

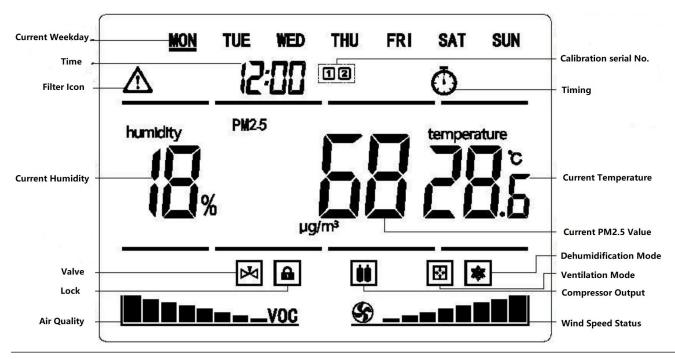
SD550A User Manual

- The new liquid crystal dehumidification controller can collect environmental temperature and humidity data, according to the current environmental conditions, to achieve intelligent control of dehumidifier.
- The controller adopts large screen digital display technology, can manually switch on/off, can manually adjust the fan wind speed and set humidity to control the work of the compressor, improve indoor air environment, comfort and energy saving.

Specification

- Power Supply: AC220V 50/60Hz
- Fan load power: <100W
- Fan Valve load power: <100W
- Compressor load power: <500W
- Power Consumption: <3W</p>

- Housing material: ABS+PC
- Installation: Standard 86
- Wire Connection: Terminal Crimping
- Working environment: 0 ~ 50°C, 5% ~ 95%RH
- □ Storage environment: -10 ~ 55°C, 5% ~ 95%RH



Operation Guide

- C: Wind speed setting/timing defrosting setting/confirmation key;
- ■: Operating mode setting/manual valve switch setting/menu key;
- U: On/off key
- igvee:Humidity setting/filter setting and zero/down button;
- O+O:Check the outdoor temperature and humidity key;
- $\mathbb{C}+\mathbf{\forall}$:Timing switch key;
- \equiv + \checkmark : Restore the factory settings key;
- + \forall : Filter and coil temperature check key;

- A: Humidity setting/up key;
- $C+\equiv:$ Lock and unlock key;
- \mathbb{C} + \blacktriangle :Local time setting key;
- $\equiv + \bigstar$: Setting key for humidity deviation value;
- \bigcirc + \checkmark :Mute key;

1. **Controller on/off:** After correctly connecting the power according to the wiring diagram, the controller defaults to the off state, and the LCD screen displays OFF. Press the key to turn on the controller, and the LCD screen displays parameter information such as indoor temperature and humidity. Press the key again in the power on state to enter the power off state of the controller.

2. Working mode setting: When turned on, press the key \equiv to switch the working mode to ventilation mode or dehumidification mode; If set to dehumidification mode, enter the humidity setting state and set the humidity value with the \bigstar or \forall keys. Press the key \bigcirc or waiting 10 seconds without any key operation, and the system will automatically confirm and return to the startup interface, displaying the corresponding mode icon.

3. **Time setting**: When turned on, press and hold the $\bigcirc + \blacktriangle$ button for more than 3 seconds to enter the local time setting state. First, modify the week, which flashes; Press the key \equiv repeatedly, and the flashing position will switch between week, hour, and minute. In the time setting state, use the key \bigstar or \checkmark to modify the corresponding value. After the time modification is completed, press the key \bigcirc to save the current time and exit the set state.

4. Wind speed setting: When turned on, press the key \bigcirc to enter the wind speed setting interface, and modify the set wind speed through the \bigstar or \checkmark keys. Pressing the confirm button or 10 seconds of keyless operation will automatically confirm and return to the startup interface. The fan will operate at the set wind speed.

5. **Timing defrosting setting**: In the startup state, press and hold the key \bigcirc for 3 seconds to enter the timing defrosting setting state. Firstly, set the compressor running time P1 and display the timing defrosting serial number flag 1. Set the compressor running time through the \blacktriangle or \checkmark key, confirm with the key, and enter the compressor stop time P2 setting. Display the timing defrosting serial number flag 2. Set the compressor stop time through the \bigstar or \checkmark key, confirm with the key \bigcirc , and return to normal working state. (Note: When the running time of the compressor is set to>0, timed defrosting will only take effect, otherwise it will operate as automatic defrosting.)

6. **Manual valve switch setting**: In the startup state, press and hold the key \equiv for 3 seconds to manually open/close the valve. When the indoor (return air) humidity sensor malfunctions or the humidity exceeds 75%, the valve is forced to close. When the indoor (return air) humidity drops below 60% again, the valve resumes normal operation. When the valve is opened, the valve symbol is displayed.

7. **Timing on/off setting**: In the on/off state, press the $\bigcirc + \checkmark$ key simultaneously to enter the timing on/off setting interface. Use the \land or \checkmark key to set the timer on/off countdown (setting range: 0-24 hours, default: 0). Pressing the key \bigcirc or 10 seconds of keyless operation will automatically confirm and return to the previous interface. The device will start countdown.

8. Humidity setting: In the dehumidification mode, press the \triangleleft or \checkmark keys to enter the humidity setting interface, and modify the humidity setting value through the \triangleleft or \checkmark keys. Pressing the button \bigcirc or

operating without a button for 10 seconds will automatically confirm and return to normal working status.

9. Humidity calibration setting: When the machine is turned on, press and hold the \equiv + Abutton for 3 seconds to enter the indoor humidity calibration setting. The calibration value and humidity calibration serial number symbol 1 will flash, and the humidity calibration value can be modified by pressing the \land or \checkmark keys. The button \bigcirc will switch to the outdoor humidity calibration setting, and the calibration value and humidity calibration serial number symbol 2 will flash. After the setting is completed, the button \bigcirc or 10 seconds of no button operation will automatically confirm and return to normal working status.

10. **Unlock setting**: In the on/off state, press and hold the \bigcirc + \equiv button for 3 seconds to switch between unlock and add. Lock status display lock flag;

11. Filter setting and resetting: When the machine is turned on, press and hold the key \checkmark for 3 seconds. If the current filter alarm is turned on, reset the filter screen. The filter screen logo on the work interface disappears, and the filter screen starts counting from zero; If the current filter alarm is in the closed state, it enters the filter setting state and flashes to display the current filter setting value. Use the \land or \checkmark keys to modify the filter setting value, with a range of 0-360 days and a default value of 42 days. Press the key \bigcirc or no key operation for 10 seconds, it will automatically confirm and return to normal working state.

12. Filter and coil temperature viewing: When turned on, press and hold the \checkmark + Abutton for 3 seconds to enter the filter screen viewing interface, which displays the current cumulative number of filter days. Press the key \bigcirc to switch to the next coil temperature viewing interface, which displays the coil temperature. Press the key \bigcirc again or operate without a button for 10 seconds, and it will automatically return to the startup interface.

13. **Outdoor temperature and humidity check**: When turned on, press and hold the $\bigcirc+\bigcirc$ button for 3 seconds to enter the outdoor temperature and humidity check status, which flashes to display the outdoor temperature and humidity parameters. If there is no button operation for 10 seconds, it will automatically return to normal working state. (Note: If there is no external outdoor temperature and humidity module, this button function is invalid.)

14. **Key tone setting**: In the power-on state, press and hold \bigcirc + \checkmark simultaneously.

15. **Restore factory settings**: When turned on, press and hold the $\equiv + \checkmark$ key to restore the product parameters to the factory default settings. After setting, the screen will display for a few seconds and then enter the shutdown state, indicating successful setting. Normal use after startup.

16. **Fault alarm**: When the coil sensor fails, the coil temperature viewing interface displays an E1 icon; When the indoor humidity sensor fails, the humidity display area displays E2. When the indoor

temperature sensor fails, the temperature display area displays E3. When the outdoor temperature and humidity sensor fails, the humidity display area flashes E2, and the temperature display area flashes E3; When a low pressure alarm occurs, the humidity display area displays E5; When a high voltage alarm occurs, the humidity area displays E6; Display E8 when phase sequence alarm occurs 15.

Instruction

1. Wind speed control:

The wind speed is controlled by manual setting the wind speed, the wind speed defaults to low speed operation, after the equipment starts the fan and the valve, after the compressor, after the shutdown, the first compressor and the valve, then delay for 3 minutes before turning off the fan.

2. Valve Control:

Dehumidification mode: when the indoor (return) humidity < 60%, the valve open execution, when the indoor (return) humidity > 75%, the valve closed execution. In ventilation mode: valve is always open. Off State: closed valves, compressors, fans.

3. Compressor control:

If the humidity setting is greater than 10% and the indoor humidity sensor is normal:

When the indoor humidity is \geq the set humidity+3%, turn on the compressor; (Note: After the compressor is turned off, it must take 3 minutes to restart.)

When the indoor humidity+1% \leq the set humidity, turn off the compressor; (Note: After starting the compressor, it will not shut down due to humidity changes within 3 minutes).

If the humidity is set to 10% or the humidity sensor malfunctions:

The equipment enters a continuous dehumidification state and starts the compressor.

4. Defrosting control:

If the running time of the compressor for timed defrosting is set to 0, operate according to automatic defrosting:

When the room temperature is ≤ 16 °C, the compressor operates for 20 minutes and turns off for 10 minutes for defrosting control;

When the room temperature is greater than 16 °C, the compressor runs continuously for 20 minutes and the coil temperature is ≤ 2 °C for 3 consecutive minutes, entering the defrosting stage, the compressor is forced to shut down, and the compressor icon flashes; When the defrosting time exceeds 10 minutes and the coil temperature is ≥ 5 °C for 3 consecutive minutes, exit the defrosting stage and the compressor returns to normal operation.

(Note: When the coil temperature sensor malfunctions, the compressor operates for 15 minutes and turns off for 10 minutes for defrosting control.)

If the running time of the compressor for timed defrosting is set to>0, operate according to timed defrosting: When the continuous running time of the compressor is \geq the set running time P1 for timed defrosting, the compressor shuts down and enters the defrosting stage;

When the continuous stop time of the compressor is \geq the set stop time P2 for timed defrosting, the

compressor returns to normal and exits the defrosting stage.

(Note: The priority of defrosting operation is higher than the normal control operation of the compressor.)定的

5. High and low voltage protection (optional function):

If a low voltage alarm, high voltage alarm, or phase sequence alarm occurs, all output devices will stop outputting, and the humidity display area will display the low voltage alarm icon E5, high voltage alarm E6, or phase sequence protection alarm E8.

(Note: (a): If a high pressure alarm is detected for 10 seconds, the high pressure alarm will be turned on and the E6 alarm icon will be displayed. Once the E6 alarm appears, it will continue to alarm for 8 minutes. After 8 minutes, if the pressure returns to normal, the high pressure alarm will be released;

(b) After the compressor is started for 3 minutes, it starts to detect a low pressure alarm. If a low pressure alarm is detected for 10 seconds, it will activate the low pressure alarm and display the E5 alarm icon;

(c) Under normal operating conditions of the equipment, high voltage is normally closed, low voltage is normally closed, and phase sequence is normally closed

6. High temperature protection:

When the indoor temperature is ≤ 41 °C, the compressor operates normally; When the indoor temperature is ≥ 43 °C: forcibly turn off the compressor, and after 3 minutes, turn off the fan and close the valve;

7. High humidity protection:

When the indoor (return air) humidity is above 75%, the valve is forced to close. When the indoor (return air) humidity is again below 60%, the valve returns to normal operation.

Installation

1.Remove the iron frame and screws from the packaging box, thread the wiring out of the iron frame, and then install and fix the iron frame to the wall. 86 Install the box	2.Correct wiring according to the electrical wiring diagram and wiring markings	3.Align the lower clamping point of the product with the iron frame and buckle it, then press and hold the upper part of the product to clamp it into the iron frame	4.Confirm if the casing is securely fastened and installation is complete