

Declaration of Compliance

Tested and approved by  and conforms to -
EN 60335-1
EN 60335-2-29
EN 62233:2008
EN 55014-1
EN 55014-2
EN 61000-3-2
EN 61000-3-3

Manufactured and Packaged for

Automotive Imports Pty Ltd
22 - 28 Lexton Road, Box Hill, Victoria, Australia

Made in China

AUS: www.hulk4x4.com.au NZ: www.hulk4x4.co.nz



6V/12V

Battery
Charger

HU6550

Charging Current
1 Amp

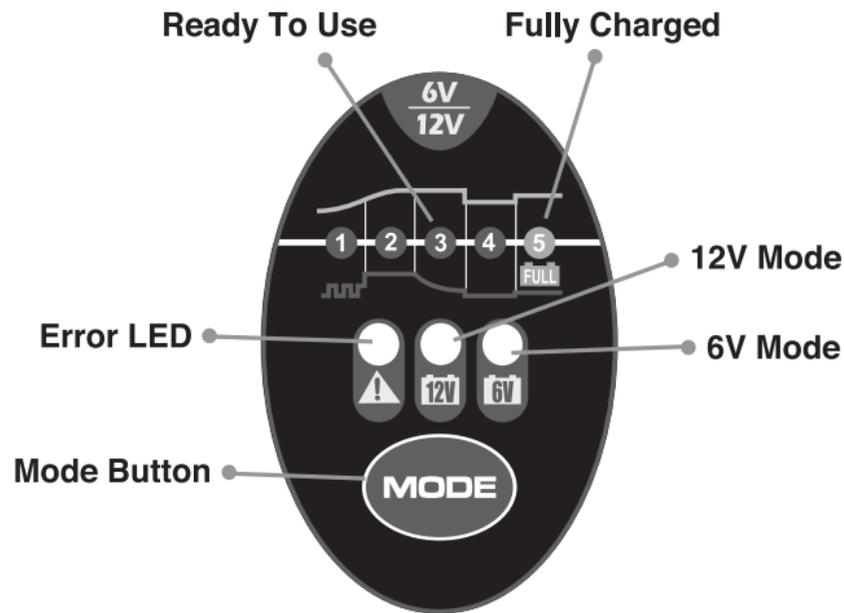
Battery Capacity
1.2-20Ah

User Manual

For Lead Acid Batteries

5 Step
Charging

User's Manual And Guide To Professional Battery Charging



For Your Safety

This manual contains important safety and operating instructions. Read this manual carefully before using the charger for the first time and keep the manual in a safe place for future reference.

Safety Information

HULK Professional 1A Battery Charger is designed for charging 6V/12V 1.2-20Ah Lead-Acid rechargeable batteries. It is not intended to supply power to low voltage electrical system. Do not use it for any other purpose.

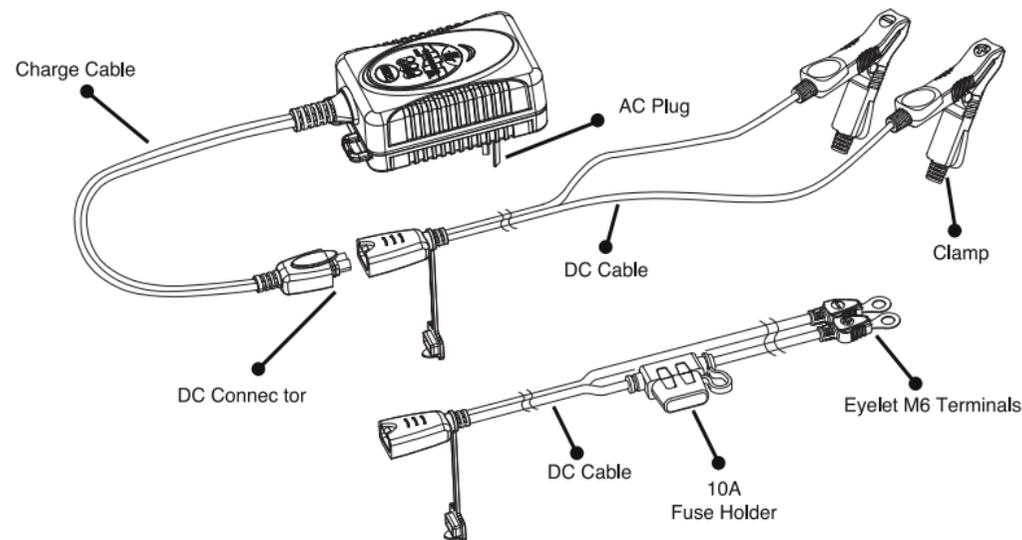
! WARNING! DO NOT ATTEMPT TO CHARGE A NON-RECHARGEABLE BATTERY (PRIMARY CELLS)

- Do not charge 6V battery using 12V Mode.
- Before charging make sure the input power is as per rated specifications, otherwise the charging performance may be seriously affected.
- Do not use the charger with a damaged cable. It must be replaced by the manufacturer, its service agent or similarly qualified technician in order to ensure safety.
- Never charge a damaged battery.
- Never charge a frozen battery.
- Never place charger above battery being charged, gases from battery will corrode and damage charger.
- Do not cover the charger while charging.
- During charging the battery must be placed in a well ventilated area.
- While charging always use safety glasses, gloves, protective clothing and keep your face away from the battery.

- **Explosion hazard!** A battery being charged could emit explosive gasses. Avoid smoking, open sparks or flames in the vicinity of the battery. Explosive and flammable substances such as fuel or solvents should not be kept in the vicinity of the charger or the battery.
- **Danger of chemical burns!** Battery acid is highly corrosive. If your skin or eyes come into contact with acid, immediately rinse the affected part of the body with excessive water and seek medical advice.
- All batteries eventually fail. If that happens during charging, charger's advance control system will detect it, but there may be some rare errors still exist in the battery, so do not leave charging unattended for a long period of time.
- Normally, a battery is grounded either, on negative or positive terminal to the vehicle's chassis. The charger's DC Clips are to be connected to the battery terminal **not connected to the chassis first**. The other connection is to be made to the terminal connected to the chassis, far from the battery and fuel line. The battery charger is then to be connected to the power supply.
- After charging, disconnect the battery charger from supply mains. **Remove the chassis connection and the battery connection**, respectively. This will reduce back drain current.
- Keep away from children.

Contents

- 1) HULK Professional 1A Battery Charger
- 2) Quick connect battery leads with clamps
- 3) Quick connect battery leads with eyelet terminals (Ø 6.3mm) with in-line battery protection fuse (10A) for permanent attachment to the battery posts to allow quick connection/disconnection through snap-connector
- 4) User Manual



Charging Modes

SYMBOL	Description
	Mode 6V/1A This mode is used for 6V WET, MF, VRLA, AGM and GEL batteries
	Mode 12V/1A This mode is used for 12V WET, MF, VRLA, AGM, EFB and GEL batteries

Bulk Charging Time

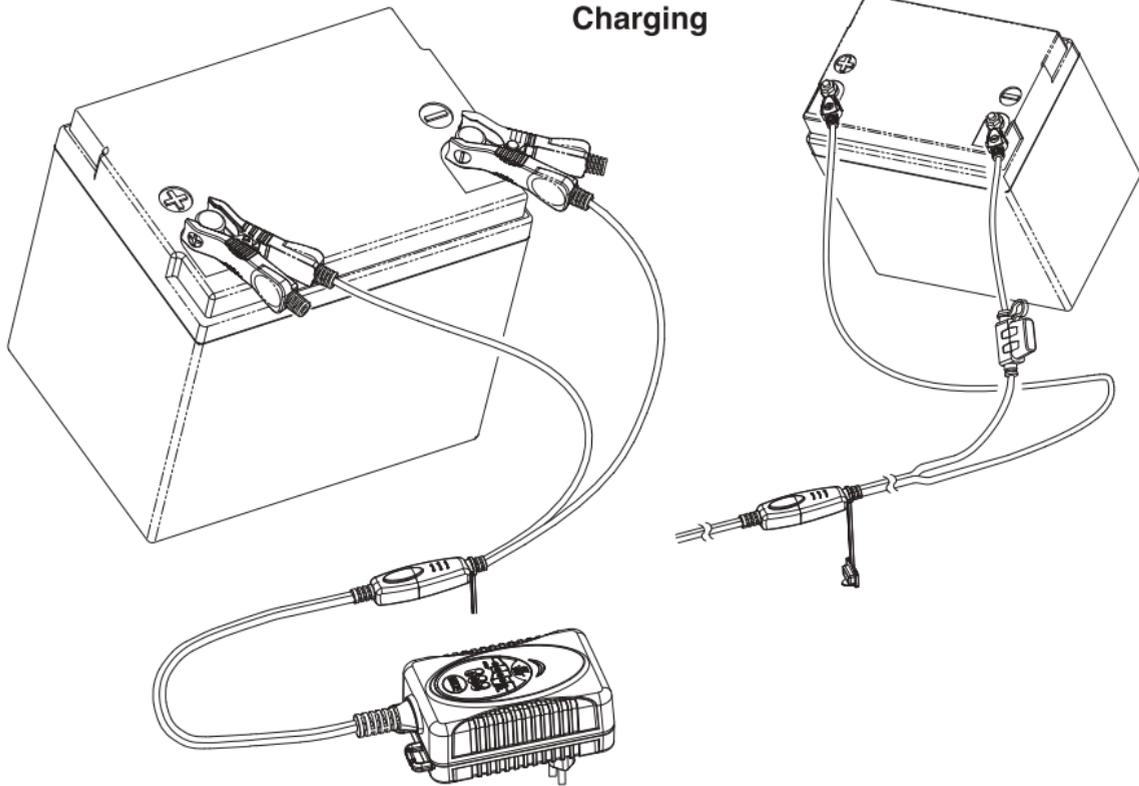
Battery Size (Ah)	Mode	For about 80% Charge (hours)
1.2		2
6		7
8		9
12		14
20		23

Technical Data

MODEL	1 Amp
Input Voltage AC	220 - 240VAC, 50/60Hz
Output Voltage	Nominal: 6V / 12V
Input Current	0.18A RMS max
Minimum Battery Voltage	> 2.5V
Output Power	14.4W
Maximum Efficiency	80%
Charging Current	1A max
Back Current Drain*	< 10 mA
Standby Power	< 1W
Operating Temperature	0°C to 40°C
Type of Charger	Five step, automatic, switch mode charging
Type of Batteries	6V / 12V Lead-acid rechargeable batteries (WET, MF, VRLA, AGM, EFB and GEL)
Battery Capacity	1.2 - 20Ah
Dimensions (L x W x H)	109.4 x 65 x 38.5mm
Housing Protection	IP60 (Dust proof) For indoor use only
Weight	0.35kg
Noise Level	< 50 dB (Tested from a distance of 50cm)

* = Back current drain is the amount of current drawn by the charger from battery, when the charger is connected to the battery, without power cord connected. **HULK Professional 1A Battery Chargers** has extremely low back current drain.

Charging



1) Charging of a permanently installed battery in a vehicle

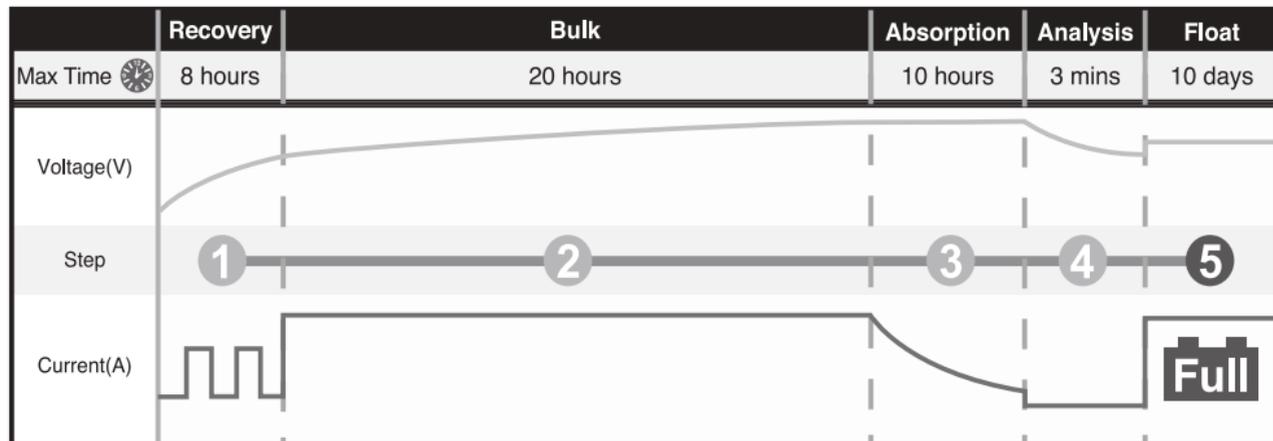
- a) Before connecting or disconnecting the battery leads, the power cord should be removed from the mains.
- b) Check polarity of the battery post. A positive (“+”) battery post usually has a larger diameter than a negative (“-”) post.
- c) Identify the pole of battery which is connected to the chassis (earth). Normally the negative terminal is connected to the chassis.
- d) **Charging of negatively earthed battery:**
 - Connect the red (+) clamp to the positive (+) terminal of the battery.
 - Connect the black negative (-) clamp to the vehicles chassis away from the fuel line or any moving parts.
- e) **Charging of positively earthed battery:**
 - Connect the black negative (-) clamp to the negative (-) terminal of the battery.
 - Connect the red positive (+) clamp to the vehicles chassis away from the fuel line or any moving parts.

2) Charging of a battery not connected to a vehicle

- a) Before connecting or disconnecting the battery leads, the power cord should be removed from the mains.
 - b) Connect the red clamp or eyelet terminal (“+”) to the positive (“+”) pole of the battery and the black clamp or eyelet terminal (“-”) to the negative (“-”) pole.
- 3) Connect charger to the mains.
 - 4) Select charging mode
Press MODE button for 3 second to change charging mode.
 - 5) And at step 3 the battery is ready to use and step 5 it is fully charged.

Charging Phases

HULK Professional 1A Battery Charger performs 5-step fully automatic charging cycle.



1) Recovery: A deeply discharged battery of over 2.5V can be recovered and charged with pulse charging of small current.

2) Bulk: 80% of energy is returned in this phase with maximum charging current.

3) Absorption: With use of declining current charging up to almost 100% is achieved.

4) Analysis: Checks status of charge. If battery does not retain energy, it must be replaced.

5) Float: Battery is fully charged and ready to use. The battery is maintained at maximum level by applying low current charge.

Trouble Shooting

Problem	Indication	Possible Cause	Solution
Charger does not work	Indicator lights are not on	a) Charger is not plugged in b) Poor electrical connection c) AC outlet is dead	a) Plug in b) Check AC connections and make sure mains are switched on c) Check receptacle
Charger has no DC output		a) Battery is connected with reverse polarity poles	a) Check DC connection between charger and battery and make sure they are not short circuited
No charging current	 Flashing	a) Battery may be defective / excessive current draw b) Battery may be severely sulfated c) Charging is interrupted in Phase 1 d) Charging is interrupted in Phase 4	a) Dead battery, it should be replaced b) If battery cannot be de-sulfated, it must be replaced c) Battery cannot accept charge, it must be replaced d) Battery cannot retain charge, it must be replaced
No charging Phases	 Flashing	a) Charger is not connected to a battery for over 2 mins b) Poor contact from charger to battery c) MODE button is not pressed	a) Charger is in energy save mode b) Check if connectors are not greasy or corroded and making a clean connection and there are no loose or damaged connections c) Select MODE