

# TX1-00 Operating Instructions



TX1 Temperature Controller

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**Colling/Heating  
 Electronic Thermostat**  
**MODEL : TX1-00**

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**NOTECH**  
**SENSING & CONTROL**

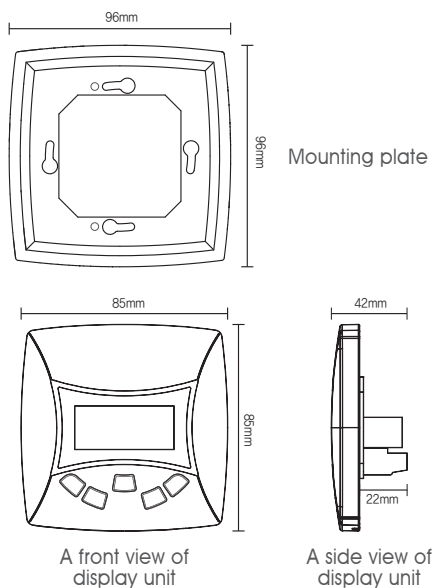
## Precautions for Use ⚠

1. This Product May cause an Electric Shock in handling, please do not attempt to open it with power turned on.
  2. Could not used at flammable / corrosive / explosiveness / high temp / humidification Place.
  3. Tight wiring When POWER & OUTPUT wire connetion. Could not safety of a fire , wiring without fail.
  4. Please the thickness of the wire should be above 2.5mm<sup>2</sup>
  5. You Could Used less than rating. Overload is a cause of trouble.
  6. In order to prevent it from an noise, please maintain the high-voltage wire and power wire separated.
  7. Please avoid installing the product in a place where a strong magnetism, noise, severe vibration and impact exist.
  8. The sensor wire and signal wire should be away from the power and load wires using conduits separately installed.
  9. If this product is dismantled/processing/modified discretionary is a cause of malfunction/fire.
  10. Please be understood that if this product is dismantled or modified discretionary after sales service will not be able to be provided.
  11. Product's damages other than those described in the guarantee conditions provided by the manufacturer shall not be responsible by us.
  12. If the supply cord is madaged, it must be replaced by manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
  13. The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given super
  14. Children being supervised not to play with the appliance.
  15. The appliance has a heated surface. Persons insensitive to heat must be careful when using the appliance.
- ※ The aforementioned precautions must be observed, and if you fail to do so, it may cause a product's breakdown.

## Basic Specification

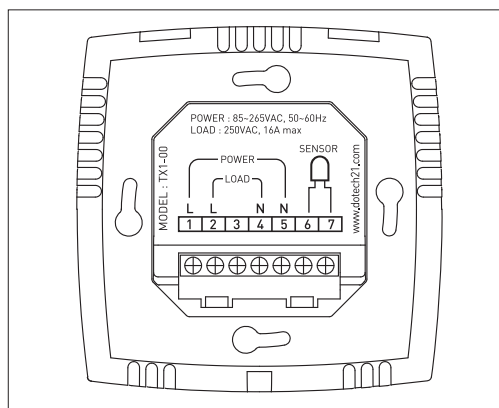
power	AC85 – 265V~, 50/60Hz
Connector	Screw Bolt Connector
Output	Relay Output 1 Point (250Vac / 16A)
Input	(Dotech Standard NTC Sensor DPR-TH5-T1) 5k $\Omega$ at 25°C, Limit : -40 ~ 120°C, Accuracy : $\pm 0.3^\circ\text{C}$ at 25°C External Temp. sensor : 1Point
Operation	Temp. -10 ~ 50°C, Humidity Under 90%RH
Storage	Temp. -20 ~ 60°C, Humidity Under 90%RH

## Dimensions



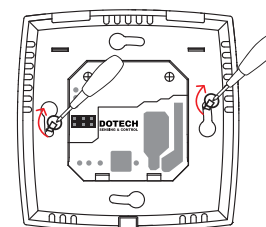
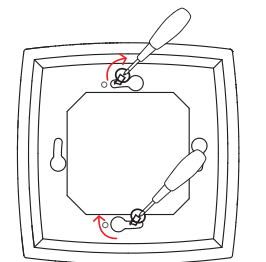
## Connection Diagram

POWER	Connector 1 & 5
OUTPUT	Connector 2 & 4
SENSOR	Connector 6 & 7

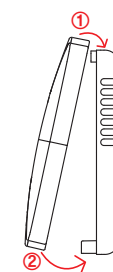


## How to Install

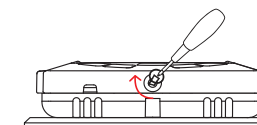
1. Fasten the mounting plate on wall using screw bolt.
2. Connect sensor and wire on the back case of display unit.
3. Screw down controller after adjusting the position at mounting plate



4. Insert the cover of controller at the slit according to priority.



5. Screw down the bottom of controller



## Display Function

<b>ON</b>	Power is ON (Flickering when the power stands by.)
<b>S2</b>	When external sensor is connected.
	During presetting mode
	Controller is Lock Mode

## Operating Switches

	Power Button / Press five(5) seconds, then enter the setting mode
	increase a set point
	decrease a set point
	Choice and save/Locking button (Press locking button and release/Press locking button for three(3) seconds at lock status for cancellation of lock status)
	Presetting button (Button for hour setting of turn on / turn off)

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## Trouble Check Point

STATUS	CODE	DESCRIPTION
High Temp. Alarm	<b>HHH</b>	If temperature of external sensor is reached overheating value, output will be automatically OFF.
Error for setting of input sensor	<b>Err</b>	at the temperature sensor disconnection and short circuit

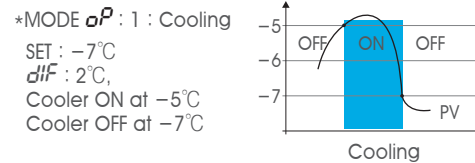
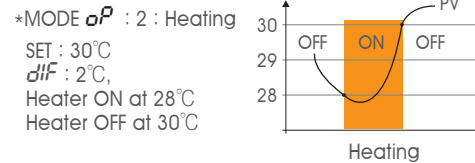
## Presetting function (go out / night mode)

- Presetting "ON" function : Press button and set presetting time on power OFF.
- Whenever user press button, it will be increased by an hour per once.
- Presetting "OFF" function : Press button at the state of display for current temperature. when presetting time is shown users want, it will be flickering at intervals of 0.1 second, and then will be automatically set after 2 (two) seconds.
- Setting range for Preset time : 0~24 hour

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## Control method by mode

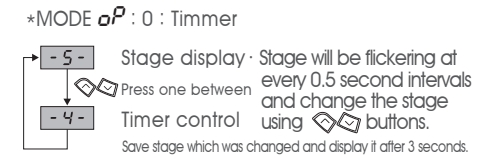
- Sensor control mode  
Sensing current temperature by sensor and control ON/OFF of heater/cooler compared with setting temperature.
- Internal & external sensor : Sensing current temperature by connected sensor
- Average temperature : Sensing current temperature in the 50/50 proportion of internal and external sensor.



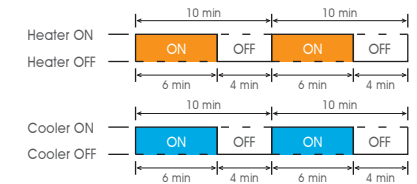
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## Timmer Mode

- How to operate in Timmer Mode  
Control temperature by ON/OFF time of heater/cooler according to cycle and stage.



- \* Level : 0 ~ 9  
 e.g) Output cycle – 10(min) / Level – **-5-**



- \* ON Time(min) = Output cycle(1~60min) × Level(0~9) ÷ 10sec
- \* OFF Time(min) = Output cycle(1~60min) – ON Time(min)

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## How to set by user

### **30** Display Present Temperature

Set temperature using one between buttons.

- If there is no any input for two (2) seconds during setting, then save temperature which was changed and automatically display current temperature.

## How to set by installer

1. If press button for 5 seconds, the first code "Pb" message will be displayed.
2. If press button after setting each code, save set value and move to menu items.
3. If press button after setting, --- will be appeared on the screen and display current temperature after 2 (two) seconds.

- \* Initialization : If press buttons simultaneously for 10(ten) seconds at lock status, all parameters will be initialized to factory value.  
(Display **rES** message when finished)

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## Sep-up Mode

NO.	CODE	HOW TO CHANGE	DEFAULT	DESCRIPTION	DESCRIPTION	UNIT	STEP	MIN.	MAX.
01	<b>Pb</b>	If press one	1	Operating mode	0 : Use a internal sensor, 1 : Use an external sensor, 2 : Control by average temperature between internal sensor and external sensor	–	1	0	2
02	<b>oP</b>	between   buttons,	2	Control mode	0 : Timmer Mode, 1 : Cooling, 2 : Heating	–	1	0	2
03	<b>dF</b>	current set value	2	Control deviation	Set a temperature deviation of control output.	°C	1	1	99
04	<b>AL</b>	will be flickering.	60	Overheating alarm temperature	In the case of reaching overheating set value of external temperature sensor, output will be OFF. if temperature goes down to less than -3°C compared with overheating alarm temperature, then automatically reset.	°C	1	-55	125
05	<b>Ft</b>	Press button once	3	Min. operating delay time	Even if in output condition, it will output after setting delay time.	Min	1	0	99
06	<b>CL</b>	again to change	0	Temperature sensor correction	Correct the deviation of temperature sensor. e.g) if indicated temperature is 19°C and actual temperature is 18°C, it is corrected by inputting -1°C.	°C	1	-99	99
07	<b>UH</b>	set value, then push	100	Max. set value	Set a maximum value of the set temperature available to be set by user.	°C	1	-55	125
08	<b>UL</b>	button for	-50	Min. set value	Set a minimum value of the set temperature available to be set by user.	°C	1	-55	125
09	<b>Pt</b>	saving data.	15	Output cycle of timer mode	1 ~ 99 min	Min	1	1	99

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