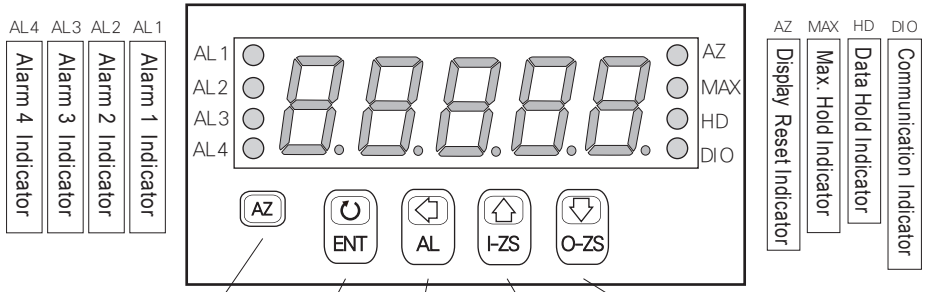
KEY FUNCTIONS



	Function Key	Enter Key & Save Key	Shift Key & Alarm Setting Key	Up Key & Display Setting Key	Down Key & A/O Setting Key	
Measuring Status	Enable the setting function	Enter to parameter groups	Hold for 3 sec. enter to Alarm Setpoint Modification	Hold for 3 sec. enter to Display Group Setting	Hold for 3 sec. enter to A/O Group Setting.	In any status can back to measuring status
Parameter Page			Enter to parameter setting	Back to the last parameter page	Go to the next parameter page	
Parameter Setting		Save the value	Move the cursor left	Increase the digit	Decrease the digit	

WIRING CONNECTION

Input Function

1	2	3	4	5	6
EXC+	INA	INB			COM

External Control Function

8	9	10	11
AZ	MAX HOLD		COM

Power

- AC Power: 12 13 (+ -) AC/DC 100~240V
- DC Power: 12 13 (+ -) DC 22~50V

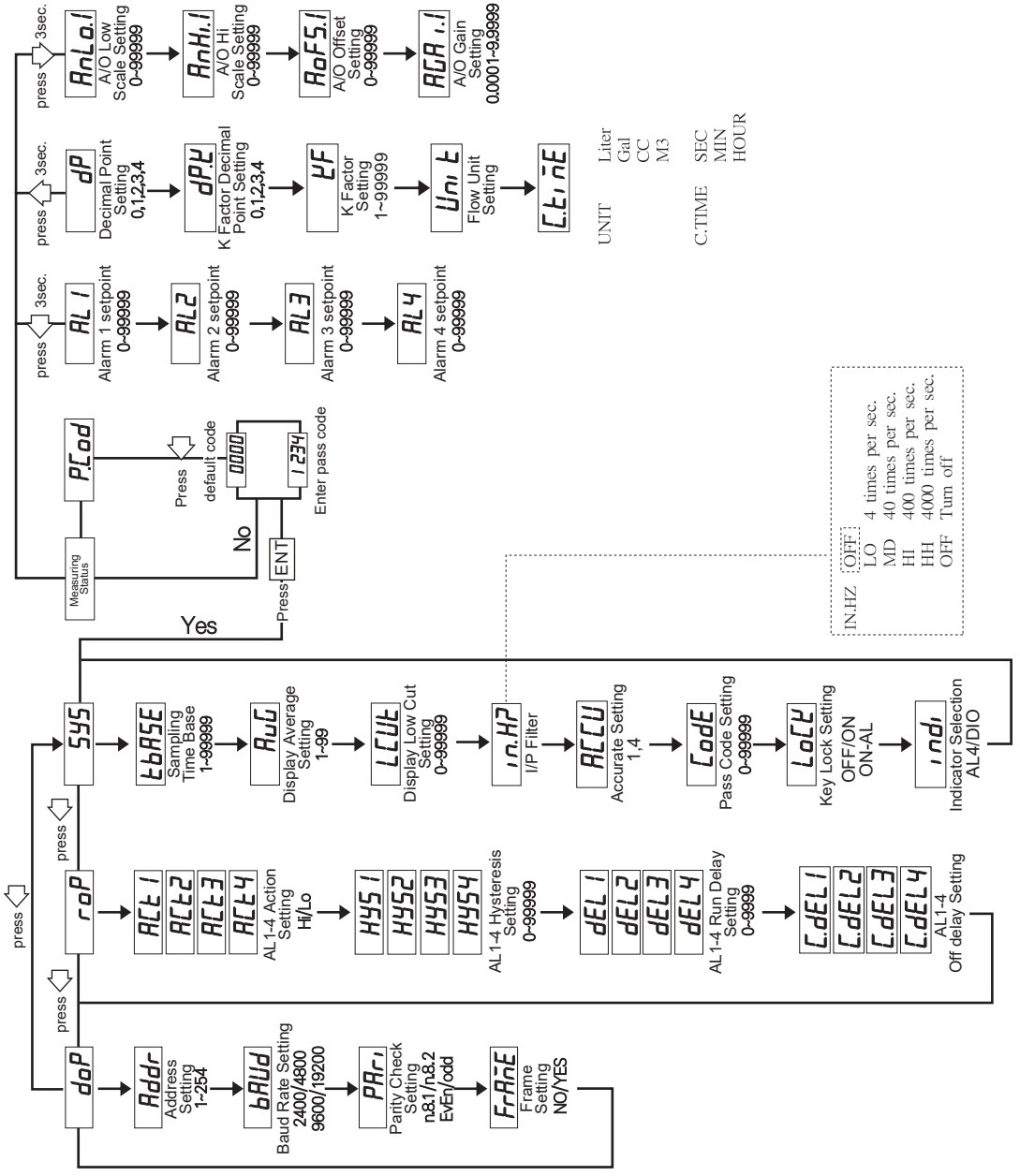
Output Function

- A/O output: 23 24 (+ -) A/O
- RS-485 output: 25 26 (+ -) RS-485

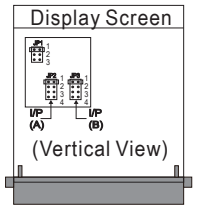
Relay Function

- Relay x1~3: 14 15 16 (A C B) AL1; 17 18 19 (A C B) AL2; 20 21 22 (A C B) AL3
- Relay x4: 14 15 16 (A C B) AL1; 17 18 (A C) AL2; 19 20 (A C) AL3; 21 22 (A C) AL4

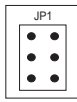
Programming Mode Operating Procedures



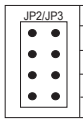
Input Signal Modification



**To Select the pin to modify the input signal for different sensors.
PS: In dual input type, excitation power must be the same.

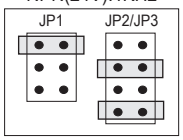


JUMPER	DEFINITION
1	Close: 24V
2	Close: 12V
3	Close: 5V

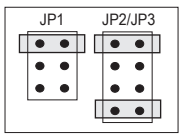


JUMPER	DEFINITION	
1	Open: 100KHz	Close:10KHz
2		Close:1KHz
3	Open: NPN; Close: PNP	
4	Open: PNP; Close: NPN	

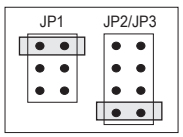
NPN(24V):1KHz



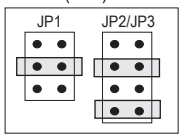
NPN(24V):10KHz



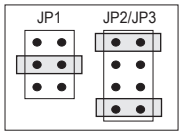
NPN(24V):100KHz



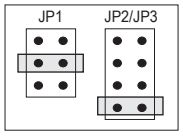
NPN(12V):1KHz



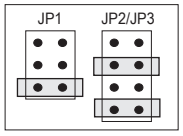
NPN(12V):10KHz



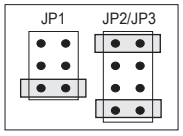
NPN(12V):100KHz



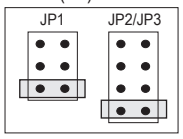
NPN(5V):1KHz



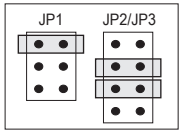
NPN(5V):10KHz



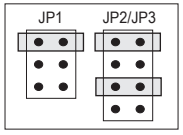
NPN(5V):100KHz



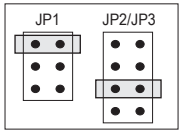
PNP(24V):1KHz



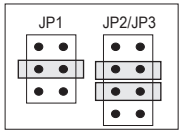
PNP(24V):10KHz



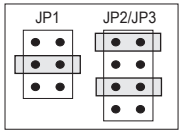
PNP(24V):100KHz



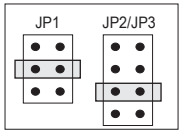
PNP(12V):1KHz



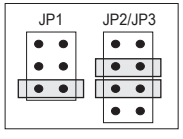
PNP(12V):10KHz



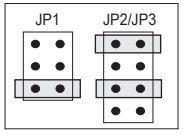
PNP(12V):100KHz



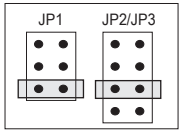
PNP(5V):1KHz



PNP(5V):10KHz



PNP(5V):100KHz



Modbus RTU Mode Protocol Address Table

Data: 16Bit / 32Bit, +/- is 8000~7FFF (-32768~32767), 80000000~7FFFFFFF(-2147483648~2147483647)

Modbus	HEX	Name	Descriptions	Act
40001	0000	ID	Model number identification; MFM-R is "01"	R
40002	0001			
40003	0002			
40004	0003	DP	Decimal point setting; range: 0000~0003 (0~3) 0:10^{0}, 1:10^{-1}, 2:10^{-2}, 3:10^{-3}	R/W
40005	0004	BAUD	Baud rate setting; range: 0000~0003 (0~3) 0:19200, 1:9600, 2:4800, 3:2400	R/W
40006	0005	PARI	Parity setting; range: 0000~0003 (0~3), 0:N.8.2., 1:N.8.1., 2:EVEN, 3:ODD	R/W
40007	0006	AVG	Display average setting; range: 0001~0063 (1~99)	R/W
40008	0007	LCUT	Display low cut setting; range: 0000~0063 (0~99)	R/W
40009	0008	ADDR	Address setting; range: 0000~00FF (0~255)	R/W
40019	0012	CODE	Pass code setting; range: 00000000~0001869F (0~99999) Hi Bit	R/W
40020	0013		Pass code setting; range: 00000000~0001869F (0~99999) Low Bit	R/W
40038	0025	PV	Range:FFFCF2C1~000F423F(-19999~99999)	R
40039	0026		Range:FFFCF2C1~000F423F(-19999~99999)	R
40045	002C	DISPLAY	Range:FFFFB1E1~0001869F(-19999~99999)	R
40046	002D		Range:FFFFB1E1~0001869F(-19999~99999)	R
				R
				R

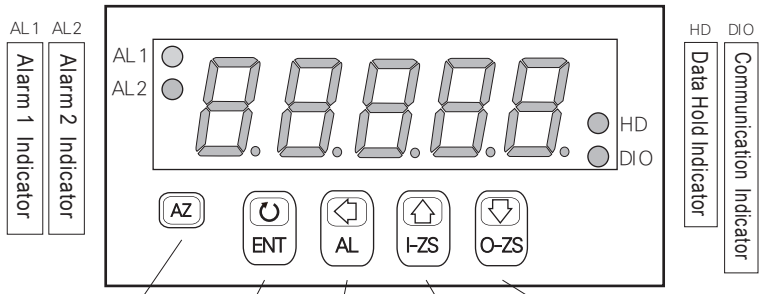
ERROR CODE OF SELF-DIAGNOSIS

E-00 **EEPROM reading / writing suffers the interference (about 1 million times).**

Old version.(Before 2021)

MFM-R 5 DIGITAL MICRO-PROCESS PULSE INPUT FLOW METER with 1-2 ALARMS / ANALOG OUTPUT / RS-485 **MANUAL**

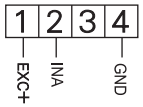
KEY FUNCTIONS



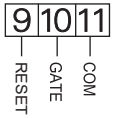
	Function Key	Enter Key & Save Key	Shift Key & Alarm Setting Key	Up Key & Display Setting Key	Down Key & A/O Setting Key	
Measuring Status	Enable the setting function	Enter to parameter groups	Hold for 3 sec. enter to Alarm Setpoint Modification	Hold for 3 sec. enter to Display Group Setting	Hold for 3 sec. enter to A/O Group Setting.	In any status can back to measuring status
Parameter Page			Enter to parameter setting	Back to the last parameter page	Go to the next parameter page	
Parameter Setting		Save the value	Move the cursor left	Increase the digit	Decrease the digit	

WIRING CONNECTION

Input Function

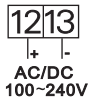


External Control Function



Power

- AC Power

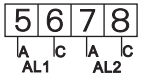


- DC Power

Output Function

- Relay*1 Output

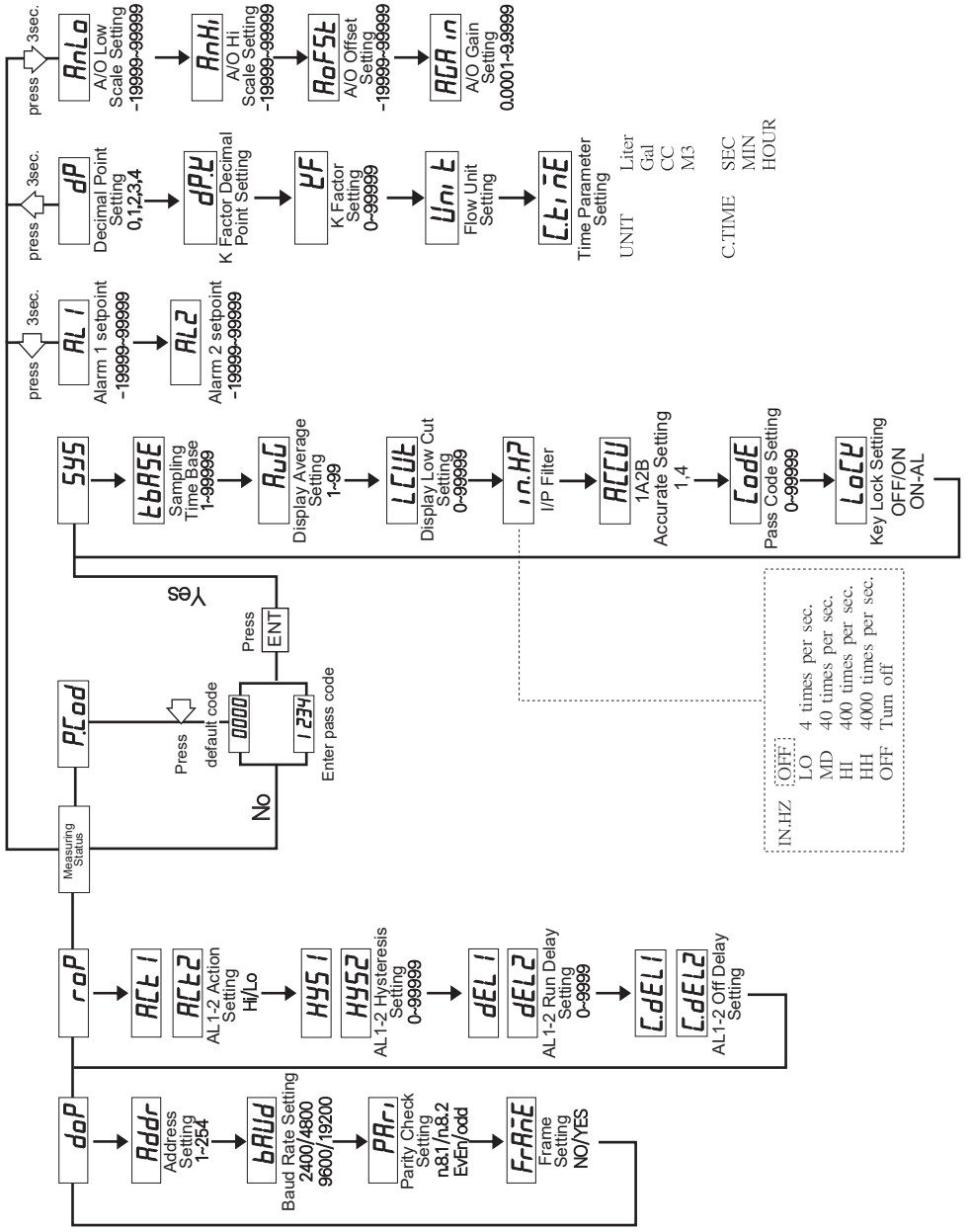
- Relay*2 Output



- Analog Output

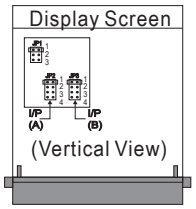
- RS485 Output

Programming Mode Operating Procedures

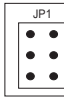


Old version.(Before 2021)

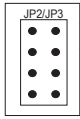
Input Signal Modification



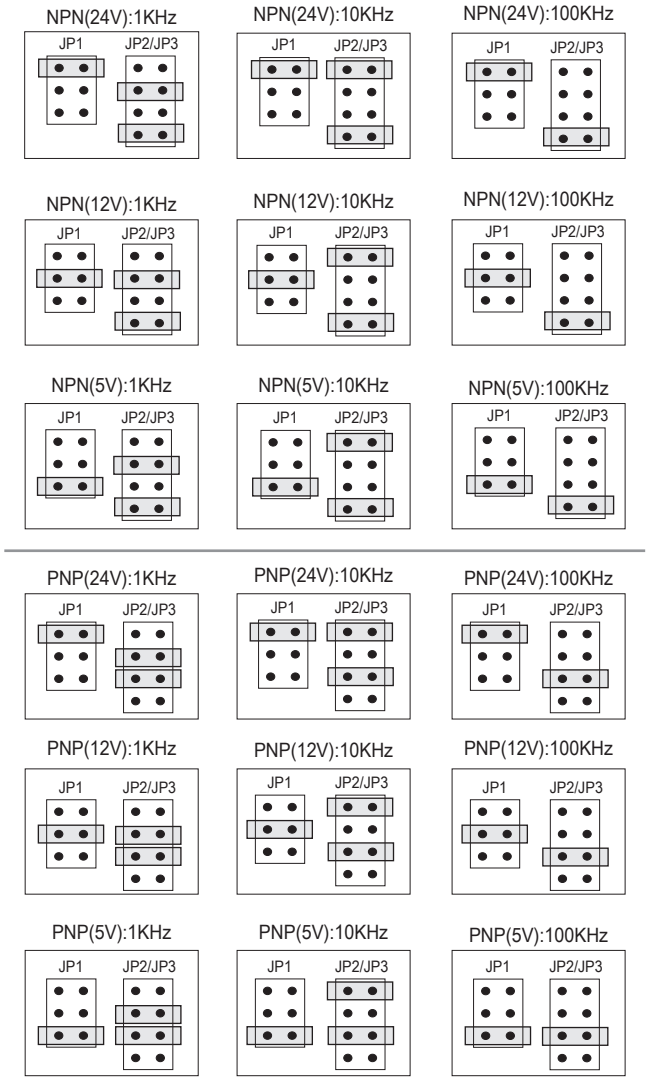
**To Select the pin to modify the input signal for different sensors.
PS: In dual input type, excitation power must be the same.



JUMPER	DEFINITION
1	Close: 24V
2	Close: 12V
3	Close: 5V



JUMPER	DEFINITION	
1	Open: 100KHz	Close:10KHz
2		Close:1KHz
3	Open: NPN; Close: PNP	
4	Open: PNP; Close: NPN	



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40007	0006	AVG	Display average setting; range: 0001~0063 (1~99)	R/W
40008	0007	LCUT	Display low cut setting; range: 0000~0063 (0~99)	R/W
40009	0008	ADDR	Address setting; range: 0000~00FF (0~255)	R/W
40019	0012	CODE	Pass code setting; Hi byte，range:0~1869F(0~99999)	R/W
40020	0013		Pass code setting; Lo byte，range:0~1869F(0~99999)	R/W
40037	0024	DISPLAY	Range:FFFFB1E1~1869F(-19999~99999)	R
40038	0025		Range:FFFFB1E1~1869F(-19999~99999)	R
40039	0026	DISPLAY	Range:FFFFB1E1~1869F(-19999~99999)	R
40040	0027		Range:FFFFB1E1~1869F(-19999~99999)	R
40046	002D	DISPLAY	Range:FFFFB1E1~1869F(-19999~99999)	R
40047	002E		Range:FFFFB1E1~1869F(-19999~99999)	R

ERROR CODE OF SELF-DIAGNOSIS

iofL	Input signal is over 120% of input range.
dofL	Input signal is over display range (999999).
E-00	EEPROM reading / writing suffers the interference (about 1 million times).