THUNDER

CONGRATULATIONS ON THE PURCHASE OF YOUR THUNDER BATTERY MONITOR

For your personal safety please read, understand and follow the information provided in this instruction manual and on the battery monitor.

Connection to your Weekend Escape

FEATURES & DISPLAY INFORMATION

This specialty 12 Volt Thunder Battery Monitor is sophisticated and is designed to work with most 12 Volt Gel, Lead Acid, Lithium, Lithium Ion Phosphate and Calcium batteries.

WARNING: It is recommended that this unit be installed by a qualified tradesman

	FEATURES
1	Adjustable battery capacity (up to 590Ah)
2	Adjustable low and full voltage
3	Automatic backlight
4	Power-down memory capacity function
5	Fast response speed
6	Low power consumption, automatic wake/sleep
7	150A shunt
8	1.5m monitor cord
9	Easy to read LCD screen

	DISPLAY INFORMATION
1	The remaining battery capacity (Ah or mAh)
2	The percentage of battery capacity
3	The battery voltage value
4	The battery input and output current value
5	The output power value
6	The charging and discharging time remaining

SPECIFICATIONS

ELECTRICAL SPECIFICATIONS		
PARAMETER	**MIN**	**MAX**
Operating voltage	8.0V	60V
Working power	8mA	10mA
Standby power consumption	0.5mA	0.8mA
Voltage acquisition accuracy	±1.0%	
Current acquisition accuracy	±1.0%	
Ambient temperature range	0°C	+45°C
Backlit light current	40mA	50mA
Battery capacity	0.1Ah	590Ah
Built-in current	5A	10A
Shunt operating current		150A

DIMENSIONS	
Outside unit diameter	66 x 40 x 10mm
Display window size	32 x 23mm
External dimensions of shunt	23 x 18 x 5mm

INSTALLATION

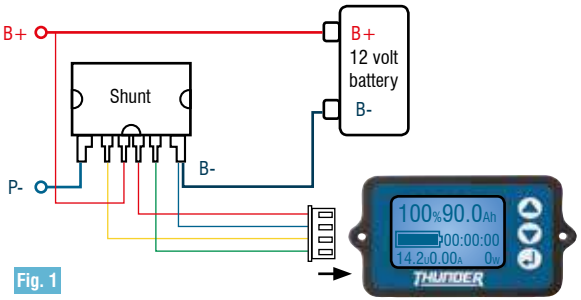


Fig. 1

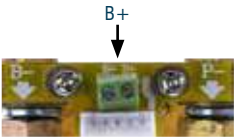


Fig. 2

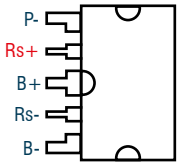


Fig. 3

1. Fit unit to desired position using the template provided on page 7. Extra 1.5m extension cords are available to increase the mounting distance of your Thunder Battery Monitor (Part no: TDR17013)
2. Plug in extension cord to the shunt and the Thunder Battery Monitor.
3. Connect B- on the shunt to the battery negative terminal.
4. Connect all negative loads to the P- terminal on the shunt.
5. Connect B+ on the shunt to the battery positive terminal (see fig. 2). To do this, connect a 3mm cable (not included) from the B+ on the shunt to the battery positive terminal.

INSTALLATION (continued)

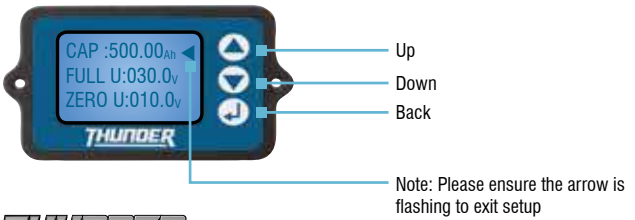
First start up

1. After the connection is completed in accordance with the illustration (Fig 1.), connect the battery B+ to the battery positive terminal. The LCD screen should display the capacity of the battery, voltage and internal memory capacity of the factory default settings. To get the actual battery capacity, allow the battery to fully discharge before charging, the real capacity of the battery will then be displayed, if the screen does not display, you should power off, power on again after checking the circuit connection is correct.

Note: If the load current fluctuates, the time will fluctuate as well.

Battery capacity (payload capacity) settings

1. Press the up and back buttons simultaneously for 3 seconds to enter the setup interface.
2. Tap the up or down button to select the unit you want to adjust.
3. Select 'CAP' to adjust the capacity setting; tap the back button to enter.
4. When the current capacity setting begins to flash, tap the up or down button to adjust. Click the back button to select the next flashing digit.
5. After you have completed your settings, press and hold the back button for 2 seconds to complete capacity settings.
6. Repeat above to adjust the Full and Zero settings.
7. Press up and down button together to exit setup.



INSTALLATION (continued)

The main interface overview

1. Item A shows the percentage of the remaining capacity of the battery bank.
2. Item B indicates the current remaining capacity (Ah/mAh).

3. Item C is a visual battery symbol which indicates the remaining capacity of the battery.
4. Item D shows the charging or discharging time remaining, the maximum display is 99:00:00.
5. Item E shows the battery voltage, current (in and out), power usage in Watts/hr.
6. When the charge and discharge current value is less than 40mA the Thunder Battery Monitor will enter low-power standby mode, the backlight will be off.
7. When the discharge current value is greater is than 50mA, the backlight will automatically illuminate and start to display the battery capacity value and the remaining time available.
8. Your new Thunder Battery Monitor is now ready to go!

WARRANTY TERMS & CONDITIONS

When you acquire or fit a Thunder product you have the peace of mind in knowing that it is backed by a comprehensive 12 month warranty against defects in materials and workmanship.

The Thunder warranty is provided in additional to any rights you may have under the Australian Consumer Law.

All claims under this warranty should be made by returning the product to the place of purchase at your expense, with the detail of the fault, proof of purchase and fitment details. If we determine that a Thunder product is defective in materials or workmanship during the warranty period, we will either repair or replace the unit.

This warranty does not apply to failure or damage to a Thunder product caused by incorrect or faulty fitment, accidental or intentional damage, failure of other products, incorrect application, incorrect voltage, environmental damage, operation of the product outside of its environmental and technical specifications, or repair or modification carried out by anyone other than an authorised repairer.

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.

Use this template to find the best location for your Battery Monitor and to cut an accurate hole in your mount location.

THUNDER

GPC Asia Pacific Pty Ltd
ABN 97 097 993 283

51-57 Qantas Drive
Brisbane Airport QLD 4007
AUSTRALIA

thunderauto.com.au // thunderauto.co.nz