

**SOCKET
& SEE™**





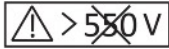
RCD PRO
Professional RCD Tester

Instruction Manual & Specification



1. Safety

1.1 Equipment Markings

	Caution - refer to the instruction manual.
	Construction is double insulated.
	Product should be recycled as electrical waste.
	Conforms to EU standards.
	Prohibited to use on Electrical Systems which use voltages above 550V.
CAT IV 300V	Measurement Category IV is applicable to testing and measuring circuits at the origin of the installations supply. They are utility level checks. This part of the installation is expected to have a minimum of one level of over-current protective device between the transformer and connecting points of the measuring circuit. This tester's voltage rating for CAT IV location is 300V where the voltage is Phase (line) to Earth.

1.2 Operational Safety

The RCD PRO is designed to be used by skilled persons in accordance with safe methods of work. If the RCD PRO is used in a manner not specified by Socket & See, the protection provided by it may be impaired.

Inspect the product before using. If any damage is visible; such as cracks in the casing, damage to any accessories, leads or probes, the unit should not be used.

Do not operate the RCD PRO with the battery cover off as this will compromise the insulated safety barrier.

To maintain safety, ensure serviceability and to monitor accuracy of the RCD PRO the tester should be checked on a checkbox such as the Socket & See CB400 at regular intervals.

When connecting to mains, ensure the colour coding on the test leads and terminals is adhered to.

Although fully protected against over voltage up to 440V, the tester should only be used on 230V systems.

2. Description

The RCD PRO is a digital RCD tester that will test the most commonly encountered RCD's to current standards. This includes standard (AC) type, selective (ACS) type and A type RCD's.

2.1 Features

- AC, ACS, A type RCD testing
- 30mA Auto test
- Ramp Test
- x½ , x1 test on all RCD types
- x5 test on 30mA RCD's
- Auto 0° - 180° cycle
- AC Voltage VLN
- Distribution network operator polarity test pad
- Result Recall
- Hands free function
- Polarity, voltage present LED
- Auto switch off function for battery preservation.

2.2 Indication

The white display backlight will illuminate when switching on and during testing. To preserve battery life the backlight will switch off after approximately 4 seconds of inactivity. The unit will automatically power off after approximately 3 minutes of inactivity. To switch the tester back on after auto power off press any button. A fail condition will be indicated by a red backlight and a warning tone.



LCD display shown in the ramp test function

3. Usage



* The LCD is shown indicating a FAIL result.

3.1 Battery Installation

Unit requires 4 x AA batteries.

Ensure that all test leads are removed before installing batteries. Remove the rubber over mould then the battery cover on the reverse of the unit. Install the new batteries ensuring correct polarity as indicated. After installing batteries and before use ensure the battery cover and rubber over mould are correctly fitted, switch on the unit and check for correct operation.

Dispose of used batteries as per the local authorities guidelines.

3.2 Operation

30mA Auto Test

The 30mA auto test is available for A and AC type RCD. Select the required 30mA auto test on the rotary dial. The tester will monitor the mains for correct polarity and voltage. If parameters are correct the Volts Present LED will illuminate green and a test can be carried out. On pressing the test button. The auto test will begin. X½, x1 and x5 tests will automatically be carried out at 0° and 180°. The results can be seen by using the recall button to toggle through results.

RCD Manual Testing

Select the required RCD type on the rotary dial. Then use the multiplier button to select the required test current. If the mains polarity and voltage is correct the volts present LED will illuminate green and a test can be carried out by pushing the test button. The first test will always be done at 0°. The tester will then automatically cycle to 180° ready for the next test.

Ramp Test

Rather than applying a set test current, this gradually increases the level of additional leakage to identify at what current the RCD trips. Select the required RCD type on the rotary dial. Then use the multiplier button to select the ramp feature. If the mains polarity and voltage is correct the

volts present LED will illuminate green and a test can be carried out by pushing the test button. The tester will display the leakage current at which the RCD tripped along with a pass or fail indication.

Hands Free

The Hands Free function can be used with any RCD test. Select the required RCD type on the rotary dial. Press the Hands Free button, HANDSFREE will be displayed on the screen. Once the tester is connected, correct voltage and polarity is confirmed a RCD test will be conducted without TEST being pressed.

Polarity Test Pad

It is a little known fact that a system can be reverse wired with Live (Phase) to earth/neutral and earth/neutral to Live (Phase) The sockets will all work and conventional testers will test and show that everything is correct despite this very dangerous wiring condition. Although extremely rare, this dangerous condition can exist, so if your test shows this fault do not proceed.

Touch the touchpad area next to the test button. There should be no change in the indication given. If the Voltage/Polarity LED flashes Red and a warning tone is emitted when the touchpad is touched a potentially dangerous polarity reversal exists. Do not proceed. If in any doubt advise the customer to contact the electricity supply company immediately.

4. Maintenance and Service

If required, clean with a soft damp cloth and mild detergent. Do not use abrasives or solvents.

With the exception of the batteries there are no user serviceable parts. Contact Socket & See for parts and technical assistance.

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Specification	
Supply Voltage	195V - 253V AC 50Hz
RCD Trip Time	
Measurement Range	Operating Range Per BSEN61557-6
5 ms - 1999 ms	30 ms - 1999 ms
Test Current Accuracy	
Test Current	Accuracy
X ½	- 0% to - 10%
X 1, x 5	+ 0% to + 10%
Trip Time Accuracy	
Range	Accuracy
< 1 second	± (1% + 1ms)
> 1 second	± (1% + 10ms)
Power Supply	4 x AA LR6 Batteries
Battery Life	50 Hours
Overvoltage Category	CAT III 300V
Operating Temperature	0 - 40°C

Storage Temperature	-10 to 60°C
Operating Humidity	80% @ 31°C to 50% @ 40°C
Safety Compliance	BSEN 61010-2-030:2010
EMC Compliance	BSEN 61326-2-2:2013
Performance Standard	BSEN 61557-1:2007 BSEN 61557-6:2007
Probes	GS38 Compliant
Dimensions (mm)	180mm x 85mm x 50mm
Weight (g)	Approximately 450g