

sanwa

DIGITAL CONTACT RESISTANCE METER

MODEL SCL-100

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DIGITAL CONTACT RESISTANCE METER

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Introduction

The SCL-100 has been developed for the purpose of reading on a digital indicator the contact resistance of a relay or a switch, the conductance resistance of a AC cord wire, and the DC resistance of a transformer, etc.

The various distinctive features have the meter surely display its availability as an indispensable gear for quality control in the course of production and inspection processes.

Features

1. Just by connecting the attached Kelvin cords to the subject to be measured, the resistance value is readily read on the LED indicator.
2. A problem of measuring error in the very small resistance measurement has been minimized by the adoption of the 4-terminal method.
3. A very accurate measurement is expected by the very stable performance which is enabled by the stabilized voltage and current to drive the meter.
4. By the use of the 1-tip LSI, the A-D conversion circuit has increased its reliability very much.
5. The digital display completely eliminates the personal reading error in measurement which makes it easy for any operator to use the meter.

Measurement ranges

Range	Measuring ranges	Resolution	Power source	Accuracy *
200mΩ	0 ~ 199.9mΩ	0.1mΩ	1A	Stabilized DC power source
2Ω	0 ~ 1.999Ω	1mΩ	0.1A	
20Ω	0 ~ 19.99Ω	10mΩ	10mA	

* At $25^{\circ} \pm 10^{\circ}\text{C}$ for 12 hours continuous use.

Operation: Double integral system.

Display: 3.5 digits LED in red, 1999 at the full scale.

"OVER" indication: Flashing of "0" in the lower 3 figures.

Measuring time: Minimum 400ms.

Voltage across terminals: About 0.7V.

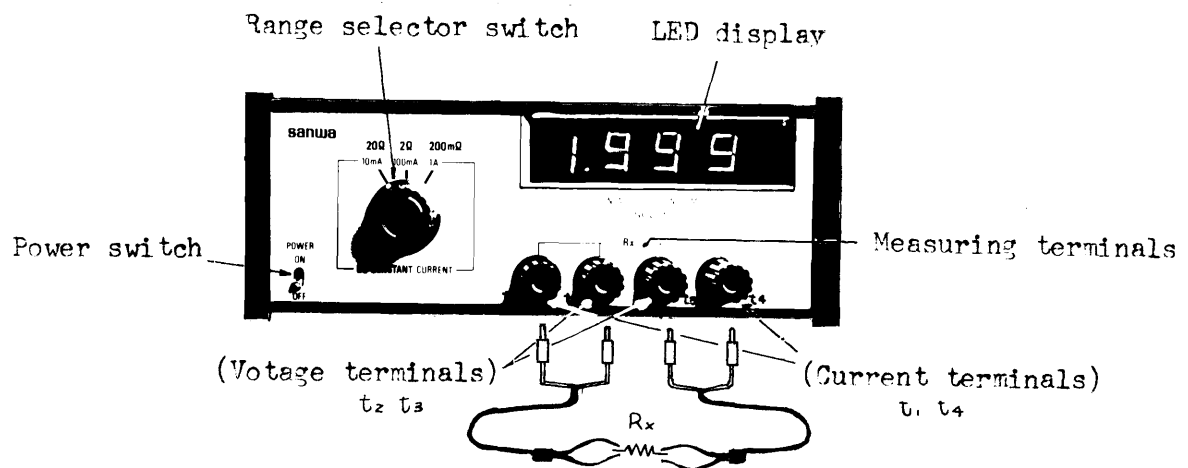
AC power supply: AC V (50/60Hz)

Operating conditions: AC power supply AC V~ V (50/60Hz)
 Ambient temperature 5^o~ 40^oC

Dimensions/weight: 175 x 80 x 235mm / 2.5kg

Attached accessories: Measuring Kelvin's cords 2
 AC cord 1
 Instruction manual 1

Controls on the panel



Operation

1. The AC cord is connected to the receptacle on the back of the meter and the plug is plugged in the AC mains socket.
2. The power switch is turned on, and the display shows the condition of "OVER" (RX = ∞) with the "0" figures of the lower 3 digits flashing.
3. The range selector switch is set to a desired range.
4. The attached Kelvin's cords are connected across the terminals t1 - t2 and t3 - t4 on the front panel respectively.
5. The tips of the Kelvin's cords are connected to the subject to be measured. The resistance value is indicated on the display at once.

Caution

1. Never impress a voltage through the measuring terminals.
2. In order to obtain an accurate result, set to measurement 30 minutes after the switch is turned on.
3. While the subject is being measured, clip the measured subject firmly with the tips of the Kelvin's cords. If it is not assuredly clipped, a measuring error or a faulty operation may occur.
4. Any enquiry is welcome as to providing with the BCD output terminals or other modifications.