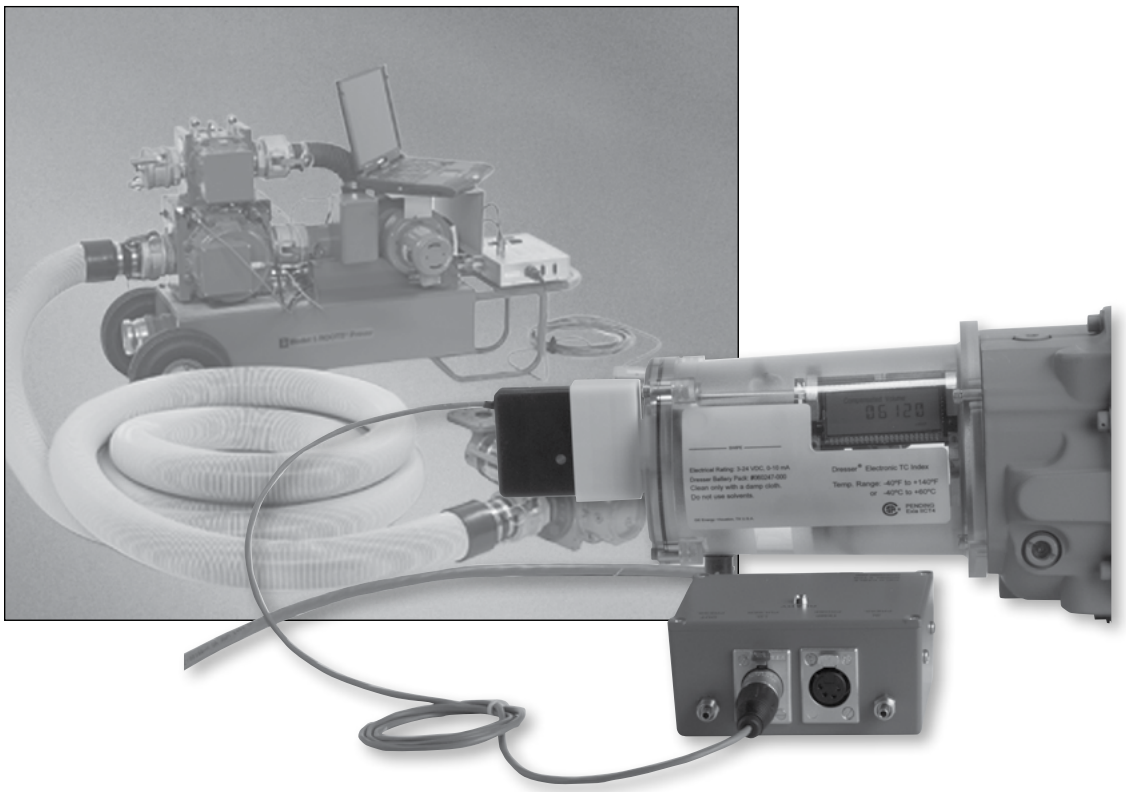
DRESSER
NATURAL GAS SOLUTIONS

Dresser Meters & Instruments

Quick Start Proving Instructions for Dresser Electronic Temperature Compensator (ETC)



Proving the ETC with Dresser Model 5 Transfer Prover

1. Establish IrDA Cable Connection

A. Insert the IrDA adapter in the cover of the ETC, as shown in Figure 1.

B. Attach the cable connector of the IrDA to the ID Pulser connection port on the Prover field meter junction box, as shown in Figure 1.

C. Turn on the power switch of the Model 5 Prover, and wait for light on the IrDA to come on and start flashing.

D. Once the ETC unit is put into "Prove Mode," the flashing light changes to a solid light, as shown in Figure 2.

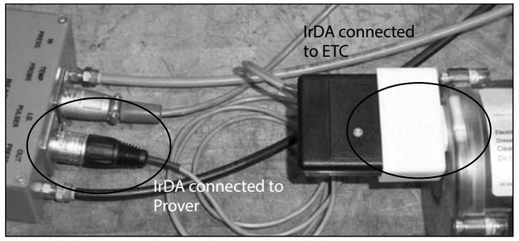


Figure 1 - Connect IrDA to ETC and Model 5 Prover

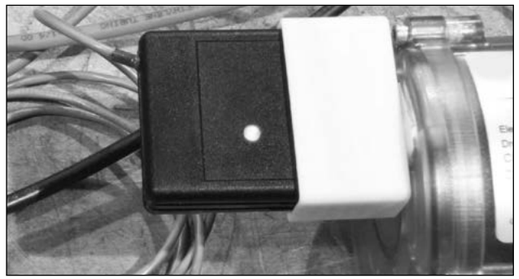


Figure 2 - Light indicating connections is established

2. Verify Prove Mode Enabled on the ETC

If you are able to scroll to a screen stating "PROV C.V" (for compensated testing) or to "PROV NC.V" (for non-compensated testing) the ETC is already configured for prover testing. Refer to the Proving Section of the ETC IOM manual if the "PROV" screens do not appear.

If the ETC is configured for testing, go to Section 3 for testing compensated volumes or to Section 4 for testing non-compensated volumes.

3. Prove Compensated Volume

A. Swipe the magnet across the "Swipe" line until the screen displays PROV C.V (Figure 3), and then stop swiping.

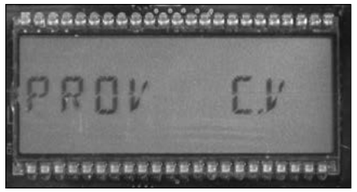


Figure 3 - LCD screen displays PROV C.V

B. After five seconds, the display will change to PROVE I.C.V (Figure 4).

Figure 4 - LCD screen displays PROVE I.C.V

C. Hold the magnet for about five seconds on the word "SWIPE" until the display changes to PRVE_CO.R (Figure 5).

The ETC is now ready to be proved using the compensated volume output.

Figure 5 - LCD screen displays PRVE_CO.R

D. Exit Prove Mode by holding the magnet on the word "Swipe" for five seconds.

4. Prove Non-Compensated Volume

A. Swipe the magnet across the "Swipe" line until the screen displays PROV NC.V (Figure 6), and then stop swiping.

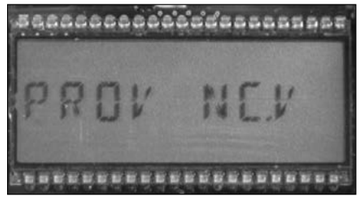


Figure 6 - LCD screen displays PROV NC.V

B. After five seconds, the display will change to PROVE I.U.V (Figure 7).

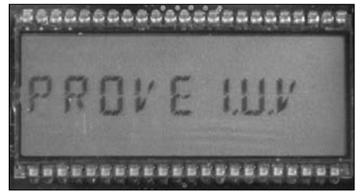


Figure 7 - LCD screen changes to PROVE I.U.V

C. Hold the magnet for about five seconds on the word "Swipe" until the display changes to PRVE_NC.V (Figure 8).

The ETC is now ready to be proved using the non-compensated volume output.

Figure 8 - LCD screen changes to PRVE_NC.V

D. Exit Prove Mode by holding the magnet on the word "Swipe" for five seconds.

5. Model 5 Prover Software Configuration

The Model 5 Prover software must be set up as circled on the left side of the screen shot as shown in Figure 9. The TC options box must also be set for Diaphragm TC for all meter sizes, as circled in Figure 9. For reference, the values for the prover configuration are explained in Section 6.

Note: The recommended pulses per test and test volume are shown in Table 1 according to meter size. Using the shown values will allow for a test lasting a minimum of the factory recommended 30 seconds.

Click Start and the prover test will begin to run.

For more information on the prover configuration screen, please refer to the ETC IOM manual.

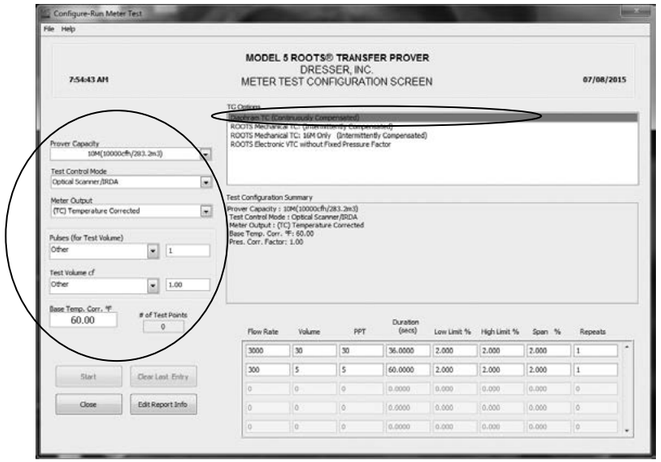


Figure 9 - Prover Configurations screen for Model 5 Prover software

Table 1 - Recommended prover configuration settings based on meter size

Meter Size	Flow Rate (% of Maximum Flow Rate)			
	100%		10%	
	Min. # of Pulses	Min Test Volume	Min. # of Pulses	Min. Test Volume
8C	8	8	4	4
11C	10	10	4	4
15C	15	15	5	5
2M	20	20	5	5
3M	30	30	5	5
5M	50	50	10	10
7M	70	70	15	15
11M	20	200	5	50
16M	20	200	5	50

6. Adding Additional Test Points:

- Flow Rate: To add additional test points, enter the desired flow rate in the next available box in the "Flow Rate" column. Figure 9 shows a value of "1600" representing 10% of flow for a 16M meter.
- Volume: Enter the desired test volume. Suggested values are provided in Table 1. A value of "20" is shown in Figure 9 representing the recommended test volume for testing a 16M meter at 10% of maximum flow rate
- Drive Rate/PPT: As stated previously, the drive rate will always match the volume.
- The remaining boxes in the row will auto populate based on the current prover default settings.
- Start this process again to continue adding additional test points. Always start with the highest flow rate and progress downward to the lowest flow rate.

Important: When entering values, always move to the next box by either pressing "Enter" or using the cursor. Using "Tab" will cause errors in the test configuration.

Note: Contact factory to request pre-configured test files if preferred.

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