

Geometrics Knowledgebase

My OhmMapper Console Indicates NO DATA

Stop surveying immediately to save time. Close the survey and troubleshoot the problem.

Choose System Setup->OhmMapper Test and note whether any data is scrolling on the screen.

If no data is scrolling on the screen, check the receiver, the front receiver dipole cable, the optical wand, the 2.5 Meter cable between the wand and the console cable, the console cable, and the console.

You can substitute dipole cables by exchanging with other dipole cables supplied with your OhmMapper. If you have spare parts, you can substitute console cable and optical wand with spares. Check the receiver for a red power light. If the light is out, check the receiver power switch and batteries.

If data is scrolling, check to see that the receiver is still locked on to the transmitter. Also check the transmitter for correct operation. It may be that you have passed over conductive ground with a long spacing between transmitter and receiver.

Check the console serial port settings:

COM1 and COM4 PORT MODE : <1>

COM1 is RS 232 I/O

COM4 is RS232 input

COM2 and COM 3 PORT MODE : <1>

COM2 is RS232 I/O

COM4 is RS232 I/O

COM1 baud rate: < 1200 > (Some OhmMapper Instruments use 2400)

COM2 baud rate < 9600 >

COM3 baud rate < 9600 >

COM4 baud rate < 9600 >

OhmMapper Test Screen Detail

This screen allows the operator to view the state of the OhmMapper data as it is sent to the G-858 console. It can be used both as a troubleshooting tool and as a way to verify that the console is acquiring data. The screen display of the OhmMapper is as follows:

PHASE A

PHASE B

PHASE C

PHASE D

2.107,124,120,26

2.203,120,129,26

2.900,123,122,26

The PHASE messages indicate that the console is receiving digital data from the receiver but has not yet locked on to the phase of the transmitter signal. The numbers are as follows:

First number (for example 2.107) = value in 10's of microvolts per mA of transmitter current.

The second and third numbers indicate an estimation of receiver and transmitter battery voltage respectively. For example in the first numeric line above, "124" indicates a receiver battery voltage of 12.4 Volts, and "120" is an estimation of transmitter battery voltage of 12.0 Volts.

The fourth number consists of two digits. The first digit indicates the detected transmitter current, and the second digit indicates the receiver gain. The current digit is a binary indication from 0 to 7 representing current settings of 16, 8, 4, 2, 1, 0.5, 0.25, 0.125 mA where 0 indicates a current of 16 mA and 7 indicates a current of 0.125 mA. This number should be the same as the binary code being flashed by the transmitter. For example, if the transmitter green light is flashing long-short-long (101) this is binary 5 and the current digit in

the OhmMapper Test should also be 5. The gain digit indicates receiver gain as a power of 4. For example, gain level 0 indicates a gain of 1, level 2 indicates gain of 16 (i.e. 4²), gain level 3 indicates gain of 64 (i.e. 4³), etc. For example the value 26 in the last number indicates a transmitter current of 4 mA (current level 2) and a gain of

4,096 (gain level 6).

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