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CONOTEC

CONOTEC CO., LTD.

DIGITAL TEMPERATURE CONTROLLER

ISO 9001:2008

FOX-CTM4, CTM7, CTM5 **Instruction Manual**

[FOX-CTM4] [FOX-CTM7] [FOX-CTM5]

- 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

1. 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

1. 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.
5. 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.
10. 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. ⚠ 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.
18. 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

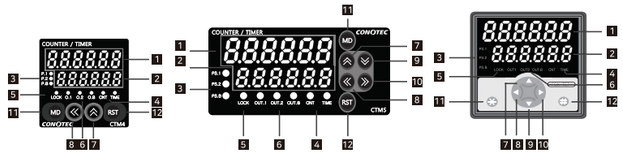
■ Model Composition

Model	Specification
FOX-CTM4	(W)48X(H)48X(D)109.5 mm
FOX-CTM5	(W)96X(H)48X(D)111 mm
FOX-CTM7	(W)72X(H)72X(D)111.2 mm

■ Ratings & Performance

Item		FOX-CTM4	FOX-CTM5	FOX-CTM7
Power voltage		100~240VAC(50/60Hz) ±10%		
Power consumption		7VA		
Allowable voltage fluctuation		power voltage ±10%		
External input		CP1(START), CP2(INHIBIT), RESET, BATCH RESET		
External input type		전압입력 방식, 무전압입력 방식 선택 가능		
Max count speed		1 / 30 / 1K / 13Kcps		
one shot output		0 ~ 99.99s		
Control output	contact	relay : SPST(1a), SPDT(1a1b) /rating : 250VAC 2A resistive		
	non-contact	open collector : OUT1, OUT2, BATCH OUT / rating : 30VDC Max, 100mA Max		
External power		12VDC ±10%, 200mA Max		
Memory		10 years (EEPROM)		
Relay life	electrical	100k operations (250VAC 2A resistive)		
	mechanical	10 million operations or more		
Ambient temp		-10~55℃ (no condensation)		
Storage temp		-25~65℃ (no condensation)		
Ambient humidity		35~85% RH		
Weight		221g	244g	236g

03 Components



[FOX-CTM4] [FOX-CTM5] [FOX-CTM7]

1 Run mode: current count
Menu setting mode: menu name
Setting value change mode: setting value

2 Run mode: set value
Menu setting mode: submenu
Setting value change mode: set value

3 PS.1: preset1 active
PS.2: preset2 active
PS.B: batch active
- batch count current value & batch count set value

4 CNT : counter value
TIME: current time in timer mode
※ Hold: timer hold, RUN: timer running

5 LOCK : key lock set

6 OUT.1 : OUT1 output ON
OUT.2 : OUT2 output ON
OUT.B : Lights when batch counter output is active.

7 UP, 9 DOWN key

*In setting-change mode: increases/decreases the setting value

*In operation mode: switches display mode during operation

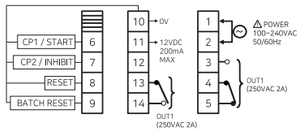
8 LEFT, 10 RIGHT key : setting digit select

11 MODE key : run mode / menu setting mode switch

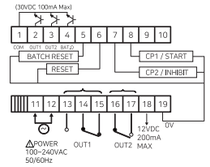
12 RESET key : reset; in menu mode works as back key

04 Terminal wiring diagram

■ FOX-CTM4



■ FOX-CTM5



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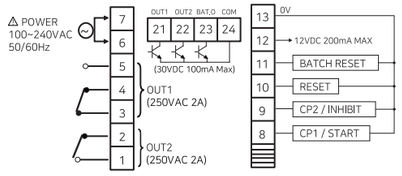
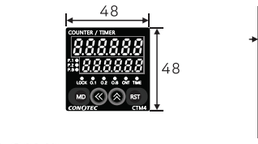


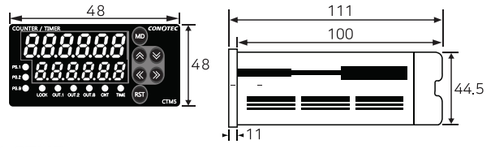
05 Diemension and panel hole sizes

(Unit : mm / error : ±0.5)

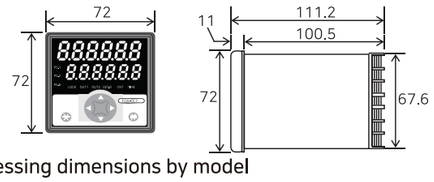
■ FOX-CTM4



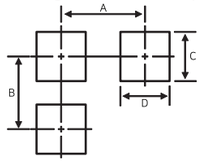
■ FOX-CTM5



■ FOX-CTM7



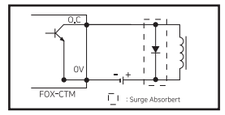
■ Processing dimensions by model



	CTM4	CTM5	CTM7
A	60 이상	130 이상	82 이상
B	60 이상	60 이상	82 이상
C	45.0 $^{+0.6}_{0}$	45.0 $^{+0.5}_{0}$	68.0 $^{+0.7}_{0}$
D	45.0 $^{+0.6}_{0}$	92.0 $^{+0.5}_{0}$	68.0 $^{+0.7}_{0}$

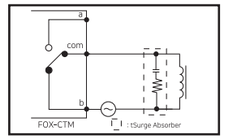
06 Relay Connection Example

■ Non-contact (Transistor) output EX



※ Do not exceed non-contact output load rating (30VDC 100mA).
※ For inductive loads (relay, etc.), connect surge absorber on load side.
※ Non-contact output is isolated internally.

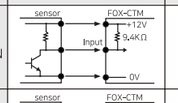
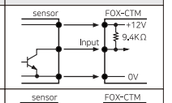
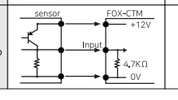
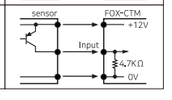
■ Contact (Relay) output EX



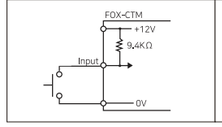
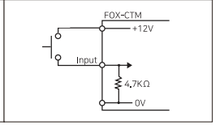
※ Relay output rating: 250VAC 2A or less.
※ Using loads beyond the rating may cause contact failure, contact welding, relay damage — caution.

07 Input Connection

■ Example of Non-contact Input

Sensor Specification	Voltage Output	Open-Collector Output
Sensor Type : NPN Product Setting : NPN		
Sensor Type : PNP Product Setting : PNP		

■ Example of Contact Input

When Input Logic is NPN	When Input Logic is PNP
	

08 How to Use the Counter

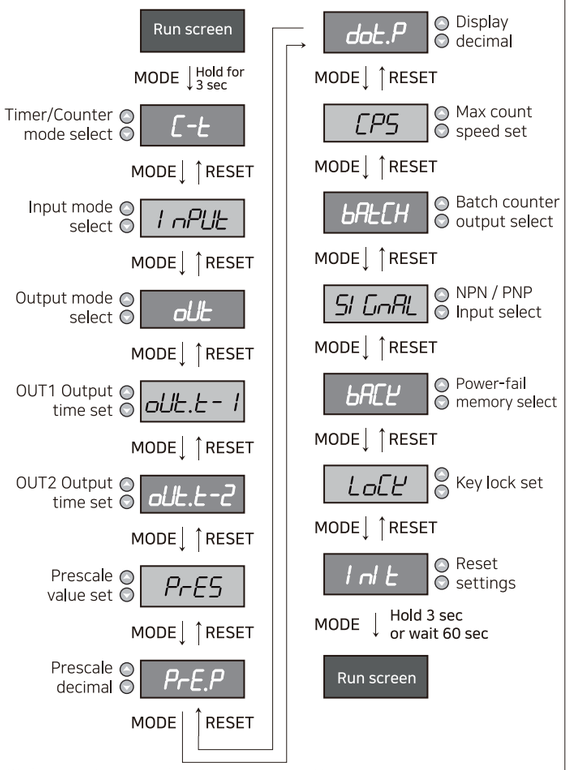
■ Function Setting Submenu

Setting Item	Setting Content	Factory Default Value
inPUt	UP-A ↔ dU-A ↔ UP-b ↔ dU-b ↔ UP-Ab ↔ dU-Ab Ud-A ↔ Ud-d ↔ Ud-b ↔ Ud-E ↔ Ud-C ↔ Ud-F	UP-A
oUt	tUn (트윈) n ↔ F ↔ C ↔ r ↔ U ↔ P ↔ 9 ↔ A SnG (싱글) n ↔ F ↔ C ↔ r ↔ U ↔ P ↔ 9 ↔ A dSP (표시) 1 ↔ 2	tUn n
oUt.t-1	00.00 ~ 99.99	01.00
oUt.t-2	00.00 ~ 99.99	01.00
Pr.ES	000001 ~ 999999	1000
Pr.E-P	0.0001 ~ 0001 ※ No decimal, up to 5 digits adjustable	001.000
dot-P	0 ~ 0000 ※ No decimal, up to 3 digits adjustable	0
CPS	1 ↔ 30 ↔ 1K ↔ 13K ※ When using contact input, use 1 or 3 cps	30
bAtCH	CTM5 CTM7: ry-1 ↔ tr ↔ ALL ↔ oFF CTM4: ry-1 ↔ oFF ※ If relay or ALL, OUT1 operates as batch output	ry-1
SLGnAL	nPn ↔ PnP ※ Select input logic: nPn or PnP	nPn
PoUEr	SAVE ↔ nonE ※ Select whether to use power-failure memory	SAVE
LoCK	L.oFF ↔ L.rSt ↔ L.SEt ↔ L.ALL ※ L.rSt : reset key L.SEt : mode key	L.oFF

■ External Key Input Time for Counter

- Minimum pulse width for RESET and BATCH RESET signals from the rear terminals is 20 ms. If the input is held for 20 ms or more, it is processed as a valid signal.

Program setting



※ If no input is made for 60 seconds in setting-change mode, the screen automatically returns to the run screen.

After selecting YES, press the MODE key → mode Pr.ESS is displayed.
Press the MODE key again → all settings are reset to factory defaults.
Pressing any key other than MODE in YES → no is displayed.

■ Relationship between Prescale, Prescale Decimal, Display Decimal

The value displayed in menu Pr.P (Prescale Decimal) is the value of Pr.ES (Prescale) with the decimal point position changed.

- Example: Prescale value = 123456
- Prescale Decimal: 2nd decimal → displays as 12.3456
- Prescale Decimal: 3rd decimal → displays as 123.456
- Prescale Decimal: 4th decimal → displays as 1234.56

This becomes the 1-count increment value.

When displaying the 1-count increment on the run screen dot.P (Display Decimal), the decimal position is determined. If the 1-count increment set above is 0001.11:

- 0 → displays as 000001 → 000002 → 000003 → ···
- 0.0 → displays as 0000.1.1 → 0002.2 → 0003.3 → ···
- 0.00 → displays as 000.1.11 → 002.22 → 003.33 → ···
- 0.000 → displays as 00.1.110 → 02.220 → 03.330 → ···

■ External Input Signal Distinction

• CP1 / START
- Counter Mode: operates with CP1 and used to count pulse numbers
- Timer Mode: operates with START key and used as timer start signal

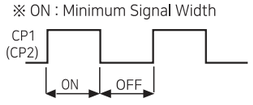
• CP2 / INHIBIT
- Counter Mode: operates with CP2 and used to count pulse numbers
- Timer Mode: operates with INHIBIT key and used as timer pause/stop signal

• RESET : operates as reset
• BATCH RESET : operates as batch counter reset

■ Minimum Signal Width by Count Speed

Count Speed	Minimum Signal Width
1 cps	500ms
30 cps	16.7ms
1 kcps	0.5ms
13 kcps	0.038ms

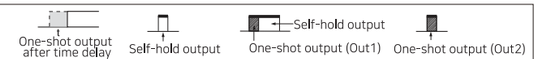
※ ON : Minimum Signal Width

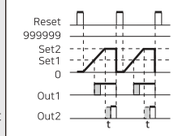
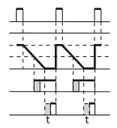
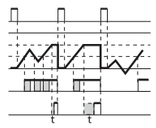
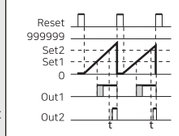
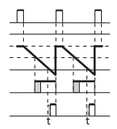
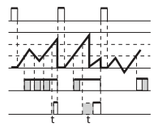
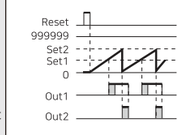
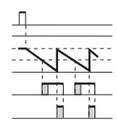
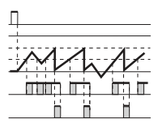
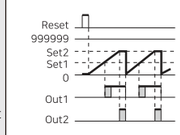
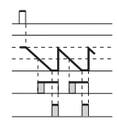
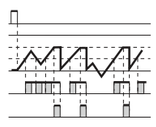
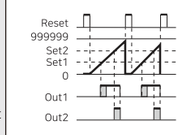
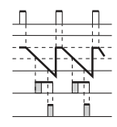
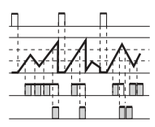
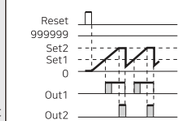
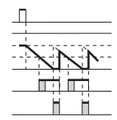
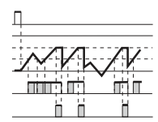
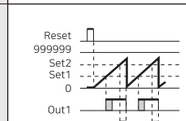
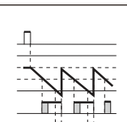
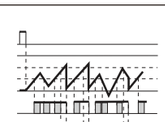
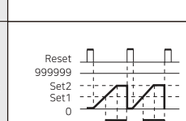
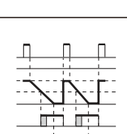
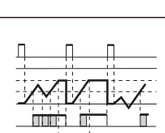
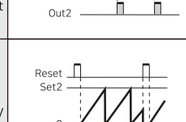
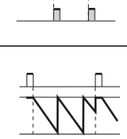
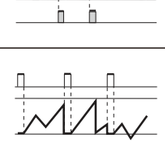
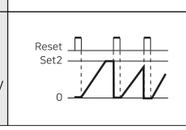
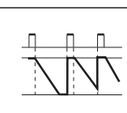
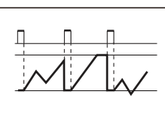


※ The minimum signal width is the time when the count input signal duty is 1:1.

■ Output Operation

※ For Single Mode Counter:
- Setting: Set2, Output: Out2 applied.
Preset1 is not displayed.



Output Mode	Input Mode: UP	Input Mode: DOWN	Input Mode: UP/DOWN/A,B,C
tWn n Twin Output SnG n Single Output			
tWn F Twin Output SnG F Single Output			
tWn C Twin Output SnG C Single Output			
tWn r Twin Output SnG r Single Output			
tWn U Twin Output SnG U Single Output			
tWn P Twin Output SnG P Single Output			
tWn 9 Twin Output SnG 9 Single Output			
tWn A Twin Output SnG A Single Output			
dSP 1 Display Only			
dSP 2 Display Only			

oUt.t: HOLD

	OUT1	OUT2
HOLD	Self-hold output at Set1 reached	Self-hold output at Set2 reached
NONE HOLD	One-shot output at Set1 reached	Self-hold output after time delay at Set2 reached

- At Set2 reached: counting stops, display holds
- On RESET input: count/display/output reset

oUt.t: HOLD

	OUT1	OUT2
HOLD	Self-hold output at Set1 reached	Self-hold output at Set2 reached
NONE HOLD	One-shot output at Set1 reached	Self-hold output after time delay at Set2 reached

- At Set2 reached: counting stops, display holds
- On RESET input: count/display/output reset

oUt.t: HOLD

	OUT1	OUT2
HOLD	Self-hold output at Set1 reached	none
NONE HOLD	One-shot output at Set1 reached	One-shot output at Set2 reached

- At Set2 reached: count/display reset and repeat, RESET input applied only once, Out2 OFF → Out1 OFF

oUt.t: HOLD

	OUT1	OUT2
HOLD	Self-hold output at Set1 reached	none
NONE HOLD	One-shot output at Set1 reached	One-shot output at Set2 reached

- At Set2 reached: counting stops/display holds, RESET input applied once
- Out2 OFF → Out1 OFF, count/display reset and repeat

oUt.t: HOLD

	OUT1	OUT2
HOLD	Self-hold output at Set1 reached	none
NONE HOLD	One-shot output at Set1 reached	One-shot output at Set2 reached

- Count and display continue, RESET input → count/display/output reset
- Out2 OFF → Out1 OFF

oUt.t: HOLD

	OUT1	OUT2
HOLD	Self-hold output at Set1 reached	none
NONE HOLD	One-shot output at Set1 reached	One-shot output at Set2 reached

- At Set2 reached: display holds/count reset, Out2 OFF → Out1 OFF, counted value displayed, RESET input applied once

oUt.t: HOLD

	OUT1	OUT2
HOLD	Self-hold output at Set1 reached	none
NONE HOLD	One-shot output at Set1 reached	One-shot output at Set2 reached

- Count and display continue, RESET input applied once
- Out2 OFF → Out1 OFF, count/display reset and repeat

oUt.t: HOLD

	OUT1	OUT2
HOLD	Self-hold output at Set1 reached	none
NONE HOLD	One-shot output at Set1 reached	One-shot output at Set2 reached

- At Set2 reached: counting stops, display holds, Out1/Out2 OFF independently, RESET input → count/display/output reset

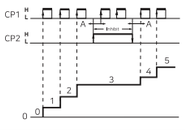
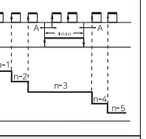
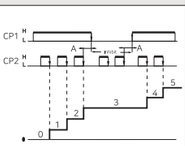
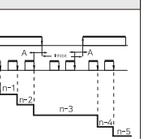
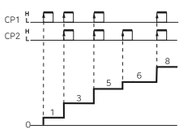
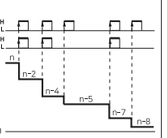
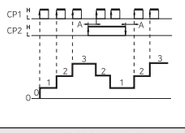
- At Set2 reached: count/display reset
- Repeat operation

- At Set2 reached: count/display stop
- On RESET input → initialize and restart

* For twin counter: display example → tWn n (twin n output) * For single counter: display example → SnG n (single n output)
* For display-only counter: display example → dSP 1 (display 1)

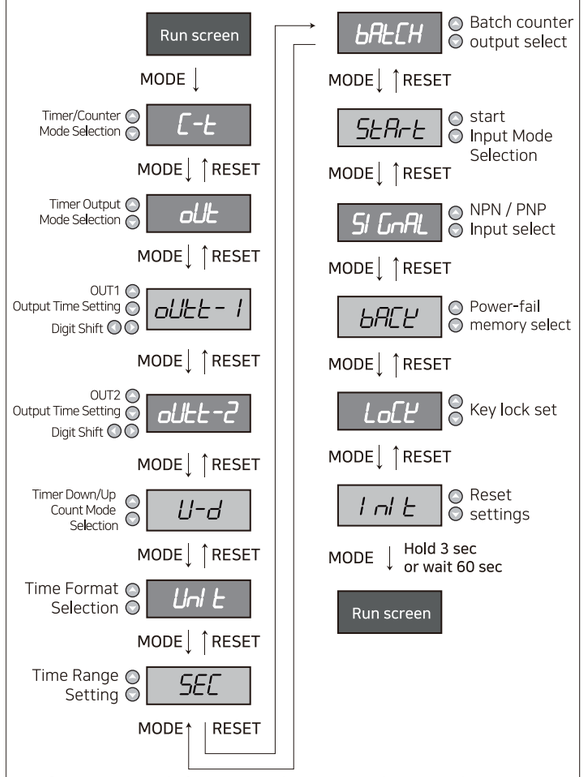
■ Input Mode

※ A ≥ minimum pulse width, B ≥ 1/2 of minimum pulse width

Input Mode	UP-A Inhibit Input	Input Mode	DOWN-A Inhibit Input
UP-A		dU-A	
Input Mode	**UP-B Inhibit Input**	**Input Mode**	**DOWN-B Inhibit Input**
UP-b		dU-b	
Input Mode	**UP-AB Individual Input**	**Input Mode**	**DOWN-AB Individual Input**
UP-Ab		dU-Ab	
Input Mode	**UP/DOWN-A Command Input**	**Input Mode**	**UP/DOWN-D Command Input**
Ud-A		Ud-d	
Input Mode	**UP/DOWN-B Individual Input**	**Input Mode**	**UP/DOWN-E Individual Input**
Ud-b		Ud-E	
Input Mode	**UP/DOWN-C Phase Difference Input**	**Input Mode**	**UP/DOWN-F Phase Difference Input**
Ud-C		Ud-F	

09 Timer Mode Operation Method

Program setting



※ If no input is made for 60 seconds in setting-change mode, the screen automatically returns to the run screen.

After selecting YES, press the MODE key → nodE PrESS is displayed.
Press the MODE key again → all settings are reset to factory defaults.
Pressing any key other than MODE in YES → no is displayed.

■ Function Setting – Detail Menu

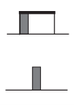
Setting Item	Setting Description		Factory Default
oUt	tWn (Twin) 1↔2↔3↔4↔5↔ SnG (Single) 6↔7↔8↔9↔ dSP (Display) A↔b		tWn 1
oUt.t-1	00.00 ~ 99.99		01.00
oUt.t-2	00.00 ~ 99.99		01.00
U-d	UP ↔ doWn		UP
Unit	10 ↔ 60		10
SEC	※ Refer to time range settings.		9999.99
bAtCH	CTM5 CTM7	rY-1 ↔ tr ↔ ALL ↔ oFF	※ When set to relay or ALL, OUT1 operates as batch output.	rY-1
	CTM4	rY-1 ↔ oFF		
StArt	SHot ↔ KEEP ↔ P-on			SHot
SLGnAL	nPn ↔ PnP			nPn
PoWEr	SAVE ↔ nonE			SAVE
LoCk	L.oFF ↔ L.rSt ↔ L.SEt ↔ L.ALL ※L.rSt: reset key /L.SEt: mode key			L.oFF

■ Time Range Setting

Decimal System(Unit=10)			Sexagesimal System(Unit=60)		
Display		Range	Display		Range
SEC	9999.99	9999.99s	SEC	59.59.99	59m 59.99s
SEC	9999.99	9999.99s	SEC	9.59.59.9	9hr 59m 59.9s
SEC	999999	999999s	SEC	99.59.59	99hr 59m 59s
Hi n	999999	999999s	Hi n	9999.59	9999hr 59s

■ External Key Input Time in Timer Mode

- The minimum pulse width for START, INHIBIT, RESET, and BATCH RESET signals received from the rear terminal block is 20 ms or more.
  If the signal is maintained continuously for 20 ms or longer, it is processed as a valid input.

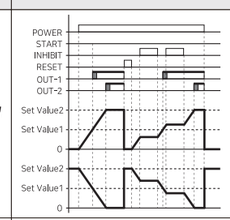
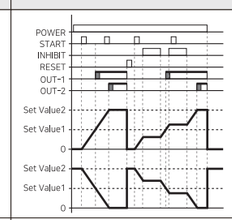
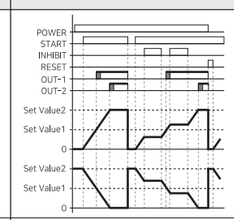
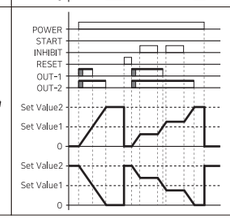
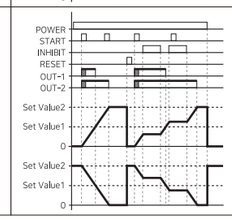
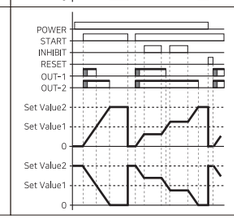


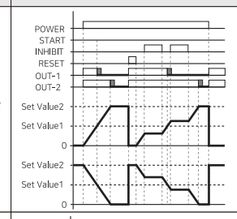
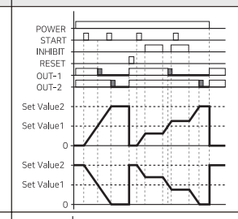
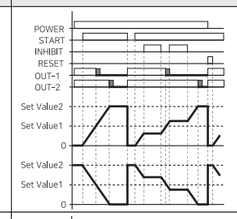
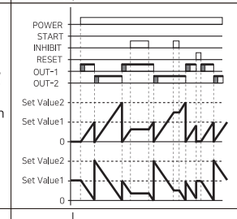
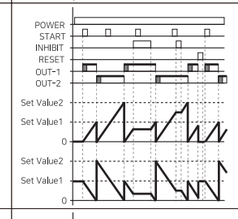
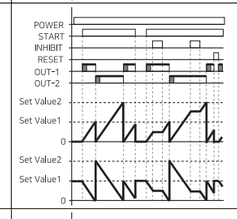
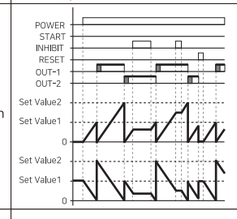
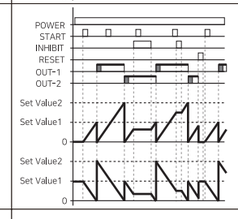
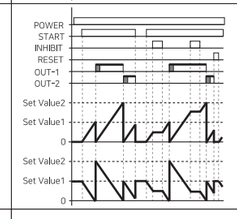
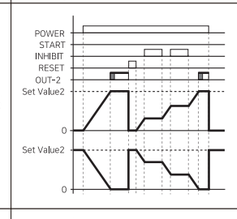
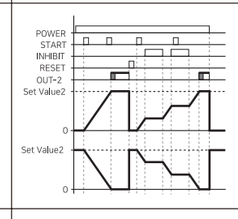
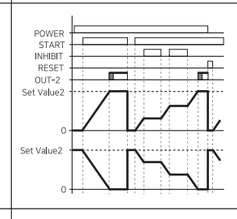
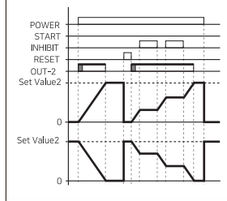
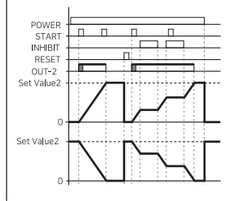
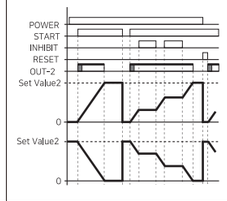
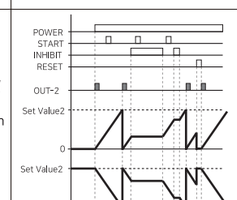
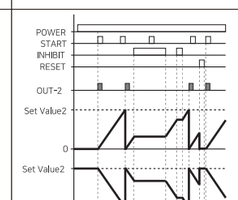
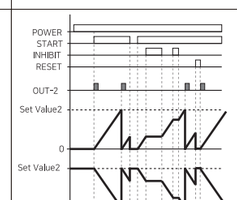
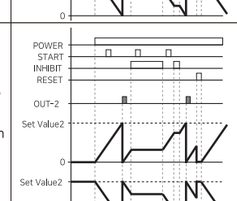
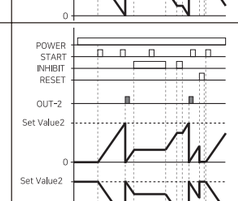
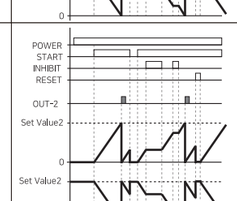
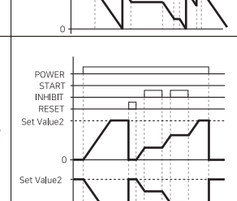
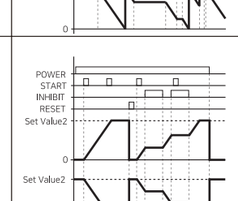
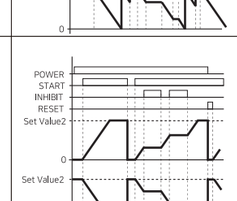
OutTime : HOLD → Self-hold Output
OutTime : Time → One-shot Output for Set Time

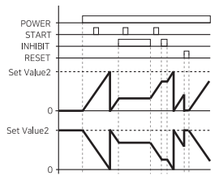
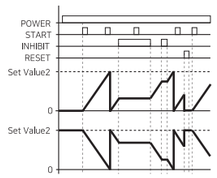
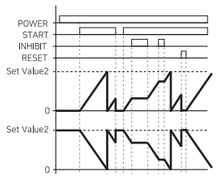
OutTime : HOLD → No Output
OutTime : Time → One-shot Output for Set Time

■ Output Operation

START Input Operation	P.ON(P.on)	SHOT(SHot)	KEEP(KEEP)
	Power ON → Timer turns ON immediately and remains ON until power OFF. START input is ignored.	With power ON, when START input is applied → Timer turns ON. During Timer ON, START input is ignored.	With power ON, Timer stays ON only while START input is held. When START input turns OFF → Timer resets.

Output mode		START=P.ON(P.on)	START=SHOT(SHot)	START=KEEP(KEEP)	Operation Description
Twin	tWn 1				* Twin-timer function *OUT1 - Output ON at Set1 - OFF on reset input *OUT2 - Output ON at Set2 - OFF on reset input
	tWn 2				* Twin-timer function *OUT1 - Output ON at start - OFF at Set1 - OFF on reset input *OUT2 - Output ON at start - OFF at Set2 - OFF on reset input

Output Mode		START=P.ON(P.on)	START=SHOT(SHot)	START=KEEP(KEEP)	Operation Description
Twin	tWn 3				* Twin Timer Function – OFF Output * OUT1 - Output OFF at Set1 - ON on reset input * OUT2 - Output OFF at Set2 - ON on reset input
	tWn 4 Repeat Operation				* Twin Timer Function – Repeat Operation (Output at Start) * OUT1 - Output ON at start - OFF at Set1 - OFF on reset input * OUT2 - Output ON at start - OFF at Set2 - OFF on reset input
	tWn 5 Repeat Operation				* Twin Timer Function – Repeat Operation (Output at Set) * OUT1 - Output ON at Set1 - OFF at Set2 - OFF on reset input * OUT2 - utput ON at Set2 - OFF at Set1 - OFF on reset input
Single	SnG 6				* Single Timer Function – Set2 / OUT2 Applied * OUT2 - Output ON at Set2 - OFF on reset input * Preset1 not displayed
	SnG 7				* Single Timer Function – Output at Start * OUT2 - Output ON at start - OFF at Set2 - OFF on reset input * Preset1 not displayed
	SnG 8 Repeat Operation				* Single Timer Function – Repeat Operation (Output at Start) * OUT2 - One-shot output ON at start (Self-hold output not applied) * Preset1 not displayed
	SnG 9 Repeat Operation				* Single Timer Function – Repeat Operation (Output at Set) * OUT2 - One-shot output ON at Set2 (Self-hold output not applied) * Preset1 not displayed
Display	dSP A				* Display-only Timer – Stop at Set2 * Preset1 not displayed

Output Mode		START=P.ON(P.on)	START=SHOT(SHot)	START=KEEP(tEEP)	Operation Description
Display	dSP b Repeat Operation				* Display-only Timer – Repeat Operation * Automatically reset and restart at Set2 * Preset1 not displayed

10 Changing Display Mode in Operation

In operation screen, use the DOWN / UP arrow keys to check the preset setting and batch counter value.

Current Value / Preset1 Set Value

Preset1 – Display & Edit Mode
Press MD key or ✲ to change Preset1 setting.

Current Value / Preset2 Set Value

Preset2 – Display & Edit Mode
Press MD key or ✲ to change Preset2 setting.

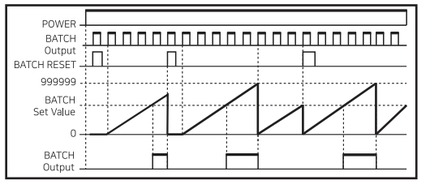
Current Value / Batch Counter Set Value

Batch Counter – Current Value Display Mode
Display only.

Batch Counter Current Value / Batch Counter Set Value

Batch Counter – Set Value Display & Edit Mode
Press MD key or ✲ to change Batch Counter setting.

11 Batch Counter



* The batch count increases each time the display value reaches the set value.
* If the count exceeds 999999, it resets to 0 and repeats counting from 0.
* Batch output can be selected as OUT1, TR, OUT1+TR, or OFF.
* Batch counter reset methods:
  - Front reset key: Only available in batch counter display & edit mode.
  - Rear reset input: Can reset in any state.

※ Caution when using the batch counter:
- If batch output is set to relay, the Out1 relay operates as the batch output.

12 Output According to Batch Setting

bAtCH Set Value	OUT1 Output	OUT2 Output	BATCH Output
ry-1	Out1 LED Out1 TR	Out2 LED Out2 TR Relay2	Batch LED Relay1
tr	Out1 LED Out1 TR Relay1		Batch LED Batch TR
ALL	Out1 LED Out1 TR		Batch LED Batch TR Relay1
oFF	Out1 LED Out1 TR Relay1		

13 Status Change According to Setting Changes

1. During Operation – Preset1/2 or Batch Counter Set Change
 - Counting, display, and output continue even while setting.
 - Once setting is completed, values are immediately saved to memory and current operation

2. Entering Detailed Setting Menu
 - Counting and output continue during setting.
 - If changes are made, they are applied and reset upon completion.
 - If no changes are made, operation continues without saving.

14 How to Check Program Version

When not in setting mode on the operation screen, press either the LEFT or RIGHT key to display the program version.

Operation Screen　　Version Display Screen

15 Easy error diagnosis instructions

※ When EEPROM ERROR Appears at Power On
- This occurs when external noise or surges cause errors in the system's internal memory, changing stored settings to unknown values. Press the RESET key to initialize all settings to factory default values.

⚠ Caution　All settings will be reset to factory defaults, so you must reconfigure them.

When Er1 is displayed, press the ✲ key.

The screen will return to the Operation Screen.

※ 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

◈ Installation precautions

■ This device sholuld be connected to a protective earth terminal and a power supply in order to prevent an electric shock.

■ Do not block the air outlet.

◈ Operation precautions

※ An operating environment of this device is as follows.

■ Ambient temperature : 0 ~ 60℃　■ Ambient humidity : 80%RH or less

■ Indoor uses only　■ Pollution class 2

■ Altitude under 2000m　■ Installation category : II

■ This device should be laid out in a way that its power cord is easy to handle.

■ Using this product in any method other than those specified by the manufacturer may damage its protection function

■ Major products and development

- Temperature/humidity controller
- Counter and timer controller
- Current and voltage panel meter
- Temperature/humidity indicator
- Oven controller
- CO2 controller
- PID controller
- Unit cooler controller
- Heat pump controller
- Chiller controller
- Thermo-hygrostat controller
- Short message alarm
- Temperature/ humidity transmitter
- Smartphone app and monitoring system

※ This manual was prepared in the Naver Nanum fonts.