![2GIG Engineering logo]

HOW TO COMMUNICATE WITH THE USB 2GIG INCLINOMETER USING COOLTERM

HOW TO GET READINGS FROM THE INCLINOMETER

1. Open the CoolTerm software and click the **Options** button. Then click on **Serial Port** in the menu on the left. This will show you the configuration settings for establishing a connection with any chosen serial port.

2. Verify that the settings match the **Communication Specs** in the 2GIG USB Protocol. Baud rate: Default Rate (check part number), Data Bits: 8, Parity: None, Stop Bits: 1, Flow Control: None.

3. Click on **Port** and click on the USB Inclinometer port. It should show up under the name **usbserial**. If there are no ports that match that name, please check that the USB Inclinometer is plugged into the computer and then click the **Re-Scan Serial Ports** button to reinitialize the list of available ports.

4. Once the correct port is selected, click **Ok**.

5. Click the **Connect** button in order to start seeing the inclinometer readings. Please refer to the 2GIG USB Inclinometer protocol for a detailed description of the readings.

HOW TO SEND COMMANDS TO THE INCLINOMETER

1. In order to adjust the baud rate or output rate of the inclinometer, the 2GIG USB protocol will show you what commands to send. In order to send these commands to the sensor with CoolTerm, click **Connection** on the navigation menu at the top. Next, click **Send String** (the shortcut for opening this window is **Command-T**).

2. A new window will open up where you can type any adjustable command that you wish. In order to add the mandatory Line Feed character at the end of every command, simply hit **Enter** after typing the command.

3. Click **Send** after typing in the full command and the inclinometer will automatically adjust to the chosen specification and save it in memory. No power cycling is necessary.

4. If the baud rate is adjusted, make sure to follow the earlier instructions (for **HOW TO GET READINGS FROM THE INCLINOMETER**) and select the new baud rate.

HOW TO LOG THE INCLINOMETER READINGS TO A TEXT FILE

1. In order to set up CoolTerm for logging data, click the **Options** button. Then click on **Receive** in the menu on the left. This will show you all of the available data logging options.

2. Make sure under **Termination String**, that it shows **0A** (zero A) for the hexadecimal value of the Line Feed at the end of every inclinometer message.

3. Adjust and enable any options that are needed for data logging.

4. In order to start data logging, first make sure that the inclinometer is connected and displaying readings on the terminal. Click **Connection** on the navigation menu at the top. Next, click **Capture to Textfile > Start…** (the shortcut is **Command-R**)

5. A new window will appear for saving a data log text file. Specify the name of the log file and choose the folder to save it on.

6. After clicking **Ok**, the logging will start automatically and stop only when you navigate to **Connection > Capture to Textfile > Stop** (shortcut is **Shift-Command-R**)