

Bright idea for battery checks

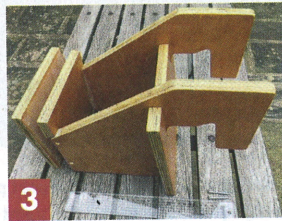
Nina Terrywood's at-a-glance method for checking battery status



1 The components of the ply bracket laid out and ready to assemble



2 The hooks slot into the central base plate



3 Outboard clamps require a double thickness of ply

handsaw and I used a fret saw to cut the hook shape. I screwed the bracket together and tried it out first and then, having modified the side panels, I screwed and glued it together for additional strength and then finished with varnish. The quality of the exterior ply was not great so I filled some gaps on the edge with glue. Marine ply would be better but is much more expensive.

To keep the bracket secure under load I simply tied it firmly to the ladder.

The throttle on the tiller can

be operated by reaching over the transom but Torqeedo makes a remote throttle unit which makes adjustment more convenient. The outboard steering can be locked and the boat is steered using the tiller.

I love the quietness of going electric and so do the kingfishers, and we even spotted a grass snake swimming across the River Ant on a recent outing! Along with environmental benefits my very young grandchildren can easily start and stop the outboard and enjoy steering.

Materials used

- 4ft x 2ft 18mm exterior plywood
- 12 x No8 stainless steel countersunk screws
- Epoxy glue
- Varnish or other wood sealer
- Line to tie bracket to the ladder

You can learn so much by random chatting – which is just how I was recommended this simple solution to keeping a constant eye on the state of the boat batteries.

I suppose it wasn't completely random as he was the mechanic servicing my car, but I did find out he'd worked on boat engines in the past and he suggested I should install an integrated LED battery monitor.

There are many systems available but this is probably the simplest, not only to fit but because it gives you an instant view to monitor any changes.

It is simply a light system – an integrated LED battery charge/level indicator – directly attached to the batteries.

With minimal power consumption (10mA nominal) the voltage or charge state of the battery is indicated by tri-colour LEDs and gives a 'rolling average' of several measurements over the last two seconds, which gives a degree of immunity to false indications from fluctuating battery loads.

I have one for each of the domestic and engine batteries under a bunk, and have located the lights

vertically on the bunk front panel in clear view so I can check regularly to keep an eye out for any changes. It's been a cheap, efficient and easy to install system that has worked very well for me.

All you need to do is drill 14mm hole(s) positioned to allow at least 30mm space behind, insert the LEDs with that are built into a black mounting bezel, wire the LEDs directly one to battery positive and one to negative... it's that simple!

I fitted a pair of Gammatronix 12V LED battery level charge monitors but there are also self-dimming options which could be useful as the lights are pretty bright at night, especially if someone is sleeping nearby.

Red/green flash	> 15.2V
Green	13.2V
Yellow.....	11.8V
Yellow flash.....	11.5V
Red.....	11.2V
Red.....	< 11.2V

All you need to do is regularly look at the lights and keep an eye on the colour. Having a copy of the colour/voltage chart (above) at hand helps to remind you what they mean.



The battery monitor LEDs installed under the bunk