

Datasheet

RS PRO Digital Battery Meter with Hours Run Counter

Stock number: 180-9264

EN

Please read and understand the following notice carefully and correctly install and operate the product before using

1 Notice

WARNING

1. Please use the product strictly in accordance with the user manual.
2. Please do not try to disassemble the unit or its accessories.
3. This product features a splash-proof design that can be used in rain, but it can not be used underwater.
4. When exposed to a large temperature differential condensation may occur.
5. High vibration and impact impact may cause product failure.
6. Minor measurement errors may occur due to component tolerances and ambient conditions. These errors may not be consistent when comparing identical products.
7. This product requires professional installation. Take care to avoid electric shock.

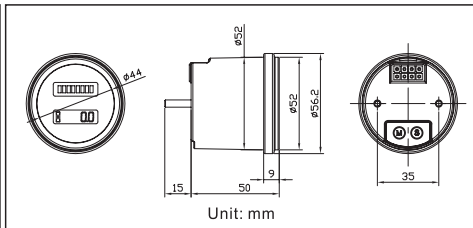
DO NOT DISASSEMBLE

WATERPROOF

2 Product parts list

- 1 x Product
- 1 x User manual
- 1 x 8-pin connector
- 1 x 8-pin connector contact inserts
- 2 x M4 Nuts
- 1 x Mounting bracket

3 Product dimensions



4 Installation

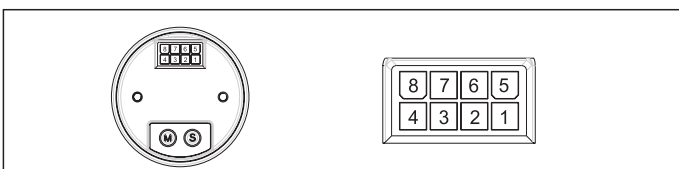
1. How to install.

Insert the meter into the panel cut-out. The two studs on the rear of the meter must pass through the two holes in the fixing bracket which is secured using the two nuts supplied.

1 Insert the meter through the panel cut-out

2 Attach the fixing bracket as shown below passing the two studs through the holes in the bracket and secure the fixing bracket with the two nuts supplied.

2. Terminal layout and programming button location.



3. Terminal assignment.

1	Timing control terminal. Effective when connected to battery negative pole
2	Key switch. Effective when connected to battery positive pole
3/4	Relay output terminal. Rated current 5A
5	Battery input negative terminal. Connect to battery negative pole
6	Timing control terminal. Effective when connected to battery positive pole
7	Positive battery input. (12-36V)
8	Positive battery input. (24-48V)

4. Verify installation.

Turn on the key switch and time switch, LED displays the current bar, LCD hourglass icon blinks or displays the current battery voltage. This indicates that the installation is correct.

5 Button operation explanation

Button	Short press	Long press
M button	Check the sub menu interface; Increment value when setting up.	Enter into setting mode; Fast increase when setting up.
S button	Switch main display or return to main interface; Decrease value when settings.	Fast decrease when setting.

※ In setting mode, press the **M + S** buttons for 2S to save and exit the settings.

6 Display operation

The meter has two main display modes: Timing mode and battery mode
Short press **S** button to switch between display modes. Button operation as below.

Timing mode: Switching Battery mode

1. Timing function: Total running hours and partial time.

- Total running hours: The default mode is total running hours. On opening the key switch and time switch, the Timing interface hour-glass icon blinks.
 - Total running time counts up. The maximum timing value is 999999H.
 - Timing display mode: When the time is 0.0-99999.9H, the timing resolution is 0.1 H. when the time is 100000-999999H, the timing resolution is 1H.

Timing main interface

Note: Total time can not be reset. When total hours are more than 999,999, the meter will start from 0 again.

Short press **M** once

View partial time interface

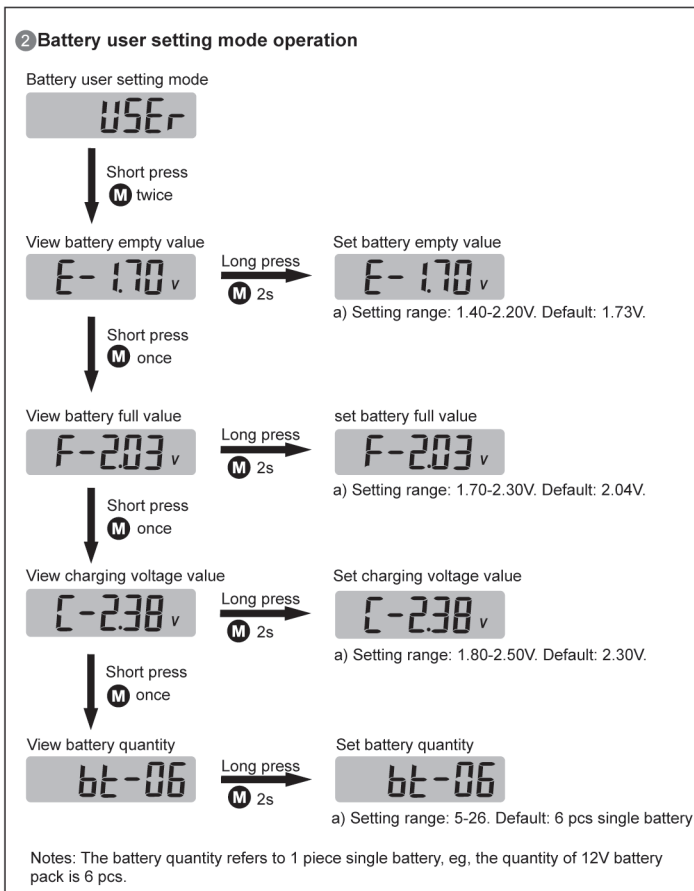
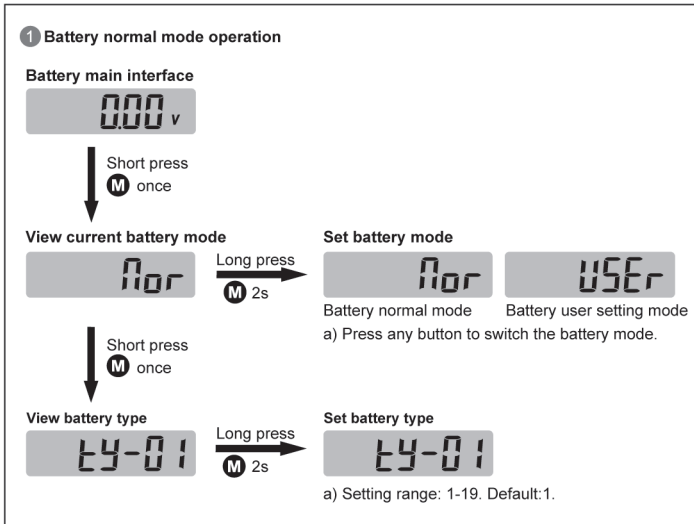
Blink alternately

Long press **M** 2s

Clear partial time

a) Partial time display range and accuracy is the same with total running hours.

2. Working mode: Normal mode and user setting mode.



7 Correlation chart between each bar and color definition

Bars	10th bar	9th bar	8th bar	7th bar	6th bar	5th bar	4th bar	3th bar	2th bar	1th bar
Light's Definition	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Red
10th bar	Always lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit
9th bar	Not lit	Always lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit
8th bar	Not lit	Not lit	Always lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit
7th bar	Not lit	Not lit	Not lit	Always lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit
6th bar	Not lit	Not lit	Not lit	Not lit	Always lit	Not lit	Not lit	Not lit	Not lit	Not lit
5th bar	Not lit	Not lit	Not lit	Not lit	Not lit	Always lit	Not lit	Not lit	Not lit	Not lit
4th bar	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Always lit	Not lit	Not lit	Not lit
3th bar	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Always lit	Not lit	Not lit
2th bar	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Flash	Not lit
1th bar	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Not lit	Flash	Flash

8 Different battery type parameter table

※ The charging voltage value is the value of first bar.

Type	Battery empty value	Battery full value	Charging voltage value	Type	Battery empty value	Battery full value	Charging voltage value
1	1.73	2.04	2.08	11	1.84	2.11	2.16
2	1.85	2.02	2.06	12	1.86	2.03	2.07
3	1.75	1.97	2.01	13	1.89	2.10	2.15
4	1.90	2.03	2.07	14	1.91	2.08	2.12
5	1.98	2.08	2.12	15	1.93	2.12	2.16
6	1.63	1.97	2.02	16	1.70	2.02	2.06
7	1.57	1.90	1.95	17	1.65	2.00	2.04
8	1.68	1.95	1.99	18	1.92	2.15	2.19
9	1.78	2.06	2.10	19	1.83	2.06	2.10
10	1.82	2.08	2.12				

9 Specification

Operating voltage	DC 12-48V	Waterproof level	IP65
Timing range	999999H	Display model	28.5x9.4mm LCD+ three color LED
Timing accuracy	0.1H		
Voltage accuracy	±0.5%	Display Windows size(Visible)	25.5x7.4mm
Charging delay time	200S	Product weight	108g
Delay time of every bar	155S	Dimension	Φ 56x65mm
Housing material	ABS+Aluminum		

10 Trouble shooting

Problems	Possible reasons	Solutions
No LED and LCD display	1. Power supply connection is wrong. 2. Power wires are damaged.	1. Check whether the power cable, wiring connected according to the instruction. 2. Repair or replace the power wires.
Hourglass icon is not flashing after timing function opened.	1. Wrongly connected with timing terminal. 2. Wire damaged.	1. Check whether connected according to the instruction. 2. Repair or replace the wire.
Voltage(12V,24V, 36V,48V) No change on voltage bar	1. Parameters of battery set incorrectly. 2. Delay time not reached.	1. Set battery parameters in accordance with the requirements. 2. Wait for 200S to view.
Unclear display on LCD or color changed	1. Wrong installation angle of the product. 2. Direct sunlight for too long.	1. Adjust the installation angle. 2. Put the hour meter in the shade.