

DCDC25A Dual Battery Charger

Safety Information

- Read the instructions before installing the unit.
- Disconnect all batteries before installation.
- Use correct fuses as indicated on the installation diagram.
- Only 12V lead-acid and automotive Lithium batteries should be charged.
- Under NO circumstances should the unit be altered or disassembled.
- Do not use the output of the unit to power any device directly.
- Warranty will be null in void if unauthorized disassembly, modifications, or repairs occurs.
- Warranty will be void in any attempt to use the DCDC25A for purposes other than indicated in this manual.

Features

- Dual purpose DC to DC Lead Acid Battery and Lithium charger.
- Charges 12V Lead Acid and Lithium batteries from vehicle or solar panel.
- Integrated 375W MPPT Solar Panel Charge controller
- Eliminates dual battery switch.
- Short circuit protection on inputs and outputs.

Status Display

- | | |
|---------------------------------------|--------|
| • Battery type indicator for lithium: | "LITH" |
| • Input source indicator vehicle: | "VEH" |
| • Input source indicator solar: | "SOL" |

Indicator lights will only be ON when the unit is charging.

Installation

- Install the unit close to the auxiliary battery.
- Horizontal or vertical(preferred) installation is suitable.
- The cooling fins of the unit should not be obstructed or blocked.
- Under load the unit will reach high temperatures.
- In-line fuses must be fitted in the positive cables close to the respective main and auxiliary batteries.
- 10mm² cables are recommended for connecting to the main and auxiliary batteries.
- Connect all negative connections to the negative pole at the auxiliary battery if possible.
- Ensure all connections and cables are correctly installed.
- Reconnect the Main battery.
- Select the Auxiliary battery type.

Selecting Battery Type

- LITH : Lithium Iron Phosphate (LiFePO4) when switch is ON
- AGM : AGM/GEL/LAC, when switch is OFF (default).

Ignition

The ignition (IGN) input can be used with smart alternators, connect the IGN wire to a switched positive ignition source, the unit ON and OFF voltages will be adjusted as indicated in the specifications.

!! Do not connect the IGN connection to a non-switched positive supply, drain on the main battery will occur.

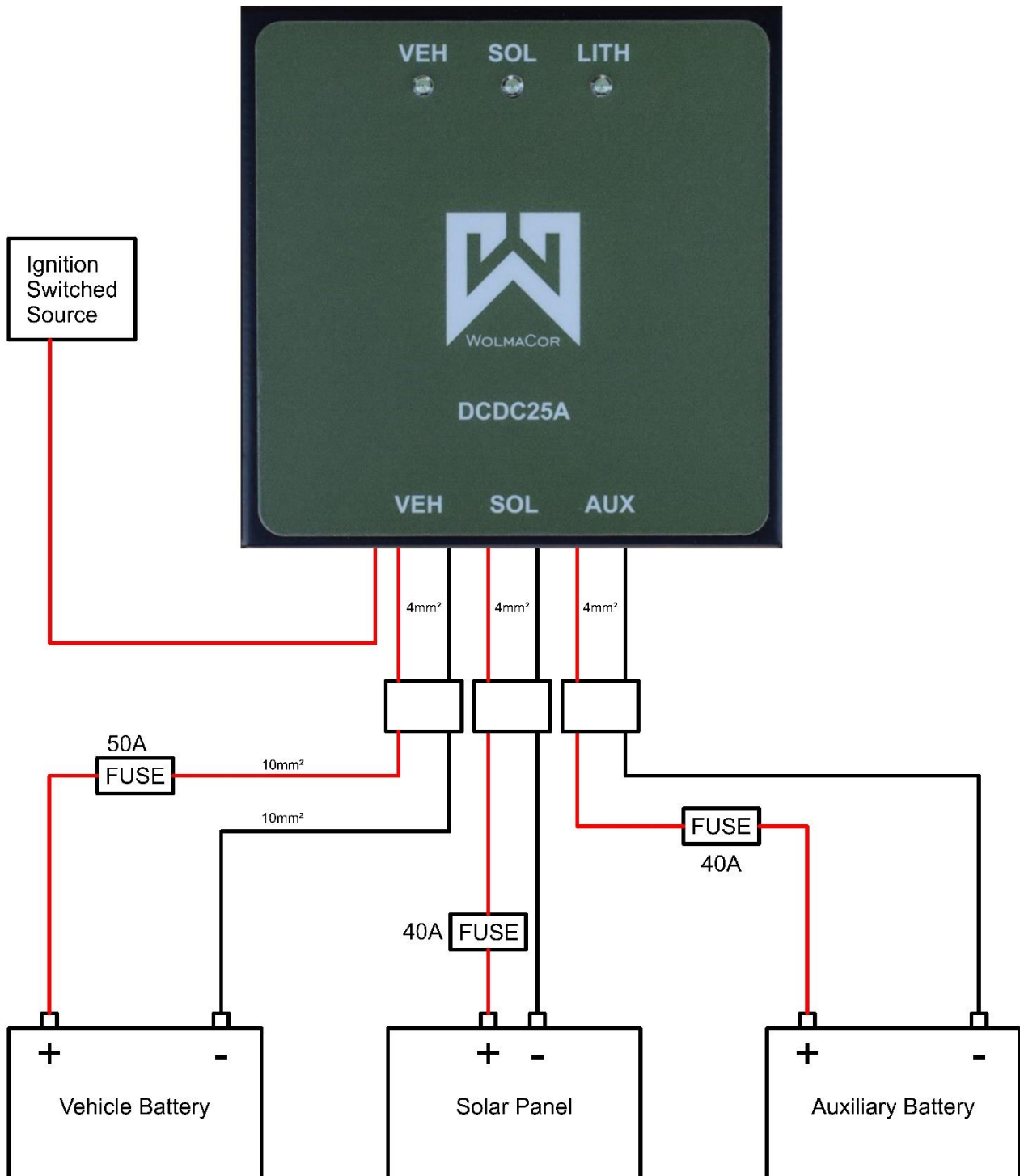
Technical Specifications

Solar Input		
Charge method	MPPT	
Power	375W	
Voltage	VOC max 50V	
Alternator Input		
Turn ON	13.2V +/- 0.1V	
Turn OFF	12.8V +/- 0.1V	
Ignition		
Turn ON	12.0V +/- 0.1V	
Turn OFF	11.0V +/- 0.1V	
Output		
Voltage	3V – 14.6V	
Current	25A +/- 1A	
Power	375W	
Operating Temperature	-20°C to 60°C	
Standby Current	< 20mA	
Dimensions	155mm x 130mm x 65mm	
Battery Types	Bulk/Boost Voltage	Float Voltage
AGM / Gel / Lead Acid	14.4V +/- 0.1V	13.6V +/- 0.1V
Lithium Iron Phosphate (LiFePO4)	14.4V +/- 0.1V	
Device Protection		
Reverse Polarity	Input and Output	
Over Voltage		
Over Current		
Over Temperature		

Warranties

- WolmaCor (Pty) Ltd warrants this product to be free from defects in materials and / or workmanship under normal use and service to the original purchaser subject to the following:
- At any time within TWO YEARS from the date of purchase by the original purchaser, WolmaCor (Pty) Ltd will at its discretion replace or repair without cost to the owner, and if through an authorised service agent, any part found to be defective by WolmaCor (Pty) Ltd. Where parts are replaced by an authorised service agent, the labour account for the work done will be for the owner's account.
- This warranty does not apply to fuses, cooling fans or items where the length of life depends on the amount of use.
- If modifications have been made to this unit which may cause undesirable or hazardous operation or may be the cause of the malfunction of this product, WolmaCor (Pty) Ltd may consider a warranty void.
- WolmaCor (Pty) Ltd shall not be responsible for any damages of any kind resulting from incorrect voltages or faults which fall outside of the unit's operating specifications.
- WolmaCor (Pty) Ltd shall not be responsible for damage to the unit caused by negligent use, storage of hazardous chemicals, use of corrosive substances, fire, flood, civil-disturbances, lightning, or any other natural phenomenon.
- Warranty returns to the factory for repairs – in the event where the unit has been shipped to the factory for repairs, transport costs will be for the owner's account.
- WolmaCor (Pty) Ltd will not accept any responsibility for the consequential loss or damage caused by, or due to the malfunctioning of this unit.
- WolmaCor (Pty) Ltd shall not be held responsible for any injuries to persons due to the incorrect or negligent usage of this unit.
- Repair work to be done in terms of this warranty must be submitted to WolmaCor (Pty) Ltd for written authorisation before any work is carried out.
- If the original proof of purchase cannot be produced, WolmaCor (Pty) Ltd reserves the right to refuse repair or service under warranty.
- With submission of a warranty claim, proof of purchase and purchase date must be presented. All units have a unique serial number - removal of this serial number on the unit will render this warranty null and void.

Installation diagram



!! Solar panel negative must be connected to solar negative on the DCDC charger.

Front outline and descriptions

1. Vehicle charge indicator light 2. Solar charge indicator light 3. Lithium mode indicator light



4. Battery type selection switch



Description

1. Will be ON when charging from vehicle
2. Will be ON when charging from solar panel
3. Will be ON when charging and Lithium mode is selected
4. Battery type selection switch