Quick Guide for Measuring Battery Voltage.

1) Wiring the meter as shown in Fig 1. Get two identical ¼ watts resistors (R1 and R2, not included). Its resistance value should be in the 1-2 kohm range. Connect one resistor between terminals 6 and 9. Connect another resistor between terminal 9 and the positive of the battery. Connect 12 VDC to terminal 1 (+) and 2 (-). Jump a wire between terminal 6 and 2. The 12V DC buzzer is optional.
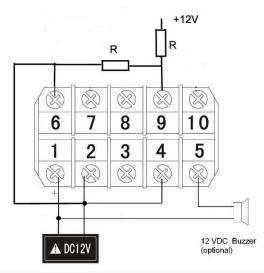

Fig 1. Wiring diagram.

2) Set the parameters for displaying the voltage with 0.1 volt resolution and 0 to 20V range. Enter the Basic Parameter setting mode with code 0089, a) Set input type, **Inty**, for 0-10 V input. b) Set the decimal point, **dot**= 000.0 (this step needs to be done before set PuL and PuH). c) Set the PuL=000.0. PuH=020.0.

3) To set the alarm on at 15.0V and off at 14.8 V, Enter code 0001 to set AH1=15.0 and AL1=14.8. The detail can be found in section C 2 of the instruction manual.

Note,
1) Two identical resistors are used as a voltage divider because the meter can only read 10 V whereas car battery can reach 15V. This voltage divider allows the meter to read and display 0 to 20.0 Volts. ¼ watt resistors in the range of 1 to 2 kohm are recommended for easy calculation. If the resistance is lower than 500 ohm, the power consumption of the resistor might pass the ¼ w rating. In that case, resistor with higher wattage rating might be needed. If the resistance is more than 2 kohm, the meter input impendence (100kohm) needs to be included in the voltage divider calculation. e. g. If two 15 Kohm resistors are used, set PuH=021.5. Using a proper divider will allow this meter to read much higher voltage. Please contract us, it you have difficult in calculating the PuH .

2) The peak holding function is set for displaying the Maximum voltage only. To display the peak voltage from the last run, or display the voltage in the peak holding mode continuously, press the ">" key once. The MAX (MIN) LED will be on, indicating the display is in the peak mode. Press ">" again to change back to display the current voltage. Press and hold "Λ" for 3 second will reset the memory. Three additional peak parameters are turned off. They are, the time that the maximum voltage was recorded, the minimum voltage and its recording time. If you want see them, use code 0037 to turn on these functions. The detail can be found in section C3 of the instruction manual.

3) To measure a 24V car battery, you need to set the measuring range to 0-30 VDC. In this case, the resistance of R1 should be twice the value of R2. e. g. If R1 is 2 kohm, R2 should be 1 kohm. Then, set PuL=000.0. PuH=030.0.

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