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Enabling Your Success

Verifying Communication with Model 2005 Azimuth Positioner

This document is intended as a supplement to the *Model 2005 Azimuth Positioner User Manual*; it does not replace the user manual.

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Revision Record | MANUAL,COMMUNICATION WITH MODEL 2005 | Part #399300, Rev. A

Revision	Description	Date
A	Initial Release	November, 2008

Before You Begin

- Read the *Model 2005 Azimuth Positioner User Manual* for complete safety, installation, and operational information.
- Follow the safety, installation, and operational information in the *Model 2005 Azimuth Positioner User Manual*.
- Place the Model 2005 on a desk with nothing attached to it. Define the limits to how far the device can move and do not exceed any physical limits on positions.

Required Components

- *Model 2005 Azimuth Positioner User Manual* – available for download from www.ets-lindgren.com/page/?i=2005
- Personal computer with one serial port (or with a USB-to-serial converter), and installed with one of the Microsoft® Windows® operating systems (2000, XP, or Vista).
- The communication port number assigned to the serial port on your computer. This document uses communication port 4.
- A serial terminal emulator program. See the next page for more information.
- A straight-through serial cable with a female 9-pin connector on one end and a male 9-pin connector on the other end. *Straight-through* indicates that each pin on each end is directly connected. If you are not sure if the cable is straight-through, use an ohm meter or continuity tester to verify.

Serial Terminal Emulator Program

If you have Windows XP or 2000

On the taskbar, click **Start**, point to **All Programs**, **Accessories**, **Communications**, and then click **HyperTerminal**.

If you have Windows Vista

- You will need to install an emulator on the computer. This document uses a free emulator, Termite, but other emulators are available.
- Download and install the free emulator, Termite, from www.compuphase.com/software_termite.htm

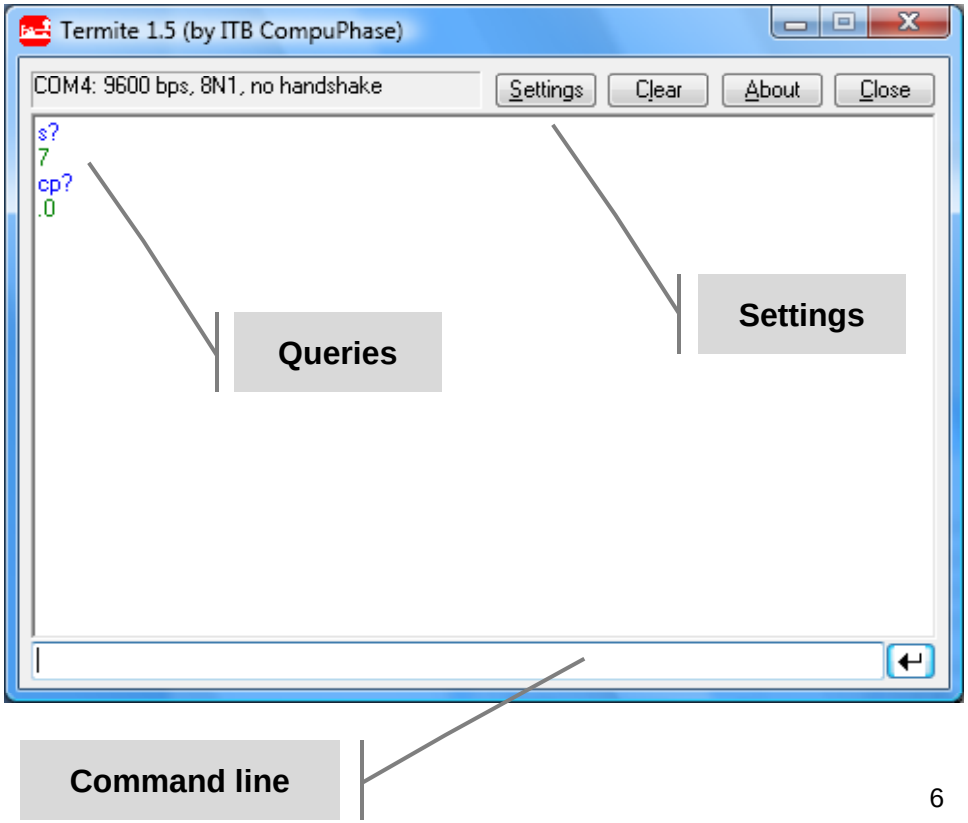
The Model 2005 also works with **EMQuest™ EMQ-100 Antenna Pattern Measurement Software** and **TILE!™**.

Contact **sales@ets-lindgren.com** for information on EMQuest or TILE!.

Using Termite to Verify Communication

Keep your fingers and any loose clothing away from the Model 2005.

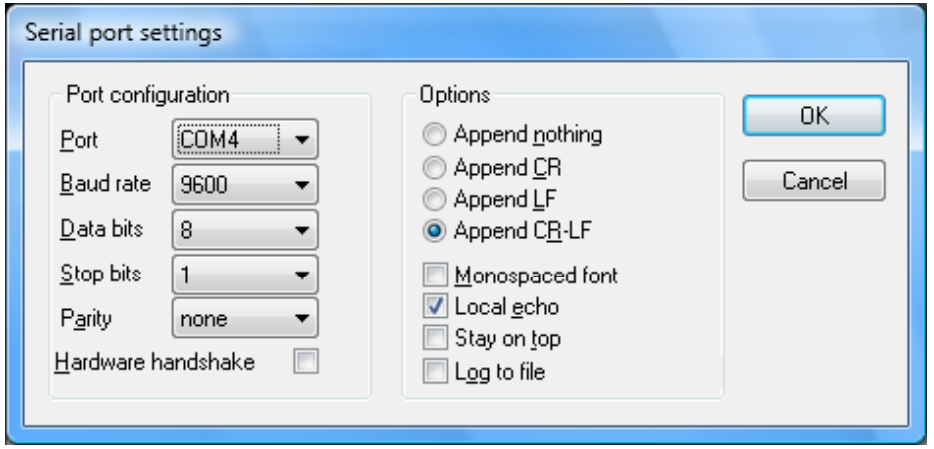
1. Plug the serial cable into the computer, and then plug the other end into the Model 2005.
2. Plug the power cord into the Model 2005.
3. Start Termite.
4. Click **Settings**.



Using Termite to Verify Communication

5. Select these settings for your communication port:

   - **Port:** (As required)
   - **Baud rate:** 9600
   - **Data bits:** 8
   - **Stop bits:** 1
   - **Parity:** none
   - **Hardware handshake:** Unchecked
   - **Append CR-LF:** Selected
   - **Local echo:** Selected



6. Click **OK**.

Using Termite to Verify Communication

7. To test communication, type **s?** in the command line and then press **Enter**. That will query the Model 2005 for the current speed setting.

8. To query the current position, type **cp**? in the command line and then press **Enter**. In the response, your position value will vary. If it returns **.0**, show the device can move by sending an **SK10.0** command. That will move to the 10.0 position.

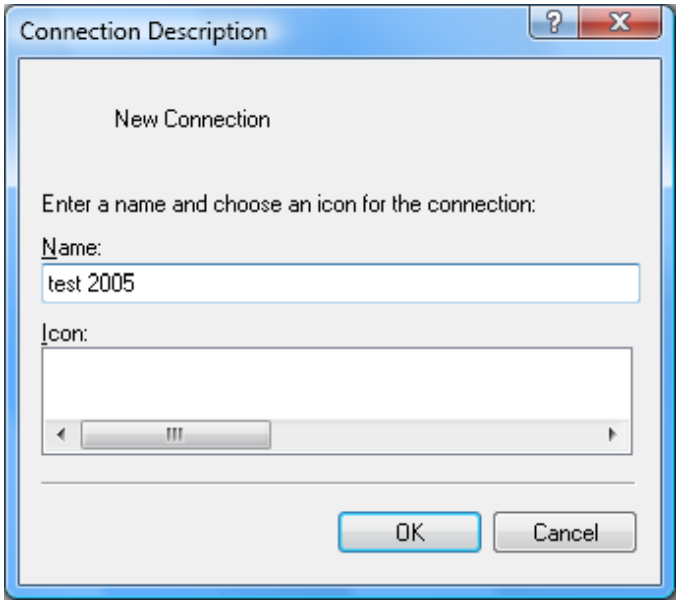
9. You can stop the Model 2005 while moving by sending the **ST** command.

10. Close Termite. Only one program at a time can use the serial port, so close Termite before you access the Model 2005 with other software.

Using HyperTerminal to Verify Communication

Keep your fingers and any loose clothing away from the Model 2005.

1. Plug the serial cable into the computer, and then plug the other end into the Model 2005.
2. Plug the power cord into the Model 2005.
3. Start HyperTerminal and name the new connection.



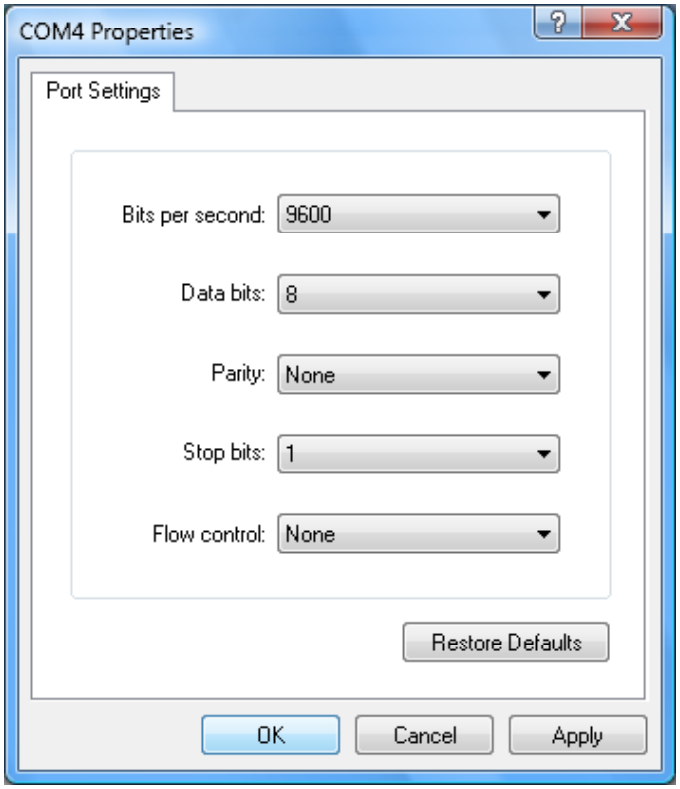
Using HyperTerminal to Verify Communication

4. Select these settings for your communication port (see next page for screens):

   - **Connect using:** (As required)
   - **Bits per second:** 9600
   - **Data bits:** 8
   - **Parity:** None
   - **Stop bits:** 1
   - **Flow control:** None

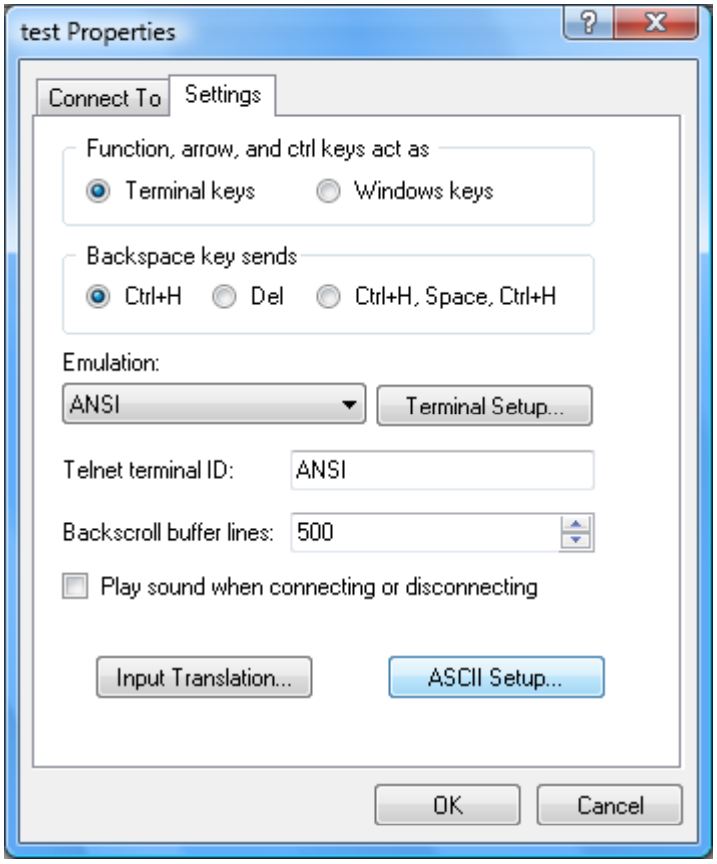
5. Click **OK**.

Using HyperTerminal to Verify Communication



Using HyperTerminal to Verify Communication

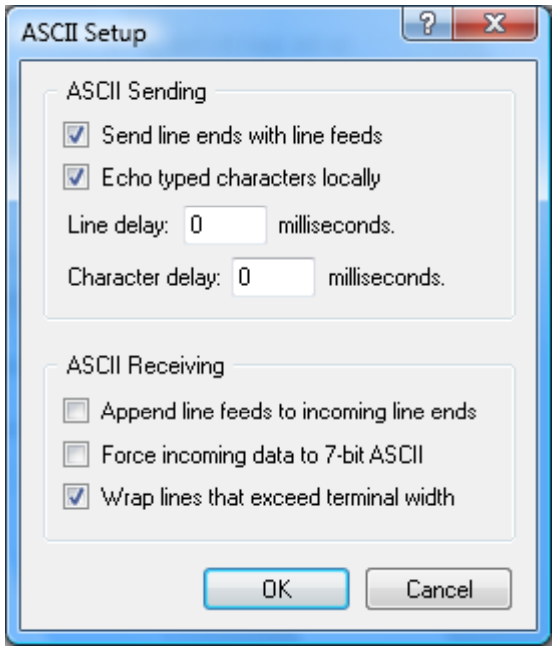
6. On the **File** menu, click **Properties**, and then click the **Settings** tab. Change the settings as shown.



Using HyperTerminal to Verify Communication

7. Click **ASCII Setup** and change the settings as shown.

8. Click **OK.**



Using HyperTerminal to Verify Communication

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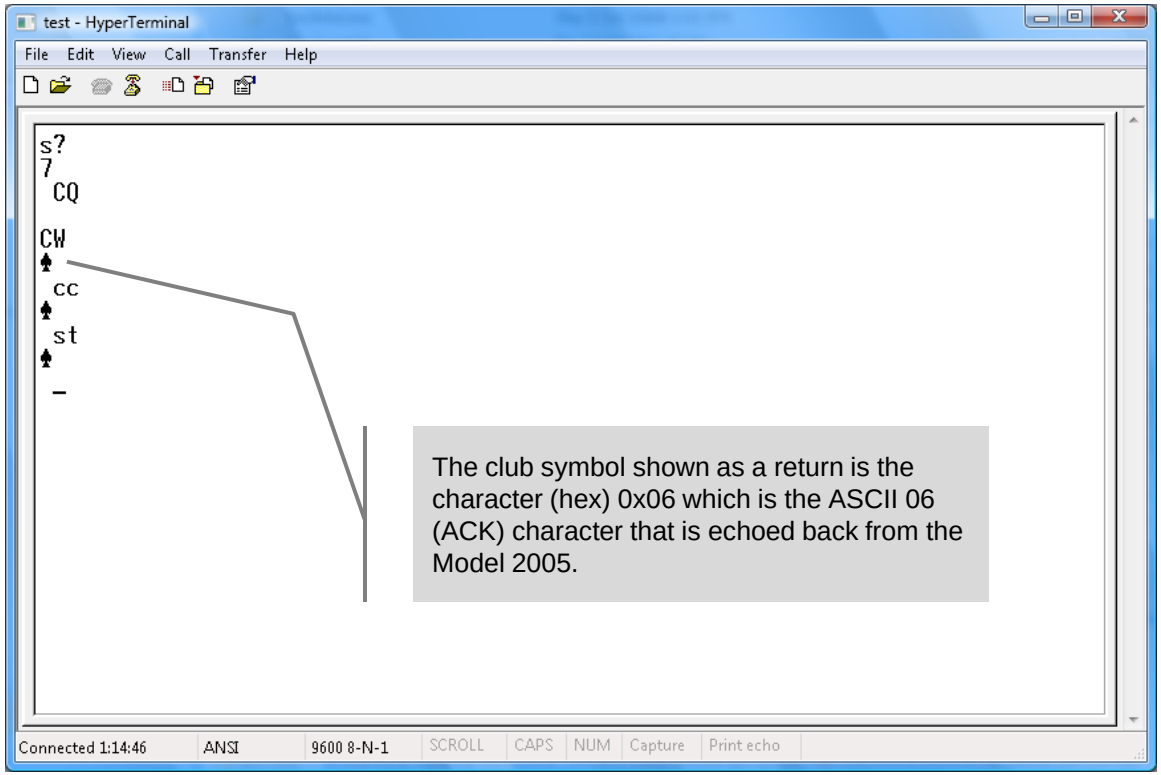

Using HyperTerminal to Verify Communication

10. To query the current position, type **cp**? in the command line. In the response, your position value will vary. If it returns **.0**, show the device can move by sending an **SK10.0** command. That will move to the 10.0 position.

11. You can stop the Model 2005 while moving by sending the **ST** command.

12. Close HyperTerminal. Only one program at a time can use the serial port, so close HyperTerminal before you access the Model 2005 with other software.