

HARDKORR



SOLAR CHARGE CONTROLLER user's manual



Please read instructions
prior to installation or use

While we utilise the best manufacturing practices, there are occasional cases of product failure, and this warranty policy covers these instances.

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.

In addition to the guarantees afforded under Australian Consumer Law, this product is guaranteed by us to be free from defects in workmanship and parts for a period of 2 years from the date of purchase. Defects that occur within this warranty period, under normal use and care, will be repaired, replaced or refunded at our discretion.

Our full warranty policy, including instructions for returning goods suspected of being faulty, can be found on our website.



INTRODUCTION



Congratulations on purchasing this high quality HARD KORR solar charge controller.

In doing so, you now have the assurance and peace of mind that comes from purchasing a product that has been manufactured to the high quality standards of HARD KORR.

Our aim is for you to be completely satisfied with your purchase, and therefore your new HARD KORR product is backed by a comprehensive 2-year warranty and an outstanding after-sales customer service team.

We hope you will enjoy using this product for years to come.

If you require technical support, or in the unlikely event your purchase appears to be faulty, please contact our support team for immediate assistance. Contact details for each country are contained within this user guide.

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This solar controller must only be used for the prescribed purpose. Any uses other than those mentioned in this manual will be considered a case of misuse. The manufacturer will not be liable for any damage or injury resulting from such cases of misuse.

To use the solar controller properly you must observe the safety instructions and operating instructions found within this manual.

SAFETY INSTRUCTIONS

Make sure you connect the red cable to the positive on the battery and the black to the negative on the battery. Please double check your connection, as connecting to the wrong terminal may burn out the controller.

Confirm that the power wires are tightened to the correct torque to avoid excessive heating from a loose connection.

Be very careful not to short circuit the battery connections.

Explosive battery gases may be present during charging. Be certain there is enough ventilation to release the gases.


Make sure your battery has enough voltage for the controller to recognise the battery type before first installation.

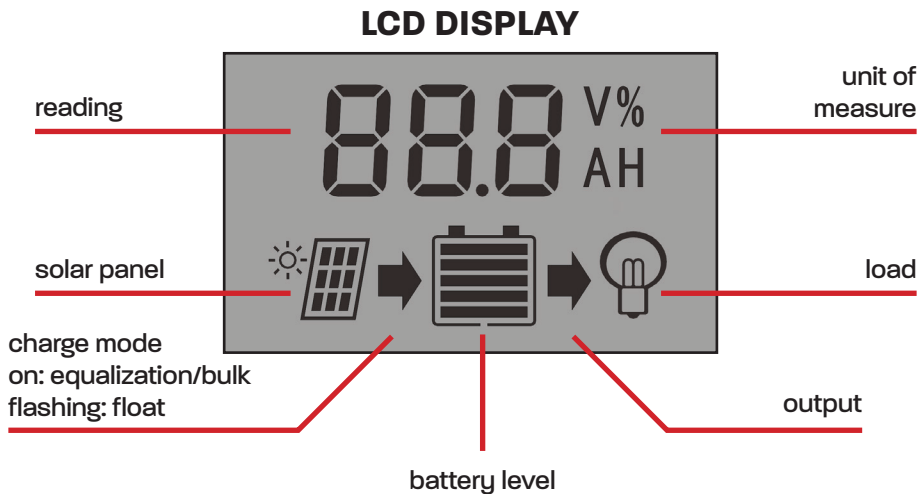
The battery cable should be as short as possible to minimise loss.

This solar charge controller is only suitable for AGM, Gel and Wet batteries. Not suitable for calcium, lithium or nickel metal hydride.

PRODUCT FEATURES

HARDKORR

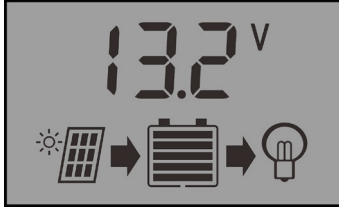
1. Built-in industrial class microprocessor.
2. Large LCD display with user-friendly interface.
3. 5-stage PWM charge management with separate programs for AGM, Wet and Gel batteries.
4. Built-in short circuit protection, open circuit protection, overload protection and reverse charge protection.
5. Dual MOSFET reverse polarity protection.
6. Can power devices directly via dual USB ports or positive/negative terminals (denoted by )



FUNC switch between different displays (long press to exit settings)

 press to increase value

 press to decrease value



① main display



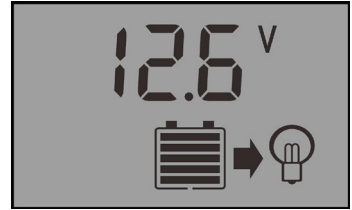
⑥ battery type



⑤ load timer



② float voltage



③ load reconnect voltage



④ load disconnect voltage



Press
●
FUNC
to cycle through the 6 menu options.

Hold
●
FUNC
for 3 seconds whilst in menu options 2-5 to adjust setting and use
● ▲ ● ▼/Ⓛ
to set parameter.

Hold
●
▼/Ⓛ
for 3 seconds to restore parameter to factory setting.

SPECIFICATIONS

HARDKORR

Specification	Value		
Battery voltage	12/24V (auto detect)		
Charge current	10A		
Discharge current	10A		
Max. solar input	50W		
Equalization voltage	B01 (AGM)	B02 (Gel)	B03 (Wet)
	14.4V*	14.2V*	14.6V*
Float charge	default 13.7V* (adjustable)		
Discharge stop	default 10.7V* (adjustable)		
Discharge reconnect	default 12.6V* (adjustable)		
USB output	2 x 5V/3A		
Self-consumption	less than 10mA/hr		
Operating temperature	-35°C to 60°C		
Size/weight	150mm x 78mm x 35mm / 150g		

** these values are doubled when using 24V system*

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