

## GAMMATRONIX MICROPOWER BATTERY MONITOR (Model 'D')

### Specifications :

Voltage : 12v (Max 16v) or 24v DC (Max 30v) dependent on model. Accuracy to +/- 0.1v.

Power Consumption : Less than 400uA average in Micropower mode, 2mA in Alternate mode.

Internally fused (self resetting) and reverse voltage protected.

Version	3 <sup>rd</sup> green	2 <sup>nd</sup> green	1 <sup>st</sup> green	Yellow	Orange	Red	Red slow	Red fast
12v DC	12.5v	12.1v	11.8v	11.5v	11.2v	11v	10.7	< 10.7
24v DC	25v	24.2v	23.6v	23v	22.4v	22v	21.4v	< 21v

**Installation :** The unit has three wires:

Red	Battery +ve
Blue	Battery -ve
Yellow	Power Mode : +12/24v for Alternate mode, 0v for Micropower mode

The unit operates by illuminating an LED at the current battery level point.

**In micropower mode**, the Yellow wire is left unconnected, ( or connected to 0v) and the LED will flash and update once per second.

**In Alternate mode**, connect yellow wire to supply, and the unit will have one LED always on at any time. Great if flashing might be annoying in your application, or you can spare that little extra current.

The red LED has multi-functional capability. Once the red LED illuminates, the battery is considered discharged. User warning against further discharge is indicated by slow flashing, and critical level indicated by rapid flashing of the red LED.

The unit is internally fused but should have the wiring to it protected by a suitable local fuse. The unit has inbuilt interference suppression, however in very noisy electrical environments it may require additional in-line suppression which may be purchased from car radio installation stores.

The unit is intended for surface mounting via the backing tape provided. It may also be mounted behind a panel with LEDs exposed through suitable holes.

LEDs are on a 7mm pitch and require a 5.5mm clearance hole if mounted in this way.

### Operation:

The LED Battery Monitor displays the current charge status of a lead acid, or other battery. In Micropower mode, the LED will flash at the battery status level. In Alternate mode, the LED will not flash and will remain lit.

Lead acid batteries, and other types exhibit different off-load voltages when discharged (or 'flat') than when under load. A flat battery may read close to 12/24v, but will immediately collapse to a few volts if current is drawn. The LED Battery Monitor is intended to give a correct reading for a battery UNDER LOAD. As with any other voltmeter, it will give an erroneous high reading if the battery is not connected to a load due to the battery's internal resistance off-load effects.



### Safety, End OF Life and Warranty Statement

This unit is an installable component and not a complete system in its own right and therefore requires installation. The installation, use and suitability in a given application is the responsibility of the installer. Any damages or consequences are limited to the replacement of the unit under the 12 month guarantee. Do not allow the unit to become damaged, immersed in water, dismantled, or make modifications to the enclosure or internal parts. Do not use the unit outside of its operating voltage specification (according to model.) At end-of-life this product should be taken to suitable recycling point and not disposed of in household rubbish.