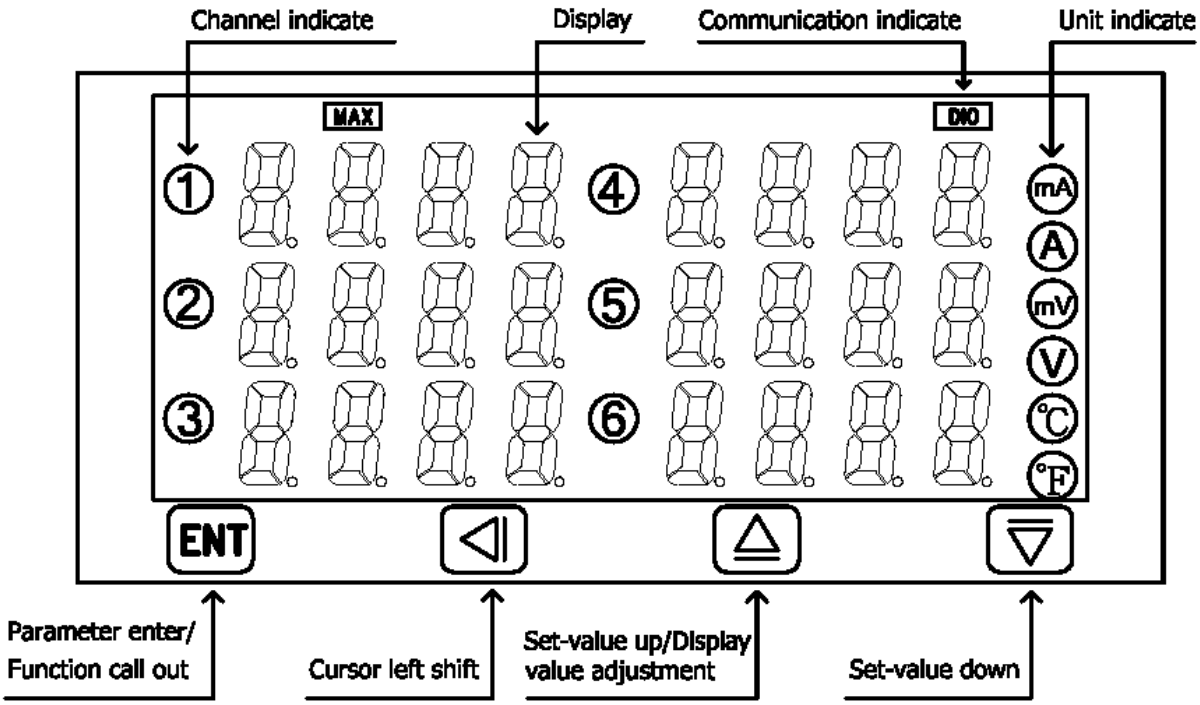
AXE MICROPROCESS 6 CHANNEL ANALOG INPUT PANEL METER MM8A-D

■ FEATURES

◎Accuracy 0.05%F.S.±1(DCV)/0.2%F.S.±0.5℃(TC)
◎Measuring 6 channel DCV/TC(K,J,E,T,R,S,B)
◎Input channel number(1~6)can be modified
◎Temperature unit(℃/℉)can be modified
◎CJC traceability < ±0.5℃(0~70℃)
◎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
ENT 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	1234	1.Press ENT key into P.COD setting page
2	P.COD (Pass Code Input Page) Default=0	P.Cod 0000	1.Key in 4 digit pass code with ◀&▲&▼ key 2.Press ENT key,the pass code is correct into setting group , otherwise,return normal display

3	SYS (System Setting Group)	SYS	1.Select setting group with ◀ key 2.Press EN key into setting page of selection setting group
	DSP (Display Value Adjust)	dSP	
	DOP (Communication Setting)	doP	
4	SYS (System Setting Group)	SYS	1.Press ◀ key decide SYS setting group 2.Press EN key into CH-S setting page
4-1	CH-S (Input Channel Number Select) Default = 6	CH-S 0006	1.Decide input channel number with ▲&▼ key(1 to 6) 2.Press EN key enter data and into TYPE setting page
4-2	TYPE (Input Range Type) Default = K-TYPE	TYPE E 	1.Decide input range type with ▲&▼ key (25mV/50mV/0.1V/0.5V/1V/K/J/E/T/R/S/B) 2.If TYPE select DCV(25mV/50mV/0.1V/0.5V/1V),Press EN key enter data and into Step 4-6 AVG setting page 3.If TYPE select Thermocouple(K/J/E/T/R/S/B),Press EN key enter data and into Step 4-3 DP setting page
4-3	DP(Decimal Point) Default = 1	dP 0001	1.Decide decimal point with ▲&▼ key(0~1) 2.Press EN key enter data and into UNIT setting page
4-4	UNIT(Temperature Unit) Default = °C	Unit °C	1.Decide Temperature Unit with ▲&▼ key(°C/°F) 2.Press EN key enter data and into CJC setting page
4-5	CJC(Cold Junction Compen-Sation) Default = ON	CJC on	1.Decide Cold Junction CompenSation with ▲&▼ key (ON/OFF) 2.Press EN key enter data and into AVG setting page
4-6	AVG (Average) Default = 5	AvG 0005	1.Decide display average times with ▲&▼ key(1~10) 2.Press EN key enter data and into LCUT setting page
4-7	LCUT (Low Cut) Default = 0	LCUt 0000	1.Decide low cut with ◀&▲&▼ key(0~99) 2.Press EN key enter data and into CODE setting page
4-8	CODE (Pass Code) Default = 0	CodE 0000	1.Decide pass code with ◀&▲&▼ key(0~9999) 2.Press EN key enter data and into LOCK setting page
4-9	LOCK (Parameter Lock) Default = NO	LoCK no	1.Decide parameter lock with ▲&▼ key(NO or YES) 2.Press EN key enter data and return SYS setting group
4-10	SYS (System Setting Group)	SYS	1.Select setting group with ◀ key 2.Press EN key into setting page of selection group

NOTE:If TYPE select Thermocouple(K/J/E/T/R/S/B),the Display Value Adjust group(DSP) is not appear

5	DSP (Display Value Adjust group)	dSP	1.Press ◀ key decide DSP setting group 2.Press EN key into DP-1 setting page
5-1	DP-1 (Decimal Point-Channel 1) Default = 2	dP-1 0002	1.Decide channel 1 decimal point with ▲&▼ key(0~3) 2.Press EN key enter data and into DL-1 setting page
5-2	DL-1 (Display Low-Channel 1) Default = 00.00	dL-1 00.00	1.Decide channel 1 display low with ◀&▲&▼ key (-1999~9999) 2.Press EN key enter data and into DH-1 setting page
5-3	DH-1 (Display High-Channel 1) Default = 10.00	dH-1 10.00	1.Decide channel 1 display high with ◀&▲&▼ key (-1999~9999) 2.Press EN key enter data and into DP-2 setting page
5-4	DP-2 (Decimal Point-Channel 2) Default = 2	dP-2 0002	1.Decide channel 2 decimal point with ▲&▼ key(0~3) 2.Press EN key enter data and into DL-2 setting page
5-5	DL-2 (Display Low-Channel 2) Default = 00.00	dL-2 00.00	1.Decide channel 2 display low with ◀&▲&▼ key (-1999~9999) 2.Press EN key enter data and into DH-2 setting page
5-6	DH-2 (Display High-Channel 2) Default = 10.00	dH-2 10.00	1.Decide channel 2 display high with ◀&▲&▼ key (-1999~9999) 2.Press EN key enter data and into DP-3 setting page
5-7	DP-3 (Decimal Point-Channel 3) Default = 2	dP-3 0002	1.Decide channel 3 decimal point with ▲&▼ key(0~3) 2.Press EN key enter data and into DL-3 setting page

5-8	DL-3 (Display Low-Channel 3) Default = 00.00	dL-3 00.00	1.Decide channel 3 display low with ◀&▲&▼ key (-1999~9999) 2.Press ENT key enter data and into DH-3 setting page
5-9	DH-3 (Display High-Channel 3) Default = 10.00	dH-3 10.00	1.Decide channel 3 display high with ◀&▲&▼ key (-1999~9999) 2.Press ENT key enter data and into DP-4 setting page
5-10	DP-4 (Decimal Point-Channel 4) Default = 2	dP-4 0002	1.Decide channel 4 decimal point with ▲&▼ key(0~3) 2.Press ENT key enter data and into DL-4 setting page
5-11	DL-4 (Display Low-Channel 4) Default = 00.00	dL-4 00.00	1.Decide channel 4 display low with ◀&▲&▼ key (-1999~9999) 2.Press ENT key enter data and into DH-4 setting page
5-12	DH-4 (Display High-Channel 4) Default = 10.00	dH-4 10.00	1.Decide channel 4 display high with ◀&▲&▼ key (-1999~9999) 2.Press ENT key enter data and into DP-5 setting page
5-13	DP-5 (Decimal Point-Channel 5) Default = 2	dP-5 0002	1.Decide channel 5 decimal point with ▲&▼ key(0~3) 2.Press ENT key enter data and into DL-5 setting page
5-14	DL-5 (Display Low-Channel 5) Default = 00.00	dL-5 00.00	1.Decide channel 5 display low with ◀&▲&▼ key (-1999~9999) 2.Press ENT key enter data and into DH-5 setting page
5-15	DH-5 (Display High-Channel 5) Default = 10.00	dH-5 10.00	1.Decide channel 5 display high with ◀&▲&▼ key (-1999~9999) 2.Press ENT key enter data and into DP-6 setting page
5-16	DP-6 (Decimal Point-Channel 6) Default = 2	dP-6 0002	1.Decide channel 6 decimal point with ▲&▼ key(0~3) 2.Press ENT key enter data and into DL-6 setting page
5-17	DL-6 (Display Low-Channel 6) Default = 00.00	dL-6 00.00	1.Decide channel 6 display low with ◀&▲&▼ key (-1999~9999) 2.Press ENT key enter data and into DH-6 setting page
5-18	DH-6 (Display High-Channel 6) Default = 10.00	dH-6 10.00	1.Decide channel 6 display high with ◀&▲&▼ key (-1999~9999) 2.Press ENT key enter data and return DSP setting group
5-19	DSP (Display Value Adjust group)	dSP	1.Select setting group with ◀ key 2.Press ENT key into setting page of selection group
6	DOP (Communication setting group)	doP	1.Press ◀ key decide DOP setting group 2.Press ENT key into ADDR setting page
6-1	ADDR (Communication Address setting page) Default =0	Addr 0000	1.Decide Communication address with ◀&▲&▼ key(0~255) 2.Press ENT key enter data and into BAUD setting page
6-2	BAUD (Communication Baud Rate setting page) Default = 19K2	bAUd 19E2	1.Decide baud rate with ▲&▼ key(38K4/19K2/9600/4800/2400) 2.Press ENT key enter data and into PARI setting page
6-3	PARI(Communication Parity Check setting page) Default = n.8.2.	PAr1 n.8.2.	1.Decide parity check with ▲&▼ key(n82,n81,even,odd) 2.Press ENT key enter data and return DOP setting group
6-4	DOP (Communication setting group)	doP	1.Select setting group with ◀ key 2.Press ENT key into setting page of selection group

Step	Parameter Mark Description	Parameter Mark	Operation Manual
7	Normal display	1234	Press ▲ key about 3 sec,into DZ-1 setting page
7-1	DZ-1 (Display Zero Adjust -Channel 1)	dZ-1 00.00	1.Adjustment channel 1 display zero with ▲&▼key 2.Press ENTkey enter data and into DS-1 setting page Note:Adjust DZ-1 value while minimum display value error
7-2	DS-1 (Display Span Adjust -Channel 1)	dS-1 10.00	1.Adjustment channel 1 display span with ▲&▼key 2.Press ENTkey enter data and into DZ-2 setting page Note:Adjust DS-1 value while maximum display value error

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

Appendix	Error Mark description	Error Mark	Analyze & Description
1	A/D Converter error detect	AdEr	1.DCV input signal over range(approx. rated 120%) 2.Inside ADC circuit damage
2	Display over range error detect	doFL	1.Input signal over display range (9999) or over measurable range
3	Display under range error detect	-doF	1.Input signal under display range(-1999) or under measurable range
4	CJC over range error detect	CoFL	1.CJC signal over measurable range(0~125°C)
5	CJC under range error detect	-CoF	1.CJC signal under measurable range(0~125°C)
6	Sensor burnout error detect	oPEn	1.Thermocouple sensor burnout
7	EEPROM error detect	E-00 no YES	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 below step: 1.E-00 & No alternate display for inquire reset EEPROM 2.Decide Yes with ▲&▼ key,press EN key return normal display 3.EEPROM was reset,Please follow step 1~7 setting again

MM8A-D Modbus RTU Mode Protocol Address Map
Data format 16Bit, sign bit, 8000~7FFF(-32768~32767)

Address	Name	Description	Accep
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	TYPE	Input Range Type,Input Range 0000~000B(0~11)0:25mV,1:50mV,2:0.1V,3:0.5V, 4:1V,5:TYPE K,6:TYPE J,7:TYPE E,8:TYPE T,9:TYPE R,10:TYPE S,11:TYPE B	R/W
0003	DP	Thermocouple Decimal Point,Input Range 0000~0001(0~1) 0:10^{0},1:10^{-1}	R/W
0004	UNIT	Temperature Unit,Input Range 0000~0001(0~1) 0:°C,1:°F	R/W
0005	CJC	Cold Junction CompenSation,Input Range 0000~0001(0~1) 0:ON,1:OFF	R/W
0006	ADDR	Communication Address,Input Range 0000~00FF(0~255)	R/W
0007	BAUD	Baud Rate,Input Range 0000~0004(0~4) 0:38K4,1:19K2,2:9600,3:4800,4:2400	R/W
0008	PARI	Parity Check,Input Range 0000~0003(0~3) 0:N.8.2,1:N.8.1,2:EVEN,3:ODD	R/W
0009	AVG	Display Average Times,Input Range 0001~000a(1~10)	R/W
000a	LCUT	Low Cut,Input Range FF9D~0063(-99~99)	R/W
000b	DP_1	Channel 1 Decimal Point,Input Range 0000~0003(0~3) 0:10^{0},1:10^{-1},2:10^{-2},3:10^{-3}	R/W
000c	DP_2	Channel 2 Decimal Point,Input Range 0000~0003(0~3) 0:10^{0},1:10^{-1},2:10^{-2},3:10^{-3}	R/W
000d	DP_3	Channel 3 Decimal Point,Input Range 0000~0003(0~3) 0:10^{0},1:10^{-1},2:10^{-2},3:10^{-3}	R/W
000e	DP_4	Channel 4 Decimal Point,Input Range 0000~0003(0~3) 0:10^{0},1:10^{-1},2:10^{-2},3:10^{-3}	R/W
000f	DP_5	Channel 5 Decimal Point,Input Range 0000~0003(0~3) 0:10^{0},1:10^{-1},2:10^{-2},3:10^{-3}	R/W
0010	DP_6	Channel 6 Decimal Point,Input Range 0000~0003(0~3) 0:10^{0},1:10^{-1},2:10^{-2},3:10^{-3}	R/W
0011	DL_1	Channel 1 Display Low , Input Range F831~270F(-1999~9999)	R/W
0012	DL_2	Channel 2 Display Low , Input Range F831~270F(-1999~9999)	R/W
0013	DL_3	Channel 3 Display Low , Input Range F831~270F(-1999~9999)	R/W
0014	DL_4	Channel 4 Display Low , Input Range F831~270F(-1999~9999)	R/W
0015	DL_5	Channel 5 Display Low , Input Range F831~270F(-1999~9999)	R/W
0016	DL_6	Channel 6 Display Low , Input Range F831~270F(-1999~9999)	R/W
0017	DH_1	Channel 1 Display High, Input Range F831~270F(-1999~9999)	R/W
0018	DH_2	Channel 2 Display High, Input Range F831~270F(-1999~9999)	R/W
0019	DH_3	Channel 3 Display High, Input Range F831~270F(-1999~9999)	R/W
001a	DH_4	Channel 4 Display High, Input Range F831~270F(-1999~9999)	R/W
001b	DH_5	Channel 5 Display High, Input Range F831~270F(-1999~9999)	R/W
001c	DH_6	Channel 6 Display High, Input Range F831~270F(-1999~9999)	R/W
001d	CODE	Pass Code,Input Range 0000~270F(0~9999)	R/W
001e	INLO[0][0]	25mV TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
001f	INLO[0][1]	25mV TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0020	INLO[0][2]	25mV TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0021	INLO[0][3]	25mV TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0022	INLO[0][4]	25mV TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0023	INLO[0][5]	25mV TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0024	INLO[1][0]	50mV TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0025	INLO[1][1]	50mV TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0026	INLO[1][2]	50mV TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0027	INLO[1][3]	50mV TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0028	INLO[1][4]	50mV TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0029	INLO[1][5]	50mV TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
002a	INLO[2][0]	0.1V TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W

002b	INLO[2][1]	0.1V TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
002c	INLO[2][2]	0.1V TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
002d	INLO[2][3]	0.1V TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
002e	INLO[2][4]	0.1V TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
002f	INLO[2][5]	0.1V TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0030	INLO[3][0]	0.5V TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0031	INLO[3][1]	0.5V TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0032	INLO[3][2]	0.5V TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0033	INLO[3][3]	0.5V TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0034	INLO[3][4]	0.5V TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0035	INLO[3][5]	0.5V TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0036	INLO[4][0]	1V TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0037	INLO[4][1]	1V TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0038	INLO[4][2]	1V TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0039	INLO[4][3]	1V TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
003a	INLO[4][4]	1V TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
003b	INLO[4][5]	1V TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
003c	INLO[5][0]	K TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
003d	INLO[5][1]	K TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
003e	INLO[5][2]	K TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
003f	INLO[5][3]	K TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0040	INLO[5][4]	K TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0041	INLO[5][5]	K TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0042	INLO[6][0]	J TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0043	INLO[6][1]	J TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0044	INLO[6][2]	J TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0045	INLO[6][3]	J TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0046	INLO[6][4]	J TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0047	INLO[6][5]	J TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0048	INLO[7][0]	E TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0049	INLO[7][1]	E TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
004a	INLO[7][2]	E TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
004b	INLO[7][3]	E TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
004c	INLO[7][4]	E TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
004d	INLO[7][5]	E TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
004e	INLO[8][0]	T TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
004f	INLO[8][1]	T TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0050	INLO[8][2]	T TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0051	INLO[8][3]	T TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0052	INLO[8][4]	T TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0053	INLO[8][5]	T TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0054	INLO[9][0]	R TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0055	INLO[9][1]	R TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0056	INLO[9][2]	R TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0057	INLO[9][3]	R TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0058	INLO[9][4]	R TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W

0059	INLO[9][5]	R TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
005a	INLO[10][0	S TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
005b	INLO[10][1	S TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
005c	INLO[10][2	S TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
005d	INLO[10][3	S TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
005e	INLO[10][4	S TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
005f	INLO[10][5	S TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0060	INLO[11][0	B TYPE Channel 1 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0061	INLO[11][1	B TYPE Channel 2 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0062	INLO[11][2	B TYPE Channel 3 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0063	INLO[11][3	B TYPE Channel 4 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0064	INLO[11][4	B TYPE Channel 5 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0065	INLO[11][5	B TYPE Channel 6 Input Low Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0066	INHI[0][0]	25mV TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0067	INHI[0][1]	25mV TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0038	INHI[0][2]	25mV TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0069	INHI[0][3]	25mV TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
006a	INHI[0][4]	25mV TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
006b	INHI[0][5]	25mV TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
006c	INHI[1][0]	50mV TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
006d	INHI[1][1]	50mV TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
006e	INHI[1][2]	50mV TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
006f	INHI[1][3]	50mV TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0070	INHI[1][4]	50mV TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0071	INHI[1][5]	50mV TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0072	INHI[2][0]	0.1V TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0073	INHI[2][1]	0.1V TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0074	INHI[2][2]	0.1V TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0075	INHI[2][3]	0.1V TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0076	INHI[2][4]	0.1V TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0077	INHI[2][5]	0.1V TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0078	INHI[3][0]	0.5V TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0079	INHI[3][1]	0.5V TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
007a	INHI[3][2]	0.5V TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
007b	INHI[3][3]	0.5V TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
007c	INHI[3][4]	0.5V TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
007d	INHI[3][5]	0.5V TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
007e	INHI[4][0]	1V TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
007f	INHI[4][1]	1V TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0080	INHI[4][2]	1V TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0081	INHI[4][3]	1V TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0082	INHI[4][4]	1V TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0083	INHI[4][5]	1V TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0084	INHI[5][0]	K TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0085	INHI[5][1]	K TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0086	INHI[5][2]	K TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W

0087	INHI[5][3]	K TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0088	INHI[5][4]	K TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0089	INHI[5][5]	K TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
008a	INHI[6][0]	J TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
008b	INHI[6][1]	J TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
008c	INHI[6][2]	J TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
008d	INHI[6][3]	J TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
008e	INHI[6][4]	J TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
008f	INHI[6][5]	J TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0090	INHI[7][0]	E TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0091	INHI[7][1]	E TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0092	INHI[7][2]	E TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0093	INHI[7][3]	E TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0094	INHI[7][4]	E TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0095	INHI[7][5]	E TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0096	INHI[8][0]	T TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0097	INHI[8][1]	T TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0098	INHI[8][2]	T TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
0099	INHI[8][3]	T TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
009a	INHI[8][4]	T TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
009b	INHI[8][5]	T TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
009c	INHI[9][0]	R TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
009d	INHI[9][1]	R TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
009e	INHI[9][2]	R TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
009f	INHI[9][3]	R TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00a0	INHI[9][4]	R TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00a1	INHI[9][5]	R TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00a2	INHI[10][0	S TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00a3	INHI[10][1	S TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00a4	INHI[10][2	S TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00a5	INHI[10][3	S TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00a6	INHI[10][4	S TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00a7	INHI[10][5	S TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00a8	INHI[11][0	B TYPE Channel 1 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00a9	INHI[11][1	B TYPE Channel 2 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00aa	INHI[11][2	B TYPE Channel 3 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00ab	INHI[11][3	B TYPE Channel 4 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00ac	INHI[11][4	B TYPE Channel 5 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00ad	INHI[11][5	B TYPE Channel 6 Input High Calibrate Value, 8000~7FFF(-32768~32767)	R/W
00ae	DISPLAY1	Channel 1 Normal Display Value,Display Range F831~270F(-1999~9999)	R
00af	DISPLAY2	Channel 2 Normal Display Value,Display Range F831~270F(-1999~9999)	R
00b0	DISPLAY3	Channel 3 Normal Display Value,Display Range F831~270F(-1999~9999)	R
00b1	DISPLAY4	Channel 4 Normal Display Value,Display Range F831~270F(-1999~9999)	R
00b2	DISPLAY5	Channel 5 Normal Display Value,Display Range F831~270F(-1999~9999)	R
00b3	DISPLAY6	Channel 1 Normal Display Value,Display Range F831~270F(-1999~9999)	R

■ **MM8A-D** Calibrate Step:

Step	Parameter Mark Description	Parameter Mark	Operation Manual
1	Normal Dispaly	1234	1.Press ㊎&◀ key about 5 sec., Into INLO setting page
2	INLO(Input Low Calibrate Setting Page)	InLo WAIT	1.Parallel connection PIN+ and PIN- then input signal 0mV, Press ▲ key read calibrate value 2.Wait until display Mark "WAIT" is disappear (about 12 sec.), Press ㊎ key enter data and into IH-1 setting page
3	IH-1(Type 25mV Input High Calibrate Setting Page)	IH-1 5147	1.Parallel connection PIN+ and PIN- then input signal DC 25mV, Press ▲ key read calibrate value 2.Wait until calibrate value finish(at least 3 sec.), Press ㊎ key enter data and into IH-2 setting page
4	IH-2(Type 50mV Input High Calibrate Setting Page)	IH-2 5138	1.Parallel connection PIN+ and PIN- then input signal DC 50mV, Press ▲ key read calibrate value 2.Wait until calibrate value finish(at least 3 sec.), Press ㊎ key enter data and into IH-3 setting page
5	IH-3(Type 0.1V Input High Calibrate Setting Page)	IH-3 5134	1.Parallel connection PIN+ and PIN- then input signal DC 0.1V, Press ▲ key read calibrate value 2.Wait until calibrate value finish(at least 3 sec.), Press ㊎ key enter data and into IH-4 setting page
6	IH-4(Type 0.5V Input High Calibrate Setting Page)	IH-4 6414	1.Parallel connection PIN+ and PIN- then input signal DC 0.5V, Press ▲ key read calibrate value 2.Wait until calibrate value finish(at least 3 sec.), Press ㊎ key enter data and into IH-5 setting page
7	IH-5(Type 1V Input High Calibrate Setting Page)	IH-5 6413	1.Parallel connection PIN+ and PIN- then input signal DC 1V, Press ▲ key read calibrate value 2.Wait until calibrate value finish(at least 3 sec.), Press ㊎ key enter data and into CJC calibrate setting page
8	TAIN(CJC Temperature Calibrate Setting Page)	tAin 25.0	1.Input meter ambient accuracy temperature(0~99.9)°C with ◀&▲&▼ key 2.Press ㊎ key enter data and return normail display page