



Keeping [S] pressed for 3s to enter temperature and humidity setting mode, digital shows set temperature. Press [P] choose humidity and temperature value circular, press [▲] or [▼] change the value(Keeping [▲] or [▼] pressed, it will be adjusted quickly)

After setting, press[S]to exit and saving parameters. Do not press any key for 30 seconds; the device will leave the set mode without saving the set data.

### Set system parameters

Keeping [P] pressed for 3s to enter parameters setting mode, digital shows parameter code, at the same time press [▲] or [▼] to choose parameter code.

Press [S] to shows its value. Press [▲] or [▼] to set its value.

Keep depressing [P] for 3 seconds, the set parameters will be saved, the mode exits.


If do not press any key for 30 seconds, the mode will exit without saving all the set data.

#### ZL-7801A Parameter code and setting instruction:

No	Parameter code	Function	Setting Range	Note	Factory Setting
01	U10	Cooling/Heating	C/H	C:Cooling; H:Heating	C
02	U11	Temperature difference	0.1 ~ 20 °C		5
03	U12	Temperature load time delay protection	0 ~ 30min		3
04	U13	Temperature correct	-9.9~+9.9%		0
05	U20	Humidification/ Dehumidity	H/P	H:Humidification; P: Dehumidity	P
06	U21		0.1 ~ 20 %		5
07	U22	Humidity load time delay protection	0 ~ 30min		3
08	U23	Humidity correct	-9.9~+9.9%		0
09	U30	Dewing warning	C/V	C: Dewing; V: No dewing	V
10	U31	Dewing delay warning	0 ~ 30		6
11	U40	Timing 1 unit	0 ~ 2	0:sec; 1:min; 2:hour	1
12	U41	Timing 1 Load	1 ~ 9999		120
13	U42	Timing 2 unit	0 ~ 2	0:sec; 1:min; 2:hour	1
14	U43	Timing 2 Load	1 ~ 9999		120
15	U50	Temp. And humidity display delay	1~ 30	Normal display when no warning	2
16	U99	Passwords	0000 ~ 9999	0000: off	0000

## Control function instruction

### Temperature control

 **Cooling control:**

- ◇ When the temperature  $\geq$  【setting temp.】 + 【temperature difference】, and temperature load (R3) stop time meet 【temp. load delay protection】, temp. Load on;
- ◇ When the temperature  $\leq$  【setting temp.】, temp. Load (R3) off;


 **Heating control:**

- ◇ When the temperature  $\leq$  【setting temp.】 - 【temperature difference】, and temperature load stop time meet 【temp. Load delay protection】, temp. Load (R3) on;
- ◇ when the temperature  $\geq$  【setting temp.】, temp. Load (R3) off;

 **Temperature correct**

- ◇ When temperature value is different from sensor install place, 【Temperature correct】 can correct it, Adjustment range is  $\pm 9.9\%$ .

**Humidity control**

 **Dehumidification control:**

- ◇ when humidity  $\geq$  【setting humidity】 + 【humidity difference】, and humidity load (R2) stop time meet 【humidity delay load protection】, humidity load on;
- ◇ when humidity  $\leq$  【setting humidity】, humidity load (R2) off;

 **Humidification control:**

- ◇ When humidity  $\leq$  【setting humidity】 - 【humidity difference】, and humidity load (R2) stop time meet 【humidity delay load protection】, humidity load (R2) on;
- ◇ when humidity  $\geq$  【setting humidity】, humidity load (R2) off;


 **Dewing warning**

When humidity get to dewpoint, after【dewing warning delay】controller enter dewing warning state. If 【dewing warning way】 is C, digital shows "E2" alarm, humidity load output stop, warning output (R1) on. If 【dewing warning way】 is V, digital shows "99.9%" alarm, still output.

 **Humidity correct**

- ◇ When humidity value is different from sensor install place, 【Humidity correct】 can correct it, adjustment range is  $\pm 9.9\%$ .


**Timed control**

 **Timing circle control:**


- ◇ When enter timing load 1 timing, timing load (R5) on, timing load (R4) off.
- ◇ When enter timing load 2 timing, timing load (R4) on, timing load (R5) off.

 **Sensor**

- ◇ Controller power is on, all load output (R2 R3) run after load delay protection;
- ◇ Running process, the temperature and humidity load (R2 R3) after downtime must be after load protection delay to start again.
- ◇ Do not change Sensor or connecting ways, when the power is on.

 **Fault alarm**

When the sensor broken controller shows "E1", humidity and temperature load off, warning output on.

 **Factory setting:**

Keep **【P】** and **【▲】** keys pressed for 5 seconds, the device displays "UnL", press **【▼】** twice controller will reset auto.

## Controller Installation

**Warning:**

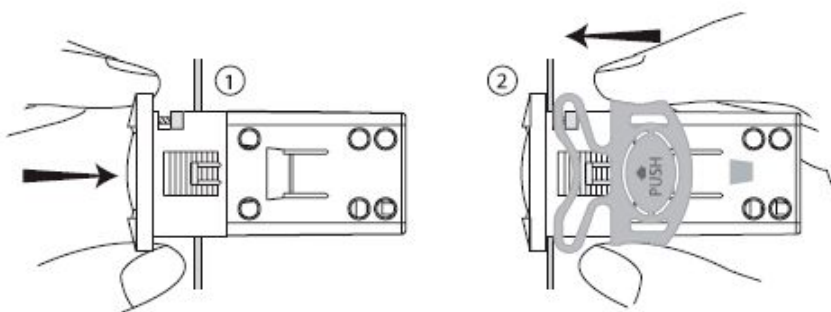
Avoid installing the device in the following environment:

- Relative humidity is greater than 90%, or possibly dewing.
- Strong vibration.
- Possibility be dropped, or within fog.
- Exposed to eroding and polluting gases (such as: air containing sulfur and ammonia, salty fog, smoky mist) to prevent erosion and oxidation.
- Ambient containing explosive or inflammable materials/gases.



### Installation Procedure

Insert the controller into hole (step one)      Slide the bracket to fix the device (step two)



## Electrical Connection



**Warning**

- Electrical wiring must be manipulated by certified electrician.
- Wrong power supply may damage the device and system seriously.
- Try with effort to layout the sensors and switches line apart from inductive load lines and power supply lines. The sensors and switches lines are not allowed go with the power supply lines and inductive load lines in a same pipeline, and are not allowed to pass near the contactor, breaker and the similar.
- Reduce the length of sensors' wiring as possible, avoid forming a spiral shape near the power devices.
- Avoid direct contact with the internal electronic components.
- After finish and check the electrical wiring layout, before connect them to the device, please follow this instruction: Pay attention the “electrical wiring diagram” below, wrong connection possibly damages the device and the system, and may be dangerous to the user. All security and protecting device for the equipments are necessary. They are very important to protect the equipments, and the user’s safety.

**Electrical wiring diagram**

