Instruction Manual

Battery Capacity Meter
BCM-L100

Contents

1. Introduction

The BCM-L100 is small LCD battery capacity meter with the following features;

- Works with lead acid, lithium, LiFePO4, and Ni-MH batteries between 0V and 100V.
- Displays capacity remaining and battery voltage / temperature.
- Reverse polarity protected.
- Auto power-off function.
- Low battery signal / alarm function

2.   Operation

Connect the red wire to battery positive, and the black wire to battery negative.

The meter is switched on and off by pressing □. The display will show battery capacity and voltage. Pressing > will toggle between voltage and temperature.

3.   Setup

With the meter switched on pressing > for 3 seconds will enter the setup menu.
In the setup menu there are 5 sub-sections;

1.   Select battery type.
2.   Set auto-off time delay.
3.   Set the upper limit voltage and lower limit voltage for the % display.
4.   Set the alarm lights on or off, and set the alarm voltage value.
5.   Recalibrate the meter voltage.

Cycle through the sub-sections by pressing >. Press □ to enter a sub section. Press and hold > to exit the setup menu.

3.1   Battery type.

In sub-section 1 there are 3 options, cycle through these by pressing >.

1 -- L 3

P = lead acid, F = LiFePO4, L = lithium.

To select the battery type press □, now select the required battery voltage as follows;

P12 denotes a 12V battery, press > to cycle up through the voltages.
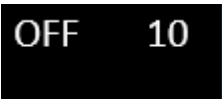
F2 denotes a 2 cell LiFePO4 battery, press > to cycle up the number of cells.

L2 denotes a 2 cell lithium battery, press > to cycle up the number of cells.

Once you have reached the required voltage or cell number, press and hold □ to return to the setup menu. Press and hold > to exit the setup menu if required.

3.2   Auto off time delay.

In sub-section 2 the auto off facility can be turned on or off, and the time delay can be toggled from 10 to 120 seconds.

OFF   10

If the auto off facility is switched on, the display will show a D sign.

Press and hold □ to save and return to the setup menu.

3.3 Upper / lower percentage values

In sub-section 3, the left 3 digits show the voltage corresponding to 0% capacity, the right 3 digits show the voltage corresponding to 100% capacity.

```
10.0   20.0v
```

Move between the digits with □, when a digit is flashing, increase the value with >, press and hold □ to save and return to the setup menu.

3.4 Alarm function

In sub-section 4 the left side shows if the alarm function is on or off, the right side shows the voltage below which the warning symbol will flash.

```
ON   20.0v
```
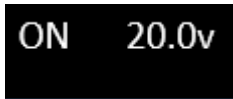
Move between the sections and digits with □, when a digit is flashing, change the value with >, press and hold □ to save and return to the setup menu. Press and hold > to exit the setup menu if required.

3.5 Calibration.

Connect the meter to an accurate 20V source, enter sub-section 5, press and hold □ to calibrate the meter. Press and hold > to exit the setup menu.

4. Dimensions

Length = 61.5mm, width = 33.5mm, height = 13.5mm.

5. Mounting

The BCM-L100 can be clipped into a rectangular slot 58mm x 28mm.

6. Water Resistance

The BCMs are not water proof, the front of the panel is a sealed membrane, but there are gaps at the rear that should be sealed if water resistance is required.

7. Service

The BCMs are a low cost item and cannot be economically repaired. If the item is not under warranty it should be replaced.

8. Warranty

All our products have a warranty against defective manufacturing for 12 months from the date of shipment. The warranty doesn't cover damage caused by incorrect installation.