

To ensure that test equipment is functioning and measuring correctly between planned calibration intervals, it is often necessary, especially for UKAS requirements, to verify that calibrators etc are still giving reliable calibration results between external calibrations.

Although you may not be able to measure the parameter as accurately as an external laboratory, you can create a 'Bench Mark' just after the instrument has been returned from calibration.

By recording the results obtained, you can, at various intervals between external calibrations, ensure that the readings obtained from your equipment are consistent with those taken at the 'Bench Mark'

This application note, provides a simply procedure for checking and verifying the RCD current accuracy of the Transmille 2100 Electrical Test Calibrators.

Available from the Transmille Web Page, there is a procedure for checking the current ranges. The program automatically sets the range of the 2100 and the current calibrator being used (i.e. Transmille 3010 or similar). Link: [http://www.transmille.co.uk/2100\\_support.htm](http://www.transmille.co.uk/2100_support.htm)

The 2100 needs to be placed into a continuous measurement mode to carry out these tests. The downloadable program automatically takes care of this.

The current output from the 3010 is connected as follows.

The negative (black) terminal is connected to the PAT GND terminal on the 2100. The Positive (red) terminal is connected to the 2100 Earth terminal of the LOOP & RCD TEST socket (IEC socket).

It is strongly recommended that the user, makes a dedicated test lead, using a re-wireable IEC plug to connect to the 2100 earth pin connection. No other connection must be made to this socket/plug, as mains voltage is present at all times.

**ANY VARIATIONS OF CONNECTIONS BETWEEN THE 2100 AND THE 3010 CALIBRATOR MAY RESULT IN CONSIDERABLE DAMAGE TO EITHER INSTRUMENT.**

