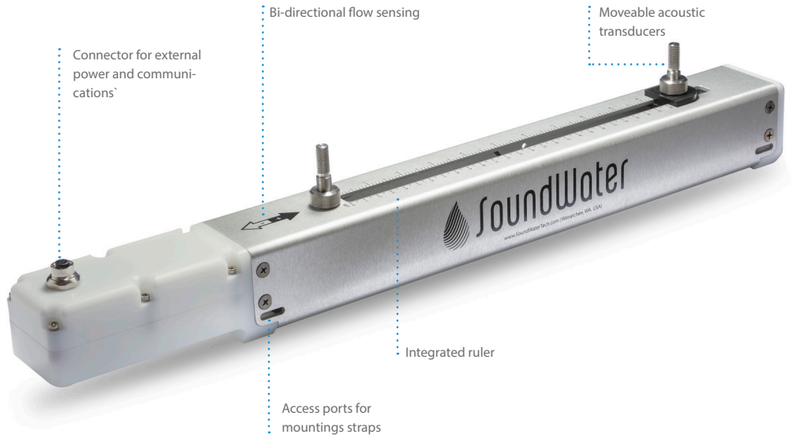
Quick Start Guide

Welcome to SoundWater Orcas SP™.
This guide shows you how to download the mobile application and helps you set it up and pair it with the Orcas SP Sensor to start taking readings.



MODEL: SWT ORCAS-01

MADE IN USA

Let's get started.

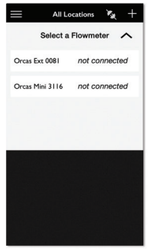
Begin by wiring power—use the wire color codes shown below (for your supplied connecting cable). After your flowmeter is powered, download the SoundWater Orcas app to your iPhone™ or other bluetooth enabled mobile device from the App Store™ or Google Play™.

1 Connecting cable wire color codes:

- 1 Not Used
- 2 RS485 Data (A) -
- 3 Power 12-24VDC (1.2W Max)
- 4 Power ground 0V
- 5 RS485 Data (B) +

2 Connect your flowmeter.

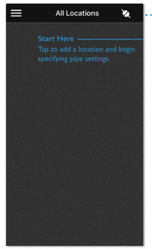
At launch the app will find any nearby SoundWater flowmeters. Select the flowmeter you want to connect to from the list.



3 Add your location.

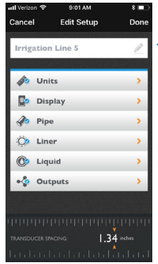
Launching the app lands you on the locations screen. Begin by tapping on the add location (+) button.

The app always begins with this screen at launch making it easy to access previously saved location settings.



Add location

4 Set-up your location.



Name your location

Drill-down through the parameter selections and choose from the pre-loaded pipe types, pipe dimensions and fluid databases. Don't see the right option? Add your custom values!

Give your location a name, then save. Each location's settings can be stored in the Orcas app, ready for reuse.

Pipe and liquid parameter selection and input screens:

Units

Toggle between metric and Imperial units of measure.

Select Flow Rate, Volume and Velocity from our pre-loaded parameter values or add custom values.

Display

Drag and drop the outputs that you rely on most to display on the main screen.

Pipe & Liner

Select Pipe Type and Wall Classifications from our pre-loaded values or add custom values.

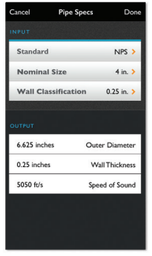
Liquid

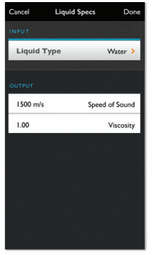
Select Liquid Type from our pre-loaded parameter values or add custom values. Be sure to select a temperature - just your best guess will help the flowmeter calculate transducer spacing.

Outputs

Select the Outputs menu to setup any optional hardware outputs such as MODBUS, 4-20 mA, and pulse outputs.

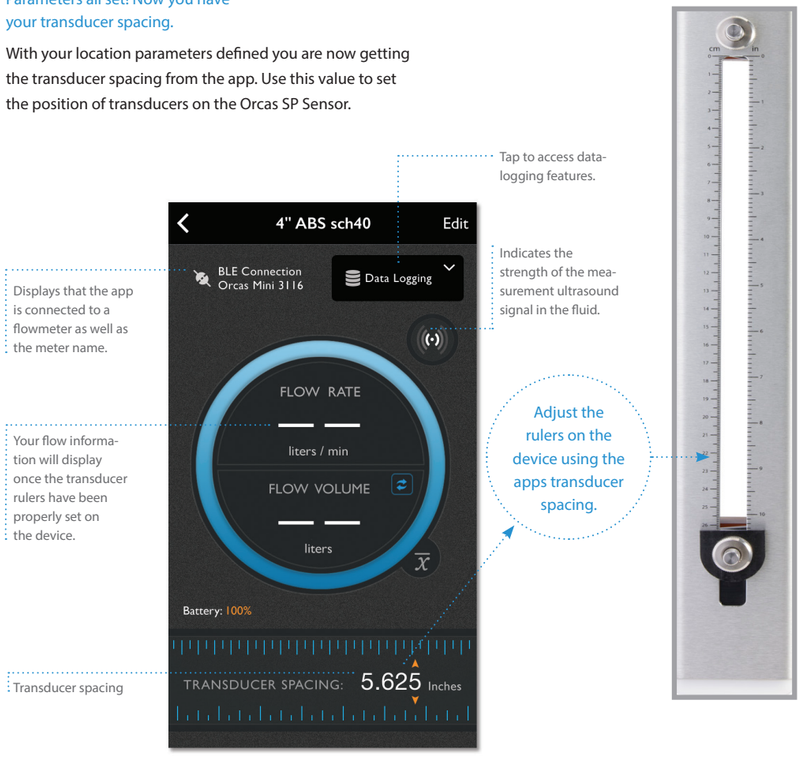
The image below displays the MODBUS RTU setup options.





Parameters all set! Now you have your transducer spacing.

With your location parameters defined you are now getting the transducer spacing from the app. Use this value to set the position of transducers on the Orcas SP Sensor.



Preparing and mounting the sensor.

Now the conveneint all in one design allows you to mount the sensor on the pipe in just one or two minutes. Bi-directional readings are transmitted wirelessly to your mobile device for display.

1. Begin by gently rotating and retracting the silver knobs until they stop.
2. Cover the entire bottom face of each transducer with the coupling gel.
3. Rest the transducer on the pipe—it self aligns!
4. Now thread the provided stainless straps through the access ports located on either side of the sensor. Wrap the straps around the pipe and secure with a socket or flat head driver.
5. Rotate the silver knobs clockwise to press the transducers firmly against the pipe.

Take your readings.

Refer back to the Orcas App for flow readings.

Or, wire the pulse or 4-20 mA output to any PLC/SCADA system to record flow.

Cellular data collection.

When combined with the Ayyeka Wavelet™, flow is transmitted to the cloud via cellular network. Use any web browser to view flow and history. Contact SoundWater or visit SoundWaterTech.com for more details.

Support

Contact SoundWater Technologies at support@soundwatertech.com.
Or call 1-509-899-7838.

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