




## Instruction manual 9080DE UNITEST Socket-Tester with RCD


Symbols on the instrument and in the instruction manual:

 **Warning!** Warns of potential danger, comply with the Instruction manual.

 **Caution!** Dangerous voltage. Danger of electrical shock.

 Continuous double or reinforced insulation complies to IEC 536, Class II

 Symbol for the marking of electrical and electronic equipment (WEEE Directive 2002/96/EC).

 Symbol of conformity, confirms conformity with relevant EU directives. The instrument complies with the EMC Directive (89/336/EEC) specifically standards EN 50081-1:1992 and EN 50082-1:1997, as well as the Low Voltage Directive (73/23/EEC) described in the standard EN 61010-1:1995.

### Instruction:

The Socket-Tester 9080 is a test instrument for safe and fast indication of correct or incorrect socket or lead connection cable wiring. The instrument is equipped with an additional RCD tester allowing the functioning of the RCD protection by means of a push-button. The nominal error current amounts to 30 mA. During the RCD test the test current time is limited at the same time as the contact voltage is monitored. Thus maximum safety is ensured when using the socket tester

In conjunction with the coding table, the five combined display elements indicate the true status of the wiring condition and thus the safety of sockets and connecting cables. The instrument contact electrode functions in compliance with the principle of a phase tester, always referring to the ground potential. Thus, a clear and safe indication of a PE-error via the LCD is available, in case dangerous contact voltage is present at PE (ground).

### Features:

- Provides a true ground error indication via the LCD.
- Enables speedy recognition of dangerous voltage being applied to the protective earth, thereby maximizing safety.
- The use of three neon indicators provides rapid detection of correct /incorrect wiring including instant identification of fault indications.
- Designed for fast and effective testing of RCD's.

### Safety measures

The instrument has left our factory in a safe and perfect condition. To maintain this condition, the user must pay attention to the safety references contained in this instruction manual.

### Warning!

This instruction manual contains both information and warnings that are necessary for the safe operation and maintenance of the instrument. It is recommended that you read the manual

carefully and ensure that its contents are fully understood. Failure to understand these instructions and to comply with the warnings and instructions contained herein can result in serious injury or damage.

### Danger!

In order to avoid the danger of electrical shock, it is important that proper safety measures are respected when working with voltages exceeding 120V (60V) DC or 50V (25V) r.m.s. AC. These voltages represent internationally the limits of max. contact voltage.

### Warning!

If a plug adapter has to be used to test a socket or a lead connection, it is essential to ensure that the adapter is in a perfect condition and that the protective conductor connection of the adapter is continuously connected. Using plug adapters without continuous protective conductor leads to faulty test results.

### Warning!

The test instrument may only be used in

properly grounded electrical installations.

### Warning!

Prior to usage check that the instrument is in perfect working order, for example at a known voltage source.

### Warning!

When using the test instrument in electrical installations with a higher distributed capacitance than indicated in the technical specification data section, faulty test results could be obtained.

### Warning!

A clear and safe statement concerning the test result can only be given in connection with the touching of the contact electrode.

### Warning!

The instrument must only be used under the conditions and for the purposes for which it has been constructed. particular attention should be paid to the safety instructions, the technical speci-

fications relating to environmental conditions and the use of the instrument in dry surroundings.

### Warning!

This unit will not detect N/PE reverse.

### Warning!

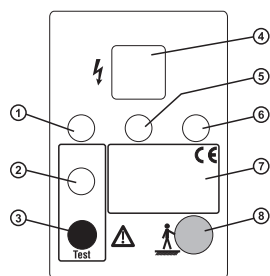
This unit is in no way intended as a replacement for a real RCD- tester.

### Warning!

The display elements may at times light up weakly depending on the distributed capacitance of the electrical installation.

### Display and Control Elements:

- 1) Neutral (N)
- 2) Indicates that the test instrument is ready to performe RCD-test (RCD)
- 3) Button to start RCD-test
- 4) LC-Display for PE-error (4)
- 5) Ground conductor (PE)
- 6) Phase (L)
- 7) Coding table
- 8) Contact electrode



### Testing of Sockets- and lead connection wiring:

### Warning!

If a plug adapter has to be used to test a socket or a lead connection, it is essential to ensure that the adapter is in a perfect condition and that the ground conductor connection of the adapter is continuously connected. Using plug adapters without continuous ground conductor leads to faulty test results.

To test sockets- and lead connection

wiring, plug instrument into socket.

Touch the contact electrode and read the display elements. A statement regarding the test result is indicated via the coding table below.

4	N	PE	L	
□	●	●	○	OK
□	●	●	●	L/N reverse
●	●	●	○	L/PE reverse
■	○	○	○	PE = L
□	○	○	●	PE open
□	○	●	○	N open
○	○	○	○	L open
□	○	○	○	□ off
■	○	○	○	■ on
⚡ ⚠ Attention! Power applied to PE				

### Warning!

The display elements may at times light up weakly depending on the distributed capacitance of the electrical installation.

### PE-error recognition:

In case of the symbol (4) appearing during a simultaneous touch of the contact electrode (8), a dangerous contact voltage is present at the PE-conductor. In such circumstances the complete electrical installation must be

checked by a qualified electrician.



### RCD-test:

### Warning!

This unit is in no way intended as a replacement for a real RCD- tester.

For the RCD test make sure that the socket wiring under test is in order. Verify socket wiring with the coding table.

The indicator (2) must then appear in order to provide the RCD-test.

Push button (3) to start RCD-test.

The RCD must trip after the test. If the RCD does not trip, please check the RCD or the entire electrical installation and/or ask a professional electrician for assistance.

If the RCD- test is performed and the max. contact voltage is exceeded the test instrument will either automatically lock out the test function or the test

instrument itself will stop the RCD- test.

### Maintenance

As long as the instructions in the operating manual are adhered to, no special maintenance is required.

### Cleaning:

Disconnect the instrument from all circuits. Humidify the cloth slightly with household cleaner and wipe the instrument surface by applying light pressure. Allow a recovery time of 6 hours after cleaning before operating the instrument.

### Technical Data

Nominal voltage:	230V AC ±10%
Frequency range:	50-60 Hz
Overvoltage category:	CAT III, 300V
Pollution degree:	2
Altitude:	up to 2000m
RCD-test time:	60...300ms
Contact voltage threshold:	<50V AC against ground depending on coupling to earth
RCD-test current:	30mA ±15%

Overload protection:	300V AC/DC
Temperature range:	0°C up to 40°C
Humidity:	<80%
PE-error detection:	
Response threshold:	<50V AC against ground depending on coupling to earth

Max. distributed capacitance per unit length:	0,1µF
Applicable Directives and Standards:	
EMC:	EN 50081-1 and EN 50082-1, EN50082-2
Low Voltage Directive:	EN61010-1

### 24 months' guarantee

**UNITEST** instruments are subject to stringent quality controls. If, in the course of normal daily use, a fault should occur, we provide 24 months' guarantee (only valid with invoice). Faults in manufacture and materials will be rectified by us free of charge, provided the instrument has not been tampered with, and is returned to us unopened. Damage due to dropping, abuse or misuse is not covered by the guarantee.

Our Service Department will promptly

repair any faults that occur outside the guarantee period.

Please contact:

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This Instruction Manual has been prepared with great care. No liability is accepted for the correctness and completeness of the data, illustrations, and drawings it contains.

We reserve the right to make changes