Before using this product please read this manual, if you have any questions may consult the relevant professionals or directly with the factory technical department.

OVERVIEW

- Shell Size 48×96×75mm
- With high-performance CPU chips, improved data processing speed
- Adaptable contact switch with a variety of Hall, photoelectric, proximity switch
- Count is 6-digit display
- Decimal point position can be arbitrary
- Blackout data retention up to 10 years
- Counting speed 30CPS/2000CPS
- Anti-jamming capability to IEC801 3

ZNJC Counter are widely used in printing, textile, rubber, pharmaceutical and food packaging industries, quantitative, speed, length measurement and control. The table has the anti-jamming and anti-vibration capability, stable performance, reliable work.

Product Description

1. Features

ZNJC-6E	ZNJC-6E1R	ZNJC-6E2R	ZNJC-6E1R-B	ZNJC-6E2R-B
No Relay Output	A Relay Output (OUT1 output)	Two Relay Outputs (OUT1,OUT2 output)	A Relay Output(OUT1) Interval (OUT1-L, OUT1-H) set; range movement (shown the value of output in the action between the two settings)	Two Relay Outputs(OUT1, OUT2) Interval (OUT1L,H; OUT2L,H) set range movement (shown the value of output in the action between the two settings)

Common characteristics

Master control relay (OUT1) output can be set to automatically reset, time adjustable from 0.1 to 9.9 seconds Count range 0~999999 +, -, Reversible A, B, C	Can be accumulated power-down (power failure memory) and non-cumulative Automatic reset and external pin reset Decimal can be set Counting speed 30/2000CPS

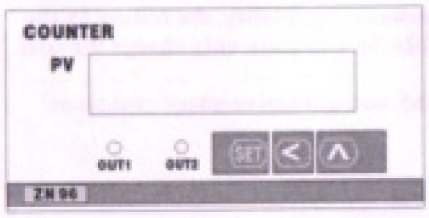
Note: Type the back with M (ZNJC-6E1R-M) of the product with modbus communication protocol for the instrument, by RS485 interface with different PLC, displays and other devices to connect to support modbus protocol use, communication distance up to 2000m.

To ordering the production of this product

2. Specifications

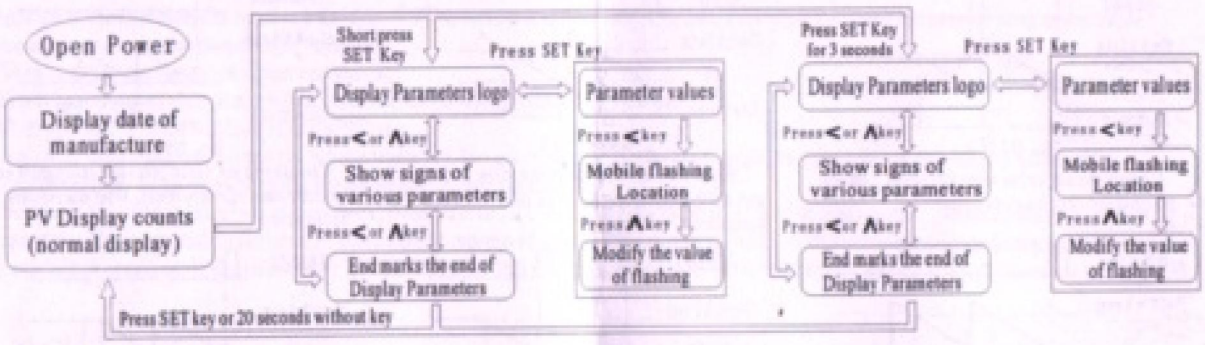
- Power Supply: AC/DC 100-250V
- Auxiliary Output Power: DC12V 200mA (Sensors for use)
- Input signal frequency: 0Hz~2kHz (Duty cycle 1:1)
- Input: L≤2V、H≥4V
- Input signal: pulse width ≥ 15mS (30CPS)
  pulse width ≥ 0.2mS (2000CPS)
- Shell Size: 48X96X75mm
- Total Weight: 210g/230g
- Machine power consumption: ≤4W
- Contact Capacity: AC220V 3A、DC24V 5A
- Reset pulse signal: pulse voltage ≤ 2V,
  pulse width≥4mS
- Impedance: 4.7K
- Use of the environment: Temperature 0~60C°、
  relative humidity≤85%
- Storage Temperature: -20~85C°
- Installation: snap-on

3. Panel Description



NO	Panel	Description of contents
1.	PV	Value / parameter display
2.	OUT1	Output OUT1 indicator
3.	OUT2	Output OUT2 indicator
4.	SET	Settings button
5.	<	Set the number of shift keys
6.	∧	Set the number keys

4. Operation diagram



5. Parameter list

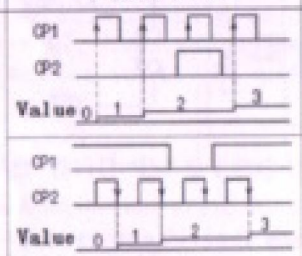
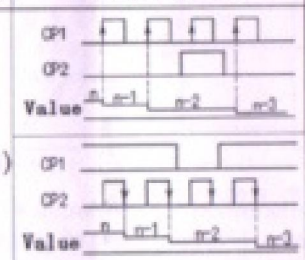
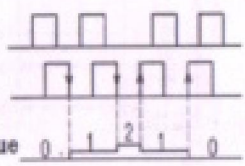
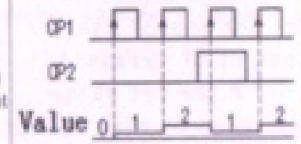
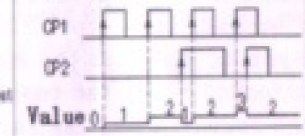
A. Short press SET button to show the following parameters

ZNJC-6EXX		ZNJC-6EXX-B	
Symbol	Function	Symbol	Function
out--1	Relay (OUT1) action set value;	out-1L out-1H	Relay (OUT1) movement interval set value;
out--2	Relay (OUT2) action set value;	out-2L out-2H	Relay (OUT2) movement interval set value;
End	Quit(no keys could also be out of 20S, but not saved in the editing parameters).		

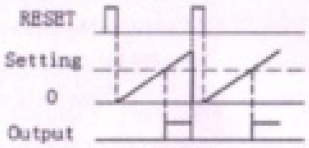
B. Long press SET button for 3 seconds, display the following parameters

Symbol	Function	Symbol	Function
P-CoEF	Pulse Equivalent (Rate): Set the range 0.00001-99.9999	Sd---P	Preset value of signs, its setting is reset when the load calculations;
		SF---H	Counting mode: were: U, d, reversible A, b, C mode.
outn-1 outn-2	Relay Output Mode: OUT1 number is 01 ~ 06, OUT2 numbered 01 ~ 02.	SS--HH	Counting speed: "30" Said the count rate 30CPS; "2E" said the count rate 2000CPS.
otun-1 otun-2	Relay output delay values: set the range of 0.1-9.9 seconds, set 0.0 seconds delay time value <0.1 seconds.	SC--HH	Power-down memory model, namely: "on" said power failure memory; "of" that power outages do not remember.
------	Set the decimal point location: see the decimal point position of the decimal point position is set.	End	Quit(no keys could also be out of 20S, but not saved in the editing parameters)

6. Input operation mode(Counter)

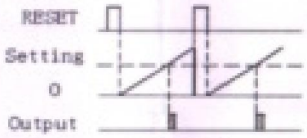
Mode	Function	Mode	Function	Mode	Function
U (UP)		d (DOWN)		C (Up/Down-C) Phase difference input	 This counting mode with encoder count, but we should count rate (see point 7 to use), such as faster speed and the high accuracy, please use ultra-high-speed counter (encoder-specific type).
A (Up/Down-U) Connect input		b (Up/Down-D) Individual input			

7. Output operation mode



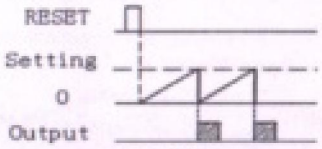
No. 01 (F)

Counts the set value after the relay pull-in, the counter continues to count.



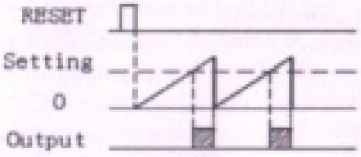
No. 02 (K)

Counts the set value after the relay pull-in and delay after the release of the counter to keep count.



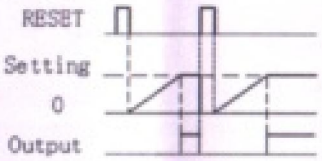
No. 03 (C)

Counts the set value after the relay pull-in, counter immediately reset, after the release delay relay.



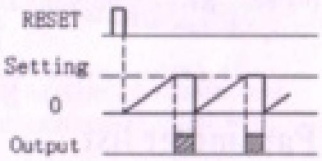
No. 04 (Q)

Counts the set value after the relay pull-in, the counter continues to count; relay delay and released at this time the counter reset.



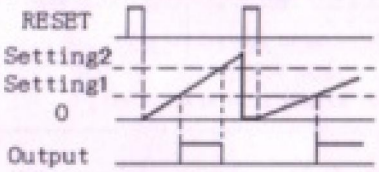
No. 05 (N)

After counting to setpoint and relay, the counter stops counting; until the reset signal to the counter reset, the relay releases.



No. 06 (R)

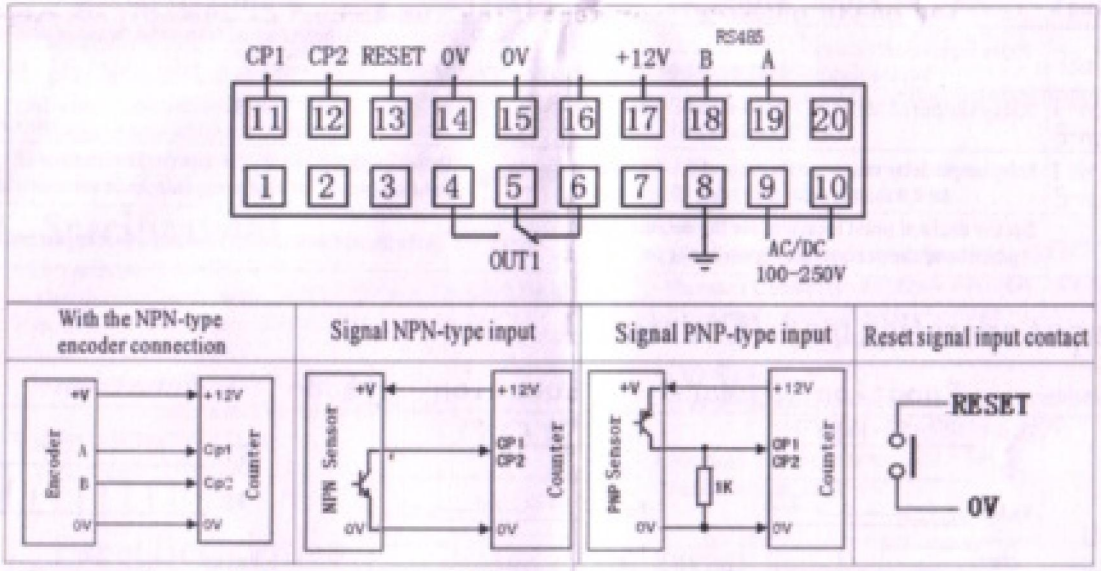
After counting to setpoint and relay, the counter stops counting; relay time delay after the release, and reset the counter.



XXXX-B-type specific No. 11

Count to the setting value between 1 and set the value of 2 and relay, counter to keep count.

8. Connections



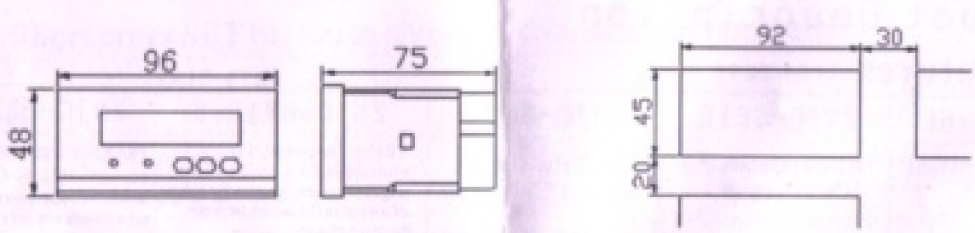
Terminal Description

1. Terminal 8 to earth terminal (PE), when the instruments work in the strong interference Please occasions when the earth and the earth connection;
2. Terminal 17 is the power output, the output +12 V/200mA for sensor use;
3. Terminals 14 and 15 is a public side, is the power output of 0V terminal;
4. Terminal 13 is the reset input, reset the count to Sd --- P the set value;
5. Terminals 11 and 12 is the count input, the input signal plus or minus count.
6. Terminals 18 and 19 is the RS485 Interface.

9. Caution

1. Applied to the environment relative humidity ≤ 85%, temperature 0 ~ 50C ° to use, to prevent the work because of work undesirable phenomenon caused by temperature changes.
2. Taken to avoid too strong vibration and shock.
3. Do not have pairs of electrical products harmful chemicals, gases, places for use.
4. When you use sensors, it is best to use NPN type.
5. To prevent the strong interference in the environment, the use of strong interfering signals, the input signal line use shielded cable.
6. Control current output relay contacts please do not exceed capacity.
7. The design should pay attention to count rate, count rate of 2k CPS is the duty cycle of 1:1 and the phase 90 ° , when measured, taking into account the duty cycle and phase encoder has a certain margin of error, so the design should be left a certain speed cushions, speed calculation method of counting: If Encoder 100P / R, shaft speed of 900 rev / min, count rate = 100 * 900/60 (1 minute equals 60 seconds) = 1.5k CPS.

10. Dimensions, Panel cut-out

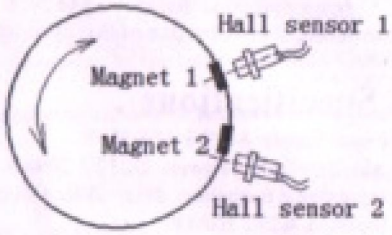


11. Application Examples

Identification phase counter (for measuring the number of laps or length) and supporting the use of Hall sensors

Installation:

1. To automatically identify rotating, and automatically add and subtract count, the sensor must be installed as shown, opposite the Hall switch a magnet, the Hall switch 2 must be just the edge of the magnet must be formed as shown The output signal waveform, the proposed use large magnets magnet.
   Note: The magnets have polarity requirements, so that one end through the sensor, the sensor has sensing, indicating the correct polarity.
2. Counter must count mode select Up / Down-C mode (SF --- C), Hall switches 1 and 2 respectively, and counter input CP1 and CP2 connection.



Preserve and protect the

1. Instruments from the date of purchase within 18 months due to manufacturing quality, the failure by the company for free repairs due to damage caused by improper use while the company only charge the cost of maintenance costs, life-long maintenance of instrumentation.
2. Gauges are to be complete in packaging cases stored in dry ventilated, non-corrosive gases occasions.