

## Functional Check PV200/210

To ensure the PV200/210 functions correctly, we recommend a daily check of the PV200/210 using the Seaward PH3-LLT check box.

The checkbox is a “prove live” checkbox which will output a current limited 1000VDC voltage.

The purpose of the check box is to show that the PV200/210 is able to measure the Voc correctly. If the PV200/210 operates correctly, the display will show a voltage >1000VDC.

If the PV200/210 is being used after a function check which results in no voltage measurement, the PV200/210 could create an unexpected short between the positive and negative, and this could lead to arcing and potential damage of the installation. It is therefore recommended to do the functional check as frequent as possible.

### What's needed for the functional check:



PV200/210

PH3-LLT proving unit

MC-4 connector leads

Combiner box leads

## Application Note 085

**PH3-LLT explained**

The PH3-LLT operates from a 9V battery and converts the 9Vdc to a current limited >1000V dc voltage. The voltage is activated when the test probes are connected to the red and black terminal. The red terminal has a micro switch to activate the 1000V signal.

The red indicator lights up when the output voltage is present. If the indicator does not light up, this would indicate an empty 9V battery.

**How to connect:**

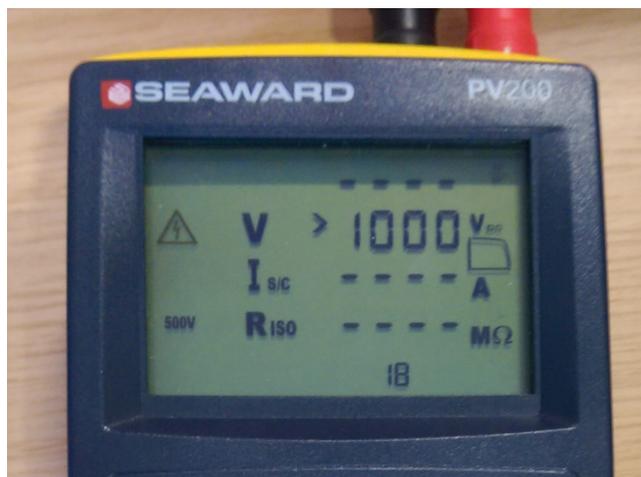
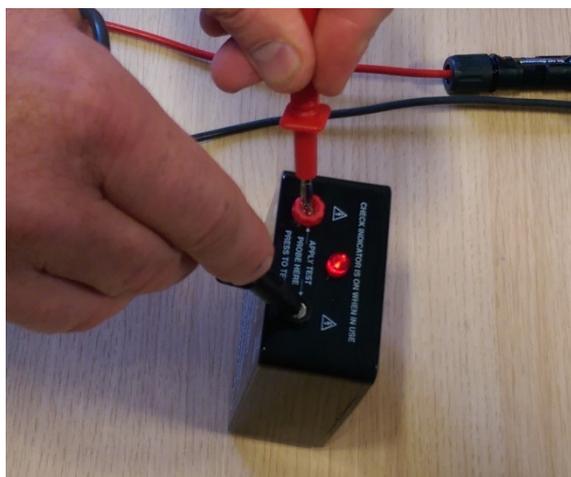
Connect the combiner box leads between the PV200/210 and the PH3-LLT providing unit as shown below.



## Application Note 085

Connect the black probe to the black terminal first, followed by the red probe on the red terminal. The red terminal has a micro switch to activate the 1000VDC voltage. Push the red probe to activate the micro switch. If the red probe and micro switch is activated before the black probe is connected, a small spark may occur as the voltage is present as soon as the red terminal micro switch is activated.

If the PV200/210 is functioning correctly, the display will show a voltage of >1000 VDC.



If the PV200/210 is unable to show a voltage, please check that the indicator on the PH3-LLT is illuminated. When the output voltage is present and the indicator lights up, and the PV200/210 does not show a voltage, it is possible that the PV200/210 has developed an internal fault and should not be connected to a PV array / string. In this case we advise you to contact our office and arrange return of your PV200/210 for investigation.

In case you need to contact us, please have your instrument serial number ready.

### Contact details:

USA / Mexico / Canada

+1 813 886 2775

ROW

+44 (0) 191 587 8737