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REMOTE METER

Model: ACDC-RM

INSTRUCTION MANUAL

----- Application: motorhomes, caravans, RVs, campervans, boats, and other DC and solar systems -----

Dear Customer,

Thank you very much for choosing our product. This manual contains important information about the installation and operation of the remote meter. Please read this manual carefully before installing the product.

Note: working with electricity and batteries can be dangerous. Ensure that any work follows all appropriate safety standards and precautions.

Overview

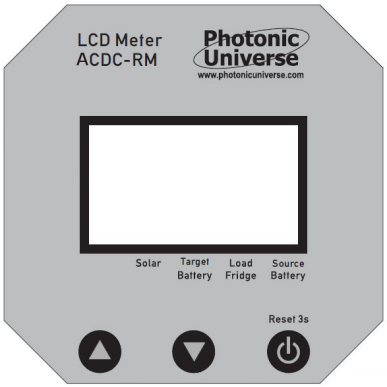
This remote LCD meter can be used with the following Photonic Universe chargers and controllers:

- Mains battery chargers BC1230PRO, BC1260PRO, BC2415PRO, BC4810PRO
- DC-to-DC battery chargers DC1212-30S, DC1212-45S, DC1212-30, DC1212-60, DC1224-25, DC2424-50, DC2412-60, DC1212-3020, DC1212-6030, DC1212-6045, DC1224-2530, DC2424-5030, DC2412-6050, DC1248-16, DC1236-18
- Dual battery MPPT solar charge controllers PMPPT series
- Any other products if the user manual of the product explicitly mentions compatibility with ACDC-RM remote meter

The meter allows you to check the status of your charger or controller by displaying various parameters such as voltage, current, power, load / fridge current and voltage etc.

The meter will also show the accumulated battery energy (Wh) and accumulated battery charge (Ah) over time, which can be easily reset if needed.

Usage instructions



Scroll to previous page

Scroll to next page

Short press – meter turns ON / OFF

Long press (hold for 3 sec.) – meter resets the parameter on the screen

Whilst this meter is designed to work with many controllers and chargers, it will only show parameters relevant to the connected device. For example, a charger without a solar input will not show PV voltage or PV power.

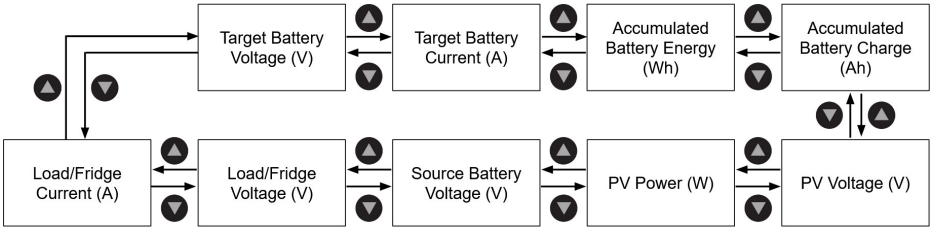
Note: in case if the meter is used with a dual battery solar charge controller PMPPT series, the ***Target Battery*** readings will relate to the primary (e.g. leisure) battery connected to the heavy duty charging terminals of the controller (i.e. the battery that will receive most of the charging current), and the ***Source Battery*** readings will relate to the optional auxiliary (e.g. starter) battery connected to the trickle charging terminals.

Display navigation

When the meter is on, the ▼ arrow at the bottom of the screen will light up and align with one of the sections named under the screen. The parameter shown on the display at that time will relate to this section.

Section	Parameters
Solar	Voltage (V), Power (W)
Target Battery	Voltage (V), Current (A), Accumulated Energy (Wh), Accumulated Charge (Ah)
Load/Fridge	Voltage (V), Current (A)
Source Battery	Voltage (V)

Use the ▲ or ▼ buttons to scroll through the different parameters of the connected charging device. The arrow ▼ will change its position accordingly as you move to the next section.



Bar indicator

The bar graph on the display indicates the amount of charge current the charger or controller is supplying at the moment.

To adjust the scale of this graph and set the current generated at the moment to correspond to 100% on the bar, scroll through the parameters until the target battery current is displayed and press and hold the power button ⏻ for 3 seconds. The scale of the bar graph will then be reset so that the current displayed at that moment matches 100% on the graph. It is advisable to make this adjustment only when the charger is outputting its maximum charging current.

Solar symbol

For charging devices with solar input, the meter will display the status with the solar symbol:

OFF: No charging from solar, the solar input of the charging device is in standby mode. This will happen during the night, or if solar panels are disconnected.

ON: Normal charging.

Flash: The controller / charger is limiting the power input from solar panels. This will happen if the power from solar is too high and exceeds the maximum rated input solar power, or if the device is in the final absorption (constant voltage) or float stages of charging the battery.

Resetting Wh and Ah values

To reset the accumulated energy (Wh) or accumulated charge (Ah) values to 0, scroll through the display until the desired parameter is shown and press the power button ⏻ for 3 seconds.

Note: AC-DC chargers do not have this function. They will instead reset these values after completing the charge or when the AC power is disconnected.

Screensaver and backlight

If the charging device connected to the meter is actively charging, the display will automatically stay ON to show the charging parameters. When the device stops charging and is in standby mode, the screensaver function turns the display OFF automatically after 2 minutes of inactivity.

If any button on the meter is pressed, the backlight will turn on. The backlight will remain on for a duration of 3 minutes after the last button press, after which it will automatically turn off**.**

The backlight brightness can be adjusted following the steps below:

1. Hold ▲ or ▼ button for 3 seconds.
2. Adjust the brightness between 0-100% with short presses of the ▲ and ▼ buttons.
3. Once the desired brightness has been selected, press ⏻ to save your settings.

Specifications

Model	ACDC-RM
Nominal voltage of the charger	12V / 24V / 36V / 48V
Meter working voltage range	8V – 32V
Meter working current	3 – 30 mA
Measured charging power range	20 – 9999 Wp
Backlight	LED
LCD display area size	49 x 28 mm
Meter dimensions with the frame	110 x 110 x 40 mm
Weight	75 g
Connection cable length	3 m

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