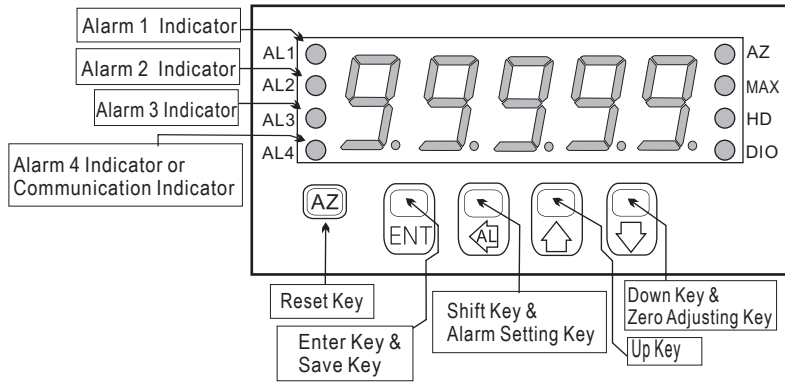


*Please understand key indicators & functions at the first operation.

FRONT PANEL & KEY FUNCTIONS



Key Name	Symbol	Descriptions
Reset Key	Ⓩ	1. Press this key to enable the reset functi on.
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 & Alarm Setting Key	←AL	1. In the measuring status, press this key for 3 sec can enter to alarm setting page (The selecting digit will be flashed) 2. In the parameter setting , press this key can move the cursor left.
Up Key	↑	1. In the parameter setting, press this key can increase the digits.
Down Key & A/O Adjusting Key	↓	1. In the measuring status, press this key for 3 sec can enter to analog output adjustment. 2. In the parameter setting , press this key can decrease the digits.

- **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 ←↑↓, and press ENT to save the parameter after the modification.
- 3. Please don't forget the new pass code after modification.
- 4. In any pages, press ↑&↓, or don't press any keys for 2 minutes that will back to measuring status.

GENERAL MODE OPERATING PROCEDURES

Block Charts	Display	Descriptions	Default	
Alarm Setpoint				
Power ON	10000	Measuring Status	Present value for measurement	
Press ←AL for 3 sec	AL 1	Alarm 1 Setpoint (AL1)	Press ←↑↓ to modify alarm 1 setpoint.	
Press ENT	AL 2	Alarm 2 Setpoint (AL2)	Press ←↑↓ to modify alarm 2 setpoint.	
Press ENT	AL 3	Alarm 3 Setpoint (AL3)	Press ←↑↓ to modify alarm 3 setpoint.	
Press ENT	AL 4	Alarm 4 Setpoint (AL4)	Press ←↑↓ to modify alarm 4 setpoint.	
Press ENT				
Analog Output: "ZERO" & "SPAN" Adjustment				
Power ON	10000	Measuring Status	The following steps are only available for analog output.	
Press ↓ for 3 sec	APZero	A/O Zero Adjustment (AZero)		Press ← to select adjusting speed rate, press ↑ ↓ to modify the A/O zero. PS: To use this function to adjust the real A/O zero.
Press ENT	ASpan	A/O Span Adjustment (ASpan)		Press ← to select adjusting speed rate, press ↑ ↓ to modify the A/O span. PS: To use this function to adjust the real A/O span.
Press ENT				

- Remark: 1. There are 4 parameter groups of "System Setting Group(SYS)", "Alarm Setting Group(roP)", "Analog Output Setting Group (AoP)" & "RS485 Setting Group(doP)" for modification.
2. Press ← to select each group page, and press ENT to enter each group or parameter page for modification or saving the parameters.
3. Some of optional functions of parameter pages still exist, but the functions are disable.

PROGRAMMING MODE OPERATING PROCEDURES

Block Charts	Display	Descriptions	Default
Parameter Group Setting Procedures			
Power On	10000	Measuring Status	Present value for measurement
Press ENT	P.Cod	Pass Code (P.Cod)	Press ←↑↓ to enter pass code.
Press ENT	P.Code Correct		Pass code is correct that will enter to parameter groups. Pass code is wrong that will back to measuring status.
NO			
YES			
Press ←	SYS	(SYS)	
Press ENT	roP	(roP)	
Press ←	AoP	(AoP)	
Press ENT	doP	(doP)	
Press ←			
Press ENT			

Display	Descriptions	Default
System Setting Group Procedures		
595 Press: ENT ↓ dP	System Setting Page (SYS) Decimal Point Setting (dP) Press \uparrow \downarrow to select decimal point (0, 1, 2, 3, 4). EX: if the value shows "0.00" that means the decimal point is 2 digits.	Customers specify
Press: ENT ↓ tYPE	Input Type Setting (tYPE) Press \uparrow \downarrow to modify the input type. (1U2D / 1P2D / 1A2B)	Customers specify
Press: ENT ↓ ACCU	1A2B Accurate Setting (ACCU) Press \uparrow \downarrow to modify 1A2B accurate (X1, X4).	Customers specify
Press: ENT ↓ SCALE	Scale Coefficient Adjustment (SCALE) Press \leftarrow \uparrow \downarrow to modify scale coefficient (0.0001 ~9.9999).	01.0000
Press: ENT ↓ div	Pre-Division Setting (div) Press \uparrow \downarrow to modify pre-division (1~999999).	000001
Press: ENT ↓ CodE	Pass Code Setting (CodE) Press \leftarrow \uparrow \downarrow to modify pass code (0~19999). PS: Please don't forget the new pass code after modification.	00000
Press: ENT ↓ LoCK	Key Lock Setting (LoCK) Press \uparrow \downarrow to lock the keys, using key lock function only can view the parameters, but cannot modify any values. PS: no (unlock) ,YES ("ENT" unlock , others lock).	no
Press: ENT ↓ indi	Indicator 4 Setting (indi) Press \uparrow \downarrow to modify indicator 4 for AL4 or DIO.	Customers specify
Alarm Setting Group Procedures		
roP Press: ENT ↓ ACt1	Alarm Setting Page (roP) The following steps are only available for alarm output.	
Press: ENT ↓ ACt2	Alarm 1 (ACt1) Press \uparrow \downarrow to modify alarm value that is \geq (Hi) or $<$ (Lo) for alarm action.	
Press: ENT ↓ ACt3	Alarm 2 (ACt2) PS: 1. There are 4 alarms output optional.	
Press: ENT ↓ ACt4	Alarm 3 (ACt3) 2. This page is exist without alarm output, but the function will be disabled.	Hi
Press: ENT ↓ oP.modE	Alarm 4 (ACt4) 3. Press ENT to save the value and go to the next parameter.	
Press: ENT ↓ oP.tiME	Alarm Mode Setting (oP.ModE) Press \uparrow \downarrow to modify alarm output mode (N, R, C). N: manual; R: return; C: continue	n
Press: ENT ↓ oP.tiME	Alarm Run Time Setting (oP.tiME) Press \leftarrow \uparrow \downarrow to modify alarm run time (1~99).	00001
A/O Setting Group Procedures		
RoP Press: ENT ↓ PoLAR	A/O Setting Page (AoP) The following steps are only available for analog output.	
Press: ENT ↓ AnLo	A/O Polarity Setting (PoLAR) Press \uparrow \downarrow to select output for positive or negative pole. PS : Voltage output ,NO: positive pole output (0~+10V) YES: positive & negative pole output (-10~+10V)	no
Press: ENT ↓ AnHi	A/O Low Scale Setting (AnLo) Press \leftarrow \uparrow \downarrow to adjust A/O low scale to correspond to the display value (programmable). EX: A/O is 0~10V, the display is 10.0 to output 0V, this value must be set for 10.0.	000000
Press: ENT ↓ AnHi	A/O Hi Scale Setting (AnHi) Press \leftarrow \uparrow \downarrow to adjust A/O hi scale to correspond to the display value (programmable). EX: A/O is 0~10V, the display is 90.0 to output 1 0V, this value must be set for 90.0.	999999

Display	Descriptions	Default
RS485 Setting Group Procedures		
doP Press: ENT ↓ Addr	RS485 Setting Page (doP) The following steps are only available for RS-485.	
Press: ENT ↓ bAUd	Address Setting (Addr) Press \leftarrow \uparrow \downarrow to modify address (0~255).	00000
Press: ENT ↓ PAri	Baud Rate Setting (bAUd) Press \uparrow \downarrow to select baud rate (38400/19200/9600/4800).	19200
Press: ENT ↓ FrAmE	Parity Setting (PAri) Press \uparrow \downarrow to select parity (n.8.2/n.8.1/even/odd).	n8.2
Press: ENT ↓ FrAmE	Frame Setting (FrAmE) Press \uparrow \downarrow to select frame type. (NO:Hi \rightarrow Lo , YES:Lo \rightarrow Hi)	no

ERROR CODE OF SELF-DIAGNOSIS

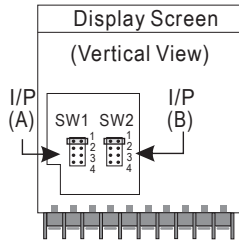
Display	Descriptions
E-00	EEPROM reading/writing suffers the interference (about 1 million times).
**Please check the wiring connection is correct first, if the problem still exist, please return the meter to the factory.	

**Relay Output Mode Descriptions:

- N: (Manual); the relay is on when the present value reaches the alarm setpoint, the present value is still counted and the relay don't deactivate until manual reset by "reset key" or "external control terminal". Then the present value is reset to zero.
- R: (Return); the relay is on when the present value reaches the alarm setpoint, the present value is counted until the relay output time is terminated. Then the present value is reset to zero.
- C: (Continue); the relay is on when the present value reaches the alarm setpoint, the present value is reset to zero. And the relay is still on until the relay output time is terminated.

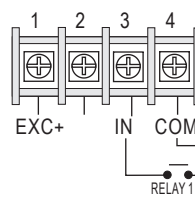
INPUT SIGNAL MODIFICATION

**To Select the pin to modify the input signal for different sensors.
PS: In dual input type, excitation power must be the same.



SW1/SW2	JUMPER	DEFINITION (ON: close; OFF: open)
	1	ON: 5V; OFF: 12V
	2	ON: 0~400 Hz; OFF: 0~10 KHz
	3	ON: PNP
	4	ON: NPN

※Connection:

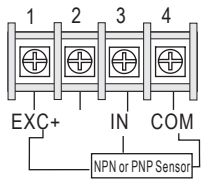


Relay Contact: NPN 0~400 Hz

JUMPER	SW1/SW2
1	
2	
3	
4	

**For relay input type, please select NPN 0~400 Hz.

※Connection:



NPN (5V): 0~400 Hz

JUMPER	SW1/SW2
1	
2	
3	
4	

NPN (5V): 0~10 KHz

JUMPER	SW1/SW2
1	
2	
3	
4	

NPN (12V): 0~400 Hz

JUMPER	SW1/SW2
1	
2	
3	
4	

NPN (12V): 0~10 KHz

JUMPER	SW1/SW2
1	
2	
3	
4	

PNP (5V): 0~400 Hz

JUMPER	SW1/SW2
1	
2	
3	
4	

PNP (5V): 0~10 KHz

JUMPER	SW1/SW2
1	
2	
3	
4	

PNP (12V): 0~400 Hz

JUMPER	SW1/SW2
1	
2	
3	
4	

PNP (12V): 0~10 KHz

JUMPER	SW1/SW2
1	
2	
3	
4	

MODBUS RTU MODE PROTOCOL ADDRESS TABLE

Data: 16Bit / 32Bit, +/- is 8000~7FFF (-32768~32767), 80000000~7FFFFFFF(-2147483648~2147483647)				
Modbus	HEX	Name	Descriptions	Act
40001	0000	ID	Model number identification; DC5H-C is "0F"	R
40002	0001	STATUS	Current alarm output & external control input status display; range: 0000~00F0 (0~240) (0:OFF, 1:ON) (Bit7:AL4, Bit6:AL3, Bit5:AL2, Bit4:AL1)	R
40003	0002	POLAR	Analog output polarity setting; range: 0000~0001 (0~1) 0:NO, 1:YES	R/W
40004	0003	LOCK	Key lock setting; range: 0000~0001 (0~1) 0:NO, 1:YES	R/W
40005	0004	FRAME	Frame setting; range 0000~0001(0~1) 0:NO, 1:YES	R/W
40006	0005	ACT1	Alarm 1 act setting; range: 0000~0001 (0~1) 0:HI, 1:LO	R/W
40007	0006	ACT2	Alarm 2 act setting; range: 0000~0001 (0~1) 0:HI, 1:LO	R/W
40008	0007	ACT3	Alarm 3 act setting; range: 0000~0001 (0~1) 0:HI, 1:LO	R/W
40009	0008	ACT4	Alarm 4 act setting; range: 0000~0001 (0~1) 0:HI, 1:LO	R/W
40010	0009	TYPE	Input type setting; range: 0000~0002 (0~1) 0:1U2D, 1:1P2D, 2:1A2B	R/W
40011	000A	ACCU	1A2B accurate setting; range 0000~0001(0~1) 0:X1, 1:X4	R/W
40012	000B	DP	Present Value decimal point setting; range: 0000~0005 (0~4) 0:10, 1:10 ¹ , 2:10 ² ~5:10 ⁵	R/W
40013	000C	OP.MODE	Count mode setting; range 0000~0002(0~2) 0:N, 1:R, 2:C	R/W
40014	000D	BAUD	Baud rate setting; range: 0000~0003 (0~3) 0:38400, 1:19200, 2:9600, 3:4800	R/W
40015	000E	PARI	Parity setting; range: 0000~0003 (0~3), 0:N.8.2., 1:N.8.1., 2:EVEN, 3:ODD	R/W
40016	000F	ADDR	Address setting; range: 0000~00FF (0~255)	R/W
40017	0010	OP.TIME	Present value relay output time setting; range: 0000~0063 (0~99)	R/W
40018	0011	AZERO	Analog output zero setting; range: D8F1~270F (-9999~9999)	R/W
40019	0012	ASPAN	Analog output span setting; range: D8F1~270F (-9999~9999)	R/W
40020	0013	CODE	Pass code setting; range: 00000000~000F423F (0~99999) Hi Bit	R/W
40021	0014		Pass code setting; range: 00000000~000F423F (0~99999) Low Bit	R/W
40022	0015	DIV	Pre-division setting; range: 00000001~000F423F (1~999999) Hi Bit	R/W
40023	0016		Pre-division setting; range: 00000001~000F423F (1~999999) Low Bit	R/W
40024	0017	SCALE	Total scale setting; range: 00000001~000F423F (1~999999) Hi Bit	R/W
40025	0018		Total scale setting; range: 00000001~000F423F (1~999999) Low Bit	R/W
40026	0019	ANLO	Analog output low scale setting; range: FFFCF2C1~000F423F (-199999~999999) Hi Bit	R/W
40027	001A		Analog output low scale setting; range: FFFCF2C1~000F423F (-199999~999999) Low Bit	R/W
40028	001B	ANHI	Analog output hi scale setting; range: FFFCF2C1~000F423F (-199999~999999) Hi Bit	R/W
40029	001C		Analog output hi scale setting; range: FFFCF2C1~000F423F (-199999~999999) Low Bit	R/W
40030	001D	AL1	Present value alarm 1 setpoint setting; range: FFFCF2C1~000F423F (-199999~999999) Hi Bit	R/W
40031	001E		Present value alarm 1 setpoint setting; range: FFFCF2C1~000F423F (-199999~999999) Low Bit	R/W
40032	001F	AL2	Present value alarm 2 setpoint setting; range: FFFCF2C1~000F423F (-199999~999999) Hi Bit	R/W
40033	0020		Present value alarm 2 setpoint setting; range: FFFCF2C1~000F423F (-199999~999999) Low Bit	R/W
40034	0021	AL3	Present value alarm 3 setpoint setting; range: FFFCF2C1~000F423F (-199999~999999) Hi Bit	R/W
40035	0022		Present value alarm 3 setpoint setting; range: FFFCF2C1~000F423F (-199999~999999) Low Bit	R/W

Modbus	HEX	Name	Descriptions	Act
40036	0023	AL4	Present value alarm 4 setpoint setting; range: FFFCF2C1~000F423F (-199999~999999) Hi Bit	R/W
40037	0024		Present value alarm 4 setpoint setting; range: FFFCF2C1~000F423F (-199999~999999) Low Bit	R/W
40038	0025	PV	Current present value setting; range: FFFFB1E1~0001869F (-19999~99999) Hi Bit	R/W
40039	0026		Current present value setting; range: FFFFB1E1~0001869F (-19999~99999) Low Bit	R/W