

Thumper PLATINUM LITHIUM BATTERY HUB

Congratulations on your purchase of the Thumper Lithium Battery Hub (TBH).

The Thumper Battery Hub has been designed to offer both portability and reliability with its light weight and compact design. Equipped with or without a DC battery charger, the battery hub includes everything you will need for an independent battery system. This package includes the following items:

- Thumper Lithium Battery Hub 100 AH
- Complete vehicle wiring loom
- Secure battery mounting tray with strap
- 240 Volt 10 Amp Battery Charger fitted with 50 Amp Anderson connector

Battery Chemistry, Charging & Maintenance:

The Thumper Lithium Battery Hub contains Lithium Phosphate LiFePO4 Prismatic cells. The battery holds a 5 year manufacturing warranty and is designed specifically for the use with the Caravan, camping and off-road industry.

The chemistry used in the Thumper Battery Hub is extremely safe and virtually maintenance free.

The battery is internally caged for protection in harsh off-road conditions and has been designed with thermal stability protection, over voltage protection, under voltage protection and internal short circuit protection.

The Thumper Battery Hub is fitted with a digital voltage indicator to aid in monitoring the charge condition of the battery. This indicator is to be used as a guide only.

The Thumper Battery Hub is considered to be fully charged when the battery meter is reading approx. 13.4 Volts. At this time the LED bar graph around the voltage display will be illuminated with a minimum of three green bars.

When the Thumper Battery Hub has reached its final 10% remaining, the voltage display will read approx. 12.0 Volts. It is recommended to attempt to recharge the battery prior to this stage as it is likely the BMS will shut down at any point when running appliances.

In order to re-activate the BMS, the 240 volt battery charger, included, must be connected to 'wake' the battery up.

The Thumper Battery Hub requires little to no maintenance when not in use.

Charging from 240 Volt:



Included in the package is a 240 Volt 10 Amp battery charger.

This dedicated lithium LiFePO4 charger is fully regulated and designed to ensure that no overcharging will occur. The Thumper Battery Hub may be stored connected to the 240 Volt battery charger, however, it is not necessary.

The charger is designed to connect directly into the 50 Amp Anderson located on the front of the Battery Hub labelled '12 Volt Input / Output'.

When connected, the battery charger will illuminate with a red LED light.

Only once the battery has reached a full charge will the 240 volt battery charger light turn GREEN.

Once fully charged, the charger may be disconnected from the Thumper Battery Hub by holding the Anderson pull tab connected and pulling downwards. If no longer using the battery, it is recommended to isolate the Thumper Battery Hub with the isolation switch on the rear – see next section.

Isolating the Thumper Battery Hub / Storing

It is important to store the Thumper Battery Hub when 100% charged.

It is recommended to use the 240 Volt battery charger provided with the package for recharging prior to storing.



Once the battery is charged, disconnect the 240 volt battery charger and click the isolation switch on the rear of the Thumper Battery Hub – see image on right →

The isolation switch will disconnect all power connections on the Thumper Battery Hub, excluding only the 50 Amp Anderson on the front of the Hub labelled '12 Volt Input / Output'. This particular connection is left usable for the purpose of charging.

When the isolation switch has been triggered, no power will be available at any connection point on the Thumper Battery Hub. The voltage meter will not illuminate and the DC charger (if fitted) will not operate.



Only once the lower toggle on the isolation switch has been manually reset, will all of the connections within the Battery Hub be restored with power. If your Battery Hub is not operating, please check this isolation switch has not been triggered.

Battery capacity, Maximum discharge and connection points

The Thumper Lithium Battery Hub offers 100 AH of usable battery power and is fitted internally with a 'Battery Management System' (BMS) rated to 100 Amps. The 100 Amp BMS is equal to approx. 1200 watts of power. This refers to the maximum discharge capacity the battery can release to run heavy appliances such as Inverters, air compressors, etc. **The maximum draw on the Thumper Lithium 100 AH Battery Hub is 1200 watts.** Exceeding the maximum discharge capacity can result in damage to the internal BMS.



Low draw appliances are designed to connect directly into the 12 volt accessory sockets located on the front of the Thumper Battery Hub. Appliances with heavier draws, up to 50 Amps, can be connected via the 50 Amp Anderson connector labelled '12 Volt Input / Output'.

For larger output requirements, exceeding 50 Amps but limited to 100 Amps, it is recommended to use one of the two 120 Amp Anderson connectors fitted to the top of the Battery Hub – see image on left ←

Using the DC battery Charger | Note: this section will not apply to models with no DC charger fitted

The Thumper Lithium Battery Hub includes optional models for a DC battery Charger (Projecta or Redarc). The DC battery charger has been hard-wired and internally protected with circuit breaker protection. The DC charger is wired to two dedicated 50 Amp Anderson connectors on the Thumper Battery Hub, labelled 'Alternator Input' and 'Unregulated solar input'.

Alternator Input: The DC charger is designed to alter the input voltage from the vehicle to provide a regulated charge to the Battery Hub. Vehicle charging must be connected to the Anderson labelled 'Alternator Input' in order to utilise the DC Battery Charger. If left to operate without an override, the DC charger will engage its charge when the vehicle's starter battery reaches a charged voltage of approx. 13.2 volts.



In order to over-ride any low voltage issues the vehicle may experience, the Thumper Battery Hub has been equipped with a 'Low Voltage Switch'. The low voltage switch is designed to work in conjunction with the DC battery charger and the wiring loom provided to allow the charger to operate as 'ignition activated', rather than activating on voltage.

Switch in ON position:

When 'ON' the ignition switch will illuminate blue and will act to immediately engage the DC charger. The DC charger will no longer isolate from the vehicle starter battery when this switch is ON. It is recommended to install the vehicle wiring loom if using this switch as the isolator in the loom will act to isolate the main battery from the Battery Hub.



Switch in OFF position:

When 'OFF' the switch will allow the DC Charger to run normally as voltage sensitive. The DC charger will require a minimum voltage of 13.0 Volts from the main start battery in order to engage the DC Charger. When the main vehicle battery drops below 12.7 Volts (indicating the vehicle is no longer charging), then the DC charger will disconnect.

Unregulated solar input: The Anderson connector labelled 'Unregulated solar input' allows for the connection of an unregulated solar panel. In order to use this connection, the panel must not have a regulator fitted. The voltage input of the solar panel must be between 9-33 volts and must not exceed 420 watts.

Vehicle wiring loom: The Battery Hub includes a complete vehicle wiring loom. Please refer to the TUR-L instructions for fitting.

For additional questions please contact direct on 08 8398 5381