

# Length Counter Instruction

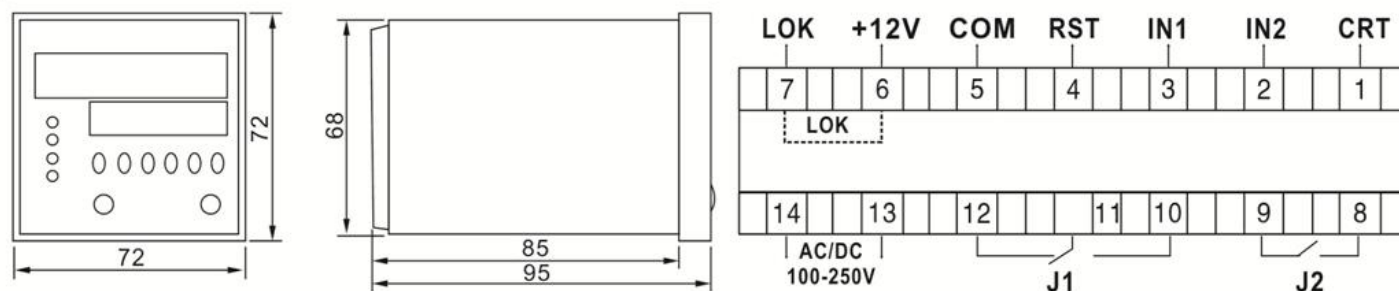
## Performance characteristics

1. Meter can connect with NPN type photoelectric switch, proximity switch, encoder and hall sensor.
2. 6 digit display, it is intuitive that can be directly operated and changed by the six number at the bottom.
3. There are Power-off memory function and not memory function can be chose.
4. It can set the position of decimal point when display length.
5. There are parameter lock feature and buttons lock feature, avoiding fault operation.
6. 2 relay output, master relay J1 output can be set automatic reset, time can be adjusted 00.01-99.99s, relay J2 supply output.

## Technical parameters

Power: AC/DC100-250V	Frequency: 30KHZ	Display range: 0-999999
Feed-voltage: DC12V,30mA max	Condition:-10°C~50°C	Dimensions(mm):72*72*85
Weight: 230g	Power consumption: below 4W	Contact capacity: AC220V3A、DC24V5A
reset pulse signal: low level less than 2V high level more than 5V	Impedance: 2K	Installation: snap-in

## Diagram introduction



### Indicator light introduction:

RST: reset	SET: set 1-6 Number: Set the digit increase	LOK indicator light: Key lock status
RST indicator light: Reset signal input status	J1 indicator light: Relay J1 operating status	J2 indicator light: Relay J2 operating status

### Meter Terminal Description:

① Terminals 13 and 14 are power input, AC / DC 100-250V power supply;	④ Terminal 6 for the output power supply, the output +12 V / 200mA;
② Terminal 5 for the common, terminal 2 and 3 for the count input, the input signal count up and down;	⑤ Terminal 4 is the reset input terminal, and the COM terminal short-circuit clear the count value, you can external reset switch.
③ Terminal 7 is the LOK key, function is locked according to the lock level when connected with +12;	⑥ Connect the 1 and 5 terminals to display the number.

## Relay output mode description

number	Function Description
1	Count value $\geq$ Set value, corresponding to the relay output, the counter continues to count.
2	Count value $\geq$ set value, corresponding to the relay output, the relay delay T seconds release, the counter to keep counting.
3	Count value $\geq$ Set value, corresponding to relay output, counter reset restart counter, relay delay T seconds release.
4	Count value $\geq$ set value, corresponding to the relay output, the counter continues to count, delay T seconds after the release, the counter reset.
10	Count value = set value J1-J2 after the new value, the relay J2 output, the counter continues to count.
11	The count value is relayed between the set value J1-1 (J2-1) and the set value J1-2 (J2-2).


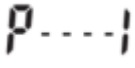

## Description of parameter settings

Press the SET key to release the setting control output value immediately

J1	The value of relay J1	J1-1	This symbol appears when relay J1 is set to 11 function number and relay J1 operates in the J1-1 and J1-2 set point intervals	J2-1	This symbol appears when relay J2 sets 11 function number and relay J2 operates in the J2-1 and J2-2 set point intervals
J2	The value of relay J2	J1-2		J2-2	

## Instructions for use

Press the SET button for more than 5 seconds to set the function parameters, the red words of upper row show the corresponding symbol (set into the short press SET button to switch)

Setting mode (press SET key to switch)		Select Settings (1-6 numeric keypad settings)
Input mode		Count A mode and identification phase C mode, Note: when connect meter wheel, encoder identification phase sensor used when the choice of C mode, then three-wire NPN normally open sensor selection A mode.
Ratio coefficient		The meaning of proportional coefficient P: the length of a pulse, the measured count is set to $p = 1.00000$ instrument with double frequency output, the accuracy of double, for example: rotary encoder input, encoder selection 1000 line, rotary encoder $P = L / 2$ times the number of encoder lines = $L / 1000 * 2 = 300/2000 = 2$ times the pulse, that is $1000 * 2 = 2000$ pulses, and the measured perimeter $L = 2 \pi R = 0.15000$ , indicating a pulse width of 0.15 mm.
Decimal point		Display decimal point position setting, is the decorative effect, does not participate in the operation, the display unit with the ratio to set the unit of calculation to be consistent, for example, display decimeter set position ----.- Display cm set position ----.-- Display Mm Position setting ---.---
Relay J1 output form	J1	01,02,03,04,11 (number description see " Relay output mode description")
Relay J2 output form	J2	01、 02、 10、 11 (number description see " Relay output mode description")

Relay J1 output time	<u>J1----t</u>	00.01-99.99s
Relay J2 output time	J2----t	00.01-99.99s
Password lock	LOCY-1	(Do not need password protection), LOC.1 (SET key 5 seconds to enter need the password), LOC.2 (short press SET button and long press 5 seconds settings are required to enter the password) Password: 0055
Key lock	LOCY-2	LOC.1 (lock button SET button for 5 seconds to enter) LOC.2 (lock reset RST key) LOC.3 (SET key for 5 seconds to enter and lock with reset RST) LOC.4 (Lock all keys) Set the lock level and connect the terminals 7 and 6, and the LOK indicator on the instrument panel lights to indicate that the lock is successful.
Initial value	SF	Default value is set to 000000. If the secondary parameter is set to a different number, it will be 000000 when cleared each time.
Memory	LP	OFF (no memory) ON (with memory)
Restore factory values	HF	Enter 0055 to restore the factory values

**Note:** After setting, press the reset key RST key to save

## Resolution of Instrument fault using

1. The instrument does not count.

Check the connection of instrument cable is correct or not? Check the sensor input signal, level, frequency is correct or not? Check the meter input, counting speed to meet the requirements or not? Is the ratio coefficient P set correctly? 3-wire NPN signal input sensor, whether the black signal wire connected IN2 (2 terminals)?

2. Can not set any parameters and settings.

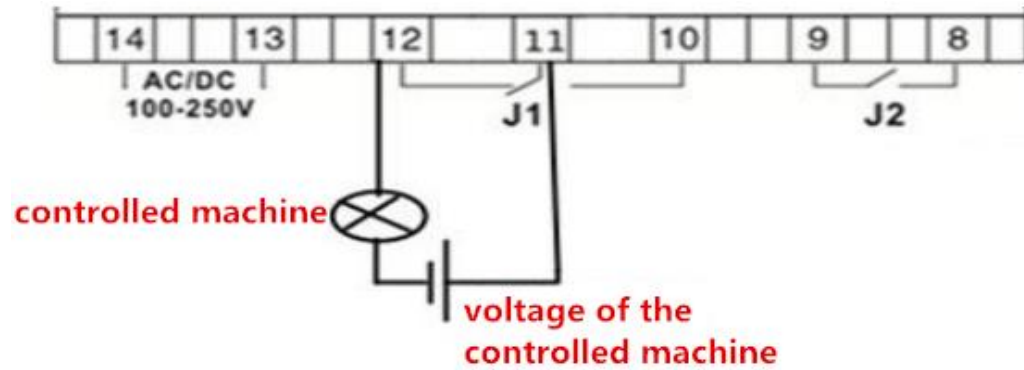
When press the SET button for short time or long time, the green number of next row are displayed 0000, but can not enter the settings, please check whether set the password lock and key lock level, the details see the parameter setting table. Enter the unlock code: 0055

3. The meter always shows a negative number

Replace the position of two connecting wires with 2 and 3 terminal

4. Set the parameters but can not be saved

After setting the parameters, press the reset key RST to save.



**Note:**

it is a diagram of controlled machine stop to connect. 12 and 11 terminal are two normally closed switch terminals, so stop to connect 12 and 11 terminals. If you want to control the meter to start the machine, such as connected to a cutter or the alarm, connected to the normally open switch terminal 11 and 10. Connection must be correct, otherwise, the wrong connection will cause short-circuit and to burn the instrument. If there is any else you do not understand, please contact with us.

