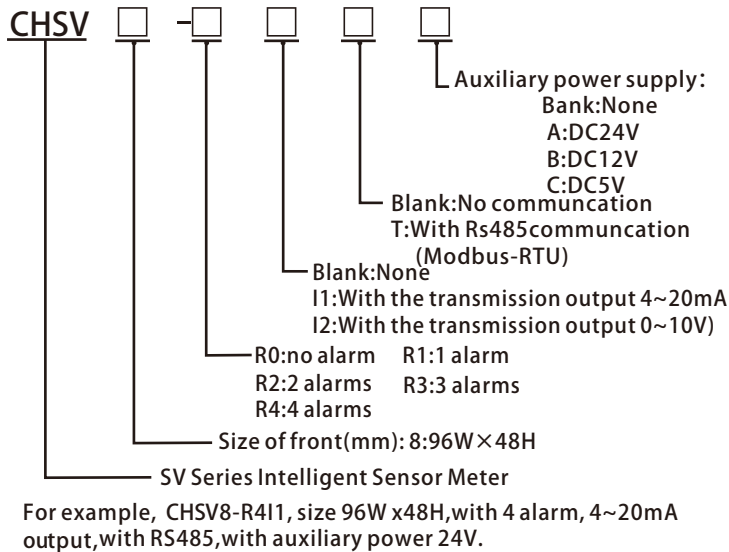


Features

- ★Accuracy: $\pm 0.1\%F.S(DC \text{ Input})$; $\pm 0.2\%F.S(AC \text{ Input})$
- ★With 08"Big LED display , by software setting parameter
- ★Universal input: TC、RTD、V、mV、A、mA、 Ω signal
- ★Sampling rate: the Max.is 30 time/second
- ★Display setting range:-19999~99999
- ★With insulate function for input current.
- ★Can be with 4 alarm.
- ★RS485 or RS232 interface
- ★Isolated analogue output: 0-10V or 4-20mA, configurable by software
- ★It is can contact with transducer,as like transport sensor, Load cell, Magnetostrictive position transducer

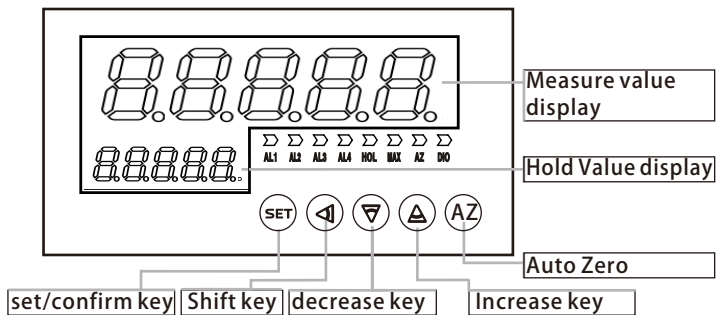
Model Specifications



Technical Specifications

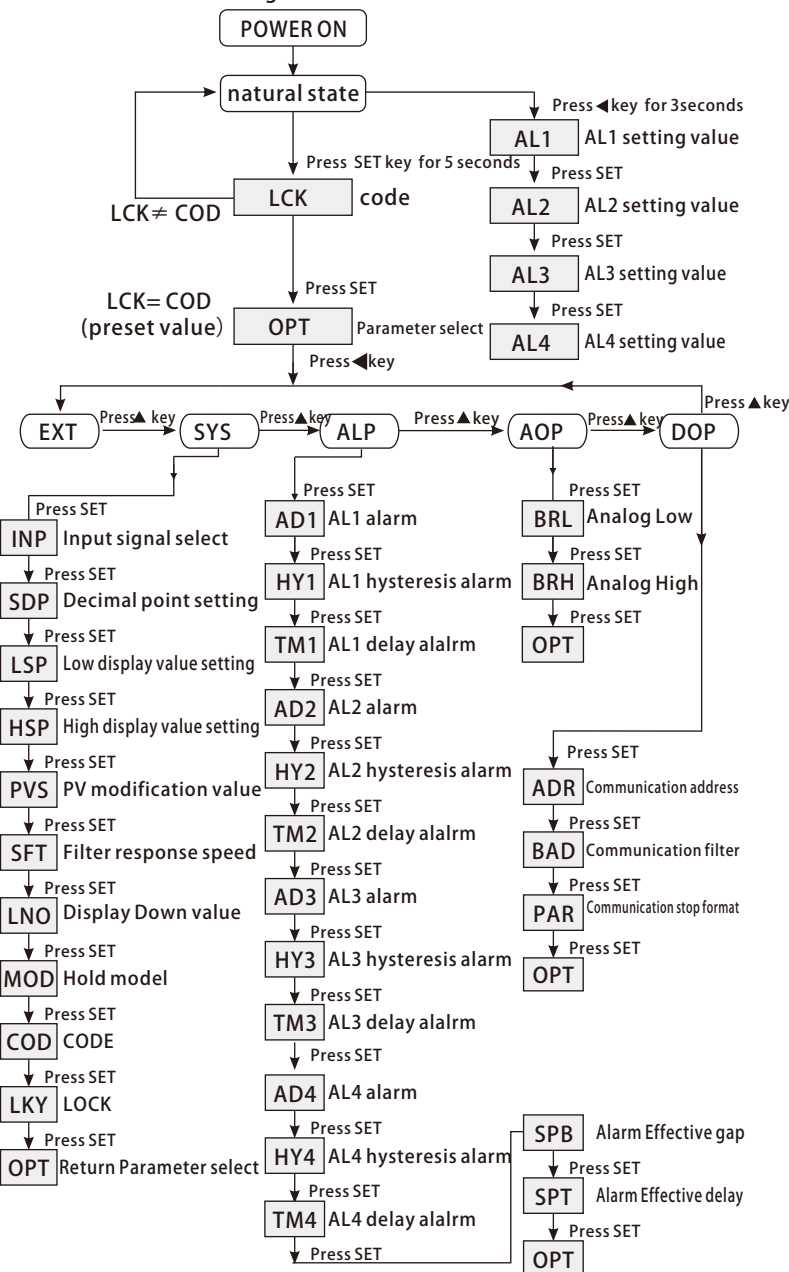
Power supply	AC85~265V 50/60Hz(also manufacture AC/DC 24V)		
Energy consumption	<5VA		
Accuracy	$\pm 0.1\%F.S(DC \text{ Input})$; $\pm 0.2\%F.S(AC \text{ input})$		
Display	Big LED display with 0.8"		
Samplly time	The max. is 20cycles/sec (about 50ms/time)		
Display range	-19999~99999		
Rate	15bit(1/32768)		
Overflow	UUUUU		
Operation conditions	Temperature:-25~50°C (non condensing) ; Humidity:35~85% RH		
Input signal		Leaver factory setting	specific order
	Linear current(mA)	4~20mA	0~10mA; 0~20mA
	Linear voltag(V)	0~10V	0~1V; 0~5V; 1~5V
	Linear voltag(mV)	0~50mV	0~2mV; 0~10mV; 0~100mV
	Linear resistance(Ω)	0~300 Ω	0~1k Ω ; 0~5k Ω ; 0~10k Ω ; 0~20k Ω ; 0~100k Ω
	TC	K(-50.0~1300.0°C); S(0~1600.0°C); R(0~1600.0°C); E(0~800.0°C); J(0~1000.0°C); T(-200.0~350.0°C); B(600~1800.0°C);	N(0~1300.0°C) WRe3-WRe25(0~2300°C) WRe5-WRe26(0~2300°C)
	RTD	PT100(-200.0~550.0°C); Cu50(-50.0~150.0°C);	PT100(-99.99~99.99°C)
	DV		0~2V; 0~20V; 0~200V; 0~500V
	AV		0~2V; 0~20V; 0~200V; 0~500V
	DA		0~200mA; 0~2A; 0~5A; 0~20A
	AA		0~200mA; 0~2A; 0~5A; 0~20A

Panel illustration



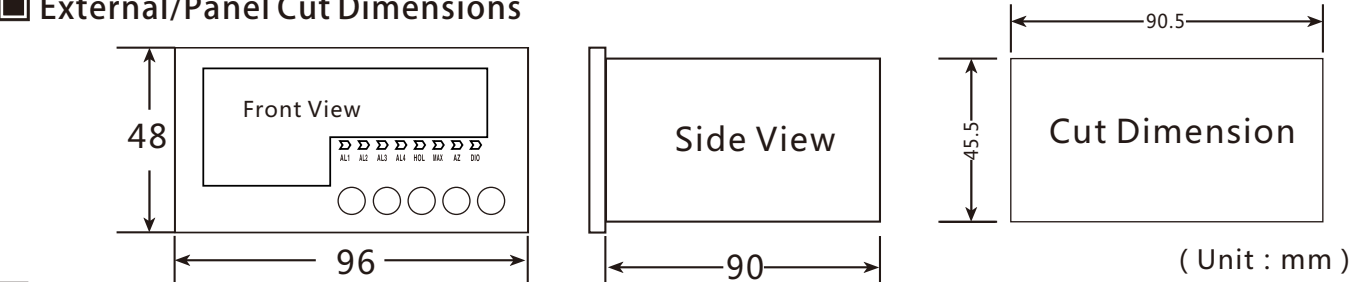
Operation process

1. SET: set/confirm key; ◀: Shift key; ▼: decrease key; ▲: Increase key; AZ:Auto Zero
2. In the menu operation process, simultaneity presse ▼ + ▲ key than stop the operation and can save the data.
3. Have any operation more than 1 minute, then will returned the natural estate.
4. Natural state, press ▼ key more than 5S until to the DIO lamp flash,it is can use the ▲ key and ▼ key adjust the display ZERO value, press SET key exit it.Press ▲ key more than 5S until to the DIO ON, it is can use the ▲ key and ▼ key adjust the display SPAN value, press SET key exit it.
5. Natural state,Press AZ Key 5 Seconds, AZ lamp ON, Go ZERO (Go Gross weight)
6. Parameter setting:

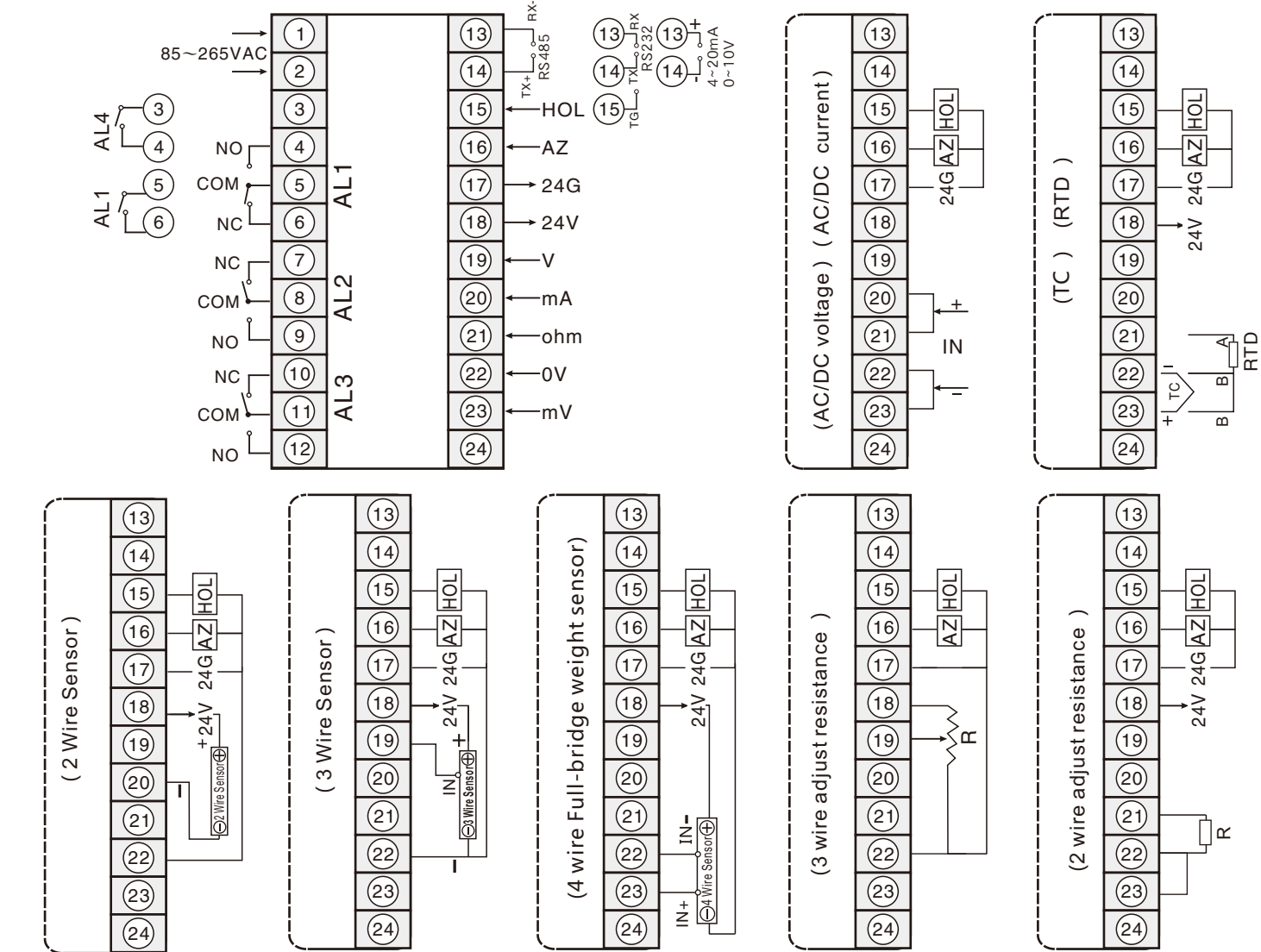


Code	Parameter	Meaning	Meaning	Ex-factory setting
CODE				
1	LCK	CODE	LCK=COD preset value, then can into the menu amend it. LCK=other value, forbid into and returned the natural estate	0000
2	OPT	Parameter select	It is can use for any parameter into the menu.	EXT
system parameter setting process				
3	INP	Input signal select	MV;Pt100;Cu50;Om;V;mA;K,S,R;E,J;T;B;	mV
4	SDP	Decimal setting	0.0000 00.000 000.00 0000.0	0000.0
5	LSP	Display Low setting	Range:-19999~99999	0000.0
6	HSP	Display High setting	Range:-19999~99999	2000.0
7	PVS	Display modification value	modification value(range:-19999~99999)	000.0
8	SFT	Filter constant	The larger the filter constant that value more stable, but the reaction is more slowly.	00
9	LNO	Display Low stop value	When the measure value<LNO,the display is 0 (range: -19999~99999)	-1999.9
10	MOD	HOLD model	MOD=HOL(HOL for working,display hold the natural value) MOD=MAX(HOL for working,display hold the maximum value)	HOL
11	COD	CODE	Only the LCK =Preset COD code then can into the 2ND Parameter.(please remember the COD code)	0000
12	LKY	LOCK	LKY=yes, It is can lock for any key except the SET.	NO
Alarm parameter setting process				
13	AD1	Alarm 1 model	AD1=Hi(alarm1 High alarm) AD1=LO(alarm 1 Low alarm)	HI
14	HY1	Alarm 1 hysteresis	Adjust appropriate hysteresis to prevent relay from bouncing too frequently.	00000
15	TM1	alarm1 delay alarm	The alarm1 delay alarm unit is second. (Range:0-255s)	000
16	AD2	Alarm2 model	AD2=Hi(AL2 High alarm) AD2=LO(AL2 Low alarm) AD2=GO(AL2 middle alarm)	HI
17	HY2	Alarm 2 hysteresis	Adjust appropriate hysteresis to prevent relay from bouncing too frequently.	000.0
18	TM2	Alarm2 delay alarm	The alarm2 delay alarm unit is second. (Range:0-255s)	000
19	AD3	Alarm3 model	AD3=Hi(AL3 High alarm) AD3=LO(AL3 Low alarm)	HI
20	HY3	AL3 hysteresis alarm	Adjust appropriate hysteresis to prevent relay from bouncing too frequently.	000.0
21	TM3	Alarm3 delay alarm	The AL3 delay alarm unit is second. (Range:0-255s)	000
22	AD4	Alarm4 model	AD4=Hi(AL4 High alarm) AD4=LO(AL4 Low alarm)	HI
23	HY4	AL4 hysteresis alarm	Adjust appropriate hysteresis to prevent relay from bouncing too frequently.	000.0
24	TM4	Alarm4 delay alarm	The AL4 delay alarm unit is second. (Range:0-255s)	000
25	SPB	Alarm Dead Band	Measure value >SPB then with alarm function, Measure value<SPB then stop alarm. (range: -19999~99999)	000.0
26	SPT	Alarm delay	Measure value >SPB until the alarm delay deal it. Then with alarm function. (Range:0-255s)	000
Analog paramter setting process				
27	BRL	Analog Low	Analog Low output corresponding to the low setting display	0000.0
28	BRH	Analog High	Analog high output corresponding to the high setting display	2000.0
29	ADR	Communication ADD	Communication ADD Parameter(Range:0~255)	001
Communication Parameter setting process				
30	BAD	Communication filter bit	Communication filter bit for select(4800;9600;	9600
31	PAR	Communication data	With 2 bit or 1 bit 1.8.2.n:1 Start bit, data bit=8, stop bit=2. 1.8.1.n:1 Start bit, data bit=8, stop bit=1.	1.8.2.n

External/Panel Cut Dimensions



Terminal connection diagram



Note:1> Check the power supply voltage before making the connections.
2> Please refer to the connection label on the meter if any changes.

MODBUS-RTU code(the examply data is HEX)

(1) Order 03H, read parameter value, as read measure value PV==0001869F(HEX)=99999(BCD)

Master								Slave					
Address	Order	First address		Word		CRC		Address	Order	Byte	Data		CRC
01	03	Hbyte	Lbyte	Hbyte	Lbyte	Hbyte	Lbyte	01	03	04	86	9F	00
		00	00	00	02	C4	0B						

(2)Order 03H, read parameter value, input model INP=0001(HEX)

Master								Slave					
Address	Order	First address		Word		CRC		Address	Order	Byte	Data		CRC
01	03	Hbyte	Lbyte	Hbyte	Lbyte	Hbyte	Lbyte	01	03	02	00	01	79
		00	03	00	01	74	0A						

(3)Order 03H, read parameter value, alarm estate FLAG=0001(HEX)(only AL1 working)

Master								Slave					
Address	Order	First address		Word		CRC		Address	Order	Byte	Data		CRC
01	03	Hbyte	Lbyte	Hbyte	Lbyte	Hbyte	Lbyte	01	03	02	00	01	79
		00	01	00	01	D5	CA						

(4)Order 06H, simply parameter value, alarm hysteresis value HY4=1388(HEX)=5000(BCD)

Master								Slave					
Address	Order	First address		Word		CRC		Address	Order	Byte		Data	
01	06	Hbyte	Lbyte	Hbyte	Lbyte	Hbyte	Lbyte	01	06	Hbyte	Lbyte	Hbyte	Lbyte
		00	0F	13	88	B4	9F			00	0F	13	88

(5)Order 10H, double parameter value, AL1 setting value AL1=0001869F(HEX)=99999(BCD)

Master													
Address	Order	First address		Word		Byte	Data				CRC		
01	10	Hbyte	Lbyte	Hbyte	Lbyte	04	Hbyte	Lbyte	Hbyte	Lbyte	Hbyte	Lbyte	
		00	0D	00	02		86	9F	00	01	EA	90	
Slave													
Address	Order	first address				Word				CRC			
01	10	Hbyte		Lbyte		Hbyte		Lbyte		Hbyte		Lbyte	
		00		0D		00		02		D0		0B	

MODBUS-RTU parameter address

The format 16Bit/32Bit,it is with positive and negative the is 8000-7FFF(-32768~32767),80000000-7FFFFFFF(-2147483648~2147483647)

MODBUS	HEX	byte number	Name	Function	Date range	Action
40001	0000	4	PV1	Measure value	FFFFB1E1~0001869F(-19999~99999)	R
40002	0001	4	PV2	HOLD value	FFFFB1E1~0001869F(-19999~99999)	R
40003	0002	2	FLAG	Alarm and Overflow display	0000~001F(0~31) Bit7:flow, Bit3:AL4, Bit2:AL3, Bit1:AL2, Bit0:AL1	R
40004	0003	2	INP	Measure type	0000~000C(0~12)0:K,1:S,2:R,3:E,4:J,5:T,6:B,7:mV 8:Pt100,9:Cu50,10:oM,11:V,12:mA	R/W
40005	0004	2	SDP	Decimal select	0000~0004(0~4)0:1,1:0.1,2:0.01,3:001,4:0.0001	R/W
40006	0005	4	LSP	Min. input display value	FFFFB1E1~0001869F(-19999~99999)	R/W
40007	0006	4	HSP	Max. input display value	FFFFB1E1~0001869F(-19999~99999)	R/W
40008	0007	2	PVS	Display modification value	F831~270F(-1999~9999)	R/W
40009	0008	2	SFT	Filter constant	0000~0063(0~99)	R/W
40010	0009	4	LNO	Low display value	FFFFB1E1~0001869F(-19999~99999)	R/W
40011	000A	2	MOD	HOLD function	0000~0001(0~1)0:COM,1:MAX	R/W
40012	000B	2	COD	CODE	0000~270F(0~9999)	R/W
40013	000C	2	LKY	LOCK	0000~0001(0~1)0:NO,1:YES	R/W
40014	000D	4	AL1	Alarm 1 value	FFFFB1E1~0001869F(-19999~99999)	R/W
40015	000E	4	AL2	Alarm 2 value	FFFFB1E1~0001869F(-19999~99999)	R/W
40016	000F	4	AL3	Alarm 3 value	FFFFB1E1~0001869F(-19999~99999)	R/W
40017	0010	4	AL4	Alarm 4 value	FFFFB1E1~0001869F(-19999~99999)	R/W
40018	0011	2	AD1	Alarm 1 model	0000~0001(0~1)0:Hi,1:Lo	R/W
40019	0012	2	HY1	Alarm 1 hysteresis	0000~270F(0~9999)	R/W
40020	0013	2	TM1	Alarm 1 delay	0000~00FF(0~255)	R/W
40021	0014	2	AD2	Alarm 2 model	0000~0001(0~1)0:Hi,1:Lo	R/W
40022	0015	2	HY2	Alarm 2 hysteresis	0000~270F(0~9999)	R/W
40023	0016	2	TM2	Alarm 2 delay	0000~00FF(0~255)	R/W
40024	0017	2	AD3	Alarm 3 model	0000~0001(0~1)0:Hi,1:Lo	R/W
40025	0018	2	HY3	Alarm 3 hysteresis	0000~270F(0~9999)	R/W
40026	0019	2	TM3	Alarm 3 delay	0000~00FF(0~255)	R/W
40027	001A	2	AD4	Alarm 4 model	0000~0001(0~1)0:Hi,1:Lo	R/W
40028	001B	2	HY4	Alarm 4 hysteresis	0000~270F(0~9999)	R/W
40029	001C	2	TM4	Alarm 4 delay	0000~00FF(0~255)	R/W
40030	001D	2	SPB	Alarm range	F831~270F(-1999~9999)	R/W
40031	001E	2	SPT	Alarm delay range	0000~00FF(0~255)	R/W