Version 1,4(2023,03,22)

WWW,CONOTEC,CO,KR

# CONOTEC

CONOTEC CO., LTD.

DIGITAL TEMPERATURE CONTROLLER



FOX-N900

Instruction Manual



#### <Key Features>

- Independent function selection available for TOP/FLOOR
- External contact temperature deviation compensation and preheating time adjustable
- A user manual for this product is posted on the company website.
- Please download the technical document and communications manual on the company website

#### 01 Safety precautions

Please read the safety precautions carefully for correct operation of the product.

The specifications and dimensions specified in this instruction manual may be changed without any notice for performance enhancement.

#### ▲ Warning

- This product was not made as a safe device. Therefore, this
  product should be attached with dual safety devices if it is used
  for the control purposes (e.g. a device vulnerable to accident and
  property damage, etc.).
- 2. Do not wire, inspect or service this product while the power is being supplied.
- 3. You must attach this product to a panel. Otherwise, it may cause an electric shock.
- 4. When connecting the power, you must check the terminal number.
- 5. Do not ever disassemble, process, modify or repair this product.

#### **▲** Caution

- Please make yourself familiar with all the operation instructions, safety precautions and warnings before using this product. Comply with related specifications and capacity requirements
- 2. Do not wire or install this product to any unit with high inductive load (e.g. motor, solenoid, etc.).
- 3. Use a shielded cable with a proper length when extending a sensor.
- 4. Do not use any part that generates an arc when used in the same power or directly switched in close proximity.
- Keep the power cable away from a high-voltage cable and do not install this product in any place that is full of water, oil and dust.
- 6. Do not install this product in any place that is exposed to direct sunlight or rain.
- 7. Do not install this product in any place that is subject to strong magnetic power, noise, vibration or shock.

- 8. Keep this product away from any place that generates strong alkaline or acid substances. Use a separate pipe.
- 9. Do not sprinkle water onto this product for cleaning when installing it in the kitchen.
- Do not install this product in any place where the temperature/ humidity ratings are exceeded
- 11. The sensor cable should not be cut or cracked..
- 12. Keep the sensor cable away from a signal cable, a power cable or a load cable. Use a separate pipe.
- 13. Keep in mind that the follow-up service will not be available if this product has been arbitrarily disassembled and modified
- 14. A symbol on the terminal wiring diagram indicates a safety statement that alerts a warning or caution.
- 15. Do not use this product near any device generating strong high-frequency noise (e.g. high-frequency welding machine high-frequency sewing machine, high-frequency radio, large-capacity SCR controller, etc.).
- 16. Using this product in any method other than those specified by by the manufacturer may lead an injury or a property damage
- 17. The product is not a toy. Keep it away from children.
- The product should be installed only by an expert or a qualified person.
- 19. The company will not be liable for any damage caused by the violation of the above warnings and cautions or by a consumer's fault

#### ▲ Danger

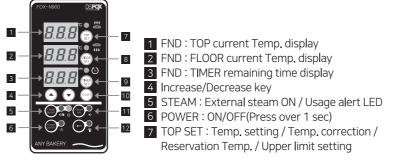
Caution: Risk of electric shock

- Electric shock Do not touch the AC terminal while the current is flowing.
   It may cause an electric shock.
- · You must disconnect the input power when servicing it.

#### 02 Model Types

Product Name	FOX - N900
Power Supply Voltage	100~240VAC 50/60Hz
Allowable Voltage Variation	90% ~ 110% of rated voltage
Power Consumption	Less than approx. 16VA
Display Method	7-Segment LED Display (Red) [LED: Red]
Input Sensor	CA(K)
Control Method	ON/OFF Control
Control Temp. Range	-40℃ ~ 590℃
Control Output	5EA : TOP, FLOOR, LAMP, STEAM/HEATING, STEAM INJEGTING (220VAC 2A)
Operating Temp.	0℃ ~ 50℃

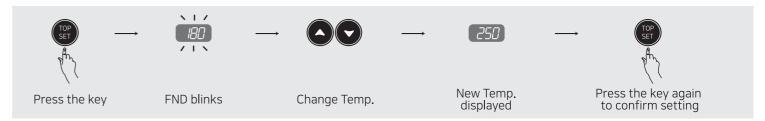
#### 03 Components



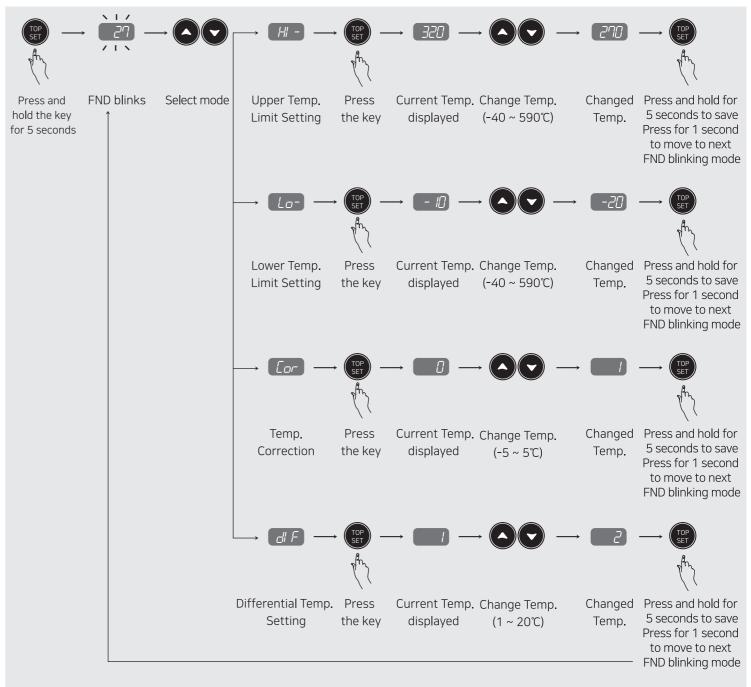
- 8 FLOOR SET: Temp. setting / Temp. correction / Reservation Temp.
- 9 TIMER SET: Time setting / Steam time / Reservation time / Alarm time
- 10 TIMER Start/Stop
- 11 STEAM: Steam injection 12 LIGHT: LAMP ON/OFF

#### 04 Setting process

#### ■ TOP/FLOOR Temperature Setting



#### ■ TOP/FLOOR Detailed Setting



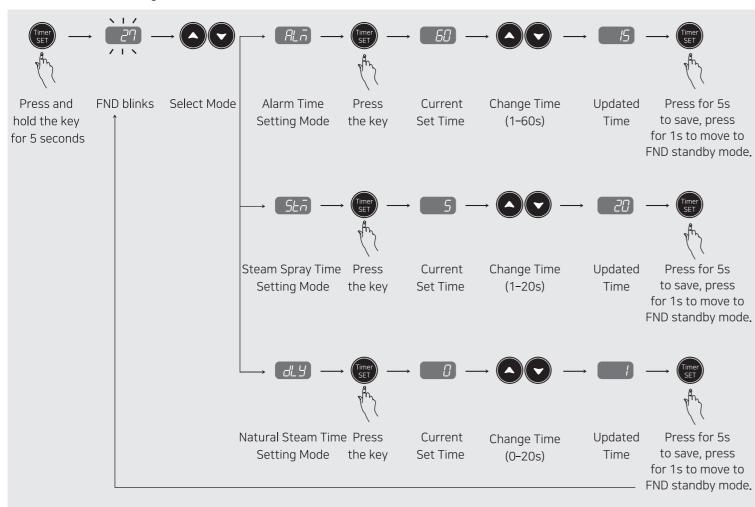
- \*\* TOP/FLOOR settings are identical.
- \* If no input is made for about 30 seconds, it will automatically return to the initial setting screen.
- lpha When adjusting settings, holding the  $oldsymbol{lack}$  or  $oldsymbol{lack}$  key will make the value change faster.

#### 05 TIMER Setting

#### ■ Timer Setting



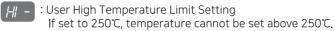
#### ■ Detailed Timer Setting



- \* If there is no key input for about 30 seconds during setting, the screen resets automatically.
- \* While changing values, holding increases/decreases the value rapidly.

#### 06 Function details

- Power Status Memory Function
  - $\cdot\,$  Remembers the oven's power state before the main power was cut off.
- => When power is restored, the oven resumes the previously saved power state.
- TOP/FLOOR Program Function Description



Setting Range: -40 ~ 590°C

User Low Temperature Limit Setting
If set to 100℃, temperature cannot be set below 100℃.
Setting Range: -40 ~ 590℃

Correction of the current temperature

- This function corrects discrepancies between the actual product's temperature and the sensor input or reference temperature (e.g., a water thermometer or previously used temperature controller), even when the product itself has no issues.

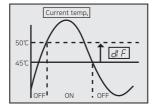
EX) real temp: 10.0℃ → Corrow Modification of 0.0 to -2.0

Display: 12.0℃ → Displayed as 10.0

(current temperature modified)

- H = 1: Setting for temperature deviation
  - In the ON/OFF control, it needs at regular interval between ON and OFF.
  - By operating the ON/OFF control frequently, the realy or its output contact can be damaged quickly and it also occurs the hunting (oscillating, chattering) by virtue of external noise. You can make use of the temperature deviation in order to protect its realy or contact and so on.

Ex) d' F= 5°C and set temperature = 50°C, When the sensor reads below 45°C, the relay turns ON. When it reads 50°C or higher, the relay turns OFF.



Set Temperature =  $50^{\circ}$ C d.  $F = 5^{\circ}$ C d. U = 0

■ TIMER Program Function Description

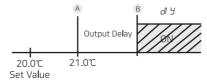
: Alarm Delay Time Setting

Sets the time delay (1–60 seconds) before the alarm sounds after the timer ends.

Sets the time (1–20 second

Sets the time (1–20 seconds) for external steam spray after preheating from an external steam source.

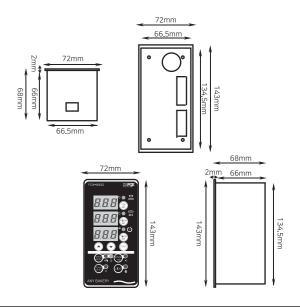
- ♦ ⇒ Preheating from external steamer
- ⊕ Steam spraying available
- ※ Steam spray condition: External steam signal must be input while in steam mode (Manual switch → STEAM/EXT)
- : Output Delay Time Setting
  If the target device has frequent ON/OFF switching problems, use this setting to delay relay output (0-20 seconds).



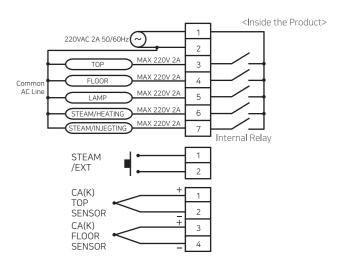
Ex) If & 9 is set to 1 sec, and the temperature rises from point A to point B, Relay will turn ON 1 second after reaching point B.

### 07 Diemension and panel hole sizes

(Unit:mm/error:±0.5)



#### 08 Terminal wiring diagram



- ※ Output is 220VAC.
- \* Caution: Be sure to use an external power relay or magnetic contactor.

## 09 Easy error diagnosis instructions

\* If an error is displayed while the product is running

- 🖅: Displayed when the sensor is not connected.
- [ ]: Displayed when the temperature is below the Lo- setting value.
- H-E: Displayed when the temperature exceeds the H setting value, and an alarm will sound with a "beep~".
- \*\* The above specifications may be changed without any notice for performance enhancement. Please make yourself fully familiar with and follow the above precautions.
- Warranty period: One year from the date of purchase
- Address: (Street address) 56, Ballyongsandan 1-rp, Jangan-eup, Gijang-gun, Busan, ROK

(Land-lot address) 901-1, Ballyong-ri, Jangan-eup, Gijang-gun, Busan, ROK (46034)

- Product service : 070-7815-8289
- Customer service : 051-819-0425 ~ 0427
- FAX: 051-819-4562
- Email : overseas-sales@conotec.co.kr
- SNS : Facebook, Instagram, Twitter, YouTube ▶ 'Search for 'Conotec'
- Website : www.conotec.co.kr

\* This manual was prepared in the Naver Nanum fonts.