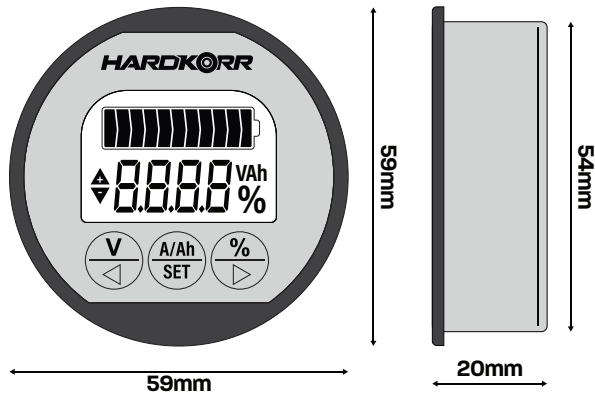


HARDKORR

REMOTE BATTERY MONITOR

WITH HIGH-PRECISION 100V / 500A SHUNT

INSTRUCTION MANUAL



PRODUCT OVERVIEW

This remote battery capacity monitor uses a high-capacity 100V / 500A shunt (350A continuous) to return highly accurate readings of battery charge level (Ah and %), voltage and live current draw (A).

It includes a memory function, and is suitable for all common battery types including AGM, wet, gel, calcium and lithium.

PRODUCT DIAGRAM

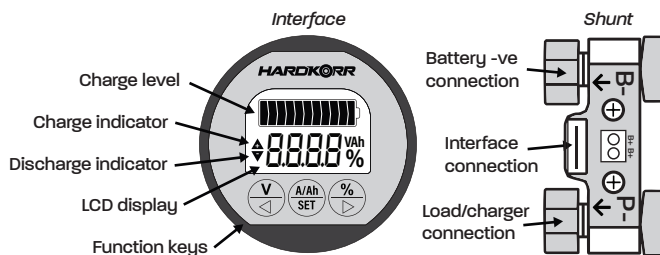


Figure 1

SPECIFICATIONS

Working voltage	8-100V DC
Max. current	350A (500A peak)
Working current draw	10-12mA
Backlight current draw	100mA
Standby current draw	0.5-0.6mA
Accuracy	±1.0%
Operating temperature	-10°C to 60°C
Weight	410g
Dimensions	59mm Ø x 20mm
Cut-out size	54.5mm
Certifications	CE, RoHS, C-Tick

INSTALLATION

1. Use a hole saw to cut a 54.5mm hole in the surface on which the battery monitor is to be mounted. Ensure you can access the hole from both the front and rear.
2. Insert the monitor into the hole from the front. The front fascia should sit flush against the sides of the hole.
3. From the rear, slip the bracket over the threaded stud.
4. Screw the wingnut onto the threaded stud and tighten until the bracket is firmly holding the monitor in place. Do not overtighten.

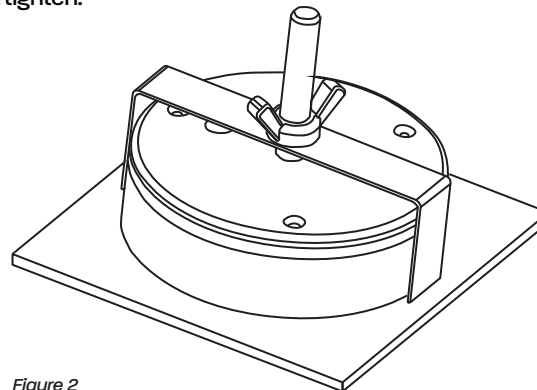


Figure 2

CONNECTING THE MONITOR

NOTE: given the multitude of different applications in which this monitor can be used, cables referred to in these instructions are not supplied unless specified. If you are unsure of the correct gauge and/or fixtures to use for your setup, please consult a qualified automotive electrician prior to commencing installation.

1. First connect the battery monitor to the negative circuit of your battery. Run a cable from the terminal marked "B-" on the shunt to the negative terminal on the battery, and from the terminal marked "P-" on the shunt to the negative terminal on your charge or output device (refer Figure 3).
2. Next connect the monitor to the positive circuit of the battery. Run a cable from one of the two terminals marked "B+" on the shunt to the positive terminal on your battery.
3. Finally, connect the shunt to the interface using the supplied shielded cable.

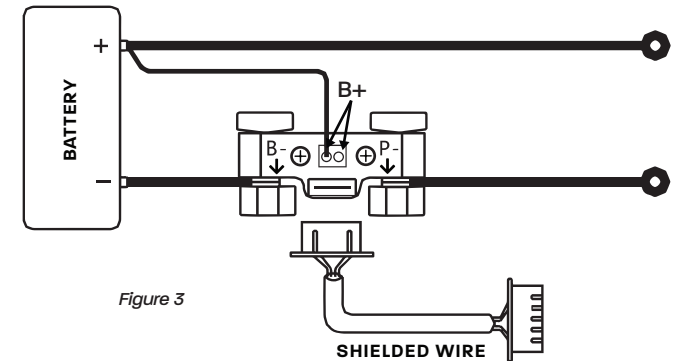









Figure 3


PREPARING FOR FIRST USE

1. Before setting up the battery monitor, ensure the battery to which it will be connected is fully charged.
2. Press the **A/Ah SET** button to wake up the unit. Press the **%** button and ensure the capacity shows 100%. If not, hold down the **%** button until it resets to 100%.
3. Set initial voltage. Use the **V** button to navigate to the

voltage display, then hold the  button for three seconds (until it flashes) to access the adjustment function. Set the voltage using the   buttons.


4. Set the initial capacity (Ah). Press the  button twice to navigate to the capacity (Ah) display, then hold the  button for three seconds (until it flashes) to access the adjustment function. Set the capacity using the   buttons.


3. Connect a load to the battery monitor and check that the backlight illuminates and the  icon appears on the display.

4. Disconnect the load, connect a charger to the battery monitor and check that the backlight illuminates and the  icon appears on the LCD display.

USING THE BATTERY MONITOR

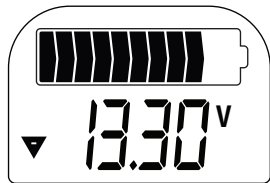
The battery monitor has four display modes: voltage (V), remaining charge level (Ah), live current draw (A) and remaining charge level (%).

Press  to view voltage.

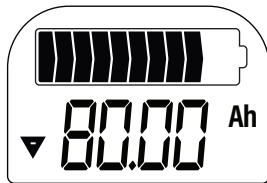
Press  once to view remaining charge level (Ah).

Press  twice to view live current draw (A).

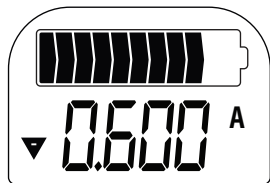
Press  to view remaining charge level (%).



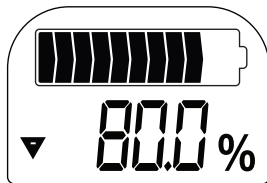
Voltage display mode



Charge level display mode (Ah)



Live current draw (A) display mode



Charge level display mode (%)

WARNINGS

Please observe the maximum voltage and current as described in the specifications table. Connecting the battery monitor to a system which exceeds these parameters will void your warranty.

Do not mount battery monitor in a location where it will be constantly exposed to sunlight. This will shorten the lifespan of the LCD screen.

Do not attempt to disassemble the battery monitor. Any attempt to disassemble, make unauthorised repairs to or modify the battery monitor will void your warranty.

This battery monitor is not waterproof. Do not install the monitor or shunt in a place where it is likely to come into contact with moisture.

WARRANTY POLICY

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Hardkorr warrants that this product will be free from defects in material and workmanship for two years. The warranty commences on the date of purchase by the original purchaser, and is not transferable. To access the benefits of this warranty, you must retain your proof of purchase and follow any other direction we reasonably give you (e.g. completing and returning your warranty card if applicable).

If you believe your Hardkorr product is defective, it must be returned to Hardkorr for inspection by our warranty claims department. Hardkorr will not be liable for any charges you incur relating to installation, repair or removal of Hardkorr products, nor for any costs incurred in returning the product to us.

To make your warranty claim:

1. You must first obtain a Return Authorization (RA) number. To get your RA number, please complete the form found on our website and wait for the warranty team to contact you.

2. Once you have an RA number, you must arrange for the product must be shipped back to Hardkorr (except in the case of fridge/freezers, which must be taken to an authorised service agent for examination). The address for shipment is 25 Old Pacific Hwy,

Yatala Qld 4207.

3. Please include a copy of your original proof of purchase.

4. Please be sure that your RA number is clearly marked on your documentation as well as on the outside of the packaging used for shipping.

Completing the steps above will ensure faster processing of your claim, so that Hardkorr can get your product back to you as soon as possible.

If Hardkorr determines, at our sole discretion, that your product is defective in material or workmanship, we will honor your warranty claim. We will determine whether the item is repaired or replaced.

Your warranty is voided if we (at our sole discretion) determine that there is evidence of one or more of the following:

Negligence: Improper installation, improper or extreme use, etc.

Abuse: Road hazards, Damage beyond the limits of "normal wear and tear".

Unauthorized Repair: Repair service performed by an unauthorized service centre.

Disassembly: Any attempt to open, tamper with or otherwise compromise the integrity of the product.

Discontinued Items:

Discontinued items that are still under warranty will be reviewed by Hardkorr. If a discontinued item is covered under warranty it may be replaced by an equivalent item. If an equivalent item is not available Hardkorr will determine terms of resolution on a case-by-case basis.

Exceptions to this Warranty:

Painted Finish: Hardkorr uses the highest quality materials available, but depending on location, environment and exposure, painted surfaces can fade. We will not approve any warranty claims that relate to faded paint.

Damage to Lenses: Please be aware that certain chemicals cause damage to polycarbonate plastics. Do not use cleaning products that contain any chemicals in the following list:

Acetic Acid Aq., Acetone, Ammonium Carbonate Aq., Ammonium Chloride Aq., Benzene, Calcium Hypochlorite, Chloroform, Chromic Acid Aq., Ethyl Acetate, Ethylene, Glycol Aq., Formaldehyde Aq., Citric Acid, Heptane, Hydrofluoric Acid Aq., Lubricating Oils (Petroleum), Methyl Ethyl Ketone, Methyl Chloride, Mineral Oils, Oleic Acid, Ozone, Phosphoric Acid Aq., Toluene, Turpentine, Zinc Chloride Aq.

Hardkorr will not approve any warranty claims for lighting products where we reasonably believe that products have been exposed to any of these chemicals.