



# How do I perform an in situ earth bond-test?

## Supernova Plus/Elite/Europa Plus In-Situ Testing

The following document is intended to help setup and perform an in-situ earth bond test using a Supernova Plus/Elite or a Europa Plus.

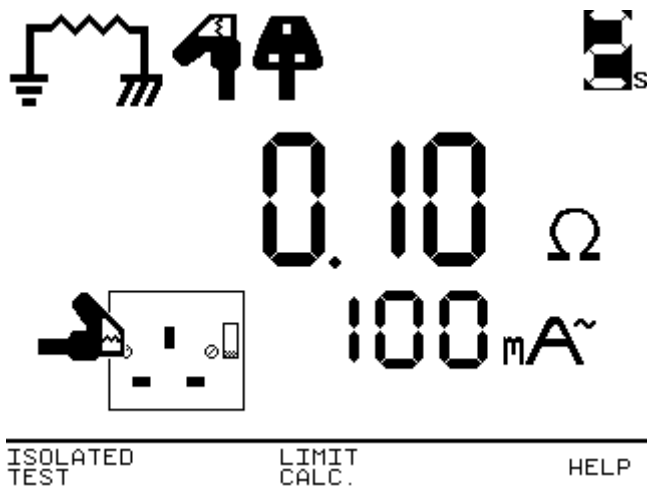
In-situ testing is not available on non-Plus/Elite or the Supernova XE products.

In-Situ tests provide a method of performing an earth bond test on a EUT which cannot be disconnected from the mains supply e.g. computer servers. The earth bond test lead is still required for this test type and the earth bond test current must be set to 100mA.

In-Situ testing can be selected when the earth bond test is displayed on the LCD before a test is started, in both automatic test sequence and manual mode.

To perform an In-Situ earth bond test;

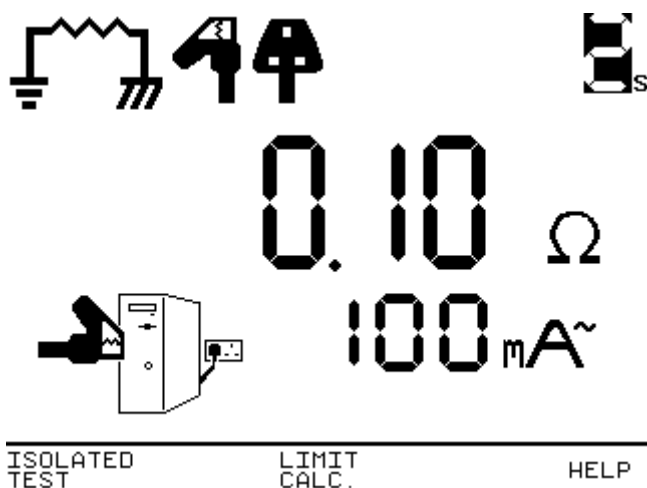
1. Select either a test sequence that includes a 100mA Earth Bond test or setup a 100mA Earth Bond test from the Manual Mode.
2. Select the 'In-situ Test' mode by pressing the fast key. An icon of a mains outlet socket will be displayed in the bottom left hand corner of the LCD.



3. Connect the earth bond probe to an earthed point close to mains socket which the EUT is plugged. This can be the screw head of the mains socket housing or the earth pin of an adjacent socket.

DO NOT push anything into a mains socket earth which is not intended for that purpose. Accessories such as ESD earth bonding points can be used to access the earth pins of an adjacent socket.

4. Press the Green button to start the test, a test will be performed. After the test is complete the icon in the bottom left hand corner of the LCD will change indicating that the earth bond probe should now be connected to the EUT metal enclosure.



5. Disconnect the earth bond probe from the previous point and connect it to a conductive part of the EUT enclosure.

6. Press the Green button to start the test. The Tester will now perform an earth bond test and a measurement will be displayed.

The displayed measurement is result of the second test minus the result of the first test. If the calculated measurement is negative (ie the first test result is greater than the second test result) then a warning message is displayed.

*Note: In Automatic Mode the first earth bond test within the sequence sets the test type for the remaining earth bond tests. For example if an automatic test sequence includes five 100mA earth bond tests and the first test within the sequence is set to 'In-situ' then all subsequent tests will also be set to 'In-situ'.*

If you require more help, please contact us at <https://www.seaward.com/gb/enquire/>.