SUNBIRD2 SP
Test Post Monitor

Quick Start Guide
&
Safety Information

www.MOBILTEX.com

ABOUT THIS DOCUMENT

This document has been issued as a guide only and is applicable for both 1st generation SUNBIRD2 SP and 2nd generation SUNBIRD2 SP units. In all instances please refer to the full SUNBIRD2 SP Test Post Monitor Installation Instructions for further information.

SUNBIRD2 COMPATIBILITY

The SUNBIRD2 SP Test Post Monitor has been designed to fit most standard 3" riser posts including Pro-Mark PM TS3, Big Fink, Rhino and Tinker & Razor T-3.

Note

Any existing hardware needs to be stripped off the test post terminal cap in order to facilitate the fitting of the SUNBIRD2 Interface PCB.

HOW TO OBTAIN FULL INSTALLATION INSTRUCTIONS

1) Go to www.MOBILTEX.com and click the Corrosion Prevention link under the Solutions menu located at the top of the page.
2) Select Test Station Monitoring & Interruption
3) Click the link for the CorTalk SUNBIRD2 SP and download the required files for viewing online or for printing at your own convenience. These documents contain wiring diagrams for the most common installations.

DISCLAIMER

If this equipment is used in a manner not specified by Abriox, the protection provided by the equipment may be impaired. Please ensure you follow all guidance for safe and correct use of your equipment.

SAFETY INFORMATION

Please ensure you are familiar with the safety regulations of your company and observe them at all times.

General Safety Summary

This document contains information and warnings that must be observed to keep the unit in a safe condition and ensure safe operation. To use the unit correctly and safely, read and follow all precautions given.

Please ensure you fully understand all instructions throughout this document that relate to specific measurement functions. In addition, please follow all generally accepted safety practices and procedures required when working with and around electricity.

Safety Symbols

The table below lists safety symbols that appear within this document.

Symbol	Description
CAT IV	Installation Category (Overvoltage Category) IV
⚠	Risk of danger. Important information. See Installation Instructions.
⚠	Hazardous voltage. Voltage > 30V AC (42.4V peak) or 60V DC may be present

Maximum Input Voltage for Channels 1 and 2 ⚠

Channels 1 (Pipe 1 or Coupon / Ref Cell 1) and 2 (Pipe 2 or Coupon 2 or Native Coupon / Ref Cell 2) of the SUNBIRD2 SP have a maximum input voltage range of 35V AC (RMS) and 50V DC without damage.

Maximum Input Voltage for Channel 3 ⚠

Channel 3 (Shunt + / Shunt -) of the SUNBIRD2 SP provides readings up to 100mV AC and ±100mV DC. The channel itself should not be exposed to voltages greater than ±1Vpeak.

Greater voltages than this will cause the channel input protection to activate which can only protect the unit for a limited period of time.

Danger of Electric Shock ⚠

If there are voltages greater than 30V AC (42.4V peak) or 60V DC present, care should be taken as there is a danger of electric shock.

CAT IV Input Protection

All of the input channels have CAT IV surge protection for their rated input voltage ranges.

WEEE Directive

This symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE Directive (2002/96/EC) and your national law. This product should be handed over to a designated collection point, e.g., on an authorised one-for-one basis when you buy a new similar product or to an authorised collection site for recycling waste electrical and electronic equipment (EEE).

Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources.

For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, approved WEEE scheme or your household waste disposal service.

COMPLIANCE

Declaration of Conformity CE

This product is CE marked which means that Abriox declares that the product or equipment complies with all applicable European Directives. A copy of the Certificate of Conformity can be obtained from Abriox.

FCC Rules FC

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

i) Reorient or relocate the receiving antenna

ii) Increase the separation between the equipment and receiver

Do not make any changes or modifications to the equipment unless otherwise specified in the manual.

If such changes or modifications should be made, you could be required to stop operation of the equipment.

SUNBIRD2 INTERFACE PCB KIT

The Interface PCB kit may be purchased as a pre-assembled kit complete with Tinker & Rasor T-3 Terminal Board Test Post, or, it can be purchased as a loose kit without the test post. Refer to the full Installation Instructions for further details and assembly instructions.

INSTALLATION INSTRUCTIONS

This document has been issued as a guide only; in all instances please refer to the full SUNBIRD2 SP Test Post Monitor Installation Instructions for further information.

Step 1 - Software Check

iCPSM4* users, please ensure you have received your Licence Certificate which details your HQ number, username and password.

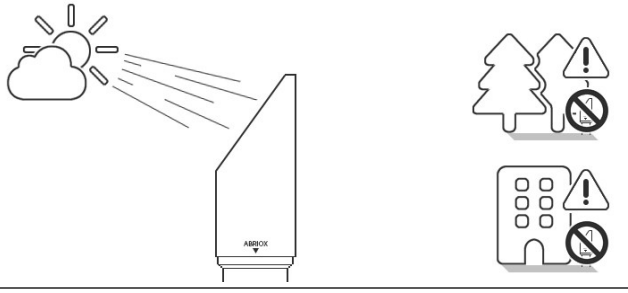
*Please note, SUNBIRD SP is only compatible with **iCPSM4**.

Step 2 - Gather Equipment for Installation

To install the SUNBIRD SP Test Post Monitor at the test post you will need:

- A strong magnet to activate the unit on site
- Permanent reference cell
- Coupon (if required)
- Shunt - of correct value
- Consumables - for making the connections at the test post
- Multimeter - for confirming the voltage and current readings at the test post
- Installation Instructions

Step 3 - On Site Check and Positioning



The SUNBIRD SP requires direct view of the sun in order to work correctly. Place the SUNBIRD SP in full sunlight. Do not install the SUNBIRD SP in shade, under foliage or next to buildings as this will hinder power and communications.

PANEL ORIENTATION - THE SOLAR PANEL MUST BE TURNED TOWARDS THE TERRESTRIAL EQUATOR (FACING SOUTH IN THE NORTHERN HEMISPHERE) SO THAT DURING THE DAY ITS ORIENTATION ALLOWS THE PANEL TO CATCH THE GREATEST AMOUNT OF SOLAR RADIATION POSSIBLE.

Step 4 - Prepare Test Post

This step is specific for preparing test posts for installing an Interface PCB. **If an Abriox supplied wiring loom is to be used for the installation, skip this step and proceed to step 5.**

If retrofitting an existing test post installation:

Disconnect all wires from the test post. With the wires disconnected, install the Interface PCB onto the test post. **Detailed steps for fitting the Interface PCB can be found on the next page.**

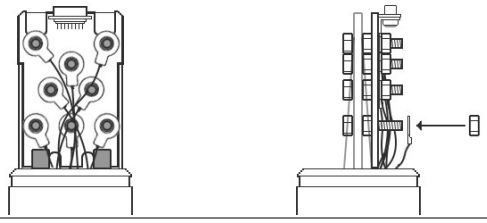
If a pre-assembled Test Post and Interface PCB Kit has been purchased; disconnect all wires from the existing test post, remove the test post then install the Abriox supplied Test Post and Interface PCB Kit onto the riser post, then proceed to **step 5.**

For new test post installations:

If a test post has been supplied separately (i.e. the Interface PCB is not pre-assembled), **detailed steps for fitting the Interface PCB onto a test post can be found on the next page.**

If a pre-assembled Test Post and Interface PCB Kit has been purchased, install this onto a suitable riser post then proceed to **step 5.**

Step 5 - Make Wired Connections



Using the markings on the PCB, connect the test post wires to the **Interface PCB** where required and hold in place with the supplied **Half Nuts** (x8).

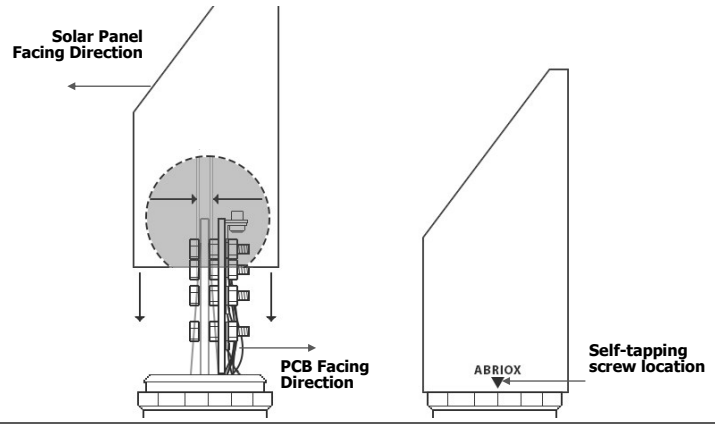
Alternatively, if using an Abriox supplied wiring loom, proceed to connect the terminals as labelled to the appropriate connections on the test post.

For installation examples, refer to the full Installation Instructions for further information.

Step 6 - Take a Reading (Optional)

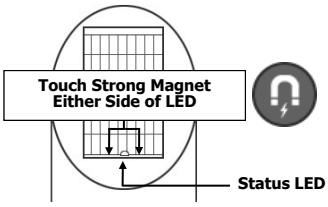
Take a reading on the terminals using a multimeter to compare the measurements against the readings given by the SUNBIRD2 SP given in iCPSM4 (Step 9).

Step 7 - Fit SUNBIRD2 SP Unit



Make a note of the **serial number** (located on the inside of the unit) then dock the **SUNBIRD2 SP Test Post Monitor Unit** on top of test post ensuring orientation is correct (PCB and solar panels should face opposite directions). The **aligning arrow** on the side of the unit will aid correct fitting. Push the SUNBIRD2 SP in place until it is securely held by the retention clips. To aid security, you may use self-tapping screws (No.6 x 5/8 self-drilling screw) where indicated.

Step 8 - Activation



It can take up to 20 minutes for installation to complete

The Status LED can indicate various statuses, please refer to the full Installation Instructions for further information.

Activate the SUNBIRD2 SP by touching a strong magnet next to the Status LED as indicated. Once the LED has illuminated, remove the magnet to start the installation process. The **Status LED** on the SUNBIRD2 SP will flash to indicate the installation status. The LEDs will flash between Amber and Green to show installation/communications are taking place. Once the unit is flashing green (1 green flash every 2 seconds), communications have been established and installation has been completed.

Step 9 - Recommended Actions

To check the measurements taken by the SUNBIRD2 SP, open **iCPSM4** via a browser on your phone/ tablet/laptop etc. Once you are logged in, click on "New Installations" from the menu on the left and locate your unit by **serial number**. Check the reading values match those given by the multimeter. If any of the readings are inconsistent with the multimeter, check the wiring. You will also need to specify the alert thresholds, measurement time and time zone. Further configuration and operational features can be carried out directly via the software. Please refer to the full Installation Instructions for further information.