SR-510A Manual

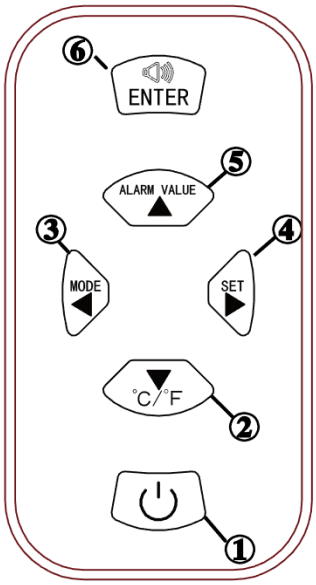
Features:

1. Full-color TFT screen.
2. Real-time display of carbon dioxide concentration, temperature, and humidity
3. Dynamic expressions of good, normal, and bad indoor quality index system.
4. 20,000 groups of recorded data, local trend graph, computer graph, computer APP data download data record
5. Date and time update can be connected to the computer APP to refresh.
6. High sensitivity NDIR CO_2 sensor
7. CO_2 sound and light alarm with mute function
8. High and low alarm values are fully adjustable
9. Conversion of temperature units between Celsius and Fahrenheit
10. Removable rechargeable lithium battery or separate external USB power supply
11. The life of the sensor is up to 10 years.
12. Can be manually calibrated
13. It can be placed on the table or hung on the wall.

Specifications

Product Model	SR-510A
Carbon dioxide concentration measurement scope	0-10000PPM
Resolution ratio of carbon dioxide concentration	1 PPM
Accuracy	±3% of readings of ±40PPM
Working temperature range	-10~+60℃ (-14~140℉)
Working humidity range	0~99% RH
Storage temperature range	-40~+80℃ (-40~176℉)
Temperature measurement range	-20~60℃ (-4~140℉)
Temperature measurement accuracy	±1(℃)
Humidity measurement range	100%RH
Temperature accuracy	±2%
Humidity resolution	0.01%RH
Supply battery	Built in with demountable 3.7V/18650-cylinder battery or externally connected 5V USB power supply
Working current	180~300 mAh
Battery service life	2200mAh capable of continuous work at >9 hours
Charging duration	3 hours
Auto power off	Capable of being set (with factory default as automatic power off in 15 minutes)
Record groups	Local mode 999 groups Computer mode 20000 groups
Connection	Micro-C USB
Net weight	210g
Size	140*134*33mm

Product description:



① Power ON/OFF

② Test mode: to convert temperature units;
Set mode: Move Down menu

③ Measurement mode: Historical trend
Set mode: shift or reduce data

④ Test mode: Records or Setting
Set mode: to shift or add data

⑤ Measurement mode: alarm setting interface.
Set mode: move up menu

⑥ Measurement mode: turn on/off the alarm.

Warn: Don't operate or calibrate the equipment parameters at will to prevent error in data detection or inaccuracy.

Power on or off

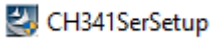
Shortly press the button  once for power on or off.

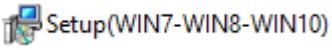
Historical trend chart interface conversion

Short press the button  once to complete the interface conversion. Short press the button again to exit.

1. Software Installation:

1.1 Put the software CD into the drive to read the files.

1.2 Click the application software in the CH341SerSetup folder and Install drive package. 

1.3 Click the T5LTest (Setup) document, and then click the application software to install it. 

Data Download:

Click on 

Pop-up window appears  Click OK to download the data and wait for the data download to complete, (save)(cancel), Click to save the record file.

2. Export Excel file:

Click on 

Choose export, appear(save)(cancel), Click save to export the file to "XLS" format

3. Correct the clock:

Click on 

Select the clock to be calibrated, a pop-up window appears and click OK.

4. Open or close of the alarm sound

In the measurement mode, after exceeding the set alarm value, the button 

can turn on or off the alarm sound.

5. Alarm value setting

Press the button 

, the left and right 

buttons can move the number, the upper and lower buttons 

can add or subtract the number, press the button 

to save and exit the setting after the setting is completed.

6. Data record interval time

Press 

key twice to enter the function parameter setting. Press the 

button, Press the button 

to select corresponding parameters. Press the button 

to set parameters. Press the 

button to determine and return, Press the button 

to exit parameter Settings and return to the test interface.

7. Historical record inquiry

Press the 

button once and press the 

to go to <Records>, with the left and right buttons for shifting, and up and down buttons to revise the record pages.

Parameter settings

Press the button 

twice, then the button 

enters <Settings>. Press up and down buttons to move to select the corresponding parameters.

Character's background color the selected option turns white. Left and right keys can Used to modify parameters. Exit the parameter setting mode, press the button 

and the white background color disappears, press the button 

again to return to the main test interface.

1. OFF Backlight:

The left and right buttons can be used to switch screen time OFF - 1 min - 5 min and 10 min - 30 min - 1 hour

2. Record interval:

The left and right buttons can be used to modify the record interval: off-10sec-30sec-1min-5min-10min-30min-60min

3. Brightness:

The left and right buttons can be used to modify the backlight brightness Close - 25% - 50% - 75% - 100%

4. Data Clear:

The Left and Right button can be used to go to the data clearance menu. Press the Left button once again to confirm the clearance and use the Right button to quit clearance.

5. Max & Min Mode:

Left and right buttons on or off.

6. Time/Data:

The Left and Right button is used to go to the time setting menu. Press the Left and Right button once again to shift. The Up and Down button can be used to modify parameters. Press the button 

to be able to confirm the modification and return to the main set menu.

7. Auto shutdown:

The Left and Right button is used to select OFF (without automatic power off) at /15 minutes/30 minutes/45 minutes/1 hour/2 hours/4 hours/8 hours.

8. Calibration:

press left and right key to enter the calibration preparation and enter 600 seconds for count down. Press the key 

will exit or cancel the calibration. (Note: For operation of the step, it should be done in a 400PPM environment which does not change within 600 seconds).

9. Reset:

The Left and Right button can be used to enter the Restore to Factory Setting. Press the Left button once again to confirm the reset, and the right button to quit the reset. After reset, all parameters will be restored to factory parameters.

Analysis of common problems

1. The carbon dioxide concentration data in the air is not accurate.

1) Analysis: The concentration content of the environment is not stable. At the time of measurement, place the device in the same place for a period.
2) Analysis: There are sundries, dirt at the sampling window of carbon dioxide sensor. The air flow ventilation window is blocked.
3) Analysis: the carbon dioxide sensor has deviation. It needs to calibrate the equipment again.

2. Incorrect temperature and humidity

1) Analysis: Analysis of existence of impurities or dirt or filth at the sampling window of the temperature and humidity sensor
2) Analysis: The ventilation window has been blocked by something.
3) Analysis: Date and time is not accurate
4) Analysis: Caused by too low button battery level inside the equipment

3. Failure in power on

(1) Analysis: The battery has no power or is damaged. Use the USB socket for power supply. If power can be on, and if there is change any change in the power check, it indicates that there is no power in the battery. If there is no change, the OK icon is displayed only indicating the battery has been damaged.
(2) Analysis: Battery +/- polarity is mounted reversely. It is required to note that the non-protruding contact at one end of the battery must be “-” polarity, and that the protruding contact at one end must be “+” polarity. The following figure can be referenced.

4. The upper computer cannot relate to the instrument

1) Analysis: Replace the USB interface.
2) Analysis: Testing with another computer may not be compatible or software conflict to make it impossible to connect.