

DYNOTEK

QUICKSTART FOR DATA MANAGER 500

This QUICKSTART instruction will guide you in the setup of a Dynotek sensor and data manager in a level monitoring application. For normal measurements (ft of fluid above the sensor), stop after completing step 2. To measure Static level, or distance down to water from Top of Casing (TOC) continue with step 3.

1. Initial SETUP

- a. Attach sensor to pigtail connection on Data Manager – Black to Black and White to White.
- b. Press *Menu* – SENSOR will appear
- c. Press *Enter* – PRESS should appear. If it doesn't, scroll the Down arrow until it does.
- d. Press *Enter* – FT H2O should appear. If it doesn't, scroll the down arrow until it does.
- e. Press *Enter*. The 4 mA value should be 0.
- f. Press *Enter*. The 20 mA value should be the full scale value of the sensor in ft of water (PSI times 2.31).
- g. Press *Enter*. WARM UP will appear, and then 0. Change to 0 if Necessary.
- h. Press *Enter*. SCADA will appear. If the Data Manager is externally powered, you may enable by pushing an up or down arrow. If not externally powered, press *Enter* to retain the disabled state. **Note:** if the Data Manager is left in SCADA mode with battery power only, the batteries will drain in about two days
- i. After the above procedure, the sensor is set up and ready for calibration.

2. CALIBRATION

- a. Press *Menu*, and then the down arrow for CAL
- b. Press *Enter* – CAL ZERO will appear.
- c. Press *Enter* – MEASURE will appear.
- d. Press *Enter* – ZERO MA will appear and then a mA value close to 4.0
- e. When the numbers are relatively stable (a few seconds) press enter. CAL will appear.
- f. Press *EXIT* to return to the display. The sensor should now be reading very close to 0. It is now ready to insert in the well. All subsequent readings will reflect feet of water above the transducer.

3. STATIC MEASUREMENT (FROM TOP OF CASING)

With the sensor in place in the well, it will be reading the height of the water column above the sensor. To read STATIC level, i.e. from the top of casing down to the water surface, use the following steps.

- a. Press *Menu* – Sensor will appear.
- b. Press *Down Arrow* twice. SET REF will appear.
- c. Press *Enter* - DISABLE will appear.
- d. Press the *up arrow* – ENABLED will appear
- e. Press *Enter* – REF VAL, the FT H2O, then a number (normally 0) will appear.
- f. Use the up and down keys to enter the current static level as measured with a tape or other static measurement device. Start with the Left Arrow and then an up or

down arrow to set the value as negative (-). The display button moves the decimal point if needed.

- g. After the static level has been entered as a negative value, press *Enter*. The Ft of water value above sensor value that is currently being measured will appear.
- h. Press *Enter*. SET REF will appear. Then press *Exit* to return to the display. The value shown will be the static level, displayed as a negative number. As the level in the well goes down, the number will be a larger negative number, and as it rises will be a smaller negative number. The Negative sign will be a reminder that the value is down to the water surface.

For other procedures see the reference manual, or call Dynotek Customer Service at 303-748-6574