



KRUT SYSTEMS LLC



LED GAS PRICE SIGN MANUAL

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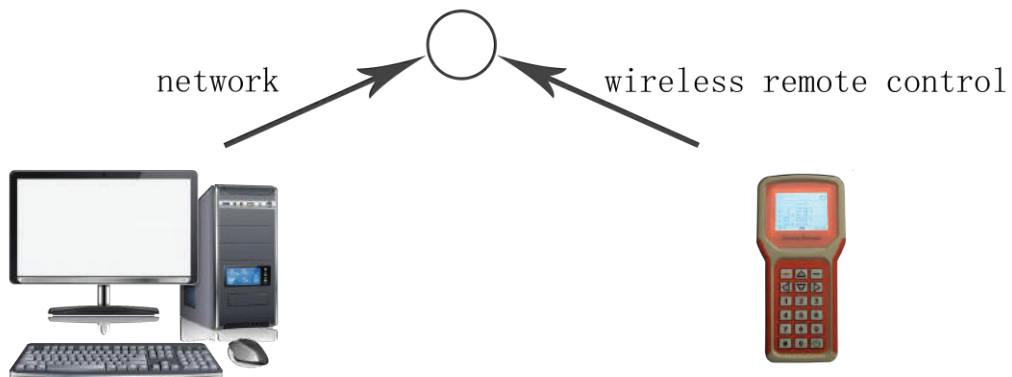


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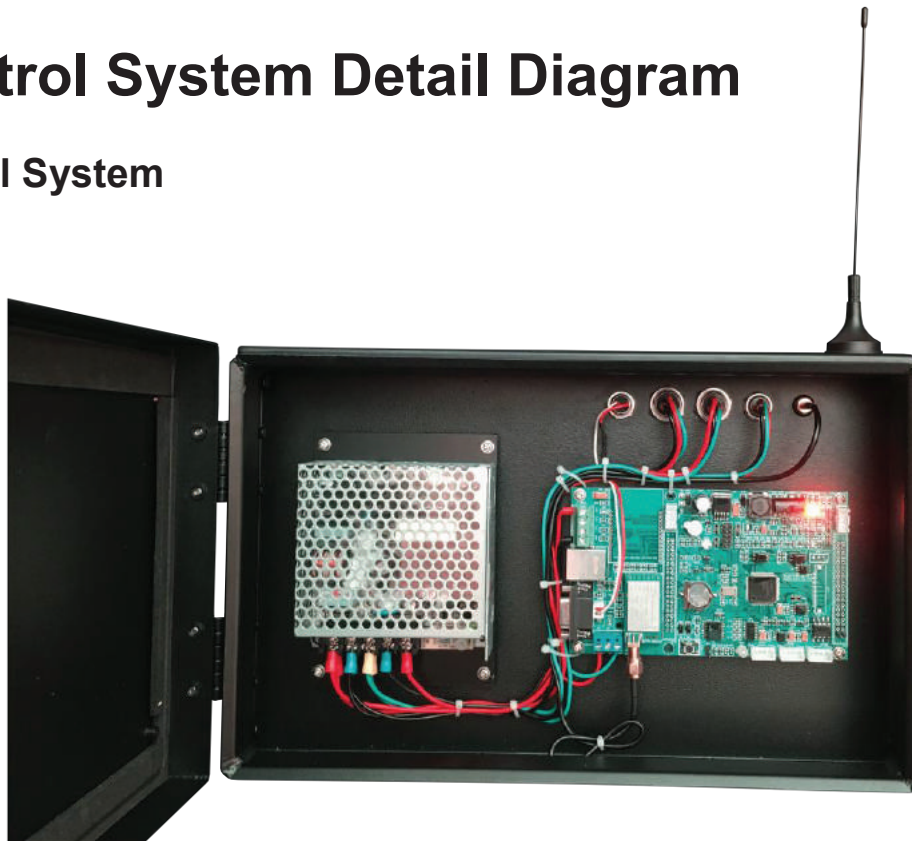
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◆ Product Structure Diagram



◆ Control System Detail Diagram

1. Control System



2. Wireless Remoter





◆ Technical Parameters

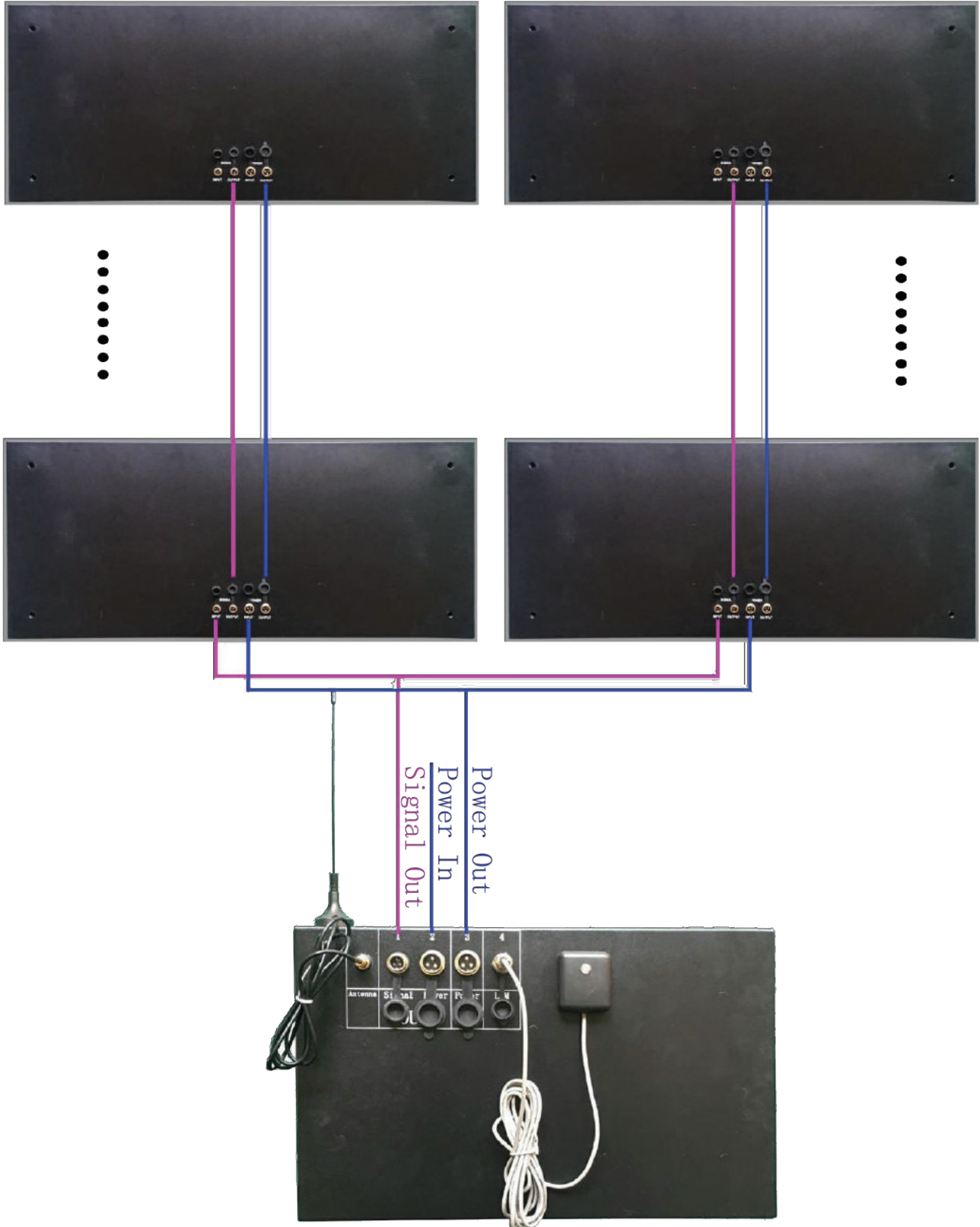
1. Control Display Section

a	Input Rated Voltage	AC85V~265V
b	Rated Standby Power	≤10W
c	Insulation Class	A Grade
d	IP Rating	IP65
e	Operating Temperature	-20°C ~ +70°C
f	Relative Humidity	≤95%

2. Wireless Remoter Section

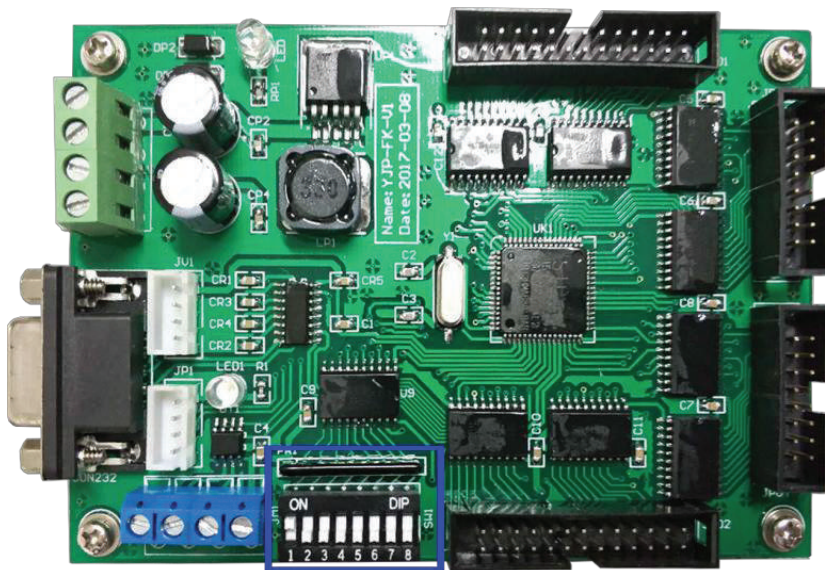
a	Input Rated Voltage	DC5V~DC6V(Four AAA Batteries)
b	Stand-by Current	40mA~100mA
c	Insulation Class	A Grade
d	Operating Temperature	-20°C ~ +70°C
e	Relative Humidity	≤95%

◆ Product Wiring Diagram



◆ Sign Address Setting

The control system sets up a maximum of 9 sets of double-sided signs , with the same front and back addresses (the same display content). The address of the sign is set by the dial switch of the internal scanning card of the sign. And the blue mark in the figure below is the dial switch of the sign address setting.



Address 1:	1	ON
Address 2:	2	ON
Address 3:	3	ON
Address 4:	4	ON
Address 5:	5	ON
Address 6:	6	ON
Address 7:	7	ON
Address 8:	8	ON
Address 9:	1、 8	ON

Other combination addressed are 1

◆ Work Parameters Setting

1. Wireless Remoter Key Description

All the operating parameters of the system are set by the wireless remoter.

The function partition of the wireless remoter is as follows:





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Signal connection indication: The control host with the same address within the effective range of the wireless remoter shows the signal connection symbol, otherwise it shows no signal connection symbol.

Battery indication: Displays the wireless remoter battery status.

Cycle position indication: The simulation display sets the parameter cycle picture (cycle position).

Sign simulation display 1: Simulate the sign to display area 1 by setting parameters.

Sign simulation display 2: Simulate the sign to display area 2 by setting parameters.

Sign display / off key: Indicates that the sign displays a closed state, full (on display), empty- (off display).

Left function key: Different settings page function is different, according to the page display execution function.

Right function key: Different settings page function is different, according to the page display execution function.

Arrow key: Change parameter settings, setting the position.

Number key: Change parameter settings, setting the position parameters.

Sign display/ Display off key: Single press the key, sign display/ display off state are switching between full (open display) and empty (closed display) states.

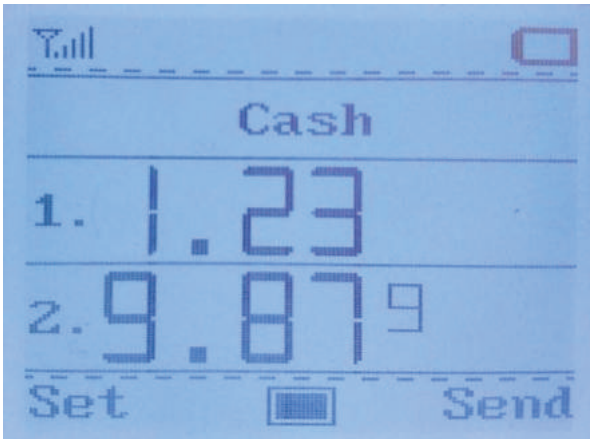
Wireless remoter ON / OFF key: In the state of "OFF", press the key and the wireless remote will "ON" . In the state of "ON", press the key twice and the wireless remote will "OFF".

★ **Wireless remoter power - saving protection:** The wireless remoter turns off the display backlight after 30 seconds in the absence of key operation, and closes for 60 seconds. The wireless remoter enters a power-saving state.

2. Work Parameters Setting

a. Setting

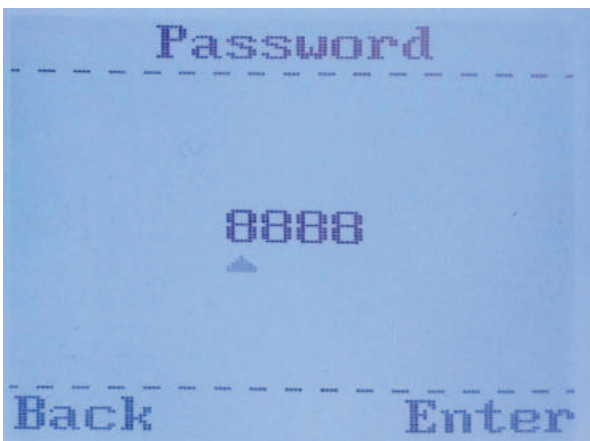
In the <Main interface> of wireless remoter, press “Left function key” _ <Password interface>, use “Arrow Key” and “Number Key” to enter password {8888}, then press “Right Function Key”_ <Setting interface>, as shown in the figure:



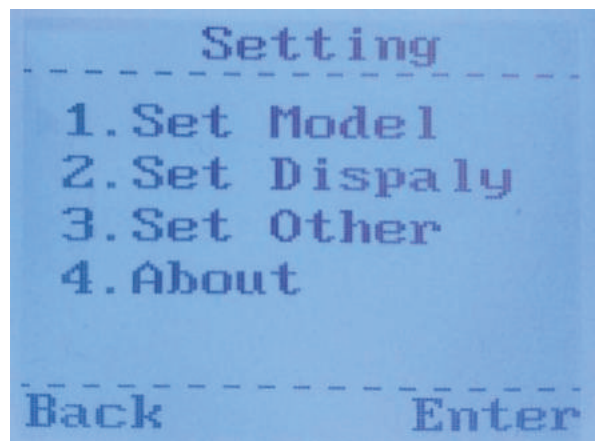
<Main interface>



<Password interface>



<Password interface>

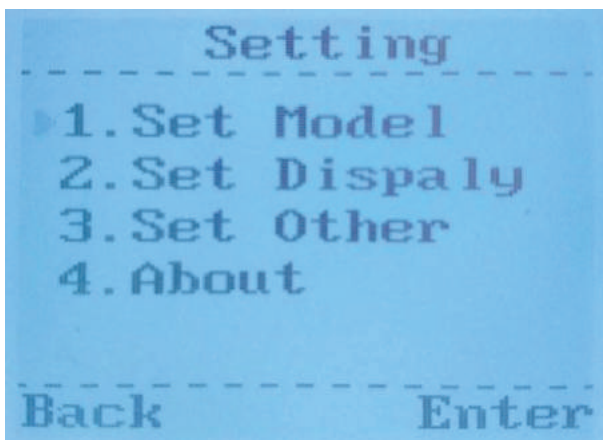


<Setting interface>

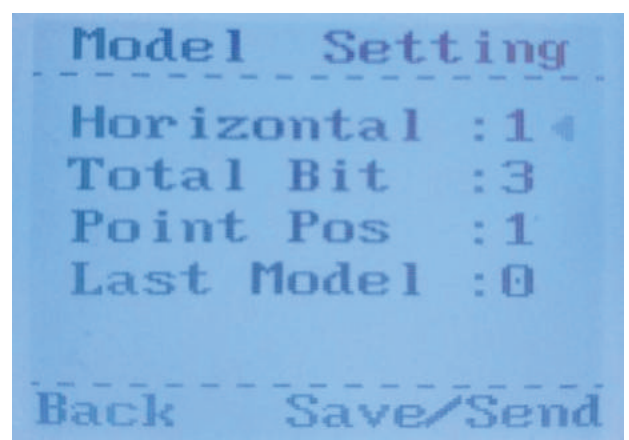
b. Set Model

Setting Parameters: Displays the number of digits, decimal point position, ending character mode, and limit the number of the sign.

In **<Setting interface>** press "Arrow Key". move the cursor to " **Set Model** " this line. Then , press " **Right function key**" **_<Model Setting Interface>**, as shown below:



<Setting interface>



<Model Setting interface>

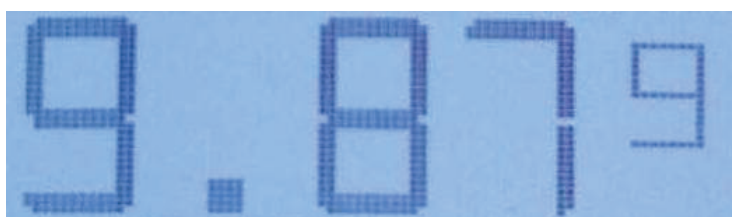
Horizontal : Sign number, range of parameters: 1-9

Total Bit : Sign number corresponds to the display number of digits, range of parameters : 1-5

Point Pos : Sign number corresponds to the display decimal point position range of Parameters: 0-(Display the number of digits)

Last Model: Sign number corresponds to display end display model
 0 (No display) , 1 (Small9) , 2 (9/10)

Setting Example :

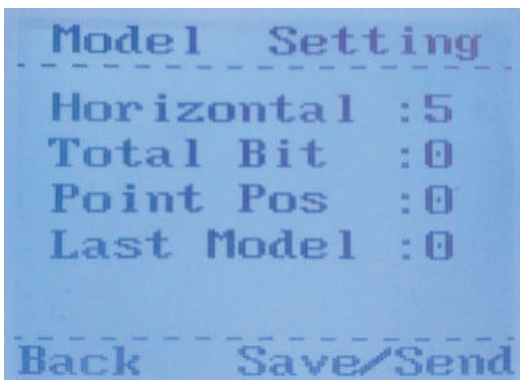


Parameters Setting:

Total Bit : 3
 Point Pos : 1
 Last Model : 1

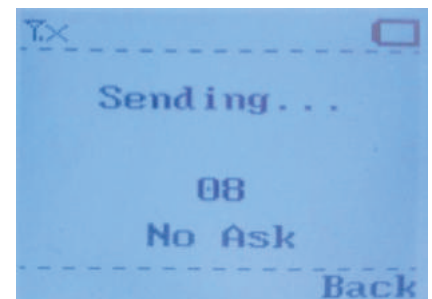
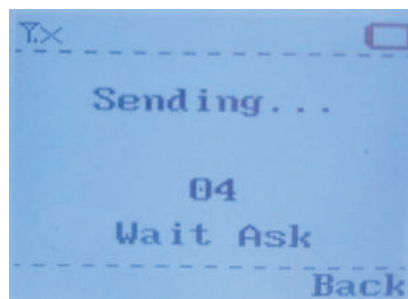
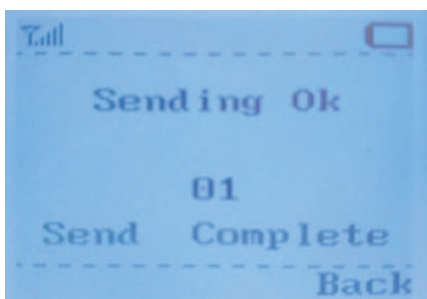
Modify the sign number parameter to view and modify the number of digits displayed in different signs, the position of the decimal point and the end of the display mode.

★ **Maximum number of signs setting, if only have 4 sets signs (Regardless of front and back), only need to set the parameter of sign number 5 to 0 (other numbers and so on). As shown below:**



<Only have 4 sets signs end setting interface>

After the parameter setting is completed, press the “Right function Key” to save the parameters to the wireless remoter and send the parameters to the control system. Press the “left function key” to abandon the setting and return to <Setting interface>.



<Send success page> <Send page continuously> <Send page failed>

★ **Failed to send will continue to try to send 8 times, 8 failed to send failure.**

C. Display Setting

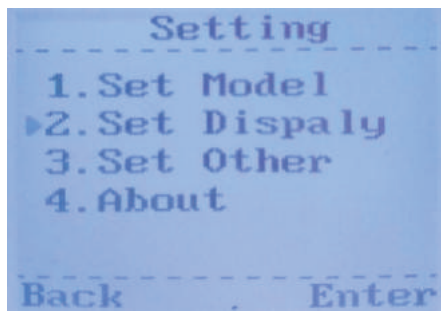
Display setting are divided into **1. Set Picture** and **2. Set Digital**

1. Set Picture can set the number of pictures and cycle displayed for each cycle.
2. Set Digital can set the number displayed for each sign in each cycle.

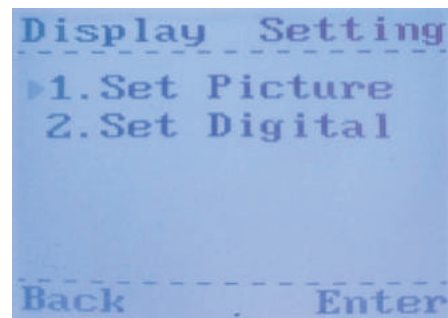
In **<Setting Interface>** press **“Arrow Key”**, move the cursor to **“2.Set Display”** this line and press **“Right Function Key”** _ **<Display Setting Interface>**

In **<Setting Interface>** press **“Arrow Key”**, move the cursor to **“1.Set Picture”** this line and press **“Righ Function Key”**_ **<Display Digital Setting Interface>**

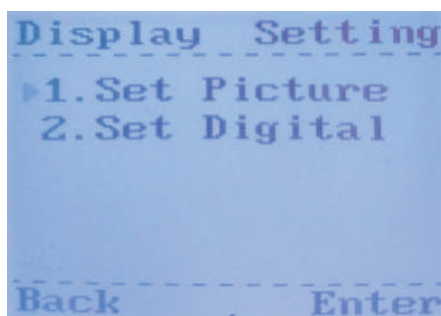
As shown in the figure below :



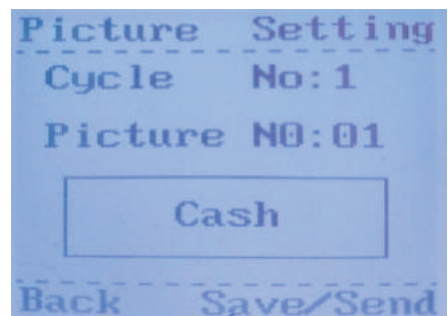
<Setting interface>



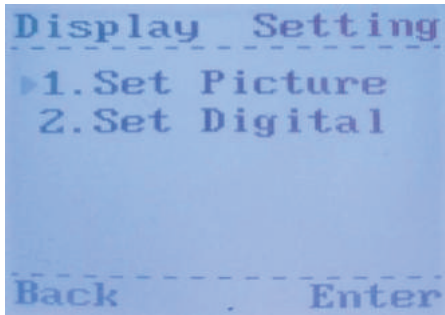
<Display Setting interface>



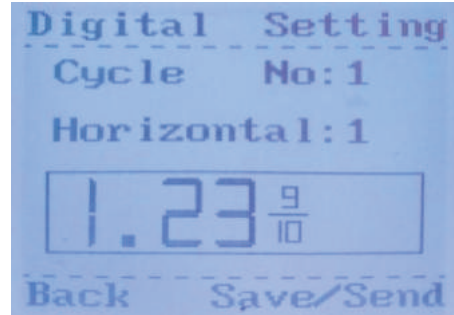
<Display Setting interface>



<Display Picture Setting interface>



<Display Setting interface>



<Display Picture Setting interface>

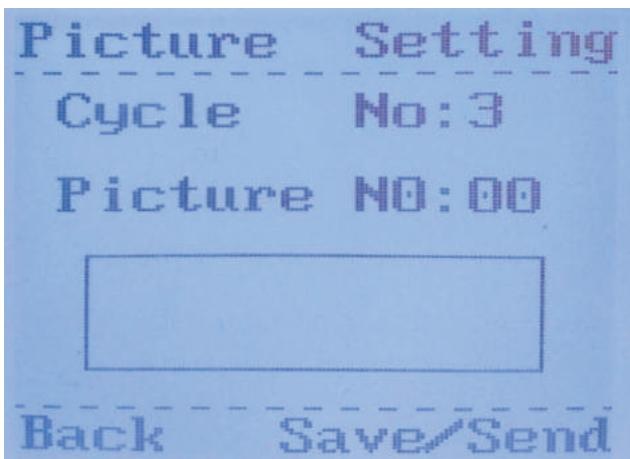
1.> Display Picture Setting:

Cycle No. : Cycle No, range of parameters:1-9

Picture No. : Cycle No. display picture No., range of parameters: 00-02
00 (End cycle), 01 (Cash), 02 (Card)

★ **Maximum number of cycles setting, if there are only 2 cycles, only need to number the pictur of cycle number 3 as 00 (other numbers and so on).**

As shown below:



<Only have 2 cycles end setting interface>

2. Display Digital Setting:

Cycle No. : Cycle No., range of parameters: 1-9

Horizontal : Sign No., range of parameters: 1-(Maximum No. of signs)



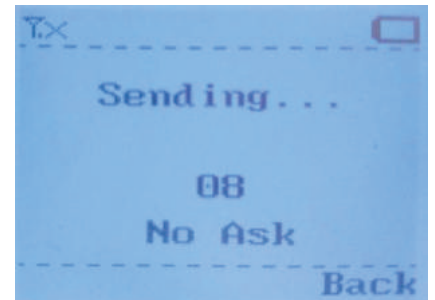
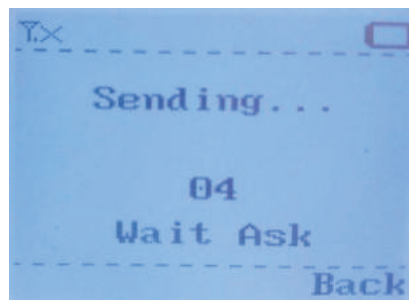
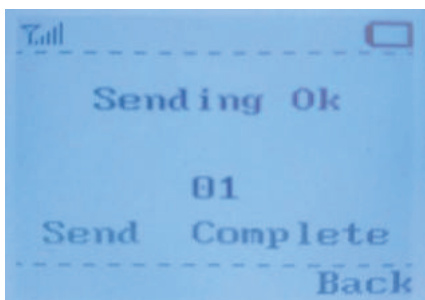
Display No. of sign No. in cycle number, range of parameters:

Unlimited.

The number of effective signs for each valid cycle of the display number must be set. After the setting are completed, you can return to the main interface to see the effect. There are mistakes repeating the steps to modify the parameters until the settings are correct.

After the parameters setting is completed, press the “Right function key” to save the parameters to the wireless remoter and send the parameters to the control system. Press the “Left function key” to abandon the setting and return to <Setting interface>.

Send success and failure interface as follows:



<Send success page>

<Send page continuously>

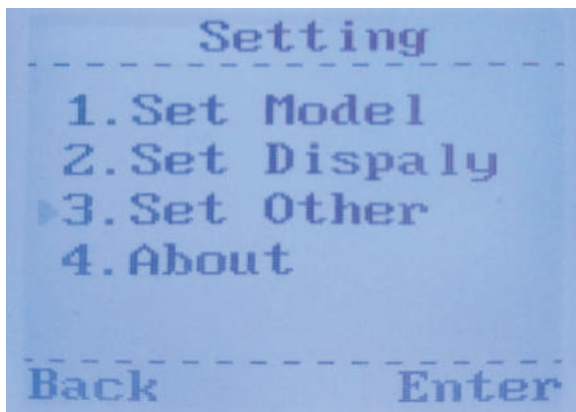
<Send page failed>

★ Failed to send will continue to try to send 8 times, 8 failed to send failure.

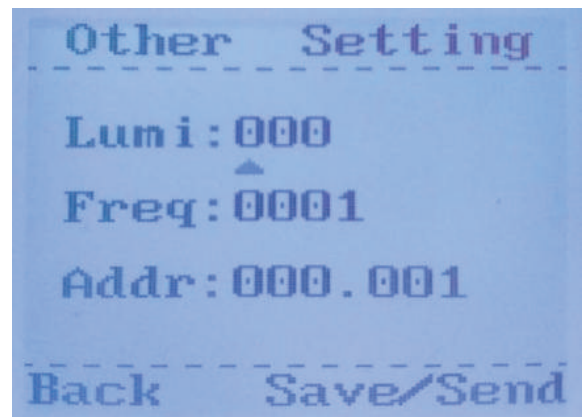
d. Set Other

Other Setting: Luminance Setting / Replacement Frequency Setting/ Communication Address Setting

In <Setting interface> press “Arrow key”, move the cursor to “3. Set Other” this line and press “Right function Key”_ <Other Setting interface>. As shown below:



<Setting interface>



<Other Setting interface>

Lumi: The luminance of signs, range of parameters : 000-100. The larger the parameter , the higher the luminance of the sig. When the parameter is 000, the auto light sensor function of the control system is enaled. The control system automatically adjusts the sign display luminance accordingly to the ambient light.

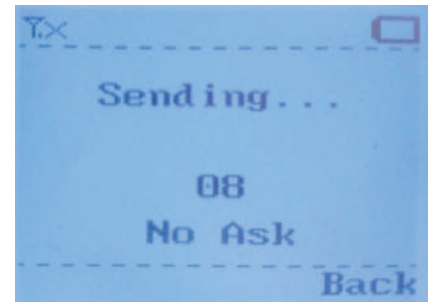
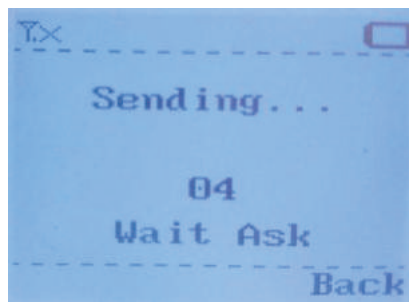
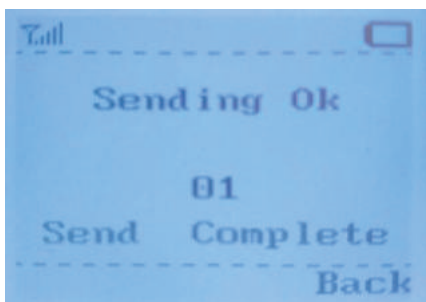
Freq: Cycle change speed, range of parameters : 0001-9999. Parameter in seconds setting parameters is each sign in the display change speed in the display content in each cycle (Wireless remoter does not simulate this function, the scroll speed is fixed)



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Addr: Communication address, range of parameters: 000.000-000.255 Parameter. The address of the control system corresponding to the wireless remoter communication, the wireless remoter and the control system must fail if they do not correspond to the communication.

After the parameter setting is completed, press the “Right Function Key” to save the parameters to the remoter and send the parameters to the control system. Press the “Left Function Key” to abandon the setting and return to Send success and failure interface as follows:



<Send success page> <Send page continuously> <Send page failed>

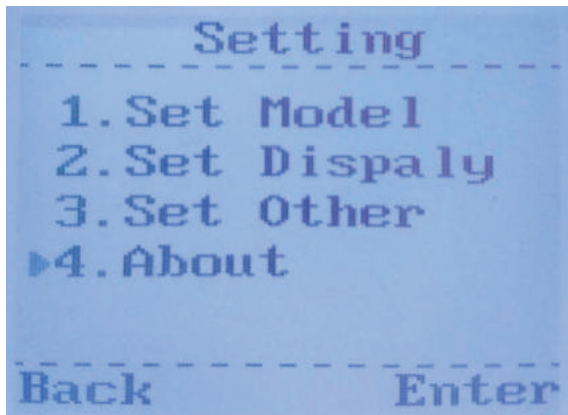
★ Failed to send will continue to try to send 8 times, 8 failed to send failure.

e. About

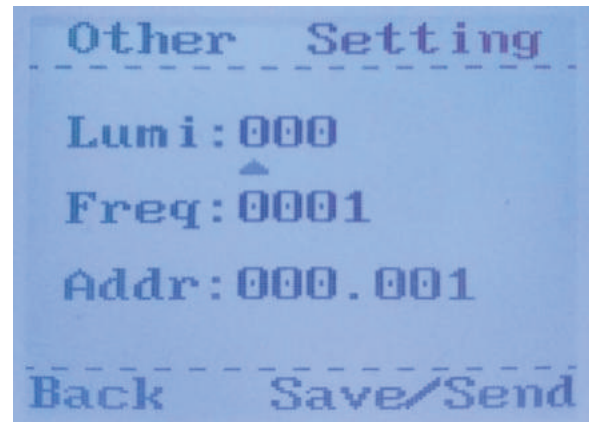
The version system can check the system version number and system completion date. In <Setting interface> press “Arrow key”, move the cursor to “4.About” this line and press “Right function key” _ <Display Version Information interface>

:

As shown in the figure below



<Setting interface>



<Other Setting interface>

◆ Common troubleshooting

1.> Sign is not light:

- a. Please check whether the power supply is connected (The indicator light of internal power supply whether light)
- b. Please check the system setting whether is turned off

2.> Digital scrolling change of sign(1-9):

- a. Whether the control system is powered on
- b. Whether the communication line between the control system and the sign is Connected properly.

3.> Wireless remoter data transmission has failed:

- a. Whether the control system is powered on
- b. Whether the address of the control system and the wireless remoter are the same.
- c. Whether the control system is too far away from the wireless remoter or has a strong interference source.



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◆ Product Application

