

THUNDER

Connection to your Weekend Escape

20A DC TO DC CHARGER



Temperature
compensation

300W solar MPPT

Charges with smart and
conventional alternators

Will charge batteries
of different chemical
types

Solar and alternator
charging



THE THUNDER DIFFERENCE

With the introduction of Euro 5 and Euro 6 on its way in 2017, we can assume variable voltage alternators are here to stay. This fact is impacting directly on the Australian 4WD market with dual battery systems now requiring something a little smarter to keep the charge up to the auxiliary battery.

The Thunder DC to DC Charger (TDR02010) utilises a unique pulse charging algorithm with the intelligence to determine the best charge rate for your auxiliary battery (excluding lithium). We believe we have one of the best additions for your 4WD or camper ready to be installed. Included in this state of the art product is an MPPT solar regulator that is able to regulate up to 300W of solar @ 25V, this means that the TDR02010 will regulate your solar panel at maximum efficiency.

With a 20A output the TDR02010 has more than enough power to charge your auxiliary battery while you are driving. Once the vehicle is turned off, the DC to DC charger will switch to the solar input when the main battery drops to 11.9V. An easy to read display shows your battery charge percentage and a Thunder logo that lights up in 10% increments, not only does the TDR02010 perform outstandingly it looks the part making it a welcome addition to your 12V setup.

Installing the TDR02010 could not be easier with 4 mounting holes and 4 easy-to-use wiring studs there is minimal fuss to the unit. The TDR02010 is able to be installed into everything from a 1960 40 Series Toyota LandCruiser right up to a 2016 Ford Ranger.

Visit thunderauto.com.au or thunderauto.co.nz for more information.



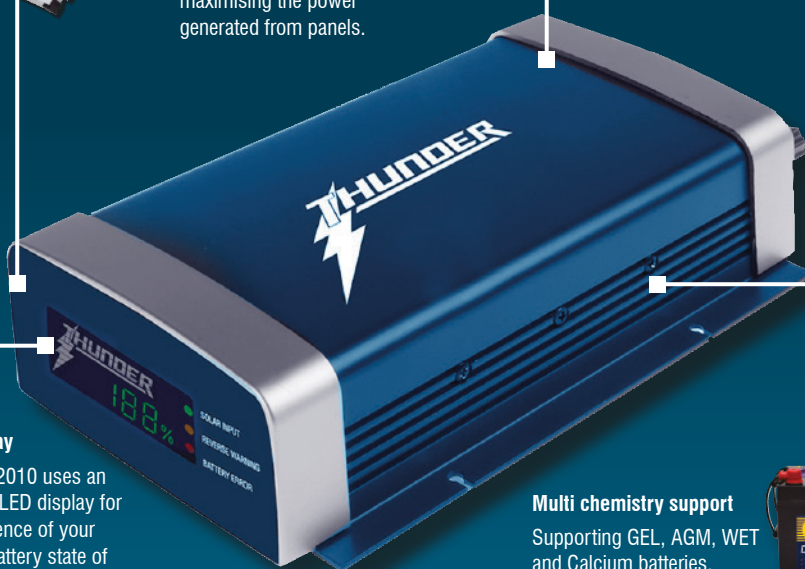
300W solar @ 25V DC

Using sophisticated MPPT (maximum power point tracking) solar regulator technology, the TDR02010 operates as a solar controller, maximising the power generated from panels.



Switch-mode technology

The TDR02010 will work with even the newest computer controlled alternators.



LED display

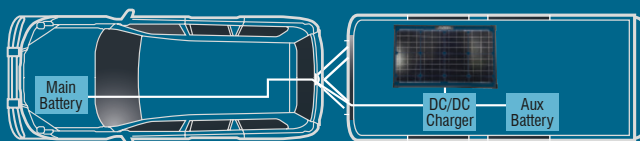
The TDR02010 uses an integrated LED display for easy reference of your auxiliary battery state of charge and indicator lights. The Thunder logo increases in 10% increments.

Multi chemistry support

Supporting GEL, AGM, WET
and Calcium batteries.

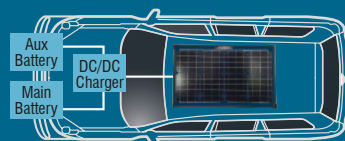


Caravan installation



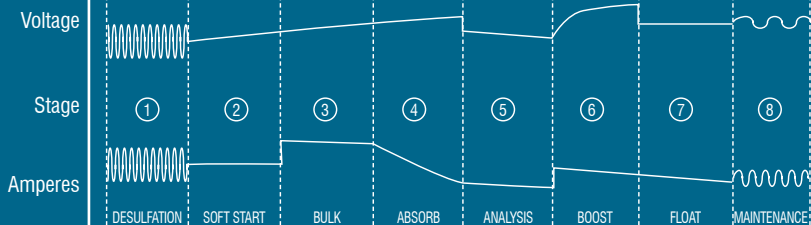
Uses your solar or vehicle's power to deliver a staged charge ensuring longer battery life and performance.

Vehicle installation



A sophisticated dual battery charger engineered for in-vehicle or under bonnet installation on vehicles fitted with traditional or smart alternators.

8 STAGE CHARGE CURVE



PRODUCT INFORMATION

Key Features

Over temperature protection

The TDR02010 will automatically adjust its output based on battery and ambient temperature, preventing overcharge and overheating in small batteries and hotter climates.

Reverse connection protection

The charger will detect and indicate a reversed connection on the input and output terminals, preventing damage to the internal circuitry of the unit.

Over and under voltage protection

The TDR02010 will automatically shut down if it detects an over voltage or under voltage problem, preventing damage to the battery.

Spark-free protection

The TDR02010 will not begin charging unless the load is securely connected, preventing output leads from sparking due to accidental short circuit.

Specifications

Charging style	8 stage from vehicle and 3 stage from solar
Input	12.4 to 16.0 Volts DC
Output voltage	13.1-16.2V (stops charging when alternator or vehicle battery below 11.9V)
Output current	20 Amps
Minimum start voltage for 2nd battery	1.5 Volts
Maximum solar input voltage	25 Volts
Maximum solar watt input	300 Watts
Soft start	Yes
Battery range	18 to 250Ah



Part No:
TDR02010

Description:
DC to DC Charger
with Solar

With a range of affordable products for 4WD enthusiasts, Thunder truly is the connection to your weekend escape!



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