Geodimeter 510 Direct Connection

Confirm Settings

Communication Parameters

To check prism constant → 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).

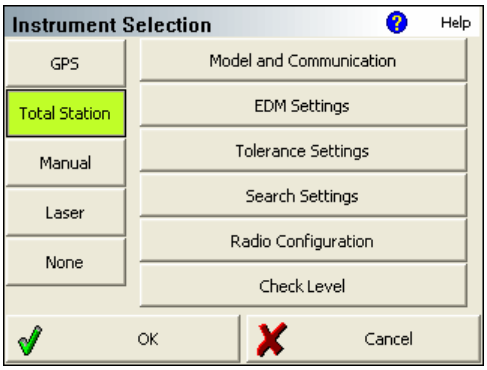
1. Select Menu, ENT, 4 (Data com), 1 (Select device), 2 (Serial) and at the prompt “Serial ON?”, select ENT.
2. Now confirm that the com settings = 1.7.2.1200 and press ENT to continue.
3. When prompted for “Table No.=”, select ENT.
4. When prompted for “Reg key?”, select ENT.

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

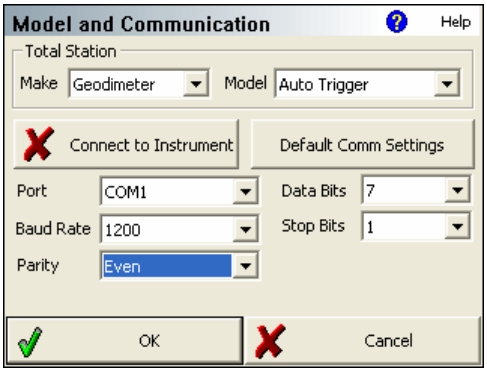
Please ensure you have FieldGenius 2006 or higher installed.

Go to the Main Menu → Settings → Instrument Settings → Total Station



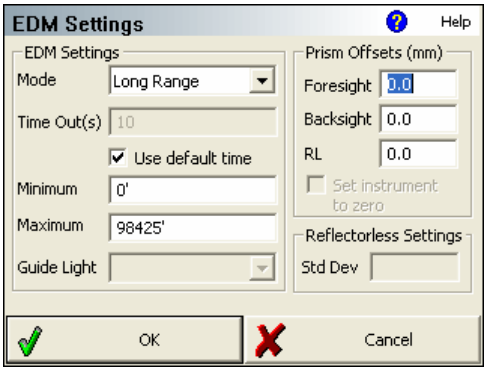
Model and Communication

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



EDM Settings

Make certain you set FieldGenius to equal the following:



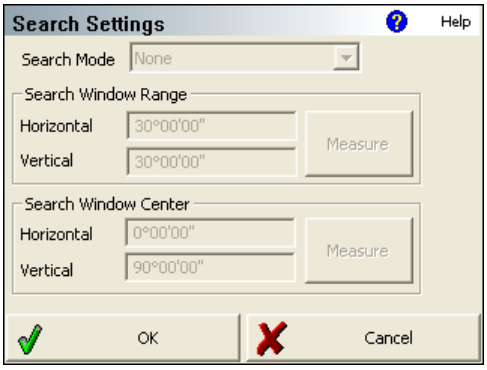
Prism offsets are optional.
Note: To switch between Tracking and Standard mode, you need to manually do this on the instrument. When ready to record the measurement, press the measure button in FieldGenius.

Tolerance Settings

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

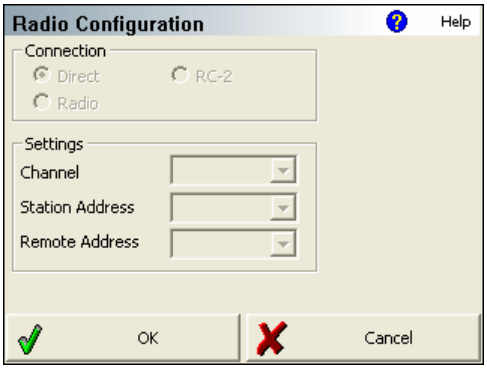
Search Settings

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



Radio Configuration

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



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)

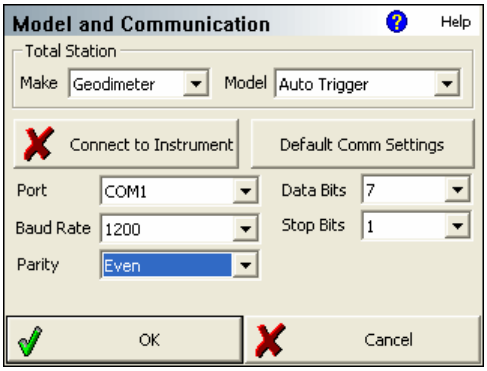
HA : 213.1339
HA Ref: (enter zero)

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.



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.