

### **Basic Troubleshooting Techniques for OhmMapper**

1. When the transmitter is turned on, the red power light (or green light in later versions) comes on and stays on. The blue light will go into a rapid flashing pattern then settles into a three-flash sequence, for example short-long-short or short-long-long, or something like that. Is that what the transmitter is doing? If not, there are three possible causes of the problem and this will require swapping parts:

Defective dipole cable or shorting plugs are two potential problems. The best test is to plug the shorting plugs directly into both ends of the Transmitter and turn on. If this works, then add one dipole cable and turn on again. Then add the second cable and power up. If failure occurs with just the shorting plugs then the most likely problem is a battery with a shorted internal cell. This will look like it is fully charged when you measure it with a volt meter, but will not be able to supply the current required to drive the transmitter. Swap out batteries to test. If swapping the batteries does not resolve the issue and you never get the blue light to start flashing you may have a bad Tx and it would need to be returned to Geometrics.

2. When the receiver is turned on the red power light will come on, then the blue light will flash rapidly, then the blue light will turn off waiting for the receiver to phase lock onto the Tx. Once it locks onto the transmitter the blue light will start flashing at once per measurement. Depending on how conductive the ground is and how far apart the Tx/Rx separation is you may have to wait up to a minute to get the lock. Try it with about a 5 meter separation between the end of the dipoles, i.e. the equivalent to having a 5-meter rope between them. The Rx should lock and start flashing within about 20 seconds. If it never locks on even though the Tx's blue light is flashing then there may be something wrong with the receiver and it would need to be sent back. Remember that the transmitter blue light has to be flashing first. If the Tx is not working the Rx will never detect it and start flashing.

3. With the Rx turned on, even if the blue light is not flashing, when you look at the OhmMapper Test screen on the console do you see the message: Setting Gain, Phase A, Phase B or something similar being updated on the screen every second (or twice per second with the old systems)? If so your console is communicating with the receiver. If not, you have no communication between the Rx and the console so you could have a bad dipole cable, bad optical wand, bad console cable, or a bad receiver. If you have spares of any of these items you can troubleshoot the problem. If you have no spares then you will need to send the system back here for evaluation.

<http://support.geometrics.com/kb/questions.php?questionid=56>