



PMED 操作手冊
User's Manual
取り扱い説明書

PMED-H1-1-Series

User's Manual

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1. Functions:

- (1) Switch between ABS and REL: See appendix
- (2) Units of measurement: mm/inch
- (3) Zero and auto-center (1/2) function
- (4) Set count direction (increase/decrease)
- (5) Switch between digital and analog signals

* Analog signal is only used for the HIWIN Positioning Measurement System

- (6) Decimal point setting

mm: 0.001, 0.01, 0.1, 1

inch: 0.000001, 0.00001, 0.0001, 0.001

- (7) Resolution setting (unit: μm): 1, 2, 5, 10

- (8) Preset function: 8 sets

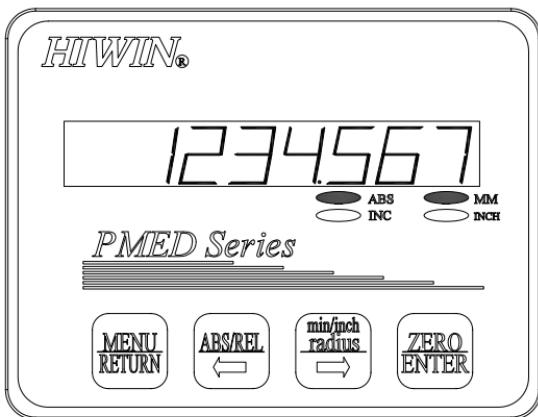
- (9) Relay output function: 4 sets

- (10) Current value read (displayed) will be automatically saved during a temporary power failure

2. Specifications:

- ◎ Display: LED 8 digit display
- ◎ Input power: 5VDC $\pm 5\%$ /1A
- ◎ Input signal: SIN/COS 1Vp-p(analog), 5V RS-422/TTL(digital)
- ◎ Relay contact rating: 24VDC/2A
- ◎ Relay frequency: 2 seconds
- ◎ Operating temperature range: 0°C ~ +50°C
- ◎ Storage temperature range: -5°C ~ +65°C

3. Panel Description:



ABS: ABS Mode

INC: REL Mode

MM: Unit: mm

INCH: Unit: inch

4. Normal Mode Description:

Button representation:



: Menu



: Switch between ABS/REL mode



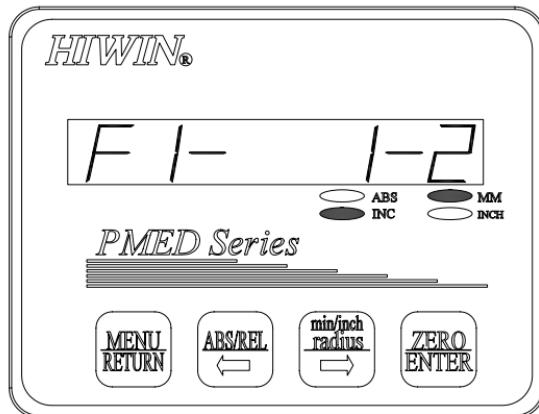
: Switch between units (mm/inch)



: Set zero mark

5. Function Mode Description:

When the display is set on normal mode, press the MENU button to enter into the function mode



Button representation:

MENU RETURN : Return back to normal mode/back one page

ABS/REL : Switch between functions
F1-1-2>F2-DIR>F3-ADC>F4-DOT>F5-DPI>F6-PCALL>
F7-PSET>F8-IO.USE>F9-IO.SET> F1-1-2

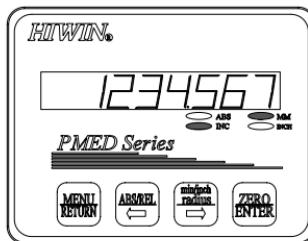
mm/inch radius : Switch between units (mm/inch)
F1-1-2> F9-IO.SET> F8-IO.USE> >F7-PSET >F6-PCALL>F5-DPI
>F4-DOT>F3-ADC>F2-DIR> F1-1-2

ZERO ENTER : Confirmation button

6. Auto-Center (1/2) Function:

Function: To set the auto-center (1/2) value when needed

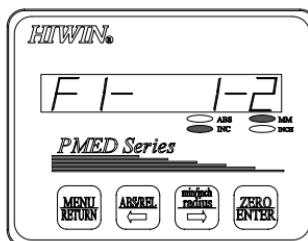
Caution: Can only be used when the display unit is set on INC mode



Step 1. If not in INC mode, press



to switch into INC mode



Step 2. Press



once, and then press



or



until it displays F1-1-2 Press

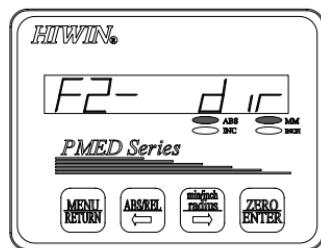


to find the midpoint

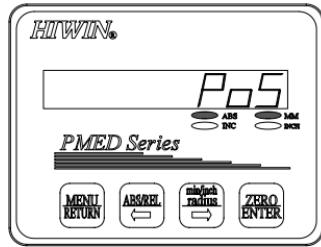
7. Count Direction Setting (DIR):

Function: To set the direction (increase or decrease)

Note: Can be used with the display unit set on ABS mode or INC mode



Step 1. Press **MENU RETURN** once, and then press **ABS/REL** or **mm/inch radius** until it displays F2-DIR

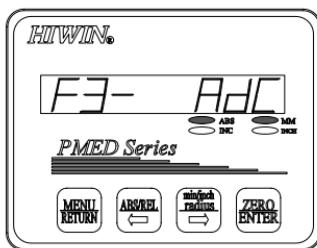


Step 2. Press **ZERO ENTER** to enter setting, then press **ABS/REL** or **mm/inch radius** to choose the counting direction (positive or negative) Press **ZERO ENTER** to confirm

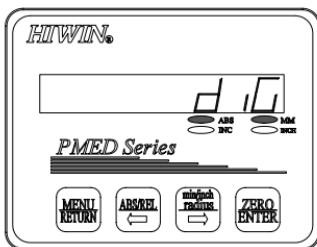
8. Input Signal Setting (ADC):

Function: Choose the input signal (analog or digital)

Note: Can be used with the display unit set on ABS mode or INC mode



Step 1. Press **MENU RETURN** once, then press **ABS/REL** or **mm/inch radius** until it displays F3-ADC



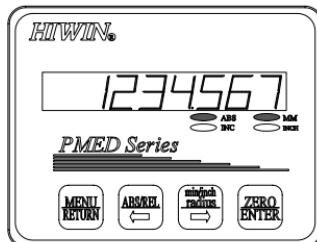
Step 2. Press **ZERO ENTER** to enter setting, then press **ABS/REL** or **mm/inch radius** to choose DIG (digital signal) or ANA (analog signal). Press **ZERO ENTER** to confirm

9. Decimal Point Setting (DOT):

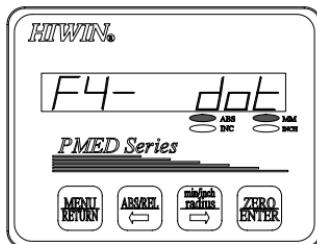
Function: To set the decimal point according to the user's requirement

1. For mm, choices are 0.001, 0.01, 0.1, 1
2. For inch, choices are 0.000001, 0.00001, 0.0001, 0.001

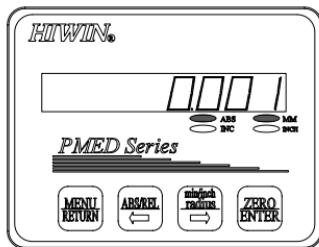
Note: Can be used with the display unit set on ABS mode or INC mode



Step 1. Press to choose the desired unit



Step 2. Press once, and then press or until it displays F4-DOT



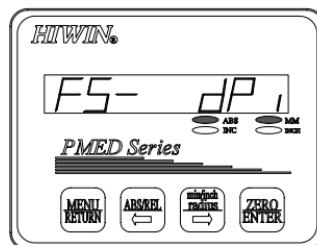
- Step 3. Press  to enter setting, then press  or  to choose the placement of the decimal point Press  to confirm

10. Resolution Setting (DPI):

Function: To set the resolution according to user's requirement

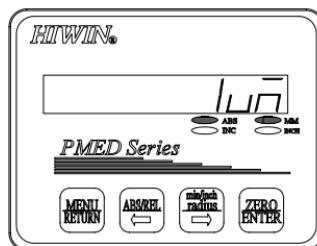
Choices are $1\text{ }\mu\text{m}$, $2\text{ }\mu\text{m}$, $5\text{ }\mu\text{m}$, $10\text{ }\mu\text{m}$

Note: Can be used with the display unit set on ABS mode or INC mode



Step 1. Press once, and then press or

until it displays F5-DPI



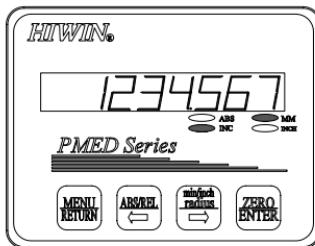
Step 2. Press to enter setting, then press or

to choose the desired resolution Press to confirm

11. Pre-Call (PCALL):

Function: This function can recall the preset parameter

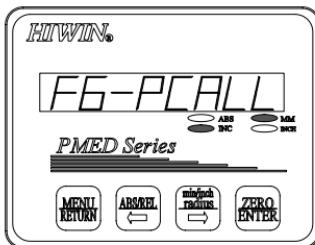
Caution: Can only be used when the display unit is set on INC mode



Step 1. If not in INC mode, press



to switch into INC mode



Step 2. Press



once, and then press

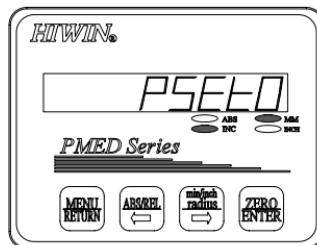


or



until it

displays F6-PCALL



Step 3. Press to enter setting, and then press



or to choose which set of number presets you require Press

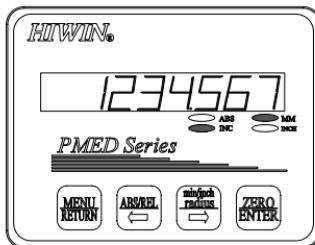
to confirm

12. Preset Setting (PSET):

Function: Preset number setup

The preset function offers 8 sets

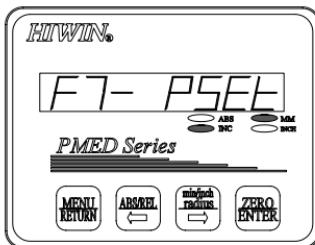
Caution: Can only be used when the display unit is set on INC mode



Step 1. If not in INC mode, press



to switch into INC mode



Step 2. Press



once, and then press

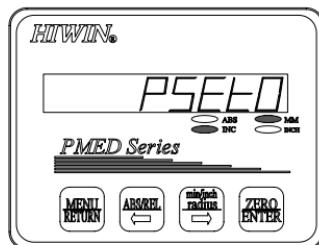


or



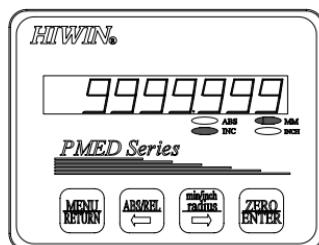
until it

displays F7-PSET



Step 3. Press to enter setting, and then press

or to choose which set of number presets you require



Step 4. Press to enter setting, and then press to change

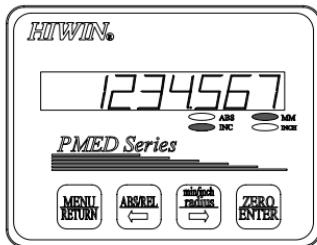
the blinking digit Press to change the value, and

press to change to the next digit Press to confirm

13. Relay Enable/Disable Setting (IO.USE):

Function: Relay enable/disable setting

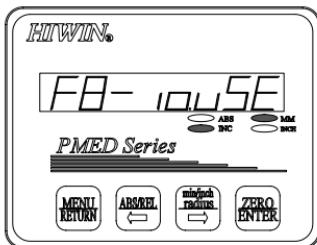
Caution: Can only be used when the display unit is set on INC mode



Step 1. If not in INC mode, press



to switch into INC mode



Step 2. Press



once, and then press

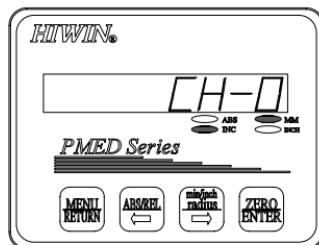


or



until it

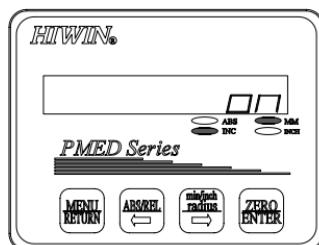
displays F8-IO.USE



Step 3. Press to enter setting, and then press



or to choose which set of number presets you require



Step 4. Press to enter setting, and then press



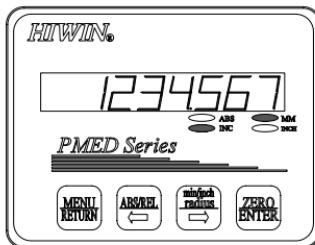
or to setup the relay enable or disable function

14. Relay Output Position Setting (IO.SET):

Function: Relay output position setup

Relay output: 4 sets

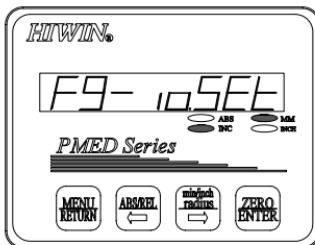
Caution: Can only be used when the display unit is set on INC mode



Step 1. If not in INC mode, press



to switch into INC mode



Step 2. Press



once, and then press

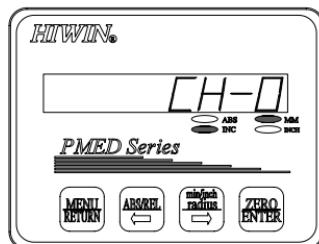


or

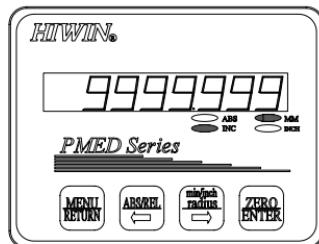


until it

displays F9-IO.SET



Step 3. Press **ZERO
ENTER** to enter setting, then press **ABS/REL** or **mm/inch radius** to choose the position setting (CH-0~CH-3)



Step 4. Press **ZERO
ENTER** to enter setting, press **ABS/REL** to change the

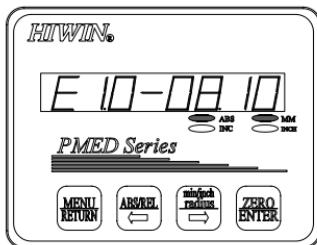
blinking number, and then press **ABS/REL** to change the value

Press **mm/inch
radius** to change to the next number When completely finished

setting the numbers, press **ZERO
ENTER** to confirm

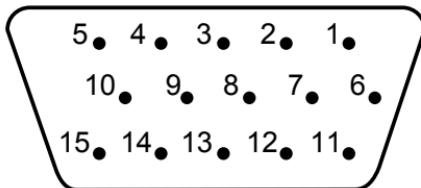
15. Software Version:

Function: The systems software version



When powered on, the panel will display the current software version for about 3 seconds

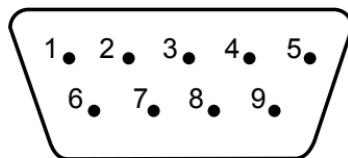
16. Description of Input Signal:



D-sub VGA 15 Pin Female

Pin	Signal	Pin	Signal	Pin	Signal
1	+5V	6	FG	11	A+(Analog)
2	GND	7	Z+	12	A-(Analog)
3	A+(Digital)	8	Z-	13	B+(Analog)
4	B+(Digital)	9	A-(Digital)	14	B-(Analog)
5	NC	10	B-(Digital)	15	NC

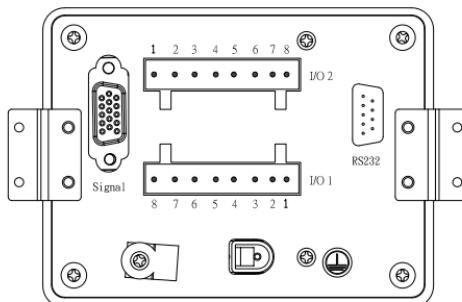
17. Description of RS-232 Signal:



D-sub 9 Pin male

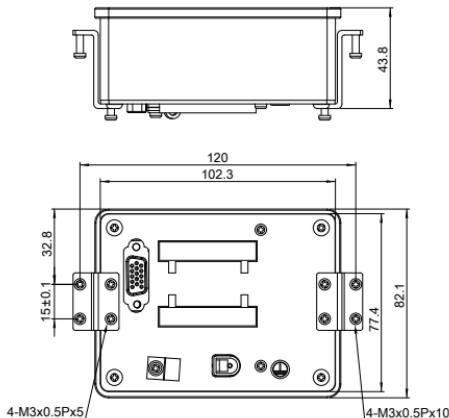
Pin	Signal	Pin	Signal
1	NC	6	NC
2	TXD	7	NC
3	RXD	8	NC
4	NC	9	NC
5	GND		

18. Description of Output Signal:



I/O 1		I/O 2	
Pin	Designation	Pin	Designation
1	NC	1	NC
2		2	
3	NC	3	NC
4		4	
5	Relay 0(CH-0)	5	Relay 2(CH-2)
6		6	
7	Relay 1(CH-1)	7	Relay 3(CH-3)
8		8	

19. Dimensions:



20. Parameter Defaults:

Function	Description	Default
F2-DIR	Counting Direction	POS(positive)
F3-ADC	Input Signal	ANA(analog signal)
F4-DOT	Decimal Point	mm: 0.001 inch: 0.000001
F5-DPI	Resolution	1 μm
F6-PCALL	Pre-Call	PSET 0
F7-PSET	Preset	PSET 0~PSET 7=0
F8-IO.USE	Relay Enable/Disable	CH-0~CH-3: OFF
F9-IO.SET	Relay Output	CH-0~CH-3=0

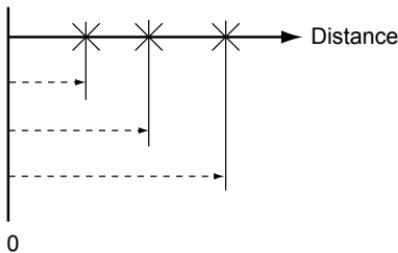
21. Appendix:

Panel display (number and letter (function) representation):

Name	LED Display	Name	LED Display	Name	LED Display
0	0	1	1	2	2
3	3	4	4	5	5
6	6	7	7	8	8
9	9	A	A	B	b
C	C	D	d	E	E
F	F	G	G	H	H
I	I	J	J	K	K
L	L	M	M	N	N
O	O	P	P	Q	Q
R	R	S	S	T	T
U	U	V	V	W	W
X	X	Y	Y	Z	Z

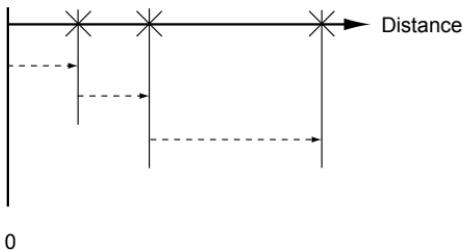
(2). Technical description:

(a). Absolute mode:



Has the same origin, the position of the origin can not be changed

(b). Relative mode:



The position of the origin can be changed based on your demand



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ISO 9001
FM57748



ISO 14001
EMS61827



TAIWAN
EXCELLENCE

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