# Quick Start-Up Guide

SonoPro® Portable Professional Series Ultrasonic Flowmeter

1. Turn on power to the handheld unit by pressing the "POWER" button.
2. Press "ENTER". A screen with "Enter Password" will be displayed.
   a. Enter the "User Password" of 1234.
3. Using the left/right arrow, navigate to the "Fluid" menu.
   a. Press the up/down arrow to access the "Flowing Fluid" sub-menu.
   b. Press "Enter" and select the type of liquid to be measured.
      i. Use the up/down arrow to scroll through the list of fluids.
      ii. **Note:** If the liquid used in your system is not represented in this list use the "Other Liquid" category and input the necessary parameters.
   c. Press "Enter" after selecting the type of liquid.
      i. This will save the current configuration.
   d. Press the up/down arrow to return to the "Fluid" menu.
4. Using the right arrow, navigate to the "Units" menu.
   a. Using the up/down arrow, define the required units.
5. Using the right arrow, navigate to the "Calibration" menu.
   a. Enter the "Pipe OD" and the "Wall Thickness".
      i. "Pipe ID" will be calculated.
   b. Enter "Pipe Material" and "Liner Material".
   c. Enter the "Transducer Type".
      i. 2 MHz
         1. Typical pipe sizes: ½" to 4"
      ii. 1 MHz
         1. Typical pipe sizes: 2" to 20"
      iii. ½ MHz
         1. Typical pipe sizes: 12" to 200"
   d. Enter the "Trans Traverse".
      i. W method – Typically used with pipe sizes ranging from ½" to 4"
      ii. V method – Typically used with pipe sizes ranging from 4" to 12"
   iii. Z method – Typically used with pipe sizes ranging from 12" and up
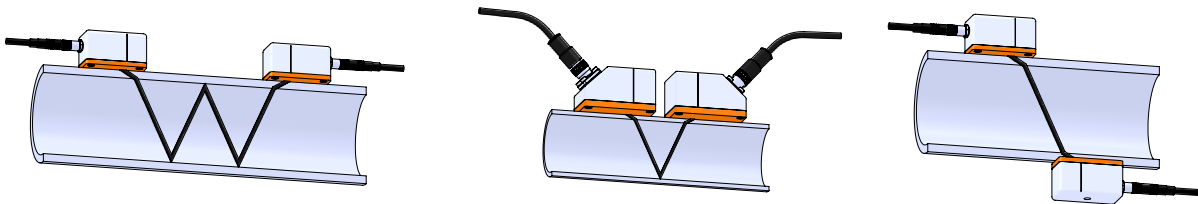
   e. Enter "Spacing Temp (°F)".
      i. Note: this is the temperature of the liquid at the time of transducer installation.
   f. Enter "Fluid Temp. 1".
      i. Select:
         1. "Use RTD"
         2. "Don't Use RTD"
            a. Enter temperature of liquid being measured
   g. Enter "Fluid Temp. 2". Note: Only for models with Energy.

6. Now that all parameters have been set, navigate to the "Trans Traverse" sub-menu within the "Calibration" menu.
    a. Press the right arrow to access the "Spacing" parameter.
    b. This number is the required spacing, in units of length, that will need to be set between the scribe lines of the two transducers before measurements within the pipe can be taken.
7. Exit and "Save Changes".
8. Install the Rail/Fixture System on to the pipe.
    a. Adjacent side transducer installation method.
        i. V and W methods of measurement.
            1. Refer to page 2-5 in the manual for detailed installation instructions.

    b. Opposite side transducer installation method.
        i. Z method of measurement.
            1. Refer to page 2-7 in the manual for detailed installation instructions.
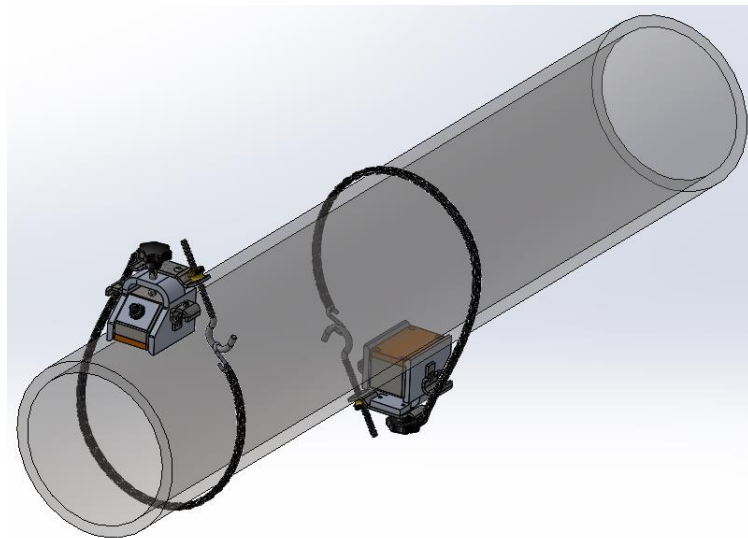
9. **Optional:** With no flow, navigate to the "Zero Cal" sub-menu within the "Calibration" menu.
    a. Press "Enter", scroll to the left two places, and place a zero in that location using the up/down arrow. Press "Enter" again.
    b. This will calculate the internal error factor of the transducers
10. The handheld unit is now ready to take readings.