

Installation and User Guide

The Soofie® will arrive pre-assembled and include all required pieces to complete installation.

The anemometer assembly is only required on a single Soofie® per site, but all SOOFIEs are compatible.



Purpose

To provide a procedure outlining the guidelines, requirements, and testing necessary to install a Soofie®.

Scope

This procedure applies to all SLB personnel and subsidiaries, authorized installation and service personnel, including but not limited to any 3rd party contractors engaged on the project.

Responsibilities

It is the responsibility of all SLB personnel, field technicians, operators, contractors, and customer representatives to understand and follow the procedures and guidelines outlined in this document.

Equipment Ratings

	Definitions
Supply Voltage	12.8v DC
Power	30 watts
Battery	Non-serviceable, non-replaceable 12.8v LiFePO4
Elevation	< 16,000 feet (< 5,000 meters)
Temperature	-4°F ≤ ambient ≤ 158°F (-20°C ≤ ambient ≤ 70°C)
Relative Humidity	2% ≤ ambient ≤ 99%
Ingress protection	IP54/ NEMA Type 3

Definitions

	Definitions
mm	millimeter
in	inch
LiFePO	Lithium Iron Phosphate
DC	Direct Current
IP	Ingress protection
Nm	Newton Meter
In lbs	Inch pound

Knowledge & Training Requirements

- Read and understand manuals and instructions of all tools.
- Read and understand this complete document prior to starting work.
- Be able to operate tools in a safe and effective manner.

Mounting Requirements

- 2 - 2.5 inches outer diameter (50.8 – 63.5mm)
- 6 ft 10 in to 7 ft 6 in above ground (2 – 2.3 m)
- Will not rotate
- Can withstand local conditions (high winds, snow load, etc.)

Equipment & Tools

Power tools

- Small handheld drill or screwdriver

Hand tools

- 3/16 in or 4.5mm hex bit or Allen key
- Compass
- Measuring tape

Required Materials

- Hardware
- Bracket(s)
- Electronic(s)
- Cable(s)

Safety Precautions

Pre

- Safety glasses are to be worn while conducting the assembly to protect from potential debris or accidental impact.
- Adequate lighting is recommended to efficiently assemble the apparatus.
- Cut resistant gloves are required when handling any material that may have sharp edges or corners.

Safe handling of lithium-based products

- Inspect for damage, do not use if damage is present.
- Do not short circuit.
- Do not over charge.
- Do not modify, disassemble, puncture, cut, or crush.
- Lithium batteries must be properly disposed of – do not dispose of in a fire.
- Battery is non-serviceable and not replaceable.

Safe handling of glass-based photovoltaic/solar panels

- Extra care must be taken when interacting with delicate glass panels.
- Safety glasses are to be worn while working with the panels to protect from potential debris or accidental impact.
- Cut resistant gloves are to be worn while working with the panels.

Safe Operation

- Only use the accessories and equipment provided by the manufacturer.
- Do not use alternate or unauthorized solar panels.
- Verify correct installation and operation by using SOOFIE app or by contacting the customer service team.

For any questions, please reach out to emissions.support@championx.com or call 720-836-0481.

Procedure

- 1 Locate the protruding tab on the upper mounting clamp, the direction this tab is facing is the direction the solar panel will face.

In the northern hemisphere face this tab south, in the southern hemisphere face this tab north.



- 2 Measure 6 feet 8 inches (2 meters) from ground level.
This will be the height of the top clamp. Using a 5/32 inch or 4.5mm hex bit or Allen key, completely loosen the single long screw in the top clamp allowing it to fully open.

With the tab pointing up, wrap the clamp around the pole and tighten the bolt to 16 in-lbs into the threaded pin.



- 3 Locate the pocket on the SOOFIE mounting bracket. Hang the SOOFIE assembly from this tab and pocket.

- 4 Install lower pole mounting bracket with two long screws. Do not fully tighten one side before tightening the other side, they must be tightened equally. Tighten to 16 in-lbs.



- 5 Loosen but do not remove the two screws on each side holding the solar panel positioning arms. Swing arms down to unlock solar panel.



- 6 Select position according to installation latitude.

Position A: Vertical for areas like northern Canada and locations that need to prevent snow accumulation on panel surface

Position B: High angle for northern locations that have minimal snow accumulation

Position C: Mid angle for mid-latitude locations

Position D: Low angle for areas that do not have snow accumulation and have high sun angle most of the year



- 7 Ensure both arms are set to the same position and tighten the screws to 20 in-lbs.

- 8 Attach LTE antenna to gold colored antenna port and tighten by hand

If anemometer is to be installed, proceed to step 9. Otherwise skip to step 14



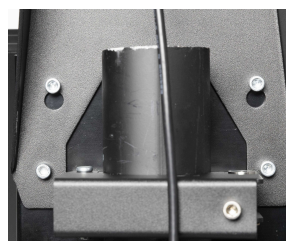
- 9 Guide anemometer cable through anemometer bracket flange as seen in the picture to the right.

- 10 If installing the SOOFIE in the northern hemisphere, align the red seal on the anemometer opposite of the side with the ChampionX logo. If installing the SOOFIE in the southern hemisphere, align the red seal on the anemometer on the same side as the ChampionX logo.

This red seal must be oriented towards true north. Install the three screws to attach the anemometer to the flange, tighten to 16 in-lbs.



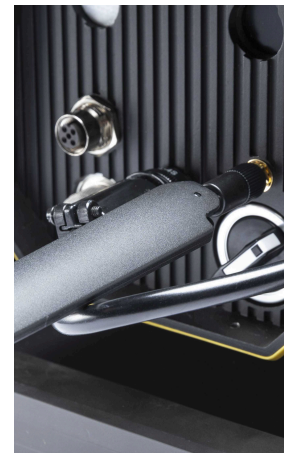
- 11 Loosely thread the 4 anemometer screws into the main bracket as seen above. This will allow the anemometer bracket slide over these bolts.



- 12 Install anemometer bracket assembly onto main bracket and tighten all four screws to 16 in-lbs.



- 13 Insert anemometer cable into port on bottom of the SOOFIE, hand tighten the threaded collar into the port. This cable is keyed and can only be inserted in a single position, do not force this connection.
- 14 Rotate power switch to "ON" position to power on SOOFIE
- 15 SOOFIE will broadcast a Bluetooth signal that gathers required device installation, and allows for a sensor check via our SOOFIE app.



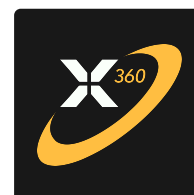
Installing and Using the Detex360 App

- Navigate to Your App Store

1. For iPhone users, open the App Store. For Android users, open the Google Play Store.
2. Alternatively, scan the QR code below to directly access the Detex360 app in your device's app store.

- Search for "Detex360"

- Locate and download the Detex360 app in the search results



- Once the installation is complete, open the Detex360 app from your home screen or app drawer.
- To familiarize yourself with the app's features, click the circle help button, which will guide you through a tutorial on how to use the app effectively. This tutorial covers all necessary functions and provides a comprehensive overview to ensure you get the most out of your Soofie® device.

Revision History

Rev #	Date	Notes
1.0	January 5, 2024	Initial Release
1.1	May 28, 2024	Added Certification Requirements
1.2	May 28, 2025	Updated Equipment Ratings