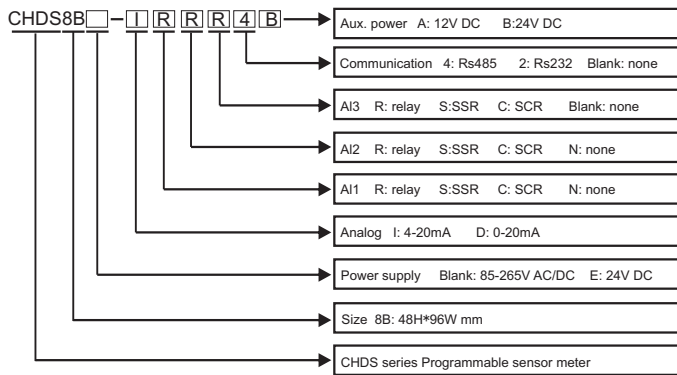


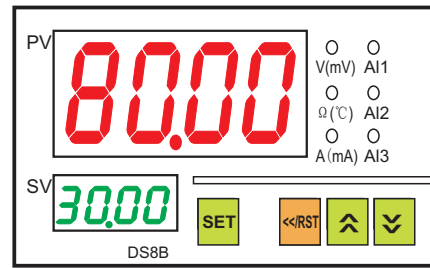
# CHDS8B series Programmable Sensor Meter User Instruction Manual

First of all, thank you for using our qualified products. Please read this manual carefully before use so that you can fully understand and properly use the instrument

## 1. Model number and ordering info.



## 4. Panel description



PV window: display PV and parameter notation

SV window: display SV and parameter value

AI1: indicate lamp for alarm 1, ON: active OFF: inactive

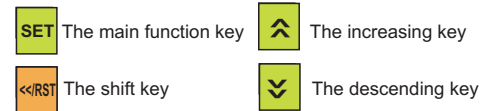
AI2: indicate lamp for alarm 2, ON: active OFF: inactive

AI2: indicate lamp for alarm 2, ON: active OFF: inactive

V(mV): signal input lamp ON: V signal flash: mV signal

Ω(°C): signal input lamp ON: resistance signal flash: TC/RTD signal

A(mA): signal input lamp ON: A signal flash: mA signal

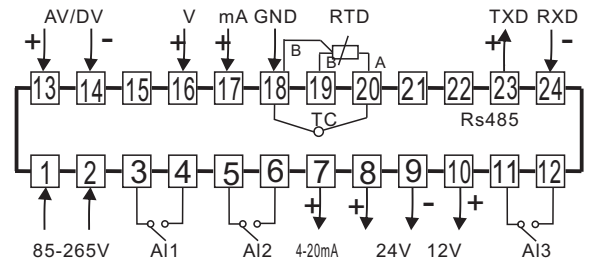


## 2. Technical specifications

The instrument accepts many types of signals input as 4-20mA, 0-10V, 0-75mV, TC/RTD, load cell, etc.. This makes it applied in different applications, such as temperature, pressure, weighting, resistance, current and voltage measurement. We also provide 20-stage programmable setting for no-linear input. The input, output and power supply are isolated from each other.

|                |   |
|----------------|---|
| Power supply   | 85-265V AC/DC 50/60Hz consumption: ≤5VA |
| Accuracy       | 0.3%F.S ±2 digits                       |
| Sampling speed | ≤8 times/sec.                           |
| Alarm          | Relay, 250V/3A AC or 30V/3A DC cos =1   |
| Input          | 4-20mA, 0-10V, 0-75mV, TC/RTD           |
| Analog         | 0/4-20mA set output range by software   |
| Aux. power     | 12/24V 30mA DC                          |
| Communication  | Rs485 / Rs232                           |

## 5. Wiring diagram

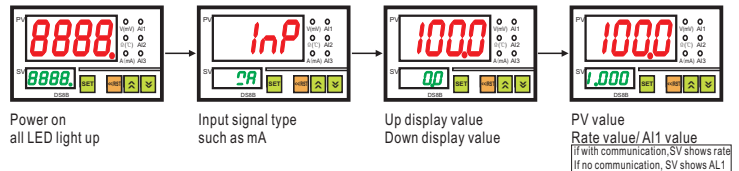


Remark Above is a general wiring diagram. Please always refer to the connection diagram on the side of the controller.

## 6. Setting and programming

### 6.1 Power on initialization

Power on for self-checking and showing input type & display value range.



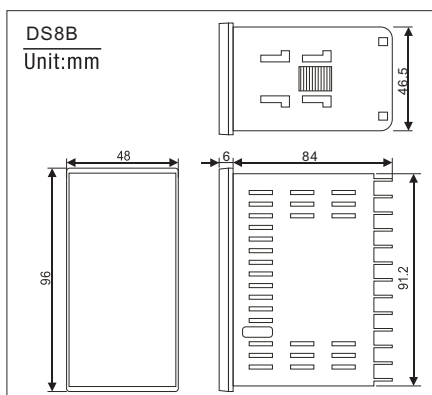
PV value Rate value/AI1 value  
If with communication, SV shows rate  
If no communication, SV shows AI1

Power on all LED light up

Input signal type such as mA

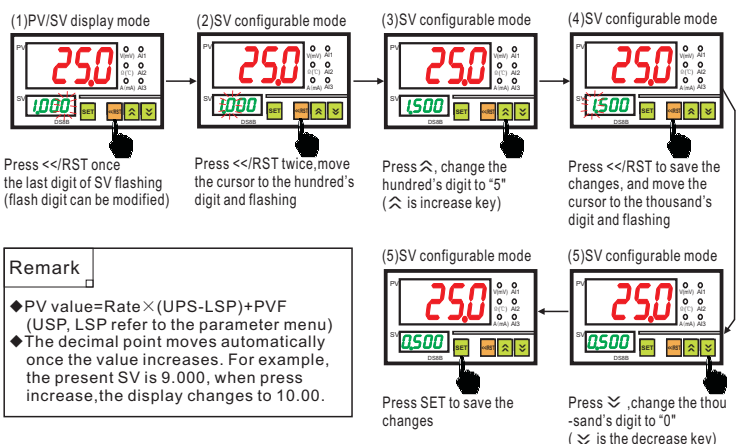
Up display value  
Down display value

## 3. Size and mounting



### 6.2 Rate configuration and parameter configuration

6.2.1 How to change the SV setting value (example: change 1,000 to 0,500)

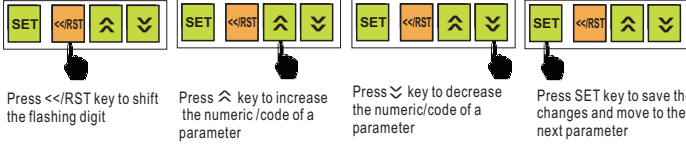


Remark  
◆ PV value=Rate×(UPS-LSP)+PVF (USP, LSP refer to the parameter menu)  
◆ The decimal point moves automatically once the value increases. For example, the present SV is 9.000, when press increase, the display changes to 10.00.

Press SET to save the changes

Press ↓ change the thousand's digit to "0" (↓ is the decrease key)

### 6.2.2 How to configure all configurable parameters



### 6.2.3 Zero point clearance

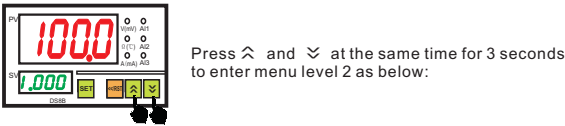


**Remark** The instrument will return to the measuring estate if no any operation for 25 seconds

## 7. Parameter menu



| Notation   | Name                 | Description | Default | Remark  |
|------------|----------------------|-------------|---------|---|
| <b>AL1</b> | Alarm 1 value<br>AL1 | LSP≤AL1≤USP | 144.0   | Alarm value for alarm 1   |
| <b>AM1</b> | Alarm 1 mode<br>AM1  | H,L         | H       | H: High alarm L: Low alarm  |
| <b>AL2</b> | Alarm 2 value<br>AL2 | LSP≤AL2≤USP | 10.0    | Alarm value for alarm 2   |
| <b>AM2</b> | Alarm 2 mode<br>AM2  | H,L         | H       | H: High alarm L: Low alarm  |
| <b>AL3</b> | Alarm 3 value<br>AL3 | LSP≤AL3≤USP | 50.0    | Alarm value for alarm 3   |
| <b>AM3</b> | Alarm 3 mode<br>AM3  | H,L         | H       | H: High alarm L: Low alarm  |
| <b>PVF</b> | Offset value<br>PVF  | -50 to 50   | 0.0     | PV value= measuring value - PVF   |
| <b>LCK</b> | Lock password<br>LCK | 0~999       | 000     | LCK=010, the menu level 1 can be read only<br>LCK=000, the menu level 1 can be modified |



| Notation   | Name                                   | Description                 | Default | Remark  |     |     |      |     |
|------------|--|-----------------------------|---------|---|-----|-----|------|-----|
| <b>INP</b> | Input sensor code selection INP        |                             |         |   |     |     |      |     |
|            | Symbol                                 | $\mu$                       | $\mu$   | $\epsilon$                                      | $t$ | $r$ | $S$  | $b$ |
|            | input                                  | K                           | J       | E   | t   | r   | S    | b   |
| <b>INP</b> | Symbol                                 | $Pt$                        | $rt$    | $mV$  | $A$ | $V$ | $mA$ |     |
|            | input                                  | Pt100                       | rt      | mV  | A   | V   | mA   |     |
| <b>LSP</b> | Low display value<br>LSP               | -1999 ~ 9999                | 0.0     | PV low limit display value                      |     |     |      |     |
| <b>USP</b> | High display value<br>USP              | -1999 ~ 9999                | 100.0   | PV high limit display value                     |     |     |      |     |
| <b>gP</b>  | Decimal point<br>gP                    | 0000, 000.0<br>00.00, 0.000 | 000.0   | PV decimal point                                |     |     |      |     |
| <b>HY1</b> | Alarm hysteresis for alarm 1<br>HY1    | -50 to 50                   | 1.0     | Hysteresis value for alarm 1                    |     |     |      |     |
| <b>HY2</b> | Alarm hysteresis for alarm 2<br>HY2    | -50 to 50                   | 1.0     | Hysteresis value for alarm 2                    |     |     |      |     |
| <b>HY3</b> | Alarm hysteresis for alarm 3<br>HY3    | -50 to 50                   | 0.0     | Hysteresis value for alarm 3                    |     |     |      |     |
| <b>TrL</b> | Transmission output<br>lower limit TrL | LSP≤TrL≤USP                 | 0.0     | Display for re-transmission at low limit value  |     |     |      |     |
| <b>TrH</b> | Transmission output<br>high limit TrH  | LSP≤TrH≤USP                 | 100.0   | Display for re-transmission at high limit value |     |     |      |     |
| <b>bAd</b> | Baud rate bAd                          | 1,2,3,0                     | 0       | 1: 19.2K bit/s 0: 9.6K bit/s, 2,3 reserved      |     |     |      |     |
| <b>Add</b> | Communication address<br>Add           | 000~200                     | 001     | Communication address code                      |     |     |      |     |
| <b>Prt</b> | Temperature unit<br>Prt                | NO, YES                     | NO      | NO:°C YES:F                                     |     |     |      |     |
| <b>LCK</b> | Lock password                          | 0~999                       | 015     | Password to access menu level 2                 |     |     |      |     |

**Remark** Depends on the specific functions, some of parameter may or may not be available.

## 8. Malfunction estimate

|                         |  |
|-------------------------|--|
| No display              | Check all the connection and wiring if it's correct;<br>Specially pay attention to the power supply terminals and signal input terminal. Do not connect wrongly;<br>Do not short connect the output terminals by strong current. |
| Wrong display           | Check if the parameter PVF=0;<br>Check if the input signal is conformity with the selected input symbol.<br>For RTD input, please use low impedance cable. The 3 wires should be at the same length.                             |
| Wrong control           | When the instrument lose control, please check if the output diagram connection is correct;<br>Check if the components for output part is damage or not.   |
| UUUU<br>LLLL<br>display | UUUU: the input signal exceeds the measured USP range;<br>LLLL: the input signal is lower than the measured LSP range;<br>or the input signal terminal connection is contrary.   |