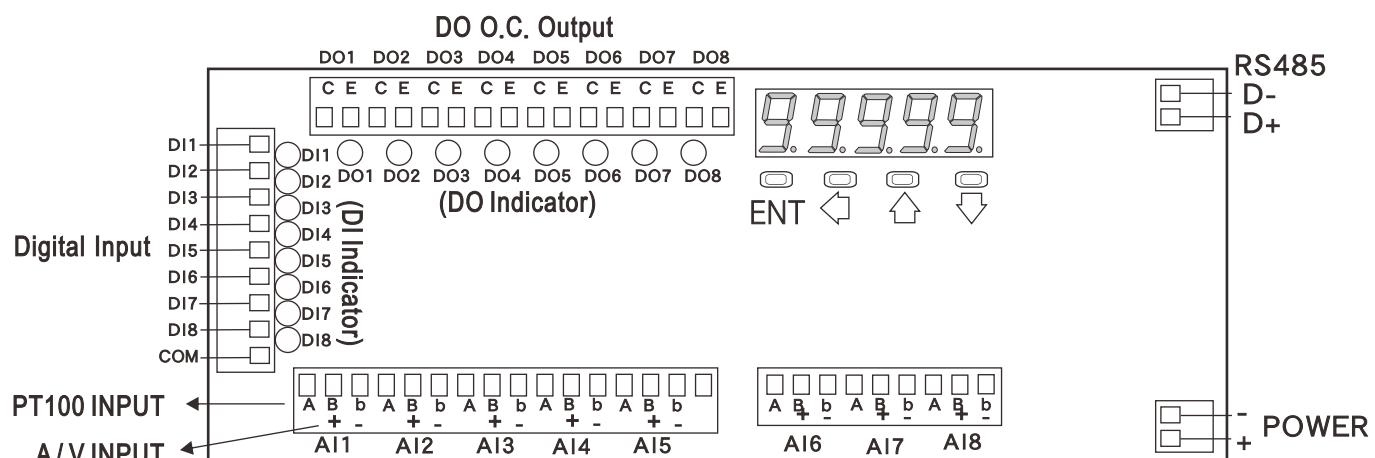


* Please understand key indicators & functions at the first operation.

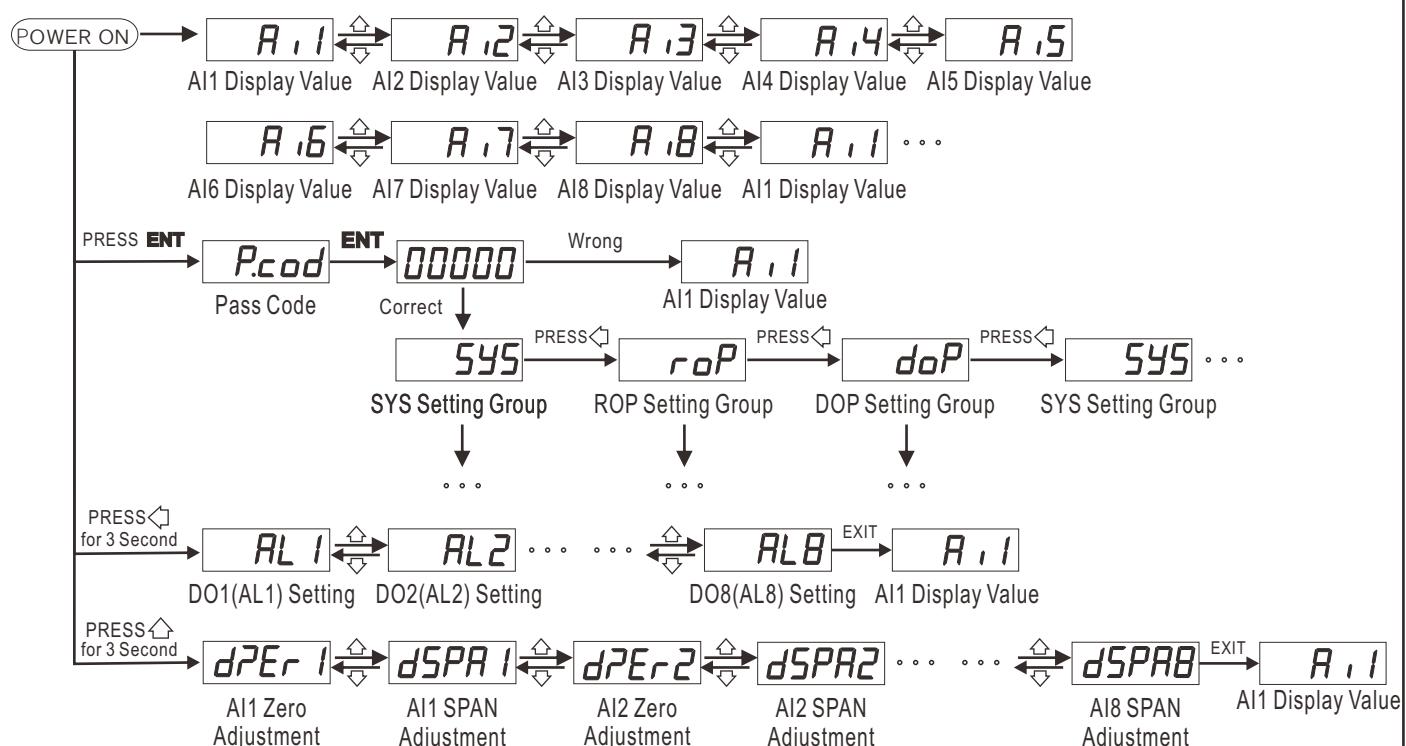
FRONT VIEW & KEY FUNCTIONS



Key Name	Symbol	Descriptions
Enter Key & Save Key	ENT	1. In the measuring status, press this key can enter to parameter pages. 2. In the parameter setting, press this key can save the value & go to next parameter.
Shift Key & DO Setting Key	◀	1. In the measuring status, press this key for 3 sec can enter to DO setting page. 2. In the parameter setting page, press this key can move the cursor to left digit.
Up Key & Display Value Adjusting Key	↑	1. In the measuring status, press this key for 3 sec can enter to display value adjustment of "ZERO" & "SPAN". 2. In the parameter setting page, press this key can jump to next parameter. 3. In the parameter setting mode, press this key can increase the digits.
Down Key	↓	1. In the parameter setting page, press this key can jump to previous parameter. 2. In the parameter setting, press this key can decrease the digits.
Exit Key	↑ + ↓	1. In the any page, press this key can exit to measuring status.

★In the setting page, the parameter name and value will be displayed alternately, and press the key to enter setting mode.

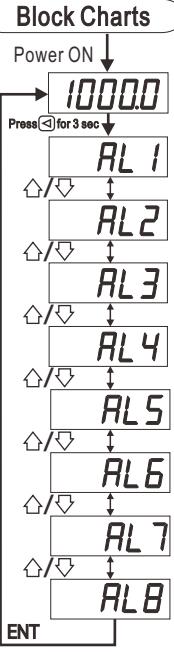
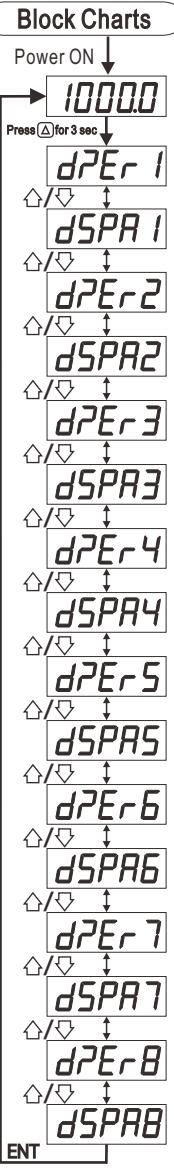
DISPLAY SCREEN AND SETTING FLOW CHART



**1. The following block charts are parameters codes, parameter codes & parameters will alternate flashing if the parameters can be modified.

2. To modify the parameters, please press \triangleleft / \wedge / \vee , and press ENT to save the parameter after the modification.

QUICK SET PROCEDURES

Block Charts	Display	Descriptions	Default
		DO Setting (Alarm Setpoint)	
	Measuring Status	Present value for measurement	
	DO1 Setpoint (AL1)	Modify DO setpoint. Setting range is -19999~99999.	00000
	DO2 Setpoint (AL2)		
	DO3 Setpoint (AL3)		
	DO4 Setpoint (AL4)		
	DO5 Setpoint (AL5)		
	DO6 Setpoint (AL6)		
	DO7 Setpoint (AL7)		
	DO8 Setpoint (AL8)		
		Display Value: "ZERO" & "SPAN" Adjustment	
	Measuring Status	Present value for measurement.	
	AI1 Zero Adjustment (dZEr1)	Zero Adjustment(dZEr) setting is modify the display vale to correct value, when the value have a slight deviation of the zero point, please adjust this setting.	Same as current input value
	AI1 Span Adjustment (dSPA1)		
	AI2 Zero Adjustment (dZEr2)	PS. When enter to the dZEr setting mode, you will see the last digit of current value flashing, then please press UP or DN key to adjust it to the correct value, if the value of change is too small or no changing, you can press SHIFT key to move to higher digit then modify again.	
	AI2 Span Adjustment (dSPA2)		
	AI3 Zero Adjustment (dZEr3)	Span Adjustment(dSPA) setting is modify the display vale to correct value, when the value have a slight deviation of the span point, please adjust this setting.	
	AI3 Span Adjustment (dSPA3)	PS. When enter to the dSPA setting mode, you will see the last digit of current value flashing, then please press UP or DN key to adjust it to the correct value, if the value of change is too small or no changing, you can press SHIFT key to move to higher digit then modify again.	
	AI4 Zero Adjustment (dZEr4)		
	AI4 Span Adjustment (dSPA4)		
	AI5 Zero Adjustment (dZEr5)		
	AI5 Span Adjustment (dSPA5)		
	AI6 Zero Adjustment (dZEr6)		
	AI6 Span Adjustment (dSPA6)		
	AI7 Zero Adjustment (dZEr7)		
	AI7 Span Adjustment (dSPA7)		
	AI8 Zero Adjustment (dZEr8)		
	AI8 Span Adjustment (dSPA8)		

ADVANCED SETTING PROCEDURES

Block Charts	Display	Descriptions		Default
		System Setting Group Procedures		
Power ON ↓ 10000 Press ENT ↓ 545 Press ENT ↓ dP1 △/▽ ↓ dSPL1 △/▽ ↓ dSPH1 △/▽ ↓ dP2 △/▽ ↓ dSPL2 △/▽ ↓ dSPH2 △/▽ ↓ dP3 △/▽ ↓ dSPL3 △/▽ ↓ dSPH3 △/▽ ↓ dP4 △/▽ ↓ dSPL4 △/▽ ↓ dSPH4 △/▽ ↓ dP5 △/▽ ↓ dSPL5 △/▽ ↓ dSPH5 △/▽ ↓ dP6 △/▽ ↓ dSPL6 △/▽ ↓ dSPH6 △/▽ ↓ dP7 △/▽ ↓ dSPL7 △/▽ ↓ dSPH7 △/▽ ↓ dP8 △/▽ ↓ dSPL8 △/▽ ↓ dSPH8 △/▽ ↓ RuG △/▽ ↓ LCU △/▽ ↓ LoCk △/▽ ↓ CodE ENT	Measuring Status	Present value for measurement.		
	System Setting Page (SYS)			
	AI1 Decimal Point Setting (dP1)	Select the decimal point of AI1, setting range: 0, 1, 2, 3, 4 EX. If need the value showing "0.00", set the dP to "2.".		Customers specify
	AI1 Low Scale Setting (dSPL1)	Setting the display low scale of AI1, this value is the display value of the minimum input. EX. If the input signal is 4~20mA, and need to display 0.0 of 4mA, set the dSPL to 0000.0		
	AI1 High Scale Setting (dSPH1)	Setting the display high scale of AI1, this value is the display value of the maximum input. EX. If the input signal is 4~20mA, and need to display 100.0 of 20mA, set the dSPL to 100.0		
	AI2 Decimal Point Setting (dP2)	Select the decimal point of AI2, setting range: 0, 1, 2, 3, 4 EX. If need the value showing "0.00", set the dP to "2.".		
	AI2 Low Scale Setting (dSPL2)	Setting the display low scale of AI2, this value is the display value of the minimum input. EX. If the input signal is 4~20mA, and need to display 0.0 of 4mA, set the dSPL to 0000.0		
	AI2 High Scale Setting (dSPH2)	Setting the display high scale of AI2, this value is the display value of the maximum input. EX. If the input signal is 4~20mA, and need to display 100.0 of 20mA, set the dSPL to 100.0		
	AI3 Decimal Point Setting (dP3)	Select the decimal point of AI3, setting range: 0, 1, 2, 3, 4 EX. If need the value showing "0.00", set the dP to "2.".		
	AI3 Low Scale Setting (dSPL3)	Setting the display low scale of AI3, this value is the display value of the minimum input. EX. If the input signal is 4~20mA, and need to display 0.0 of 4mA, set the dSPL to 0000.0		
	AI3 High Scale Setting (dSPH3)	Setting the display high scale of AI3, this value is the display value of the maximum input. EX. If the input signal is 4~20mA, and need to display 100.0 of 20mA, set the dSPL to 100.0		
	AI4 Decimal Point Setting (dP4)	Select the decimal point of AI4, setting range: 0, 1, 2, 3, 4 EX. If need the value showing "0.00", set the dP to "2.".		
	AI4 Low Scale Setting (dSPL4)	Setting the display low scale of AI4, this value is the display value of the minimum input. EX. If the input signal is 4~20mA, and need to display 0.0 of 4mA, set the dSPL to 0000.0		
	AI4 High Scale Setting (dSPH4)	Setting the display high scale of AI4, this value is the display value of the maximum input. EX. If the input signal is 4~20mA, and need to display 100.0 of 20mA, set the dSPL to 100.0		
	AI5 Decimal Point Setting (dP5)	Select the decimal point of AI5, setting range: 0, 1, 2, 3, 4 EX. If need the value showing "0.00", set the dP to "2.".		
	AI5 Low Scale Setting (dSPL5)	Setting the display low scale of AI5, this value is the display value of the minimum input. EX. If the input signal is 4~20mA, and need to display 0.0 of 4mA, set the dSPL to 0000.0		
	AI5 High Scale Setting (dSPH5)	Setting the display high scale of AI5, this value is the display value of the maximum input. EX. If the input signal is 4~20mA, and need to display 100.0 of 20mA, set the dSPL to 100.0		
	AI6 Decimal Point Setting (dP6)	Select the decimal point of AI6, setting range: 0, 1, 2, 3, 4 EX. If need the value showing "0.00", set the dP to "2.".		
	AI6 Low Scale Setting (dSPL6)	Setting the display low scale of AI6, this value is the display value of the minimum input. EX. If the input signal is 4~20mA, and need to display 0.0 of 4mA, set the dSPL to 0000.0		
	AI6 High Scale Setting (dSPH6)	Setting the display high scale of AI6, this value is the display value of the maximum input. EX. If the input signal is 4~20mA, and need to display 100.0 of 20mA, set the dSPL to 100.0		
	AI7 Decimal Point Setting (dP7)	Select the decimal point of AI7, setting range: 0, 1, 2, 3, 4 EX. If need the value showing "0.00", set the dP to "2.".		
	AI7 Low Scale Setting (dSPL7)	Setting the display low scale of AI7, this value is the display value of the minimum input. EX. If the input signal is 4~20mA, and need to display 0.0 of 4mA, set the dSPL to 0000.0		
	AI7 High Scale Setting (dSPH7)	Setting the display high scale of AI7, this value is the display value of the maximum input. EX. If the input signal is 4~20mA, and need to display 100.0 of 20mA, set the dSPL to 100.0		
	AI8 Decimal Point Setting (dP8)	Select the decimal point of AI8, setting range: 0, 1, 2, 3, 4 EX. If need the value showing "0.00", set the dP to "2.".		
	AI8 Low Scale Setting (dSPL8)	Setting the display low scale of AI8, this value is the display value of the minimum input. EX. If the input signal is 4~20mA, and need to display 0.0 of 4mA, set the dSPL to 0000.0		
	AI8 High Scale Setting (dSPH8)	Setting the display high scale of AI8, this value is the display value of the maximum input. EX. If the input signal is 4~20mA, and need to display 100.0 of 20mA, set the dSPL to 100.0		
	Display Average Setting (AvG)	Setting the display value average count, setting range: 1~99 EX. If the input signal is 4~20mA, and need to display 0.0 of 4mA, set the dSPL to 0000.0		00005
	Display Low Cut Setting (LCU)	Setting the display low cut value, setting range: 0~99 If the display value lower than this setting, and it will display 0.		00000
	Key Lock Setting (LoCk)	Setting the key lock function, when setting yes, the key will be locked in the setting page.		no
	Pass Code Setting (CodE)	Setting the pass code, setting range: 0~19999 Please		00000

DO (ALARM) SETTING PROCEDURES

Block Charts	Display	Descriptions		Default
		ROP Setting Group Procedures		
Power ON 	Measuring Status	Present value for measurement.		
Press ENT	System Setting Group (SYS)			
Press \triangleleft	DO Setting Group (rOP)			
Press ENT	DO1 Selection Setting (dSEL1)	Select the reference of DO1, setting range: AI1, AI2...AI8, RS485 If set to RS485, the DO is controlled by RS485 communication, other ROP setting is disabled	r5485	
\triangle/\triangledown	DO1 Alarm Action Direction Setting (ACT1)	Setting the alarm output action direction, setting range: Hi, Lo Hi is for high alarm(\geq) and Lo is for low alarm(<).	H,	
\triangle/\triangledown	DO1 Alarm Hysteresis Setting (HYS1)	Setting the alarm hysteresis value, setting range: 0~9999 Turn off the alarm after the display value cross over the alarm point and this setting value.	00000	
\triangle/\triangledown	DO1 Alarm Delay Time Setting (dEL1)	Setting the alarm action delay time, setting range: 0~99 (sec) Turn on the alarm after the display value cross over the alarm point and this setting time.	00000	
\triangle/\triangledown	DO2 Selection Setting (dSEL2)	Select the reference of DO2, setting range: AI1, AI2...AI8, RS485 If set to RS485, the DO is controlled by RS485 communication, other ROP setting is disabled	r5485	
\triangle/\triangledown	DO2 Alarm Action Direction Setting (ACT2)	Setting the alarm output action direction, setting range: Hi, Lo Hi is for high alarm(\geq) and Lo is for low alarm(<).	H,	
\triangle/\triangledown	DO2 Alarm Hysteresis Setting (HYS2)	Setting the alarm hysteresis value, setting range: 0~9999 Turn off the alarm after the display value cross over the alarm point and this setting value.	00000	
\triangle/\triangledown	DO2 Alarm Delay Time Setting (dEL2)	Setting the alarm action delay time, setting range: 0~99 (sec) Turn on the alarm after the display value cross over the alarm point and this setting time.	00000	
\triangle/\triangledown	DO3 Selection Setting (dSEL3)	Select the reference of DO3, setting range: AI1, AI2...AI8, RS485 If set to RS485, the DO is controlled by RS485 communication, other ROP setting is disabled	r5485	
\triangle/\triangledown	DO3 Alarm Action Direction Setting (ACT3)	Setting the alarm output action direction, setting range: Hi, Lo Hi is for high alarm(\geq) and Lo is for low alarm(<).	H,	
\triangle/\triangledown	DO3 Alarm Hysteresis Setting (HYS3)	Setting the alarm hysteresis value, setting range: 0~9999 Turn off the alarm after the display value cross over the alarm point and this setting value.	00000	
\triangle/\triangledown	DO3 Alarm Delay Time Setting (dEL3)	Setting the alarm action delay time, setting range: 0~99 (sec) Turn on the alarm after the display value cross over the alarm point and this setting time.	00000	
\triangle/\triangledown	DO4 Selection Setting (dSEL4)	Select the reference of DO4, setting range: AI1, AI2...AI8, RS485 If set to RS485, the DO is controlled by RS485 communication, other ROP setting is disabled	r5485	
\triangle/\triangledown	DO4 Alarm Action Direction Setting (ACT4)	Setting the alarm output action direction, setting range: Hi, Lo Hi is for high alarm(\geq) and Lo is for low alarm(<).	H,	
\triangle/\triangledown	DO4 Alarm Hysteresis Setting (HYS4)	Setting the alarm hysteresis value, setting range: 0~9999 Turn off the alarm after the display value cross over the alarm point and this setting value.	00000	
\triangle/\triangledown	DO4 Alarm Delay Time Setting (dEL4)	Setting the alarm action delay time, setting range: 0~99 (sec) Turn on the alarm after the display value cross over the alarm point and this setting time.	00000	
\triangle/\triangledown	DO5 Selection Setting (dSEL5)	Select the reference of DO5, setting range: AI1, AI2...AI8, RS485 If set to RS485, the DO is controlled by RS485 communication, other ROP setting is disabled	r5485	
\triangle/\triangledown	DO5 Alarm Action Direction Setting (ACT5)	Setting the alarm output action direction, setting range: Hi, Lo Hi is for high alarm(\geq) and Lo is for low alarm(<).	H,	
\triangle/\triangledown	DO5 Alarm Hysteresis Setting (HYS5)	Setting the alarm hysteresis value, setting range: 0~9999 Turn off the alarm after the display value cross over the alarm point and this setting value.	00000	
\triangle/\triangledown	DO5 Alarm Delay Time Setting (dEL5)	Setting the alarm action delay time, setting range: 0~99 (sec) Turn on the alarm after the display value cross over the alarm point and this setting time.	00000	
\triangle/\triangledown	DO6 Selection Setting (dSEL6)	Select the reference of DO6, setting range: AI1, AI2...AI8, RS485 If set to RS485, the DO is controlled by RS485 communication, other ROP setting is disabled	r5485	
\triangle/\triangledown	DO6 Alarm Action Direction Setting (ACT6)	Setting the alarm output action direction, setting range: Hi, Lo Hi is for high alarm(\geq) and Lo is for low alarm(<).	H,	
\triangle/\triangledown	DO6 Alarm Hysteresis Setting (HYS6)	Setting the alarm hysteresis value, setting range: 0~9999 Turn off the alarm after the display value cross over the alarm point and this setting value.	00000	
\triangle/\triangledown	DO6 Alarm Delay Time Setting (dEL6)	Setting the alarm action delay time, setting range: 0~99 (sec) Turn on the alarm after the display value cross over the alarm point and this setting time.	00000	
\triangle/\triangledown	DO7 Selection Setting (dSEL7)	Select the reference of DO7, setting range: AI1, AI2...AI8, RS485 If set to RS485, the DO is controlled by RS485 communication, other ROP setting is disabled	r5485	
\triangle/\triangledown	DO7 Alarm Action Direction Setting (ACT7)	Setting the alarm output action direction, setting range: Hi, Lo Hi is for high alarm(\geq) and Lo is for low alarm(<).	H,	
\triangle/\triangledown	DO7 Alarm Hysteresis Setting (HYS7)	Setting the alarm hysteresis value, setting range: 0~9999 Turn off the alarm after the display value cross over the alarm point and this setting value.	00000	
\triangle/\triangledown	DO7 Alarm Delay Time Setting (dEL7)	Setting the alarm action delay time, setting range: 0~99 (sec) Turn on the alarm after the display value cross over the alarm point and this setting time.	00000	

Display	Descriptions	Default
dSEL8	Select the reference of DO8, setting range: AI1, AI2...AI8, RS485 If set to RS485, the DO is controlled by RS485 communication, other ROP setting is disabled	r5485
ACt8	DO8 Alarm Action Direction Setting (ACt8)	Hi
Hy58	DO8 Alarm Hysteresis Setting (HyS8)	00000
dEL8	DO8 Alarm Delay Time Setting (dEL8)	00000
Sb	Alarm Start Band Setting (Sb)	00000
Sdt	Alarm Start Band Time Setting (Sdt)	00000

Press ENT

COMMUNICATION SETTING PROCEDURES

Block Charts	Display	Descriptions	Default
DOP Communication Setting Group Procedures			
Power ON Press ENT	Measuring Status	Present value for measurement.	
 Press ⌂	System Setting Group (SYS)		
 Press ⌂	Communication Setting Group (doP)		
 Press ⌂	Address Setting (Addr)	Setting the address, setting range: 0~255	00000
 Press ⌂	Baud Rate Setting (bAUd)	Setting the baud rate, setting range: 38400, 19200, 9600, 4800	19200
 Press ENT	Parity Setting (PArI)	Setting the parity, setting range: n.8.2, n.8.1, even, odd	n.8.2

ERROR CODE

Display	Descriptions
,oFL	Input signal is over 120% of input range.
-,oFL	Input signal is under -20% of input range.
RdEr	Input signal is over 180% of input range or meter error.
doFL	Input signal is over display range (99999)
-doFL	Input signal is under display range (-19999)
E-00	EEPROM reading/writing suffers the interference (about 1 million times).

**Please check that the wiring is correct at the first time, if the problem still available, please contact the dealer in your district.

ADI Modbus RTU Mode Protocol Address Map)

Data size 16bit / 32bit, signed range: 8000~7fff(-32768~32767) / 80000000~7fffffff(-2147483648~2147483647)

Modbus	HEX	Name	Descriptions	Act
40001	00H	ID		R
40002	01H	ACT	Alarm action direction setting; BIT7:ACT8, BIT6:ACT7, BIT5:ACT6, BIT4:ACT5, BIT3:ACT4, BIT2:ACT3, BIT1:ACT2, BIT0:ACT1; Setting range:0000~000F(0:HI, 1:LO)	R/W
40003	02H	LOCK	Key lock setting; setting range: 0000~0001(0:NO, 1:YES)	R/W
40004	03H	BAUD	Baud rate setting; setting range: 0000~0003(0:38400, 1:19200, 2:9600, 3:4800)	R/W
40005	04H	PARI	Parity setting; setting range: 0000~0003(0:n.8.2, 1:n.8.1, 2:even, 3:odd)	R/W
40006	05H	DSEL1	DO reference setting; setting range: 0000~0009(0:RS485, 1:AI1, 2:AI2, 3:AI3, 4:AI4, 5:AI5, 6:AI6, 7:AI7, 8:AI8)	R/W
40007	06H	DSEL2		
40008	07H	DSEL3		
40009	08H	DSEL4		
40010	09H	DSEL5		
40011	0AH	DSEL6		
40012	0BH	DSEL7		
40013	0CH	DSEL8		
40014	0DH	DSEL1	Decimal point of Display value ; setting range: 0000~0004(0, 1, 2, 3, 4)	R/W
40015	0EH	DSEL2		
40016	0FH	DSEL3		
40017	10H	DSEL4		
40018	11H	DSEL5		
40019	12H	DSEL6		
40020	13H	DSEL7		
40021	14H	DSEL8		
40022	15H	AVG	Average time of display value setting; setting range: 0000~0063(0~99)	R/W
40023	16H	ADDR	Address of modbus communication setting; setting range: 0000~00FF(0~255)	R/W
40024	17H	SB	Alarm start band setting; setting range: 0000~0063(0~99)	R/W
40025	18H	STD	Alarm start band delay time setting; setting range: 0000~0063(0~99)	R/W
40026	19H	DEL1	Alarm action delay time setting; setting range: 0000~0063(0~99)	R/W
40027	1AH	DEL2		
40028	1BH	DEL3		
40029	1CH	DEL4		
40030	1DH	DEL5		
40031	1EH	DEL6		
40032	1FH	DEL7		
40033	20H	DEL8		
40034	21H	HYS1	Alarm hysteresis band setting; setting range: 0000~0063(0~99)	R/W
40035	22H	HYS2		
40036	23H	HYS3		
40037	24H	HYS4		
40038	25H	HYS5		
40039	26H	HYS6		
40040	27H	HYS7		
40041	28H	HYS8		
40042	29H	LCUT	Lowcut of display value setting; setting range: 0000~0270F(0~9999)	R/W
40043	2AH	CODE	Pass code setting; setting range: 0000~4E1F(0~19999)	R/W
40044	2BH	DSPL1	Low scale of display value; setting range: FFFFB1E1~00004E1F(-19999~19999)	R/W
40045	2CH	DSPL2		
40046	2DH	DSPL3		
40047	2EH	DSPL4		
40048	2FH	DSPL5		
40049	30H	DSPL6		
40050	31H	DSPL7		
40051	32H	DSPL8		

ADI Modbus RTU Mode Protocol Address Map)

Data size 16bit / 32bit, signed range: 8000~7fff(-32768~32767) / 80000000~7fffffff(-2147483648~2147483647)

Modbus	HEX	Name	Descriptions	Act
40052	33H	DSPH1	High scale of display value; setting range: FFFF B1E1~0000 4E1F (-19999~19999)	R/W
40053	34H	DSPH2		
40054	35H	DSPH3		
40055	36H	DSPH4		
40056	37H	DSPH5		
40057	38H	DSPH6		
40058	39H	DSPH7		
40059	3AH	DSPH8		
40060	3BH	AL1	Alarm point setting; setting range: FFFF B1E1~0000 4E1F (-19999~19999)	R/W
40061	3CH	AL2		
40062	3DH	AL3		
40063	3EH	AL4		
40064	3FH	AL5		
40065	40H	AL6		
40066	41H	AL7		
40067	42H	AL8		
40068	43H	DIO	DI/DO status, setting range: 0000~FFFF High byte for DI: Bit7:DI8, Bit6:DI7, Bit5:DI6, Bit4:DI5, Bit3:DI4, Bit2:DI3, Bit1:DI2, Bit0:DI1; Low byte for DO: Bit7:DO8, Bit6:DO7, Bit5:DO6, Bit4:DO5, Bit3:DO4, Bit2:DO3, Bit1:DO2, Bit0:DO1;	R/W
40069	44H	AI1	Analog input display value; reading range: FFFF B1E1~0000 4E1F (-19999~19999)	R
40070	45H	AI2		
40071	46H	AI3		
40072	47H	AI4		
40073	48H	AI5		
40074	49H	AI6		
40075	4AH	AI7		
40076	4BH	AI8		