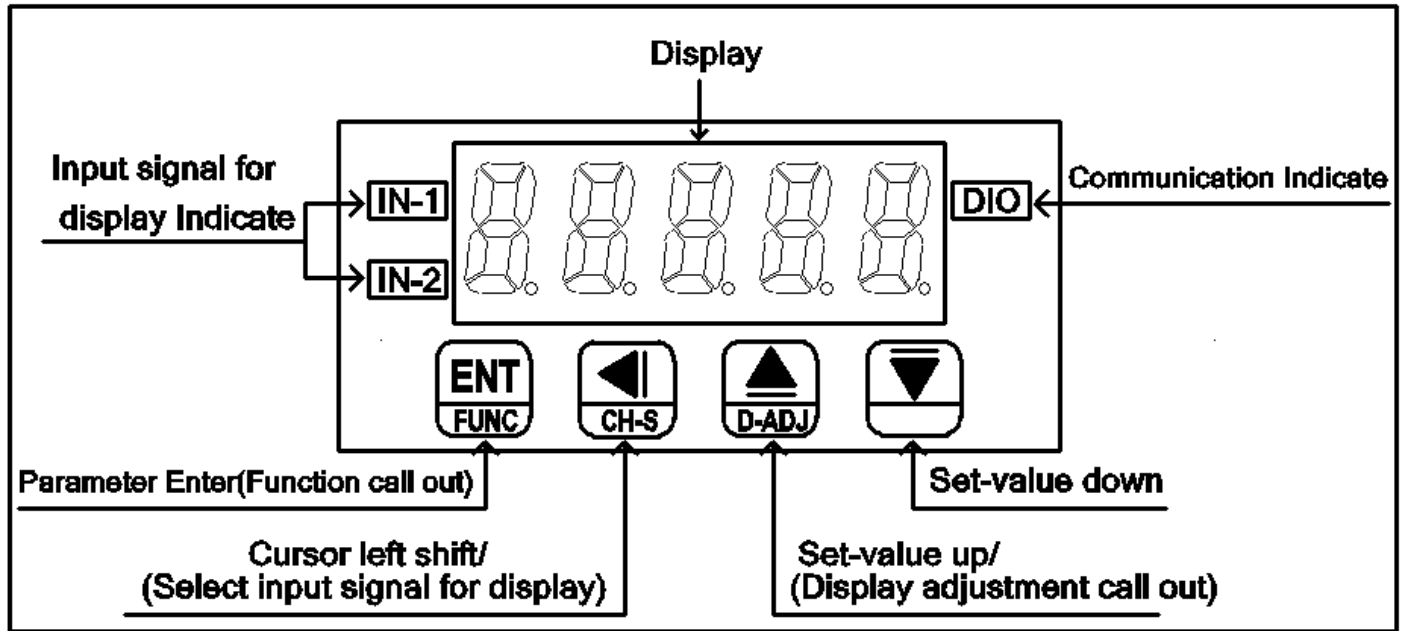


■ Features

- ⊙ Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/ Load Cell/Resistor/etc.
- ⊙ Accuracy 0.05% F.S.±1 digit
- ⊙ Programmable rate -19999~99999 digit
- ⊙ Decimal point can be modified for each input value
- ⊙ Display average can be modified (1~99)
- ⊙ RS485 communication interface, Protocol MODBUS RTU MODE
- ⊙ BAUD RATE:19200/9600/4800/2400
- ⊙ 0.268" highlight display
- ⊙ Man-machine interface, easy to operate
- ⊙ EEPROM 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. In normal display, press ◀ key is select IN-1/IN-2 for display. 2. Into parameter setting page, the parameter mark & data is alternate display, If need modify data can press ◀ key into setting page, 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, press ▲ key keep beyond 3 second, will call out adjustment display value 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 be increment.(Key response about 0.2 sec.)
▼ Key function	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 be decrement.(Key response about 0.2 sec.)
▲ & ▼ Key function	In setting page, press ▲ & ▼ key will return normal display, but if in setting page the modify data will lost
No key in anything	In setting page, no key in anything about 2 minutes, will return normal display

■ Inside parameter operate procedure

Step	Parameter Mark Description	Parameter Mark	Operation Manual
1	Normal display	1 2 3 4 5	Press ⊕/FUNC key into P.CODE setting page
1-1	P.CODE(Pass Code) Default = 0	P. C 0 0 0 0	1. Key in 5 digit pass code with ◀ & ▲ & ▼ key 2. Press ⊕ key, if the pass code is correct then into DP1 setting page, otherwise, return normal display
1-2	DP1(IN-1 Decimal Point) Default = 0	0 P 1	1. Decide IN-1 Decimal point position with ▲ & ▼ key (0~4) 2. Press ⊕ key enter data and into DSPL1 setting page
1-3	DSPL1(IN-1 Display Low Scale) Default = 0	0 5 P L 1	1. Decide IN-1 Display Low Scale with ◀ & ▲ & ▼ key(-19999~99999) 2. Press ⊕ key enter data and into DSPH1 setting page
1-4	DSPH1(IN-1 Display High Scale) Default = 99999	0 5 P H 1	1. Decide IN-1 Display High Scale with ◀ & ▲ & ▼ key(-19999~99999) 2. Press ⊕ key enter data and into DP2 setting page.
1-5	DP2(IN-2 Decimal Point) Default = 0	0 P 2	1. Decide IN-2 Decimal Point Position with ▲ & ▼ key (0~4) 2. Press ⊕ key enter data and into DSPL2 setting page

1-6	DSPL2(IN-2 Display Low Scale) Default = 0	└ 5 P L 2	1. Decide IN-2 Display Low Scale with ◀&▲&▼ key(-19999~99999) 2. Press Ⓜ key enter data and into DSPH2 setting page
		□ □ □ □ □	
1-7	DSPH2(IN-2 Display High Scale) Default = 99999	└ 5 P H 2	1. Decide IN-2 Display High Scale with ◀&▲&▼ key (-19999~99999) 2. Press Ⓜ key enter data and into AVG setting page
		9 9 9 9 9	
1-8	AVG (Average) Default = 6	A □ □	1. Decide Average with ◀&▲&▼ key(1~99) 2. Press Ⓜ into LCUT setting page
		□ 6	
1-9	LCUT (Low Cut) Default = 0	L C U T	1. Decide Low cut with ◀&▲&▼key(-99~99) 2.Press Ⓜ key enter data and into ADDR setting page Note:1.When LCUT is set to a positive value, the display value is positive and less than the setting, is displayed as 0 2.When LCUT is set to a negative value, the display value is negative and larger than the setting, is displayed as 0 3. When LCUT is set to 0, the function is turned off
		□ □	
1-10	ADDR(Communication Address) Default = 0	A d d r	1. Decide address with ◀&▲&▼ key (0~255) 2. Press Ⓜ key enter data and into BAUD setting page
		□ □ □ □	
1-11	BAUD(Communication Baud Rate) Default =19200	b A U d	1. Decide baud rate with ▲&▼ key (19200,9600,4800,2400) 2. Press Ⓜ key enter data and into PARI setting page
		1 9 2 0 0	
1-12	PARI(Communication Parity Check) Default = n.8.2.	P A R I	1. Decide communication parity with ▲&▼ key (n.8.2,n.8.1,even,odd) 2. Press Ⓜ key enter data and into CODE setting page
		n . 8 . 2	
1-13	CODE(Code) Default = 0	C o d e	1. Decide pass code with ◀&▲&▼ key (0~99999) 2. Press Ⓜ key enter data and into LOCK setting page
		□ □ □ □ □	
1-14	LOCK(Panel Lock) Default = NO	L o c k	1. Decide panel lock ▲&▼ key (NO or YES) 2. Press Ⓜ key enter data and return normal display
		n o	

■ Outside function key operate procedure

Step	Parameter mark description	Parameter mark	Operation manual
2	Normal display	1 2 3 4 5	Press ▲/D-ADJ key about 3 sec, into D1-Z adjustment page
2-1	D1-Z(IN-1 Display Zero Adjust)	└ 1 - 2	1. Adjustment IN-1 display zero with ▲&▼key. 2. Press Ⓜkey enter data and into D1-S adjustment page
		□ □ □ □ □	
2-2	D1-S(IN-1 Display Span Adjust)	└ 1 - 5	1. Adjustment IN-1 display span with ▲&▼key 2. Press Ⓜkey enter data and into D2-Z adjustment page
		□ □ □ □ □	
2-3	D2-Z(IN-2 Display Zero Adjust)	└ 2 - 2	1. Adjustment IN-2 display zero with ▲&▼key 2. Press Ⓜkey enter data and into D2-S adjustment page
		□ □ □ □ □	
2-4	D2-S(IN-2 Display Span Adjust)	└ 2 - 5	1. Adjustment IN-2 display span with ▲&▼key 2. Press Ⓜkey enter data and return normal display.
		□ □ □ □ □	

Appendix	Error Mark Description	Error Mark	Analyze & Description
1	Display over error detect	└ o F L	Display over range(99999)
2	Display under error detect	- └ o F L	Display under range(-19999)
3	Input over error detect	, o F L	Input signal over range
4	Input under error detect	- , o F L	Input signal under range
5	EEPROM error detect	E - □ □	1. External interference when EEPROM read/write 2.EEPROM write over 1 million times(guarantee 10 years) Please power reset, if still display E-00,doing following step: a.E-00 & No alternate display for inquire reset EEPROM b.Decide Yes with ▲key,press Ⓜ key return normal display c.EEPROM was reset,Please follow step 1~2 set again
		n o	
		Y E S	

SDMAI Modbus RTU Mode Protocol Address Map

Data format 16Bit/32Bit, sign bit 8000~7FFF(-32768~32767),80000000~7FFFFFFF(-2147483648~2147483647)

Address	Name	Description	Accept
0000	ID	Type code judge, SDMAI=00	R
0001	STATUS1	IN-1 Display status, Display Range 0000~001F(0~31)(0:OFF,1:ON) (Bit0:DOFL,Bit1:-DOFL,Bit2:IOFL,Bit3:-IOFL,Bit4:ADER)	R
0002	STATUS2	IN-2 Display status, Display Range 0000~001F(0~31)(0:OFF,1:ON) (Bit0:DOFL,Bit1:-DOFL,Bit2:IOFL,Bit3:-IOFL,Bit4:ADER)	R
0003		Reserve, read 0	R
0004	DISPM	IN1/2 display indicate, Input Range 0000~0001(0~1) (0:IN1, 1:IN2)	R/W
0005	DP1	IN-1 Decimal Point, Input Range 0000~0004(0~4)0:10 ⁰ ,1:10 ⁻¹ ,2:10 ⁻² ,3:10 ⁻³ ,4:10 ⁻⁴	R/W
0006	DP2	IN-2 Decimal Point, Input Range 0000~0004(0~4)0:10 ⁰ ,1:10 ⁻¹ ,2:10 ⁻² ,3:10 ⁻³ ,4:10 ⁻⁴	R/W
0007	LOCK	Panel Lock, Input Range 0000~0001(0~1)0:NO,1:YES	R/W
0008	BAUD	Communication Baud Rate, Input Range 0000~0003(0~3)0:19200,1:9600,2:4800,3:2400	R/W
0009	PARI	Communication Parity Check, Input Range 0000~0003(0~3)0:N.8.2.,1:N.8.1.,2:EVEN,3:ODD	R/W
000A	AVG	Average, Input Range 0001~0063(1~99)	R/W
000B	ADDR	Communication Address, Input Range 0000~00FF(0~255)	R/W
000C	LCUT	Low Cut, Input Range FF9D~0063(-99~99)	R/W
000D	CODE	Pass Code, Input Range 00000000~0001869F(0~99999) high word	R/W
000E		Pass Code, Input Range 00000000~0001869F(0~99999) low word	R/W
000F	DSPL1	IN-1 Display Low Scale, Input Range FFFF1E1~0001869F(-19999~99999)high word	R/W
0010		IN-1 Display Low Scale, Input Range FFFF1E1~0001869F(-19999~99999)low word	R/W
0011	DSPH1	IN-1 Display High Scale, Input Range FFFF1E1~0001869F(-19999~99999)high word	R/W
0012		IN-1 Display High Scale, Input Range FFFF1E1~0001869F(-19999~99999)low word	R/W
0013	DSPL2	IN-2 Display Low Scale, Input Range FFFF1E1~0001869F(-19999~99999)high word	R/W
0014		IN-2 Display Low Scale, Input Range FFFF1E1~0001869F(-19999~99999)low word	R/W
0015	DSPH2	IN-2 Display High Scale, Input Range FFFF1E1~0001869F(-19999~99999)high word	R/W
0016		IN-2 Display High Scale, Input Range FFFF1E1~0001869F(-19999~99999)low word	R/W
0017	DISPLAY1	IN-1 Display Value, Display Range FFFF1E1~0001869F(-19999~99999)high word	R
0018		IN-1 Display Value, Display Range FFFF1E1~0001869F(-19999~99999)low word	R
0019	DISPLAY2	IN-2 Display Value, Display Range FFFF1E1~0001869F(-19999~99999)high word	R
001A		IN-2 Display Value, Display Range FFFF1E1~0001869F(-19999~99999)low word	R