Manuals+ — User Manuals Simplified.

DIGITEN DHTC1011 Humidity and Temperature Controller User Manual

Contents

**DIGITEN DHTC1011 Humidity and Temperature Controller**

Feature

- Large LCD screen;
- Dual relay output, be able to control heating/cooling equipment and humidification/dehumidification device at the same time;
- Support reading with Celsius or Fahrenheit units;
- Maximum temperature output load: 1650W@110V, 3000W@220V;
- Easy to use and program, plug and play device;
- With temperature and humidity correction functions;
- Compressor delay protection for refrigeration control;
- High and low-value alarms are available;
- Over-temperature and sensor fault alarm;
- Heating/cooling return difference could be set separately to protect the temperature controller from violent change;
- The temperature or humidity function can be used separately.

Specification

	Temperature	Humidity
Control Range	-40-120'C, -40-248,	1-100%RH
Temperature Resolution	o.1'C. o.n	0.1%RH
Temperature Accuracy	±0.3'C, ±0.3,	:t2%RH
Control Mode	Heating and Cooling	Humidification and Dehumidification
Input Power	100-240VAC, 50/60Hz	
Temperature Control Output	Max.10A, 100-240VAC	Max.7A, 100-240VAC
Buzzer Alarm	High and Low Temperature Alarm	High and Low humidity Alarm
Sensor Type	Digital sensor	
Sensor Length	2m.6ft	2m.6ft
Relay Contact Capacity	Heating (15A. 100-240VAC)	Humidification(10A,100•240VA C)
	Cooling (15A. 100-240VAC)	Dehumidification(1OA,100•240V AC)
Input Power Cable length	120 cm/4ft	
Output Power Cable Length	15cm/6	

Display
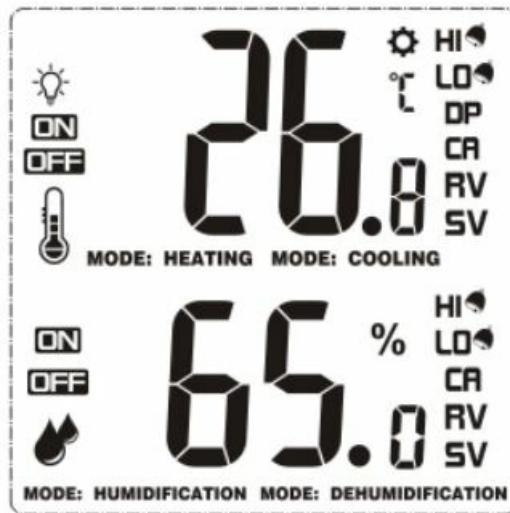
- **PV:** Current measuring temperature/humidity
- **RV:** Run value
- **SV:** Stop value
- **CA:** Calibration
- **DP:** Time of compressor Delay Starting
- **ON:** Loading working status is on
- **OFF:** Loading working status is off
- **HI:** High temperature/humidity alarm value
- **LO:** Low temperature/humidity alarm value

Setting Instruction

- **View the setting value**
- Short press the SET button and you can check the parameter values in sequence.
- **Change temperature unit**
- Press and hold the ▲ and ▼ buttons simultaneously to switch between Fahrenheit and Celsius units.
- **Note:** After changing the temperature unit, all setting values will be restored to the factory settings.
- **Set cooling mode:**
- To set the RV(RUN temperature) > SV(STOP temperature), the system will be in cooling mode, and the MODE: COOLING will appear on the display.
- When PV (Measuring temperature) > RV, the green indicator of TEMPERATURE will light and the cooling equipment will work. (If the RUN value flashes, it means that the cooling equipment is in the delayed start protection state.)
- When PV :S SV, the green light will go out and the cooling equipment will stop working.
- **Note:** The indicator light on the left of the panel is for Temperature, and the right one is for Humidity. Each light is a two-color light that is red and green. The red light indicates stop working, and the green one means running.

1. Long press the SET button until the ⚙ appears and the) 🌡💧 lashes.

2. Short press the ⬆ or ⬇ button and there will be a 🌡 flashing, then press the SET button to select the temperature.

3. Press ⬆ or ⬇ adjust the RV(run temperature) you require.

4. Short press the SET button to set SV(stop temperature) and the next value.

5. Long press the SET button to save and exit.

Set heating mode:

- To set the RV(RUN temperature)< SV(STOP temperature), the system will be in heating mode, and the MODE: HEATING will appear on the display. When PV(Measuring temperature) < RV, the green indicator of TEMPERATURE will light and the cooling equipment will work.

- When PV SV, the green light will go out and the heating equipment will stop working.

1. Long press the SET button until the ⚙ appears and the 🌡💧 flashes.

2. Short press the A or Y button and there will be a 🌡 flashing, then press the SET button to select the temperature.

3. Press ⬆, or ⬇ adjust the RV(run temperature)you require.

4. Short press the SET button to set SV(stop temperature) and the next value.

5. Long press the SET button to save and exit.

Set humidification mode;

- To set the RV(RUN value) < SV(STOP value), the system will be in humidification mode, and the

- **MODE:** HUMIDIFICATION will appear on the display. When PV(Measuring temperature) < RV, the green indicator of HUMIDITY will light and the humidification equipment will work.

- When PV SV. the green light will go out and the humidification equipment will stop working.

1. Long press the SET button until the ⚙ appears and the 🌡💧 flashes.

2. Short press the ⬆ or ⬇ button and there will be a flashing, then press the SET button to select the Humidity.

3. Press ⬆ or ⬇ to adjust the RV(run value) you require.

4. Short press the SET button to set SV(stop value) and the next value.

5. Long press the SET button to save and exit.

Set dehumidification mode:

- To set the RV(RUN value) > SV(STOP value), the system will be in dehumidification mode, and the.

- **MODE:** DEHUMIDIFICATION will appear on the display. When PV(Measuring temperature) > RV, the green

indicator of HUMIDITY will light and the dehumidification equipment will work.

- When PV is SV, the green light will go out and the dehumidification equipment will stop working.

1. Long press the SET button until the ⚙ appears and the 🌡🔥 flashes.

2. Short press the ▲ or ▼ button and there will be an 🌡 flashing, then press the SET button to select the humidity.

3. Press ▲ or ▼ to adjust the RV (run value) you require.

4. Short press the SET button to set SV (stop value) and the next value.

5. Long press the SET button to save and exit.

Set High/low-value alarm

- When P¼HI (high-temperature alarm value), the high-temperature alarm will be triggered and the buzzer will emit "bi-bi–bi–" until the temperature is lower than the HI value.

- There will be an alarm symbol HIS **HI🔔** flashing on the LCD display. During this period, press any button to stop the alarm.

- When PVSLO (low-temperature alarm value), the low-temperature alarm will be triggered and the buzzer will emit "bi-bi–bi–" until the temperature is higher than the LO value, press any button to stop the alarm.

When PVSLO (low-temperature alarm value), the low-temperature alarm will be triggered and the buzzer will emit "bi-bi–bi–" until the temperature is higher than the LO value, press any button to stop the alarm.

1. Long press the SET button to enter the setting mode and select the temperature/humidity as mentioned before.

2. Short press the SET button until the HI/LO value flashes.

3. Press ▲ or ▼ to adjust the HI/LO value you require. If you want to disable the alarm, when you set the HI, keep pressing the ▲ button until the OF is displayed; when you set the LO, keep pressing the ▼ button until the OF is displayed.

4. Long press the SET button to save and exit.

Make the display stay on or automatically off

- Press the ▲ and SET buttons simultaneously for about 3 seconds until the symbol 💡 disappears, the LCD backlight will turn off automatically after 30 seconds. The same operation can restore the LCD backlight to the always-on
state.

Restore to the factory setting

- Turn off the power first, then press and hold the SET button, and re-energize, the controller will restore to the factory setting after a beep sound.

Setup Flow Chart
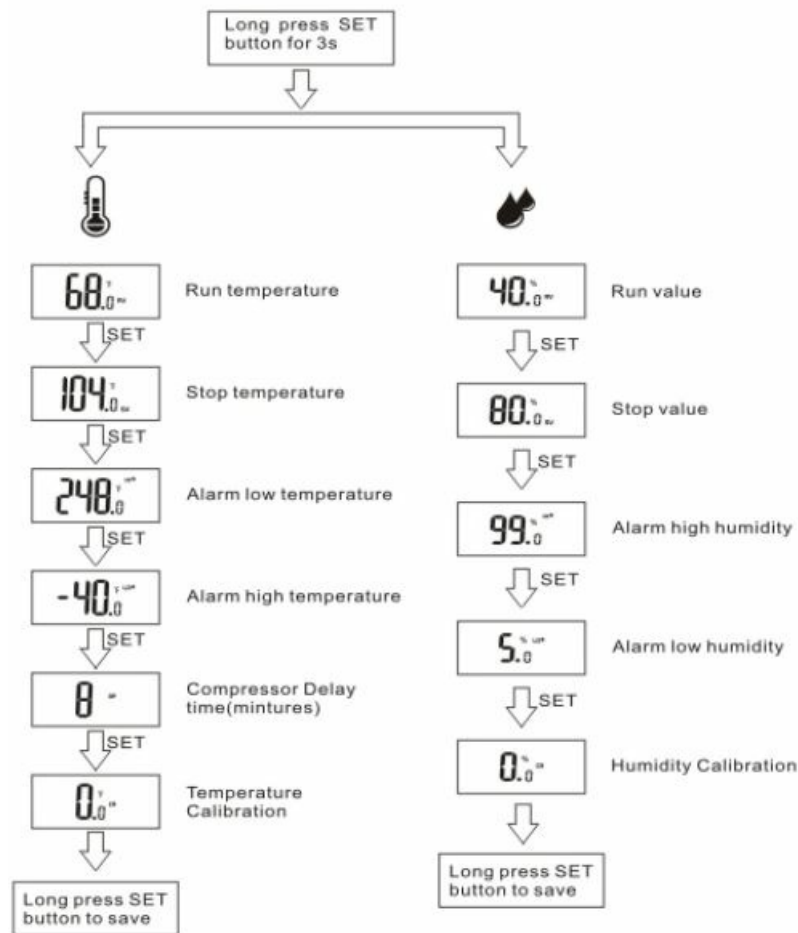
Note: Before setting the parameters, please don't connect any load (whether it is heating cooling equipment, or humidification/dehumidification equipment).

For example

Turn on the heating device at 76'F and turn it off at 80'F, turn on the humidifier at 40% humidity, and turn it off at 50%.

1. Press and hold the SET button for about 3 seconds until the 🌡️💧 appears.
2. Short press the SET button to select the temperature.
3. Press the ▲and ▼ button to set the RV to 76'F.
4. Short press the SET button on the SV value page.
5. Press the ▲and ▼ buttons to set the SV to SO'F.
6. Long press the SET button to save and return to the home page.
7. Long press the SET button as Step 1.
8. Short press the ▲or ▼button and SET button to select the Humidity.
9. Press the ▲and ▼button to set the RV to 40%.
10. Short press the SET button on the SV value page.
11. Press the ▲and ▼ button to set the SV to 50%.
12. Long press the SET button to save and exit.

Function introduction

CODE	Function	Setting range	Defaults
RV	Temperature(Humidity) -40-120'C140-2481"(0%RH-99%RH)		20'C(40%RH)
SV	Run-Value		40'C(80%RH)
HI	Temperature(Humidity)		120'C(99%RH)
LO	-40-120-C/40-2481′ (0%RH-99%RH)		-40'C(5%RH)
DP	Stop Value High temperature/ humidity alarm -40-120'Cl40-2481′ (0%RH-99%RH) value Low temperature/ humidity alarm -40-120-C/40-2481′ (0%RH-99%RH) value Time of compressor 0-10minutes Delay Starting		0minutes
CA	Temperature (Humidity) Calibration	-15-15'Cl-15-151′ (-10%RH-10%RH)	0'C(0%RH)

Time of compressor delay starting(DP)

- After power-on, in cooling mode, if PV 2 STOP, the cooling device will not start immediately and will wait for a delay time (DP).
- When the time interval between two cooling operations is greater than the delay time (DP), the cooling equipment will work immediately.
- When the time interval between two cooling operations is less than the delay time (DP), the cooling device will not start until it reaches the delay time (DP). When the cooling equipment stops instantaneously, the stop time will be recorded as the time comparison point for the next start.

Calibration(CA)

- When the PV(measuring temperature) deviates from the actual temperature, it can be corrected with the temperature calibration function.
- Correct temperature = temperature before calibration + calibration value (CA), the calibration value can be positive, negative, or 0.

Troubleshooting

The load doesn't work

1. The green indicator light is on, but the load does not work.
   - Please use a multimeter to measure the socket of the controller. If the voltage is 100-240VAC, please check your load device. Otherwise, please contact the DIGITEN Customer Service.
2. The red indicator light is on, but the load does not work.

- When energized, the PV is exactly within the RV and SV, which meets your requirements, so the load device doesn't need to be turned on at this time.

Err Alarm

- When the temperature sensor is short-circuited or disconnected, pull out the sending plug of the sensor from the controller, and then press the plug firmly into the hole of the controller after cleaning the plug.

WARRANTY

- The DIGITEN products are guaranteed to the original owner for one year against defects in workmanship and materials. Please contact us: **service@digit-en.com**
- **www.digit-en.com/support**
- **COPYRIGHT 2022 DIG1TEN CO., LTD RIGHTS RESERVED**
- **www.digit-en.com**
- **service@digit-en.com**

Documents / Resources

	DIGITEN DHTC1011 Humidity and Temperature Controller [pdf] User Manual DHTC1011, DHC101, DHTC1011 Humidity and Temperature Controller, Humidity and Temperature Controller, Temperature Controller, Controller

References

- **User Manual**