

Digital Counter

User Manual

CT Series

www.yotochn.net

CT4 48x48



CT7 72X72



CT8 48X96



Ordering Code

CT ☐ P ☐ S ☐ ☐ ☐ — Blank: Without communication 4: RS485
 1: with one alarm HI 2: with 2 alarm HI, LO
 4: 4 digit display 5: 5 digit display 6: 6 digit display
 P: Preset function is available; S: Rate setting is available
 Dimension(mm): 4: 48H*48W*80L 7: 72H*72W*80L 8: 48H*96W*80L 16: 80H*160W*80L
 CT Series intelligent digital counter/ length meter

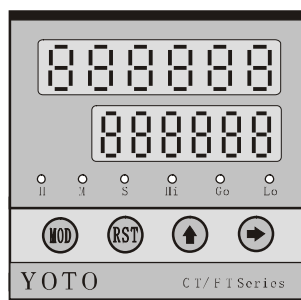
Example: CT8-PS61B: means it is CT series 6 digit counter/ length meter, with rate setting function, power supply in 90 ~ 250V AC, size: 48H*96W, with one alarm HI, with no communication function.

Technical Data

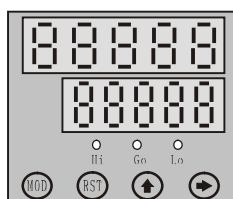
Power supply	90 ~ 250V AC 50/ 60Hz
Consumption	<5W
Relay capacity	250V AC/ 3A or 30V DC/ 5A
Auxiliary power	DC12V, max. 50mA or DC24V/50mA
Insulation resistance	≥10MΩ
Dielectric strength	Minute 2KV/ 50mA
Anti-interference	Power: ± 2KV, Input: ± 400V
Vibration resistance	10 ~ 55Hz, 0.75mm
Working environment	Temperature: 0 ~ 50℃, Humidity: 35 ~ 85%RH
Input signal	Square wave, sine wave, input signal: 0 ≤ L ≤ 2V, 5V ≤ H ≤ 30V
Input impedance	≥10KΩ
Counting rate	30CPS/ 5000CPS
Rate setting	0.0001~99999 (CT4); 0.00001~999999 (CT7/ CT8 / CT16)
Delay output time	0.01 second ~ 99.99 second delay output

Panel Illustration

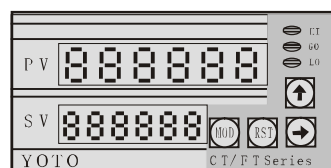
CT7



CT4



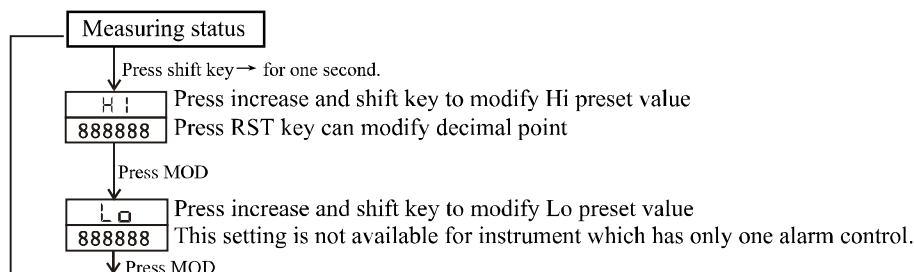
CT8 CT16



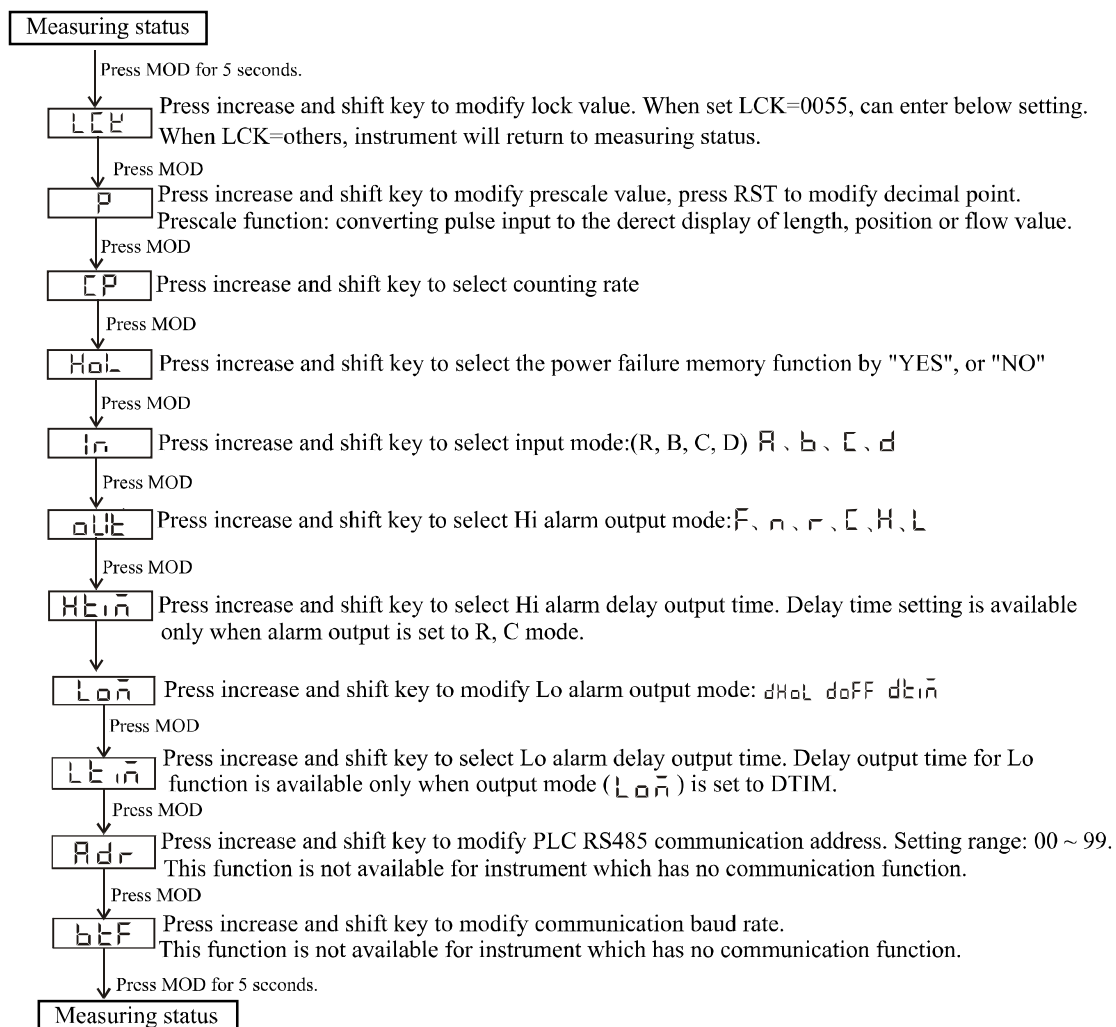
MOD	Set/ confirm key
RST	Reset key
PV	Measured value
SV	Setting and control value
Hi	1st alarm indicator lamp
Lo	2nd alarm indicator lamp
→	Shift key
↑	Increase key

Operation Process

A. Alarm value setting



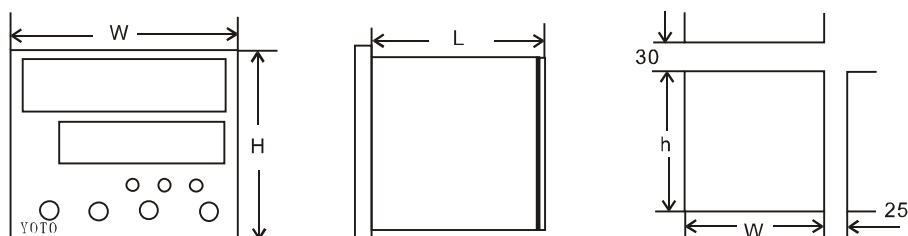
B. Parameter setting sequence



Menu Structure

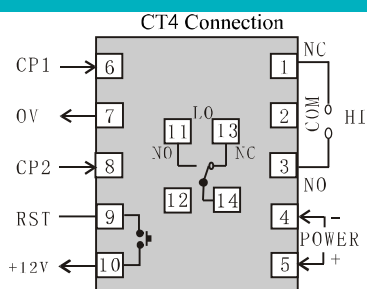
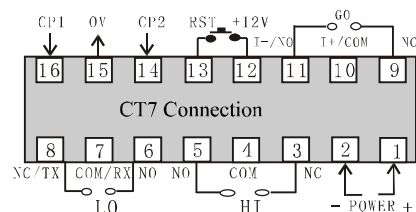
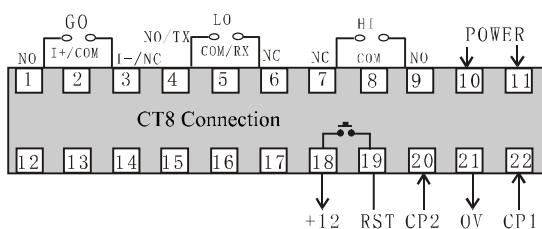
Parameter	Meaning	Description
Hi	Hi alarm preset value	Counting value will delay output when reaching Hi alarm preset value. CT4 can have up to 4 decimal point setting, CT7, CT8, CT16 can have 5 decimal point setting.
Lo	Lo alarm preset value	Counting value will delay output when reaching Lo alarm preset value. CT4 can have up to 4 decimal point setting, CT7, CT8, CT16 can have 5 decimal point setting.
Lock	Key Lock	LCK=0055, all parameters can be modified. LCK=others, only Hi, Lo, LCK can be modified, other parameters are locked and can not be modified.
P	Prescale value setting	Prescale function: converting pulse input to the direct display of length, position or flow value.
CP	Counting speed setting	CP=30 means that instrument only receive input counting signal that lower than 30Hz. switch the SW2 to "30", and this is for limit switch or other contact input. CP=5K, means that instrument only receive input counting signal that lower than 5000Hz, and switch SW2 to "5K".
HoL	Power failure memory	YES: with power failure memory, (After power on, the counting/ timing is continue from the saved value after the last power off.) NO: no power failure memory (After power on, all value will be reset.)
In	Input mode selection	To select CP1, CP2 input mode, please refer to "input logic relation chart" on page 4.
Out	Output mode selection	To select Hi alarm value and counting value, please refer to "Counter output mode" on page 5.
Hi on	Hi alarm delay output	When Hi alarm output mode (Out) is set to on mode, Hi alarm value keep to the set delay time, delay time setting range: 0.01s ~ 99.99s.
Lo on	Lo alarm output mode	To select Lo alarm output and counting value, please refer to "Counter output mode" on page 5.
Lo on	Lo alarm delay output	When Lo alarm output mode (Lo on) is set to on mode, Lo alarm value keep to the set delay time, delay time setting range: 0.01s ~ 99.99s.
Addr	Communication address	Communication address
bteF	Baud rate	Baud rate

Dimension Size



Model	Panel size (H * W)	Shell size (H * W * L)	Hole size (A * B)
CT4	48H * 48W	45 * 45 * 84	45.6 * 45.6
CT7	72H * 72W	68 * 68 * 80	68.5 * 68.5
CT8	48H * 96W	44 * 90 * 80	44.5 * 90.5

Terminal Connection

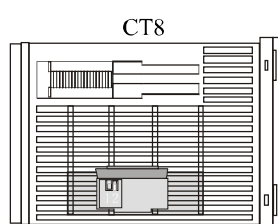
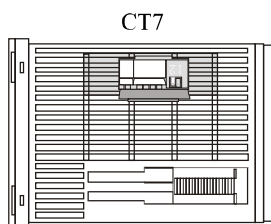


Note: Please refer to the connection table on the product if any changes.

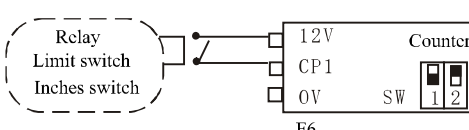
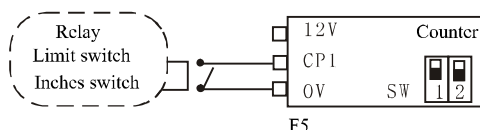
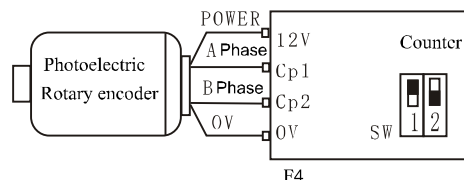
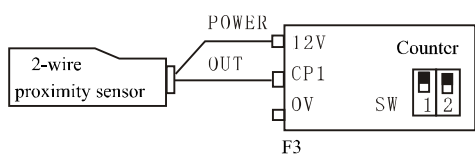
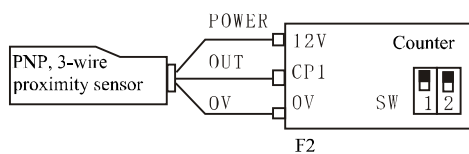
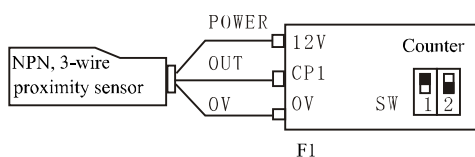
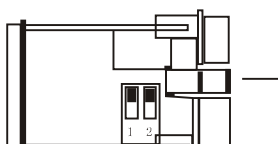
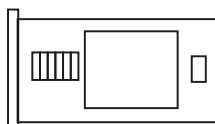
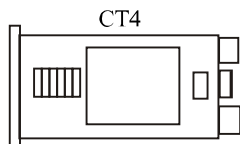
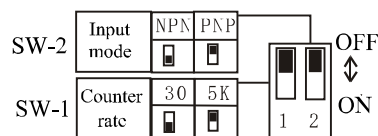
Application Example

1). Function adjustment before using

Please open the instrument front lid to adjust the function before using.



Thumb switches on the instrument, as below:



Note: 1). The factory setting for SW-2 is on "PNP" terminal, SW-1 is on "5K" terminal.

2). Above two figures F5 and F6 are for connection with switches, two connections are workable.

3). CP2 need to switch to N terminal which is inside the meter