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## Simplified Installation of the EESiFlo Portalok 7S Ultrasonic Flow Computer

Setup and Installation of the Portalok 7S Ultrasonic Flow Computer involves three simple steps.

- Define the Parameters of the Pipe and Fluids (PAR on the main menu)
- Select the Output Options (OPT on the main menu)
- > Enter the Measure Mode (MEA on the main menu)

## Defining the Pipe and Fluid Parameters >PAR<

- 1) Plug the Transducer into the receptacle marked **Transducer**.
- 2) Turn the instrument **ON** by pressing the **PWR** button
- 3) Using the Arrow keys scroll to **PAR** (parameters) on the main menu and press **ENTER**.
- 4) Enter the pipes **Outer Diameter** by using the Down arrow key to change the values and the right arrow key to move to the next position then press **ENTER**. Remember, this is the OD of the pipe not the pipe size. For example a 2 inch pipe has an Outside Diameter of 2.375 inches.
- 5) Next, enter the pipe **Wall Thickness** using the arrow keys then press **ENTER**
- 6) Select a **Pipe Material** using the arrow keys to scroll up and down through the available list then press **ENTER**.
- 7) Answer **YES** or **NO** to the prompt for **Lining**. If you answered **YES**, then enter the **Lining Type** (using the arrow keys) and then the **Lining Thickness**
- 8) Enter the internal **Roughness** of the pipe (this is an estimate, if unknown leave as default) then press **ENTER**
- 9) Using the arrow keys, select the **Medium** (Liquid Type) from the available list then press **ENTER**.
- 10) Enter the <u>approximate</u> **Medium Temperature** then press **ENTER**.
- 11) Enter **Additional cable** length (if no extension is used select 0) then press **ENTER** and you will return to the main menu.

## **Selecting Output Options > OPT<**

- 1) Using the arrow keys, scroll to **OPT** (Output Options) then press **ENTER**.
- 2) The meter will prompt you for the **Physical Quantities** for your desired output. Use the arrow keys to scroll up and down through the available list (Volume Flow is the most common). Press **ENTER**.
- 3) Using the arrow keys, choose your **Volume In** units from the available list then press **ENTER.**
- 4) Choose a **Damping** (averaging) time in seconds (if unknown leave as default 10s) then press **ENTER**
- 5) The meter is fitted with an internal data logger for logging time stamped data. Answer **NO** to **Store Meas. Data** (if you wish to setup the data logger please consult the user manual) then press **ENTER**.
- 6) The meter is fitted with a Serial Output Interface. Answer **NO** to **Serial Output** (if you wish to setup the serial interface for instantaneous output please consult the user manual) then press **ENTER**.
- 7) The meter is fitted with a 4 to 20 mA output, answer **NO** to **Current Loop** (if you wish to setup the 4 to 20mA output please consult the user manual) then press **ENTER**.
- 8) The meter is fitted with an **Alarm Output**, answer **NO** (if you wish to setup the Alarm Output please consult the user manual) then press **ENTER** and you will return to the main menu.

## Enter the Measure Mode >MEA<

- 1) Using the arrow keys, scroll back to **MEA** (Measuring) then press **ENTER.**
- 2) If you have setup the Store Meas. Data function then at **Meas. Point No.** select a file name for the storage record then press **ENTER**.
- 3) When **Sound Path** appears, the number indicated below this prompt represents the number of Sound Paths (please consult the user manual definition). This value may be manually adjusted by the User. Choose a Sound Path that matches your needs, and then press **ENTER**.
- 4) The **Transd. Distance** will indicate how far apart the transducers must be separated.
- 5) Select an appropriate transducer **Installation Site** by following the guidelines in the selecting transducer mounting location document.
- 6) Apply **Ultrasonic Couplant** to the bottom of the Transducers
- 7) **Install Transducers** with arrow pointing in the same direction and in the direction of flow.
- 8) Ensure Transducers are correct distance apart by pressing **ENTER** and reviewing the **SIGNAL STRENGTH** as discussed in the user manual. Then press **ENTER**.
- 9) At **Transd. Distance** press **ENTER**.
- 10) You are now displaying the flow measurements!!!

Once measurements are complete, press and hold the **PWR** button to shut the instrument off.