



# SCR ELEKTRONIKS

Leading Manufacturer of Industrial Electronic Products since 1975

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## Jig For Functional Testing

### FUNCTIONAL TEST JIG FOR ENERGY METER TESTING

SCR ELEKTRONIKS have developed Testing Jigs for testing Energy Meter / their PCBs for all functions during production. This facilitates high volume production.

The Functional Test Jigs are available for Testing of Energy Meter for complete functional tests. In Meter Test Jig the entire circuit, including CTs and Counter, is checked.

**There are two modes :**

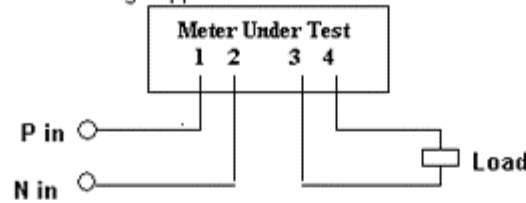
1. MANUAL MODE.
2. AUTO MODE.

In MANUAL MODE one by one four steps will be selected with push Button.

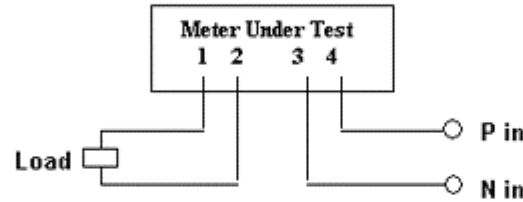
In AUTO MODE four steps are followed one by one automatically. The internal circuit makes the required connections. Specially designed fixture is provided for quick connection.

Following are four steps and the chart displays the LED status:

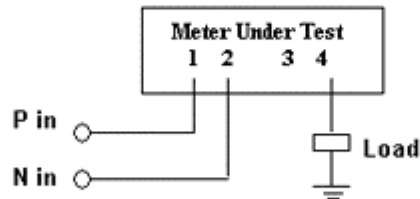
**1. Normal Operation :** In this case the Current (with Phantom Load) is passed through the Meter with Voltage applied and LED indications are observed.



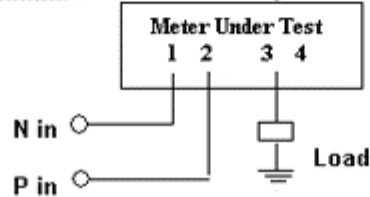
**2. Reverse Current Test :** In this case the load side and supply sides are inter-changed and LED indications are observed.



**3. Earth Fault with Phase :** The circuit is arranged as follows :



**4. Earth Fault with Neutral :** The circuit is arranged as follows :



| Sr. No. | Condition (Connection) | Power on LED | CAL LED | Earth LED | Reverse LED |
|---------|------------------------|--------------|---------|-----------|-------------|
| 1.      | Normal                 | ON           | Pulse   | OFF       | OFF         |
| 2.      |                        | ON           | Pulse   | OFF       | ON          |
| 3.      |                        | ON           | Pulse   | ON        | OFF         |
| 4.      |                        | ON           | Pulse   | ON        | OFF         |

The Jigs are also available with Calibration check. In this case for rough accuracy approximate Calibration is checked. So that final calibration is faster.

Similarly Jig is also available for testing of only PCBs. The mechanical arrangement will be different and instead of Current Transformer circuit, milivolt Signal will be given at input