

# INSTRUCTIONS

## Timer and temperature controller (ATC--300)

### General description

ATC--300 is one of a newly, successfully developed timer and temperature controller series products applied to various markets. Its practical functions, delicate appearance will please both your eyes and mind perfectly.

### Main functions and parameters

◆Control range: 0~50°C	◆Distinguish: 0.1°C	◆Accuracy:±1°C
◆Temperature difference: 1°C	◆Over heat alarm: ±2°C	◆Time units: hour
◆Input voltage: 220V±10%, 50HZ~60HZ	◆Product consumption:≤1.5W	◆Control load: ≤1200W/220VAC

### Operation

#### ◆Setting the Temperature

When the unit is switched on it will read the current ambient temperature. To change the preset control temperature, press the "TEMP" key for 3 seconds to blink the current control temperature. Press key "▲" to increase 1 digit or press key "▼" to decrease 1 digit. Setting range: 0~50°C. Press the "TEMP" key again for 3 seconds to save and exit when finished setting. If left for 15 second without saving it will return to current temperature display automatically without saving the changes.

#### ◆Check the setting temperature

Press the "TEMP" key to display the current preset control temperature value and it will exist automatically after 2 seconds

#### ◆Time setting of timer

Press the "TIME" key for 3 seconds to blink the current setting opening time, at the same time it will display "0" on bottom of the first number pipe. Press key "▲" or "▼" to change the original setting value, setting range: 0~24H. Press the "TIME" key again to blink the current setting closing time and it will display "E" on the underside the first number pipe, press key "▲" or "▼" to change the original value, setting range: 0~24H. Press the "TIME" key for 3 seconds to exist and save the setting value simultaneously. If left for 15 second without saving, it will return to current temperature display automatically without saving the changes.

#### ◆Check the setting time

Press key "▲" to display the current opening time, press key "▼" to display the stopping time and then exist automatically.

#### ◆Power on/off timer forcibly

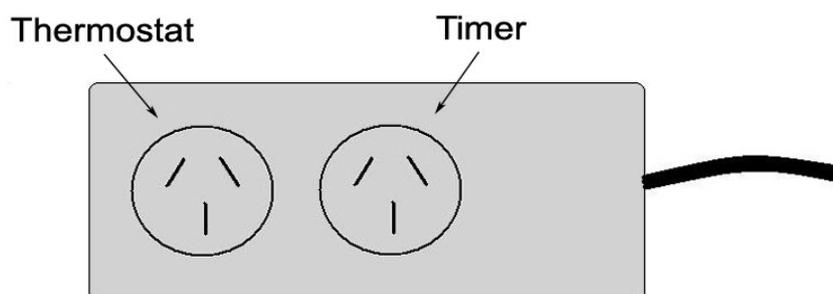
In normal measuring and control mode, press the "TIME" key to power the timer and press the "TIME" key again to power off.

### Alarm sound:

1. Press any key to cancel the out of limit alarm; sensor's failure alarm cannot be cancelled
2. Press the keys "▲" and "▼" together for 3 seconds to open or close out of limit alarm. Alarm on will remind you by "E.L"; alarm sound closure will remind you by "E.L". Display delays for 2S and then exits.

### Other description

- ◆When the temperature is out of its range  $\leq$ setting value -2°C or  $\geq$ setting value +2°C, the temperature value will blink and the alarm sound with a Beeping.
- ◆When the temperature is totally out of measuring range:  $\leq$ 0°C will display "LLL" and  $\geq$ 50°C ,display "HHH"; and the alarm sound with a Beeping.
- ◆Failure of the sensor will display "EEE", cut off the heater and make the alarm sound



## More information on the timer

Note: The timer and the thermostat work independently.

### Time setting of timer

The timer works on a 24 hour cycle from initiation. Once initiated the unit operates on an open circuit. This can be forcibly altered to start on a closed circuit by following the “power on/off timer forcibly” instructions. Press the “**TIME**” key for **3** seconds to blink the current open circuit time, at the same time it will display “**0**” on the bottom of the first number pipe. Press Key “**▲**” or “**▼**” to change the original value between 0-24 hours. Press the “**TIME**” key again to blink the current closed circuit time and it will display “**0**” underside the first number pipe. Press key “**▲**” or “**▼**” to change the original setting value between 0-24 hours. Press the “**TIME**” key for **3** seconds to exit and save the setting values. If left for 15 seconds the unit will return to display the current temperature automatically and will not save the changes.

Points to consider:

- I. When setting the open and closed circuit times they must both add up to the value of 24 hrs if a current time synchronized repetition is required.
- II. Second circuit action's value will be added to the circuit actions value as part of the timer operation cycle.

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Example 1:	Initiate unit at 00:00 (Circuit open)	Open Circuit value 11 hours	Closed Circuit value 13 hours
Operating times:		24:00	13:00

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Example 2:	Initiate unit at 18:00 (Circuit open)	Open Circuit value 7 hours	Closed Circuit value 17 hours
Operating times:		17:00	11:00

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Example 3:	Initiate unit at 09:00 (Forcibly Circuit closed)	Open Circuit value 8 hours	Closed Circuit value 16 hours
Operating times:		17:00	09:00

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Example 4:	Initiate unit at 00:00 (Forcibly Circuit closed)	Open Circuit value 10 hours	Closed Circuit value 14 hours
Operating times:		10:00	00:00