Geoscanners AB®

TRG-817

The triggering device TRG-817 provides the possibility to run any SIR® ground penetrating radar system in sync with GPS units. Via the software, GeoPointer X®, one has full control over the position of the markers in the data file. Further more the specified intervals can be set by time or distance. The TRG-817 also features a survey wheel input, making possible to add survey wheel information to the file for those antennas lacking the support for it.

Electrical Specifications:

Power Consumption (USB)	22 mW
Power Consumption (Survey Wheel Idle)	7.2 mW
Marker Switch type [Note 1]	Opto-isolated
Marker width	From 100 to 500 ms
Survey Wheel DC power Output [Note 2]	5V +/- 0.2 %

Note 1: The ground of the survey wheel and the USB part ground are isolated from one another.

Note 2: The current consumption of the survey wheel encoder attached to this output should not exceed 200mA due to SIR-3000 output limitations, otherwise it supports up to 1A output.

Mechanical Specifications:

Dimensions (LxWxH) mm/inch [Note 3]	110x105.9x45.8 (mm) / 4.3x4.2x1.8 (inch)
Weight Kg/Lbs	0.2 kg / 0.44 Lbs
Ingress Protection Rating	IP51

Note 3: The length does not include the cable which is 300mm/11.8 inches long.

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Environmental Specifications:

Maximum Temperature °C / °F	+40 °C / +104 °F
Minimum Temperature °C / °F	-10 °C / +14 °F
Maximum Humidity (non-condensing)	96% RH
RoHS Compliant	YES

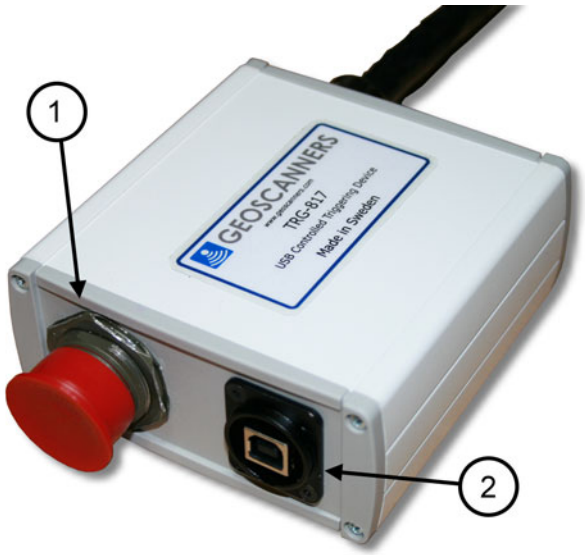

Fig. 1 Device Front Connectors

Fig. 2 Device Back Connectors

Operating Instructions:

It is very crucial to install the device drivers before connecting this unit to your PC. Detailed instructions on how to install the drivers for different operating systems can be found in our corporate website, http://www.geoscanners.com. Check in the control panel of GeoPointer X® that the drivers are installed and properly functioning.

1. Attach the control cable connector (4) to your ground penetrating radar compatible with GSSI antennas.
2. Connect the antenna control cable to the TRG817 input (1).
3. Attach the other end of the antenna control cable to the antenna intended to be operated.
4. If survey wheel operation is desired, then connect your GSSI compatible survey wheel cable connector to the survey wheel input in your TRG817 (3).
5. Connect a USB connector to the USB output of the TRG817 (2).
6. Establish a connection with GeoPointer X® and make sure the unit is available.
7. Start a new data file in your ground penetrating radar unit, apply then manual markers from GeoPointer X® to make sure the unit is operating properly. Stop then the data file in your control unit.
8. Set the duration of the triggering pulses from within GeoPointer X®, please note that too short pulses might not be registered on you control unit and too long ones might produce double markers. Experiment until you are satisfied with the results. For the SIR® 3000 control unit a good starting point is 300ms.
9. Set the mode of operation from GeoPointer X® to time or distance and start the log in the software simultaneously with your radar data survey.
10. Proceed with your survey.

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