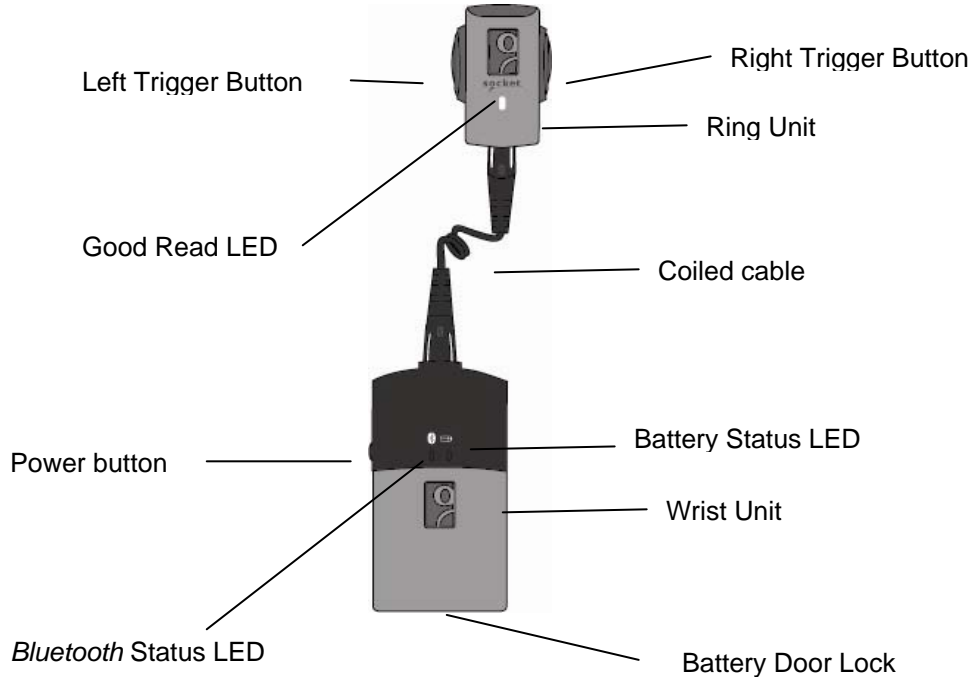
Note: The Bluetooth Device Address is labeled on the bottom of the wrist unit. It helps you identify your CRS.

CABLE BREAK AWAY

The *Bluetooth* CRS is designed to break away from the hand if subjected to unusual force. This feature is designed to reduce the risk or extent of injury in case the *Bluetooth* CRS gets entangled with industrial equipment. If the cable breaks away during use, simply plug it back in to resume operation.

STATUS INDICATOR LEDS AND BEEPS

Ring Unit LED

LED	LED Activity	Meaning
Good Read (Green LED)	On	Data successfully scanned and sent to host device

Wrist Unit LEDs

LED	LED Activity	Meaning
***Bluetooth* Status** (Blue LED)	Solid on	Side power button pressed
	1 blink per second	*Bluetooth* radio is on, no connection
	1 blink every 3 seconds	*Bluetooth* connection
Battery Status (Red LED)	Blinking	20% battery capacity remaining
	On	10% battery capacity remaining
	Off	Off or Good Battery status

Wrist Unit Beeps

Beep Pattern	Meaning
2 beeps (low-high)	Power on
2 beeps (high-low)	Power off
1 beep	CRS connected to host computer
2 beeps (same tone)	CRS disconnected from host computer
1 beep with green LED (optional setting)	Data successfully scanned and sent to host computer
3 long beeps	Cable disconnected from wrist unit
5 beeps	CRS has detected an error and reset

2 | HARDWARE PREPARATION

ASSEMBLING THE AC ADAPTER

The AC adapter for the *Bluetooth* CRS charger comes with plugs for USA and Europe.

1. Insert the appropriate plug for your region into the AC adapter.

2. While pressing the release button, push down on the plug and turn it clockwise until it locks into place.

3. Release the button.
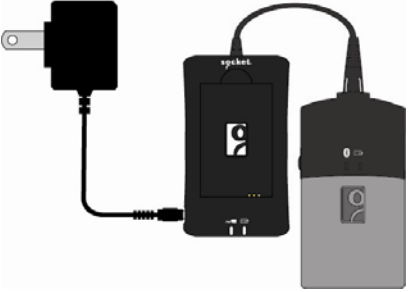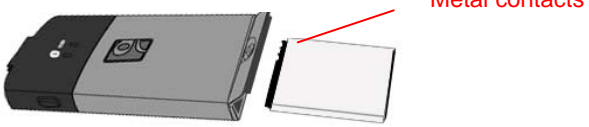
CHARGING AND INSTALLING THE BATTERY
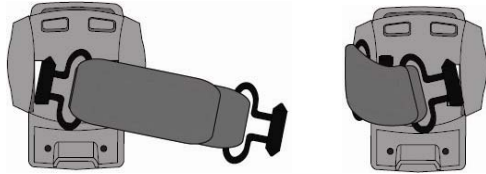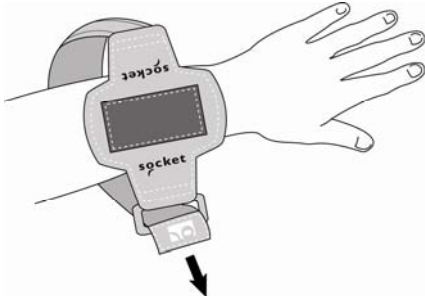
Notes:
- *Please charge the battery before initial use.*
- *You can charge the battery before or after inserting it into the wrist unit.*
- *The charger can charge a wrist unit and spare battery simultaneously.*
- *Do not use the charger or Bluetooth CRS with other batteries, doing so will void the warranty.*
- *A fully charged battery can power 12,000+ scans in ~ 10 hours under normal conditions.*
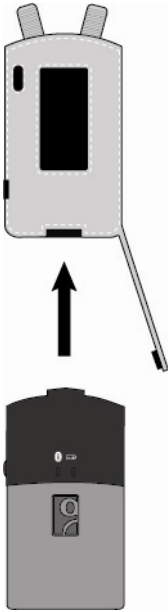
Battery Charger LEDs
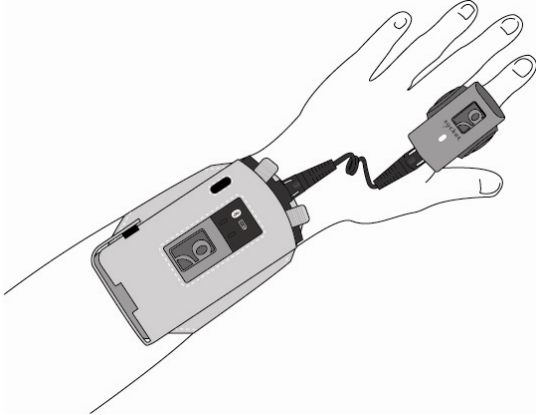
LED	LED Activity	Meaning
Power	Red	Plugged into valid power source
Charging	Yellow	Charging
	Green	Battery is fully charged

OPTION 1: Charge battery separately.	When inserting the battery, make sure the metal contacts of the battery touch those inside the charger.
OPTION 2: Charge battery inside wrist unit.	After installing the battery (see instructions below), connect the charger cable to the top of the wrist unit.
Installing the Battery	Use a coin or screwdriver to unlock the battery door. Open the door. With the wrist unit right-side up, insert the battery with the blank side of on top and metal contacts in front. Metal contacts *WARNING! To prevent damage to the battery, do not insert it backwards or upside-down!* Close and lock the battery door. The door will not fully close if the battery is inserted wrong.

ASSEMBLING AND PUTTING ON THE *BLUETOOTH* CRS

STEP 1: Attach finger strap to ring unit.	Insert clip post into slot and gently push down. Repeat on other side. ***Important! Do not twist the clips during insertion or removal!*** *Note: To remove, grasp a clip and gently pull out. Repeated removal may distort the post and make it unusable.*
STEP 2: Put on wrist strap.	The wrist strap can be worn on the right or left wrist. Adjust for a comfortable fit. *Note: A shorter, 6-inch strap is also available, SKU#.*
STEP 3: Connect cable to ring unit.	Plug the narrow end of the cable into the connector on the back of the ring unit.

STEP 4: Put on the ring unit.	Insert index finger, adjust strap for a comfortable fit, and secure into place.
STEP 5: Insert wrist unit into case.	Insert the wrist unit into the case and fasten into place. *Note: You may hear a beep and see the LED flicker because the power button was pressed during insertion. However, the wrist unit will not turn on unless the button was pressed for more than 2 seconds (you will hear 2 beeps).*

STEP 6: Attach the wrist unit and connect the cable.	Press the wrist case onto the wrist strap and connect the cable into the top of the wrist unit.

Replacement Parts

Straps and other replaceable components of the *Bluetooth* CRS are available in single or multi-packs.

Part	SKU#
Coiled cable, 1 pack	AC4044-1139
Coiled cable, 10 pack	AC4045-1140
Battery, 5 pack	AC4031-714
Finger Strap, 10 pack	AC4027-710
Wrist Unit Case, 10 pack	AC4029-712
Wrist Strap, 10 pack	AC4028-711

3 | SETUP FOR WINDOWS MOBILE

This chapter explains how to install and use the *Bluetooth* Cordless Ring Scanner (CRS) with a *Bluetooth* enabled Pocket PC or other Windows Mobile powered device.

Before you begin the instructions in this chapter, make sure you have charged and installed the battery as explained in Chapter 2, "Hardware Preparation."

SETUP SUMMARY

STEP 1: Uninstall other scanning software.
STEP 2: Install SocketScan and Connect!Agent.
STEP 3: Start SocketScan.
STEP 4: Enable cordless scanner support.
STEP 5: Turn on the *Bluetooth* CRS.
STEP 6: Connect device to *Bluetooth* CRS.
STEP 7: Assemble and put on the *Bluetooth* CRS.
STEP 8: Open your application.
STEP 9: Scan data into your application.

Application Features
Symbology selector
Scanner settings
Scan Demo
Connect!Agent utility

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STEP 1: UNINSTALL OTHER SCANNING SOFTWARE

Remove any bar code scanning software already installed in your device, including previous versions of SocketScan.

OPTION 1: Uninstall Directly from the Pocket PC

1. Make sure the bar code scanning software is not running, and remove or disconnect any Socket data collection products from your Pocket PC.

2. Tap **Start | Settings**. Tap on the **System** tab or **Control Panel**.

3. Tap on the **Remove Programs** icon.

4. Use the utility to remove the software.

OPTION 2: Uninstall via ActiveSync

1. Make sure the bar code scanning software is not running, and remove or disconnect any Socket data collection products from your device.

2. Use ActiveSync and a serial/USB cable or cradle to make an active connection between your device and a host PC.

3. On the host PC, open Microsoft ActiveSync.

4. Click **Tools | Add/Remove Programs**.

5. Use the utility to remove the software.

STEP 2: INSTALL SOCKETSCAN AND CONNECT!AGENT

ADVANCED USERS: Refer to the README file for CAB installation instructions.

1. Make an active connection between your device and a host PC. Use a USB/serial connection cable or cradle and synchronization software (ActiveSync or Windows Mobile Device Center).

   Note: The synchronization software is available free from the Microsoft website.

2. Insert the installation CD into your host PC.

3. If it does not start automatically start, use **My Computer** or **Windows Explorer** to access your CD-ROM drive. In the CD, click on SETUP.EXE.

4. The SocketScan Setup Center will appear in your web browser. Read the first page and click **Installation** in the left margin.

5. In the Windows CE section of the SocketScan Installation page, click **Install** In the first paragraph.

6. Your web browser will present a series of dialogs.

   Internet Explorer:
   - In the File Download –Security Warning dialog, click **Run**.
   - In the second warning dialog, click **Run**.
   - Internet Explorer will download the file.

   Firefox:
   - In the file opening dialog, click **Save File**.
   - Firefox will download the file.
   - In the Downloads list, next to SocketScanCE.exe, click **Open**.
   - In the warning dialog, click **OK** to continue.

7. The installation wizard will automatically begin. Follow the wizard to install the software.
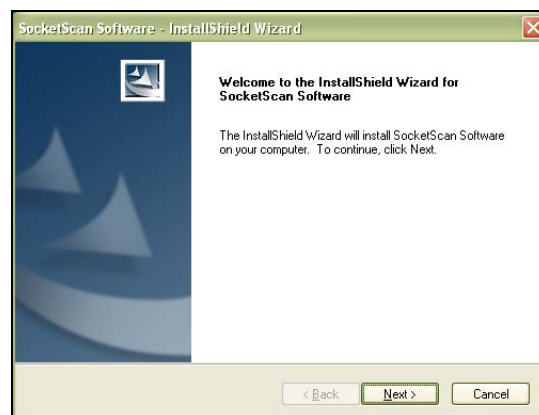
8. When software installation is complete, remove the device from the cradle. Soft reset the device by either tapping **ok** when prompted or pressing the reset button.

9. Install Connect!Agent. Return to the SocketScan Setup Center Installation page. Scroll down to the Connect!Agent – Mobile Devices section and click on the **Connect!Agent software** link there.

IMPORTANT! You must install both SocketScan and Connect!Agent software!

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STEP 3: START SOCKETSCAN

Tap **Start | Programs | SocketScan folder |SocketScan**.

SocketScan

After you start SocketScan, an icon will appear in the task tray at the bottom of the Today screen.

Icon	Meaning
(red circle)	SocketScan is not ready to connect to the *Bluetooth* CRS
(blue circle)	SocketScan is ready to connect to the *Bluetooth* CRS
	Bluetooth CRS is connected and ready to scan

STEP 4: ENABLE CORDLESS SCANNER SUPPORT

1. Go to the Today screen by tapping **Start | Today**.

2. Tap the SocketScan icon at the bottom of the screen. In the pop-up menu, tap **Settings**.

3. The Scanner Settings utility will appear. Tap on the **CS** tab at the bottom of the screen.

4. Check the box **Enable Cordless Scanner support**. **IMPORTANT!!!**
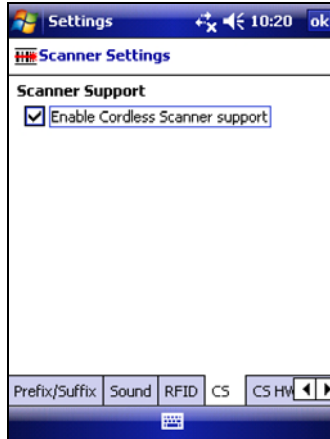
5. Tap **ok** in the top right corner.

Note: If the Bluetooth radio is off, a message may report that ActivePairing is not activated. Tap ok.

Note: After Cordless Scanner Support is enabled, the SocketScan icon will have a blue circle.

STEP 5: TURN ON THE *BLUETOOTH* CRS

Press and hold the small power button on the left side of the wrist unit until you hear 2 beeps (low – high).

Power button
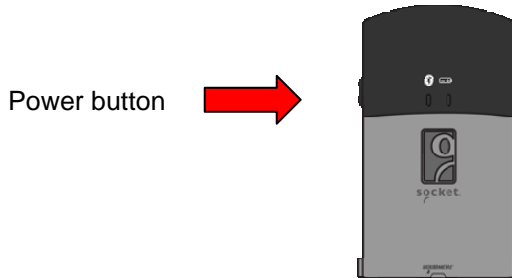
Note: For more information on beeps and LEDs, see page 10.

After you turn on the *Bluetooth* CRS, it will have the following sequence of *Bluetooth* modes until it connects to a computer:

Time after turning on scanner	*Bluetooth* mode
0-5 minutes	Discoverable and connectable
5-20 minutes	Connectable
20 minutes	Scanner automatically powers off

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STEP 6: CONNECT DEVICE TO *BLUETOOTH* CRS

1. Tap on the SocketScan icon at the bottom of the screen. In the pop-up menu, tap **Connect CS**.
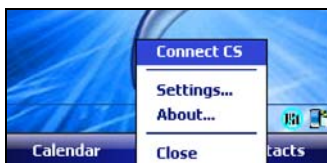
*Note: The **Connect CS** option appears only when Cordless Scanner support is enabled.*

2. If the *Bluetooth* radio of your device is turned off, Connect!Agent will ask if you want to turn it on. Tap **Yes**.

Connect!Agent will automatically turn on the *Bluetooth* radio.

3. Connect!Agent will search for and connect to the *Bluetooth* CRS.

    - If this the device's first time connecting to the *Bluetooth* CRS, Connect!Agent will search for any in range.

    - If the device previously connected to a *Bluetooth* CRS, Connect!Agent will search for the favorite (default) device.
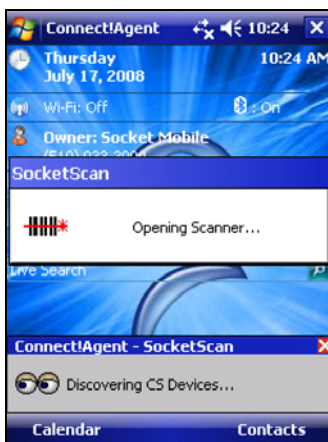
4. Tap to select your *Bluetooth* CRS and tap **ok**.

Note: To help you identify the Bluetooth CRS, Connect!Agent reports the Bluetooth Device Address, which is labeled on the bottom of the wrist unit. The characters in brackets are the last six characters.

5. Connect!Agent will connect to the selected *Bluetooth* CRS.
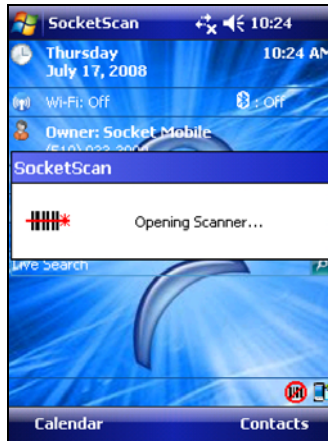
6. After connecting, the *Bluetooth* CRS will beep once, and the SocketScan icon will change into a ring icon.

   Note: Connect!Agent will save information to automate future connections to the Bluetooth CRS. To change which Bluetooth CRS is assigned as your favorite, use the Connect!Agent utility (instructions provided at the end of this chapter).

   Note; After you have connected the device to the Bluetooth CRS, you can use ActivePairing for future connections. Please refer to the instructions later in the chapter.

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STEP 7: ASSEMBLE AND PUT ON THE *BLUETOOTH* CRS

Please refer to the instructions in Chapter 2.
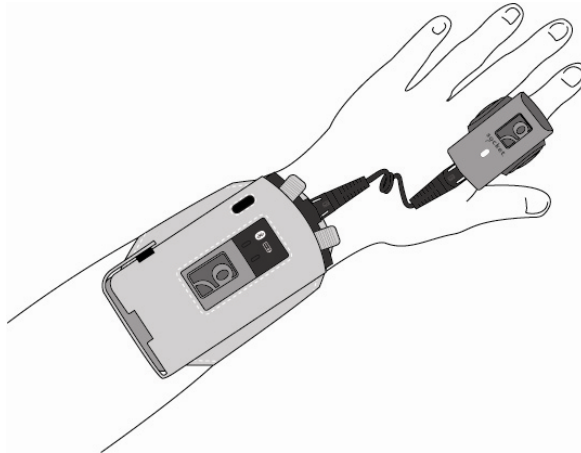
STEP 8: OPEN YOUR APPLICATION

1. Start the application that you want to enter scanned data into.

2. Place the cursor where you want data to enter.

STEP 9: SCAN DATA INTO YOUR APPLICATION

Press the trigger button and aim your finger at the bar code. The red laser beam should cover the entire width of the bar code.

After a successful scan, the *Bluetooth* CRS will beep, the LED will flash green, laser will turn off, and data will appear in your application. By default, the cursor automatically advances to the next cell or line, ready for the next scan.

Notes:

- *See Appendix B for scanning tips.*

- *If no data is read in a few seconds, the laser will turn off, and you must try again.*

SocketScan Auto-Reconnect

If your mobile device suspends or the *Bluetooth* CRS moves out of range, the connection will end. After the mobile device turns on again or the *Bluetooth* CRS returns into range, SocketScan will try to re-connect for about 3 minutes.
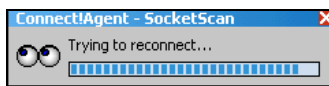
If, after 3 minutes, they have not re-connected, manually re-connect them by tapping on the SocketScan icon and tapping **Connect CS**.

DISCONNECTING

To disconnect, tap on the SocketScan icon at the bottom of the Today screen and tap **Disconnect**. The CRS will beep twice (same tone) to indicate that the connection has ended.

Note: Connect!Agent will also turn off the Bluetooth radio of some mobile devices, depending on their Bluetooth stack.

Turning off the *Bluetooth* CRS
To turn off the *Bluetooth* CRS, press and hold the power button on the wrist unit until you hear 2 beeps (high – low).

SYMBOLOGY SELECTOR

The applet makes it easy to select symbologies for the *Bluetooth* CRS to recognize. By default, the *Bluetooth* CRS recognizes several of the most common symbologies.

1. Tap on the SocketScan icon. In the pop-up menu, tap **Symbology Selector...**
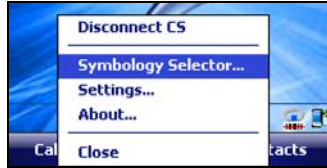
2. Check the symbologies you wish to enable. Uncheck those you wish to disable. For convenience, you can tap **Disable All** to disable all and select the ones you want. Tap **ok**.
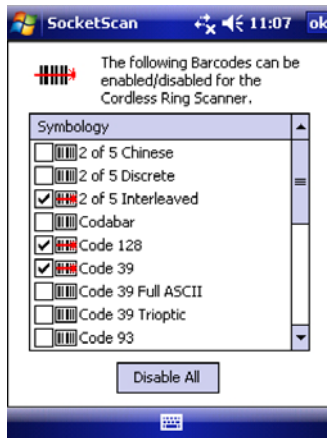
Note: Socket does not recommend enabling all symbologies. Doing so will slightly lengthen the decode process.

*Note: To scan Vehicle Identification Number bar codes, select **VIN**. SocketScan will disregard extra characters added by vehicle manufacturers and only output the VIN.*

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SCANNER SETTINGS

1. Tap on the SocketScan icon. In the menu, tap **Settings**.

2. The Prefix/Suffix screen will appear. If desired, enter characters to append to each scan (128 character maximum, only ASCII printable characters).
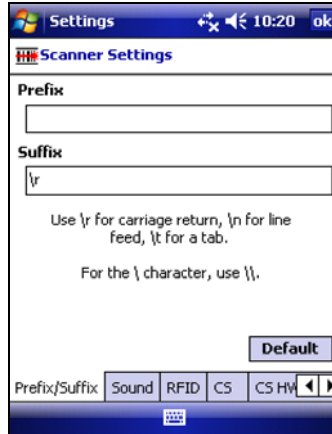
Note: The default suffix is a carriage return. Besides characters listed on the screen, other characters can be typed or entered using the format \nnn, where nnn = ASCII character 001 - 255.

3. Tap on the **Sound** tab. Select a sound to indicate a good read. If you select **Play .wav file**, tap on the **…** button to search for the file (it must be located in the **My Documents** folder).
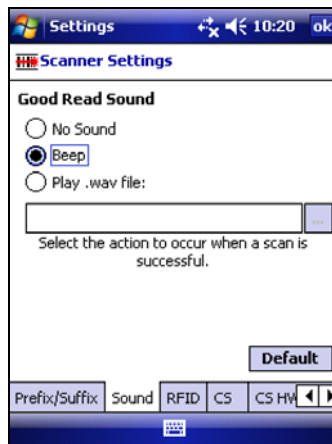
4. Tap on the **CS HW** tab. Enter the following settings:
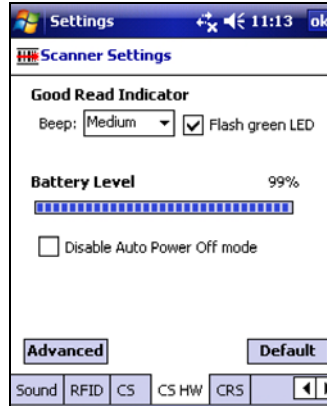
- **Good Read Indicator:** Select how you want the *Bluetooth* CRS to indicate that it has successfully read data.

- **Battery Level**: When the *Bluetooth* CRS is connected, a progress bar displays this advanced feature.

- **Disable Auto Power Off mode:**

  CAUTION: Selecting this option will disable the Auto Power Off mode and can result in complete discharge of the CRS battery. Use with caution.

  *Note: When the Bluetooth CRS is connected, the **Advanced** button appears. Permanent Pair is the only Advanced option for the Bluetooth CRS. For instructions, see ActivePairing on the next page.*

5. Tap on the **CRS** tab. Select the CRS button(s) you want to use to trigger the scanner. Tap **ok**.
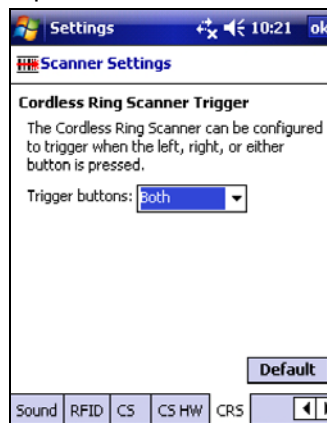
SCAN DEMO

Scan Demo makes it easy to determine the symbology and other properties of bar codes supported by the *Bluetooth* CRS. This is useful if you encounter a bar code that the scanner will not decode by default, so you know which symbology to enable in Symbology Selector.

1. Tap **Start | Programs | SocketScan folder | Scan Demo**.

ScanDemo

*Note: Accessing Scan Demo disconnects the Bluetooth link. If you have not configured the Bluetooth CRS to automatically connect, tap on **CS | Connect CS** at the bottom of the screen.*

2. The Scan Demo screen will appear. If desired, use the check boxes to modify the test.

   Enable all symbologies: By default, this option is checked. Different symbologies can sometimes interpret the same bar code differently, so you may want to uncheck this option.

   Display as hex data: Check this box to view scanned data in hexadecimal format. Otherwise, data will appear as ASCII.

   Code Page: Check this box to select the code page option.

3. Scan the bar code. Scan Demo will report the properties of the bar code.
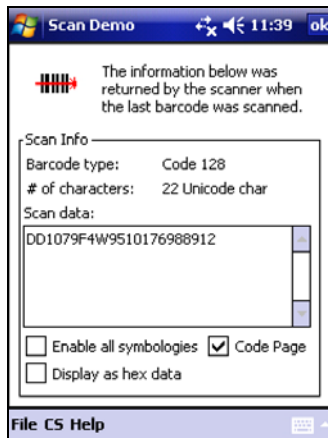
CONNECT!AGENT UTILITY

The Connect!Agent utility enables you to view and change the default *Bluetooth* CRS that Connect!Agent attempts to connect to.

1. Tap **Start | Settings | System tab | Connect!Agent**.
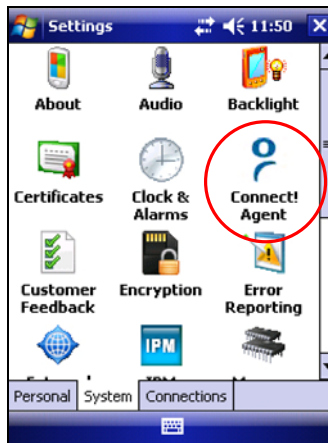
2. The Connect!Agent utility lists the *Bluetooth* CRS that it has saved as a favorite device. This is a specific device that Connect!Agent automatically attempts to connect to when SocketScan or Scan Demo is started.

Note: SocketScan and Scan Demo can have the same favorite CRS.

3. To remove a device from the partnership list, select the device and tap **Delete**. In the confirmation screen, tap **Yes**.

DUAL DEVICE SUPPORT

SocketScan versions 7.2.4 and later support the simultaneous use of a cordless and a plug-in Socket data collection device with the same computer.

Simply connect or plug in each device as normal. Each device will function normally. No extra configuration is required.

Each device can be configured separately. In the SocketScan menu, tap on the appropriate device to configure its settings.

4 | SETUP FOR WINDOWS XP AND WINDOWS VISTA

This chapter explains how to install and use the *Bluetooth* Cordless Ring Scanner (CRS) with a *Bluetooth* enabled computer running either of the following operating systems:

- Windows XP Professional/Tablet PC (SP1, SP2, SP3)
- Windows Vista Business/Ultimate (SP1)

Before you begin the instructions in this chapter, make sure you have charged and installed the battery as explained in Chapter 2, "Hardware Preparation."

SETUP SUMMARY

STEP 1: Uninstall other scanning software.
STEP 2: Install SocketScan software.
STEP 3: Turn on the *Bluetooth* CRS.
STEP 4: Start *Bluetooth* on your computer.
STEP 5: Configure *Bluetooth* settings
STEP 6: Configure scanner settings.
STEP 7: Connect Computer to *Bluetooth* CRS.
STEP 8: Assemble and put on the *Bluetooth* CRS.
STEP 9: Open your application.
STEP 10: Scan data into your application

Application Features
Scanner settings.
Advanced *Bluetooth* settings.
Remote trigger button.
Symbology Selector

STEP 1: UNINSTALL OTHER SCANNING SOFTWARE

Remove any bar code scanning software already installed in your computer, including previous versions of SocketScan.

1. Make sure the software is closed.
2. Click **Start | Control Panel**. For Windows Vista, click **Programs and Features**. For Windows XP, click **Add or Remove Programs**.
3. Use the utility to remove the software.

STEP 2: INSTALL THE SOFTWARE

1. Insert the SocketScan installation CD into the CD drive of your computer.

2. Use **My Computer** or **Windows Explorer** to access your CD-ROM drive. In the CD, click on SETUP.EXE.
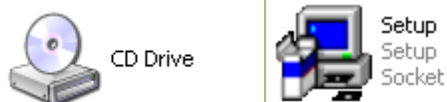
3. The SocketScan Setup Center will appear in your web browser. Read the first page and click **Installation** in the left margin.
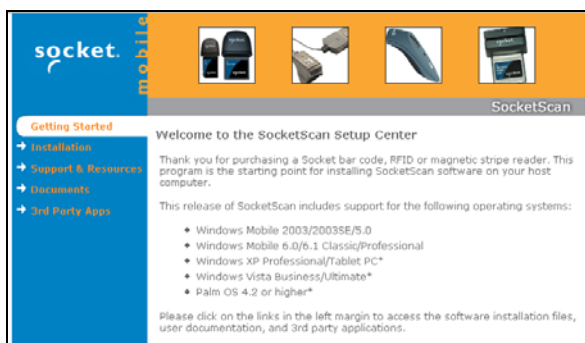
4. In the SocketScan Installation page, scroll down to the Windows XP and Windows Vista section and click on the **Install** link there.

5. Your web browser will present a series of dialogs.

   Internet Explorer:
   - In the File Download –Security Warning dialog, click **Run**.
   - In the second warning dialog, click **Run**.
   - Internet Explorer will download the file.

   Firefox:
   - In the file opening dialog, click **Save File**.
   - In the Downloads list, next to SocketScan...exe, click **Open**.
   - In the warning dialog, click **OK** to continue.

6. The installation wizard will launch. Follow it to install the software.
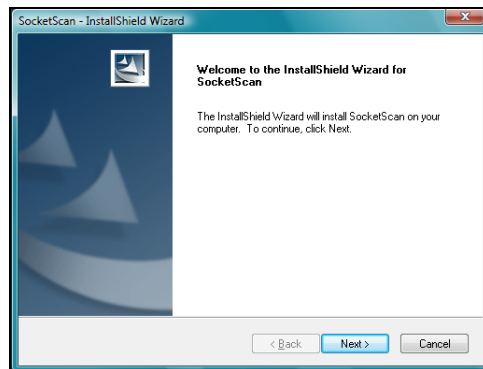
7. During installation, a message will warn that the software is unsigned or has not passed Windows Logo testing.

   - Windows XP: Click **Continue Anyway**.
   - Windows Vista: Click **Install this driver software anyway**.
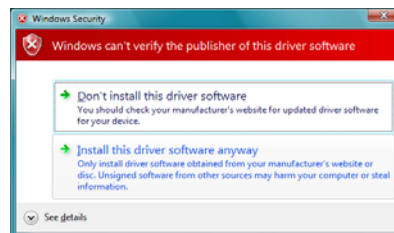
8. After software installation, icons for **SocketScan** and **Socket CS Connect** will appear on your desktop.

STEP 3: TURN ON THE *BLUETOOTH* CRS

Press and hold the small power button on the left side of the wrist unit for at least 2 seconds, until you hear two beeps (low – high).

Power button
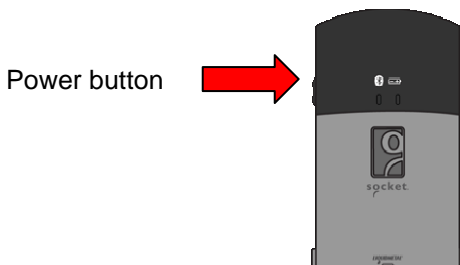
Notes:

- *See page 10 for information on beeps and LEDs.*

- *If the Ring Scanner is not attached, the 2 beeps will be followed by 3 long beeps. See page 16 for more information.*

After you turn on the *Bluetooth* CRS, it will have the following sequence of *Bluetooth* modes until it connects to a computer:

Time after turning on scanner	*Bluetooth* mode
0-5 minutes	Discoverable and connectable
5-20 minutes	Connectable
20 minutes	Scanner automatically powers off

STEP 4: START *BLUETOOTH* ON YOUR COMPUTER

Refer to your *Bluetooth* hardware/software documentation for instructions.

1. If using an add-on *Bluetooth* card or adapter, such as the Socket Scanning Companion USB *Bluetooth* adapter, plug it into your computer.

2. Start your computer's *Bluetooth* software. For some computers, the software will automatically launch after you turn on the *Bluetooth* radio.

3. Turn on the *Bluetooth* radio of your computer. For some computers, the radio must be enabled through the software. Other computers have a hardware switch.

STEP 5: CONFIGURE *BLUETOOTH* SETTINGS

Follow the instructions for your *Bluetooth* stack. Configuration is only needed the first time you connect the *Bluetooth* CRS to your PC.

Refer to your *Bluetooth* software manual for full instructions.

Note: SocketScan supports a generic Bluetooth COM port and may be able to connect to Bluetooth stacks other than those listed.

Microsoft Bluetooth Stack:

1. Click on the *Bluetooth* icon in the task tray. In the pop-up menu, click **Add a Bluetooth Device**.
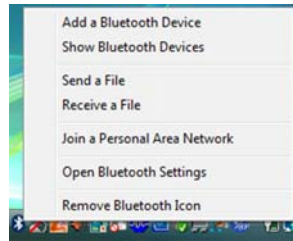
2. The Add Bluetooth Device Wizard will begin. Make sure the *Bluetooth* CRS is turned on. Check the box **My device is set up and ready to be found** and click **Next**.

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3. During the device discovery, the *Bluetooth* Cordless Ring Scanner will appear as **Socket CRS [xxxxxx]**
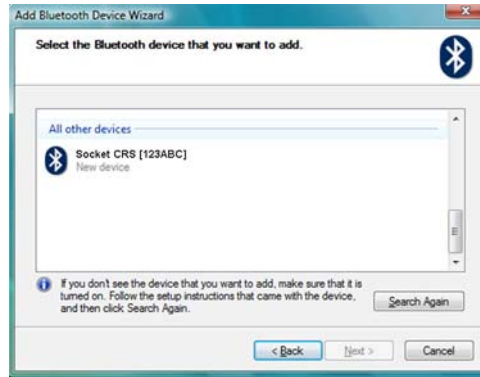
Note; The characters in brackets are the last 6 characters of the Bluetooth Device Address, which is labeled under the wrist unit.

4. In the next screen, select **Use the passkey found in the documentation** and enter the default PIN **1234**.
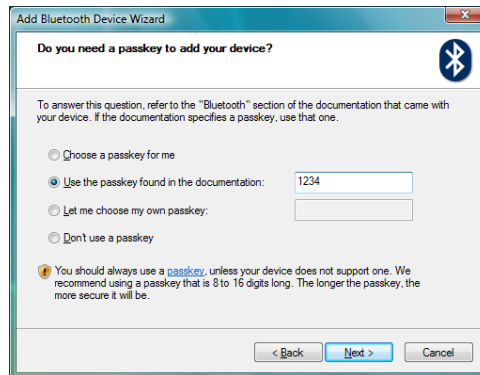
5. The *Bluetooth* CRS will connect to your computer and the blue LED on the *Bluetooth* CRS wrist unit will begin to blink once every three seconds.

   Note: A series of balloons will report the Bluetooth connection progress.
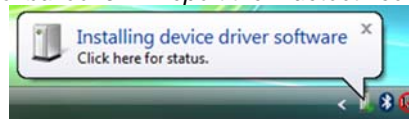
6. In the last screen of the Add Bluetooth Device Wizard, **note the COM number of the Outgoing COM port**.

CHAPTER 4: SETUP FOR WINDOWS XP & WINDOWS VISTA   39

Note: If you plan to enable ActivePairing, also note the __Incoming__ COM port.
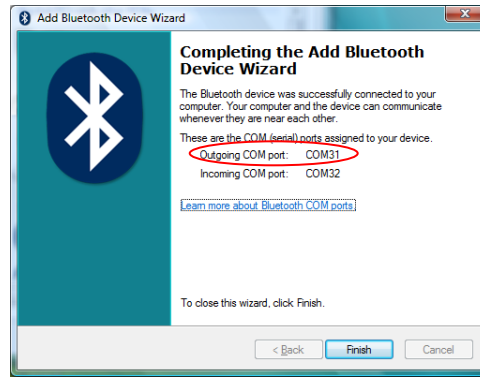
Toshiba Bluetooth Stack:

1. Double-tap on the *Bluetooth* icon in the task tray.

2. In *Bluetooth* Settings, tap **New Connection**.

3. In the Add New Connection Wizard, select **Custom Mode** and click **Next**. The tablet will searching for *Bluetooth* devices in range.
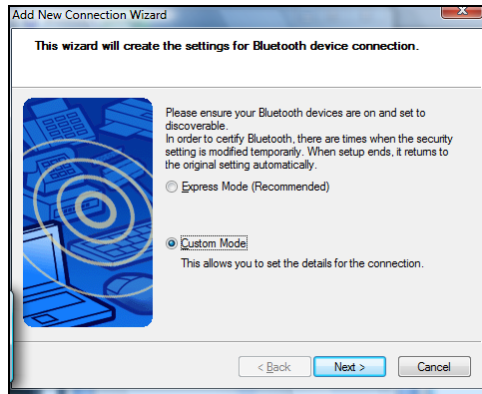
4. In the list of found devices, select **Socket CRS [xxxxxx]**. Tap **Next**.
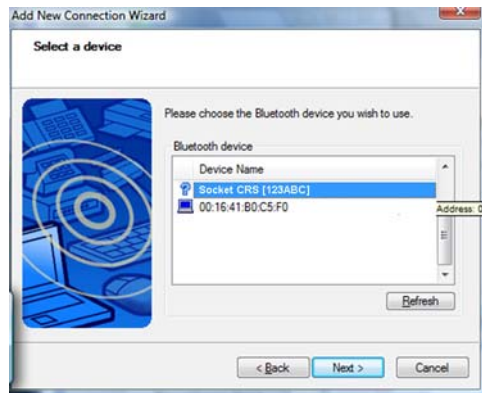
Note: The characters in brackets are the last six characters of the Bluetooth Device Address, which is printed on a label under the wrist unit.

5. If a passkey is requested, enter the default PIN **1234**. Tap **OK**. After connecting, the *Bluetooth* CRS will beep once and the blue LED on the *Bluetooth* CRS wrist unit will begin to blink once every three seconds.

6. In the list of device services, select **Serial Port**. Tap **Next**.
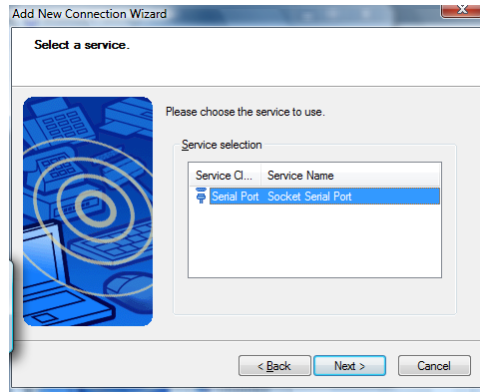
7. In the next screen, uncheck **Use default COM port**. Select another COM port. If desired, check **Auto Connect**. Click **Next**.
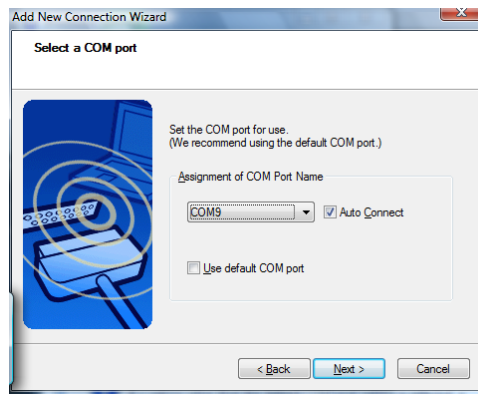
WARNING! Do not select a COM port that is used by another device on your system!

8. After the wizard reports that COM port selection is complete, **remember the COM port number** and click **Next**.

9. In the next screen, edit the connection name and/or icon if desired and click **Next**.

10. In the last screen, click **Finish**.

Broadcom (Widcomm) Bluetooth Stack:

1. Click the *Bluetooth* icon in the task tray. Click **Quick Connect | Bluetooth Serial Port | Find Devices**.

Business Card Exchange	
Bluetooth Serial Port ▶	Find Devices…
Dial-up Networking ▶	
Fax ▶	
File Transfer ▶	**Explore My Bluetooth Places**
PIM Synchronization ▶	Bluetooth Setup Wizard
Network Access ▶	Advanced Configuration
Headset ▶	
Audio Gateway ▶	Quick Connect ▶
nent1 - Microsof…	Stop the Bluetooth Device
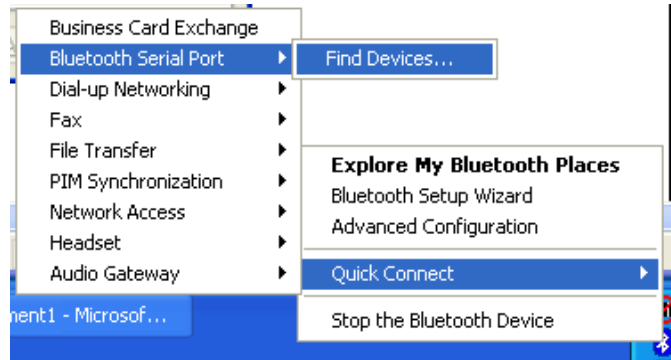
   Note: Be sure to connect to the Bluetooth *CRS via Quick Connect because this sets the* Bluetooth *CRS as your default Bluetooth serial device.*

2. After the device search, select the CRS, which will appear as **Socket CRS [xxxxxx]**.

   Note: The characters in brackets are the last 6 characters of the Bluetooth Device Address, which is printed on a label under the wrist unit.

3. If a passkey is requested, enter **1234**.

4. To indicate the connection, the *Bluetooth* CRS will beep once. The blue LED will also blink off once per second.

   Note: By default, the Bluetooth software asks for the passkey each time you connect.

   *Note: To disable the passkey requirement, under **Advanced Configuration**, disable the **Secure Connection** requirement for both the Local Service and Client Application, then unpair the devices. Refer to the documentation for your Bluetooth hardware/software for complete instructions.*

STEP 6: START SOCKETSCAN

Double-click on the SocketScan icon on your desktop.

SocketScan

When SocketScan is running, the SocketScan icon will appear in the task tray at the bottom of your screen.

Icon	Meaning
	The *Bluetooth* CRS is not connected to the computer.
	The *Bluetooth* CRS is connected to the computer
  Spinning icon alternates between *Bluetooth* CRS and CHS icons.	SocketScan is ready for the *Bluetooth* CRS to connect to the computer with ActivePairing.

STEP 7: CONFIGURE SCANNER SETTINGS

1. Click the SocketScan icon at the bottom of the screen. In the pop-up menu, click **Settings**.
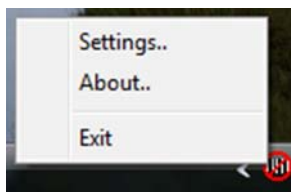
*Note: Alternatively, click **Start | Control Panel | SocketScan Settings**.*

2. In the SocketScan utility, click on the **CS** tab.

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3. Select **Enable CS Support**. Click **OK. IMPORTANT!**
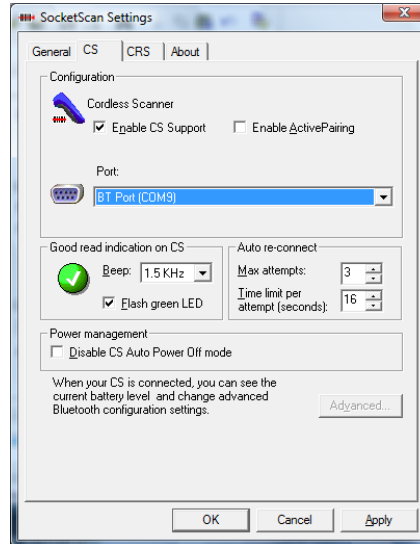
4. More fields will appear. Enter the following:

- **Enable ActivePairing**: See Chapter 5 for instructions.

- **Port**: Select the **outgoing** COM port number assigned to the *Bluetooth* CRS. **IMPORTANT**!

- **Good read indication on CS:** Select how you would like the CRS to indicate that it has successfully read data.

- **Auto re-connect**: Select the maximum number of attempts and time limit per attempt for the *Bluetooth* CRS to reconnect to the computer in case they move out of range from each other.

- **Disable CS Auto Power Off mode**:

  CAUTION: Selecting this option will disable the Auto Power Off mode and can result in complete discharge of the CRS battery. Use with caution.

  Note: You must disable CS Auto Power Off mode if you would like the CRS to automatically reconnect to the computer after losing a connection.

- **Advanced**: When the computer is connected to the *Bluetooth* CRS, you can modify the *Bluetooth* friendly name and security

settings of the *Bluetooth* CRS. Please refer to the instructions later in this chapter.

- **Battery Level**: When the scanner is connected, a progress bar will show the scanner's battery level.

5. Click on the **CRS** tab. Select which button on the *Bluetooth* CRS you would like to use to trigger the scanner.
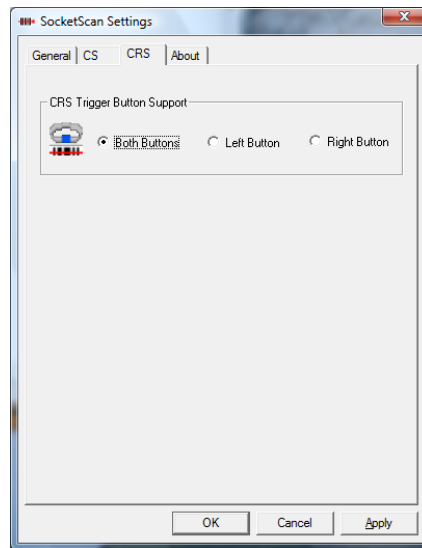
6. After entering settings, click **OK** to save the changes.

STEP 8: CONNECT COMPUTER TO *BLUETOOTH* CRS

1. Right or left-click the SocketScan icon at the bottom of the screen and click **Connect CS**.
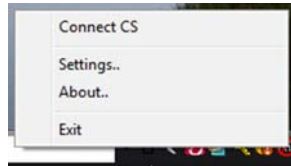
*Note: The **Connect CS** option appears only if cordless scanner support is enabled.*

2. If you are using the Microsoft *Bluetooth* stack, a balloon may report that a device is requesting to connect. Click on the balloon. As prompted, enter the passkey **1234** to connect.
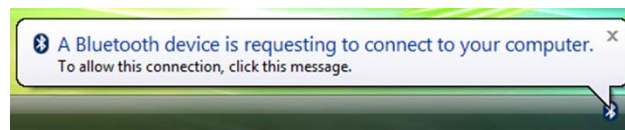
3. SocketScan will connect the computer to the *Bluetooth* CRS.
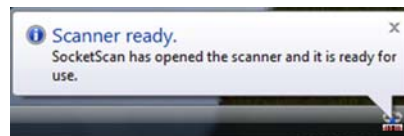
4. The task tray icon at the bottom of your screen will change to an image of a ring above a bar code to indicate that SocketScan is connected to the *Bluetooth* CRS.

Note: The CRS will remain powered on as long as it is connected to a host computer.

STEP 9: ASSEMBLE AND PUT ON THE *BLUETOOTH* CRS

Please refer to the instructions in Chapter 2.
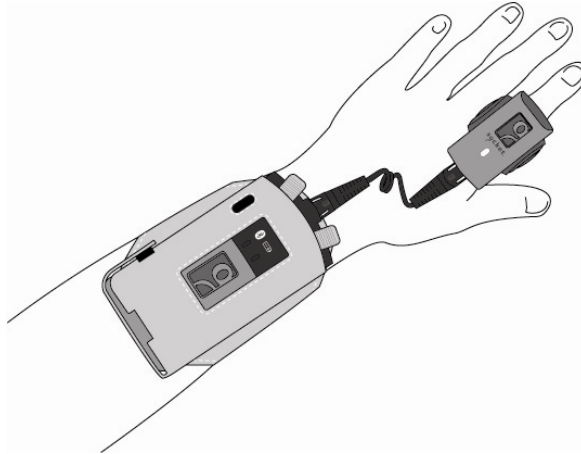
STEP 10: OPEN YOUR APPLICATION

1. Start the Windows application that you want to enter scanned data into. Make sure a document or spreadsheet is open.

2. Place the cursor where you want data from the next scan to be entered.

STEP 11: SCAN DATA INTO YOUR APPLICATION

1. Press the trigger button and aim your finger at the bar code. The red laser beam should cover the entire width of the bar code.

Note: When data is read and sent to the computer, the laser will turn off. Depending on your scanner settings, the scanner may beep and/or the ring scanner's LED may flash green to indicate a good read.

Note: If no data is read in a few seconds, the laser will turn off, and you must try again.

Note: See Appendix B for scanning tips.

2. After a successful scan, data should appear in your document. By default, the cursor automatically advances to the next cell or line, ready for data from the next scan.

Note: Wait for the "Good Scan" indication before you scan another bar code. If you try to scan too fast, the device can lock up until you stop scanning.

Reconnecting

If your PC suspends or the *Bluetooth* CRS is moved out of range, the connection will be lost. After the PC turns on again or returns in range, SocketScan will try to re-connect according to the "auto re-connect" settings you chose in SocketScan.
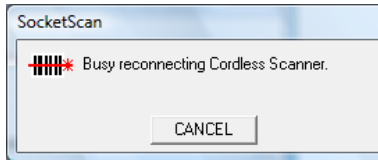
After the time limit for re-connection attempts has passed, you can click on the **Socket CS Connect** icon on the desktop to manually initiate re-connection.

Note: By default, CS Auto Power off mode is enabled. This mode must be disabled for automatic reconnections.

Disconnecting

To disconnect, click on the SocketScan icon and click **Disconnect CS**. The *Bluetooth* CRS will beep 2 times to indicate the disconnection.

Note: If using ActivePairing, disconnect by turning off the Bluetooth CRS.

Turning off the *Bluetooth* CRS

To turn off the *Bluetooth* CRS, press and hold the power button on the wrist unit for at least 2 seconds, until you hear 2 beeps (high – low).

SCANNER SETTINGS

1. In SocketScan Settings, click on the **General** tab.
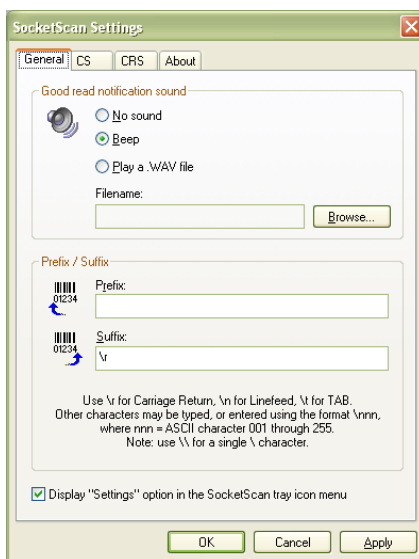
2. Adjust any settings as desired:

   Good read notification sound:
   Select a sound to indicate good reads of data. By default, your computer will beep. If you would like your computer to play a .WAV file, select **Play a .WAV file** and click **Browse** to select the file.

   Prefix/Suffix:
   Enter any prefix and/or suffixes you would like SocketScan to automatically append to scanned data (128 character max., printable ASCII characters only). By default, SocketScan will enter a carriage return after every scan.

   Display "Settings" option in the SocketScan tray icon menu:
   Checking this option displays the "Settings" option the SocketScan menu.

7. After changing any settings, click **OK**.

ADVANCED SCANNER SETTINGS

1. In SocketScan Settings, click on the **CS** tab.
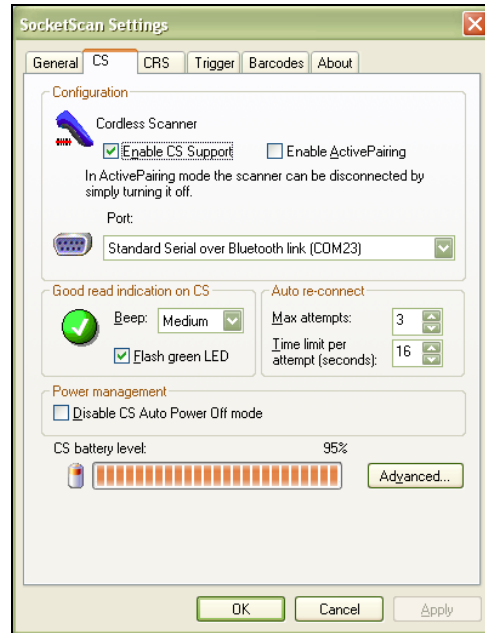
2. In the **CS** screen, click **Advanced**.

3. The Advanced Settings screen will appear, reporting the current *Bluetooth* friendly name assigned to the *Bluetooth* CRS. If desired, select a setting and click **Change**.

3. In the screen that appears, enter any changes and click **OK**.

- **Friendly Name**: Enter a new friendly name and click **OK**. The letters 'CRS' must be included in the name.

    IMPORTANT! Make sure the friendly name includes the string "CRS" if you want to also use the Bluetooth CRS with a Windows Mobile powered device. Otherwise, Connect!Agent will not be able to find the Bluetooth CRS.
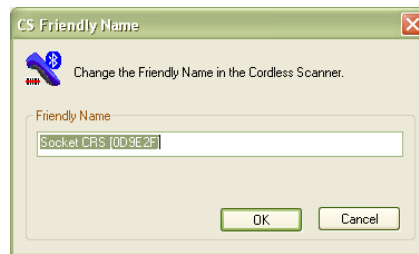
Note: If you plan to use multiple Bluetooth CRS devices in the same area, changing the Friendly Name may help identify specific devices.

- **Security**: If enabled, the default security PIN is **1234.** A new 4 digit PIN can be entered, but you will need to enter it manually every time you connect. This PIN is used to authenticate the device to the host every time it connects.

If desired, click **Delete Bonding** to delete any bonding/pairing information in the *Bluetooth* CRS. After making any changes, click **OK**.

- **Permanent Pair**: For instructions, please refer to Chapter 5.
4. If you modified any security settings, you will be prompted to turn your *Bluetooth* CRS off and back on to make the changes take effect.

Read the message and click **OK**. Turn the *Bluetooth* CRS off and back on again.

4. When you return to the Advanced Settings screen, click **Close**. In the SocketScan Settings screen, click **OK**.

REMOTE TRIGGER BUTTON

The SocketScan utility enables you to assign of your computer's function keys to trigger the *Bluetooth* CRS.

1. In SocketScan Settings, click on the **Barcodes** tab.

   *Note: The **Trigger** and **Barcodes** tabs only appear if you are connected to the Bluetooth CRS.*
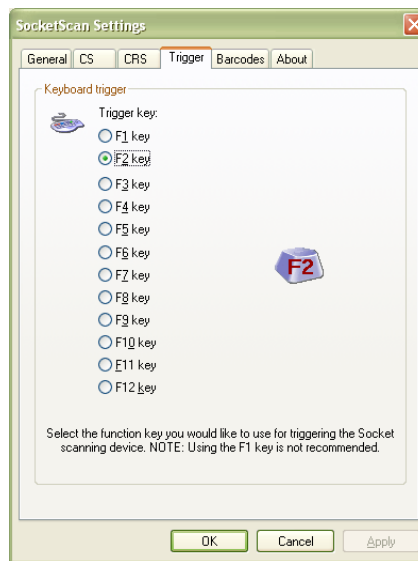
2. Select the function key you would like to use to remotely trigger the *Bluetooth* CRS. Click **OK**.

FLOATING TRIGGER

The floating trigger places a software trigger on the computer desktop that can be clicked on to trigger the *Bluetooth* CRS. It can be a useful option to enable for tablet computers.

1. Connect the *Bluetooth* CRS to the computer.

2. In SocketScan menu, click **Launch Floating Trigger**.
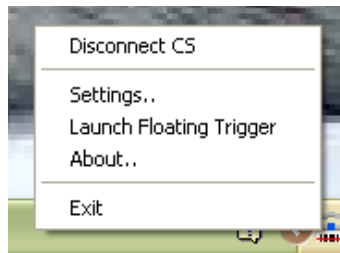
3. The floating trigger will appear on your desktop. Click on the icon to trigger the *Bluetooth* CRS.

4. To close the floating trigger, in the SocketScan menu, click **Remove Floating Trigger**.

SYMBOLOGY SELECTOR

The SocketScan utility makes it easy to modify which symbologies you want the scanner to recognize and decode.

1. In SocketScan Settings, click on the **Barcodes** tab.

   *Note: The **Trigger** and **Barcodes** tabs will only appear if you are connected to the Bluetooth CRS.*
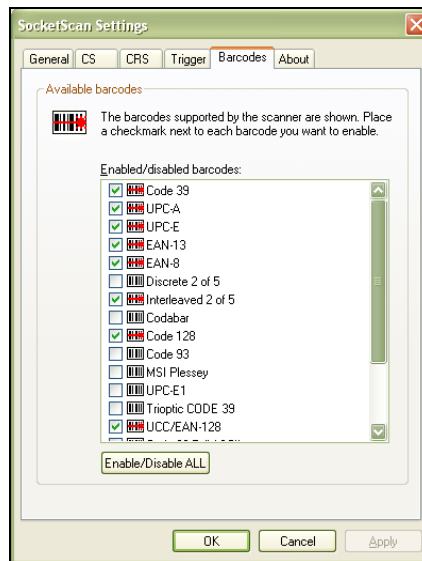
2. Check the symbologies you wish to enable. Uncheck those you wish to disable. Click **OK**.

   Note: Socket does not recommend enabling all possible symbologies. Doing so will make the decode process slightly longer.

   Note: To scan Vehicle Identification Numbers, select the VIN option. SocketScan will only output the VIN, omitting extra characters added by vehicle manufacturers.

5 | ACTIVEPAIRING

ActivePairing technology makes it easy to connect the *Bluetooth* CRS to a host computer. With ActivePairing, the *Bluetooth* CRS initiates the connection process instead of the mobile device. ActivePairing works in either of two ways:

1. Scan special connection bar codes to pair/unpair with the mobile device. This is the ideal method if you plan to use the *Bluetooth* CRS with different mobile devices and want to quickly connect. You will need a printer and either bar code software or access to a bar code generating website.

2. Create a "permanent pair" with a mobile device. After you configure the permanent pair, whenever you turn on the *Bluetooth* CRS, it will automatically try to connect to the designated mobile device. This method is ideal if you only plan to use the CRS with one particular mobile device.

IMPORTANT! CHECK YOUR HARDWARE VERSION TO SEE IF IT IS COMPATIBLE WITH ACTIVEPAIRING.

HARDWARE: Check the part number on the bar code label in the battery compartment.

Wrist Unit Part Number	Revisions with Active Pairing Support
8550-00019	"F" or later
8550-00028	"A" or later

WINDOWS MOBILE — CHECK YOUR SOFTWARE VERSIONS TO SEE IF THEY ARE COMPATIBLE WITH ACTIVEPAIRING.

SOCKETSCAN SOFTWARE FOR WINDOWS MOBILE:
Tap on the SocketScan task tray icon. In the pop-up menu, tap **About**. *SocketScan versions 7.4.2.0 and later support ActivePairing.*

CONNECT!AGENT SOFTWARE FOR WINDOWS MOBILE:
Tap **Start | Settings | System Tab | Connect!Agent**. *In the Connect!Agent utility, tap* **About**. *Connect!Agent versions 1.3.xx and later support ActivePairing.*

WINDOWS MOBILE — IF YOUR DEVICE HAS THE BROADCOM OR WIDCOMM BLUETOOTH STACK, DISABLE THE BLUETOOTH SERIAL PORT PROFILE BEFORE BEGINNING ACTIVEPAIRING.

IDENTIFYING YOUR BLUETOOTH STACK FOR WINDOWS MOBILE:
Check the About screen of your Bluetooth software to determine if it was developed by Broadcom or WIDCOMM. The table below lists some devices that have the Broadcom or WIDCOMM Bluetooth stack:

Device	Operating System
Dell Axim	Windows Mobile 2003, 2003SE
Fujitsu LOOX	Windows Mobile 2003, 2003SE
HP iPAQ	Windows Mobile 2003, 2003SE, 5.0, 6

DISABLING THE SERIAL PORT PROFILE FOR WINDOWS MOBILE:
*Open your device's Bluetooth software. Tap on the **Services** tab. Next to the **Serial Port** option, uncheck the **Enable Service** option.*
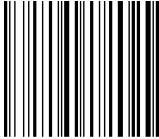
WINDOWS XP/VISTA —ACTIVEPAIRING HAS BEEN SUCCESSFULLY TESTED WITH THE MICROSOFT, BROADCOM AND TOSHIBA BLUETOOTH STACKS. BECAUSE OF THE LARGE NUMBER OF POSSIBLE HARDWARE BRAND AND BLUETOOTH STACK COMBINATIONS, ACTIVEPAIRING MAY NOT WORK CORRECTLY ON ALL COMPUTERS RUNNING WINDOWS XP OR WINDOWS VISTA.

Using ActivePairing by Scanning Special Bar Codes:

1. Find out the *Bluetooth* address of your computer.

2. Use your bar code software to print the following bar codes:

IMPORTANT! THE BAR CODES MUST BE FORMATTED IN THE SYMBOLOGY, "CODE 128"!

ActivePairing Bar Code	Sample	Result after Scanning
Initiator Bar Code — contains the following data: **#FNIxxxxxxxxxxxx#** where xxxxxxxxxxxx is the *Bluetooth* address of the computer	*Sample - DO NOT SCAN* #FNIaabbccddeeff#	The *Bluetooth* CRS will change to initiator mode and automatically try to connect to the computer with the *Bluetooth* address embedded in the bar code
Acceptor Bar Code — contains the following data: **#FNA#**	#FNA#	The *Bluetooth* CRS will unpair with the computer it is connected to and change to acceptor mode.

3. Windows Mobile only: Make sure you have previously connected your device and *Bluetooth* CRS using the instructions in Chapter 3.

4. Make sure the *Bluetooth* CRS is not connected to the computer. To disconnect, click on the SocketScan task tray icon. In the pop-up menu, click **Disconnect CS**.

5. Turn on the *Bluetooth* radio of the computer.

6. Start SocketScan.
   - Windows Mobile: Tap **Start | Programs | SocketScan folder | SocketScan**.
   - Windows XP/Vista: Click on the SocketScan icon on the desktop.

7. Windows XP/Vista only: Click on the SocketScan task tray icon. In the pop-up menu, click **Settings**. Click on the **CS** tab and enter the following settings:
   - **Enable CS Support:** Check the box.
   - **Enable ActivePairing:** Check the box.

- **Port**: Select the Incoming Bluetooth COM port for the CRS.

Click **OK**.
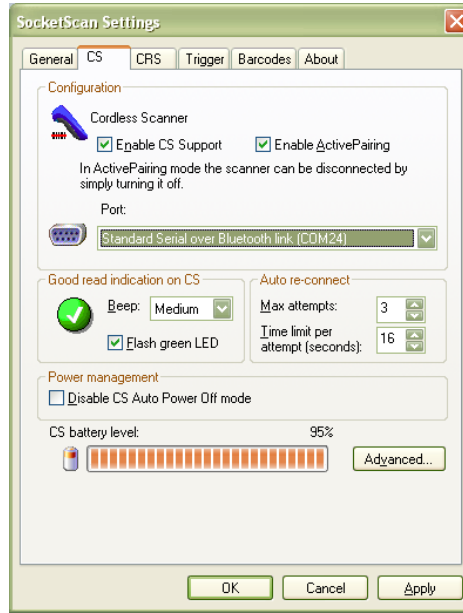
8. Check the SocketScan task tray icon to make sure it indicates it is ready for ActivePairing.
    - Windows Mobile: In the Today screen, make sure the SocketScan icon in the task tray has a blue circle.
    - Windows XP/Vista: There should be an animated "spinning" icon.

9. Turn on the *Bluetooth* CRS and scan the Initiator Bar Code.

    Note: It may take several seconds for the Bluetooth CRS to connect to the mobile device. The Bluetooth CRS will try to connect every 2 seconds for a maximum of 20 attempts.

10. After connecting, the *Bluetooth* CRS will beep once, and the *Bluetooth* Status LED of the *Bluetooth* CRS will blink once every 3 seconds.

11. To disconnect, click on the SocketScan icon. In the pop-up menu, click **Disconnect CS**. Alternatively, simply turn off the *Bluetooth* CRS.

    Notes:

- *After disconnecting from a mobile device, you can easily connect to a different device by scanning the Initiator Bar Code customized for that device.*

- *To change the Bluetooth CRS to Acceptor Mode, scan the Acceptor Bar Code within 5 seconds after turning on the Bluetooth CRS.*

- *If, after 20 attempts, the Bluetooth CRS cannot connect to the mobile device (indicated by 2 long beeps with the same tone), the Bluetooth CRS will change to acceptor mode, with the following Bluetooth status:*

Time after 2 long beeps	Bluetooth mode
0-5 minutes	Discoverable and connectable
5-20 minutes	Connectable
20 minutes	Scanner automatically powers off

Using ActivePairing by Creating a "Permanent Pair":

1. Connect the computer and _Bluetooth_ CRS using the instructions in Chapter 3 or 4.

2. Windows XP/Vista only: Use your _Bluetooth_ software to identify the COM port assigned to the _Bluetooth_ CRS for an <u>incoming</u> _Bluetooth_ connection.

3. In the SocketScan utility, enter the following settings:

   - Windows Mobile: In the **CS HW** tab, tap **Advanced**. Select the **Permanent Pair** checkbox. Tap **OK**. Tap **ok** to save.

   - Windows XP/Vista:
     - In the **CS** tab, select **Enable Cordless Scanner support** and **Enable ActivePairing.** For **Port**, select the <u>Incoming</u> _Bluetooth_ COM port for the _Bluetooth_ CRS.

     - Click **Advanced…** Select **Permanent Pair** and click **Change**. Select **Permanent Pair**. Click **OK**. Click **OK**. Click **Close**. Click **OK**.
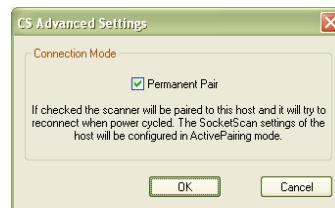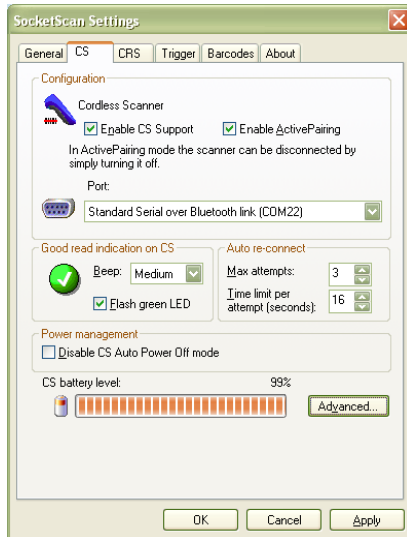
4. SocketScan and the *Bluetooth* CRS are now configured as a permanent pair. In the future, whenever you want to connect the *Bluetooth* CRS to the computer, simply do the following:

- Turn on the *Bluetooth* radio of your computer.
- Open SocketScan. Tap **Start | Programs | SocketScan folder | SocketScan**.
- Turn on the *Bluetooth* CRS. It will automatically try to connect to the last computer it connected to.

Note: It may take several seconds for the Bluetooth CRS to connect to the mobile device. The Bluetooth CRS will try to connect every 2 seconds for a maximum of 20 attempts.

- To disconnect, simply turn off the *Bluetooth* CRS.

Notes:

- *After you turn on the Bluetooth CRS, it will wait 5 seconds before it starts trying to connect. During these 5 seconds, you can change the Bluetooth CRS to acceptor mode by scanning an Acceptor Bar Code (see example in the section, "Using ActivePairing by Scanning Special Bar Codes").*

- *If, after 20 attempts, the Bluetooth CRS cannot connect to the mobile device (indicated by 2 long beeps with the same tone), the Bluetooth CRS will change to acceptor mode, with the following Bluetooth status:*

Time after 2 long beeps	*Bluetooth* mode
0-5 minutes	Discoverable and connectable
5-20 minutes	Connectable
20 minutes	Scanner automatically powers off

APPENDIX A
SPECIFICATIONS

Physical Characteristics
Wrist Unit Size: 98l x 13.1h x 47w (mm) 3.86l x 0.52h x 1.85w (in.)
Ring Size: 55l x 37h x 38w (mm) 2.17l x 1.46h x 1.5w (in.)
Wrist Unit Mass: approx. 90 g (3.2 oz)
Ring Mass: approx. 50 g (1.8 oz)
Mass with Battery: 167 g (5.9 oz)

Power Source: Rechargeable 3.7V 1070 mAh lithium-ion battery
*Expected Battery Life with Typical Operation (connected via
   Bluetooth and minimum 12,000 bar code scans)*: 10 hours

Operating Temp: -4 to 140°F (-20 to 60°C)

Operating System Support:
- Windows Mobile 2003, 2003SE, 5.0 for Pocket PC /Pocket PC
  Phone Edition
- Windows Mobile 6.0 or 6.1 Classic/Professional
- Windows CE.NET for Intermec CK30
- Windows XP Professional/Tablet PC (SP1, SP2, SP3)
- Windows Vista Business/Ultimate (SP1)

Bluetooth Stack Support:

Windows Mobile
- Broadcom 1.5 or greater
- Microsoft *Bluetooth* stack for Windows Mobile
- Stonestreet One 1.2.4 (Build 1783)

Windows XP and Windows Vista
- Broadcom 5.1.0.1700 or later
- Microsoft *Bluetooth* stack for Windows XP and Windows Vista
- Toshiba 4.00.34, 5.00.06F or later

*Note: Additional Bluetooth stacks may be compatible but have not
been tested by Socket.*

2005 Sunrise Date Compliant

Scanning Characteristics

Bar Code Symbologies Decoded: Code 39, UPC/EAN/JAN, MSI, Code 128, Code 93, Codabar, Interleaved 2 of 5, Discrete 2 of 5, RSS-14, RSS-Limited, RSS-Expanded, Chinese 2 of 5

Laser:
   CRS 9M: Class 1
   CRS 9P: Class 2

Scan Angle: 46.5°

Laser Scanner Performance:

Scan Repetition Rate: 100 scans/sec (bi-directional)
Decode Distances (depends on symbol size, symbology, label media, W-N Ratio, scan angle):
   CRS 9M: 2.00 to 20.00 inches typical
   CRS 9P: 2.00 to 45.00 inches typical

Bar Code Symbology Support:

Bookland EAN, Chinese 2 of 5, Codabar, Code 11, Trioptic Code 39 (including VIN numbers), Code 39 Full ASCII, Code 93, Code 128, Discrete 2 of 5, ISBT 128, Code 39, Interleaved 2 of 5, MSI Plessey, RSS-14/Limited/ Expanded, UPC/EAN (UPC-A, UPC-E, UPC-E1, EAN-13, EAN-8, UCC/EAN-128)

Some symbologies must be enabled using the Symbology Selector in SocketScan software.

Bluetooth Characteristics

Protocol: *Bluetooth* 2.0 with Enhanced Data Rates (EDR), 2.45 GHz ISM band frequency hopping
Antenna: Integrated
RF Power: Class 1 *Bluetooth* radio
Typical Output: 12 dbm
Radio Range (depends on environment): Up to 330 ft (100 m) if connected to another Class 1 Bluetooth radio
Connection: Point-to-point
Security: Encrypted link 56 bit encryption

Certification/Compliance

FCC: Part 15, Class B
CE: EN55024:2003
FCC: Part 15, Class B
CE: EN55024:2003
RoHS
21CFR1040.10, 21CFR1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.

Bluetooth 2.0 + EDR
UL

About Bluetooth Range
The *Bluetooth* Cordless Ring Scanner features a powerful Class 1 *Bluetooth* radio to provide the maximum possible range. As with all wireless technologies, the connection range can vary widely depending on many factors such as the class and placement of the *Bluetooth* radio in the host device, the type and size of physical obstacles and the presence and activity level of competing radio transmissions.

In range testing of the *Bluetooth* CRS while connected to a variety of typical host devices with Class 2 radios, functional connection distances from 18 to over 100 feet have been experienced depending on the environment. The following conditions appear to reduce the *Bluetooth* connection range:

- The presence of soft, absorbent materials such as paper, fiberglass insulation, foam material in office cubical walls, carpeting and, to a lesser extent, even sheetrock and wood construction materials.

- Human bodies or containers of liquid positioned between the host and the *Bluetooth* CRS.

- The presence and activity level of competing *Bluetooth* or 802.11 (Wi-Fi) systems using the same 2.4 GHz frequency.

- Metal in a grid pattern, such as chain link fencing or chicken wire. This type of material may block the *Bluetooth* (or Wi-Fi) signal completely.

APPENDIX B
SCANNING, SAFETY AND USAGE TIPS

Scanning Tips
Practice to determine the best scanning angle and distance for your type of bar code.

Scan Angle
For best results, position the scanner at an angle to the bar code, at least 15° from perpendicular. Otherwise, light can bounce back into the scanner and "blind" the sensing mechanism.
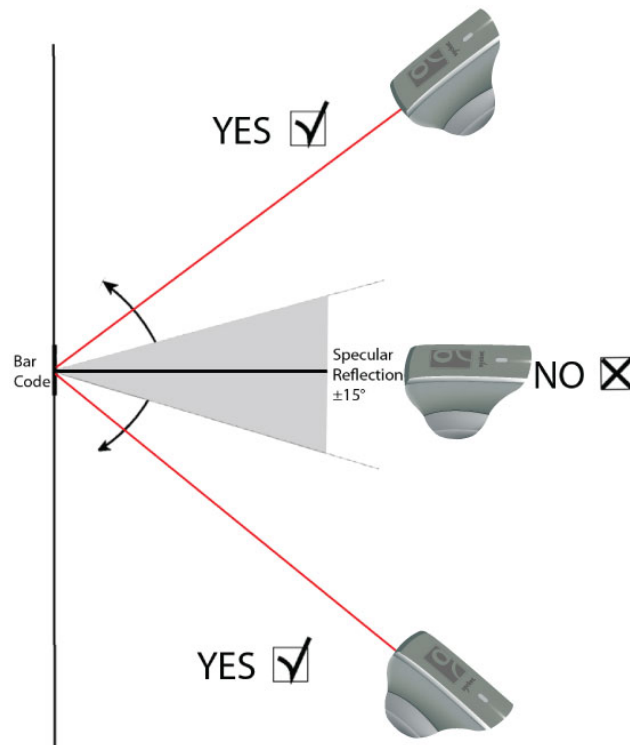
Aiming Beam

Aim the laser so that the red beam covers the entire width of the bar code.

YES ☑   NO ☒
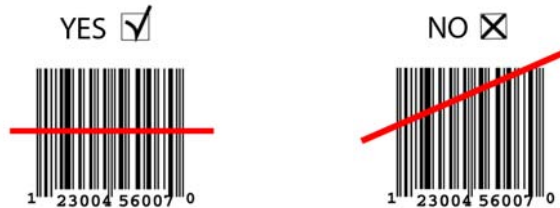
Scanning Distance

- The optimal scanning distance varies depending on the bar code size, symbology, label media, W-N Ratio, and scan angle. In general, the *Bluetooth* CRS 9M can successfully scan 1.5 to 20 inches (3.8 to 51 cm) from the bar code, and the *Bluetooth* CRS 9P can successfully scan 1.5 to 45+ inches (3.8 to 144 cm) from the barcode.

- The larger the barcode, the further away you should position the scanner.

The thinner the bars of the barcode (more dense), the closer you should position the scanner.

About *Bluetooth* and Health

Bluetooth wireless technology allows you to use short-range radio signals to connect a variety of devices, such as bar code scanners, mobile phones, Pocket PCs, notebook computers, printers, LAN access points, and many other devices at home or work. These radio signals replace the cables that have traditionally connected these devices.

Bluetooth products have small radio transmitters and receivers. Output power is normally very low, only 1 mW (1/1000 of a watt). This gives a working range of approximately 10 meters.

The maximum exposure levels from *Bluetooth* products are far below recommended safety guidelines. At most, typical *Bluetooth* devices (1mW) reach only one percent of the prescribed safety levels.

Product Care

- Do not expose the *Bluetooth* CRS to liquid, moisture or extreme humidity.
- Do not expose the *Bluetooth* CRS to extreme high or low temperatures.
- Do not expose the *Bluetooth* CRS to lit candles, cigarettes, or cigars, or to open flames, etc.
- Do not drop, throw or try to bend the *Bluetooth* CRS, as rough treatment could damage it.
- Do not paint the *Bluetooth* CRS, as the paint could obstruct parts and prevent normal use.
- Do not attempt to disassemble the *Bluetooth* CRS t: a broken warranty seal will void the warranty. The *Bluetooth* CRS does not contain consumer serviceable components. Should your *Bluetooth* CRS need service, contact Socket technical support (see Appendix H).
- Treat the CRS with care. Keep in a clean and dust-free place.
- Changes or modifications of the *Bluetooth* CRS, not expressly approved by Socket, may void the user's authority to operate the equipment.

Washing Instructions for Wrist Strap, Finger Strap and Wrist Unit Case

	Machine wash cold with like colors.
	Tumble dry low.
	Do not bleach.
	Do not dry clean.
	Do not iron.

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Antenna Care

Do not place a metallic shield around the *Bluetooth* CRS since it will reduce the radio transmission efficiency.

Efficient Use

For optimum performance, please make sure that there is no metal surrounding your *Bluetooth* CRS.

Driving

RF energy may affect some electronic systems in motor vehicles, (e.g., car stereo, safety equipment, etc.). Inquire the vehicle maker to verify the *Bluetooth* CRS will not affect the vehicle's electronics.

Aircraft

- Turn off your *Bluetooth* CRS before boarding any aircraft.
- To prevent interference with communications systems, you must not use your CRS while the plane is in the air.
- Do not use it on the ground without permission from the crew.

Radio Frequency Exposure

Your *Bluetooth* CRS contains a radio transmitter and receiver. When in use, it communicates with a *Bluetooth* enabled computer by receiving and transmitting radio frequency (RF) magnetic fields in the frequency range 2400 to 2500 MHz. The output power of the radio transmitter is 0.001 Watt. The *Bluetooth* CRS is designed to comply with the RF exposure limits set by national authorities and international health agencies[1] when installed or used separately from other antennae or radio transmitters.

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[1] Examples of RF exposure standards and guidelines:

ICNIRP, "Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz)", International Commission on Non-Ionizing Radiation Protection, Health Physics, vol. 74, pp 494-533, 4/1998.

99/519/EC, EU Council Recommendation on the limitation of exposure to the general public to electromagnetic fields 0 Hz – 300 GHz, Official Journal of the European Communities, 7/1999.

ANSI/IEEE C95.1-1992, "Safety levels with respect to human exposure to radio frequency electromagnetic fields, 3 kHz to 300 GHz", The Institute of Electrical and Electronics Engineers, Inc., New York, 1991.

FCC Report and Order, ET Docket 93-62, FCC 96-326, Federal Communications Commission (FCC), 8/1996.

Radiocommunications (Electromagnetic Radiation Human Exposure) Standard 1999, Australian Communications Authority (ACA), 5/1999.

APPENDIX C
BAR CODE LABEL SPECIFICATIONS

All bar code symbols/labels should satisfy the appropriate AIM Uniform Symbology Specification.

Background Substrate:
The bar code symbol should be printed on material (media) that is reflective and has a matte (not glossy) finish. A background diffuse reflectance of at least 70% to 80% is desirable for optimum contrast. Retro-reflective media should be used to obtain decode distances greater than 36 inches.

Ink Color and Type:
The inked bars should not exceed 25% reflectance at the wavelength that is being used for reading, whether printed with black ink or colored ink. The reflectance value should not vary more than 5% within the same character.

Voids and Specks:
The code should be printed clearly, free of voids, specks, blemishes and lines that could "fool" the scanner. Specks or blemishes in the white spaces, or false or missing bar sections could be interpreted by the reading equipment as part of the code. Generally, the width of such flaws is more serious than the height. Code symbols/ labels should be rejected if these defects are present.

Definition:
The bars in the bar code symbol should be well defined. Their edges should not be rough or fuzzy, so that the bars and spaces have the proper widths intended for the bar code symbology used.

Contrast:
Background reflectance (that of the substrate on which the codes are printed) should always provide a good contrast relative to the ink reflectance (that of the code bars). The difference between the two should be at least 37.5% at the wavelength used for reading.

Tolerance:

The ratio of the widths of bars and spaces in a bar code symbol must conform to the appropriate AIM bar code specifications and can cause problems if not correct throughout the bar code. Problems can occur when bar edges are smeared or rough, or when they exhibit voids.

APPENDIX D
ENABLING OR DISABLING SYMBOLOGIES

The Cordless Ring Scanner is pre-set to automatically detect and decode (auto-discriminate) the most common bar code symbologies. To enable or disable symbologies, simply use the SocketScan Symbology Selector.

Notes:
- *The length of some symbologies will change after Symbology Selector is used. See Table 1.*

- *With more symbologies enabled, the scanner must work harder to search through all the possible combinations. This may make the decoding process slightly longer.*

- *The advanced symbology parameters listed in Table 2 can only be modified by using the SocketScan Advanced Programming Guide or the SocketScan SDK. Check the Socket Mobile website for updates.*

Table 1. Default Symbologies

Symbology	Scanner Default	Default Length	Length after Symbology Selector
UPC/EAN/JAN			
UPC-A	Enabled	N/A	N/A
UPC-E	Enabled	N/A	N/A
UPC-E1	Disabled	N/A	N/A
EAN-8	Enabled	N/A	N/A
EAN-13	Enabled	N/A	N/A
Code 128 (USS-128 & UCC/EAN 128)	Enabled	Any	Any
Code 39*			
Code 39	Enabled	2 to 23	2 to 55
Trioptic Code 39	Enabled	2 to 23	2 to 55
Code 39 Full ASCII	Disabled	2 to 23	2 to 55
Code 93	Disabled	2 to 38	2 to 55
Interleaved 2 of 5*	Enabled	14 Only	2 to 55
Discrete 2 of 5*	Disabled	12 Only	2 to 55
Codabar	Disabled	5 to 55	2 to 55
MSI Plessey*	Disabled	1 to 30	2 to 55
RSS-14 (Standard, Limited, Expanded)	Disabled	N/A	N/A

*Warning: Setting the length to "Any" may lead to inaccurate decodes of these symbologies.

Table 2. Other Symbology Parameters

Symbology Parameters	Scanner Default
UPC/EAN/JAN	
Supplementals	Disabled
Transmit Check Digit	Enabled
Bookland EAN	Disabled
Decode UPC/EAN Supplementals	Ignore
UPC/EAN Supplemental Redundancy	Seven
Transmit UPC-A Check Digit	Enabled
Transmit UPC-E Check Digit	Enabled
Transmit UPC-E1 Check Digit	Enabled
Convert UPC-E to A	Disabled
Convert UPC-E1 to A	Disabled
EAN-8 Zero Extend	Disabled
UPC/EAN Security Level	0
UPC/EAN Coupon Code	Disabled
Code 39	
Convert Code 39 to Code 32	Disabled
Code 32 Prefix	Disabled
Check Digit Verification	Disabled
Transmit Check Digit	Disabled
Code 39 Full ASCII	Disabled
Interleaved 2 of 5	
Check Digit Verification	Disabled
Transmit Check Digit	Disabled
Convert I 2 of 5 to EAN-13	Disabled
RSS-14	Disabled
RSS-14 Limited	Disabled
RSS-14 Expanded	Disabled

Appendix E
Decode Zone

The decode zones for the *Bluetooth* Cordless Ring Scanner is shown below. The minimum element width ("X Dimension" or bar code "size") is the width in thousandths of an inch (mils) of the narrowest element (bar or space) in the symbol. The figures shown are the typical scanning distances (depths of field) for selected bar code sizes. The maximum usable length of a bar code symbol (Width of Field) at any given range is also shown.

Bluetooth CRS 9M with Class 1 laser engine

Depth of Field

*Minimum distance determined by symbol length and scan angle
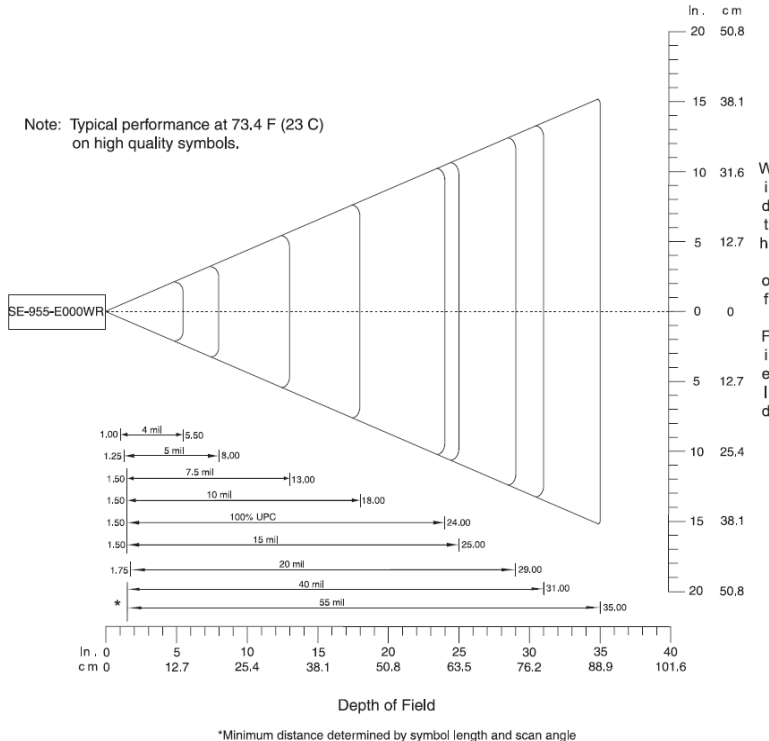
Bluetooth CRS 9P with Class 2 laser engine

Note: Typical performance at 73.4 F (23 C) on high quality symbols.

SE-955-I000WR

Width of Field

In. cm
- 20 50.8
- 15 38.1
- 10 31.6
- 5 12.7
- 0 0
- 5 12.7
- 10 25.4
- 15 38.1
- 20 50.8

1.50 — 4 mil — 5.50
1.80 — 5 mil — 8.00
2.20 — 7.5 mil — 13.00
2.20 — 10 mil — 18.00
2.20 — 100% UPC — 24.00
2.20 — 15 mil — 28.00
2.50 — 20 mil — 29.00
* — 40 mil — 33.00
55 mil — 42.00

In. 0   5   10   15   20   25   30   35   40   45
cm 0 12.7 25.4 38.1 50.8 63.5 76.2 88.9 101.6 114.3

Depth of Field
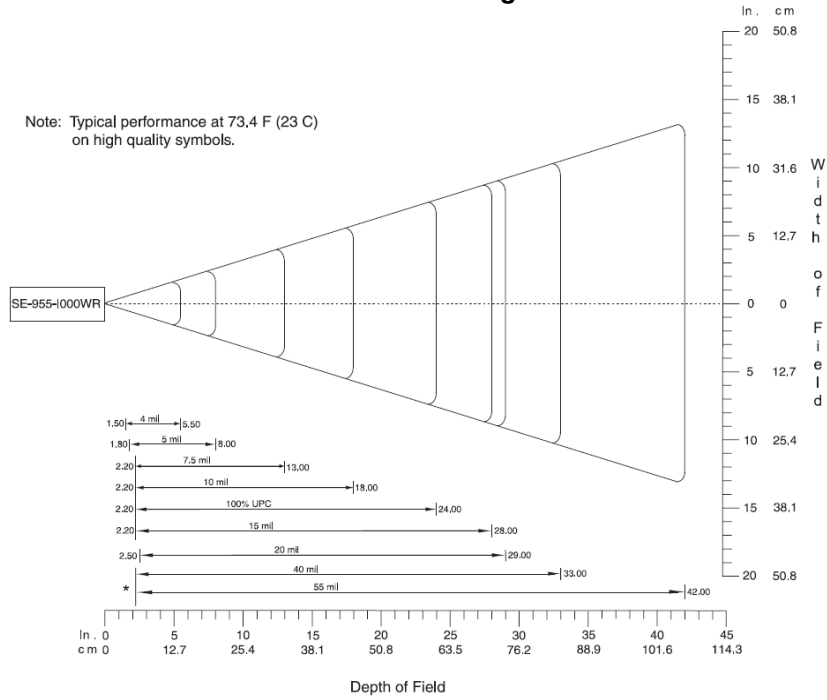
*Minimum distance determined by symbol length and scan angle

APPENDIX F
RESTORING FACTORY DEFAULTS

To restore the *Bluetooth* CRS to its factory defaults, do the following:

1. Turn on the assembled *Bluetooth* CRS – the ring scanner must be attached.

2. Press and hold both the left and right trigger buttons.

3. While still pressing the left and right trigger buttons, briefly press and release the power button on the wrist unit.

4. Wait 15 seconds or until you hear a single beep.

5. Release both trigger buttons at the same time. If you performed the actions correctly, multiple beeps will sound. The *Bluetooth* CRS will power off.

6. The next time you power on the *Bluetooth* CRS, it will reset the virtual memory and scan engine to their factory default settings.

APPENDIX G
TROUBLESHOOTING

For help on SocketScan for Windows Mobile, tap **Start | Help** on a Pocket PC.

SYMPTOM: I get the "No Scanner Detected" 🚫 icon and can't trigger the laser or scan any barcodes.

POSSIBLE REASON	SOLUTION
The *Bluetooth* Cordless Ring Scanner is not connected to your computer	Make sure the *Bluetooth* Cordless Ring Scanner is on and in range and has enough battery power. Try to reconnect by clicking on the SocketScan task tray icon and clicking **Connect CS**.

SYMPTOM: When I try to scan, the laser activates, but no data appears on my screen, and the laser eventually turns off.

POSSIBLE REASON	SOLUTION
The scanner is too close or too far from the barcode.	Practice so you get accustomed the most effective distance and scanning angle.
The barcode is incorrectly formatted or poorly printed.	Try scanning a barcode that is correctly formatted or printed well, such as on a retail package.
The barcode symbology may be disabled or not supported by the *Bluetooth* Cordless Ring Scanner.	Use Scan Demo for Windows Mobile to identify the symbology. If needed, enable the symbology by using Symbology Selector.
You don't have an application open to scan data into.	Open an application and place the cursor where you want scanned data to go. Try scanning again.

SYMPTOM: *When I scan a lot of barcodes very fast, the scanner locks up and won't work for a few seconds.*

POSSIBLE REASONS	SOLUTION
You are scanning too fast for the Error Proof Protocol to confirm that the host computer has successfully received each scan of data.	Wait for the confirmation beep after each scan before you scan a new bar code.

SYMPTOM: *My computer cannot find the Bluetooth CRS, and/or I get an error message saying that the scanner could not be opened or there are connection problems.*
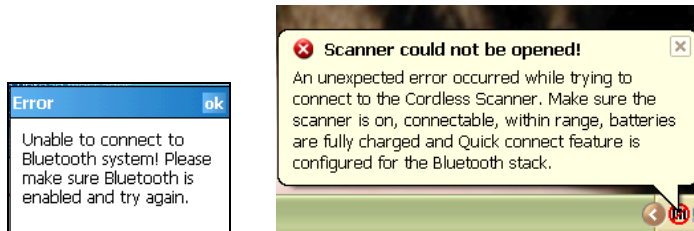
POSSIBLE REASONS	SOLUTION
The *Bluetooth* COM port listed in SocketScan Settings is incorrect. This problem is more likely with a Windows XP or Windows Vista host.	Review Chapter 4, Step 5 of this User Guide, then confirm that the correct *Bluetooth* COM port is assigned in SocketScan Settings.
The *Bluetooth* Cordless Ring Scanner is not turned on.	Turn on the *Bluetooth* Cordless Ring Scanner.
You have assigned another device as your favorite or default *Bluetooth* serial device.	Remove any settings that assign another device as your favorite *Bluetooth* serial device. Refer to the documentation for your *Bluetooth* software for instructions.
You did not start the *Bluetooth* software.	Start the *Bluetooth* software. Refer to the documentation for your *Bluetooth* software for instructions.
The *Bluetooth* radio of your computer is not turned on.	Turn on the *Bluetooth* radio of your computer. Refer to the documentation for your *Bluetooth* software for instructions.

SYMPTOM: *While scanning with the Bluetooth CRS, I turned off the Pocket PC, or my Pocket PC entered suspend mode. Now my Pocket PC won't turn on again.*

POSSIBLE REASONS	SOLUTION
This is a known problem with the Widcomm stack (built into HP h221X iPAQ Pocket PCs with ROM version 1.00).	Soft reset the Pocket PC by pressing the reset button.

SYMPTOM: *While scanning with the Bluetooth CRS, I turned off the host device, or my host device entered suspend mode. Now the Bluetooth CRS won't reconnect to my host device.*

POSSIBLE REASONS	SOLUTION
There is a known problem with the Broadcom (Widcomm) stack on some devices where the *Bluetooth* CRS can be discovered but fails to communicate. Affected units include the HP iPAQ models h221X with ROM version 1.10 and h1945.	Soft reset the Pocket PC by pressing the reset button.

SYMPTOM: *My Pocket PC shows an error message saying that there are insufficient device resources.*

POSSIBLE REASONS	SOLUTION
Some HP iPAQ Pocket PCs are not compatible with the *Bluetooth* Cordless Ring Scanner.	The *Bluetooth* CRS will not work with your Pocket PC at this time.

SYMPTOM: *When I try to connect with ActivePairing to a Windows XP or Vista computer, the Bluetooth software indicates that the Bluetooth CRS has connected, but when I try to scan data, it does not enter into my application.*

POSSIBLE REASONS	SOLUTION
Your computer has multiple incoming *Bluetooth* serial ports enabled.	Use your *Bluetooth* utility to disable extra incoming *Bluetooth* serial ports.
SocketScan Is not running.	Start SocketScan.

SYMPTOM: *My Bluetooth CRS no longer connects to my Windows Vista computer.*

POSSIBLE REASONS	SOLUTION

You are using a USB *Bluetooth* adapter with your Windows Vista computer, and the *Bluetooth* bonding settings became corrupted after the computer suspended and resumed.	Use your *Bluetooth* software to rediscover the *Bluetooth* CRS. Do not uninstall the pairing.

SYMPTOM: *The Permanent Pair checkbox no longer appears in the SocketScan utility.*

POSSIBLE REASONS	SOLUTION
You are using a Windows XP or Vista computer and connected a different *Bluetooth* Cordless Ring Scanner than the one whose Friendly Name is saved under SocketScan Advanced settings.	Disconnect and reconnect your scanner or close and restart SocketScan.

APPENDIX H
TECHNICAL SUPPORT

If you have trouble installing or using the *Bluetooth* CRS, Socket has different support options to help you.

Online Knowledge Base: Search for articles, Frequently Asked Questions or Hot Topics any time, day or night.
www.socketmobile.com/support   Click on **FAQs**.

Online Requests: Register your product and submit a question to our Technical Support Team.
www.socketmobile.com/support/support/login.asp

By Phone: Contact our Tier 1 Technical Support by calling either:
* USA & Canada Toll-Free: 800-279-1390
* Direct: +1- 510-933-3020

LIMITED WARRANTY

Socket Mobile, Inc. (Socket) warrants this product against defects in material and workmanship, under normal use and service, for one (1) year from the date of purchase:

EXCLUDES: Consumables such as batteries, removable cables, cases, straps, chargers, and CF-to-PC Card adapters (90 day coverage only)

An enhanced service policy is available separately for the *Bluetooth* Cordless Ring Scanner. For more information, visit: www.socketmobile.com/support

Incompatibility is not a defect covered by the Socket warranty. During the warranty period, Socket will, at its option, repair or replace the defective product at no charge when furnished with proof of retail purchase, provided that you deliver the product to Socket or to an authorized Socket Service Center.

The returned product must be accompanied by a return material authorization (RMA) number issued by Socket or by a Socket Authorized Service Center. If you ship the product, you must use the original container or equivalent and you must pay the shipping charges to Socket. Socket will pay surface shipping charges back to any location in the contiguous United States. This warranty applies only to the original retail purchaser and is not transferable.

Socket may, at its option, replace or repair the product with new or reconditioned parts and the returned product becomes the property of Socket. Socket warrants the repaired or replaced products to be free from defects in material or workmanship for ninety (90) days after the return shipping date, or for the remainder of the original warranty period, whichever is greater.

This warranty does not cover the replacement of products damaged by abuse, accident, misuse or misapplication, nor as a result of service or modification other than by Socket. This warranty is void if you install a battery into the product that was not supplied by Socket Mobile.

SOCKET IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING DAMAGE TO PROPERTY AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURY. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Some states do not allow limitation of implied warranties, or the exclusion or limitation of incidental or consequential damages, so that the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

This product may contain fully tested, recycled parts, warranted as if new.
For warranty information, please visit: www.socketmobile.com/support

LIMITED SOFTWARE WARRANTY

LIMITED WARRANTY. Socket Mobile, Inc. (Socket) warrants that the original disk or CD ROM is free from defects for 90 days from the date of delivery of the SOFTWARE.

CUSTOMER REMEDIES. The entire liability of Socket and your exclusive remedy shall be, at the option of Socket, either (a) return of the price paid or (b) replacement of the SOFTWARE which does not meet the Socket Limited Warranty and which is returned to Socket with a copy of your receipt. Any replacement SOFTWARE will be warranted for the remainder of the original warranty period or 30 days, whichever is longer. THESE REMEDIES ARE NOT AVAILABLE OUTSIDE OF THE UNITED STATES OF AMERICA.

NO OTHER WARRANTIES. Socket disclaims all other warranties, either express or implied, including but not limited to implied warranties of merchantability and fitness for a particular purpose, with respect to the SOFTWARE and the accompanying written materials. This limited warranty gives you specific legal rights. You may have others which vary from state to state.

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GOVERNMENT END USERS. If the SOFTWARE is supplied to the U. S. Government, the SOFTWARE is classified as "restricted computer software" as defined in clause 52.227-19 of the FAR. The U. S. Government 's rights to the SOFTWARE are as provided in clause 52.227-19 of the FAR.

CONTROLLING LAW AND SEVERABILITY. This License shall be governed by the laws of the United States and the State of California. If for any reason a court of competent jurisdiction finds any provision, or portion thereof, to be unenforceable, the remainder of this License shall continue in full force and effect.

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REGULATORY COMPLIANCE

The *Bluetooth* Cordless Ring Scanner is designed to be compliant with the rules and regulations in locations where they are sold and will be labeled as required. This product is type approved — users are not required to obtain license or authorization before using.

This product has been certified as conforming to technological standards. Therefore, the following actions are punishable by law:
- Disassembly or modification of this product
- Removal of identification labels on the back of the product

The frequency used by this product is also used by industrial, scientific and medical devices, such as microwave ovens, as well as wireless detectors for motion detectors, such as those requiring licenses used on manufacturing lines or similar radio transmitters (all of these wireless devices will be called "other wireless transmitters" below). Most modern electronic equipment (e.g., in hospitals and cars), is shielded from RF energy. However, certain electronic equipment is not.

1. Please ensure that all medical devices used in proximity to this device meet appropriate susceptibility specifications for this type of RF energy.

2. In the unlikely event that there is electronic interference between this system and other wireless transmitters, quickly change the location of operation or stop operating the unit (cease signal transmission).

3. If other electrical interference or related problems occur, contact Socket technical support at www.socketmobile.com/support/support/new

Radio Frequency Interference Requirements
This device complies with part 15 of the FCC rules and Industry Canada Radio Standard RSS 210. Operation is subject to the following 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.

This equipment is also ETS EN300 328, ETS EN301 489-1 and ETS EN301 489-17 compliant. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his or her own expense.

This equipment generates and radiates radio-frequency energy. To comply with FCC RF exposure compliance requirements, the following antenna installation and device operating configurations must be satisfied: (1) Users are not permitted to make changes or modify the system in any way, and (2) connecting external antennas to the Cordless Ring Scanner is prohibited. This device and its antenna must not be co-located or operated with any

other antenna or transmitter. End-users and installers must be provided with installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

To comply with Industry Canada RF exposure compliance requirements, the following antenna installation and device operating configurations must be satisfied: "The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, available at www.hc-sc.gc.ca/ehp/ehd/catalogue/rpb.htm"

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 may try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna of the radio or television.
- Increase the distance separating the equipment and the receiver.
- Connect the equipment to an outlet on a different branch circuit than that of the receiver.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet helpful: *How to Identify and Resolve Radio-TV Interference Problems.* This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402.

Radio Frequency Interference Requirements – Canada
This Class B digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la Classe B respecte toutes les exigencies du Reglement sur le Matériel Brouilleur du Canada.

CE Marking & European Union Compliance
Products intended for sale within the European Union are marked with a CE Mark which indicates compliance to applicable Directives and European Normes (EN), as follows. Amendments to these Directives or ENs are included: Normes (EN), as follows:

Applicable Directives:
- Radio and Telecommunications Terminal Equipment Directive 1999/5/EC
- Low Voltage Directive 73/23/EEC

Applicable Standards:
- ETSI EN 301 489-17 V 1.5.1 (2004-11) – Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific Conditions for 2.4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment.
- ETSI EN 300 328 V1.6.1 – Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2.4 GHz ISM band and using wide band modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive.

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- EN61000-4-2 – Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment, Part 2: Electrostatic Discharge Requirements.
- EN61000-4-3 – Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment, Part 3: Radiated Electromagnetic Field Requirements.

LASER DEVICE:
The Socket bar code scanning product(s) described in this User Guide contain a Symbol SE955 laser scan engine.

For the Class 1 version of this engine, the following applies:

- Complies with 21CFR1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

- Complies with IEC60825-1:2001-08

- Class 1 Laser devices are not considered to be hazardous when used for their intended purpose. The following statement is required to comply with US and international regulations:

Caution: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

A label such as the one below should appear on the end product.

CLASS 1 LASER PRODUCT
LASER KLASSE 1
APPAREIL À LASER DE CLASSE 1
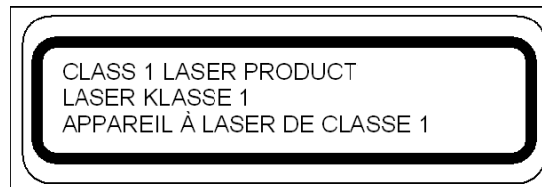
Example of Class 1 Laser Warning Label

For the Class 2 version of this engine, the following applies:

- Complies with 21CFR1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.
- Complies with IEC60825-1:2001-08

- Class 2 laser scanners use a low power, visible light diode. As with any very bright light source, such as the sun, the user should avoid staring directly into the light beam. Momentary exposure to a Class 2 laser is not known to be harmful.

Caution: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

A label such as the one below should appear on the end product.

```
LASER EMITTED FROM THIS APERTURE
CAUTION - LASER LIGHT.
DO NOT STARE INTO BEAM.
IEC CLASS 2 LASER PRODUCT
630nm-680nm, 1.0mW LASER
----------------------------------------------------------------
ACHTUNG LASERSTRAHL, LASERKLASSE 2,
NICHT IN DEN STRAHL BLICKEN
LUMIERE LASER – NE PAS REGARDER DANS
LE FAISCEAU
APPAREIL A LASER DE CLASSE 2.
```

Example of Class 2 Laser Warning Label

Battery Warning:
- Your device contains a rechargeable Lithium-Ion battery. Never throw the battery into a fire, as that could cause the battery to explode.
- Never short-circuit the battery by bringing the terminals in contact with another metal object. This could cause personal injury or a fire, and could also damage the battery.
- Never dispose of used battery with other ordinary solid wastes. Batteries contain toxic substances.
- Dispose of used battery in accordance with the prevailing community regulations that apply to the disposal of batteries. Cover the metal terminals with insulating tape. (This is to prevent accidental short-circuiting).
- Never expose the battery to any liquid.
- Always keep the battery out of reach of infants or small children.
- Never shock the battery by dropping it or throwing it.
- Dispose of a spent or damaged battery promptly.

Product Disposal
Your device should not be placed in municipal waste. Please check local regulations for disposal of electronic products.

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