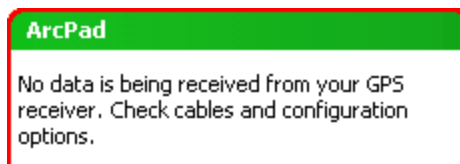
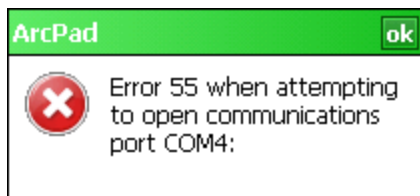


Reason

Sentinel GIS mobile software runs on any hardware supported by ArcPad. This includes a variety of Windows Mobile and Windows devices. Different devices use different GPS settings, including COM port, protocol, and baud. For example, the Archer with a GPS card uses COM3 and a Trimble Juno 3B uses COM4.

These settings are stored in a preferences file called ArcPadPrefs.apx. This file is sent to each handheld from the “Hand-Held Software” path configured in DataLink GIS. (For example, the GPS preferences file for Larviciding is in \Applets\MobileApps\Larviciding.) The ArcPad Preferences file only specifies one setting for GPS Protocol, COM port, and baud rate. This results in GPS not functioning properly on all devices if they use different settings. One of the following error messages may display when Sentinel first starts.



Error 55 indicates that the COM port does not exist on this system. The error that “no data is being received” indicates that the COM port exists, but no GPS data is being received on it.

Solution

The Sentinel GIS Application Manager will manage device GPS connection settings, provided the device type is identified in Windows Mobile settings, and a matching device type is found in the Mobile Application Manager configuration file.

Your field technicians may use a variety of handheld devices that have different GPS connection settings.

Device	Name	Protocol	COM Port	Baud
Juniper Archer with Compact Flash GPS receiver (GlobalSat)	Archer	NMEA	3 ¹	4800
Juniper Archer with Hemisphere XF-101 GPS receiver	Hemisphere	NMEA	3 ²	57600
Juniper Mesa	Mesa	NMEA	7	38400
Trimble Juno SB/SC/3B/3D	Juno_SB_SC	NMEA or SiRF ³	4	4800 for NMEA, 38400 for SiRF
Trimble Nomad L	Nomad	NMEA or SiRF ⁴	2	4800 for NMEA, 38400 for SiRF
Trimble Nomad G	Nomad_G	NMEA or SiRF ⁵	2	9600 for NMEA, 38400 for SiRF
Trimble GeoExplorer	Geo_X	NMEA ⁶	2	4800
Trimble Yuma or other Windows laptop	Generic	NMEA	2	4800 for NMEA
Trimble Pro6H, 6T, XRT	Add to config	NMEA ⁷	Bluetooth port, varies	4800

¹ Requires configuration of GPS in Windows Settings > System > GPS. Otherwise, the COM Port is COM2.

² Requires configuration of GPS in Windows Settings > System > GPS.

³ The Trimble Juno and Nomad receivers use NMEA protocol by default. If Trimble field software is used to connect to the receiver (TerraSync, GPScorrect for ArcPad, GPS Controller), the protocol is automatically switched to SiRF. This will prevent ArcPad and Sentinel GIS from being able to connect to it, unless the receiver's protocol is changed back to NMEA, or the configuration settings for the device are changed to SiRF protocol. For instructions on setting NMEA output, see www.trimble.com/support for Support Notes for a particular device.

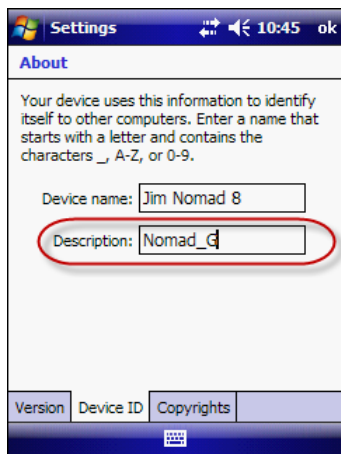
⁴ See footnote 3.

⁵ See footnote 3.

⁶ The GeoExplorer series outputs NMEA on COM2. GeoExplorer 6000 series must have NMEA Option enabled.

⁷ NMEA output over Bluetooth must be configured using Trimble GPS Controller software. See www.trimble.com/support for Support Notes on configuring NMEA output for a particular receiver.

1. On the handheld, go to Start > Settings > System tab. Tap the About shortcut, then tap the Device ID tab. In the *Description* field, enter the device Name from the preceding table. Tap OK to save.



2. When Sentinel GIS starts, it will read the Device ID > Description setting, look for a match in the ElecData.Mobile.ApplicationManager.config file, and upon finding a match, it will set the ArcPad GPS preferences appropriately before starting ArcPad. If it does not automatically connect, continue with the following steps.
3. Locate the ElecData.Mobile.ApplicationManager.config file in the DataLink GIS \Hand-Held Software\Program Files\ElecData path. Open it in a text editor like Notepad or Notepad++. Use caution when editing the .config file. If required formatting is missing, the Sentinel application manager will not start and will throw errors.
4. Locate the **<Device Types>** section. Each device type is entered in the following format:

```

<DeviceType>
  <ID>12</ID>
  <Name>Nomad_G</Name>
  <GPSProtocol>NMEA</GPSProtocol>
  <GPSPort>2</GPSPort>
  <GPSBaud>9600</GPSBaud>
  <AuxPort>1</AuxPort>
  <AuxBaud></AuxBaud>
</DeviceType>

```

The example above is for a Trimble Nomad G. The device name is Nomad_G, and the GPS settings are NMEA, COM2, 9600 baud. The 9-pin COM port (or Auxiliary Port) is COM1. AuxBaud must be configured if using the Adulticiding module.

5. If your device is listed, make note of the Device Name and enter it in the Device settings in Step 1.

6. If your device is not listed, insert it above the **</Device Types>** line, in the format shown above. Increment the **<ID></ID>** tag to the next available number. For example, if the last listed device is ID 15, then enter your new device as **<ID>16</ID>**. In the following example, a new device type has been added for a Bluetooth connection to a Trimble Pro receiver.

```
<DeviceType>
  <ID>16</ID>
  <Name>Pro</Name>
  <GPSProtocol>NMEA</GPSProtocol>
  <GPSPort>7</GPSPort>
  <GPSBaud>4800</GPSBaud>
  <AuxPort></AuxPort>
  <AuxBaud></AuxBaud>
</DeviceType>
```

7. Save any changes that were made to the file, then exit Notepad.
8. Connect each handheld and send files using DataLink GIS.