

# SD Series Sensor Meter User Manual



Features:

1. Dual LED display output:
2. Two alarm output;
3. TC / RTD / Analog signal universal input;
4. Special linear signal input can be ordered

For your safety, please read follow content carefully before you use our meter!

**■ Safety Caution**

※ Please read the manual carefully before you use the meter

\* Please comply with following important points:

! WARNING: An accident may happen if the operation does not comply with the instruction

⚠ NOTICE: An operation that does not comply with the instruction may lead to product damage

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※ The instruction of the symbol in the manual is as follow.

⚠ An accident or danger may happen in a special condition.

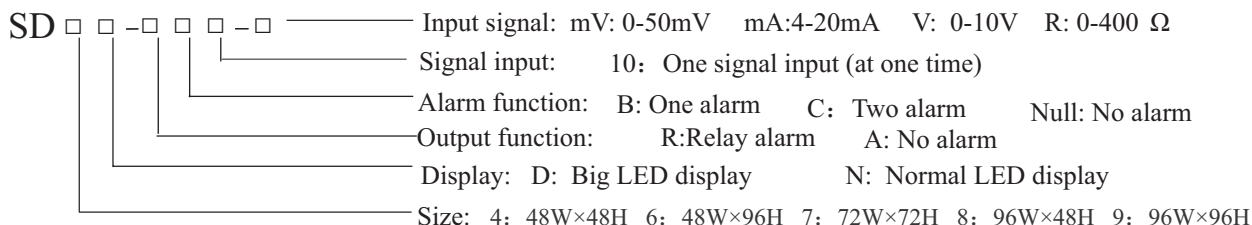
**⚠ Warning**

1. A safety protection equipment must be installed or please contact with us for the relative information if the product is used under the circumstance such as nuclear control, medical treatment equipment, automobile, train, airplane, aviation and equipment etc.. Otherwise, it may cause serious loss, fire or person injury.
2. A panel must be installed, otherwise it may cause creepage (leakage).
3. Do not touch wire connectors when the power is on, otherwise you may get an electric shock.
4. Do not dismantle or modify the product. If you have to do so, please contact with us first. Otherwise it may cause electric shock and fire.
5. Please check the connection number while you connect the power supply wire or input signal, in case cause fire.

**⚠ Caution**

1. This product cannot be used outdoors. Otherwise the working life of the product will become shorter, or an electric shock accident may happen.
2. When you connect wire to the power input connectors or signal input connectors, the moment of the No.20 AWG (0.50 mm<sup>2</sup>) screw tweaked to the connector is 0.74n.m - 0.9n.m. Otherwise the connectors may be damaged or get fire.
3. Please comply with the rated specification. Otherwise it may cause electric shock or fire, and damage the product.
4. Do not use water or oil base cleaner to clean the product. Otherwise it may cause electric shock or fire and damage the product.
5. This product should be avoid working under the circumstance that is flammable, explosive, moist, under sunshine, heat radiation and vibration. Otherwise it may cause explosion.
6. In this unit it must not have dust or deposit, otherwise it may cause fire or mechanical malfunction.
7. Do not use gasoline, chemical solvent to clean the cover of the product because such solvent can damage it. Please use some soft cloth with water or alcohol to clean the plastic cover.

## 1.Model



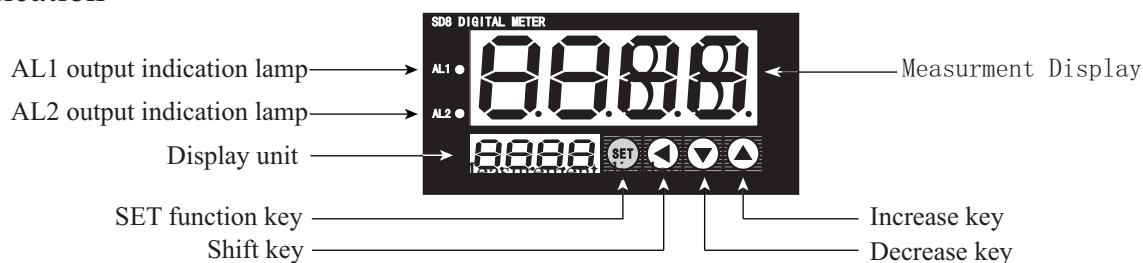
## 2.Model Description

Model	Alarm function	Input
SD□-RC10-mV	Two Relay Output Capacity	0~50mV
SD□-RC10-V	Two Relay Output Capacity	0~10V
SD□-RC10-mA	Two Relay Output Capacity	4~20mA
SD□-RC10-R	Two Relay Output Capacity	0~400Ω

## 3.Main Technical Parameters

Input signal	mV	0-50mV (0-20mV can be orderde)
	V	0-10V(0-5V, 1-5V, 1-10V can be ordered)
	mA	4-20mA (0-20mA can be ordered)
	R	0-400Ω
Alarm output	Relay output: capacity: 1A/250V AC	
Power supply	SD6/7/8/9: AC 110/220V±10% SD4: AC/DC 100-240V	
Total current	<30mA(AC 220V)	
Ambient temperature	0-50℃	
Ambient humidity	45-85%RH	

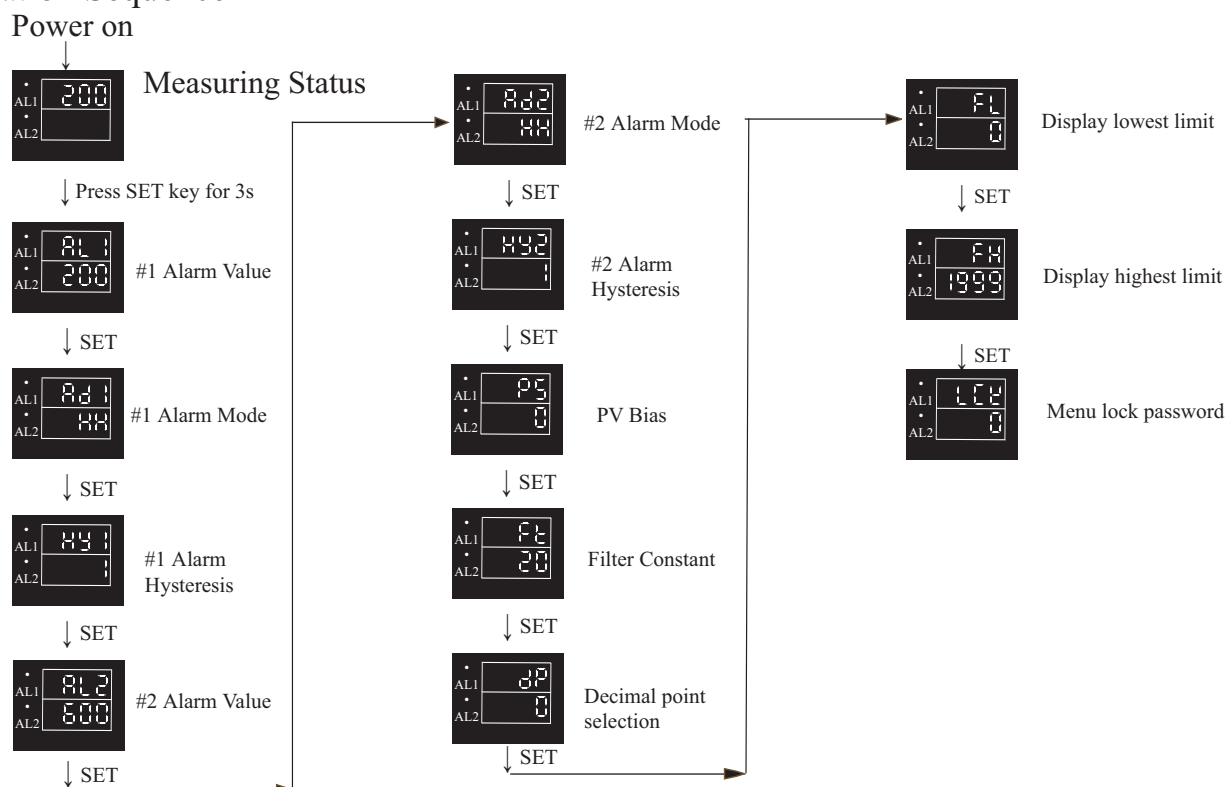
## 4.Panel Indication



## 5.Panel Key Operation

- (1) In normal display status, press SET key for a few seconds to show setting menu.  
In setting menu, press SET key for a few seconds to quit setting menu.
- (2) Press ◀ key before changing value.
- (3) Press ▲ or ▼ key to change value.
- (4) After parameters are changed, press SET key to confirm and save.

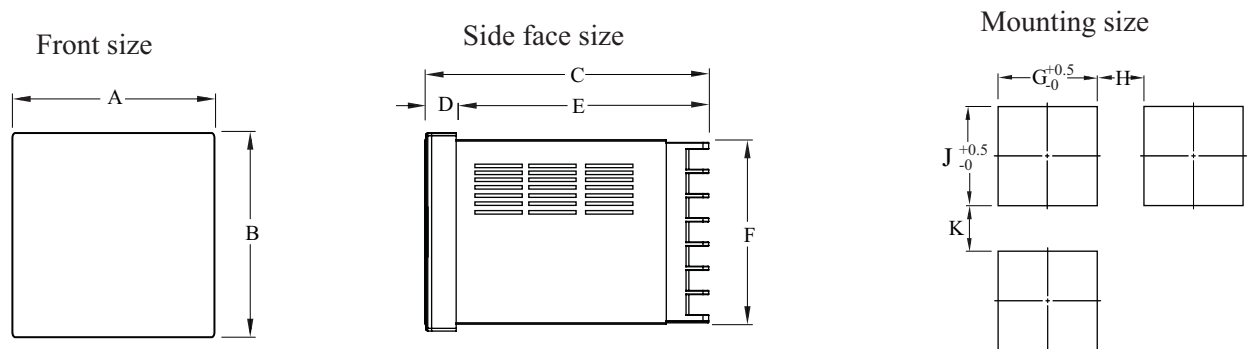
## 6.Operation Sequence



## 7.Setting Menu

Menu	Function name	Description	Setting range	Ex-factory setting
NULL	Measurement unit choose	Null、M, CM, MM, Kg, g, mg,MPa,Pa,ba, mba,N,W,KW,RPM,HZ,KHZ,mV,V,KV,mA,A,KA,Ω, °C, F, can be choosed		
AL1	#1 Alarm Value	#1 Alarm Value Setting	FL-FH	200
AD1	#1 Alarm Mode	#1 Alarm Mode select between lowest and highest limit	HL/HH	HH
HY1	#1 Alarm Hysteresis	#1 Alarm Hysteresis value setting	0-1000	1
AL2	#2 Alarm Value	#2 Alarm Value Setting	FL-FH	600
AD2	#2 Alarm Mode	#2 Alarm Mode select between lowest and highest limit	HL/HH	HH
HY2	#2 Alarm Hysteresis	#2 Alarm Hysteresis value setting	0-1000	1
PS	PV Bias	To bias meter display because of sensor	-1000-1000	0
FT	Filter Constant	Digital filter for input signal	1-250	20
DP	Decimal point selection	Decimal point setting	0-3	0
FL	Display lowest limit	Display lowest limit setting	-1999-1999	0
FH	Display highest limit	Display highest limit setting	-1999-1999	1999
LCK	Menu lock password	Password setting, the menu was forbade to change when setting "11"	0-250	0

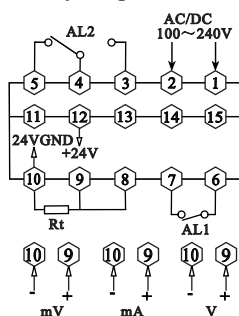
## 8.Outlook & Installation dimension



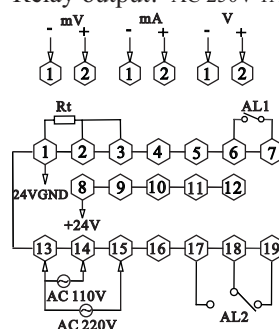
Model	A	B	C	D	E	F	G	H(Min)	J	K(Min)
4:(48*48)	48	48	108	6	102	45	45.5	25	45.5	25
6:(96*48)	48	96	109	9	100	89.5	45	25	90	25
7:(72*72)	72	72	109	9.5	99.5	67	67.5	25	67.5	25
8:(48*96)	96	48	109	9	100	44.5	90	25	45	25
9:(96*96)	96	96	108	8	100	91.5	92	25	92	25
Notes	Unit:(mm) tolerance $\pm 0.5\%$ (except special marked)									

## 9.Connection drawing

SD4 Power supply: AC/DC 100-240V  
Relay output: AC 250V 1A



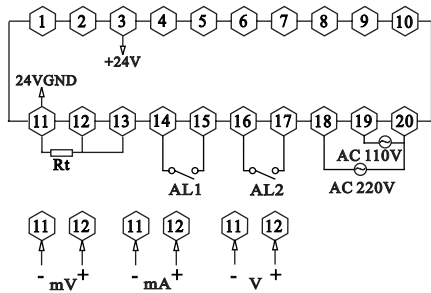
SD7 Power supply: AC 110/220V $\pm 10\%$   
Relay output: AC 250V 1A



SD6/SD8

Power supply: AC 110/220V±10%

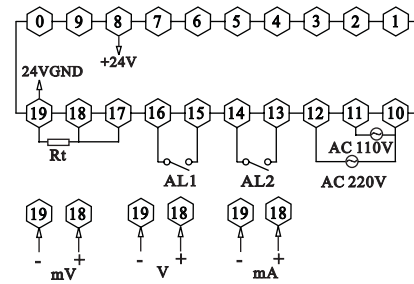
Relay output: AC 250V 1A



SD9

Power supply: AC 110/220V±10%

Relay output: AC 250V 1A



Note: Please subject to the drawing on the products as final if there is any different from the above

## 10. Simple Problem Shooting

Display Message	Shooting Method
Display HHHH/LLLL	<ul style="list-style-type: none"> <li>To check input signal connection well or not.</li> <li>To check FH, FL value;</li> <li>To check working temperature is OK or not.</li> <li>To check input signal selection is right or not.</li> </ul>