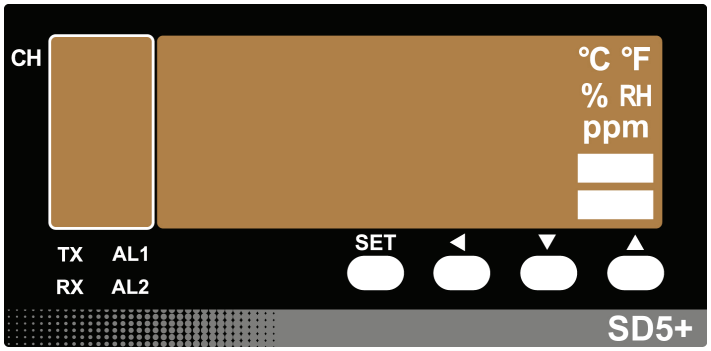
SD5+ 5 Channels Universal Monitoring Indicator



Front Panel description

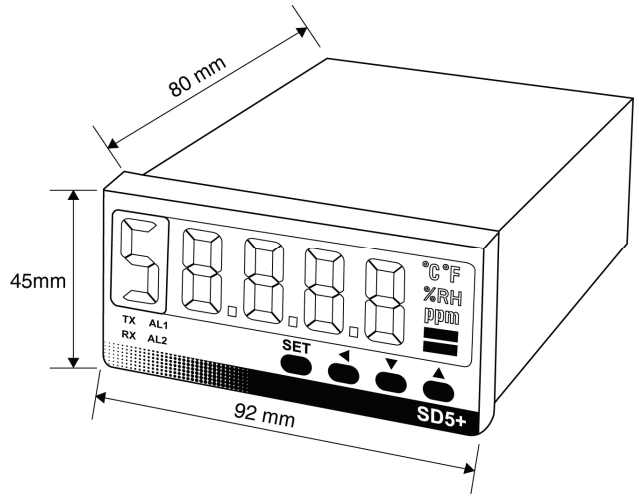
1. CH - Tells you which channel is being displayed in PV display above CH-1~CH-5
2. AL1 – Alarm 1 indicator. The alarm indicator will blink if you have selected the time function while timer alarm is counting time.
3. AL2 - Alarm 1 indicator. The alarm indicator will blink if you have selected the time function while timer alarm is counting time.
4. TX/RX - When the TX and RX indicators are blinking respectively it indicates that the communication function is working.

Keypad description

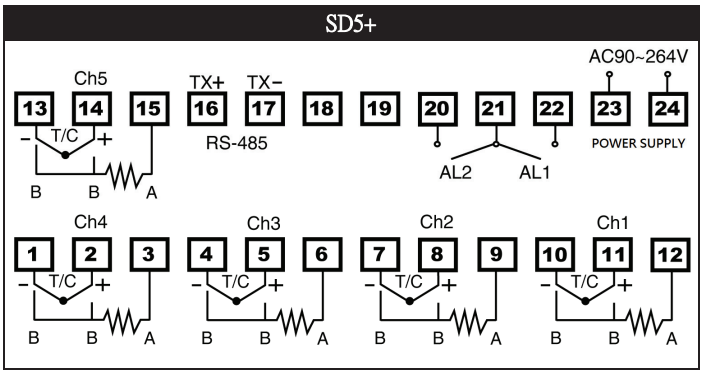
1. Press SET once to access the parameters in first level.
2. Press the SET + ◀ keys together for 5 seconds to access the second level.
3. After accessing the second level, then press SET + ◀ keys together for 5 seconds to access the second level.
4. Press SET once to access the next programmable parameter.
5. ▲ Press to increase the set value or parameter value.
6. ▼ Press to decrease the set value or parameter value.
7. Press the SET + ▲ once together to return to normal position

Panel Cutout

(Cutout) D: 80mm x H: 45mm x W: 92mm



Wiring Diagram

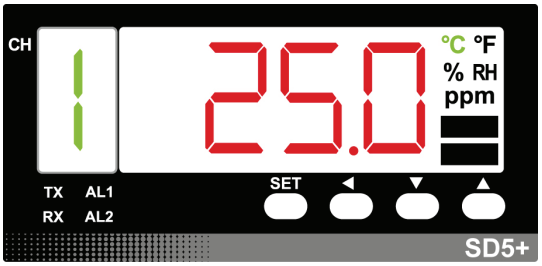


Wiring Notes

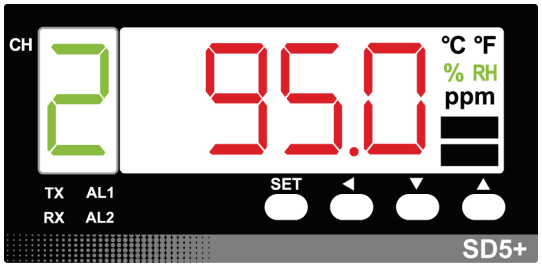
1. Before wiring, check the controller label for correct model number and options.
2. Mains power can be ac or dc between 90 and 264 volts and always goes on T23 and T24
3. Terminals T20, T21 and T22 are used for the alarms.
4. Terminals T16 and T17 are used for the RS485 comms.
5. For thermocouple input, use the appropriate compensation wire. And note the polarity of the input signal wiring
6. To avoid noise induction, keep input signal wires away from power lines.
7. Prepare the panel cutout with proper dimensions (92 + 0.5 and 45 +0.5 mm)

PV Display examples

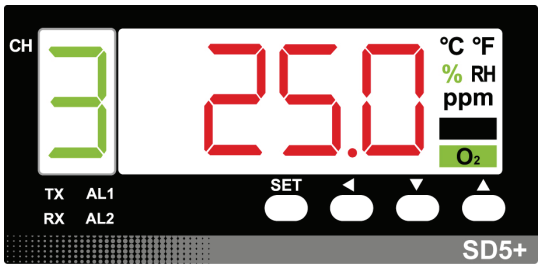
Channel 1 Signal



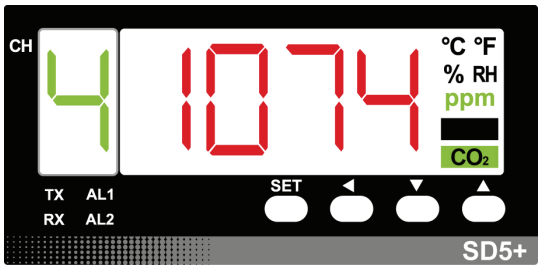
Channel 2 Signal



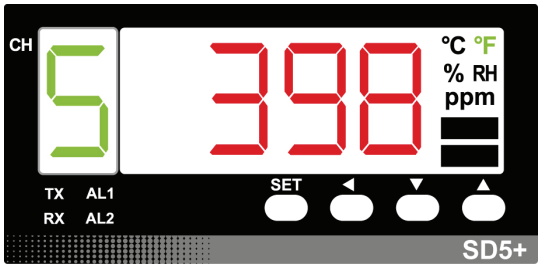
Channel 3 Signal



Channel 4 Signal



Channel 5 Signal



First Level

Press SET once to access the parameters in first level.

Parameter		Description	Range	Default
1PVOF	1PVOF	Process value offset of input channel 1. Use PV+PVoF to offset the PV indication from the actual PV.	-1000 ~ 2000 (-100.0 ~ 200.0)	0
2PVOF	2PVOF	Process value offset of input channel 2. Use PV+PVoF to offset the PV indication from the actual PV.	-1000 ~ 2000 (-100.0 ~ 200.0)	0
3PVOF	3PVOF	Process value offset of input channel 3. Use PV+PVoF to offset the PV indication from the actual PV.	-1000 ~ 2000 (-100.0 ~ 200.0)	0
4PVOF	4PVOF	Process value offset of input channel 4. Use PV+PVoF to offset the PV indication from the actual PV.	-1000 ~ 2000 (-100.0 ~ 200.0)	0
5PVOF	5PVOF	Process value offset of input channel 5. Use PV+PVoF to offset the PV indication from the actual PV.	-1000 ~ 2000 (-100.0 ~ 200.0)	0
1A1SP	1A1SP	Alarm 1 set value of input channel 1	-1999 ~ 9999	20.0
2A1SP	2A1SP	Alarm 1 set value of input channel 2	-1999 ~ 9999	20.0
3A1SP	3A1SP	Alarm 1 set value of input channel 3	-1999 ~ 9999	20.0
4A1SP	4A1SP	Alarm 1 set value of input channel 4	-1999 ~ 9999	20.0
5A1SP	5A1SP	Alarm 1 set value of input channel 5	-1999 ~ 9999	20.0
1A2SP	1A2SP	Alarm 2 set value of input channel 1	-1999 ~ 9999	20.0
2A2SP	2A2SP	Alarm 2 set value of input channel 2	-1999 ~ 9999	20.0
3A2SP	3A2SP	Alarm 2 set value of input channel 3	-1999 ~ 9999	20.0
4A2SP	4A2SP	Alarm 2 set value of input channel 4	-1999 ~ 9999	20.0
5A2SP	5A2SP	Alarm 2 set value of input channel 5	-1999 ~ 9999	20.0

Second Level

Press the SET + ◀ keys together for 5 seconds to access the second level.

Parameter		Description	Range	Default
A1FU	A1FU	Alarm 1 function. (1) nonE : Alarm function off (2) Hi : Process high alarm (3) Lo : Process low alarm	nonE Lo Hi	nonE
A1Md	A1MD	Alarm 1 mode. Used with A1FU. If A1MD=nonE, alarm mode is cancelled.	nonE StdY LAtH StLA Refer to Alarm Mode section	nonE
A1HY	A1HY	Hysteresis for Alarm 1.	0-2000	0
A2FU	A2FU	Alarm 2 function. (1) nonE : Alarm function off (2) Hi : Process high alarm (3) Lo : Process low alarm	nonE Lo Hi	nonE
A2Md	A2MD	Alarm 2 mode. Used with A1FU. If A2MD=nonE, alarm mode is cancelled.	nonE StdY LAtH StLA Refer to Alarm Mode section	nonE
A2HY	A2HY	Hysteresis for Alarm 2	0-2000	0
CHno	CHNO	This is where you set the number of channels you are using. If 5 input channels are connected, CH.no is set to 5.	1~5	5
SCAt	SCAT	Scan rate for all channels	1~10 seconds	3 seconds
Addr	ADDR	RS485 communication address 2	1-255	1
bAUd	BAUD	Communication baud rate	9.6K	9600 bps
			19.2K	19200 bps
			38.4K	38400 bps
			57.6K	57600 bps
			115.2K	115200bps
rtU	RTU	Transmission Format	o81、E81 N82、N81	N82
LoCY	LOCK	Parameter lock	Default Setting	0100

This security feature locks out selected levels or single parameters prohibiting tampering and inadvertent programming changes. See the table below.

0001	All parameters are locked out.
00 0	First level and second level are adjustable.
0011	First level is not adjustable, but second level is adjustable.
0100	All parameters in all levels are opened.

■ Third Level

After accessing the second level, then press SET + ◀ keys together for 5 seconds to access the second level.

◎ Below parameters are independent settings for channel 1~5. 1 2 3 4 5

Parameter		Description	Range	Default
tYPE	TYPE	Inputs selection are as below : Thermocouple, RTD, Line(DC mA, DC V),RSP(RS-485) See the range below.		

TYPE		UNIT	RANGE
rSP	RSP	-1999 ~ 9999 ※	
L inE	LINE	-1999 ~ 9999 ※	
d-Pt	D-PT	℃	850 ~ -200
		℉	1562 ~ -328
r	R	℃	0 ~ 1750
		℉	32 ~ 3182
t	T	℃	400 ~ -270
		℉	752 ~ 454
K	K	℃	1370 ~ -50
		℉	2498 ~ -58
J	J	℃	1000 ~ -50
		℉	1832 ~ -58

Unit	UNIT	Measuring unit of the process alue(CH1~CH5)	LED1 : ℃ LED 2 : ℉ LED 3 : % LED 4 : RH LED 5 : %RH LED 6 : ppm LED 7 : Paste the unit sticker by requirement	℃
dP	DP	Decimal point selection. 0.01 and 0.001 resolution. (Linear input only) After changing the decimal point, please reconfirm the parameter values below.	0000 : No decimal point 000.0 : 0.1 resolution 00.00 : 0.01 resolution 0.000 : 0.001 resolution	0000
LnLo	LNLO	Low scale of linear input)(4~20mA or 0~10V)	-1999~9999	0
LoHi	LNHI	High scale of linear input)(4~20mA or 0~10V)	-1999~9999	500
CUt	CUT	Used to specify the process value when linear input (type=line) signal is out of range. nonE : this function is not used Lo : The process value will be limited to 4mA when input signal is lower than the scale range. Hi : The process value will be limited to 20mA when input signal is higher than the scale range. HiLo : The process value will be limited within the range of LoLt to HiLt when input signal is out of scale.	nonE Lo Hi HiLo	nonE

※ : **Specify when ordering**

Parameter		Description	Range	Default
LEdB	LED 8	LED 8 ON/OFF (Paste the unit sticker by requirement)	0 : OFF 1 : ON	0

■ Alarm Mode

Alarm mode	Code	Description
A1nd A2nd	nonE	Disable the alarm mode
	StdY	Standby mode. When selected, prevents an alarm on power up. The alarm is active after alarm condition has been cleared and then alarm occurs again.
	LAtH	Latch mode. When selected, the alarm output and indicator latch as the alarm occurs. The alarm output and indicator will not change its state even if the alarm condition has been cleared unless the power is off.
	StLA	Both standby and Latch mode are applied.