

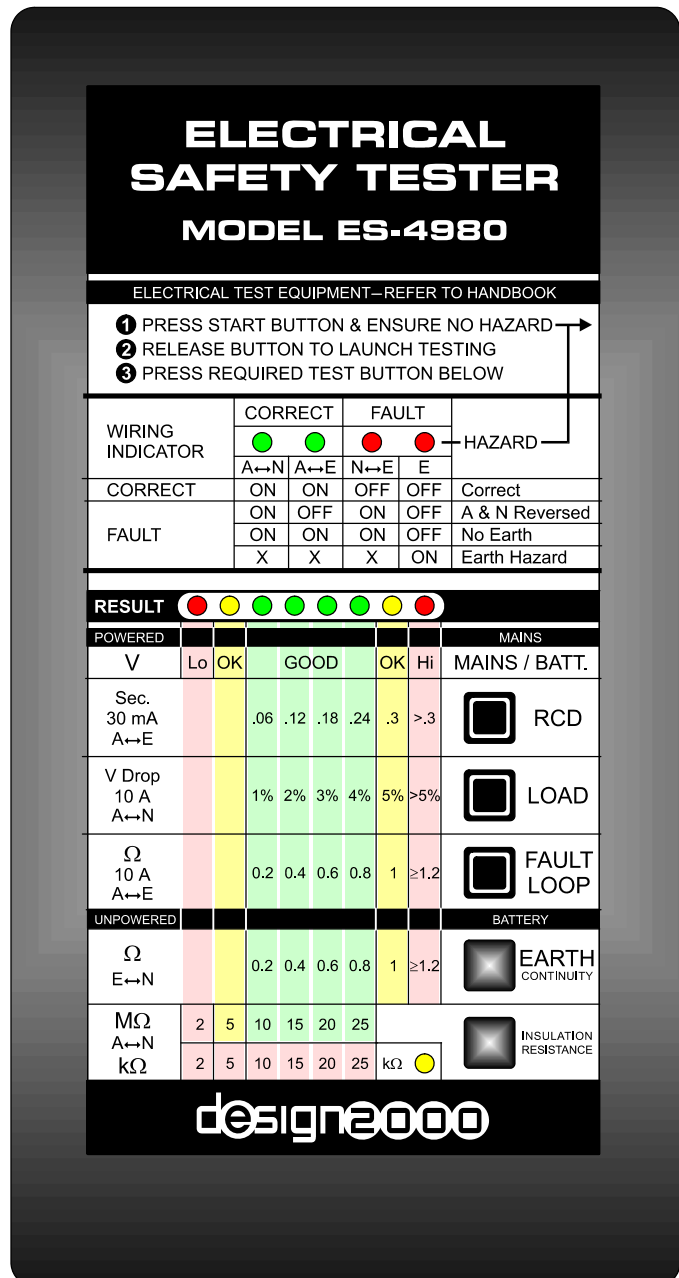


# THE MOST VERSATILE YET INEXPENSIVE MULTI-FUNCTION ELECTRICAL INSTALLATION TESTER AVAILABLE

## FEATURES

The ES-4980 performs comprehensive electrical wiring tests implicit in AS/NZS 3000:2007 from a socket outlet, with no need for a separate earth reference, no need to bridge out RCDs, and no need to disconnect electrical appliances!

- ❑ **EARTH CONTINUITY**  
AS/NZS 3000:2007 Clause 8.3.5
- ❑ **INSULATION RESISTANCE**  
AS/NZS 3000:2007 Clause 8.3.6 (prelude)
- ❑ **POLARITY**  
AS/NZS 3000:2007 Clause 8.3.7/8.3.8
- ❑ **IDLE SUPPLY VOLTAGE**  
Check for voltage to AS 60038  
230Vac +10%, -6%
- ❑ **TOTAL FAULT LOOP (A TO E)  
IMPEDANCE  
(Without tripping RCDs!)**  
AS/NZS 3000:2007 Clause 8.3.9
- ❑ **LOAD TEST**  
AS/NZS 3000:2007 Clause 8.2.2/8.3.9
- ❑ **RCD TEST**  
AS/NZS 3000:2007 Clause 8.3.10
- ❑ **EARTH RESISTANCE**  
(AS/NZS 3000:2007 Clause 8.3.5)
- ❑ **EARTH LEAKAGE**  
AS/NZS 3000:2000 Clause 2.5
- ❑ **EXTENSION LEAD TESTING**  
(IMPORTANTLY UNDER 10A  
MOMENTARY LOAD!)
- ❑ **AUTOMATIC PROTECTION OF  
UNPOWERED TESTS**  
(IF MAINS POWER IS APPLIED)



## USAGE & BENEFITS

The ES-4980 will test:

- Polarity and Earth connection – is the Active and Neutral wired correctly, and is the earth connected and at a safe potential?
- Supply voltage – is the mains supply within –6% and + 10% of the specified 230Vac? (Other voltages to order).
- Voltage drop under load – is there a faulty junction, a bad termination or is the cable run too long or of insufficient gauge? Can concealed wiring handle the load?
- Residual Current Device (Earth leakage detector or Safety switch) operation – does it really work and trip in time at the power outlet?
- Fault Loop Impedance (without tripping RCDs) – is the total loop resistance of the Active and Earth wires as low as it should be?
- Resistance of the Earthing System – calculate the resistance of the main Earthing conductor.
- Earth Continuity – is the Earth bonded to the Neutral properly?
- Insulation resistance – is the resistance between the Active and Neutral as high as it should be? (Tested using a SAFE voltage).
- Extension leads – Test these, power boards, double adaptors etc., under load!

## TESTING

The ES-4980 Tester performs both unpowered tests (mains off, with internal power feed) and powered tests (mains on). It features automatic protection of unpowered tests if mains power is applied.

The ES-4920 Tester is designed for failsafe and straightforward easy operation:

- Green lights indicate GOOD or PASS
- Yellow lights indicate OK or PASS
- Red lights indicate Lo/Hi WARNING or FAIL.

This is generally all the testing officer needs to know, however more detailed descriptions are found in the handbook.

## COMPLIANCE

The ELECTRICAL SAFETY TESTER, ES-4980 performs both mandatory and optional tests as outlined in AS/NZS 3000, and complies with the relevant clauses of AS/NZS 3017 (prevention of a fire and preventing a person from receiving an electric shock), AS/NZS 3260 (now superseded by AS/NZS 60950), AS/NZS 3100 (guidelines covering design and testing of electrical equipment to ensure safety and protection against electric shock), AS/NZS 3350.1 (although more appropriate for household & commercial appliances themselves) and AS/NZS 61010.1 Category III (general safety requirements for electrical test, measuring, control and laboratory equipment) for Electrical Safety.



DESIGNED AND MADE IN AUSTRALIA  
**design2000**  
Est. 1968      [www.design2000.com.au](http://www.design2000.com.au)