

Master Meter Tech Bulletin

Interpreter® Test Mode Programming Guide

The DIALOG 3G® Interpreter™ Register is a universal AMR register that takes advantage of the life left in your existing meter infrastructure by replacing the existing register on most any brand meter in minutes—without service interruption.

The Interpreter's ConnectionFree™ design houses all vital components under the glass so there are no external wires—the #1 cause of warranty related issues on competitive designs. Hassle-free installs give way to worry-free maintenance.

In addition to providing superior AMR connectivity, the Interpreter features an advanced Test Mode that allows the register to have increased resolution for system approval and verification.

Utilizing 3G Technician™ Software, the Interpreter register has the ability to temporarily increase the meter resolution in Test Mode providing highly precise meter registration testing. This test mode feature temporarily reduces the registration by a factor of 10, 100 or 1000.

Using a Master Meter 5/8" USG register as an example, the Interpreter's Gear Ratio value is programmed to 70.07, with the least significant digit value in 10 gallons.

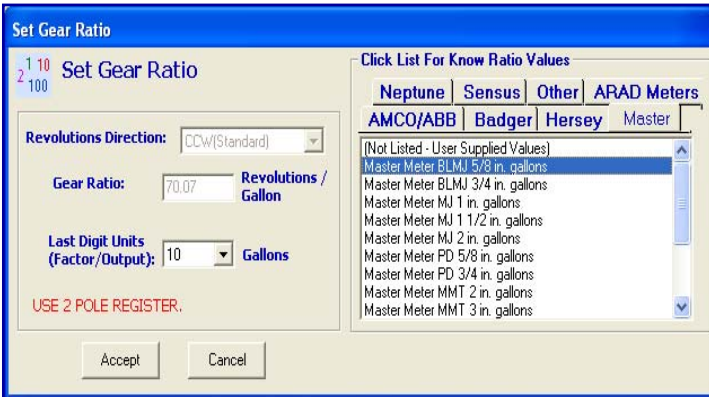


Figure 1: Settings for Master Meter 5/8 BLMJ meter in USG

Using the above settings the register shown next in Figure 2 is reading 10 Gallons.



Figure 2: Interpreter Register reading in 10 USG

All of the **Programming Commands (A)** must be displayed first, prior to placing the Interpreter in Test Mode. This is accomplished by simultaneously pressing the <CTR> <ALT> U keys.

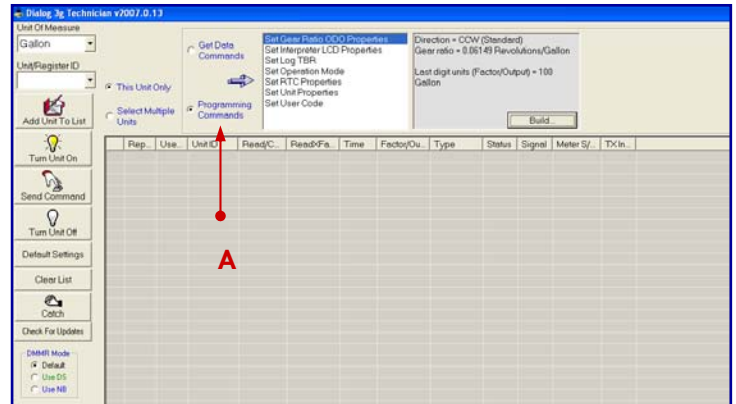


Figure 3: 3G Tech default programming commands

Once all the commands are displayed, move near the bottom of the choice list and highlight the command **Start Interpreter Test (B)**. Move to the settings and select the **Build (C)** button.

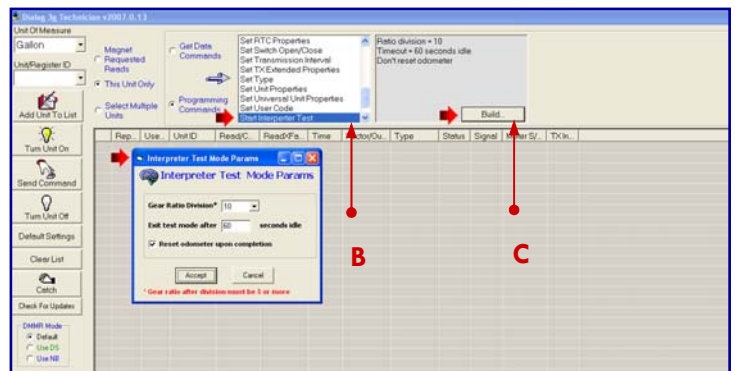


Figure 4: 3G Tech after pressing <CTR> <ALT> U, and selecting Interpreter Test

The three parameters which require programming are; **Gear Ratio Division**, **Exit Test Mode**, and **Resetting the Odometer**.

Gear Ratio Division is set to a number of 10, 100, 1000. This temporarily divides the programmed gear ratio by the indicated number. In our example, the desired least significant odometer wheel is in tenths of a gallon (which we originally programmed to be 10 USG as in Fig. 1). Thus, we must select the value of 100 (10 USG divided by 100 will deliver a reading in 10ths of 1 USG).

Exit Test Mode is used after the test to return the Interpreter's values back to the Programmed Ratio. If there is no flow during the indicated value of seconds, the register will return to the original gear ratio.

In our example the software is to set to 300 seconds (5 minutes). First a number must be selected based on the desired time interval between Low, Medium and High flow tests. If you are testing multiple flows, you do not want the register to return to its original gear ratio. Our example provides 5 minutes of zero flow between testing our low, mid, and high flow meter testing.

Upon completion of test mode, a check box "**Reset Odometer**" is available to reverse the odometer reading back to zero, or other customer determined value. There are two areas of concern when using this feature. The first is that if a large volume of water is used during testing, this could take some time to return an odometer style interpreter back to its reading prior to testing.

The previous example specifically addresses the Odometer Interpreter version. In the case of an LCD Interpreter, this is not a concern. The second concern is to ensure you get the final reading before the counter resets. **If you leave the test area and do not read the register, you will miss your test results.** In our example the odometer reading will not be reset.

After establishing the parameters, click the **Accept** button to set the parameters for the register. Once you have completed setting these parameters, enter the ID number of the register to be tested in the **ID Field** and click on the **This Unit Only** button. The register is then programmed by selecting the **Send Command** button.

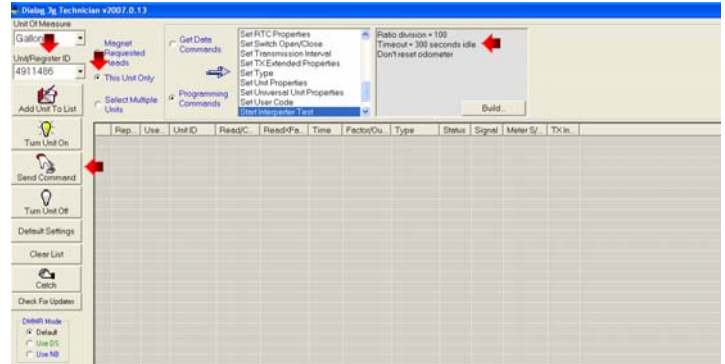


Figure 5: Within 3G Tech, enter the ID number and click "Send Command"

In Figure 6 below, we understand the result of beginning the Interpreter with a reading of Zero, using our parameters as outlined in the previous steps, and testing the meter with 10 gallons of water. The Interpreter displays a value of 100.

This unique, innovative feature of the Interpreter can dramatically reduce the time required for testing meters. It is of particular value when testing meters for ordinarily time consuming, low flow accuracy.



Figure 6: Interpreter Register reading 10 USG with Test Mode division at 100.



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