# A30-U1 Controller User Manual

Thank you for using this product of our company, the “A30-U1” controller uses LED display, procedures for intelligent control, to achieve the voltage control function, and voltmeter functions, battery charge and discharge etc.

In case of any printing or translation error, we apologize for the inconvenience.

**Features**

Voltmeter display range : DC 0-99.9 V  Voltage detection error: ± 0.1V

Working current: 8mA/24V (relay open, LED display OFF about 4mA/24V ); 58mA/24V(relay close)

Operating Power: DC6~80V

Relay parameters:

A set of conversion (normally open and normally close, NO/NC)

Contact load:  NO: 30A/250V AC or 30A/30V DC  NC :20A/250V AC or 20A/30V DC

Attention: Because high voltage DC electric arc damages relay contact, so the electric load above DC60V load current is less than 10A.

Contact resistance: ≤ 100mΩ (1A 6VDC)

Mechanical durability: 10 millions  Electricity durability: > 100,000 (20A-250VAC)

Operating Temperature: -40 ~ 85  ℃

Set display off, the minimum current value is 4mA/24V (relay open)

The pre-set parameters can be saved after power off.

## Attention:

Do not reverse input voltage polarity!

Use this product to control the high-voltage electrical equipment must electrical professionals to operate，high voltage danger!

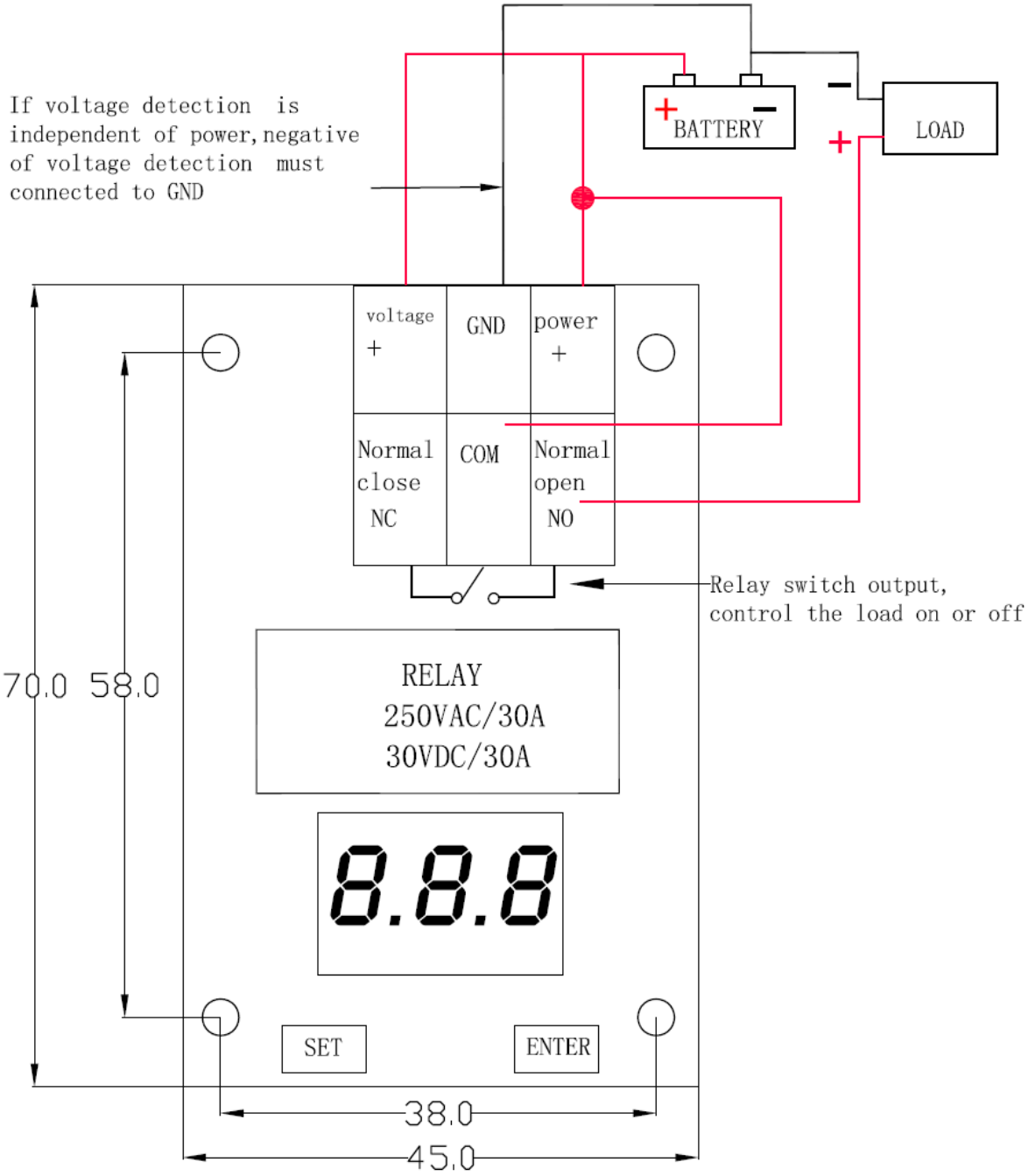
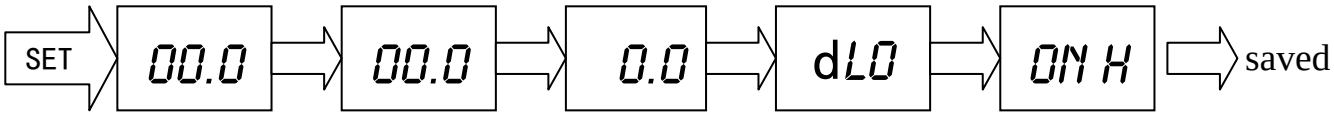





Figure 1

**operate :**




upper limit　　lower limit　　voltage correction　　LED goes off　　time　　ON H　　upper limit ON
ON L　　lower limit ON

Connect to power, LED display voltage values by detect from “voltage” and “GND” Interface ( Figure 1),short press “SET” button to set, the value to be set flashing, press the “ENTER” button can make the set value from 0 to 9 increasing circulation, first to be set are the upper limit voltage values , short press “SET” three times, the second group is set the lower limit voltage values, voltage lower limit values settings could not be exceed the upper limit values, (if the lower limit values cannot be set, please set the upper limit values higher first), short press SET button to enter the third set of values for the voltage correction, the default is 0, set the range of 0.5 ~ + 0.5V, the fourth set of values for the digital tube automatically goes off time, such as "dl0 means LED display ON all the time, "dl9" means LED display off after nine minutes, next group values is “ON H/ON L”, set to “ON H” means the relay will close when detect values exceed the upper limit until below the lower limit , set to “ON L” means the relay will close when detect values below the lower limit until exceed the upper.

press “SET” to complete the settings, LED display no longer flashing, system enter voltage detection control state, when detecting the voltage exceeds the upper limit value (set “ON H”),the relay close (normally open on, normally close off), the relay dose not open until the voltage drops below the lower limit preset.

If the pre-set voltage upper and lower limits values set to the same, such as 12.0V, when controller detected voltage values at 12.0 fluctuations may cause the relay contact frequent action, We recommend to set the voltage to maintain the difference between the upper and lower limits.

Detecting voltage condition, short press the” ENTER”　can display the state of the relay closing time (decimal point right flashing means timing), when the relay release time to stop, when relay close again will re-timing, long press “ENTER” for 3 seconds to reset values.

Note: The detection voltage terminal access to reliable, have not loose wiring、around the circuit board not insulation ,may lead to the induced voltage detection values is not accurate.