

Handbook Version : 3.0
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Congratulations !

You have purchased the latest in digital temperature instrumentation. We hope that your new **LC87-D** will give you many years of reliable service.

This manual has been designed to make it easy you to use your new **LC87-D** quickly and with complete confidence. If at any stage we can be of assistance, please contact either your local TPS representative or the TPS factory in Brisbane.

TPS Pty Ltd

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T.P.S. MODEL LC87-D DIGITAL THERMOMETER

The T.P.S. Model **LC87D** is a hand-held, all Solid State, Digital Thermometer with a Liquid Crystal Display. It is designed to operate with 2 separate Temperature sensors, with a selector switch to choose the sensor displayed.

Power source in the standard models is by a 9V Battery (alkaline preferred). A 240 Volt "PLUG-PACK" power supply is optional.

Two models are available, with either Degrees Centigrade or or Degrees Fahrenheit display.

- | | |
|----------------------------|------------------|
| 1. Centigrade Model LC87D | Part No 124107 |
| 2. Fahrenheit Model LC87DF | Part No 124107/F |

Standard Kit:

| | |
|---------------------------------------|----------------|
| LC87D Meter, plus | |
| 2 x Temperature Sensors with 6m cable | Part No 124208 |
| 9V Battery | Part No 130026 |
| LC87D Handbook | Part No 130050 |

Options:

| | |
|--|------------------|
| Plug-pack type mains power adaptor | Part No 130006 * |
| NiCad rechargeable battery and charger | Part No 130007 * |
| Hard plastic carry case | Part No 130057 |
| Vinyl Carry Pouch | Part No 130056 |

* Note: The 130006 and 130007 options are factory-fitted.

Specifications:

| | |
|-------------|--|
| Ranges | -50.0 to 120.0 °C or -50.0 to 199.9 °F |
| Resolution | 0.1 °C |
| Accuracy | +/-0.1 °C |
| Display | Liquid Crystal Display with 12.5mm digits and "LO BATT" indicator. |
| Sensor Type | Silicon for 120 °C |
| Environment | Ambient Temperature: 0 to 50 °C Relative Humidity: 0 to 95% |
| Power | 9V Battery (alkaline preferred) |
| Dimensions | 175 x 78 x 35 mm |
| Weight | Approx 200g |

Function Switch

The function switch on the front of the LC87-D has three positions:

- OFF** Switches the meter off.
- A** Displays the temperature reading from sensor plugged into the SENSOR-A socket.
- B** Displays the temperature reading from sensor plugged into the SENSOR-B

Calibration

1. Place the sensors in water at ambient temperature.
2. Measure the water Temperature with an accurate Mercury Thermometer.
3. Set the CALIBRATE control for correct display on the LC87D.

There is a separate calibrate control for each sensor, one on the FRONT panel for sensor B, and one on the END panel for sensor A.

Warranty

TPS Pty. Ltd. guarantees all instruments and electrodes to be free from defects in material and workmanship when subjected to normal use and service. This guarantee is expressly limited to the servicing and/or adjustment of an instrument returned to the Factory, or Authorized Service Station, freight prepaid, within twelve (12) months from the date of delivery, and to the repairing, replacing, or adjusting of parts which upon inspection are found to be defective. Warranty period on electrodes is three (3) months.

There are no express or implied warranties which extend beyond the face hereof, and TPS Pty. Ltd. is not liable for any incidental or consequential damages arising from the use or misuse of this equipment, or from interpretation of information derived from the equipment.

Shipping damage is not covered by this warranty.

PLEASE NOTE:

A guarantee card is packed with the instrument or electrode. This card must be completed at the time of purchase and the registration section returned to TPS Pty. Ltd. within 7 days. No claims will be recognized without the original guarantee card or other proof of purchase. This warranty becomes invalid if modifications or repairs are attempted by unauthorized persons, or the serial number is missing.

Procedure For Service

If you feel that this equipment is in need of repair, please re-read the manual. Sometimes, instruments are received for "repair" in perfect working order. This can occur where batteries simply require replacement or re-charging, or where the electrode simply requires cleaning or replacement.

TPS Pty. Ltd. has a fine reputation for prompt and efficient service. In just a few days, our factory service engineers and technicians will examine and repair your equipment to your full satisfaction.

To obtain this service, please follow this procedure:

Return the instrument AND ALL SENSORS to TPS freight pre-paid and insured in its original packing or suitable equivalent. INSIST on a proof of delivery receipt from the carrier for your protection in the case of shipping claims for transit loss or damage. It is your responsibility as the sender to ensure that TPS receives the unit.

Please check that the following is enclosed with your equipment:

- **Your Name and daytime phone number.**
- **Your company name, ORDER number, and return street address.**
- **A description of the fault. (Please be SPECIFIC.)**
(Note: "Please Repair" does NOT describe a fault.)
- **either \$13.50 for return freight for units under warranty,**
or
- **\$24 to cover inspection costs and return freight.**

(These amounts are not applicable to full-account customers.)

Your equipment will be repaired and returned to you, freight paid.

For out-of-warranty units, a repair cost will be calculated from parts and labor costs. If payment is not received for the additional charges within 30 days, or if you decline to have the equipment repaired, the complete unit will be returned to you freight paid, not repaired. For full-account customers, the repair charges will be debited to your account.

- **Always describe the fault in writing.**
- **Always return the sensors with the meter.**