ApoSun CHCV series of Counter/Length/Passel Meter instruction Manual

Function

1.It is can use for counter、Length、stopwatch
2.It is Key setting, 6、8 LED display of double line
3.It is 5 input model, with 8 kinds of output model
4.With proportion coefficient setting
5.The max. with 4 sect setting and 4 loops of output
6.All the output with delay timer setting
7. It is with 4 decimal display by software
8.Output and input all with insulate, Strong Anti-interference
9.EEPROM with hold data. Not lose data. will hold for more than 10 years for the data.

ORDERING CODE

CHCV□ -P S □ □ □

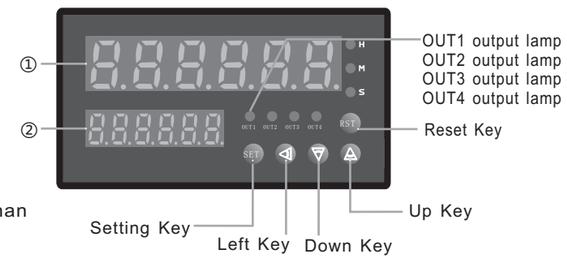
- Blank: without specific function
  T: with RS485 MODBUS interface
  I: with analogue output 4-20mA or 0-10V
- 1: 1 loop output(OUT4)
  2: 2 loops output(OUT3、OUT4)
  3: 3 loops output(OUT2、OUT3、OUT4)
- 6: 6 LED Display
  8: 8 LED Display
- S: with proportion coefficient setting
- P: with presetting Setting function
- Size: 4 : 48H×48W
  7 : 72H×72W
  8 : 96H×48W
- CV series of Counter/Length/Passel Meter

Notice: if need 4 loops output and with analogue output 4-20mA or 0-10V then it is must specific order.

SPECIFICATION

Power supply	AC85～265V 50/60Hz
Consumption	<5VA
Capacity	250VAC/3Aor30VDC/5A
Auxiliary power	DC24V/80mA (max)
Insulation impedance	≥100MΩ
Dielectric strength	2KV/0.5mA (one minute)
Anti-interference	Power: ±2KV Input:±400V
Anti-shake	10～55Hz; 0.75mm
Environment	-25～50℃;35～85% RH
Input signal	Square ware and sine ware and pulse signal: 0≤LOW≤1V, 3V≤High≤30V
Anti-jamming	>10KΩ
Count speed	5CPS/30CPS/5KCPS
proportion coefficient range	0.0001～99.9999 (6Digit) 0.0001～9999.9999 (8 Digit)
output time	0.01～99.99S
Count range	0.0001～999999 (6 Digit) 0.0001～99999999 (8 Digit)

Panel explain



① Counting Display
② presetting display

Panel explain

A. SET: Setting and confirm Key ; ◀ : Move Key; ▼ Decrease Key; ▲ : Increase Key ; RST: Reset key

B. parameter setting

Measure estate (1th parameter)
↓ Press Left Key 1S.
SV4 OUT4 presetting value
↓ Press SET Key
SV3 OUT3 presetting value
↓ Press SET Key
SV2 OUT2 presetting value
↓ Press SET Key
Sv1 OUT1 presetting value
↓ Press SET Key
Measure estate

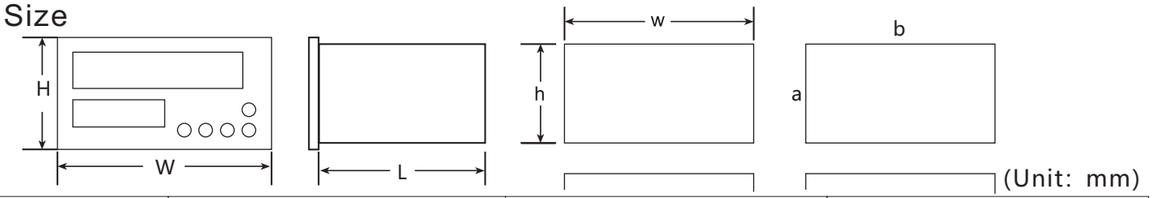
Measure status (2nd grade menu)
↓ Press SET more than 5S
LCK Menu password
↓ Press SET Key
SIG Input signal type
↓ Press SET Key
IN Input model
↓ Press SET Key
CPS Input speed
↓ Press SET Key
OUT OUT4 output model
↓ Press SET Key
TIM OUT4 delay time
↓ Press SET Key
OT3 OUT3 output model
↓ Press SET Key
TM3 OUT3 delay time
↓ Press SET Key
OT2 OUT2 output model
↓ Press SET Key
TM2 OUT2 delay time
↓ Press SET Key
OT1 OUT1 output model
↓ Press SET Key
TM1 OUT1 delay time
↓ Press SET Key
DP Decimal point (selectable)
↓ Press SET Key
P Counter proportion coefficient
↓ Press SET Key
PRE Counter initialization value
↓ Press SET Key

Measure status
↑ Press SET Key
PAR Communication Stop format
↑ Press SET Key
BAD Communication baud rate
↑ Press SET Key
ADR Communication address
↑ Press SET Key
BRH Analogue High
↑ Press SET Key
BRL Analogue Low
↑ Press SET Key
LKY Panel locked
↑ Press SET Key
COD Presetting password
↑ Press SET Key
HOL Drop power memory
↑ Press SET Key
RST Reset feedback time

Parameter setting

Number	mark	code	explain	leave factory setting
1	SV4	OUT4 preseting value	When the count value reached the SV4 preseting value, the OUT4 relay with output. see as follow drawing.	2000
2	SV3	OUT3 preseting value	When the count value reached the SV3 preseting value, the OUT3 relay with output. see as follow drawing.	1500
3	SV2	OUT2 preseting value	When the count value reached the SV2 preseting value, the OUT2 relay with output. see as follow drawing.	1000
4	SV1	OUT1 preseting value	When the count value reached the SV1 preseting value, the OUT1 relay with output. see as follow drawing.	500
5	LCK	CODE	LCK=COD preset value, then can into the menu amend it. LCK=other value, forbid into and returned the natural estate	0000
6	SIG	Input Signal	SIG=NPN (Low electric) SIG=PNP (High electric)	NPN
7	IN	Input Model	Five kinds of models. Please see as follow drawing.	U
8	CPS	Input speed	5: the MAX. value is 5Hz. 30: the MAX. value is 30Hz. 5K: the MAX. value is 5KHz. 10K: the MAX. value is 10KHz.	5K
9	OUT	OUT4 output mode	It is with eight kinds of action. Please see as follow drawing.	R
10	TIM	OUT4 delay Time	The range: 0. 01—99. 99 second	0.50
11	OT3	OUT3 output mode	It is with three kinds of action. Please see as follow drawing.	HOL
12	TM3	OUT3 delay Time	The range: 0. 01—99. 99 second	0.50
13	OT2	OUT2 output mode	It is with three kinds of action. Please see as follow drawing.	HOL
14	TM2	OUT2 delay Time	The range: 0. 01—99. 99 second	0.50
15	OT1	OUT1 output mode	It is with three kinds of action. Please see as follow drawing.	HOL
16	TM1	OUT1 delay Time	The range: 0. 01—99. 99 second	0.50
17	DP	Decimal	The Max. decimal is 4 digital	000000
18	P	Proportion coefficient	For each pulse value that it is Proportion coefficient. It is use the Counter value change to measure length value.	1.0000
19	PRE	Counter original value	Every time Press RST Key will returned original value, Every time will come to the original value read Counter.	000000
20	RST	Reposition Time	It is can select 1 millisecond or 50 millisecond	50
21	HOL	Power fail memory	if the meter turn off the power.. It will keep the before value.	YES
22	COD	CODE	Only the LCK =Preset COD code then can into the 2ND Parameter. (please remember the COD code)	0000
23	LKY	LOCK	LKY=yes, It is can lock for any key except the SET.	NO
24	BRL	Analog Low	Analog Low output corresponding to the low setting display	000000
25	BRH	Analog High	Analog high output corresponding to the high setting display	2000
26	ADR	Communication ADD	Communication ADD Parameter	001
27	BAD	Communication filter bit	Communication filter bit for select	9600
28	PAR	Communication data	2 bit or 1 bit	1.8.2.n

Size

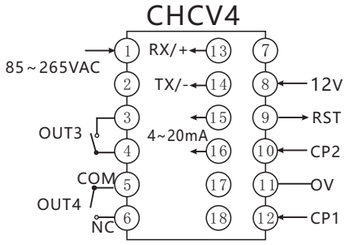


(Unit: mm)

Model	panel size H×W	shell size h×w×L	opening size a×b
CHCV4	48×48	45.5×45.5×84	46.5×46.5
CHCV7	72×72	69×69×84	70x70
CHCV8	48×96	45.5×90.5×84	46.5×91.5

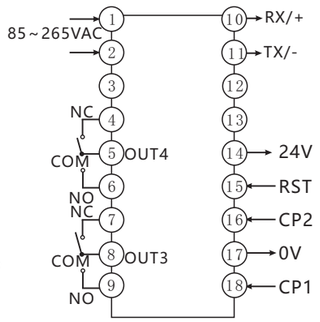
Terminal Configurations

CHCV4

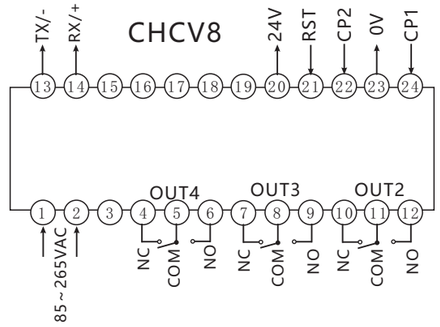


Please subject to the diagram on the prducts if any change

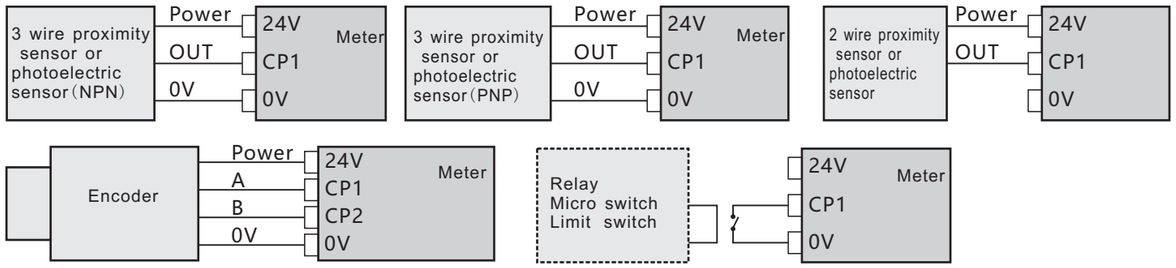
CHCV7



CHCV8



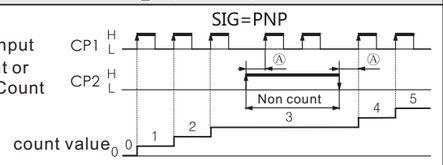
Application examples

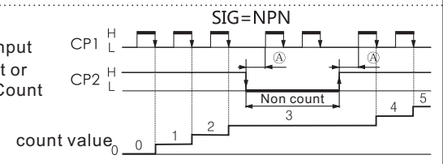


Input model(IN) and Count value(PV) drawing

U (increase)

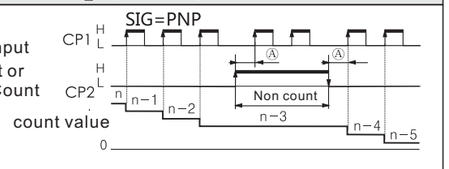
CP1: count input
CP2: concent or forbid CP1 Count



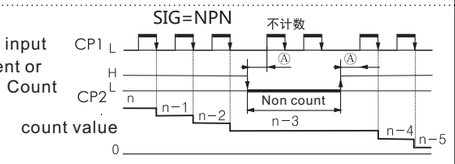


d (decrease)

CP1: count input
CP2: concent or forbid CP1 Count

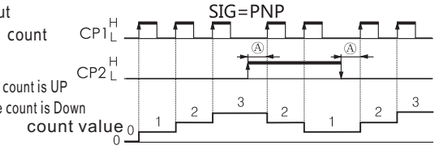


CP1: count input
CP2: concent or forbid CP1 Count



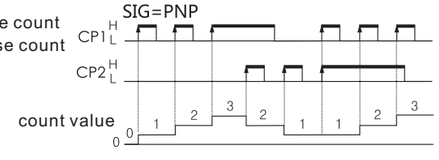
Ud-A (increase/decrease-A) Order input

CP1: count input
CP2: Up/Down count order input
When CP1 is L, the count is UP
When CP2 is H, the count is Down



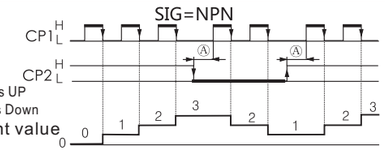
Ud-b (increase/decrease-A) single input

CP1: increase count
CP2: decrease count
PV=CP1-CP2



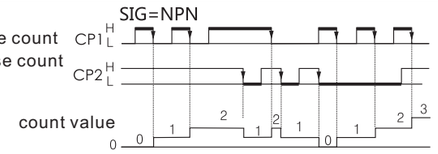
Ud-A (increase/decrease-A) Order input

CP1: count input
CP2: Up/Down count order input
When CP1 is H, the count is UP
When CP2 is L, the count is Down



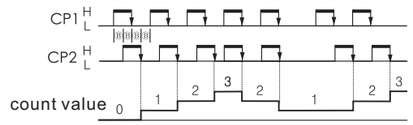
Ud-b (increase/decrease-A) single input

CP1: increase count
CP2: decrease count
PV=CP1-CP2



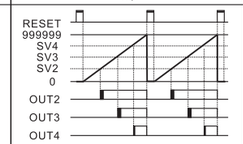
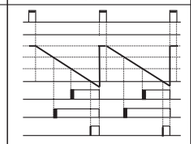
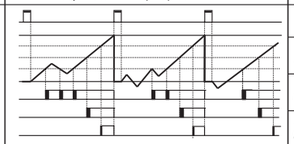
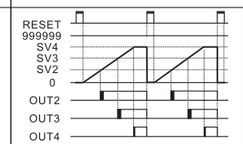
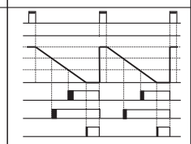
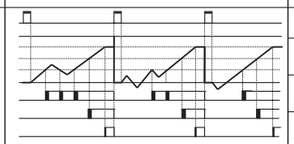
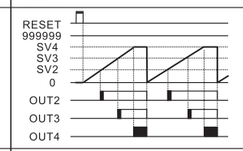
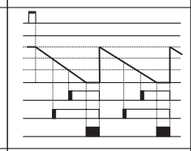
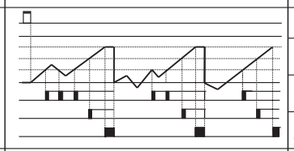
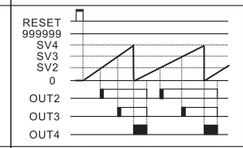
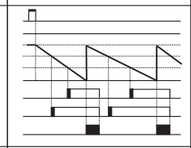
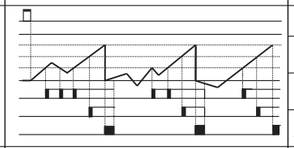
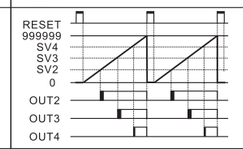
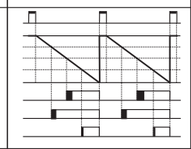
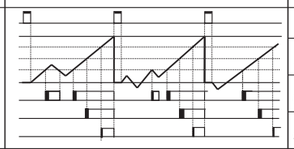
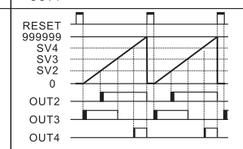
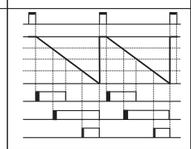
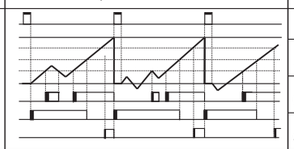
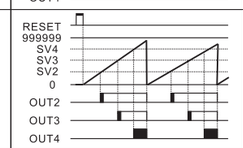
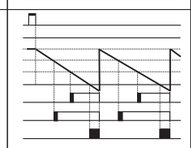
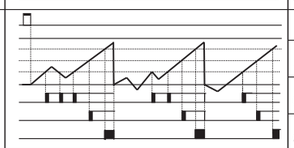
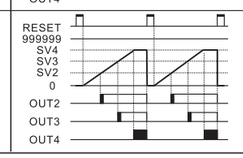
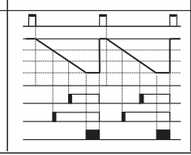
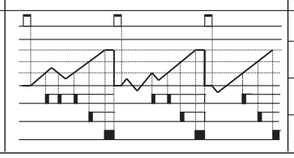
Ud-C (ncrease/decrease-c) phase difference input

The CP1 signal before CP2, it is increase count.
The CP2 signal before CP1, it is decrease count.
The CP1 and CP2 all didn't use for the input signal.
must commutative cooperate can count. The model is use for the encoder and phase difference input signal.



Counter output model

One-shot Output Hold Output

Model	Input Model: Up	Input Model: Down	Input Model: Up/Down A, B, C	Action
F (F)				OUT3 explain HoL: After relay OUT3 energized,it de-energize by reset of relay OUT4. oFF: After relay OUT3 energized,it de-energize immediately once relay OUT4 energized t in: Relay OUT3 energized,it de-energize after delay TM3.
n (N)				OUT3 explain HoL: After relay OUT3 energized,it de-energize by reset of relay OUT4. oFF: After relay OUT3 energized,it de-energize immediately once relay OUT4 energized t in: Relay OUT3 energized,it de-energize after delay TM3.
r (R)				OUT3 explain HoL: After relay OUT3 energized,it de-energize by reset of relay OUT4. oFF: After relay OUT3 energized,it de-energize immediately once relay OUT4 energized t in: Relay OUT3 energized,it de-energize after delay TM3.
C (C)				OUT3 explain HoL: After relay OUT3 energized,it de-energize by reset of relay OUT4. oFF: After relay OUT3 energized,it de-energize immediately once relay OUT4 energized t in: Relay OUT3 energized,it de-energize after delay TM3.
H (H)				OUT3 explain HoL: After relay OUT3 energized,it de-energize by reset of relay OUT4. oFF: After relay OUT3 energized,it de-energize immediately once relay OUT4 energized t in: Relay OUT3 energized,it de-energize after delay TM3.
L (L)				OUT3 explain HoL: After relay OUT3 energized,it de-energize by reset of relay OUT4. oFF: After relay OUT3 energized,it de-energize immediately once relay OUT4 energized t in: Relay OUT3 energized,it de-energize after delay TM3.
q (Q)				OUT3 explain HoL: After relay OUT3 energized,it de-energize by reset of relay OUT4. oFF: After relay OUT3 energized,it de-energize immediately once relay OUT4 energized t in: Relay OUT3 energized,it de-energize after delay TM3.
A (A)				OUT3 explain HoL: After relay OUT3 energized,it de-energize by reset of relay OUT4. oFF: After relay OUT3 energized,it de-energize immediately once relay OUT4 energized t in: Relay OUT3 energized,it de-energize after delay TM3.