

CR series

Multifunctional counter/lengther

OPERATION GUIDE

Thanks for the purchasing our C series counter/lengther. Please do read the manual before the use of the meter so that you could make a full acknowledge of our product and operate it correctly. The edition of the manual is RE-C-05A0. We will not inform you specially if any modification made.

1、Cautions

(1) Do not use this product in following environment:

- full of the air that are easy to blast and fire
- full of strong erodible air or powder dust
- high temperature
- strong vibration or strike
- with water, oil dust, chemical splashing

(2) Please make sure that the wire connection of every pin is set correctly and the power supply is in use limit before it is powered on.

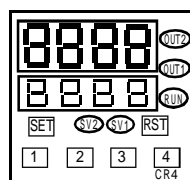
(3) Breaking up, changing and repairing our product by yourself is forbidden

(4) Please by far away from high-voltage, big-current dynamical wire while wire assignment for avoiding anti-jamming.

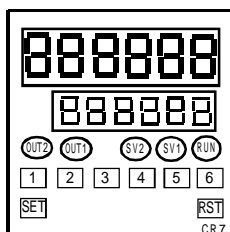
2、Meter characteristics

- ★ strong anti-jamming ability
- ★ two line 4 digit, 6 digit LED display
- ★ many size can be selectable: 48W × 48H, 72W × 72H, 96W × 48H
- ★ set the parameter value with touch switch
- ★ adding-counter U(NPN or PNP), subtracting-counter D(NPN or PNP), phase-difference counter function
- ★ rate setting range: 0.0001~999999
- ★ two segment setting and output (relay or transistor: NPN or PNP)
- ★ 8 kinds output logics: F、N、R、C、L、K、Q、A
- ★ memory function when power off
- ★ the meter can supply DC24V power (also manufacture other specification)
- ★ the panel or exterior connecting port having reset function
- ★ setting initial number function in advance

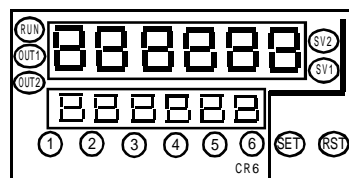
3、Panel function instruction



CR4




CR7



CR6

NO	Panel words	Content instruction
1	PV	Real measure data/mode indicator
2	SV	Setting data/mode content indicator
3	OUT1	Output 1 indicator
4	OUT2	Output 2 indicator
5	SV1	Setting data 1 setting indicator
6	SV2	Setting data 2 setting indicator
7	RUN	Meter normally working indicator
8	SET	Confirmation key
9	RST	Reset key
10	1-6	NO.1 to 6 bit number setting key,parameter modifying key

4、Type distinguishing

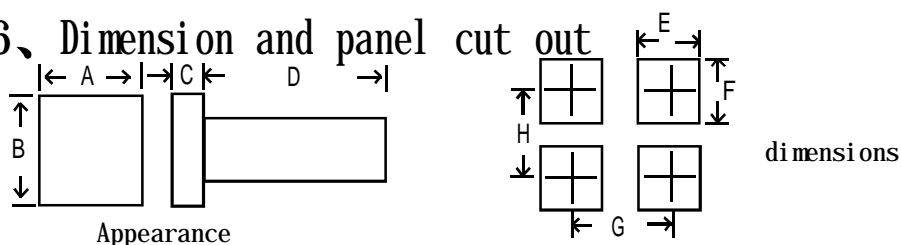
CR 

size	code	output function	code	rate set	code	counting digital	code	output method	code	communication	code
DIN48 × 48	4	one section	P1	with	S	4 digital	4	relay	R	none	0
DIN72 × 72	7	two section	P2			6 digital	6	transistor	T	RS485	2
DIN96 × 48	6										

5、Characteristics index

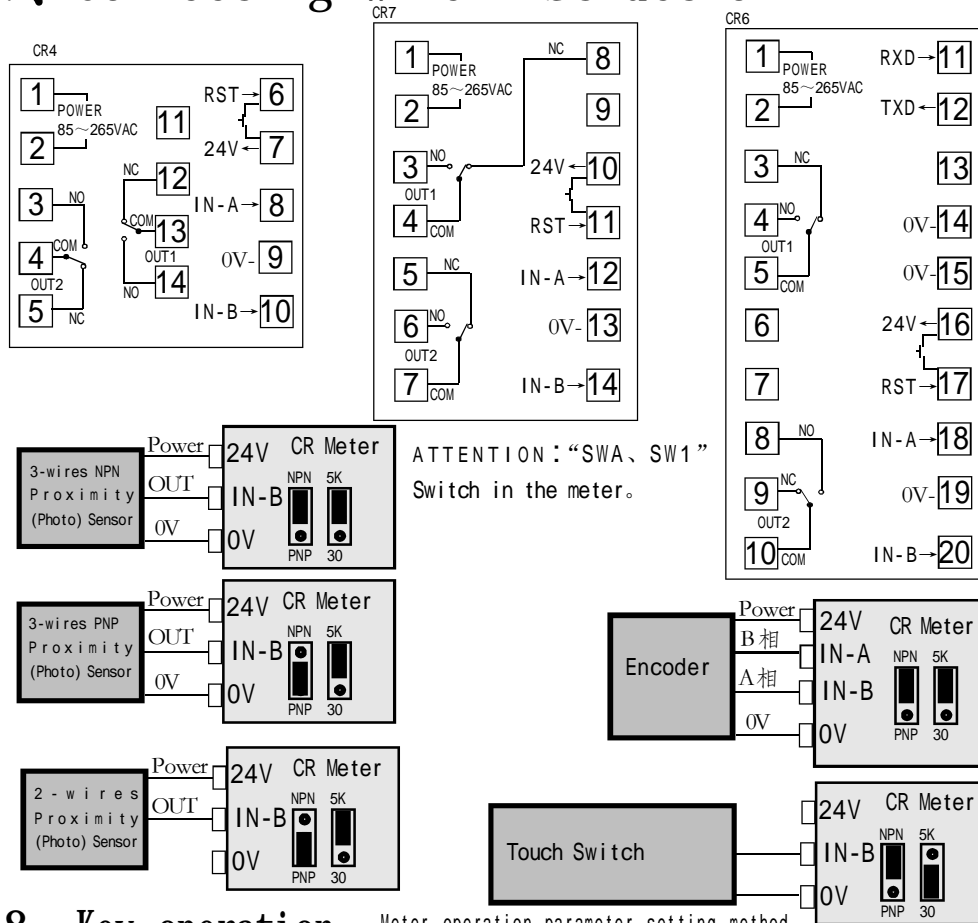
Power voltage	85V-265VAC,50Hz/60Hz(available to select 10-50VDC input)
Electric power consumption	5VA MAX
Output method	Relay contact output or transistor output
Relay contact capacity	250VAC/3A or 30VDC/5A
Transistor output capacity	30VDC/50mA
Exterior power supply	DC24VD DC50mA MAX(also manufacture other specification)
Insulated resistance	$\geq 100M \Omega$
Resisting irrelated signal interference	Power: $\pm 2000V$, input: $\pm 500V$
Resisting vibration	10~55Hz/0.75mm
Parameter keeping	10 years
Ambient temperature	0~50°C
Ambient humidity	35~85%RH
Signal input	$5V \leq H \leq 30V$ $0 \leq L \leq 2V$
Trigger signal	Rising
Impedance input	$\geq 10K \Omega$
Counting speed	30CPS/5000CPS
Rate setting range	0.001~9999 (4 bits),0.0001~999999 (6 bits)
Output delay time	0.01S~99.99S (4 bits),0.01S~9999.99S (6 bits)
Counting range	-1999~9999 (4 bits,keeping 3 bits decimal) -199999~999999 (6 bits,keeping 3 bits decimal)

6、Dimension and panel cut out

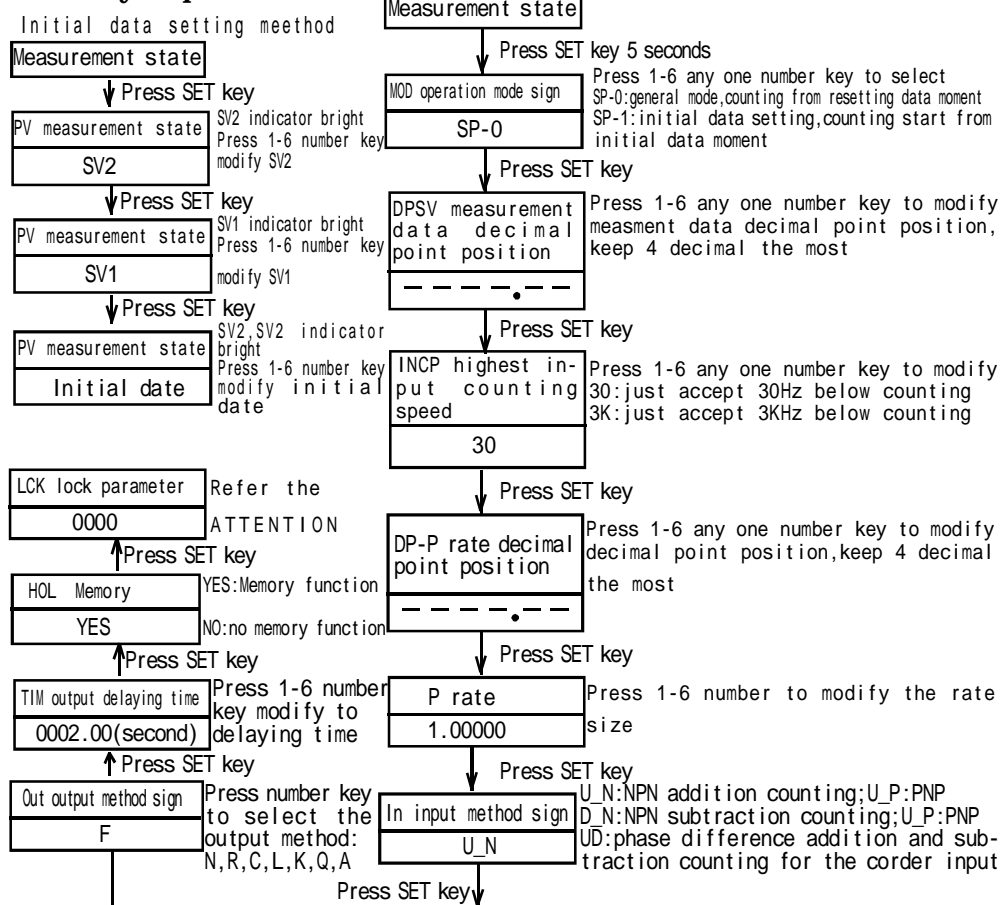


size type	A	B	C	D	E	F	G	H
CR4	48	48	14	80	44+0.5	44+0.5	80	80
CR7	72	72	14	80	68+0.5	68+0.5	104	104
CR6	96	48	14	80	90+0.5	44+0.5	90	126

7、Connecting wire instruction



8、Key operation



ATTENTION: 1、When the MOD setted SP-1, no setting for OUT, TIM these two parameter.

The meter gives tacit consent to L for the output. 2、LCK=0000: All the parameter can be change; LCK=0001: All the parameter can not be change but LCK、SV1、SV2、SV; LCK=0110: All the parameter can not be change but LCK; LCK=1111: All the parameter can not be change but LCK, the funtion RST is invalidation

Attached picture: Counting data and output method logic relationship

delay time: 0.01S-9999.99S delay output keep output OUT2 delay output keep output

		Input method			Action after the counting
		IN=U	IN=d	IN=Ud	
Output method	F				Counting data continue to add or subtract, output keeping until the reset input.
	N				Counting data and output always keeping until reset input.
	R				Counting data and output delay to the initial setting time, then automatically return to the initial state. OUT1 keeps outputting, then stop when OUT2 delaying occur.
	C				Counting data automatically return to the initial state, output delay to the initial setting time, then automatically return to the initial state. OUT1 keeps outputting, then stops when OUT2 delaying output occur.
	L				Counting data continue until exterior reset input: OUT1 output keeping at (counting data) $\leq (SV1)$ OUT2 output keeping as (counting data) $\geq (SV2)$ IN=d output method just be contrary
	K				Counting data continue, OUT1 keeps outputting, OUT2 stops when OUT2 delaying output occur.
	Q				Counting data continue during the delaying output procedure. Return to the initial state when output delaying occur. OUT1 keeps outputting until OUT2 delaying output stop.
	A				Counting data and OUT1 output keep manual reset input. OUT2 delaying output return to initial state.