Non-intrusive level switch

Explosion-proof type Mode C

V3.1.01

Parameter setting man-machine interface

1.**The instrument uses infrared remote controller to set parameters. The key functions**
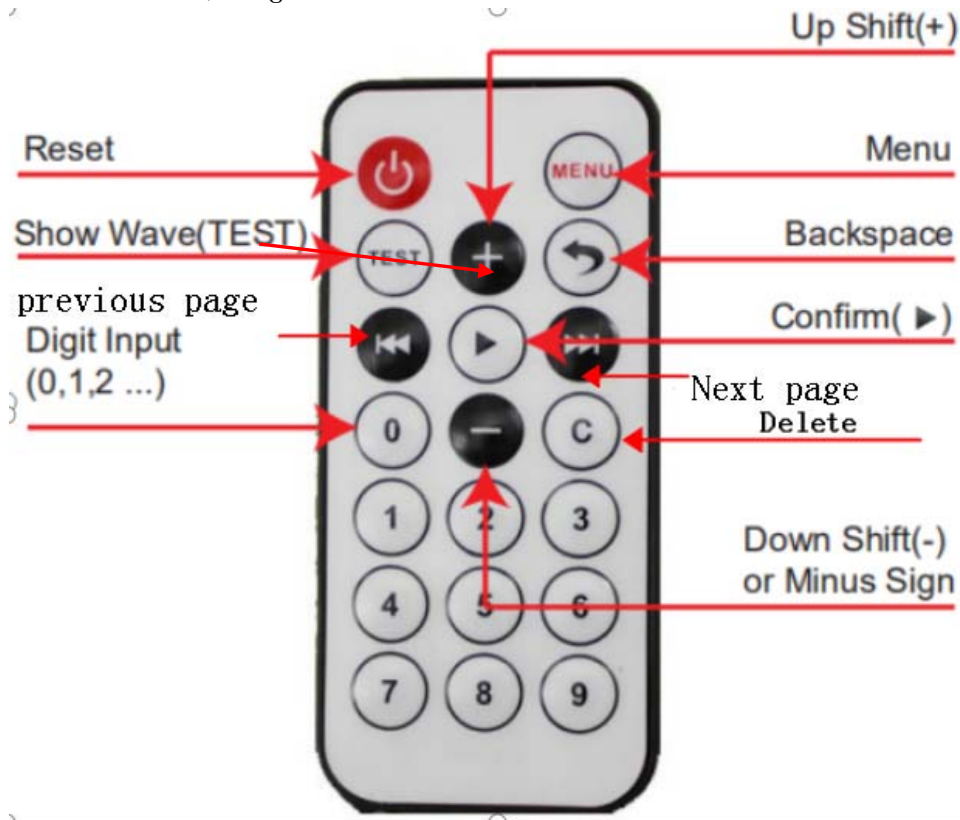
are as follows:，Figure 1-1：

Figure 1-1 IR control key

Keys	Work interface	Function
Reset	Any interface	Reset and restart the gauge
MENU	Running interface	Gauge enters menu interface under running interface
	Menu interface	Gauge returns to running interface under menu interface
TEST	Running interface	Gauge enters waveform interface under running interface
	Waveform interface	Gauge returns to running interface

|		under waveform interface
Backspace	Menu interface	Back to the previous interface
Up shift（+）	Menu interface	Up-shift operation under menu interface
Down shift（-）	Menu interface	Down-shift operation under menu interface
Confirmation	Menu interface	Confirm or enter the subordinate menu
Digit （0，1，…）	Menu interface	Number input under menu interface
Previous page(◄◄)	Menu interface	Turn to previous page under menu interface
Next page （►►）	Menu interface	Turn to next page under menu interface

2. Level switch C model running interface   Figure1-2
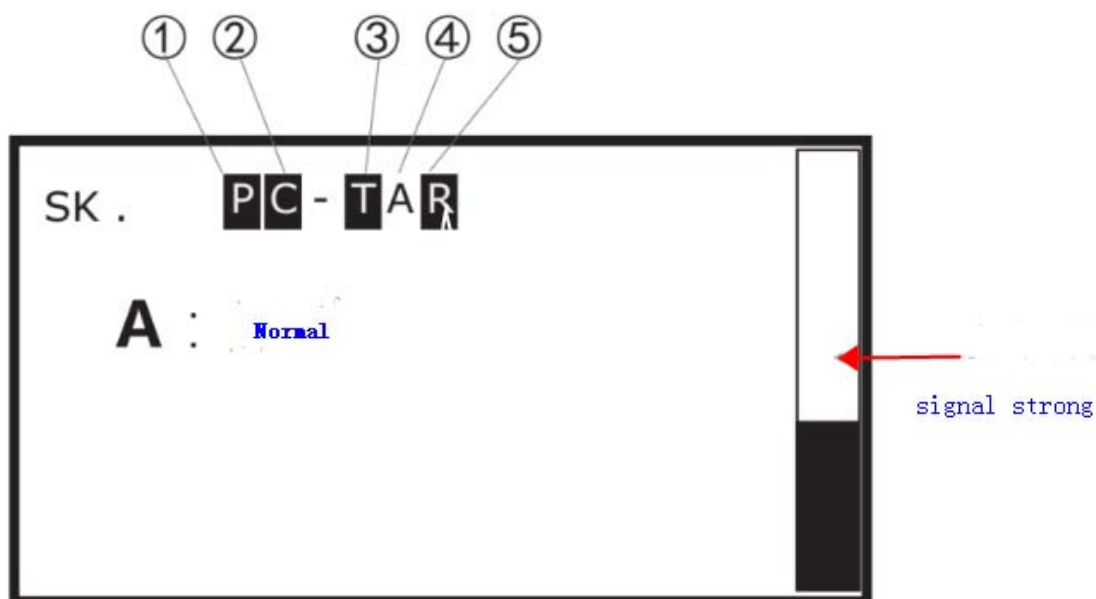
Figure 1-2

① $\boxed{P}$ 485proprietary protocol $\boxed{M}$ 485 为 Modbus protocol

② $\boxed{C}$ work mode C

③ **T** The switch is subject to outside interference and automatic reset

④ **A** A point open，and is not in alarm state   **A** A point open，and

in alarm stage. If no A or **A** , it means that the A point is closed

⑤ **R** The infrared function of the system has been interfered, and has
been banned

A: stage as blew

state	explain
normal	The switch work normally,but not in alarm state
alarm	The switch work normally, and in alarm state
wave	The switch work normally and the liquid level near the alarm point
close	The switch work normally, and the point A is close stage
abnormal	System exception, unable to work properly, invalid output result.
unknown	Unknown state,the switch unable to work properly

3、Switch operation

3.1、C Model operation features:

    C Mode work just need one probe to monitor one point,The location of

the installation point is the alarm location.

3.2、Parameter setting and modification

a）The switch is turned on and the main interface is shown.Figure 1-3
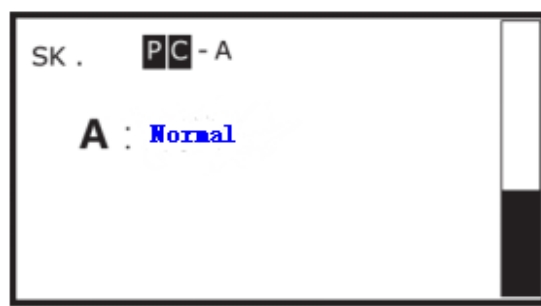

Figure 1-3

b）Use infrared remote control to operate the alarm threshold.

(1)、Measurement Mode Setting：

(1.1)、click "MENU" enter to the Menu surface, Figure 1-4,

Main Menu
▶ User Parameter
Factory Para.

Figure 1-4

(1.2)、click"up shift"or"down shift"to choose user parameter or factory
para,click "▶（confirmation key）" enter user parameter.Figure 1-5

```
┌─────────────────────────────────┐
│ User Para.（C）                 │
├─────────────────────────────────┤
│ ▶ A.Hi.Range：0                │
│                                 │
│   A.Lo.Range：0                │
│   Smooth：150                   │
└─────────────────────────────────┘
```

Figure 1-5

Click "up shift" or "down shift" to choose measure mode, click "▶
（confirmation key）".Figure 1-6：

```
┌─────────────────────────────────┐
│ User Para.（C）                 │
├─────────────────────────────────┤
│ ▶ Mode：C                      │
│                                 │
│   Freq.：160                    │
│   Vsonic：1000  m/s             │
└─────────────────────────────────┘
```

Figure 1-6

Enter the measurement mode, ABC represents three modes of switch, A
mode, B mode and C mode.Select C mode by "up shift" or "down shift" and
click "_ (confirmation key)" to confirm the measurement mode selection.
Automatically return to the user parameter interface of Figure 1-5.

(2)、Set or modify the default sound velocity:in Figure 1-5 User Para,
click "up shift"or"down shift"find Vsonic, click"▶（confirmation key）"
enter the default sound velocity setting.Figure1-7:

```
┌─────────────────────────────────┐
│ User Para.（C）                 │
├─────────────────────────────────┤
│ ▶ Mode：C                      │
│                                 │
│   Freq.：160                    │
│   Vsonic：1000  m/s             │
└─────────────────────────────────┘
```
Figure 1-7

Input the sound velocity value of the liquid measured by the digital
key in m/s, and click the "confirmation key" to determine. The upper right
corner of the screen prompts "Setup Successful", then the parameter
setting is completed.

(3)、Set or modify the A-point alarm threshold:

The setting method of A-point low alarm is the same as that of A-point
high alarm. When A-point is set as low alarm, the function of A-point high
alarm is automatically closed. When the probe is installed in the low
position, only the low-reporting threshold is set. When the probe is
installed in the high position, only the high-reporting threshold is set,

and only one of the high-reporting threshold and the low-reporting threshold is set. The following is an example of setting high reporting threshold.

Click "up shift" or "down shift" to choose the A.Hi.Range. click "▶ (confirmation key)" enter the high-reporting threshold Point A setting interface Figure 1-8。

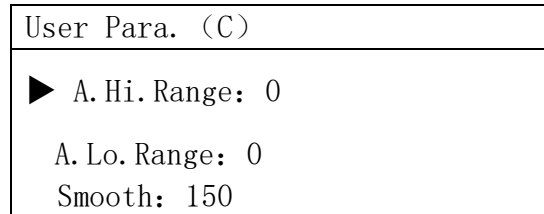| User Para. (C) |
| --- |
| ▶ A.Hi.Range：0 |
| A.Lo.Range：0 |
| Smooth：150 |

Figure 1-8

Click the digit keys, input the diameter value (mm)of the installation position of the tank, click "confirmation".The upper right corner of the screen prompts "setting succeeded".At this time, point a is set to high alarm, and the low alarm function of point a is turned off.

(4)、Click "MENU" back to main interface.

Note: When setting parameters, if you are prompted with "parameter error" or "setting failure", please check whether the parameter input is correct.