Manuals+ — User Manuals Simplified.

Pymeter PY-20TT Digital Temperature Controller Instruction Manual

Contents

Pymeter

Pymeter PY-20TT Digital Temperature Controller

OVERVIEW
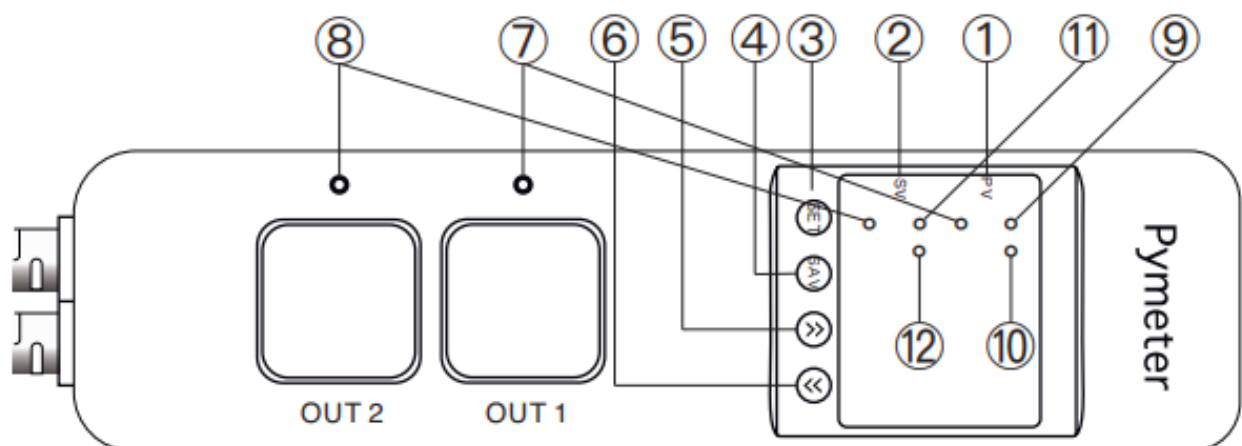
Keys Instruction

1. **PV:** under the working mode, display sensor 1 Temperature; under the setting mode, display menu code.

2. **SV:** under the working mode, display sensor 2 Temperature; under the setting mode, display setting value.

3. **SET key:** press the SET key for 3 seconds to enter the setting.

4. **SAV key:** during the setting process, press the SAV key to save and exit the setting.

5. **INCREASE key:** under the setting mode, press the INCREASE key to increasing value.

6. **DECREASE key:** under the setting mode, press the DECREASE key to decrease the value.

7. **Indicator 1:** the lights are on when outlet 1 is turned on.

8. **Indicator 2:** the lights are on when outlet 2 is turned on.

9. **LED1-L:** the light is on if outlet 1 is set for HEATING.

10. **LED1-R:** the light is on if outlet 1 is set for COOLING.

11. **LED2-L:** the light is on if outlet 2 is set for HEATING.

12. **LED2-R:** the light is on if outlet 2 is set for COOLING.

Setup Instruction

When the controller is powered on or working, press the SET key for over 3 seconds to enter setting mode, PV window displays the first menu code "CF", while SV window displays according to set value. Press the SET key to go to next menu, and press the INCREASE key or DECREASE key to set the current parameter value. For a simple setup, just need to set values for CF, 1on, 1oF, 2on, and 2oF. C and F are the temp units; 1on/2on are the ONpoint temp(start/turn on temp); 1oF/2oF are the OFF-point temp(stop/turn off temp), they are also the target temps. After setup is done, press the SAV key to saving the settings and return to normal temperature display mode. During setting, if there is no operation for 30 seconds, the system will save the settings and return to normal temperature display mode.

Use for heating device
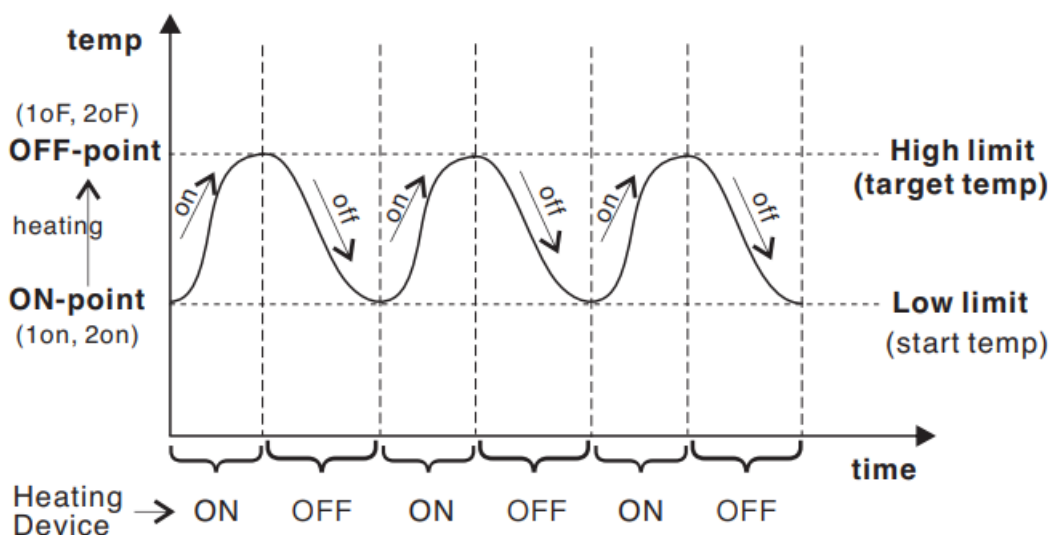
1. For the heating device, turn ON at Low temp and turn OFF at High temp. MUST set ON-point Temp < (lower than) OFF-point Temp; It will NOT work properly for heating if set ON-point Temp > MOFF-point Temp.

2. After plugging in, if the current temp is lower than the target temp (OFFpoint), outlets turn on for heating till temp reaches OFF-point.

3. After the heating device is turned off, the temp will auto fall down in the cold environment, outlets will not turn on until temp reaches ONpoint.

Use for cooling device
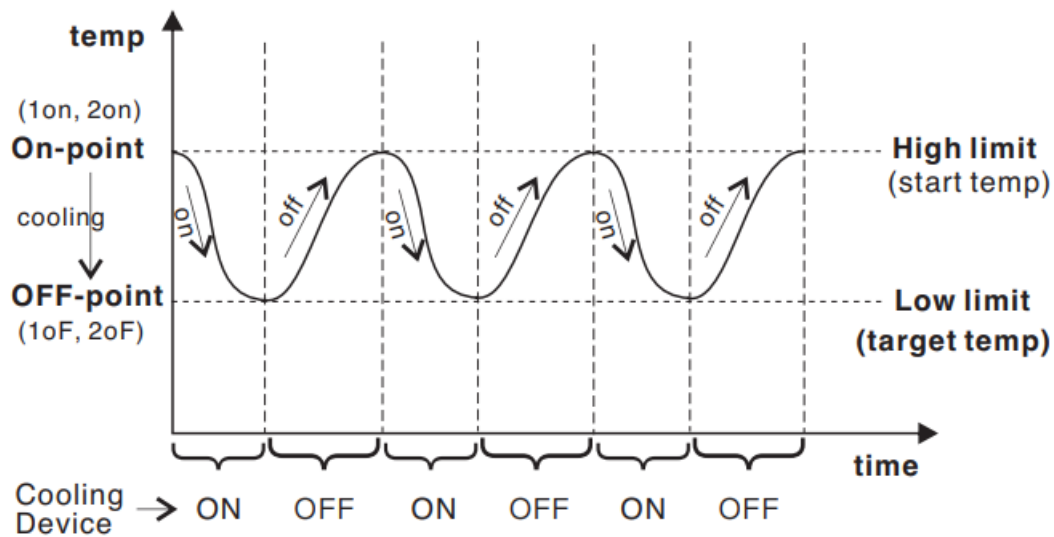
1. For the cooling devices, turn ON at High temp and turn OFF at Low temp. MUST set ON-point Temp > (higher than) OFF-point Temp; It will NOT work properly for cooling if set ON-point Temp < = OFF-point Temp.
2. After plug in, if the current temp is higher than the target temp (OFFpoint), outlets turn on for cooling till temp reaches OFF-point.
3. After cooling device is turn off, the temp will auto rise up in the hot environment, outlets will not turn on until temp reaches ON-point.

Note

1. None controller can keep temp always at target temp, to narrow down the temp range, please set ON-point closer to OFF-point(target temp).
2. Each outlet supports Heating/Cooling mode.

Setup Flow Chart

Display	Description
PV / **SV**	Current Temperature
SET × 3s	Press and hold 3 seconds
CF / C/F	Centigrade or Fahrenheit Unit
SET	
1on / 20°C/68°F	Outlet 1 ON Temperature
SET	
1oF / 30°C/86°F	Outlet 1 OFF Temperature
SET	
2on / 25°C/77°F	Oultet 2 ON Temperature
SET	
2oF / 35°C/95°F	Outlet 2 OFF Temperature
SET	
AL / −40°C/−40°F	Alarm Low Temperature
SET	
AH / 90°C/194°F	Alarm High Temperature
SET	
d7 / 99°C/210°F	Alarm Temperature Difference
SET	
P7 / 0 (min)	Power-On Delay
SET	
C1 / 0°C/0°F	Sensor 1 Calibration
SET	
C2 / 0°C/0°F	Sensor 2 Calibration
SAV	Working Normally

Main Features

- Designed with independent dual outlets;
- Dual Relays, able to control both Heating and Cooling devices at the same time, or control separately;
- Dual Waterproof Sensors, turn devices on and off at desired temperatures, very easy and flexible to use;
- Celsius or Fahrenheit Read-out;
- Dual LED Display, read temperature from 2 sensors;
- High and Low-Temperature Alarm;
- Temperature Difference Alarm;
- Power-on Delay, protect output devices from excessive on/off toggle;
- Temperature Calibration;
- Settings are retained even when power is off.

Specification

Temperature Range	-40~99°C / -40~210°F
Temperature Resolution	0.1 °C / 0.1°F
Temperature Accuracy	±1°C / ±1°F
Controller Dimension	210x55x40 mm
Input Power	85~250VAC, 50/60Hz
Output Power	85~250VAC, MAX 10A/16A
Buzzer Alarm	High and Low Temperature, Temperature Difference
Sensor Cable	NTC Sensorx2, 2m/6.56ft
Input Power Cord	1.35m / 4.5ft

MENU Instruction

Menu Code	Function	Setting Range	Default
CF	Centigrade/Fahrenheit	C / F	C
1on	Outlet 1 ON Temperature	-40°C~99°C / -40°F~210°F	20°C/ 68°F
1oF	Outlet 1 OFF Temperature	-40°C~99°C / -40°F~210°F	30°C/ 86°F
2on	Outlet 2 ON Temperature	-40°C~99°C / -40°F~210°F	25°C/ 77°F
2oF	Oultet 2 OFF Temperature	-40°C~99°C / -40°F~210°F	35°C/ 95°F
AL	Alarm Low Temperature	-40°C~99°C/ -40°F~210°F	-40°C/ -40°F
AH	Alarm High Temperature	-40°C~99°C/ -40°F~210°F	90°C/ 194°F
d7	Alarm Temperature Difference	1°C~99°C/ 1°F~210°F	99°C/ 210°F
P7	Power-On Delay	0-10mins	0 (min)
C1	Sensor 1 Calibration	-10°C~10°C/ -18°F~18°F	0°C/ 0°F
C2	Sensor 2 Calibration	-10°C~10°C/ -18°F~18°F	0°C/ 0°F

Attention: Don't compare it to a common inaccurate thermometer or temp gun! Please Calibrate with the ice-water mixture (0°C/32°F) if necessary!

Remarks: Buzzer will alarm with the sound "bi-bi-bi" until the temperature is back to normal range or any key is pressed; "EEE" is displayed on PV/SV window with a "bi-bi-bi" alarm if the sensor is a fault.

Temperature Difference Alarm(d7): (Example) if set d7 to 5°C, when the temperature difference between sensor 1 and sensor 2 is over 5°C, it will alarm with the sound "bi-bibiii".

Power-On Delay(P7): (Example) if set P7 to 1 min, outlets won't turn on until 1 min countdown since the last power off.

How to Calibrate Temperature?

- Soak the probes fully into the ice-water mixture, the actual temperature should be 0°C/32°F, if the reading temperature are not, offset(+-) the difference in Setting – C1/C2, save, and exit.

Support and Warranty

Pyrometer products are provided with Lifetime Warranty and Technical Support.

Any questions/issue, please feel free to contact us any time at **www.pymeter.com** or **Email support@pymeter.com.**
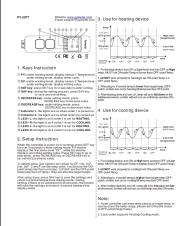

- User Manual PDF

- LiveChat Support

Documents / Resources

Pymeter PY-20TT Digital Temperature Controller [pdf] Instruction Manual
PY-20TT, Digital Temperature Controller, PY-20TT Digital Temperature Controller

References

- 🅟 **Thermostat | Temperature Controller | Hygrometer | Thermometer| WIFI Thermostat - Smart**

Thermostat, Smart Life!