

The BD Loop Megger includes:



- Batteries
- Quick Start Instructions for Testing Loops
- In-depth Instructions for Testing Loops
- Testing Record Booklet - Track loop performance and protect your installation.
- Carrying Case

BD Loops E-Z Detector Checker

Take the guess work out of your next gate servicing trip with the BD Loops E-Z Detector Checker. The only device of its kind that can help pinpoint what is causing the problem within a loop circuit by the art of substitution.



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Do you have the right meter for testing loops?



BD-Megger

**Analog 0-600 AC Volt Meter and
Megohmmeter/Insulation Tester**

Megohmmeter are the only meter that can test for the most common loop issue—a nick in the insulation causing the loop to short to ground.

**Are you testing your loops correctly?
Read this pamphlet to find out!**

What is the best Meter for Testing a Loop?

There is a lot of confusion when it comes to picking the right meter for testing loops. Especially when it comes to understanding the differences between **multimeters** and **megohmmeters**.

To properly “meg” a loop we must use a **megohmmeter** and not a **multimeter**. Because multimeters have an “ohm” setting many installers falsely believe that a multimeter can be used to “meg a loop” when it cannot. Here is a quick look at how megohmmeters and multimeters differ:

Multimeters generally measure Continuity, Resistance, and Voltage. For loops multimeters will check continuity, but will not tell you if the loop is shorting to ground.

Megohmmeters are Insulation Testers. Megohmmeters will tell you if the loop wire's insulation has been nicked as is causing a short to ground (which is the most common loop issue).

A megohmmeter is the only test meter that can test for the most common loop issue.

How do you Test a Loop with Megohmmeter?

If you do not understand how a megohmmeter works then trying to figure out how to test with one can be intimidating. A megohmmeter is looking for a short to ground—so to test for this we must connect one of the megger's clips to the loop and the other to ground. The megohmmeter will look for a connection between the loop and ground. If there is a connection this means that the loop is leaking current and possibly shorting to ground.

Here are step by step instructions on how to test a loop using a megohmmeter. What you really want to look out for here is making sure that you're attaching one of the megohmmeter's clip to an earth ground (such as an operator chassis) and the other clip to one of the loop's lead-in wires.

If you do not feel that your operator chassis is a good “ground” option you can drive a screw driver into a garden bed and douse the screwdriver with water to create a solid ground connection.

Testing Steps:

Step 1: Remove the loop lead from the operator or detector.

Step 2: Attach one of the megohmmeter's clips (if your megohmmeter has clips) to an earth ground such as the operator frame or a 12" screwdriver driven into the ground. (You can pour water on the screwdriver to help ground the connection.)

Step 3: If the device has switches on it, make sure it is set to the MΩ position.

Step 4: Touch the other clip or lead from the megohmmeter to one of the loop lead-ins.

Step 5: Read the Meter.

If you are using an analog meter look at the needle's position:

Below 10 - Bad Loop (This Loop will need to be replaced)

10-40- Suspect or Questionable Loop (we highly recommend that you replace the loop)

45-2000 - Good Loop

Step 6: Water down the area of the loop and lead-in and then take another reading. Loops often require water in the groove to facilitate a short to ground, and will read as a good loop in dry conditions. Is your reading significantly lower with water in the groove?

If you are using a digital meter: (They are a bit more difficult to read) You will likely have to read the instructions that came with your meter to make sure you are interpreting the results correctly. Some digital meters give number readings similar to the analog meters, and in that case use the chart above. Some meters have lights that will tell you if the loop is good, questionable, or bad.