■FEATURES:

※ This instrument is widely applied to all kinds of sensors with linear output and other testing equipments to measure pressure, weight, temperature, humidity, etc.
※ With decimal point setting, rate, range and zero point adjustment.
※ With analogue output 4 - 20mA DC
※ With auxiliary power supply: 12V or 24V
※ Power supply: 220V AC

■Applications

Suitable for all kinds of sensors with linear output and other testing equipment.
This instrument can measure any range of current or voltage signal input.
It can be with 2-wire transmitters, pressure sensors, 4-wire weight sensors and so on.

Thanks a lot for selecting YOTO products!
For your safe, please carefully read this manual and fully understand its contents before operating this instrument. If you have problems, please contact our sales or distributors whom you buy from. This manual is subject to change without prior notice.

▲SAFETY CAUTIONS:

※ Make sure the power is at OFF status before connecting the wires to avoid electric shock and strictly follow the connection diagram given out by the factory which is stuck on the product.
※ Make sure the power OFF when cleaning the product.
※ Working beyond the stated power supply (90 - 260V AC) is prohibited so as to avoid damage to the product or cause fire. The use life of the output relay is quite different according to its capacity and conditions.
※ Make sure the output relay is used at the rate load and electrical life, if the contact of the output relay works against the electrical life, it may melt or burned or even cause fire.
※ Do not wire when the power is on. Do not connect the unused terminals. Do not disassemble, repair or modify the instrument. This may cause electrical shock, fire or malfunction.

1. Ordering Code

DP□—SVA □ □ — A: Auxiliary power 12V DC B: Auxiliary power 24V DC
Analogue output 1: No analogue output 2: With 4 ~ 20mA analogue output
DP3-SVA: DP3-SVA Series 3 1/2 digit sensor meter
DP4-SVA: DP4-SVA Series 4 1/2 digit sensor meter

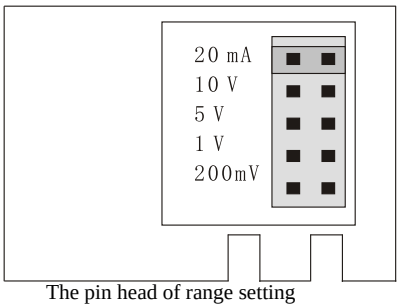
※ Example: DP3-SVA1B means that it is a DP3-SVA Series, 3 1/2 digit LED display sensor meter, with no analogue output, auxiliary power 24V DC.

2. Technical Specification

Measured function	Equipped with all kinds of sensors
Input signal	Current: 4 ~ 20mA, 0 ~ 10mA, Voltage: 0 ~ 10V, 0 ~ 5V, 0 ~ 1V, 0 ~ 200mV, 0 ~ 20mV
Accuracy	± 0.5%FS ± 2 digit
A/D converter	Dual integral
Sampling rate	2.5 times/second
Full scale	DP3: 1999(decimal point can be set freely) DP4: 19999(decimal point can be set freely)
Display mode	Red LED display (high: 14.2mm)
Load	≤600Ω
Ambient temperature	0℃ ～ 50℃
Power supply	AC 110V/ 220V, 50/ 60Hz
Dimension (mm)	48H X 96W X 100L
Weight (appr)	450g
Dielectric strength	1500V AC/ 1min
Insulation resistance	500V DC/ 100MΩ

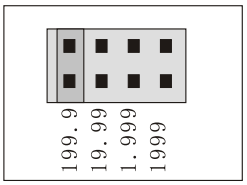
3. Function setting

While setting the range and the decimal point, be sure to pull out the internal printed circuit board, as the follow figure hows:



The pin head of range setting

Figure 1



The pin head of decimal point setting

Figure 1

1). Range setting (Figure 1)

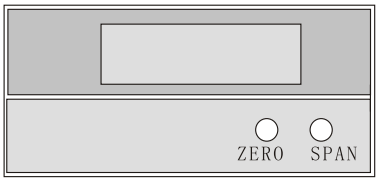
The positions of jumper cap	20mA	10V	5V	1V	200mV
Input range	4 ~ 20mA/ 0 ~ 20mA	0 ~ 10V	0 ~ 5V	0 ~ 1V	0 ~ 200mV/ 0 ~ 20mV

2). Decimal point setting (figure 2)

While moving the jumper cap on different PIN head, you can get the position of the decimal point that you want.
Note: The original setting range is 0 ~ 10V, display 0 ~ 2000, you can adjust it to what you want.

4. Display adjustment

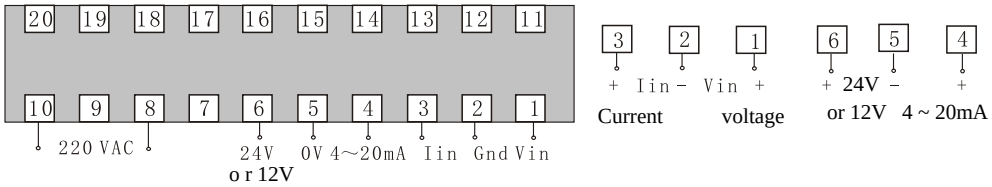
1. While setting the span and zero, please open the front lid. As the following figure shows.



2. Span adjustment (SPAN)
Input a typical value, the display value can be increased, when forward adjust, the display value can be decreased while reverse adjust.

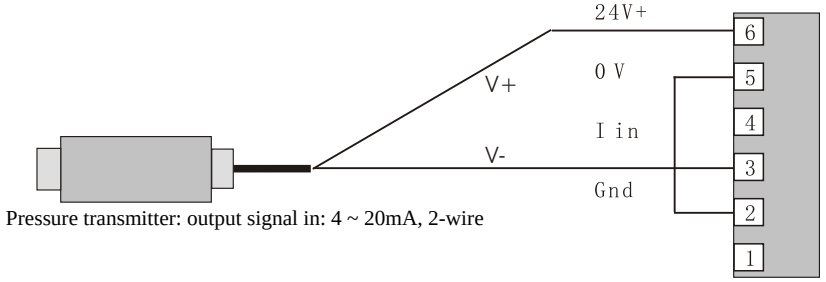
3. Zero adjustment (ZERO)
Function forward adjust is forward biased, reverse adjust is reverse biased. After the adjustment of span value and scale setting, you need to check whether zero need to be reset. Zero adjustment must be in zero input or input short circuit or an adjustment signal. For example, input 4 ~ 20mA, if you want to display zero, you must input 4mA in the terminal then adjust to zero. In order to diminish error, please adjust span & zero repeatedly.

5. Terminal Connection



Note: Please subject to the diagram on the product if there is any change.

※Application example: connect with pressure transmitter

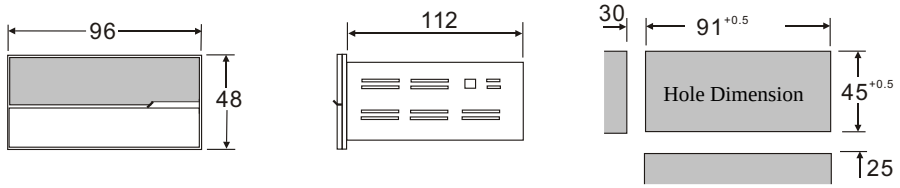


Pressure transmitter: output signal in: 4 ~ 20mA, 2-wire

Figure 1

Use with 2-wire pressure transmitter/ sensor. The instrument can supply DC 24V auxiliary power, and the sensor output is 4 ~ 20mA. Software select input signal mA. Please refer to above figure 1.

6. Dimension



7. Installation

1). Please make the holes on the shell according to meter hole dimensions. When there are more than two meters to be installed, the distance of two holes between left meter and the right meter should be large than 25mm. and the distance of two holes between the upper meter and the lower meter should be large than 30mm.
2). Insert the meter into the panel.
3). Insert the mounting bracket into mounting slot.
4). Push tight the mounting brackets so that the meter can combine with the shell firmly.

8. Cautions:

1). The product should be power on for 15 minutes before operating.
2). The appropriate ambient temperature is 0 ~ 50℃; relative humidity: 85%RH.
3). The product calibration period is 12 months.
4). Avoid shock and impact, prevent operation from heavy dust and poisonous chemicals and gas environment.
5). If the input signals with high frequency interference, the wires must configure a filter.
6). The input wires should not be too long. If the distance between the signal input terminal and the product can not be shortened, please use shielded cable.
7). For long time storage, the meter should be shield form light with conservation temperature -10 ~ 70℃/ 60%RH.
8). Please stored in indry and ventilated place. Don't place in an area surrounded by organic solvents or corrosive gases.
9). If stock in long time without operation, power on the instrument one time every 3 month is recommended, each time should be no less than 4 hours.

9. Others:

1). The complete product contains: product with connection diagram, instruction manual, installing brackets (1 set), inspection certificate and packing box with product label.
2). Guarantee: any defected products under normal operation within 12 months can be returned and replaced by us; Damage by user's wrong operation can not be replaced. If request to be returned for repair, buyer should take chare fo the freight fee, on conditions that large quantities need to be repaired, repair fee should be considered.