



協鋼工業股份有限公司  
SHEEN KONG INDUSTRIAL CO., LTD.

41279 台中市大里區四育街10號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: skon@skon.com.tw  
<http://www.skon.com.tw>

## High-accuracy pressure switch of small-scale digit display of one inch

### Performance characteristic

- High-accuracy pressure switch
- LCD shows (LCD: 20\*9.6MM)
- High resolution: 1/3000 (Max)
- Unit can choose the pressure: PSI, Bar, kg/cm<sup>2</sup>, Kpa, Mpa, inHg, cmHg, Atm.
- Many kinds of outputs way
- Two groups exporting
- The zero point adjusting
- Supreme working pressure can be up to 3000PSI
- Do use outside the non-corroding type fluid and air, can also use the liquid or the corrosive fluid
- Display can use seven kinds of colors
- Show temperature
- The pressure shows that there is pressure value which attaches the temperature compensation ( General compensation temperature is 0-50 degrees Centigrade)



協鋼工業股份有限公司  
SHEEN KONG INDUSTRIAL CO., LTD.

41279 台中市大里區四育街10號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: skon@skon.com.tw  
<http://www.skon.com.tw>

## The type forming

### For air(SB):

- (1). MGS-1Bar-SB-x : -1Bar ~ 1Bar
- (2). MGS-10Bar-SB-x : -1Bar ~ 10Bar

### For water (SA):

- (1). MGS-1Bar-SA -x: -1Bar ~ 1Bar
- (2). MGS-10Bar-SA-x : -1Bar ~ 10Bar
- (3). MGS-35Bar-SA-x : -1Bar ~ 35Bar
- (4). MGS-70Bar-SA-x : -1Bar ~ 70Bar
- (5). MGS-100Bar-SA-x : -1Bar ~ 100Bar
- (6). MGS-200Bar-SA-x : -1Bar ~ 200Bar

PS: x => N (out1 & out2 are npn output type)

x => P (out1 & out2 are pnp output type)

Specification parameter	Air (SB)	Water (SA)
Type		
The pressure amount examines the range	-1Bar to 1.05*F.S	-1Bar to 1.05*F.S
Destroy the pressure	20Bar(min)	(min)
Precision of pressure	1% F.S	1% F.S
Suitable fluid	It is not the air of the corrosivity to be clean	Gas and fluid of corrosivity
Voltage of the power	DC 10 30V	
Consume the electric current	Max: 80mA	



**協鋼工業股份有限公司**  
SHEEN KONG INDUSTRIAL CO., LTD.

4 1 2 7 9 台中市大里區四育街10號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: skon@skon.com.tw  
http://www.skon.com.tw

<b>Control and export</b>	<b>NPN, load current 100mA of PNP, voltage Max: 30VDC</b>	
<b>The temperature amount examines the range</b>	<b>0 0 100 degrees Centigrade</b>	
<b>Precision of temperature</b>	<b>± 2°C (4°F)</b>	
<b>Circums-tances</b>	<b>Use temperature</b>	<b>-10°C~60°C ( Non- frozen state)</b>
	<b>Keep temperature</b>	<b>-20°C~70°C ( Non- frozen state)</b>
	<b>Use the humidity</b>	<b>35- 85%</b>
	<b>Keep the humidity</b>	<b>35- 85%</b>
<b>Spiral shell's tooth of pressure port</b>	<b>R( PT) 1/8 *2</b>	
<b>Material</b>	<b>Cover from beginning to end: ABS Tooth: Zn</b>	<b>Cover from beginning to end: ABS Tooth: SUS304L</b>
<b>Waterproof grade</b>	<b>IP54</b>	
<b>Join the cable</b>	<b>UL2464 , 28AWG , 5P , φ 4mm , 50cm</b>	
<b>Authentication</b>		
<b>Weight</b>	<b>Invite 80g</b>	
<b>Enclosure</b>	<p>Install the regular frame Visor (go to the two as one group) The manometer uses and installs mounting bracket 1 The manometer uses and installs mounting bracket 2 (Have the two to select and use, when using, can't use at the same time with first 2 also)</p>	

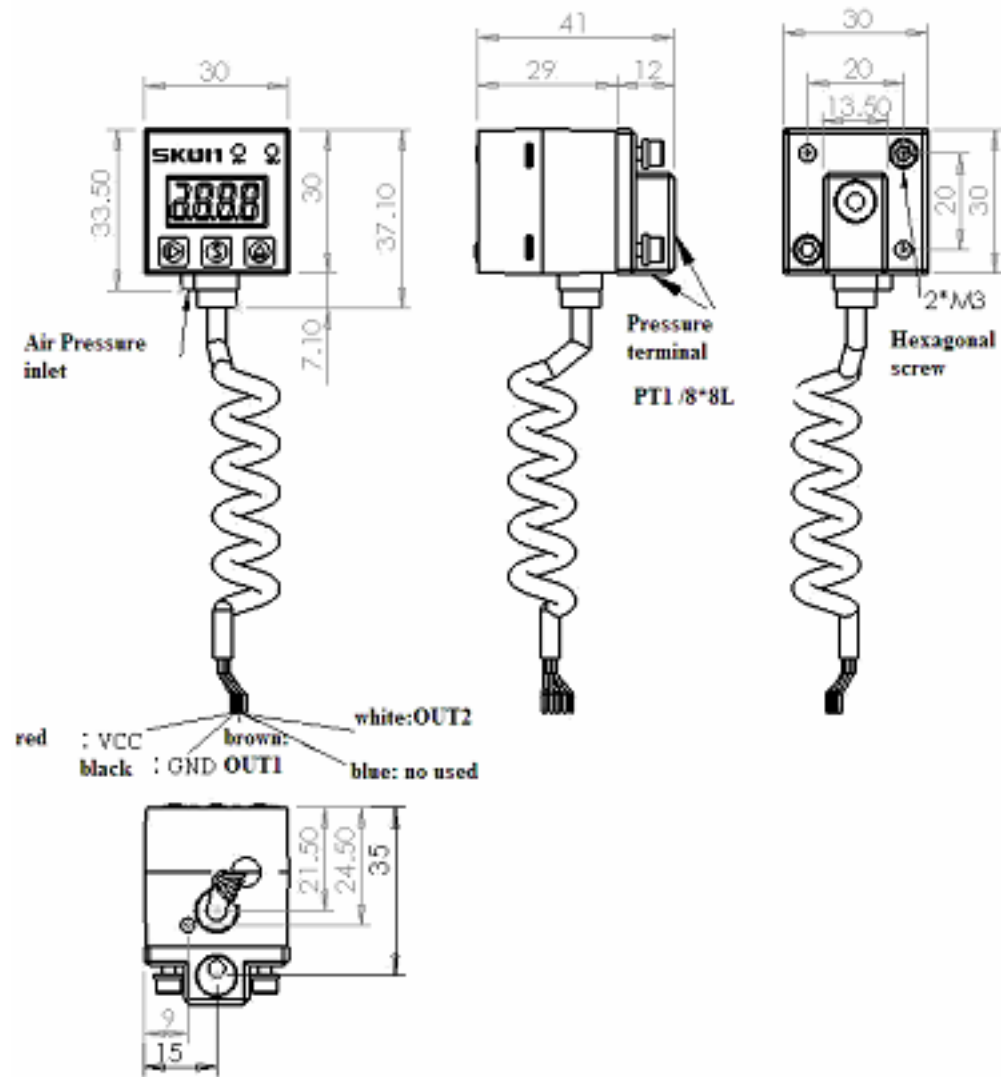


協鋼工業股份有限公司  
SHEEN KONG INDUSTRIAL CO., LTD.

4 1 2 7 9 台中市大里區四育街 10 號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: s k o n @ s k o n . c o m . t w  
http://www.s k o n . c o m . t w

## Size of appearance

### Pressure switch

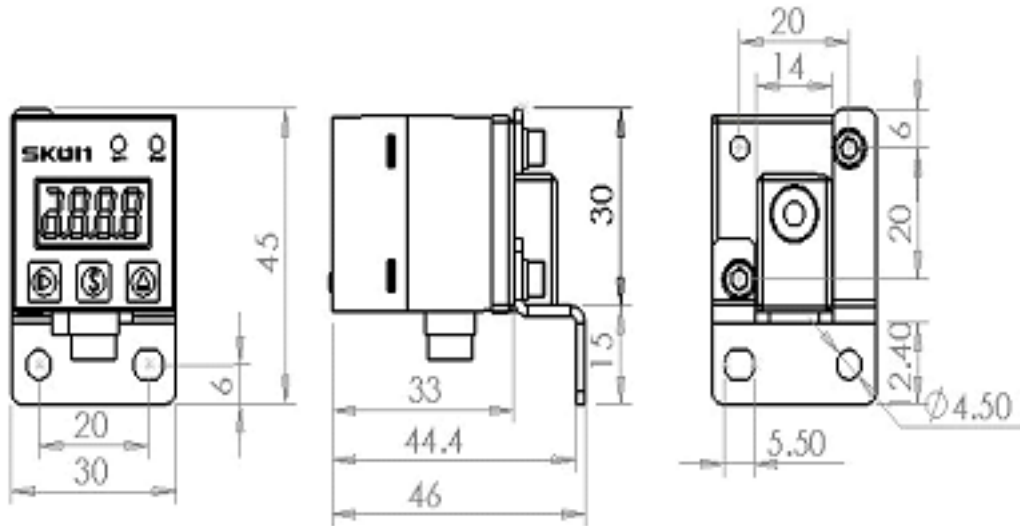


Install the mounting bracket ( Support 1)

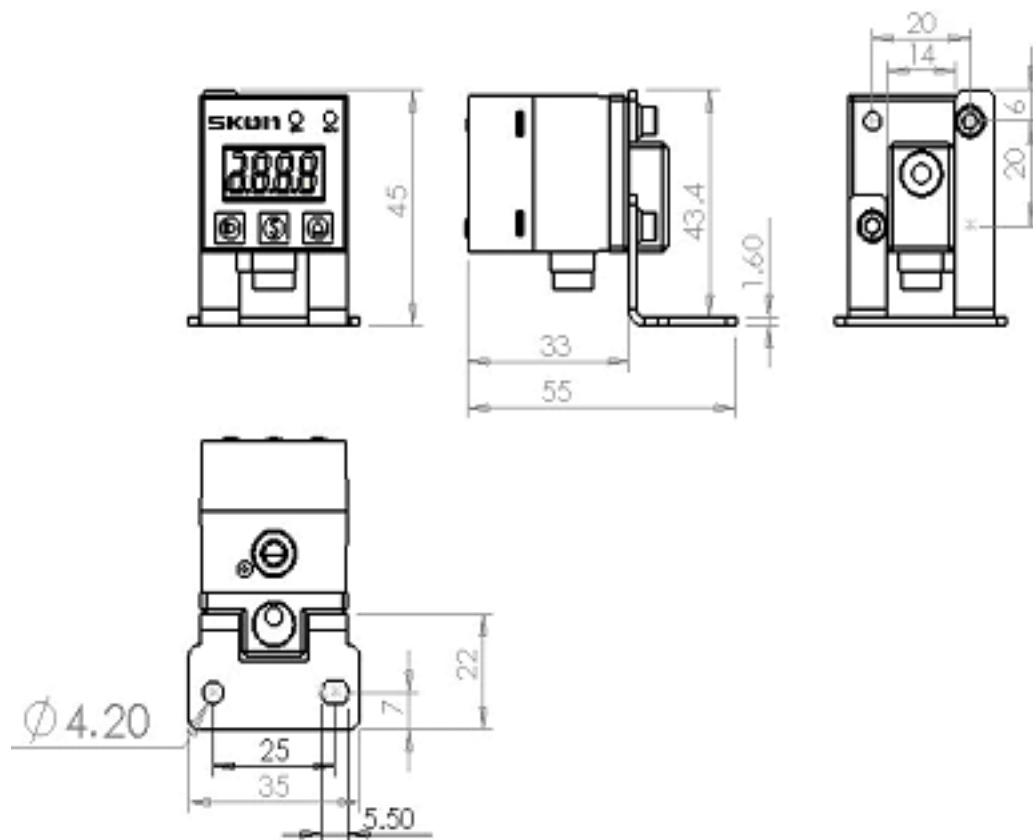


協鋼工業股份有限公司  
SHEEN KONG INDUSTRIAL CO., LTD.

41279 台中市大里區四育街10號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: skon@skon.com.tw  
http://www.skon.com.tw



Install the mounting bracket ( Support 2)

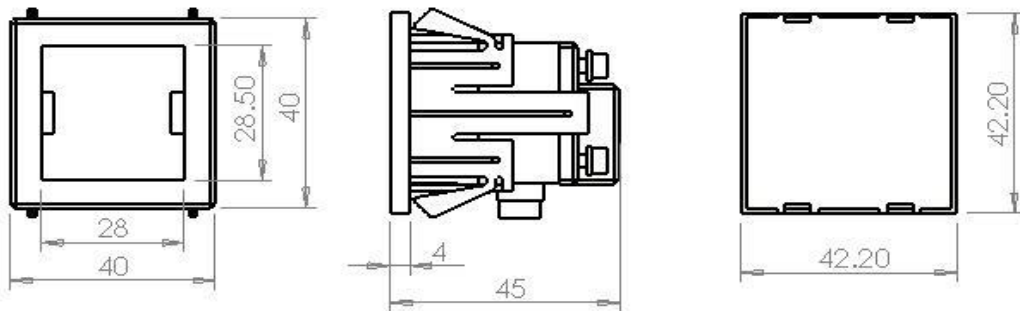
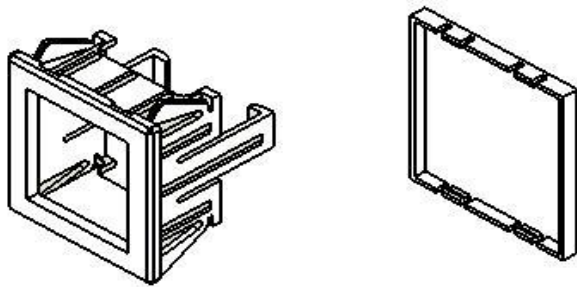




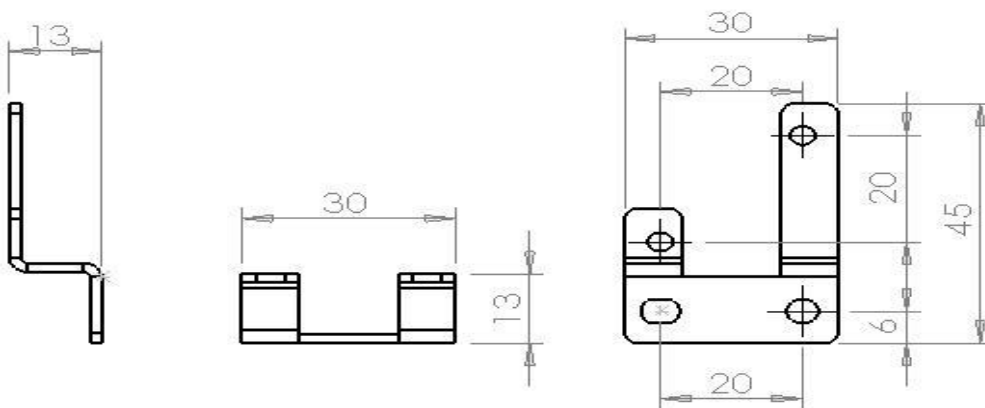
協鋼工業股份有限公司  
SHEEN KONG INDUSTRIAL CO., LTD.

41279 台中市大里區四育街10號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: skon@skon.com.tw  
<http://www.skon.com.tw>

### Install regular frame and visor



### Support 1

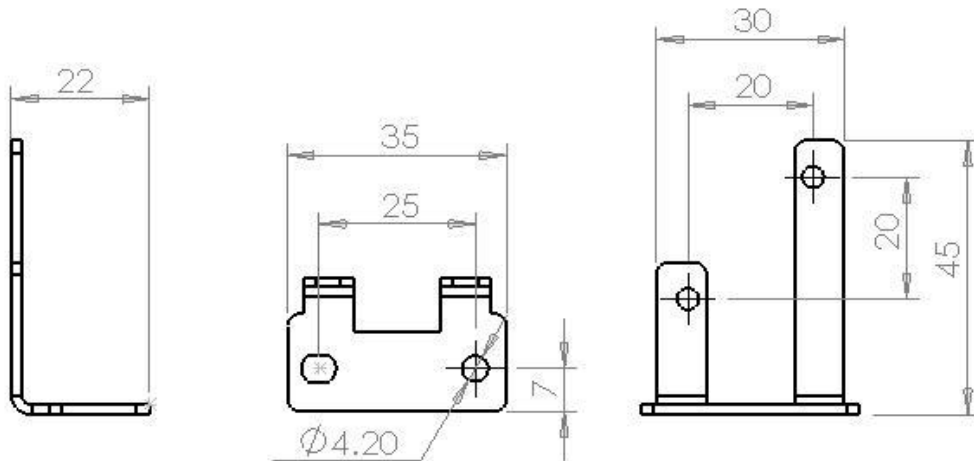


### Support 2



協鋼工業股份有限公司  
SHEEN KONG INDUSTRIAL CO., LTD.

4 1 2 7 9 台中市大里區四育街10號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: skon@skon.com.tw  
http://www.skon.com.tw



## Operation instructions

### The board in the front is explained

Above the screen, it own indicator lamp in common, it represent light out1 or out2 last state as (ON)

It represents out1 or out2 to export the state that the light puts out (OFF)

There is a button in centre above the screen. Show for S (setting sets up the key) ,Such as Fig.1



Figure 1

The left side has a triangular key right under the screen, it is a carry key, such as Fig.2



Figure 2

There is a upward triangular key on the right under the screen, in order to adjust the key of single direction, such as Fig.3



Figure 3



協鋼工業股份有限公司  
SHEEN KONG INDUSTRIAL CO., LTD.

4 1 2 7 9 台中市大里區四育街10號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: s k o n @ s k o n . c o m . t w  
<http://www.skon.com.tw>

## Step that the pressure switch is set up

### Set up in initial stage:

1. After it connect the power, it show the current pressure value (adjust unit and zero method as the following step) Set pressure unit as PSI in default.
2. Push and set up the key, show present temperature XX°C or XX°F, display temperature unit of the last one that digital ( Set unit as in default °C) .
3. Show that recovers in order to show pressure value automatically five seconds later after temperature.
4. While showing pressure value, with one-way to adjust key the two at pushing over three o'clock at the same time carry key, the pressure belongs to zero.

### Temperature and pressure unit to choose:

5. While showing pressure value, push and set up the key at more than o'clock five seconds, enter the way of setting up.
6. Setting up the pressure unit in order to set up of item 1 of the way, display P-X at this moment, uses and adjusts the key one-wayly, adjusting the figure of X, to the pressure units taken, X is 1, the unit that every figure represents is as follows, 1: PSI, 2: Bar, 3: kg/c , 4: Kpa, 5: Mpa, 6: inHg, 7: cmHg, 8: Atm.
7. Push carry after the key, is it set up the way item 2 in order to set up the temperature unit to enter, display t-X, uses and adjusts the key one-wayly, adjusts the characters of X at this moment, to the temperature units taken, X has °C (Centigrade) , °F(Fahrenheit) Two units.

### Output the way to choose:

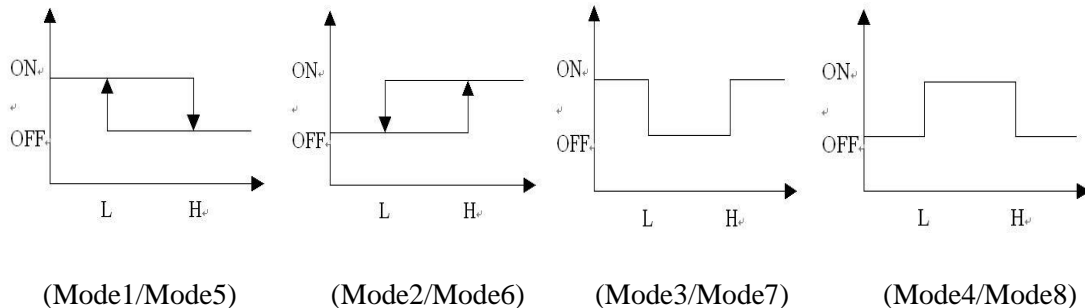
8. After pushing the carry key, it set up way of item 3 for output one 1 of out's output ways to set up, display 1o-X at this moment to enter, use and adjust the key of single direction, adjust the digit of 1~4, have four kinds to output the way Mode1, Mode2, Mode3, Mode4 as show in following figure:





協鋼工業股份有限公司  
SHEEN KONG INDUSTRIAL CO., LTD.

4 1 2 7 9 台中市大里區四育街 10 號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: s k o n @ s k o n . c o m . t w  
http://www.skonn.com.tw



### Output the way and set up and click adjusting:

9. Push carry after the key, is it set up the way item 4 in order to set up and output a high pressure setting up value of out 1 to enter, the screen shows 1H about one second later first at this moment, the screen and then shows the present establishment value, utilize and adjust the key of single direction and adjust figures, utilize the carry key to adjust -figure number, illustrate with examples, if the setting up value is 103.4 display now, show that flickers 1 at the same time, show that can adjust 1 this units now, use and adjust the key of single direction and adjust figures, push the carry key in order to adjust -figure number, the next one should be flickered by 0 this units ( Assume that has not adjusted 1 figure of this units) ,Depend on the situation is adjusted, push the carry key again and get 3 the unit of flashing, push the carry key, flicker the -figure number on the right most, namely is flickered by 4 this units.
10. Push carry after the key, is it set up way item 5 for is it output one 1 of out's low-voltage persons who set up to set up to enter, the screen shows 1L about one second later first at this moment, the screen and then shows the present establishment value, utilize and adjust the key of single direction and adjust figures, utilize the carry key to adjust -figure number, illustrate with examples, if the setting up value is 103.4 display now, show that flickers 1 at the same time, show that can adjust 1 this units now, use and adjust the key of single direction and adjust digit, push the carry key in order to adjust -figure number, the next one should be flickered by 0 this units ( Assume that has not adjusted 1 figure of this units) ,Depend on the situation is adjusted, push the carry key again and get 3 the unit of flashing, push the carry key, flicker the -figure number on the right most, namely is flickered by 4 this units.



協鋼工業股份有限公司  
SHEEN KONG INDUSTRIAL CO., LTD.

41279 台中市大里區四育街10號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: skon@skon.com.tw  
http://www.skon.com.tw

11. After pushing the carry key, is it set up way item 6 for is it output one 2 of out's output ways to set up, display 2o-X at this moment to enter, use and adjust the key one-wayly, adjust the figure of 1, have eight kinds to output the way altogether Mode1, Mode2, ..., Mode8, the following picture, shows:  
Mode1 reaches Mode4: Represent out2 to control for the pressure (2H and 2L are for the pressure setting up value)  
Mode5 reaches Mode8: Represent out2 for temperature control (2H and 2L are for the temperature setting up value)
12. Push carry after the key, is it set up way item 7 to enter for for is it output 2 high positions of out 2 output the range to set up, the screen shows 2H about one second later first at this moment, the screen and then shows the present establishment value, other operation are the same as step 9. (if 2o-X choose Mode5 to Mode8, Lcd for displaying\*\*\*°C或\*\*\*°F)
13. Push carry after the key, is it set up way item 8 to enter for for is it output 2 low location of out 2 output the range to set up, the screen shows 2L about one second later first at this moment, the screen and then shows the present establishment value, this is operated the samely as step 10. (if 2o-X choose Mode5 to Mode8, Lcd for displaying\*\*\*°C或\*\*\*°F)

#### **The color of the screen is adjusted**

14. After pushing the carry key, is it set up way item 9 to enter for for set up screen output, display bLX at this moment, use one-way to adjust key, figure to change X to the screen colors taken, X is 1, every digital representative's color is 1: Blue, 2: Green, 3: Blue and green, 4: Red, 5: Purple, 6: Yellow, 7: White.
15. After pushing the carry key, finish setting up, display LoAd, stores the parameter, jumps and shows pressure value 5 seconds later at this moment.

#### **Wiring diagram**



協鋼工業股份有限公司  
SHEEN KONG INDUSTRIAL CO., LTD.

4 1 2 7 9 台中市大里區四育街10號  
No. 10, Siyu St., Da-Li Dist., Taichung City 41279, Taiwan  
Tel 886-4-24936966 Fax 886-4-24936559  
Email: skon@skon.com.tw  
<http://www.skon.com.tw>

