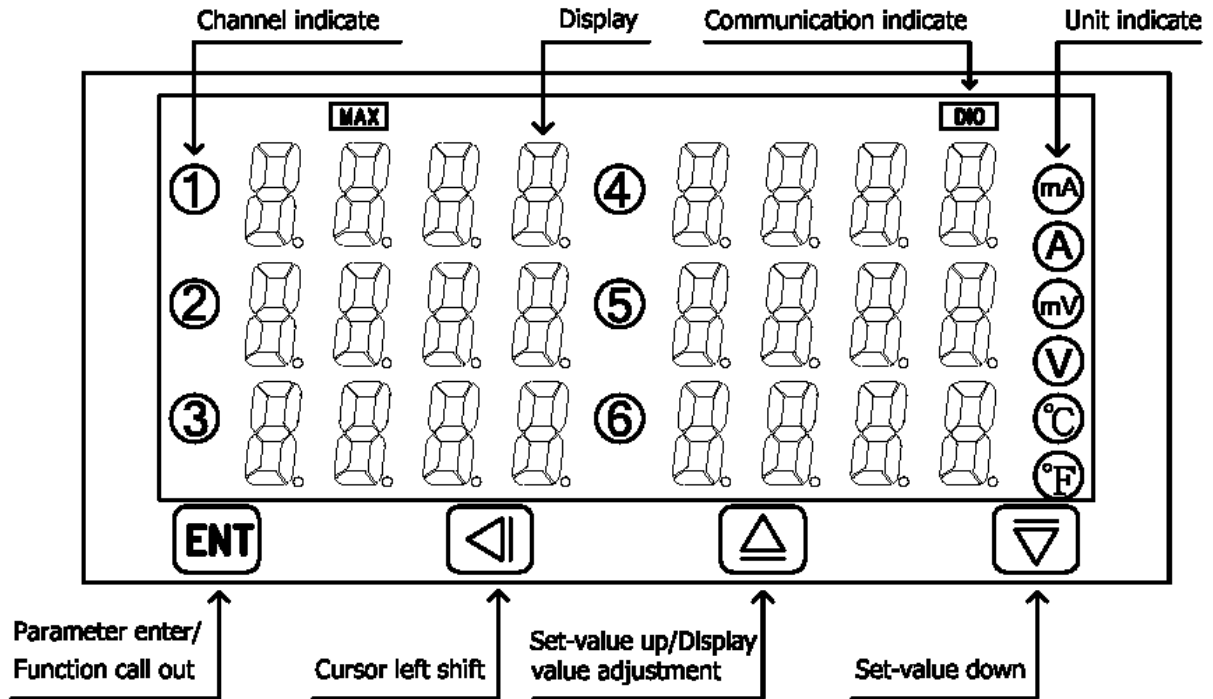


■ FEATURES

- ⊙Accuracy 0.1% FS ± 1 digit
- ⊙Measuring 6 channel Pt-100
- ⊙Input channel number (1~6) can be modified
- ⊙Unit °C/°F can be modified
- ⊙One digit decimal point can be modified
- ⊙RS485 communication interface,Protocol MODBUS RTU MODE
- ⊙BAUD RATE:38400/19200/9600/4800/2400
- ⊙Man-machine interface,easy to operate
- ⊙Flash/EE saving data safekeeping about 10 years
- ⊙Modified inside parameter must have pass code

■ Name of Parts



Key Introduce	Operation Manual
⊕ key function	1. In normal display, the key function is call out setting group 2. In parameter setting page, the key function is data ENTER and goto next page
◀ key function	1. Into parameter setting page, the parameter mark & data is alternate display, If need modify data can press ◀ key into setting procedure, The display is lock parameter data, this time must let off key about 0.2 sec ,press again, the cursor (twinkle express) is cycle moving left. (Key response about 0.2 sec.)
▲ key function	1. In normal display, The key function is call out adjustment display value (DZERO & DSPAN) page 2. Into parameter setting page, the parameter mark & data is alternate display, If need modify data can press ▲ key into setting procedure, The display is lock parameter data, this time must let off key about 0.2 sec ,press again, the parameter data will increment. (Key response about 0.2 sec.)
▼ key function	1. Into parameter setting page, the parameter mark & data is alternate display, If need modify data can press ▼ key into setting procedure, The display is lock parameter data, this time must let off key about 0.2 sec ,press again, the parameter data will decrement. (Key response about 0.2 sec.)
▲&▼ key function	1. In setting group or setting page press ▲ & ▼ key return normal display, but if in setting page the modify data will be lost
No key in anything	1. In setting group or setting page no key in anything about 2 minutes, return normal display, but if in setting page the modify data will be lost

Step	Parameter Mark Description	Parameter Mark	Operation Manual
1	Normal display	1 2 3 4	1. Press ⊕ key into P.COD setting page

2	P.COD (Pass Code Input Page) Default=0	P.C o d	1.Key in 4 digit pass code with ◀&▶&▼ key 2.Press Ⓜ key,the pass code is correct into setting group , otherwise,return normal display
		0000	
3	SYS (System Setting Group)	S Y S	1.Select setting group with ◀ key 2.Press Ⓜ key into setting page of selection setting group
	DOP (Communication Setting)	d o P	
4	SYS (System Setting Group)	S Y S	1.Press ◀ key decide SYS setting group 2.press Ⓜ key into CH-S setting page
4-1	CH-S (Input Channel Number Select) Default = 6	C H - S	1.Decide input channel number with ▲&▼ key(1 to 6) 2.Press Ⓜ key enter data and into DP setting page
		0006	
4-2	DP (Decimal Point) Default = 1	d P	1.Decide Decimal Point with ▲&▼ key(0 to 1) 2.Press Ⓜ key enter data and into UNIT setting page
		0001	
4-3	UNIT (Temperature Unit) Default = °C	U n i t	1.Decide Temperature Unit with ▲&▼ key (°C/°F) 2.Press Ⓜ key enter data and into LCUT setting page
		o c	
4-4	LCUT (Low Cut) Default = 0	L C U T	1.Decide low cut with ◀&▶&▼ key(0~99) 2.Press Ⓜ key enter data and into CODE setting page
		0000	
4-5	CODE (Pass Code) Default = 0	C o d e	1.Decide pass code with ◀&▶&▼ key(0~9999) 2.Press Ⓜ key enter data and into LOCK setting page
		0000	
4-6	LOCK (Parameter Lock) Default = NO	L o c k	1.Decide parameter lock with ▲&▼ key(NO or YES) 2.Press Ⓜ key enter data and return SYS setting group
		n o	
4-7	SYS (System Setting Group)	S Y S	1.Select setting group with ◀ key 2.Press Ⓜ key into setting page of selection group
5	DOP (Communication setting group)	d o P	1.Press ◀ key decide DOP setting group 2.Press Ⓜ key into ADDR setting page
5-1	ADDR (Communication Address setting page) Default =0	A d d r	1.Decide Communication address with ◀&▶&▼ key(0~255) 2.Press Ⓜ key enter data and into BAUD setting page
		0000	
5-2	BAUD (Communication Baud Rate setting page) Default = 19K2	b A U D	1.Decide baud rate with ▲&▼ key(38K4/19K2/9600/4800/2400) 2.Press Ⓜ key enter data and into PARI setting page
		19K2	
5-3	PARI(Communication Parity Check setting page) Default = n.8.2.	P A R ,	1.Decide parity check with ▲&▼ key(n82,n81,even,odd) 2.Press Ⓜ key enter data and return DOP setting group
		n.8.2.	
5-4	DOP (Communication setting group)	d o P	1.Select setting group with ◀ key 2.Press Ⓜ key into setting page of selection group
Step	Parameter Mark Description	Parameter Mark	Operation Manual
6	Normal display	1234	Press ▲ key about 3 sec,into DZ-1 setting page
6-1	DZ-1 (Display Zero Adjust -Channel 1)	d Z - 1	1.Adjustment channel 1 display zero with ▲&▼key 2.Press Ⓜkey enter data and into DS-1 setting page Note:Adjust DZ-1 value while minimum display value error
		00.00	
6-2	DS-1 (Display Span Adjust -Channel 1)	d S - 1	1.Adjustment channel 1 display span with ▲&▼key 2.Press Ⓜkey enter data and into DZ-2 setting page Note:Adjust DS-1 value while maximum display value error
		10.00	
6-3	DZ-2 (Display Zero Adjust -Channel 2)	d Z - 2	1.Adjustment channel 2 display zero with ▲&▼key 2.Press Ⓜkey enter data and into DS-2 setting page Note:Adjust DZ-2 value while minimum display value error
		00.00	
6-4	DS-2 (Display Span Adjust -Channel 2)	d S - 2	1.Adjustment channel 2 display span with ▲&▼key 2.Press Ⓜkey enter data and into DZ-3 setting page Note:Adjust DS-2 value while maximum display value error
		10.00	

6-5	DZ-3 (Display Zero Adjust -Channel 3)	дЗ-3	1.Adjustment channel 3 display zero with ▲&▼key 2.Press Ⓜkey enter data and into DS-3 setting page Note:Adjust DZ-3 value while minimum display value error
		00.00	
6-6	DS-3 (Display Span Adjust -Channel 3)	дS-3	1.Adjustment channel 3 display span with ▲&▼key 2.Press Ⓜkey enter data and into DZ-4 setting page Note:Adjust DS-3 value while <b>maximum</b> display value error
		10.00	
6-7	DZ-4 (Display Zero Adjust -Channel 4)	дЗ-4	1.Adjustment channel 4 display zero with ▲&▼key 2.Press Ⓜkey enter data and into DS-4 setting page Note:Adjust DZ-4 value while minimum display value error
		00.00	
6-8	DS-4 (Display Span Adjust -Channel 4)	дS-4	1.Adjustment channel 4 display span with ▲&▼key 2.Press Ⓜkey enter data and into DZ-5 setting page Note:Adjust DS-4 value while <b>maximum</b> display value error
		10.00	
6-9	DZ-5 (Display Zero Adjust -Channel 5)	дЗ-5	1.Adjustment channel 5 display zero with ▲&▼key 2.Press Ⓜkey enter data and into DS-5 setting page Note:Adjust DZ-5 value while minimum display value error
		00.00	
6-10	DS-5 (Display Span Adjust -Channel 5)	дS-5	1.Adjustment channel 5 display span with ▲&▼key 2.Press Ⓜkey enter data and into DZ-6 setting page Note:Adjust DS-5 value while <b>maximum</b> display value error
		10.00	
6-11	DZ-6 (Display Zero Adjust -Channel 6)	дЗ-6	1.Adjustment channel 6 display zero with ▲&▼key 2.Press Ⓜkey enter data and into DS-6 setting page Note:Adjust DZ-6 value while minimum display value error
		00.00	
6-12	DS-6 (Display Span Adjust -Channel 6)	дS-6	1.Adjustment channel 6 display span with ▲&▼key 2.Press Ⓜkey enter data and return normal display Note:Adjust DS-6 value while <b>maximum</b> display value error
		10.00	

Appendix	Error Mark description	Error Mark	Analyze & Description
1	Temperature over range error detect	д o F L	1.Temperature over display range (9999) or over <b>measurable</b> range (850°C)
2	Display under range error detect	- д o F	1.Temperature under display range (-1999) or under <b>measurable</b> range (-200°C)
3	Sensor burnout error detect	o P E n	1.Pt-100 sensor burnout
4	EEPROM error detect	E - 00	1.External interference when EEPROM read/write 2.EEPROM write over 100,000 cycles(guarantee 10 years) Please power reset,if still display E-00,doing <b>below</b> step: 1.E-00 & No alternate display for inquire reset EEPROM 2.Decide Yes with ▲&▼ key,press Ⓜ key return normal display 3. EEPROM was reset,Please follow step 1-6 setting again
		n o	
		Y E S	

## MM8A-C Modbus RTU Mode Protocol Address Map

Data format 16Bit, sign bit, 8000~7FFF(-32768~32767)

Address	Name	Description	Accept
0000	LOCK	Panel Lock,Input Range 0000~0001(0~1) 0:NO,1:YES	R/W
0001	CH_S	Input Channel Number Select,Input Range 0001~0006(1~6)	R/W
0002	DP	Decimal Point,Input Range0000~0001(0~1) 0:10 <sup>0</sup> ,1:10 <sup>-1</sup>	R/W
0003	UNIT	Temperature Unit,Input Range0000~0001(0~1) 0:°C,1:°F	R/W
0004	ADDR	Communication Address,Input Range 0000~00FF(0~255)	R/W
0005	BAUD	Baud Rate,Input Range 0000~0004(0~4) 0:38K4,1:19K2,2:9600,3:4800,4:2400	R/W
0006	PARI	Parity Check,Input Range 0000~0003(0~3) 0:N.8.2,1:N.8.1,2:EVEN,3:ODD	R/W
0007	LCUT	Low Cut,Input Range FF9D~0063(-99~99)	R/W
0008	CODE	Pass Code,Input Range 0000~270F(0~9999)	R/W
0009	INLO_1	Channel 1 Input Low Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
000a	INLO_2	Channel 2 Input Low Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
000b	INLO_3	Channel 3 Input Low Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
000c	INLO_4	Channel 4 Input Low Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
000d	INLO_5	Channel 5 Input Low Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
000e	INLO_6	Channel 6 Input Low Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
000f	INHI_1	Channel 1 Input High Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
0010	INHI_2	Channel 2 Input High Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
0011	INHI_3	Channel 3 Input High Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
0012	INHI_4	Channel 4 Input High Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
0013	INHI_5	Channel 5 Input High Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
0014	INHI_6	Channel 6 Input High Calibrate Value,Input Range 8000~7FFF(-32768~32767)	R/W
0015	DISPLAY1	Channel 1 Normal Display Value,Display Range F831~270F(-1999~9999)	R
0016	DISPLAY2	Channel 2 Normal Display Value,Display Range F831~270F(-1999~9999)	R
0017	DISPLAY3	Channel 3 Normal Display Value,Display Range F831~270F(-1999~9999)	R
0018	DISPLAY4	Channel 4 Normal Display Value,Display Range F831~270F(-1999~9999)	R
0019	DISPLAY5	Channel 5 Normal Display Value,Display Range F831~270F(-1999~9999)	R
001a	DISPLAY6	Channel 6 Normal Display Value,Display Range F831~270F(-1999~9999)	R