Operating Instructions

CALMASTER

InHouse Multimeter Calibration TestBox



Ensure your multimeters are always deemed accurate with CALMASTER. This useful bench tester checks that meter ranges are to calibration standard. It's quick and easy to use - and reduces the number of meters sent away unnecessarily for calibration.

Meters Ltd www.actmeters.com +44(0)1744 886660



ACT Meters Ltd The Old Smithy Church Road Rainford Merseyside WA11 8HD United Kingdom

w: www.actmeters.come: technical@actmeters.com

t: +44(0)1744 886660

f: +44(0)1744 886660

CALMASTER

Important Information

CALMASTER works in conjunction with your own calibrated multimeter. It quickly compares accuracy between the calibrated multimeter and meter under test. It allows you to test and verify the various ranges for AC/DC Voltage, Resistance and DC Current. Readings within ±5% of the calibrated multimeter will prove the meter under test is deemed accurate to BS ISO9001 standards.

PLEASE NOTE: Input sockets are provided for the calibrated meter and meter under test. Controls are provided to adjust AC/DC voltages and a switch to select functions. CALMASTER is powered from a switchable 115VAC or 230VAC supply. A RED neon indicates when AC power is on.

WARNING: DAMAGE OR INJURY MAY RESULT IF 115VAC IS SELECTED AND CONNECTED TO A 230VAC SUPPLY. Safety fuses are provided for input and output AC supplies

CALMASTER

Notes

2

CALMASTER

Operating Instructions

FIRST STEPS

- 1. Connect power lead between CALMASTER and suitable AC mains supply
- 2. Switch on AC supply and confirm that CALMASTER red neon is lit
- 3. Turn all CALMASTER controls to the fully anti-clockwise position
- 4. IMPORTANT: Remove AC mains lead when testing resistance to ensure stable resistance reading

Testing AC Voltage

- 1. Connect 'Calibrated Meter' and 'Meter Under Test' to CALMASTER left sockets
- 2. Switch both ranges to 'AC Volts' range
- 3. Turn 'AC Volt Adjust' to the desired voltage and confirm that the 'Meter Under Test' reading is within ±5% of the reading displayed on the 'Calibrated Meter'
- 4. Log readings obtained for calibration records
- 5. Repeat above on all AC voltage ranges on the meters
- 6. On completion return all control back to the fully anti-clockwise position

CALMASTER

Operating Instructions

Testing Resistance

- 1. Connect 'Calibrated Meter' and 'Meter Under Test' to the CALMASTER middle sockets
- 2. Switch both meters to 'Resistance' range
- 3. Turn the 'FINE' or 'COARSE' controls to the desired resistance on the 'Calibrated Meter'
- 4. Switch the CALMASTER from the 'Calibrated Meter' to the 'Meter Under Test' and confirm that the reading is within ±5% of the reading on the 'Calibrated Meter'
- 5. Log readings obtained for calibration records
- 6. Repeat above on all resistance ranges on the meters
- 7. On completion return all controls back to the fully anti-clockwise position

Testing DC Voltage

- 8. Connect 'Calibrated Meter' and 'Meter Under Test' to the CALMASTER middle sockets
- 9. Switch both meters to 'DC Volts' range
- 10. Switch CALMASTER to the 'DCV Both Meters' position
- 11. Turn the 'FINE' or 'COARSE' controls to the desired voltage and confirm that the 'Meter Under Test' voltage reading is within ±5% of the reading displayed on the 'Calibrated Meter'
- 12. Log readings obtained for calibration records
- 13. Repeat above on all DC voltage ranges on the meters
- 14. On completion return all controls back to the fully anti-clockwise position

CALMASTER

Operating Instructions

Testing DC Current

- 1. Connect 'Calibrated Meter' and 'Meter Under Test' to the CALMASTER right sockets
- 2. Switch both meter to 'DC mA' range
- 3. Confirm that the 'Meter Under Test' mA reading is within ±5% of the reading displayed on the 'Calibrated Meter'
- 4. Log readings obtained for calibration records
- 5. Repeat above on all DC current ranges on the meters

WARNING: ON 10AMP RANGE MAX TEST TIME 30 SECONDS

Specifications

Resistance	AC Volts	DC Volts	DC Current
00.0Ω up to 100K	0.0 to 230VAC	0.0 to 36VDC	1mA
			10mA
			100mA
			1Amp

Fuse Protection	(AC Input) 250VAC, 1.6Amp max (AC Output) 250VAC, 50mA max
Weight	2.2KG
Dimensions	216(L) x 132(W) x 102(D)mm

CALMASTER

Operating Instructions

Contents

First Steps	4
Testing AC Voltage	4
Testing Resistance	5
Testing DC Voltage	5
Testing DC Current	6
Specifications	6