

## Introduction:

The three in one electronic clock module integrates three practical functions of time, thermometer and voltmeter. It uses ds3231 clock chip with temperature compensation crystal oscillator / rx8025t clock chip of Epson. It has ultra-high timing accuracy and stability and extended temperature probe, which can effectively solve the problem of inaccurate temperature affected by module temperature. Ultra wide supply voltage, supporting 5 ~ 30V DC.

## Product parameters:

1. Power supply voltage: dc5.0 ~ 30V
2. Temperature function range: - 40 ~ 120 degrees, resolution 0.1 degrees.
3. Functional range of voltmeter: dc5 ~ 30V (pure DC power supply is required, 24V battery is not recommended, because the voltage may be too high during charging and burn out)

## Function and instructions:

1. Adjustment time, date, year, voltage error, temperature error, cycle display item definition, alternating display interval

In the non setting state, press the left key to enter the time adjustment (note that the colon in the middle is bright),

1. At this time, "minute" starts to flash, press the right button to increase, and adjust the range of 00 ~ 59. After adjusting "minute",
2. TZT Press the left button again, and the "hour" starts to flash. Press the right button to increase the adjustment range of 00 ~ 23.
3. After adjusting the "hour", press the left button to enter the date adjustment (note that the colon in the middle is off). At this time, the "day" starts to flash. Press the right button to increase the adjustment range of 1-31.
4. After the "day" is adjusted, press the left button again. At this time, the "month" starts to flash. Press the right button to increase the adjustment range of 1-12 TZT.
5. After adjusting the date, press the left key again, and the "year" starts to flash. Press the right key to increase the adjustment range 2012-2049.

6. After adjusting the "year", press the left button to enter the error calibration function [x.xu] of the display voltage. The unit is 0.1V. A positive number indicates increase and a negative number indicates decrease.

7. Then press the left key to enter the temperature error calibration setting [AC: XX]. XX represents the correction value. Press the right key to increase. A positive number represents an increase, a negative number represents a decrease, and the unit is degrees.

8. T.Z.T Press the left key again to enter the definition function DD option of the display item in the cyclic display state,

Right click to change the value: (DD: 0) time + temperature + voltage, (DD: 1) time + temperature, (DD: 3) time + voltage.

Press the left key again to enter the option of cycle display alternating interval DF, and press the right key to change the value. The larger the value, the longer the interval T.Z.T.

9. Press the left key again to save all values and return to the normal display state.

#### Option parameters:

[Ac:xx]: xx represents correction value, press up to increase, positive number indicates increase, negative number indicates decrease, in degrees.

Dd options: (DD :0) Time + temperature + voltage, (DD :1) Time + voltage, (DD :3) Temperature + voltage.

DF option: the dF option of alternating interval is displayed in a loop. Press up to change the value. The larger the value, the longer the interval. Do not set DF to 0; otherwise, the screen will turn black. Then press the key again to enter the brightness level setting LL:1, press the key to change the value, a total of 3 levels.

AL option: automatic control setting AL:0, press up to change the value, 1 is valid, 0 is invalid. Automatic brightness control means that the brightness automatically changes to level 1 between 19:00 and 6am. Finally, press the key again to save all the set values and return to the normal display state.

LL option: Digital tube brightness adjustment, the greater the value, the higher the brightness. We Are The Distributor Of T.Z.T Brand In Hong Kong, China

#### Switch display items

In the non-setting state, right click to switch display items, display will be in the time -- > ; Date - & gt; Temperature - & gt; Voltage - & gt; Alternate cycles between displays. (Note: the date does not participate in the cycle) switch the display in turn, in the non-adjustment state press the right button, you can press and wait for a few seconds, observe whether the wheel display, if not in the press wait for a few seconds, until the wheel display state.





Digital tube is an active light-emitting device . Under direct sunlight or strong light , it may not be clear . The dark light or night effect is very good , and blue is higher than other colors .

### **Matters needing attention**

- 1 . When using , keep the temperature probe away from the board as far as possible , otherwise the clock will heat up and affect the temperature measurement!
- 2 . About the time is not allowed to adjust the time , when the time is not to goneed to set , switch out , only from the set time to start walking , so if accordinto the current time set points , will certainly feel slow , when the time is adjusted , also hope buyers pay attention to oh .We Are The Distributor Of TZZ Brand In Hong Kong, China
- 3 . As for the inaccurate temperature , some parts reflect that the temperature is iaccurate . In fact , we have done the test and the actual temperature is not muchdifferent.

When using, the temperature probe shall be kept away from the board as far as possible, otherwise the clock will generate heat and affect the temperature measurement.

