F Series Counter / Length manual

Thanks for select MYPIN products!
Pls carefully read this manual and fully understand its contents before operating this meter.
This manual is subject to change without prior notice

▣ Warning

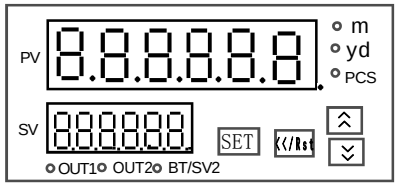
Please do not turn on the power supply until all of the wiring is completed.
Do not wire when the power is on.
Do not disassemble, repair or change the instrument.
Use this instrument within the scope of its specifications.

*Should be installed in a domestic environment.
* To avoid using this instrument in environment
full of dust / caustic gas / strong vibration/ overflow water or explosive oil.

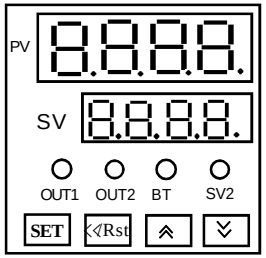
▣ Application

1 Can be used as counter / lenght, counting meter / yard / angle / position, total count or batch count or current count
2 input: contact / proximity photoelectric switches / encoder, sine wave / Square wave / triangle wave etc voltage pulses
3 display : 4 / 6 / 8 digital LED duble row , range 0.0001-99999999
4 Multi-preset output: Relay \ SSR\Buzz\4-20mA output etc.
5 power-down data saving for at least 10 years (EEPROM) .
6 communication interface: RS485 RS232 LAN RJ45(MODBUS-RTU) .

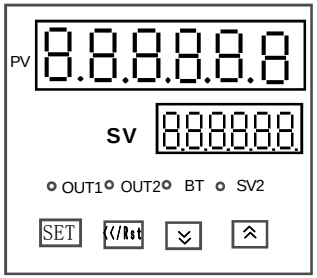
▣ Panel(For Reference)



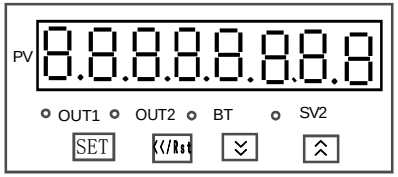
FH8 6 digit counter or length



FH4 4 digit counter or length



FH7 6 digit counter orlength



FH8 8 digit counter orlength

PV window display :count data / parameter code
② SV window display : preset value / parameter value

* SET Select or Confirm key
* Rst shift key / reset key
* ADD / UP Key
* SUB / Down Key

* OUT1 OUT2 output LED, ON : active OFF : inactive
* BT batch data LED, ON : batch data OFF: no batch data
* SV2 preset point 2 LED ON: preset 2 OFF: no preset 2

▣ Specifications

Power	90-260V AC 50/60Hz or 18-30V AC/DC， cmsp ≤5VA
input	sine, square, triangle wave pulse etc. 5V ≤ H ≤ 30V，0 ≤ L ≤2V，up edge trogger Input impedance ≥20K Ω
speed	switch/pulse ≤ 5000CPS，encoder ≤ 20000CPS
range	4 digit 0-9999 6 digit 0-999999 8 digit 0-99999999
output	Relay: normal open 250VAC 3A/ 30VDC 3A resistive load SSR: DC 12V / 24V 30mA,Triode: 60V / 30mA
AUX.Power	DC 24V or /12V Max 40mA
comm	RS232、RS485 RJ45，MODBUS RTU protocol
Enviroment	temperature: 0-50℃ humidity: 30-85%RH
Weight	< 350g

▣ Ordering code

	Model									Functions
FH	□	□-	□	□	□	□	□	□	□-□	count/length
Size	4									48W*48H*80L
	7									72W*72H*80L
	8									96W*48H*80L
	10									160W*80H*70L
power										90-260V AC/DC
	E									18-30V OR 24VDC
display		4								4 Dital LED
		6								6 Dital LED
		8								8 Dital LED
function mode			C							counting
			L							length/meter
preset output	OUT1 F:BuZZ			N						none
				R						R: Relay F:buzz
				S						Triode/SSR
				I						I: 4-20mA V:0-10V
	OUT2				N					none
					R					R: Relay F:buzz
					S					Triode/SSR
	OUT3									none
					R					R: Relay F:buzz
					S					Triode/SSR
communication										none
						2				RS232
						4				RS485
						5				LAN RJ45
AUX.power							A			12V/30mA
							B			24V/30mA
							D			other,E.g 5V/30mA
Extensions										none
									G	photoelectrical switch
									S	proximity
									R	encoder

universal input: contact \ switches \ voltage pulse \ encoder \ 90° phase difference etc.

E.g: Model FH8E-6CRNB 6 dital LED counter, size:W 96 * H 48 * L 80 mm, power supply 18-24V DC, OUT1:relay,OUT2:none,comm:none, AUX.Power 24V/30mA
Model:FH7-6LRR4A-R100 6 digtal counting length, size: W 72 * H72 * L 80 mm,Power supply:90-260V AC/DC.OUT1:relay OUT2:relay,communication:RS85, input:encoder 100pulse/Rpm,DC12V

▣ Dimension and mounting

1 FH4 W 48 * H48 * L80mm
mounting W45* H45mm
2 FH7 W72* H72* L80mm
mounting W68* H68mm
3 FH8 W96* H48* L80mm
mounting W92* H45mm
4 FH10 W160*H80* L70mm
mounting W152*H76mm

▣ Operation/parameter setting

1 **Press SET key until to enter manu**
in setting menu,press Rst key,LED flashing,press Rst again to shift LED,press ▲ or ▼ key to modify data,press SET key to confirm ,then LED Stop to flash

Modify decimal point: when LED flashing, keeping hold SET key, and press ▲ key once, the decimal point will change once ,then loose key in required position

2 **preset setting**
Enter the setting menu, OR in dispaly estate, Pres Rst key,LED flashing, then refer parameter setting steps to modify data
3 **Preset point 1 and preset point 2 converting,**
press SET key to convert SVwindow display
SV2/BT LED:OFF display preset point 1,
SV2/BT LED ON: dispaly preset point 2

Meter & yard Unit converting
keeping hold SET key, and press ▼ key once, LED unit of m and yd will change once ,then loose key in required LED unit,
PLS NOTE: the preset value doesn't change,but the units are changed

4 FH8-8 8 digit counting data and preset convert,
Press SET key to convert SV window display
PCS LED OFF: dispaly counting data
PCS LED ON: display preset,in this estate,
press Rst key, LED flashing, then refer parameter setting steps to modify data

5 Reset Opration
Press Rst key more than 2 seconds until PV LED display 0,then loose
or press terminal RST once to reset

Press SET key until to enter manu,then loose key,refer parameters setting steps to modify data

SET

Pc= vaule / Per Pulse ,
PV display data= ∑Pc*Pulse,
E.g Pc=1.00000 PCS / Per pulse,
Pc=0.01000m OR Pc=0.01094 yard

display unit is determined by Pc parameter

preset 1 setting range:.0001-999999
required : ScL1(SCL1) > ScL2(SCL2)

preset point 1 : output control, can be select R C F N H L , refer to application

preset point 1: output delay time (for only OUT1=R or C)
range: 0.01-99.99 seconds

preset 2 setting (shield when unused)
range:.0001-999999
required ScL2 (SCL2)< = ScL 1 (SCL1)

preset point 2 :output control, can be select R F H L (No C N) refer to application

preset point :output delay time(for only OUT2=R) range: 0.01-99.99 seconds

input select:
A / B one input: contact / switches / pulse
C two inputs: contact / switches / pulse
D encoder / wheel / 90 degree phase pulse

PV window count data decimal point:
int: 000000 1 bit : 00000.0 2 bit :0000.00
3 bit: 000.000 4 bit: 00.0000

counting speed,
contact input:CPS=0020, switch input CPS=1000, encoder input: CPS=9000

Data saving when power down
YES: saving data , start to count from power down data when power on
NO: no saving, start to count from 0

NPN / PNP sensor select:
NPN: NPN or OC gate input
PNP: PNP or sine /square wave/ pulse etc.

preset batch (only for batch counter / length) OR Analog output high vaule,
E.g :0-10000 for 4-20mA,Bath=10000.
if PV=5000 output 12mA

GOTO bad Parameter

SET

communication baud rate ,
0: 9.6 KBit / s 1:19.2K bit / S,
factory 0: 9.6 K Bit / s

communication ID address : 000-255,factory=001

Count or length Units
PCS:PCS m :m yArd :yard

Parameter lock, range : 0-255
LCK=000 open lock, can be read and write
LCK=010, lock, only read , cant write or modify

press SET to Return PC parameter or quit menu

▣ Input application

contact input: should be connected capacitor to prevent contact jitter, capacity: 0.1-10uf, suggest capacitor : 4.7uf

1 A input application(Contact ,switch,encoder,voltage pulse)
INA :increase count ,connect between INA and 0V
INB :allow or forbid count, INA increase count when INB open or Low Level(<1V) , INA forbid or dont count when INB connect High level(H > 5V)

2 B input application:(Contact ,switch,encoder, pulse)
INA: increase or decrease count, connect between INA and 0V
INB: used to control INA, INA increase count when INB OPEN or low Level(<1V), INA decrease count when INB connect High level (>5V)

3 C input application (Contact ,switch,encoder,voltagepulse), PV data=INA-INB
INA :increase count,connect between INA and 0V
INB: decrease count,connect between INB and 0V

4 D input: encoder or 90 degree phase pulse
Reversible UP and Down counting with direction
INA :A phase increase count, connect between INA and 0V
INB: B phase decrease count, connect between INB and 0V
Changing A and B phase wiring position can change the counting UP OR Down

▣ control output application

1 R control output:
preset value 1(SV1) > preset value 2(SV2)
PV : counting or length value
OUT1: if PV data >= SV1,OUT1 active,stop to count,after Delay time TIM1,reset PV data=0, reset OUT1 and OUT2 at the same time(OUT1 ,OUT2 =OFF)
OUT2: if PV data >= SV2, OUT2 active, but continune to count, after Delay time TIM2, reset OUT2 (OUT2=OFF)

2 C control output(only for SV1)
OUT1: if PV data >= SV1, OUT1 active and reset PV data=0 immediately, continue to count from 0, after Delay time TIM1, reset OUT1 and OUT2 at the same time(OUT1,OUT2=OFF)

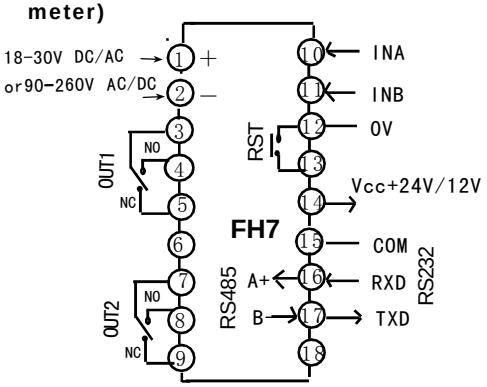
3 F control output: totalize count
OUT1: if PV data >= SV1, OUT1 active, continune to count, OUT1 keeping active until manual reset
OUT2: if PV data >= SV2, OUT2 active, continune to count, OUT2 keeping active until reset by OUT1 R C control or manual reset, NOTICE :required SV2 < SV1

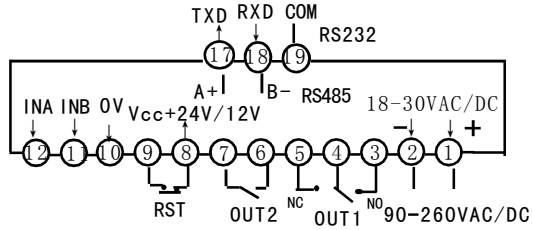
4 N control output: one cycle output(only for OUT1)
OUT1: if PV data >= SV1, OUT1 active, stop to count, OUT1 keeping active until manual reset

5 H High alarm control output
OUT1: if PV data >= SV1, OUT1 active, continune to count, if PV data < SV1, OUT1 Inactive,continune to count ,OUT1 can be reset by manual
OUT2: if PV data >= SV2, OUT2 active,continune to count, if PV data < SV2, OUT2 Inactive,continune to count,OUT2 can be RESET by OUT1 R /C control output or manual reset

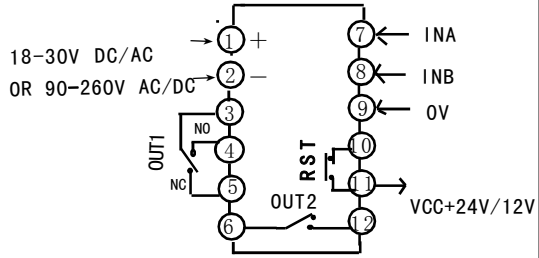
6 L LOW alarm control output
OUT1: if PV data < SV1, OUT1 active, continune to count, if PV data >= SV1, OUT1 Inactive,continune to count ,OUT1 can be reset by manual
OUT2: if PV data < SV2, OUT2 active,continune to count, if PV data >= SV2, OUT2 Inactive,continune to count,OUT2 can be RESET by OUT1 R /C control output or manual reset

▣ Terminal connection(refer to the lable on meter)

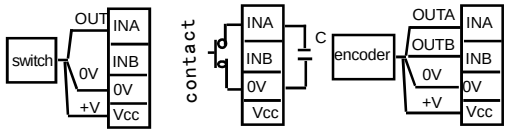




FH8 Serirs



FH4 Series



Connect to switch
Capacity 0.1-10uF Connect to contact
Connect to encoder or wheel

▣ Factory Products Contains

* 1 Copy of user manual
* 1 Inspection certificate
* 2 installing brackets.

We are responsible for the overal repairment for the failure of manufactorying quality within 12 months since the date of purchase.

▣ Modbus protocol or other information

PLS Download from :www.mypinchina.com
Email:sale@mypinchina.com

▣ Main Products

- weight indicator /controller
- Counter & length meter
- Temperature controller
- Time relay
- Ampere & Voltage meter
- Power meter
- Frequency / Tacho / Line-speed meter
- Universal Sensor indicator
- Transmitter
- Proximity sensor Photo-electrical sensor