socket™
Increasing Mobile Productivity

Quick Start Guide

Cordless Ring Scanner 9P

with *Bluetooth*® Wireless Technology

INTRODUCTION

The Socket Cordless Ring Scanner (CRS) is a unique wearable device that lets you keep your hands free while scanning bar codes into a *Bluetooth* enabled Pocket PC or Windows XP desktop, notebook or tablet computer.

The first product of its kind with a built-in wireless communicator, the CRS combines the power of laser bar code scanning with the convenience of *Bluetooth* wireless technology in a comfortable, hands-free solution that makes scanning as simple as pointing your finger.

"Fuzzy logic" technology enables the CRS to scan even damaged, poor quality or hard to read bar codes. Socket's *Error Proof Protocol*™ ensures that data is correctly received by the host computer.

SocketScan™ keyboard emulation software directs scanned data into any Windows program, so you can use the CRS with your favorite application. Also included is Socket Connect!Agent™ software, which automatically configures and manages the *Bluetooth* wireless connection, requiring no interaction from the user.

System Requirements

Your computer should satisfy these minimum requirements:

- Any of the following operating systems:
  - Windows Mobile 2003, 2003SE or 5.0
  - Windows XP or XP Tablet Edition
- Any of the following *Bluetooth* stacks*:
  - Socket Drakar v1.4 (from Socket SD/CF Connection Kits)
  - IVT BlueSoleil version 1.6.1.4 (from Socket CF/USB Connection Kits)
  - Broadcom (Widcomm) v1.4
  - Microsoft *Bluetooth* stack for Windows Mobile
  - Microsoft Windows XP Service Pack 2
  - Toshiba *Bluetooth* stack 3.03.06 or greater for Windows XP
- *Windows Mobile*: Software installation requires ActiveSync 4.0 or greater. Download it free from: www.socketcom.com/activesync.

**Other stacks may be compatible but have not been tested by Socket. For Windows XP, only the Microsoft and IVT Bluetooth stacks are compatible with the optional Socket Connect!Agent software.*

Package Contents

- Ring scanner (C)
- Wrist unit (A) with attached cable (B)
- Wrist unit case (D)
- Wrist strap (E)
- Finger strap (F)
- 2 adhesive Velcro strips (G)
- Rechargeable 3.7V lithium-ion battery
- Battery charger
- CD with software and user documentation

Product Registration

We highly recommend that all customers register their Socket products. Registered users receive the following benefits:

- Priority for technical support
- Special offers for future products and upgrades
- The latest new product information

Register online at: www.socketcom.com/prodreg

About This Quick Start Guide

This *Quick Start Guide* contains only the most basic setup instructions for the Socket Cordless Ring Scanner. For more complete information, please refer to the *User's Guide*, available in the *Docs* folder of the installation CD and online at: www.socketcom.com/support/support_cordless.asp.

In the Socket software, the abbreviation "CS" refers to both the Socket Cordless Ring Scanner and Socket Cordless Hand Scanner. Please be aware that the products described in this manual may change without notice.

Third-Party Applications

For information about third-party applications compatible with the CRS for asset tracking, warehouse mobility, field force automation and other vertical markets, please visit: www.socketcom.com/solutions/default.asp?Type=Vertical

Technical Support

If you have trouble installing or using the CRS, contact Socket technical support by first registering your product at www.socketcom.com/prodreg.

After product registration, log in, click on the Technical Support tab, and click New Trouble Ticket to submit an online request for technical support.

Afterwards, you can log in anytime to track the progress of your request. If we are unable to resolve your support inquiry online, we can arrange for a technical support representative to call you at a specific time.

HARDWARE PREPARATION

Charging and Installing the Battery

1. The battery must be charged before initial use, using the included Socket charger. The Charging LED will be yellow during charging. After approximately 4 hours, the battery will reach full charge, indicated by a green Charging LED.

   Do not use the charger with other types of batteries. A fully charged battery should provide at least 10,000 scans and more than 8 hours of operation.

2. Slide the switch at the bottom of the wrist unit to unlock the battery door. Insert the battery so that the battery contacts align with the contacts inside the wrist unit, then close and lock the battery door.

WARNING: Do not insert the battery backwards or upside-down. Damage may result.

You can check the battery level by viewing the CS HW screen of the SocketScan settings utility. The utility will report the battery level only when the CRS is connected to your mobile computer.

About the Cable Break Away

The CRS is designed to break away from the hand if subjected to unusual force. This break away feature is designed to reduce the possibility or extent of injury to the body in the event the CRS becomes entangled in industrial equipment.

If the cable breaks away from the ring scanner during use, simply plug it back in to resume operation.

Note: Whenever the cable disconnects from the ring scanner, it will beep 3 times.

Assembling and Putting on the CRS

You can put on the CRS either with or without the case. If you choose not to use the case, the plastic parts of the wrist unit will be more susceptible to abuse.

How to put on the CRS with the wrist unit case

1. Insert the wrist unit into the case, pulling the cable through the hole at the top of the case. During insertion, you may hear a beep and see the LED flicker, because the power button was pressed, however, the wrist unit will not turn on unless the button was pressed for more than 2 seconds, and the LED continues blinking.

2. Connect the free end of the cable to ring scanner.

3. Attach the finger strap to the bottom of the ring scanner.

4. Put on the wrist strap. Adjust it for a secure and comfortable fit.

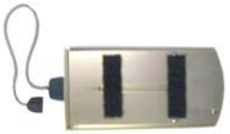
5. Put the ring scanner on your index finger, adjusting the finger strap for a secure and comfortable fit.

6. Attach the wrist unit case to the wrist strap, by pressing the Velcro together.

How to put on the CRS without the wrist unit case

Note: After you stick the Velcro strips to the wrist unit, the wrist unit will no longer fit in the case, unless the Velcro strips are removed.

1. Stick the 2 adhesive Velcro strips to the back of the wrist unit. Do not space the strips too far apart. Note the size of the Velcro on the wrist strap.



2. Connect the free end of the cable to the ring scanner.

3. Attach the finger strap to the bottom of the ring scanner.

4. Put on the wrist strap. Adjust it for a secure and comfortable fit.

5. Put the ring scanner on your index finger, adjusting the finger strap for a secure and comfortable fit.

6. Attach the wrist unit to the wrist strap, by pressing the Velcro together.

SETUP FOR WINDOWS MOBILE

Follow these instructions to set up the Socket Cordless Ring Scanner for use with a *Bluetooth* enabled Pocket PC or other mobile computing device running Windows Mobile 2003, 2003SE or 5.0

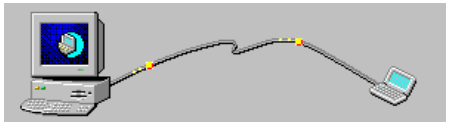
Before you begin the instructions below, make sure you have charged and installed the battery, as explained on page 4.

STEP 1: Install the Software

You must install SocketScan, but installing Connect!Agent is optional.

1. Delete any bar code scanning software already installed in your device, including software from other companies. Make sure the software is closed. Tap Start | Settings | System tab | Remove Programs. Use the utility to delete the software.

2. Use ActiveSync and a serial/USB cable or cradle to make an active connection between your mobile computing device and a host PC. ActiveSync should report "Connected," and the ActiveSync icon should turn green.



IMPORTANT: ActiveSync 4.0 or greater is required.

3. Insert the SocketScan installation CD into the CD drive of your host PC.

4. Use My Computer or Windows Explorer to access your CD drive. In the CD contents, open the SocketScanCE folder and click on the Setup.exe file.

5. The installation wizard will launch. Follow the wizard to install the software.

6. After software installation, your device will direct you to soft reset. Tap ok. Remove the device from the cable/cradle and press the reset button.

7. If desired, install Connect!Agent. Re-establish the ActiveSync connection. Open the Connect!Agent folder in the CD and launch the Connect!AgentSetup.exe file. Follow the wizard to install the software.

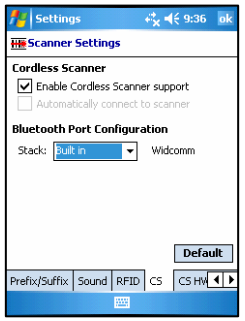
STEP 2: Configure Scanner Settings

1. Tap Start | Settings | System tab | Socket Scanner Settings.

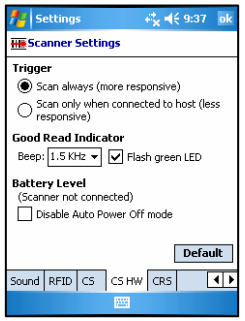
   Alternatively, tap Start | Programs | SocketScan. Go to the Today screen. Tap the SocketScan icon at the bottom of the screen. In the pop-up menu, tap Settings.

2. Tap on the CS tab at the bottom of the screen. Check Enable Cordless Scanner support.

   Under *Bluetooth* Port Configuration, select Connect!Agent if you installed it and want to use it. Otherwise, if your device has a built-in *Bluetooth* radio, your *Bluetooth* stack will be reported (e.g., Widcomm). Select Socket if you are using the Socket SD/CF *Bluetooth* card.

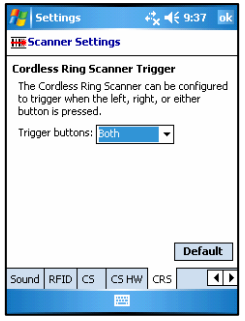


3. Tap on the CS HW tab. Enter the following settings:
   - Trigger: Select whether you would like the CRS to scan only when a *Bluetooth* connection to the device is detected. If you require the CRS to detect a *Bluetooth* connection before each scan, scanning will be a few milliseconds slower.
   - Good Read Indicator: Select how you would like the CRS to indicate that it has successfully read data.
   - Battery Level: No progress bar should appear since you are not connected to the CRS.
   - Disable Auto Power Off mode: The CRS automatically shuts off if there is no *Bluetooth* connection for 20 minutes. Check to disable.



4. Tap on the CRS tab. Select which button on the CRS you would like to use to trigger the scanner.

5. After entering settings, tap ok to save the changes.



STEP 3: Connect CRS to Host Device with *Bluetooth*

1. Turn on the CRS. Press the small power button on the side of the wrist unit for at least 2 seconds, until you hear a beep. The *Bluetooth* status LED on the wrist unit should be blinking blue.

2. **Turn on the *Bluetooth* radio of your mobile device**. Refer to your device manual for instructions.

3. If you did not install Connect!Agent, make sure a COM port is enabled for outbound *Bluetooth* serial communication. Refer to your device manual.

4. Tap Start | Programs | SocketScan.

   Disregard the icons for Socket Trigger RFID, Socket Trigger Scan, and Socket Trigger Select.

5. Tap on the SocketScan icon at the bottom of the screen. In the pop-up menu, tap Connect CS.

   Your mobile device cannot connect to the CRS if another device is set as the default Bluetooth serial device.

   If Connect CS does not appear, tap Settings in the menu, tap on the CS tab, and enable cordless scanner support.

6. Your device will begin searching for the CRS.

   - If you installed Connect!Agent, your mobile device will automatically search for and connect to the CRS. A beep will indicate the connection.

   - If you did not install Connect!Agent, your device's *Bluetooth* software will search for devices. In the list of found *Bluetooth* devices, select Socket CRS. The device will connect to the CRS, indicated by a beep.

     The six characters following the device name are the last six characters of the Bluetooth MAC address.

     If using the Broadcom (Widcomm) stack, you will be prompted to configure automatic connections.

     If a passkey is requested, enter 1234.

7. After your mobile device connects to the CRS, the SocketScan icon at the bottom of the Today screen will change into a ring icon to indicate the connection.

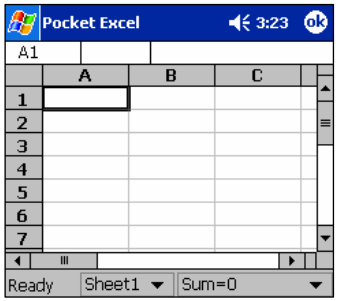
   Connect!Agent will save information about the CRS to automate future connections to your specific unit.

STEP 4: Assemble and Put on the CRS

Please refer to the instructions on pages 5-6.

STEP 5: Scan Data into Your Application

1. Start the Windows application that you want to enter scanned data into (e.g., Excel, Notepad, etc.). Make sure a document or spreadsheet is open.



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

3. 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. Please refer to the *User's Guide* for scanning tips.

   When data is read and sent to the mobile computing device, 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.

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

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

   - *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.*

   - *If your mobile device suspends or the CRS moves out of range, the connection will end. After the mobile device turns on again or returns in range, SocketScan will try to re-connect 3 times. If, after the 3 attempts, they have not re-connected, you will need to manually re-connect the devices.*

   - *To turn off the CRS, press the power button on the wrist unit for at least 2 seconds, until you hear 2 beeps.*

SETUP FOR WINDOWS XP

Follow these instructions to set up the Socket Cordless Ring Scanner for use with a *Bluetooth* enabled notebook, tablet, or desktop computer running Windows XP or XP Tablet Edition.

Before you begin the instructions below, make sure you have charged and installed the battery, as explained on page 4.

STEP 1: Install the Software

You must install SocketScan, but installing Connect!Agent is optional.

1. Delete any bar code scanning software already installed in your computer, including software from other companies. Make sure the software is closed. Click Start | Control Panel | Add or Remove Programs. Use the utility to delete the software.
2. Insert the SocketScan installation CD into the CD drive of your computer.
3. Use My Computer or Windows Explorer to access your CD drive. In the CD contents, open the SocketScanXP folder and click on the Setup.exe file.

4. The installation wizard will launch. Follow the wizard to install the software.
5. After software installation, icons for SocketScanXP and Socket CS Connect will appear on your desktop.

6. If desired, install Connect!Agent by opening the Connect!Agent folder in the CD and launching the Connect!AgentXPSetup_S.exe file. Follow the wizard to install the software.

Note: Connect!Agent is only compatible with the Socket (IVT) BlueSoleil and Microsoft Bluetooth stacks.

STEP 2: Configure *Bluetooth* Settings

Skip this step if you installed and want to use Connect!Agent, which automatically configures the *Bluetooth* settings. For Windows XP, Connect!Agent works only with the Socket (IVT) and Microsoft *Bluetooth* stacks.

If you are not using Connect!Agent, follow the instructions for your *Bluetooth* stack. This step is needed only the first time you connect the CRS to your PC.

Socket Connection Kit with IVT BlueSoleil software (CF or USB):

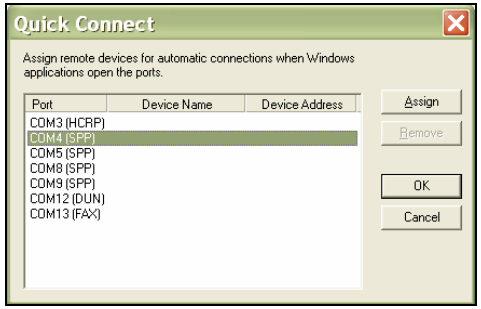
1. Turn on the Cordless Ring Scanner. Press the small power button on the side of the wrist unit for at least 2 seconds, until you hear a beep. The *Bluetooth* status LED on the wrist unit will start blinking blue.
2. Insert the Socket card into your computer, using a CF-to-PC Card adapter, or insert the USB Adapter into the USB port.
3. Start BlueSoleil. Click on the BlueSoleil icon on your desktop, or click Start | All Programs | IVT BlueSoleil | BlueSoleil.
4. Click My Bluetooth | Security. Check the box Set Default Passkey and enter the default PIN 1234 in the field below.
5. Double-click on the red ball to search for the Cordless Ring Scanner, which will appear as Socket CRS [xxxxxx].

The characters in brackets are the last 6 characters of the scanner's Bluetooth MAC address.

6. Double-click on the Socket CRS icon to begin the service discovery. After the Serial Port Service icon is highlighted at the top of the screen, right-click on the Serial Port Service icon and click Connect.

7. When the devices connect, the CRS will beep once, and the *Bluetooth* logo in the task tray will turn green.

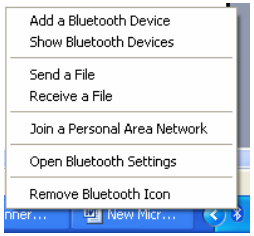
8. Click Tools | Configurations | Quick Connect. Choose a COM port assigned to SPP (Serial Port Profile) and click Assign. In the next screen, select the CRS and click OK. **Remember which COM number you assigned to the CRS** and click OK.



Microsoft Windows XP Service Pack 2:

Refer to the documentation for your *Bluetooth* hardware/software for instructions on discovering and connecting to the CRS.

1. Turn on the Cordless Ring Scanner. Press the small power button on the side of the wrist unit for at least 2 seconds, until you hear a beep. The *Bluetooth* status LED on the wrist unit will start blinking blue.
2. Turn on the *Bluetooth* radio of your computer.
3. Use the Add Bluetooth Device Wizard to discover and connect to the Cordless Ring Scanner. Click on the *Bluetooth* icon in the task tray. In the pop-up menu, click Add a Bluetooth Device.



4. During the device discovery, the Cordless Ring Scanner will appear as Socket CRS [xxxxxx]

   The characters in brackets are the last 6 characters of the scanner's Bluetooth MAC address.

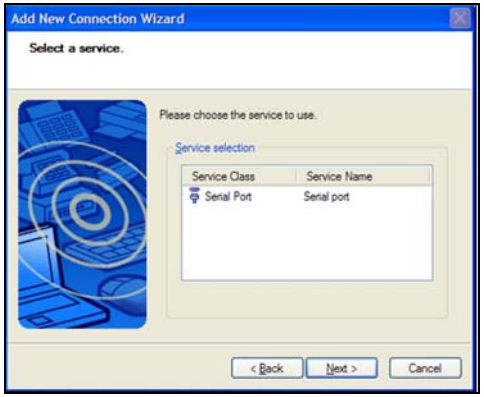
5. In the passkey options screen, select the option Let me choose my own passkey and enter a passkey of your choice.
6. To indicate the connection, the CRS will beep once.
7. In the last screen of the Add Bluetooth Device Wizard, note the COM number of the Outgoing COM port.

Toshiba Bluetooth Stack:

These instructions are based on a Motion Computing tablet. Refer to the manual for your *Bluetooth* hardware/software for specific *Bluetooth* usage instructions.

1. Turn on the *Bluetooth* radio of your computer. Tap on the Dashboard icon on the desktop. In the dashboard, check Enable Internal Bluetooth Wireless Radio. Tap OK.
2. Turn on the Cordless Ring Scanner. Press the small power button on the side of the wrist unit for at least 2 seconds, until you hear a beep. The *Bluetooth* status LED on the wrist unit will start blinking blue.
3. Double-tap on the *Bluetooth* icon at the bottom of your screen.
4. In *Bluetooth* Settings, tap New Connection at the bottom of the screen.
5. The Add New Connection Wizard will launch. Select Custom Mode and tap Next. The tablet will begin searching for *Bluetooth* devices in range.

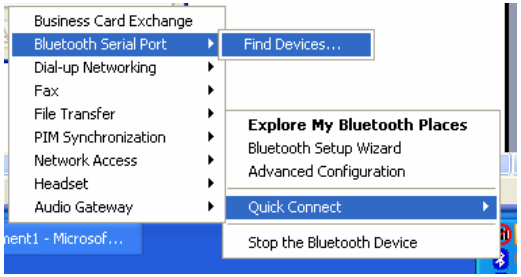
6. In the list of found devices, select Socket CRS [xxxxxx]. Tap Next.
7. If a passkey is requested, enter the default PIN 1234. Tap OK. To indicate the connection, the CRS will beep once.
8. In the list of device services, select Serial Port. Tap Next.



9. Note which COM port is assigned to the CRS.

Broadcom (Widcomm) Bluetooth Stack:
Refer to the manual for your *Bluetooth* hardware/software for specific instructions. Many *Bluetooth* USB adapters use this stack.

1. Turn on the *Bluetooth* radio of your computer.
2. Turn on the Cordless Ring Scanner. Press the small power button on the side of the wrist unit for at least 2 seconds, until you hear a beep. The *Bluetooth* status LED on the wrist unit will start blinking blue.
3. Perform a Quick Connect to a *Bluetooth* Serial Port. Click the *Bluetooth* icon in the task tray. Click Quick Connect | Bluetooth Serial Port | Find Devices.



It is essential to connect to the CRS via Quick Connect because this sets the CRS as your default Bluetooth serial device.

4. During the device search, the CRS will appear as Socket CRS [xxxxxx]

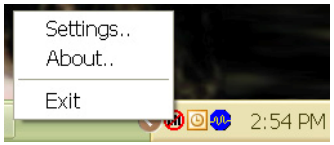
   The characters in brackets are the last 6 characters of the scanner's Bluetooth MAC address.

5. If a passkey is requested, enter 1234. To indicate the connection, the CRS will beep once.

   By default, the Bluetooth software will ask you for the passkey each time you connect. To stop the automatic prompts, 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.

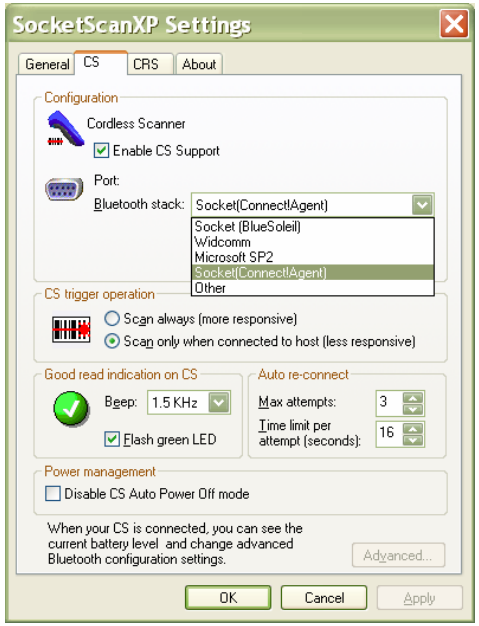
STEP 3: Configure Scanner Settings

1. Click the SocketScan icon at the bottom of the screen. In the pop-up menu, click Settings.



   If the icon does not appear, open SocketScan by clicking on the SocketScan XP icon on the desktop.

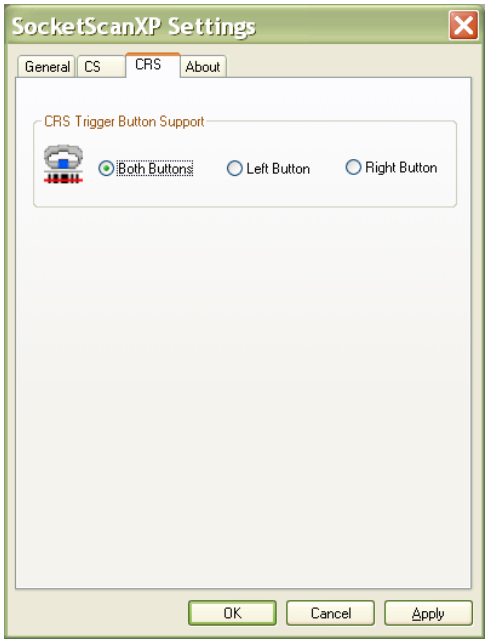
2. Tap on the CS tab. Enter the following settings:



- Enable CS support: Check this box. IMPORTANT!!!
- Bluetooth stack: Select Connect!Agent if you want to use it. Otherwise, select your computer's *Bluetooth* stack. The Connect!Agent option will only appear if you installed the Connect!Agent software.
- COM Port: Select the COM port number assigned to the CRS. This field will only appear for some *Bluetooth* stacks.
- CS trigger operation: Select whether you want the CRS to scan only when a *Bluetooth* connection to the device is detected. If you select Scan only when connected to host, scanning will be a few milliseconds slower.

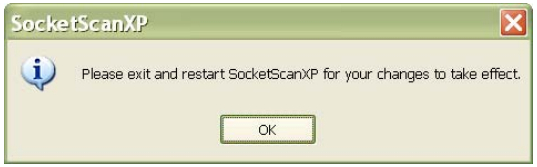
- Good read indication on CS: Select how you would like the CRS to indicate that it has successfully read data.
- Auto re-connect: Select the maximum number of attempts and time limit per attempt for the CRS to try to reconnect to your computer in case they are moved out of range from each other.
- Battery Level: No progress bar should appear since you are not connected to the CRS.
- Power management: The CRS automatically shuts off if there is no *Bluetooth* connection for 20 minutes. Check to disable.

3. Click on the CRS tab. Select which button on the CRS you would like to use to trigger the scanner.



4. After entering settings, click OK to save the changes.

5. You will be prompted to exit and restart SocketScan. Click OK.



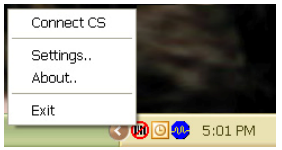
6. Click on the SocketScan icon at the bottom of your screen and in the pop-up menu, click Exit.

STEP 4: Start SocketScan and Connect to CRS

1. If you did not install Connect!Agent, start your computer's *Bluetooth* software and make sure the *Bluetooth* radio is turned on.

2. Start SocketScan XP. Click on the icon on the desktop.

3. Right-click the SocketScan icon at the bottom of the screen and click Connect CS.



If you installed Connect!Agent, it will automatically open the Bluetooth software and turn on the Bluetooth radio when you click Connect CS.

After you configure the correct Bluetooth hardware settings in SocketScan, the Connect CS menu option allows you to connect to the CRS directly from SocketScan, instead of manually connecting via your Bluetooth software.

The Connect CS option will not appear unless you checked the box Enable CS Support in the SocketScanXP settings.

SocketScan will not be able to connect to the CRS if you have another device assigned as your favorite or default Bluetooth serial device.

4. If you are using Connect!Agent, and this is your first time connecting, it will automatically search for the CRS and configure the connection.

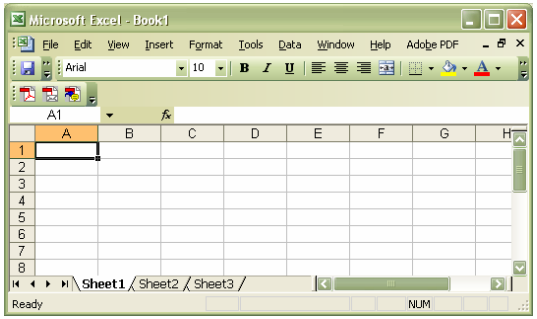
5. SocketScan will connect the computer to the CRS, indicated by a beep. The task tray icon at the bottom of your screen will change to indicate the connection.

STEP 5: Assemble and Put on the CRS

Follow the instructions on pages 5-6. You can use the CRS either with or without the module case.

STEP 6: Scan Data into Your Application

1. Start the Windows application that you want to enter scanned data into (e.g., Excel, Notepad, etc.). Make sure a document or spreadsheet is open.



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

3. 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. See the *User's Guide* for scanning tips.

When data is read and sent to the mobile computing device, 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.

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

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

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.

If your computer suspends or the CRS is moved out of range, the connection will be lost. After the computer 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.

To end the connection, click on the SocketScan icon and click Disconnect CS.

To turn off the CRS, press the power button on the wrist unit for at least 2 seconds, until you hear 2 beeps.

HARDWARE AND SOFTWARE INDICATORS

Battery Charger LEDs

LED	LED Activity	Meaning
Power	Red	Plugged into valid power source
Charging	Yellow	Charging
	Green	Battery is fully charged

Scanner LED

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

Wrist Unit LEDs

LED	LED Activity	Meaning
Bluetooth Status	Blinking blue every second	*Bluetooth* radio is on, no connection
	Blinking blue, every 5 seconds	*Bluetooth* connection
Battery Status	Blinking Red	20% battery capacity remaining
	Solid Red	10% battery capacity remaining
	Off	Off or Good Battery status

Wrist Unit Beeps

Beep Pattern	Meaning
1 beep	*Bluetooth* connection to host device has begun or power on
2 beeps	*Bluetooth* connection to host device has ended or power off
1 beep (optional setting)	Data successfully scanned and sent to host device
3 beeps	Cable disconnected from wrist unit

SocketScan Icon *For Pocket PCs, it appears at the bottom of the Today screen.*

Icon	Meaning
	The CRS is not connected to the host device
	The CRS is connected to the host device

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 5/2006 Printed in U.S.A.