

# INSTRUCTION MANUAL

Remote METER for duo-battery charging solar controller,

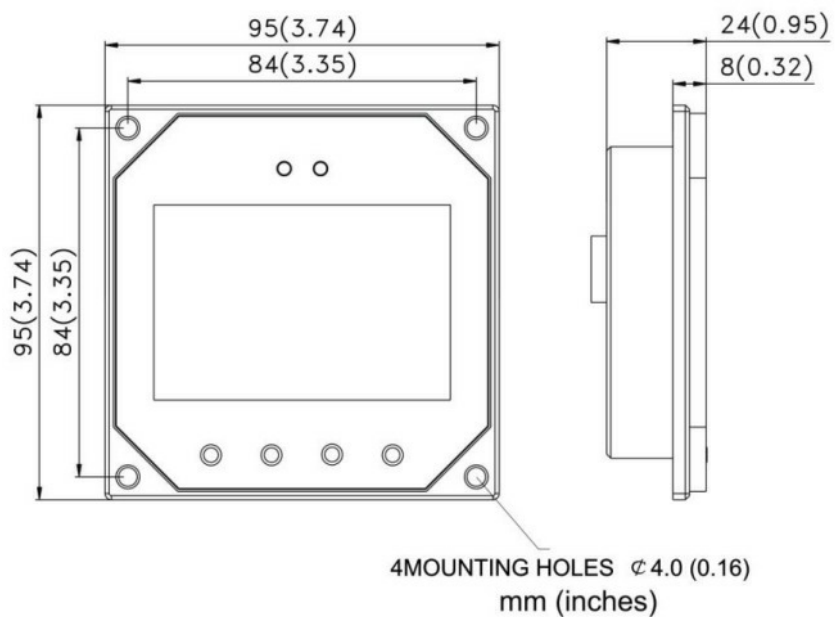
For RVs, Caravans, and boats



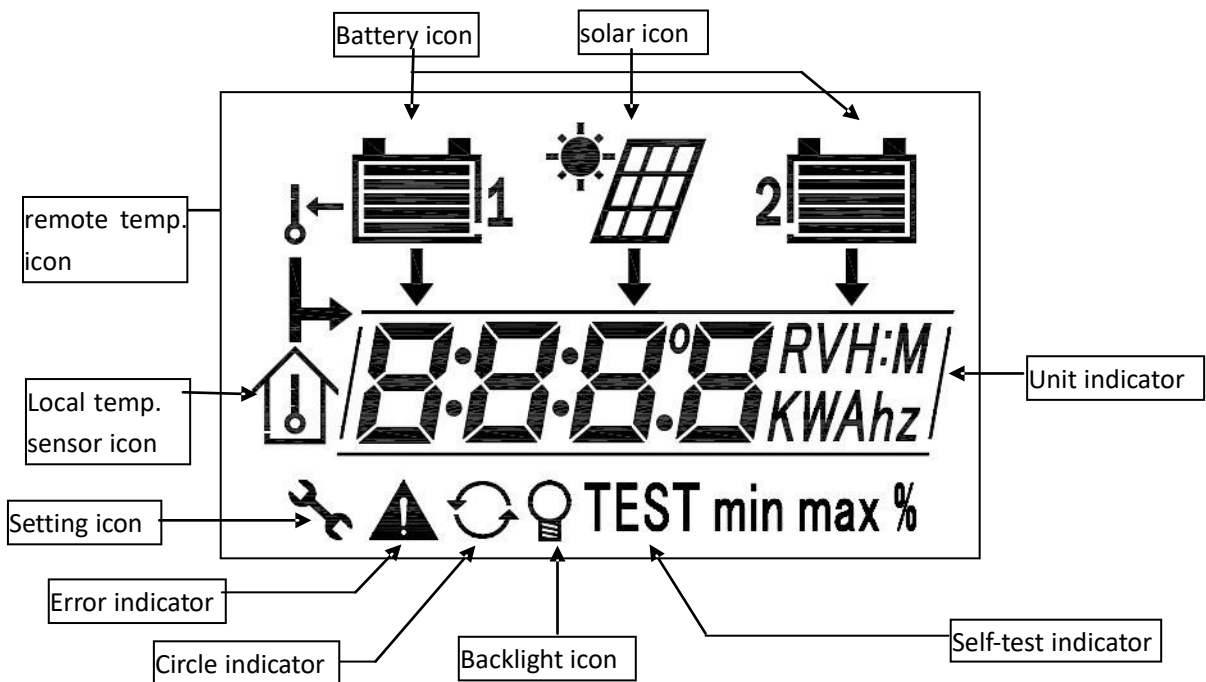
## **CONTAINS:**

Wall mounting fascia, can be mounted in or on the wall.

## **MOUNTING DIMENSIONS:**



## REMOTE METER DISPLAY:



LEDs on the top of the LCD

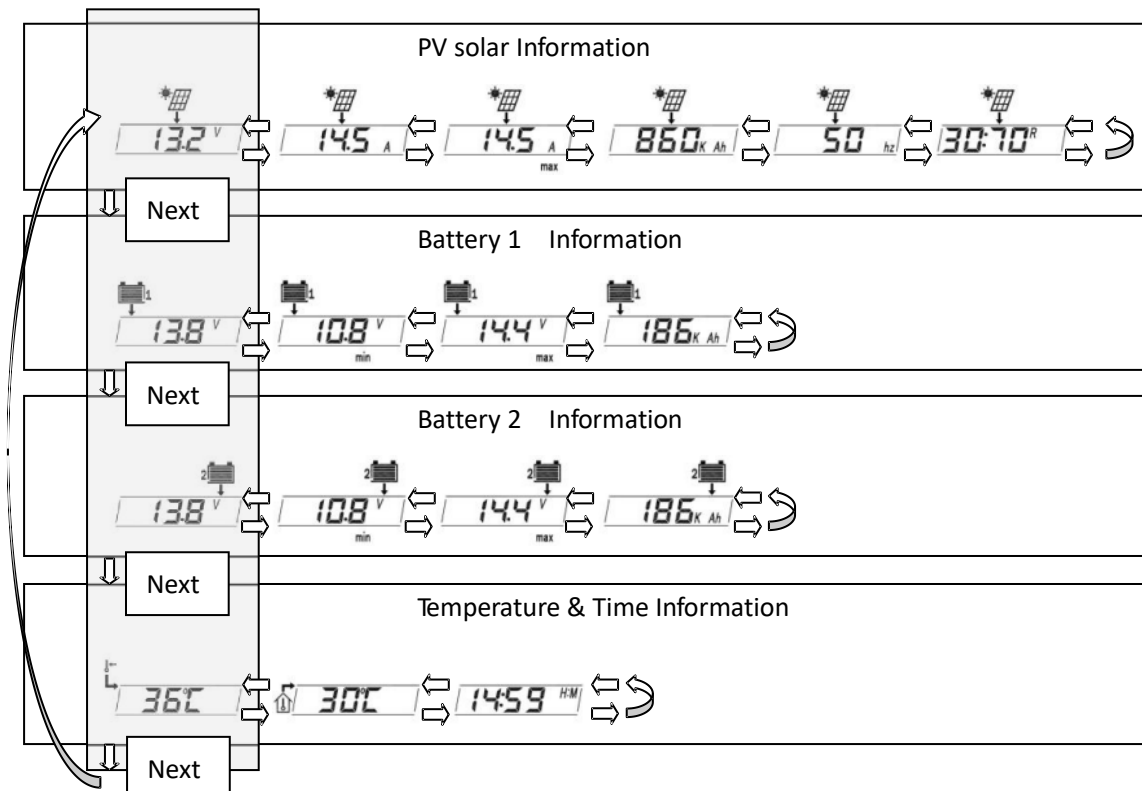
1. Charging led: green on, charging
2. Error led: red on, error

## REMOTE METER INSTRUCTION:

the keys(from left to right) are: K1-K4, or Next, Left  $\leftarrow$ , Right  $\rightarrow$ , Set .

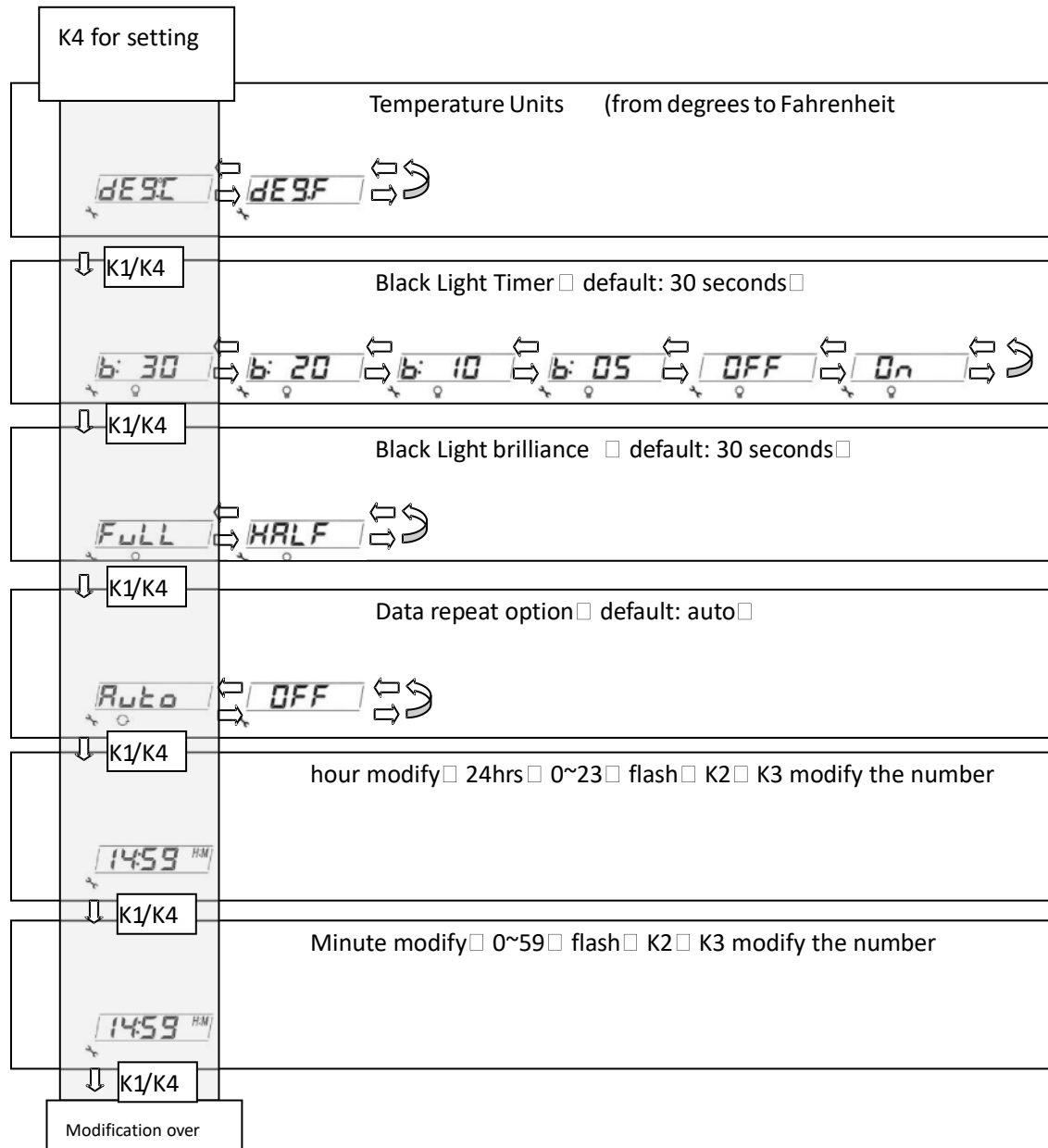
**The meter displays in the following order:**

Solar panel, battery 1, battery 2, temperature and time information. Use K2 or K3 to go forward or back between the data in each set. K1 steps to the next set.



**Data setting instructions:** Press K4 for setting , stepping through settings and to save the modified data.

K1 for next data, K2 and K3 for modifying the data.



**1. Temperature option:**

deg. °C    Celsiur scale (°C)

deg.° F    Fahrenheit (° F)

**2. Backlight instruction:** press any key the backlight will illuminate. To set the time the backlight is on press K4 and then K1. Backlight options:

**OFF:** backlight is off all the time

**On:** backlight is on all the time. **B:**

**30** backlight on for 30 seconds

**B: 20** backlight on for 20 seconds

**B: 10** backlight on for 10 seconds

**B: 05** backlight on for 5 seconds

**Note: backlight timer calculated as the last key press. And the backlight has 2 settings:**

FULL: high bright

HALF: low bright

**3. Data repeat: auto or manual, options as follows:**

**Auto** each set of data will repeat every 3 seconds, K1 for next set. K2, K3 for data repeating data in the set.

**OFF** data will not repeat automatically, unless press K2, K3, or K1 for the next set of data.

4. **Clock adjust:** hour, minute flash, press K2, K3 to modify the data, press K4 to save it.

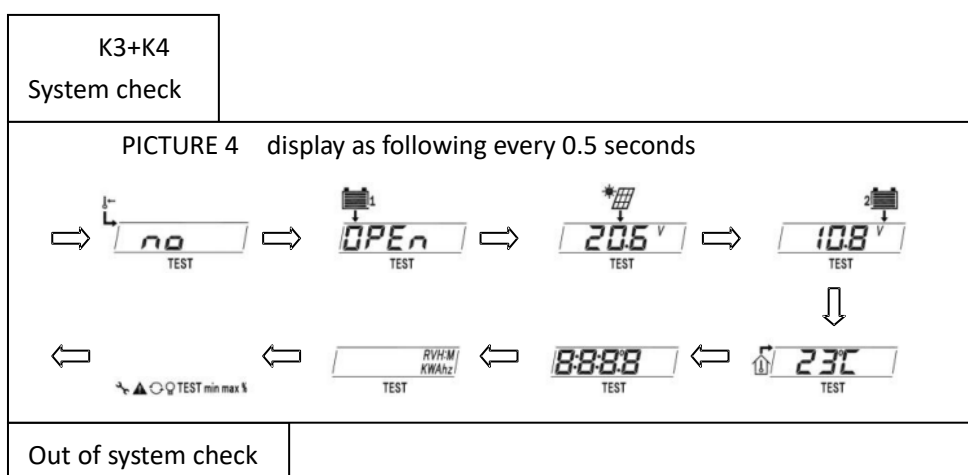
**System checking:** At any time, press K1+K2 this will check and display the related data automatically. See PICTURE 4.

If NO is displayed, this means there is no connection.

If the connection is ok, the related data will be displayed.

If there is no remote temperature sensor connected the meter will show thermometer and NO. if the connection is ok, it will show the data it detects.

**OPEn** means no battery connection or over voltage, the data will be displayed while the fault exists.



**Data erase to 0:** at any time, press K3+K4 the data will be erased to 0, such as max, min, Ah. AH accumulated.

## **Specifications:**

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**Rated voltage:** 12V, min voltage: 8.0V.

Strong backlight on: <23mA,

Low backlight on: <20mA


Backlight and LED indicator off: <17mA

**Operation temperature:** -40° +60°


LCD operation temperature: -10° C +40° C

**Humidity:**0-100%

**Communication cable:** RJ45(8PIN),

When  is displayed check the following:

1. One battery is disconnected, open circuit or over voltage.
2. The remote sensor is not connected.
3. Over Charging current.
4. Solar PV short circuit.

The  will disappear automatically when the fault is rectified

**Telecommunication port:**

If communication is cut off the display will show 4 of “\_”. If there is a communication error check cable is connected correctly. The data can be corrupt if the cable is too long or there is interference from outside sources. The data updates every 20 seconds

**Battery capacity strip flash:** each strip equals to 20% of battery capacity. For example, the first strip flash, the battery capacity is 1-19%, the second trip flash, it is 21-39%, etc.

Note: the calculation takes fully charged **voltage** as 100%, and **over discharged voltage** as 0%. This display is based on battery charging voltage, not the amp hour capacity of the battery.

**Battery capacity AH:** AH is the accumulation of charging over one minute. The data is not accurate while the charge current is too small. The min. is 1AH, means 1amps charging for 1 hour, AH accumulation less than that will not be recorded.

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