

ultra-rugged

Using the Socket Communications® Bluetooth® Cards and Drivers with the Field PC

An addendum to the user's guide that came with your Socket Communications kit

In this document

This addendum is designed to be a supplement to the user's guide that came with your Bluetooth card. (To view the user's guide online, visit Socket Communication's website at *www.socketcom.com.*) Refer to this addendum to learn how to—

- Install the Bluetooth drivers that came with your card
- Install the latest Field PC operating system
- Use GPS Manager to connect with a GPS receiver that uses Bluetooth technology

This document also provides a few tips for using a Bluetooth CF or SD card with the Field PC. Learn—

- How deactivating Bluetooth before you suspend (turn off) the Field PC helps prevent error messages
- Why you should wait a few seconds after resuming (turning on) the Field PC before using Bluetooth
- How to connect two Bluetooth COM devices to the Field PC

Install qualified Bluetooth drivers

We recommend installing drivers from Socket Communications to make your Socket Bluetooth CF or SD card most functional. To load the Socket Communications drivers, do one of the following:

- If the system requirements on the installation CD that came with your kit state support for Microsoft[®] Windows Mobile[®] 5.0 (CD revision K or later), install the drivers on the CD.
- If the system requirements on the CD do not state support for Windows Mobile 5.0, download the latest drivers from the Socket Communications website at http://www.socketcom.com.

Install the latest Field PC operating system

We recommend using the latest Field PC operating system (1.03 or higher) with the Socket Communications CF or SD card for Bluetooth technology. If the Field PC does not have the latest operating system, download it from *http://ultraruggedfieldpc.com*.

Use GPS Manager with Bluetooth GPS Receivers

If you are connecting to a GPS receiver that uses Bluetooth technology with NMEA protocol, we recommend using the GPS Manager utility in Windows Mobile 5.0 to manage your Bluetooth connection. GPS Manager automatically ends the GPS connection when the Field PC is suspended (turned off) and re-establishes the GPS connection when the device is resumed (turned on).

Note: GPS Manager only works with GPS receivers outputting NMEA protocol GPS data. Other GPS protocols, such as TSIP and SiRF, must be managed by specific GPS applications.

Before you can use the GPS manager, you need to discover your device and figure out COM port assignments, as outlined below. These steps are also outlined in Socket Communications' user's guide.

Part 1: Discover your device

- 1. Make sure the Bluetooth device is turned on.
- On the Today Screen on the Field PC, tap on the Bluetooth logo icon > Advanced Features > Bluetooth Devices, as shown below.



3. Tap on the Device Discovery icon (the eyeballs), as shown in the image below. Or tap on the Tools menu, and then *Device Discovery*.



 Make sure the Bluetooth devices are still on, and then complete each step of the Bluetooth Device Discovery Wizard, shown in the image below.



Part 2: View COM port assignments

 On the Today screen of the Field PC, tap on the Bluetooth logo icon > Advanced Features > My Bluetooth Device, as shown in the next image.



2. Tap on the COM Ports tab and note which COM port number is assigned to *Bluetooth COM*. In the following figure, COM5 is assigned.

Note: We recommend unchecking all device types and then re-selecting those you need. For example, GPS receivers use Bluetooth COM. The Bluetooth Phone option cannot be deselected.



Part 3: Assign the GPS receiver as a favorite COM port (optional)

1. To eliminate the need to select from a list of devices each time you connect to your GPS

receiver, you can set the receiver as a favorite for a specific COM port. To do this, first tap the Bluetooth icon on the Today Screen and then choose *Advanced Features* > *Bluetooth Devices*.



 Next, tap on the Tools menu, and choose "My Favorites...", as shown below.



- 3. In the COM Ports tab, tap on the "Use the favorite selected above" radio button.
- Select the device name from the "My Favorite COM port device" drop-down list, and then tap OK, as shown in the next image.



Part 4: Use GPS Manager

 On the Field PC, tap Start > Settings > System tab > GPS.



2. In GPS Manager, tap on the Hardware tab. Select the COM port number you recorded in Step 2 of *Part 2: View COM port assignments.*

Note: The baud rate is set automatically. You do not need to adjust the setting.



3. Tap on the Programs tab and set the GPS program port to the lowest available COM port number. Note the number for later reference. In the following image, COM6 is the lowest available COM port number.

Settings 🛛 🔮 🗮 ┥€ 5:17 ok
GPS Settings
Choose the port that programs will use to obtain GPS data. Any program that uses GPS will need to communicate with this port.
GPS program port:
COM6
COM6 COM7 COM8 COM9 GPD1
Programs Hardware Access

4. Tap on the Access tab and check the *Manage GPS automatically (recommended)* option.

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GPS S	Settings			
Window device GPS da box, so GPS da	ws Mobile mai and allows m ata simultaned ome program ata,	nages acces ultiple progr ously. If you s may not be	is to your Gi ams to obta I clear this c e able to ob	PS ain heck tain
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Due eue				_
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- 5. Tap *OK* to save your settings. Close the Settings window.
- In your GPS application, assign the GPS port to the COM port number you selected in Step 3. (Refer to the user's guide that came with the GPS application for more details.)

ArcP	ad - Untitle 🔮 📰 📢 5:18	
GPS Pref	erences	
Protocol	NMEA 0183	•
Port	COM6:	Ŧ
Baud Auton Show Auton	COM6: COM7: COM8: COM9: COM10: COM11: COM12: COM12: COM13: COM14:	▲ =
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The GPS Manager is now set up to manage the NMEA GPS signal.

Note: The Field PC may take a few seconds to re-establish a GPS signal after it is suspended and resumed.

Tips for using Bluetooth with the Field PC

Follow these tips to make the most of your Bluetooth technology.

• Avoid error messages by deactivating Bluetooth before turning off the Field

PC. After suspending and resuming the Field PC, you may get an error message in a software application that says GPS communication has been lost. To prevent this error message, try deactivating the GPS receiver or the COM port in the software application before turning off the Field PC. If you do this, you need to reactivate the device or COM port in the application when you turn the Field PC back on. See the documentation that came with your application for details.

• Wait a few seconds before using Bluetooth after resuming the Field

PC. When you resume (turn on) the Field PC while you are running a thirdparty software application, wait until the Bluetooth logo icon appears on the Today screen and turns blue before resuming Bluetooth communications with the software application.

 Connect two Bluetooth COM devices to the Field PC. In some applications, you can assign two different Bluetooth devices as the favorites on two different COM ports. This option allows you to connect simultaneously to two devices (such as a GPS receiver and a laser range finder) or to switch easily between two devices (such as a base station GPS receiver and a rover GPS receiver).
To assign devices to different COM ports, assign one Bluetooth COM device as the favorite on each of the two COM port numbers. (Refer to the user's guide that came with this kit or to the previous section in this addendum for instructions on assigning favorites to COM ports.) After you have done this, you can access each device using the two COM port numbers in a software application.

For more information

To learn more about using your Bluetooth card, see the user's guide from Socket Communications. For more information about using peripheral devices with your Field PC, see the Field PC user's guide.

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