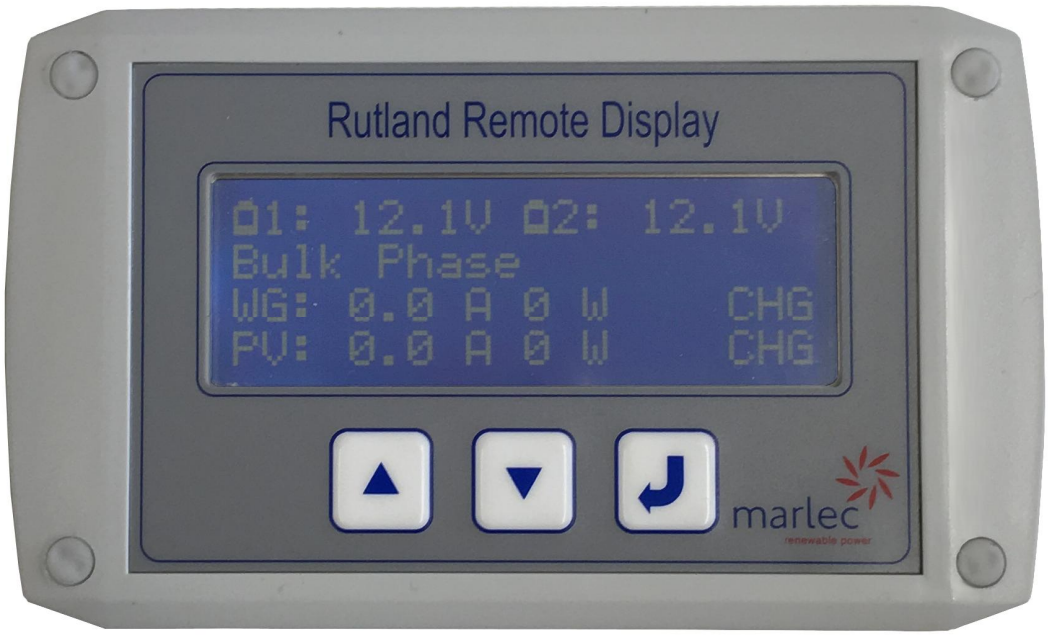
Rutland Remote Display

-Model HRDi

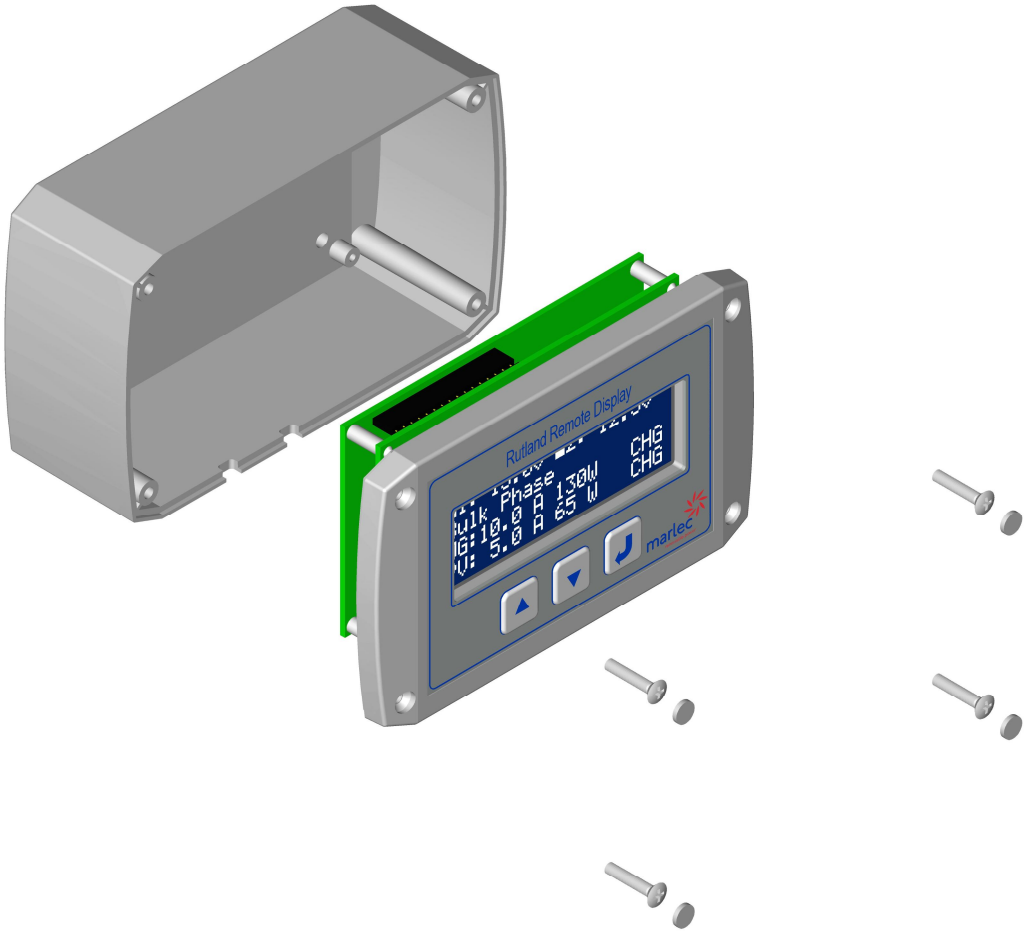
Installation and Operation



Introduction

The Rutland Remote HRDi Model is designed for use with the Rutland HRDi Controller. It enables convenient viewing of the wind generator and PV solar panel charge currents, power, battery Voltages, charging status and accumulated ampere hours of charge to the batteries. It connects to the Rutland HRDi Controller via a serial cable and mounting is optional between surface and recessed.

Exploded View



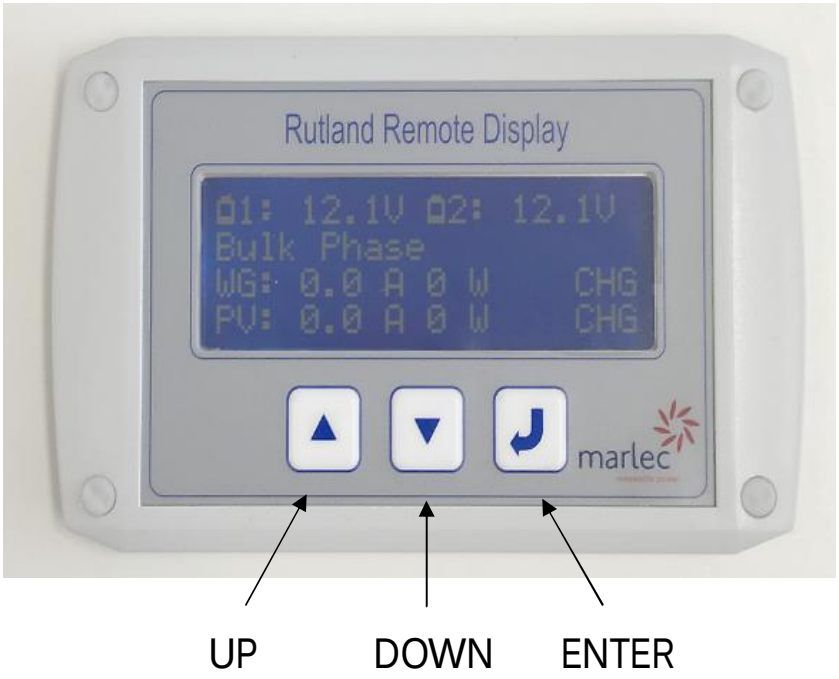
Technical Specifications

Dimensions

Surface Mount: 125x75x50mm Weight: 203g

Recess Mount: 125x75x9mm Weight: 132g Recess Mount Cut Out: 100x62mm

Power Supply: via 3m serial cable supplied. Longer cables available at www.marlec.co.uk



Mounting—2 Options are Available

Surface mount using the supplied back box. Fix the back box using suitable screws and fit the display using screws supplied.

Recess mount by discarding the back box and mount directly to a panel with a 100mm x 62mm cut out, using suitable screws.

Fit the screw caps supplied to finish.

Electrical Connection

The power supply for the unit is provided from the HRDi Controller via the serial data cable supplied. Locate the RJ11 sockets on the controller and display unit to connect the 2 devices. The screen will power up. Press any button to illuminate the backlight.

Note: In late 2016 a wireless Bluetooth kit will be available which will plug in at each end in place of the cable. The Remote Display will require a local 12/24v dc power supply which is connected via the terminal block mounted on the pcb. Important: Do not connect a local power supply to these terminals if the remote is connected to the HRDi Controller via the serial cable.

Power Up to Default Screen

Battery symbols change to show approximate level of charge 0%, 25%, 50%, 75% & 100%

WG-Wind Generator

PV-Photovoltaic panel

Battery 2 is shown as not connected.

Bulk Phase or Float Phase is displayed

CHG-Charging

or REG-Regulating

A = Amps W = Watts	
Flashing empty battery	Indicates low battery warning
Flashing full battery	Indicates regulating mode

Note: Any button press on the remote with the backlight off will switch it on and start it's countdown timer (default 30 seconds) further button presses when backlight is on perform functions.

Using the Remote Display

Press the DOWN and UP buttons to scroll through the available screens;

WG (Amps) - PV (Amps) - Total (Amps) - Default Screen

The screen can be left to display on any screen, the default screen is recommended.

The scale and bar graph alter in response to the levels of energy to display

Accumulated Ampere hours and duration of monitoring elapsed

WG or PV or Total is displayed by scrolling through UP and DOWN

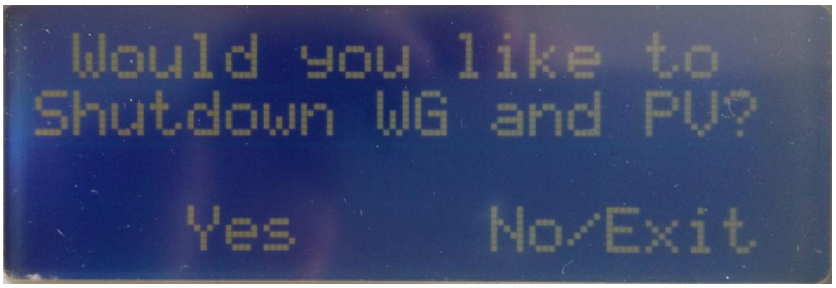
Settings

These are accessed via the ENTER key. The first screen displayed shows the controller serial number.

Press ENTER to view the programming menu. Use the UP and DOWN keys to scroll through and ENTER to select an option. A cursor indicates the option available to select.

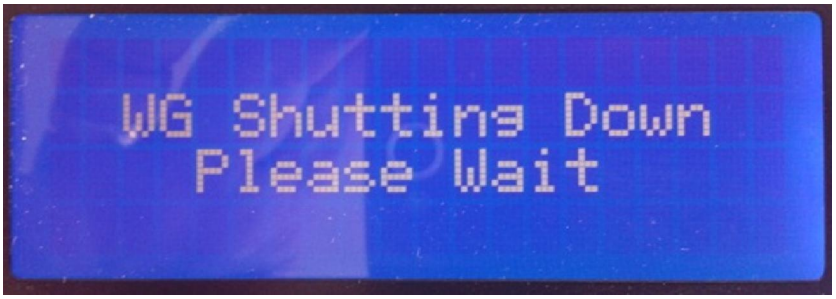
Option 1: Charge Sources On/Off

Use buttons below the selections →

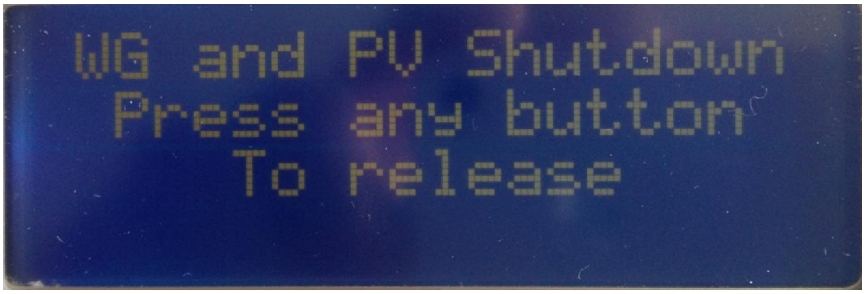


Toggle the UP button to change between ON and OFF. Press ENTER to accept or Exit.

Note that when switching WG to OFF the controller enters a soft stall routine, this slowly applies the stall to decelerate the turbine. During this routine, the following is displayed.



When the turbine has stalled, the following will be displayed:



To release the shutdown of the wind turbine and solar panel press any button and the display will return to the previous screen.

Option 2: Zero Ah Reading

This function sets to zero all accumulated Ah and elapsed time for both the WG and PV simultaneously.

To Confirm	Press ENTER
To Exit and return to the programming menu	Press UP or DOWN

Option 3: Backlight On Time

This function adjusts the length of time the backlight will remain on following a button press. The default On time duration is 30 seconds.

Adjust the seconds using the UP and DOWN buttons to the desired duration, one press adjusts one second. Press ENTER to save this time to non volatile memory and return to the programming menu.

NOTES

LIMITED WARRANTY

The Marlec Engineering Company Limited Warranty provides free replacement cover for all defects in parts and workmanship for 24 months from the date of purchase. Marlec's obligation in this respect is limited to replacing parts which have been promptly reported to the seller and are in the seller's opinion defective and are so found by Marlec upon inspection. A valid proof of purchase is required if making a warranty claim.

Defective parts must be returned by prepaid post to the manufacturer Marlec Engineering Company Limited, Rutland House, Trevithick Road, Corby, Northamptonshire, NN17 5XY, England, or to an authorised Marlec agent.

This Warranty is void in the event of improper installation, owner neglect, misuse, damage caused by external factors. This warranty does not extend to ancillary equipment not supplied by the manufacturer.

No responsibility is assumed for incidental damage. No responsibility is assumed for consequential damage. No responsibility is assumed for damage caused by user modification to the product or the use of any unauthorised components.

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