4-20mA LED dispaly

Manual

一. DES

The intelligent LED on-site display meter is an intelligent universal on-site display unit developed specifically for two-wire circuits. It adopts advanced German technology and has the characteristics of high precision, good stability and high reliability.

二. TECH Features

1. 1. LED display completely solves the problem that LCD cannot display in dark environment;
2. 2. No additional power supply is required;
3. 3. Display physical quantity can be programmed: pressure, flow, temperature, pH value, etc.;
4. 4. Display resolution 1/9999;
5. 5. With isolated switch output, it can drive devices not exceeding 100mA, and can display, control and alarm on site;
6. 6. Low voltage drop, 4V can work normally.。

三. Operation

In the following description, "▲+▼" means pressing the "▲" and "▼" keys at the same time.

1. Power-on display

Connect the LED display head in series to the "4-20mA" circuit (no display when the polarity is reversed) to display normally. You can perform the following operations:

- Press "▲" for 6 seconds to clear the current displayed physical quantity. The range that can be cleared is: -100~100 (excluding decimal points). The additional value generated by the clearing action will be stored in the zero offset menu.
- Press the "▲+▼" key to enter the menu setting. At this time, press the "▲" or "▼" key to switch the setting menu options.

2. Setting Zero Point

When display 

it indicates the zero point setting menu. At this time, press the "▲+▼" key to enter the zero point setting. The interface displays the currently set zero point. The factory default value "0.000" (percent) is displayed for the first use. (The zero point can be set to 4mA or other physical quantities).

Press the "▲" key to increase, and the "▼" key to decrease. After setting the value, press the "▲+▼" key to confirm and return to the menu.

3. Set full point

When display 

It means full point setting menu. At this time, press "▲+▼" key to enter full point setting. The interface displays the full point currently set. The factory default value "3.000" (percentage) is displayed for the first use. (The full point can be set to 20mA or other physical quantities).

Press "▲" key to increase and "▼" key to decrease. After setting the value, press "▲+▼" key to confirm and return to the menu.

4. Decimal point setting

When display 

it means the decimal point setting menu. Press "▲+▼" key to enter the decimal point setting. The interface displays the current decimal point position.

Press "▲" key to move right and "▼" key to move left. After setting the position, press "▲+▼" key to confirm and return to the menu.

5. Damping time setting

When display 

it means the damping time setting menu. The setting method is the same as 2. The damping time setting range is 1-200. After setting, press "▲+▼" key to confirm and return to the menu.

6. Zero offset

When display 

it indicates the zero setting menu. The setting method is the same as 2. The setting range is -100 to 100 (excluding decimal points). This value indicates the amount of increase or decrease based on the existing display value. After setting, press the "▲+▼" key to confirm and return to the menu.

7. Alarm switch setting

When display 

it indicates the alarm switch setting menu. Press the "▲+▼" key to enter the alarm switch setting. The interface displays the current setting value. 

Indicates that the set alarm parameters are not effective, 

indicates that the set alarm parameters are effective.

The two states can be switched by pressing "▲" or "▼". After setting, press the "▲+▼" key to confirm and return to the menu. The factory setting is "OFF".

8. Alarm point 1 setting

When display  it indicates the alarm point 1 setting menu. The setting method is the same as 2. The alarm setting value must be between zero and full point. After setting, press the "▲+▼" key to confirm and return to the menu.

9. Alarm point 2 setting

When dispaly  it indicates the alarm point 2 setting menu. The setting method is the same as 8. After setting, press the "▲+▼" key to confirm and return to the menu.

10. Alarm point 1 direction setting

When dispaly  it indicates the alarm point 1 direction setting menu. Press the "▲+▼" key to enter the alarm direction setting. The interface displays the current setting value.  It means that the monitored pressure will alarm when it exceeds the value set at alarm point 1 during the rising process.  It means that the monitored pressure will alarm when it is lower than the value set at alarm point 1 during the falling process. The two states can be switched by pressing "▲" or "▼". After setting, press the "▲+▼" key to confirm and return to the menu.

11. Alarm point 2 direction setting

When display  it means the alarm point 2 direction setting menu. The setting method is the same as 10. After setting, press the "▲+▼" key to confirm and return to the menu.

12. Alarm point 1 hysteresis setting

When display  it means the alarm point 1 hysteresis setting menu. The setting method is the same as 2. The hysteresis setting range is 0-9999. After setting, press the "▲+▼" key to confirm and return

to the menu.

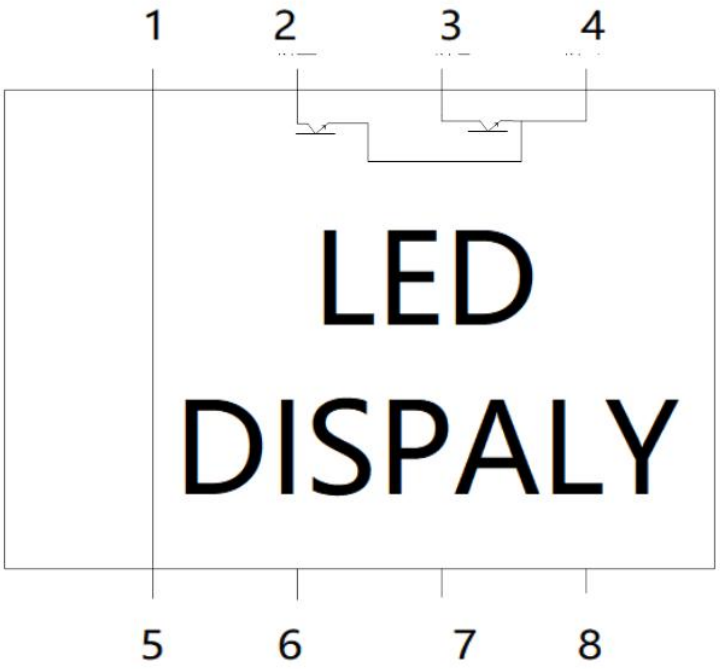
13． Alarm point 2 hysteresis setting

When dispaly 

it means the alarm point 2 hysteresis setting menu. The setting method is the same as 12. After setting, press the "▲+▼" key to confirm and return to the menu.

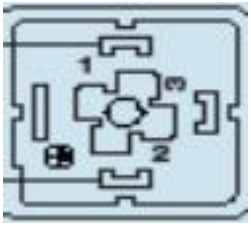
四． Alarm output wiring method

The alarm output is a photocoupler, and the output current capacity is 100mA. Alarm 1 is pin 2; Alarm 2 is pin 3:



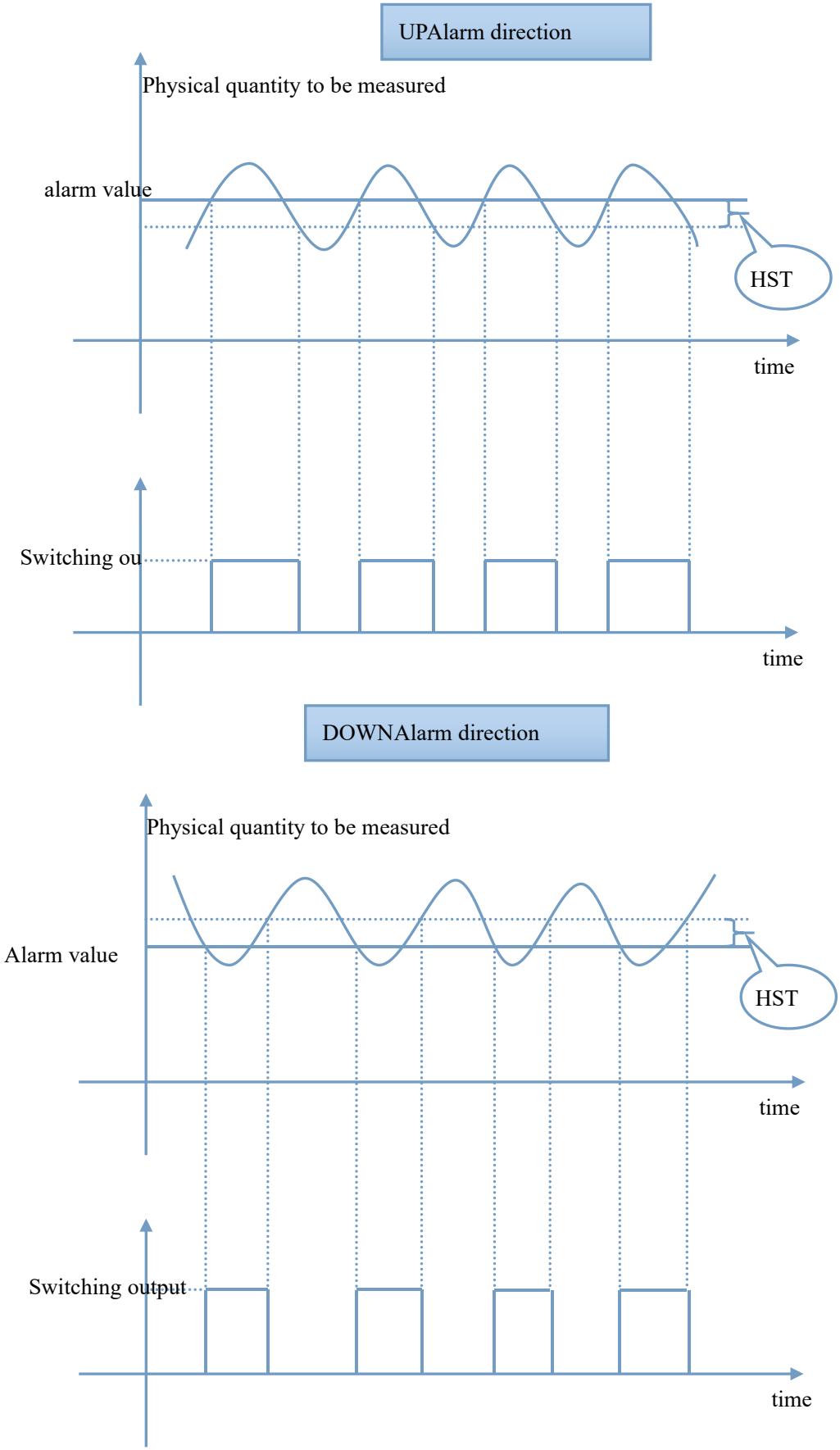
Two-way alarm	without alarm
1：power+	power+
2：alarm1	power-
3：alarm2	
4：power-	
5：transducer+	
6：transducer-	
7：null	
8：Null	

Upper surface



Lower end surface

五. Hysteresis Description



六. NOTICE

1. “**Setz”, “sets”** and “**dot”** are used together to set the zero point and full point, so that the display has actual physical meaning, but the display unit does not provide the display space of "unit", and the value is directly used.

If you need to set the display to 4~20mA: then **“setz”** is set to 400, **“sets”** is set to 2000, and **“dot”** is selected in the lower right corner of the second digit. Similarly, if you need to set the display to -100~100KPa: then **“setz “**is set to -1000, “sets” is set to 1000, and **“dot”** is selected in the lower right corner of the third digit.

2. The decimal point is shared by the whole field, that is, once the position is selected in step 5 "decimal point setting", the zero point, full point, alarm value and other parameters all share this decimal point, and the decimal point position cannot be set separately.

3. The alarm drive is 100mA. If it exceeds this value, an external driver module must be connected.

4. HILO is ‘the general alarm switch, and you can choose to alarm or not alarm by setting.