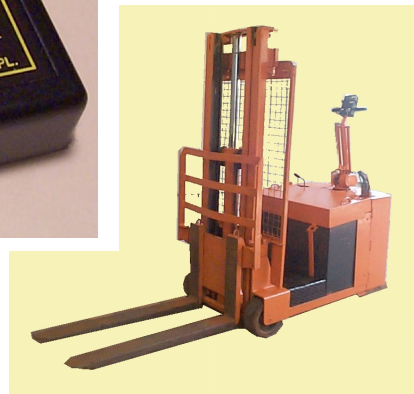
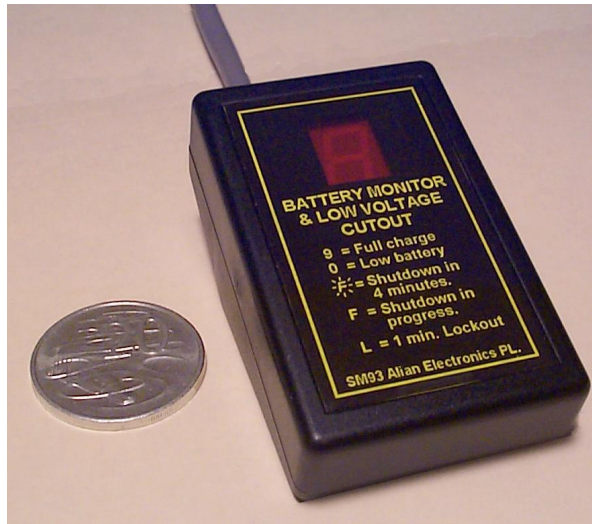




## SM93 BATTERY MONITOR & LOW VOLTAGE CUTOUT INFORMATION BRIEF

Manufactured in Australia by Alian Electronics Pty. Ltd.  
408 Old Sale Rd. Drouin West 3818 Ph. (613) 5625 2545  
more information is available at [www.alianelectronics.com.au](http://www.alianelectronics.com.au)



### GENERAL INFORMATION

The **SM93** unit is a microprocessor controlled **battery voltage monitor** and **battery discharge protector**. It will give a relative indication of battery levels in high current electric vehicles such as forklifts, warehouse tugs and scissor lifts. It will automatically adjust itself to suit a wide range of standard battery types. When a battery pack is connected to an electric vehicle fitted with the unit, it first determines the battery type, (**12, 24, 36, 48 volts**) then it indicates the relative state-of-charge of the battery with a single digit 0 to 9 on a bright LED display.

The **SM93** can be mounted within easy view of the operator using the self adhesive Velcro patch on the rear. The unit provides the operator with an **audible** and **visual warning**, which if ignored will disable selected vehicle functions after a four minute delay.

The unit also features an auxiliary contact that can be wired in series with the control circuit of a selected vehicle contactor, it can be used to disable critical functions, such as 'lift control' when the battery voltage falls to a level that may damage the pack.

If the battery is low when the vehicle is first powered up, a **forced 1 minute lockout** period via the same auxiliary contact acts as a further disincentive to operators degrading the battery pack.

### SPECIFICATIONS

- **SUPPLY VOLTAGE RANGE LIMITS** 7.5V - 55V
- **SUPPLY CURRENT (typical)** 45ma.
- **AUXILIARY CONTACT (maximum current)** 2 Amps