# **Geodimeter 510 Direct Connection**

## **Confirm Settings**

#### **Communication Parameters**

To check prism constant  $\rightarrow$  Fnc 33 You need to make sure Fnc 79 "END" is equal to 4.

The Geodimeter format is summarized like this: **COM=Stop.Data.Parity.Baud** where parity: (0 = none, 1 = odd, 2 = even).

- 1. Select Menu, ENT, 4 (Data com), 1 (Select device), 2 (Serial) and at the prompt "Serial ON?", select ENT.
- 2. Now confirm that the com settings = 1.7.2.1200 and press ENT to continue.
- 3. When prompted for "Table No.=", select ENT.
- 4. When prompted for "Reg key?", select ENT.

A quick way to check the communication parameter is to use Fnc 78. The serial connection of 1.7.2.1200 is the default used by Geodimeter and it is possible to use higher baud rates such as 1.8.0.9600.

#### **Checking Settings in FieldGenius**

Please ensure you have FieldGenius 2006 or higher installed.

Go to the Main Menu  $\rightarrow$  Settings  $\rightarrow$  Instrument Settings  $\rightarrow$  Total Station

Instrument Selection 😗 Hel			
GPS	Model and Communication		
Total Station	EDM Settings		
Manual	Tolerance Settings		
Laser	Search Settings		
	Radio Configuration		
None	Check Level		
√	ОК Х Сапсе		

#### Model and Communication

Make certain you set FieldGenius to equal the following: Choose Auto Trigger V1

Model and Communication 😗 Help					
Total Station Make Geodimeter  Model Auto Trigger					
Connect to Instrument Default Comm Settings					
Port	COM1	•	Data Bits	7	-
Baud Rate	1200	•	Stop Bits	1	-
Parity	Even	•			
<b>v</b>	ок	X	٢	Cancel	

### **EDM Settings**

Make certain you set FieldGenius to equal the following:

EDM Setti	ings		Help
EDM Setting	<u>js</u>	Prism Offs	ets (mm) —
Mode	Long Range 📃 💌	Foresight	0.0
Time Out(s)	10	Backsight	0.0
	🔽 Use default time	RL	0.0
Minimum	0'	5et ins to zero	
Maximum	98425'		ess Settings
Guide Light	<b></b>	Std Dev	
1	ок 🗙	' с	ancel

Prism offsets are optional. Note: To switch between Tracking and Standard mode, you need to manually do this on the instrument. When ready to record the measurement, press the measure button in FieldGenius.

#### **Tolerance Settings**

These are tolerances used during multisets, please confirm that the values meet your desired specifications.

## **Search Settings**

These will be grayed out because they don't apply when connected directly to the instrument.

Search Settings 🛛 😗 Help					
Search Mode	None	-			
Search Window Range					
Horizontal	30°00'00"	Measure			
Vertical	30°00'00"	measure			
Search Window Center					
Horizontal	0°00'00"	Measure			
Vertical	90°00'00"	measure			
<b>√</b>	ок 🗶	Cancel			

## **Radio Configuration**

These will be grayed out because they don't apply when connected directly to the instrument.

Radio Configur	ation	Help
Connection © Direct © Radio	<b>C</b> RC-2	
Settings Channel Station Address Remote Address	Y       Y       Y	
V OK	×	Cancel

## **Connecting FieldGenius to your Geodimeter**

Geodimeter Startup Process: 1. Power on 2. check level and hit ENT comm initiating wait... 3. Turn 199 degrees (follow arrows, watch as numbers reduce to zero) instrument is computing compensation parameters as you do this 4. A/M do1130 5. temp=22.3 ENT 6. offset = 0.00 (enter offset if necessary and hit ENT) HA : 213.1339 HA Ref: (enter zero) HA=359.5959 (make sure you see Degrees Minutes and Seconds) VA=90.514 Now you can connect using FieldGenius or Evidence Recorder

Once you've confirmed all your settings, and gone through the startup process on your instrument, you can do the following to begin surveying with FieldGenius.

- 1. Make sure you're at your measure screen on your instrument. The measure screen is where the HA and VA is displayed.
- 2. Make sure you have FieldGenius connected to your instrument.
- 3. From the Model and Communication screen, select the Connect to Instrument button.

Model and Communication 🕜 Help					
Total Station					
Make Geodimeter 💌 Model Auto Trigger 💌					
Connect to Instrument Default Comm Settings					
Port	COM1	•	Data Bits	7	-
Baud Rate	1200	•	Stop Bits	1	-
Parity	Even	•			
🖋 ок		X Cancel			



After you press the continue button you will see some reminders of things to check before you move on, press Continue when ready.

> If everything is set correctly, and the connection to the instrument is successful, you will now see a green check mark on the Connect to Instrument button.

Press Ok to continue. You are now connected and ready to start surveying.