

infoscan FV6X

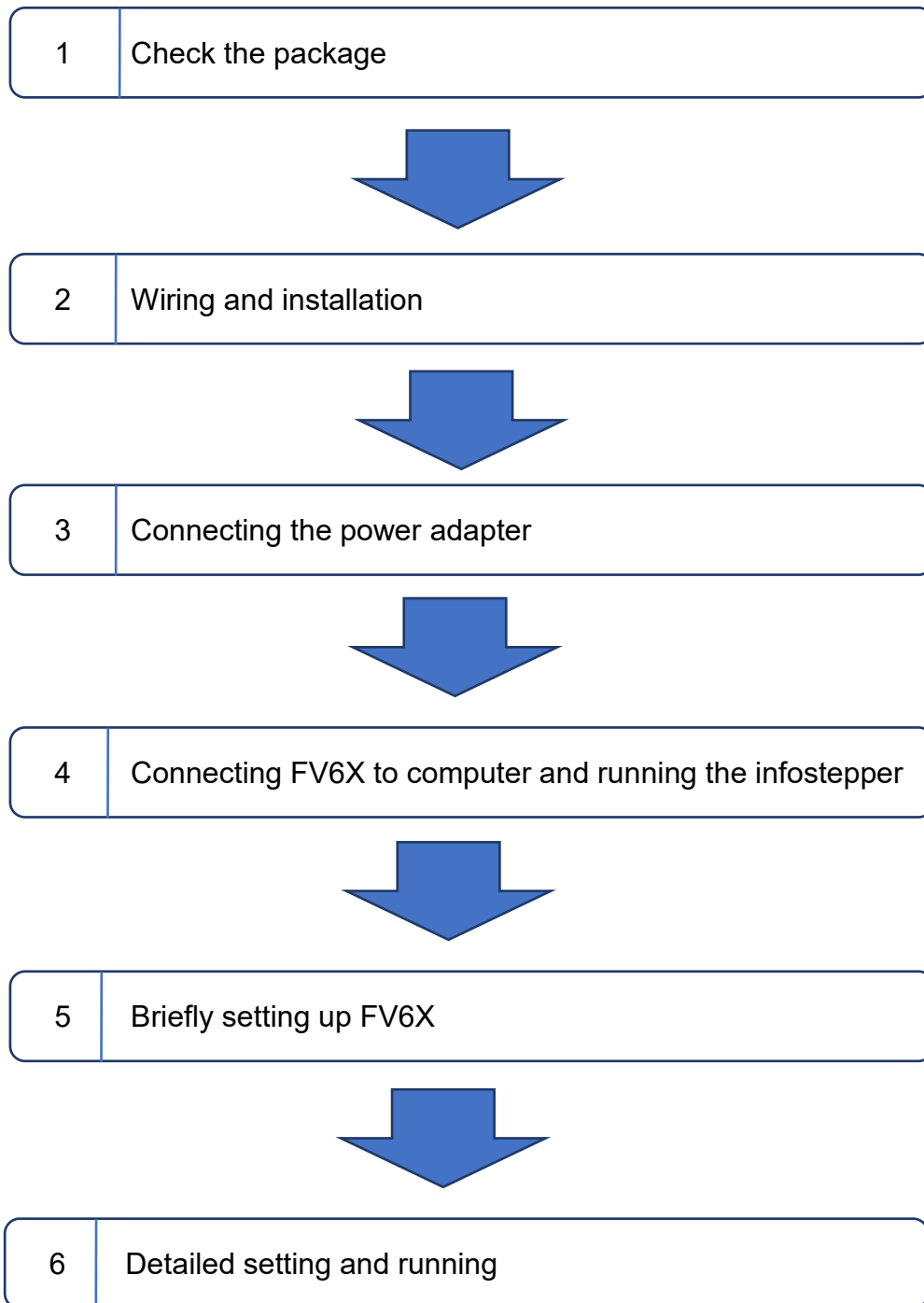
Operating Manual

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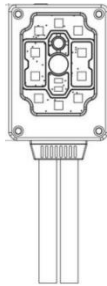




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Setup Process





1 Unwrapping the package

1-1 Reader and its belonging

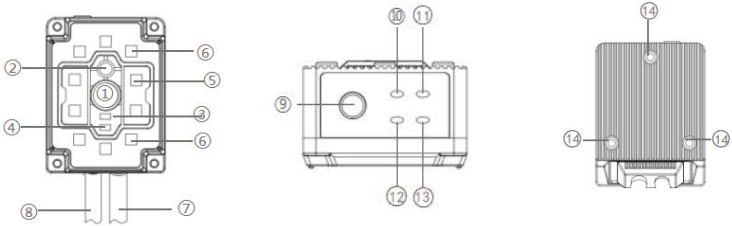
Model	Name	Package content	Quantity	Picture
FV6X	Industrial barcode scanner	Reader	1	
		Quick use guide	1	
		Installation plate	1	
		Insulating gasket	1	
		Screws	4	

1-2 Cables and power adapter

(Please refer to the customer's actual order for product accessories)

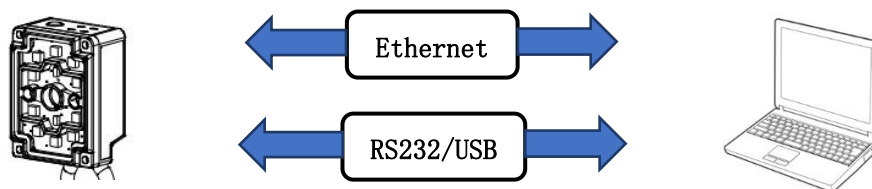
Name	Package content	Model	Quantity	Picture
Cable	Serial communication cable	H12S-0.85M-USBD9P F14-V1	1	
	Ethernet communication cable	H8S-2M-RJ-V1	1	
Power	Power adapter	WT48-2402000-T	1	

1-3 Reader photographs

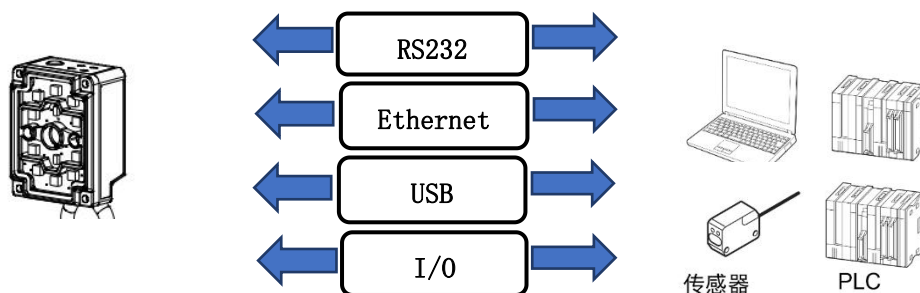
	
1	Lens
2	Laser aimer
3	No Read indicator (Red)
4	Good Read indicator (Blue)
5	Non-polarized light
6	Polarized light
7	12 PIN Connector (Serial communication, power supply, I/O)
8	8 PIN Connector (Ethernet)
9	Trigger button
10	CIR2 (Custom)
11	G/F (Good Read: indicator blue; No Read: indicator red)
12	CIR1 (Customize)
13	PWR (Power indicator: red)
14	M3 mounting hole

1-4 Reader configuration

Setting up configurations:



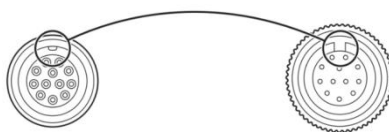
Data communication:



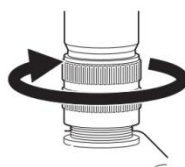
2 Connecting diagram

2-1 Cable connection diagram

1. Connect the aviation plug (male) of the cable to the aviation plug (female) of the code reader. FV6X provides two interface terminals, 12 cores and 8 cores. Be sure to connect accurately.



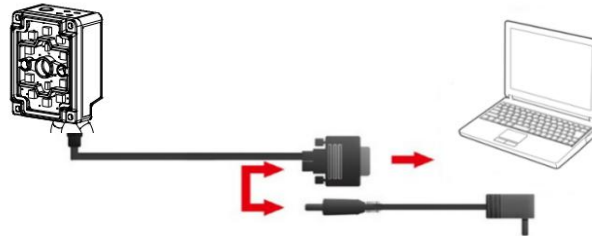
2. Rotate the aviation plug (male) screw clockwise to fix it.



3. After the aviation plug (male) is firmly connected with FV6X, then the serial communication cable DB9 (female) is connected to the PC serial port, and the Ethernet communication cable RJ45 is connected to the PC Ethernet port (see computer wiring for details).

2-2 Connecting to computer

Connecting computer via serial port (DB9):

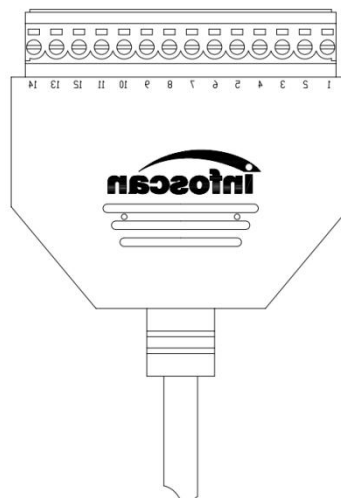


Connecting computer via Ethernet (RJ45):



2-3 I/O connection diagram

The I / O terminal is located on the serial communication cable. If the equipment is connected to external signals or to drive external equipment, it is necessary to use this terminal to connect with external equipment. The drawing of the terminal is shown as below, and the serial number and definition of the terminals are shown in the table.



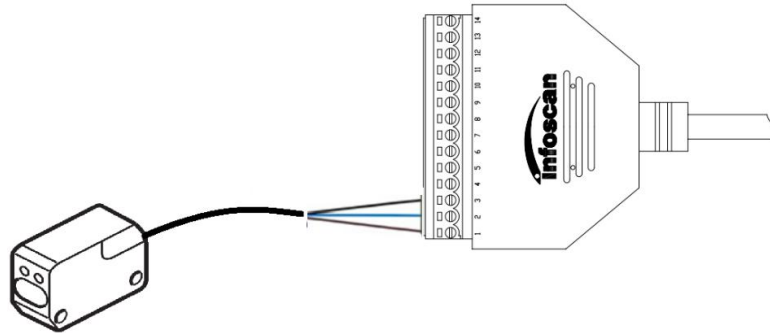
Serial number	Terminal name	Describe	Remarks
1	24V	Power input / output	Power output: it can supply power to external equipment (note ①); power input: it can be connected to 20-30v for power supply
2	GND	GND	GND
3	IN1	Input signal 1	Logic level (The default low level takes effect)
4	IN2	Input signal 2	Logic level (The default low level takes effect)
5	GND	GND	GND
6	COM-IN	Voltage output (+)	It forms voltage feedback with out1-out2, 5V \ 24V \ external voltage (no more than 36VDC)
7	OUT1	Transistor output 1	Optional internal pull-up and effective level (note ②)
8	OUT2	Transistor output 2	Optional internal pull-up and effective level (note ②)
9	NC		
10	NC		
11	NC		
12	GND	GND	GND
13	GND	GND	GND
14	24V	Power input / output	Power output: it can supply power to external equipment (note ①); power input: it can be connected to 20-30v for power supply

Note①: It depends on the voltage of the power supply connected to the serial port cable.

Note②: The effective level value can be set, and the default is 24VDC.

2-4 Input wiring diagram

1. NPN photoelectric sensor wiring;



The equipment defaults to the initial logic. The photoelectric sensor shall be NPN type, and the photoelectric sensor shall be connected to signal terminals 1, 2 and 3. The corresponding line sequence is shown in the table:

Photoelectric sensor	Terminal
+(L+)	1 (DC24V)
-(M)	2 (GND)
¬Q	3 (IN1)

Note: The high level voltage of input terminal is ranged from 5v to 24v.

2. Switch connection;

The switch connection defaults to the initial logic. Connecting the switch to signal terminals 2 and 3, and when the switch is pressed, the trigger takes effect. The line sequence is shown in the table below:

Push button switch	Terminal
SW1	2 (GND)
SW2	3 (IN1)

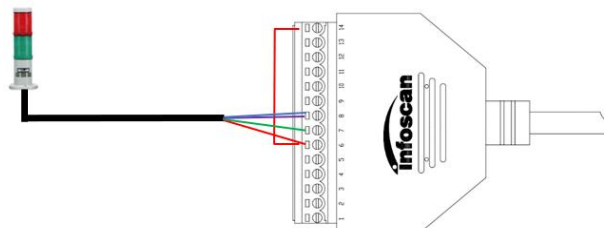
3. Relay trigger wiring;

The equipment defaults to the initial logic and the relay is connected to signal terminals 2 and 3. When the rated voltage is applied, the trigger takes effect. The corresponding line sequence is shown in the table below:

Relay	Terminal
Normal open 1	2 (GND)
Normal open 2	3 (IN1)

2-5 Output wiring diagram

1. Alarm lamp wiring;



The device defaults to the initial logic and connecting pin 14 (24V) of the 14pin terminal to the com-in terminal. Meanwhile, the positive pole of the load (taking the NPN alarm lamp as an example) is connected to the com-in terminal and the negative pole is connected to the out1 or out2 in output terminal. When reading is successful, the green light is on, and when reading fails, the red light is on and the alarm sounds. The corresponding table of line sequence is as follows:

Alarm lamp	Terminal
+ (Power input line)	6 (COM-IN)
- (Green light)	7 (OUT1)
- (Red light/Buzzer)	8 (OUT2)

Note: The standard working current of output load is 350mA, and the maximum working current is 400mA.

2. External load relay feedback wiring;

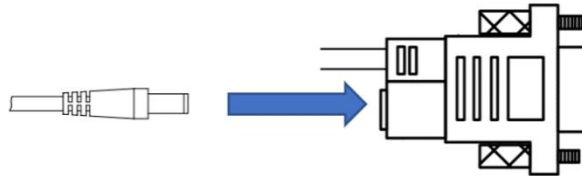
The device defaults to the initial logic and connecting the pin 14 (24V) of the 14pin terminal to the com-in terminal. At the same time, the relay coil end 1 is connected to the com-in terminal and the coil end 2 is connected to the out 2 of the terminal. When reading fails, the relay is actuated.

Relay	Terminal
Coil end 1	6 (COM-IN)
Coil end 2	8 (OUT2)

2-6 Power input diagram

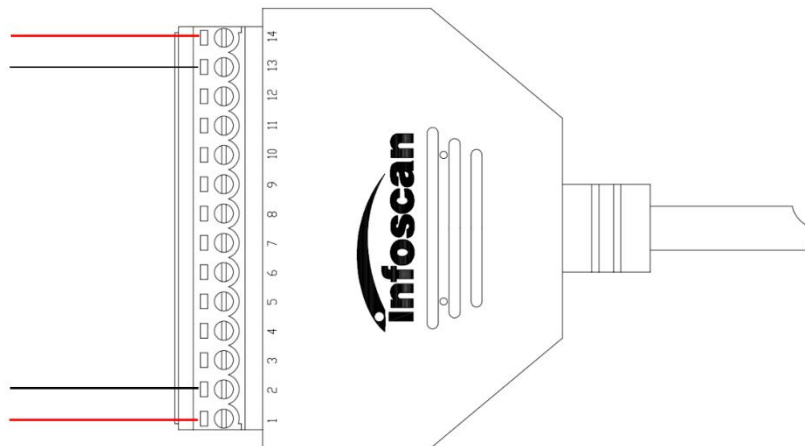
1. Adapter power supply wiring;

The power supply interface is located on the serial communication cable DB9 (female), connecting the adapter output end to the power supply interface of cable DB9.



2. Terminal power supply wiring;

Power supply can be wired in via serial port communication cable 14pin terminal strip. In the terminal, No.1 and 2 or No.14 and 13 can be used as power supply interface. See 2-3 IO terminal diagram for pin No. and definition.



3 Installation and adjustment

3-1 Before installation

Before installation, please pay attention to the following items and check the installation conditions:

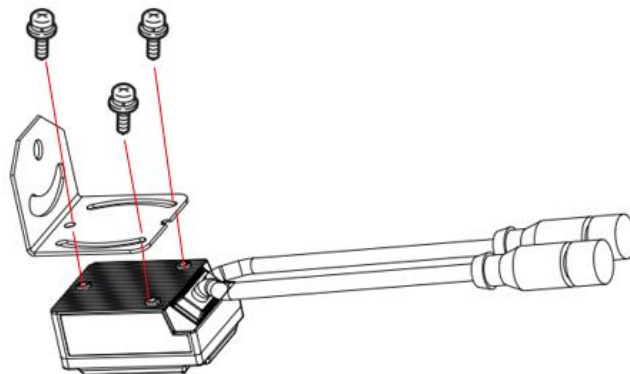
1. No influence of ambient light;

Please avoid sunlight, other lighting, photoelectric sensors and other ambient light entering the FV6X light receiving window, otherwise it may cause reading instability or reading error.

2. Check whether the light source of the barcode reader is blocked;

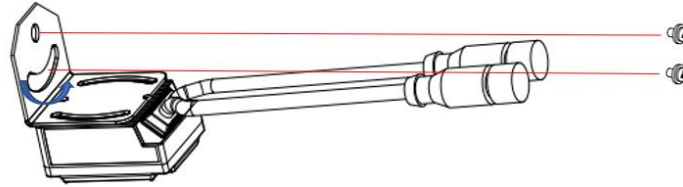
If the light source is blocked, the barcode may not be detected. If there are other devices emitting strong light (direct light and reflected light) on site, please set up a shading plate to avoid that such strong light may damage the code reader or cause code reading failure.

3-2 Installation diagram



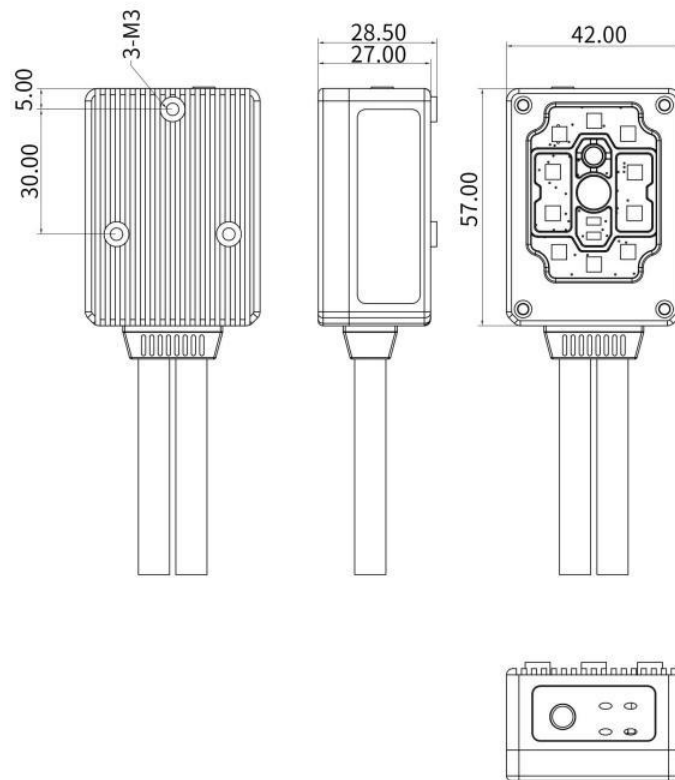
Use the mounting bracket to obtain the most appropriate reading position. The figure shows the most common installation configuration. The installation position of L-type metal fixing plate can be adjusted according to the actual needs.

3-3 Angle adjustment



As shown in the figure, adjusting the angle of the device to an appropriate angle position, and fixing the L-shape firmly with screws.

3-4 Product dimensions



Unit: mm

3-5 Reading performance chart

FV6X

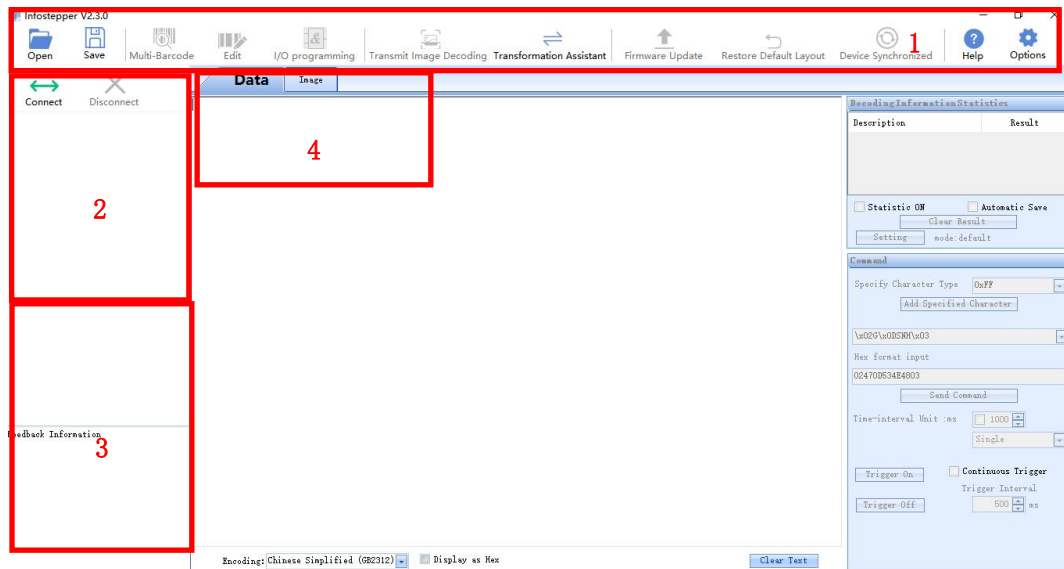
Unit: mm

Bar code specification	FV61		FV63L	
	Nearest reading distance	Maximum reading distance	Nearest reading distance	Maximum reading distance
3.34mil Code 128 10bit	45	122	45	160
5mil Code 128 10bit	40	170	40	240
6.67mil Code 128 10bit	28	220	40	330
10mil Code 128 10bit	28	260	35	490
15mil Code 128 10bit	35	339	45	730
20mil Code 128 10bit	45	430	55	930
5mil DataMatrix 10bit	57	85	50	105
6.67mil DataMatrix 10bit	40	115	43	170
10mil DataMatrix 10bit	32	188	40	255
15mil DataMatrix 10bit	30	230	35	375
20mil DataMatrix 10bit	30	312	40	480

Installation distance	FV61		FV63L	
	X-axis	Y-axis	X-axis	Y-axis
50	33	27	26	20
100	67	53	53	42
150	103	80	80	62
200	136	108	105	85
300	203	160	160	125

4 Connecting FV6X to infostepper

4-1 Introduction to infostepper

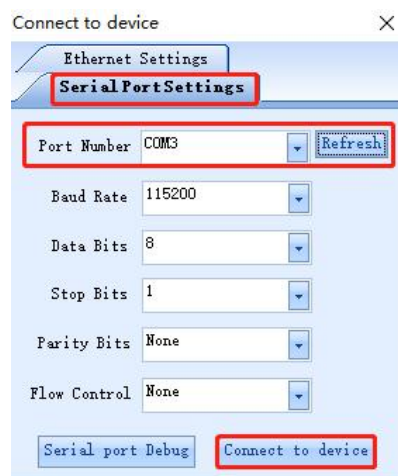


Serial number	Instruction
1	Common toolbar
2	Connection mode and information display
3	Online feedback information display
4	Data window display (once online)

4-2 Connecting FV6X to infostepper

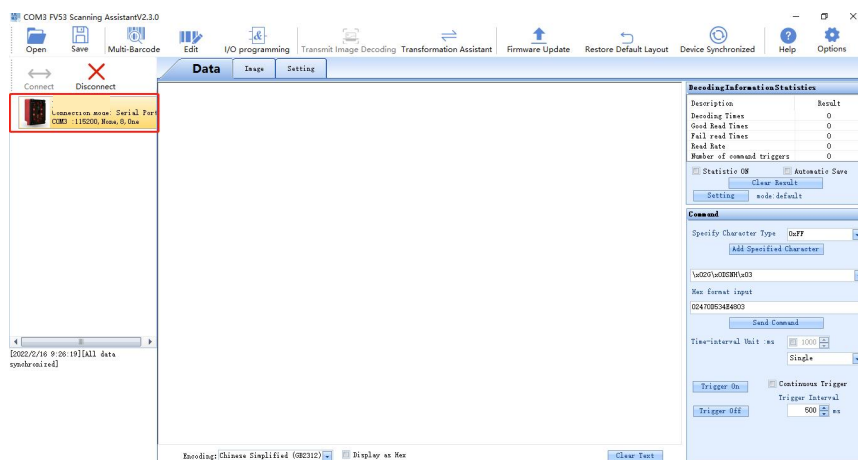
4-2-1 RS-232 connection

After the device is directly connected to the computer serial port, check "Device Manager"→"Port", confirm the port number and click "Connect". When successfully connecting to the software, then the "Connect to device" window will pop up, selecting "Serial Port Settings", then click "Port Number" and select the corresponding COM number below. If the COM number is not displayed, you can click the "Refresh" button to search; the baud rate, data bit, stop bit, etc. are consistent with the device; as shown in the figure:



Click "Connect to device" after the connection is successful, the device will have a buzz prompt, as shown in the figure:

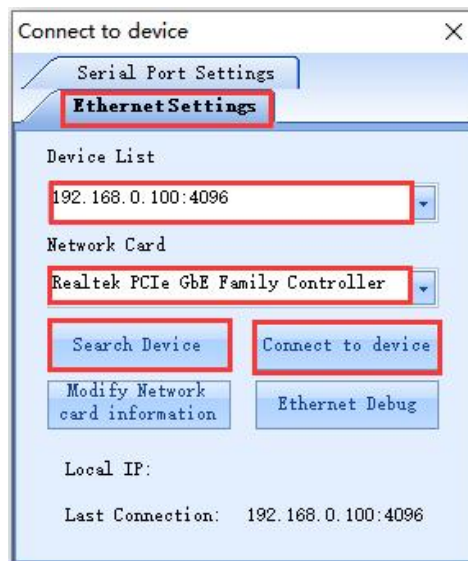
Note: The image can only be viewed under Ethernet connection



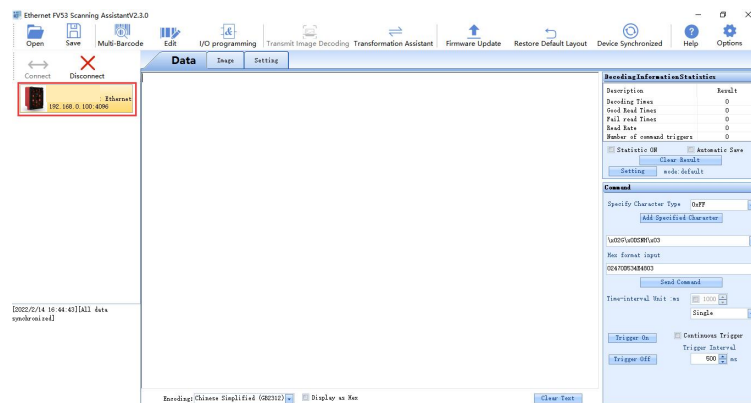
4-2-2 Ethernet (TCP/IP) connection

After the device is directly connected to the computer, go to "Control Panel" → "Network and Internet" → "Network Connections" → "Ethernet Properties" → "TCP/IPv4 Properties" → "Use the following IP address" to modify the computer's IP address parameters, so that the IP of the computer and the device (default 192.168.0.100) are in the same network segment.

Click "Connect" to pop up "Connect to device", select "Ethernet Settings", select the computer network card, and click "Search Device", as shown in the figure:



Click "Connect to device" after the connection is successful, the device beeps, as shown in the figure:

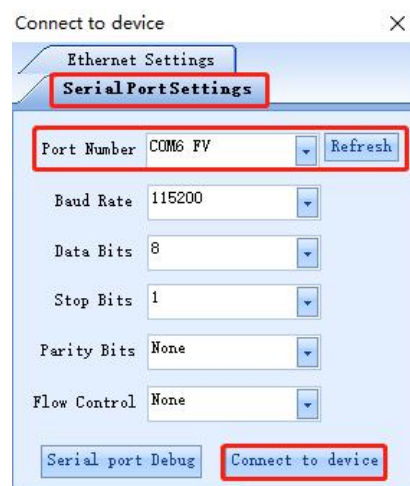


Note: Display online device model and version information and connection method, device IP address and port number information; the feedback information part displays the date and time of the connection and other related information; after the connection is successful, the interaction is successful, you can click "Image" or "Setting", make relevant detailed settings for the barcode reader.

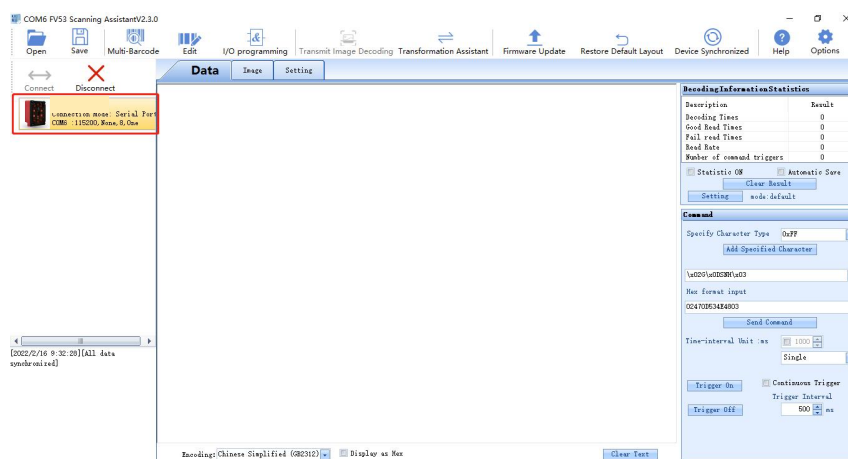
4-2-3 USB connection

Note: This connection needs a cable that shall be ordered.

After the device is directly connected to the computer, first check the "Device Manager" ---"Port" (under the premise of installing the USB serial port driver), click "Connect" when connecting to the software, then the device connection window pops up, select "Serial Port Settings", select the corresponding "COM Number FV" under "Port Number", if "COM Number FV" is not displayed, you can click the "Refresh" button to search.

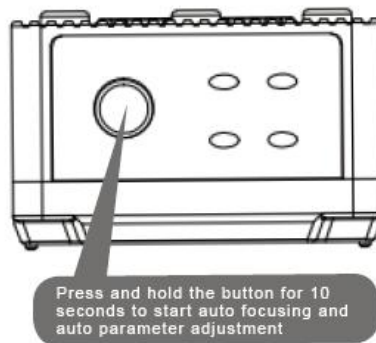


Finally click "Connect to device", the USB connection interface is as shown in the figure:



5 How to quickly setup FV6X without infostepper

FV63 provides quick setting function. Place the barcode sample you need to read within the field of view. Press and hold the button for 10 seconds to perform auto-focus first. After auto-focus is successful, it enters the automatic parameter adjustment process. The success or failure of auto-focus and automatic parameter adjustment are indicated by buzzer and indicator light. The success of “automatic parameter adjustment” is closely related to the quality of the sample barcode label read. When the quality of barcode assigned is good, the success rate of “automatic parameter adjustment” is high and the process is faster.



Note: In the image window of the setting software “infostepper”, auto-focus and auto-adjustment can also be achieved, see Chapter 6.

6 How to set up FV6X with infostepper

6-1 Focusing-on adjustment

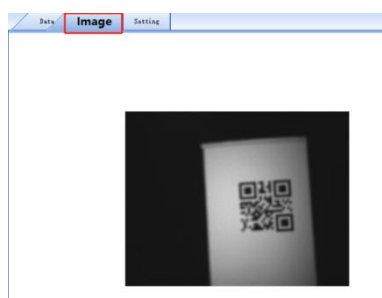
1. Click on "Image" and enter into ImagingMonitor window;



3. Method 1, click "Image snap";



3. In the main window of "Image", you can view the captured images;



The sample captured image is blurry, which affects decoding, then the focus parameters of the reader need to be adjusted.

Display area can be adjusted according to actual need.

4. Method 2, click "Continuous Shooting" to view the captured images in real time (this method is recommended).



6-2 Getting a clear Image

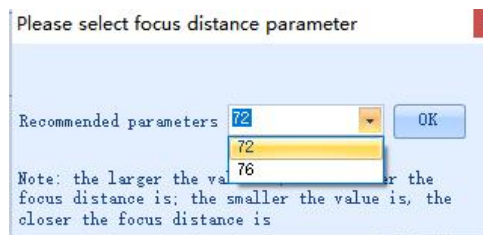
1. Method 1, select the monitor, click "Auto Focus";



2. Enter the auto-focus prompt dialog box;



3. After the auto-focus is successful, a dialog box pops up, click OK, the barcode reader will select the recommended parameters; there may be multiple recommended parameters, you can click the drop-down to select;



4. After the auto-focus is successful, enter the continuous viewing mode directly. As shown in the example, the barcode area of the image is blurred before auto-focusing. After successful auto-focusing, the barcode area of the image is clear, and the barcode area of the image shows a green frame, indicating that the barcode of the image can be decoded normally;



Before focusing



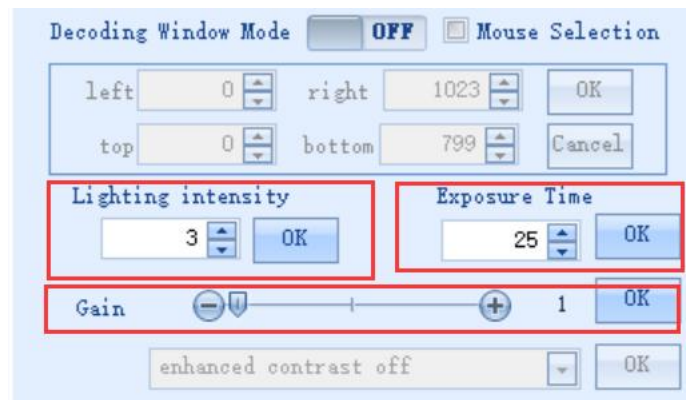
After focusing

5. Method 2, you can select "Continuous Shooting", in "Image Setting", by adjusting "Focus Distance", you can check the image sharpness in real time and you can adjust the sharpness flexibly.

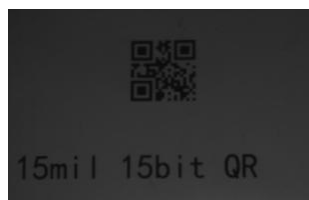


6-3 Image parameters setting

1. Select "Continuous shooting", check "Image Setting";



2. Adjust "Lighting intensity", "Exposure Time" and "Gain" to view the image changes in real time, as shown in the example. When the illumination intensity is set to 0, the image is dark, while the illumination intensity is set to 2, the image is obviously brighter and the sample barcode is displayed in a green frame, which can be successfully decoded;

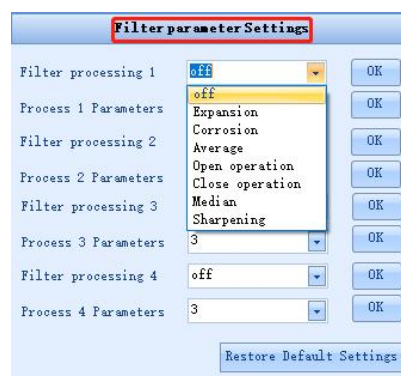


Lighting intensity is set to 0



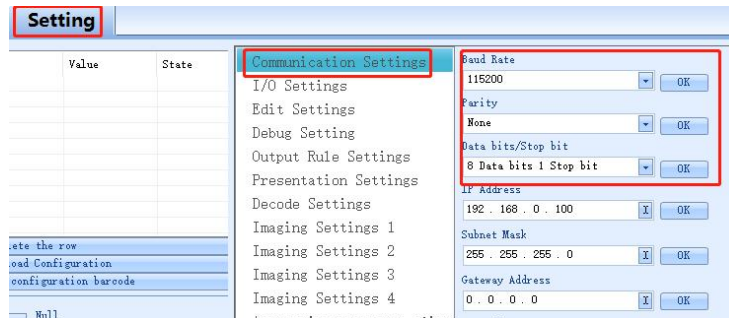
Lighting intensity is set to 2

3. Adjust the "exposure time" to view the image changes in real time, the image brightness and contrast will change significantly. For static barcode reading applications, the "exposure time" has less effect on the reading success rate; if it is mobile reading application, "exposure time" has a greater impact on reading success rate, the exposure time parameter can be calculated according to the barcode size and other conditions;
4. Adjust the "Gain", check the image changes in real time, the image brightness and contrast will change significantly;
5. For special barcode reading applications, the filter parameters need to be adjusted.

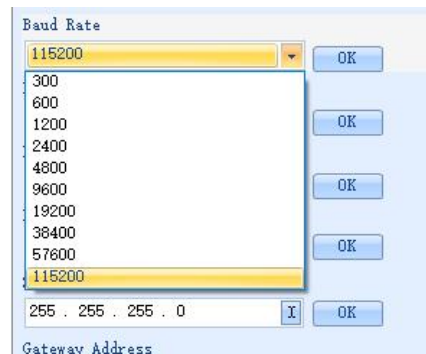


6-4 RS232 parameters setting

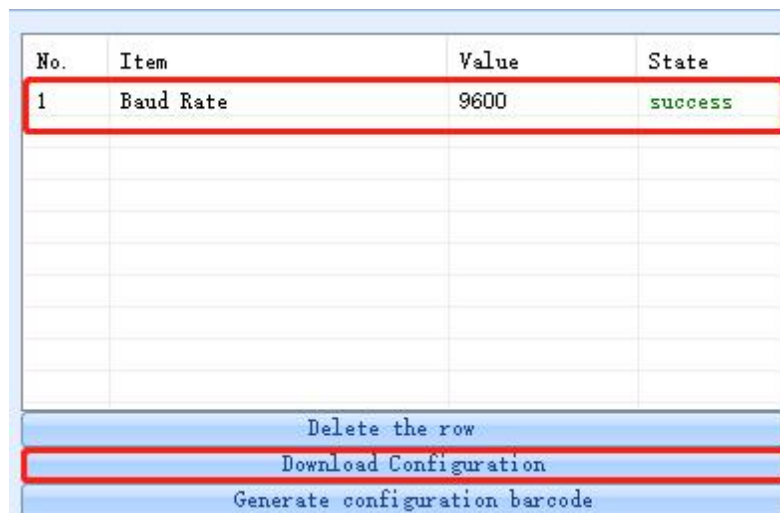
1. Click "Setting", then click "Communication Settings";



2. "Baud Rate", "Parity" and "Data bits/Stop bits" can all be set according to requirements. Take the baud rate setting as an example, set the baud rate to 9600, select "9600" and click the OK button;



3. Click "Download Configuration", if the setting is successful, the barcode reader beeps, then the setting status in the list will display "Success", indicating that the baud rate setting is successful;



4. Likewise, select "Parity" according to your needs, then click the "OK" button. The selected "Parity" setting appears in the setting list, just click "Download Configuration";

The screenshot shows a configuration window with several sections. The 'Parity' section is highlighted with a red rectangle. It contains a dropdown menu with the following options: 'None', 'None', 'Odd', and 'Even'. The first 'None' option is currently selected. To the right of the dropdown is an 'OK' button. Below the 'Parity' section, there are sections for 'IP Address' (192 . 168 . 0 . 100), 'Subnet Mask' (255 . 255 . 255 . 0), and 'Gateway Address' (0 . 0 . 0 . 0), each with an 'OK' button.

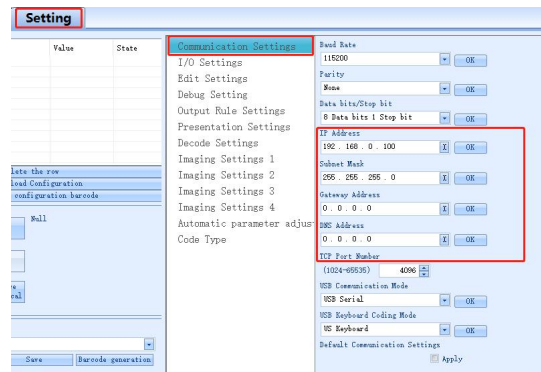
5. Select "Data bits/Stop bits" according to your needs, then click the "OK" button. The selected "Data bits/Stop bits" setting appears in the setting list, just click "Download Configuration".

The screenshot shows the same configuration window as before, but now the 'Data bits/Stop bit' section is highlighted with a red rectangle. It contains a dropdown menu with the following options: '8 Data bits 1 Stop bit', '7 Data bits 1 Stop bit', '7 Data bits 2 Stop bit', and '8 Data bits 1 Stop bit'. The first option is currently selected. To the right of the dropdown is an 'OK' button. The 'Baud Rate' section is set to 9600, and the 'Parity' section is set to 'None', both with 'OK' buttons.

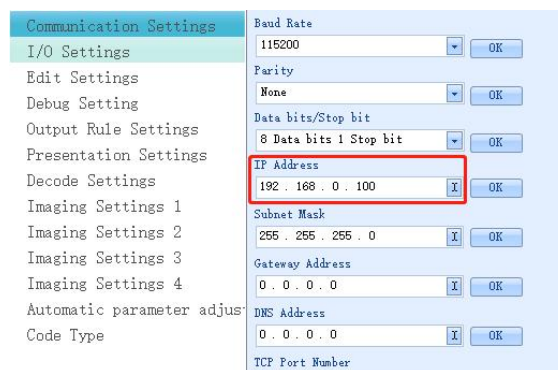
6-5 Ethernet parameters setting

FV63 barcode reader supports TCP/IP, Profinet, Modbus TCP and EtherNet/IP protocols.

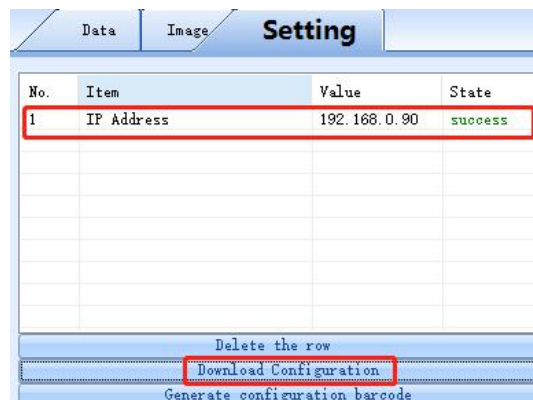
1. Click "Setting", then click "Communication Settings";



2. "IP address", "subnet mask", "gateway address", "DNS address" and "TCP port number" can be set according to requirements. Take the IP address as an example, the IP address can be directly entered by keyboard according to requirements;



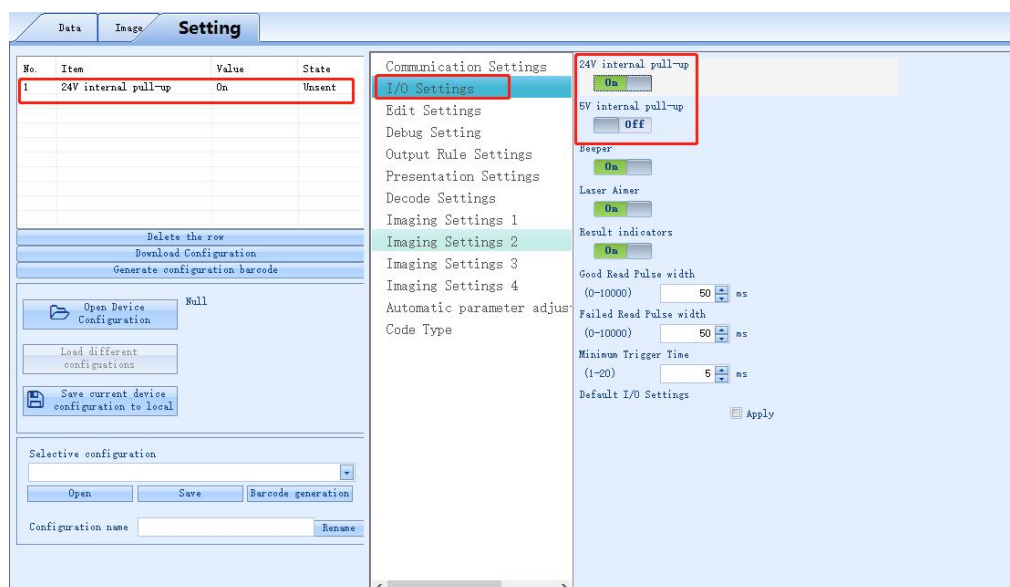
3. After the IP address input is completed, click the "Confirm" button, the set IP address will be displayed in the list, click the "Set Download" button, the reader will prompt a buzz, indicating that the setting is successful, and the setting status is "success";



4. "Subnet mask", "Gateway address", "DNS address" and "TCP port number" can be set according to the IP address setting method.

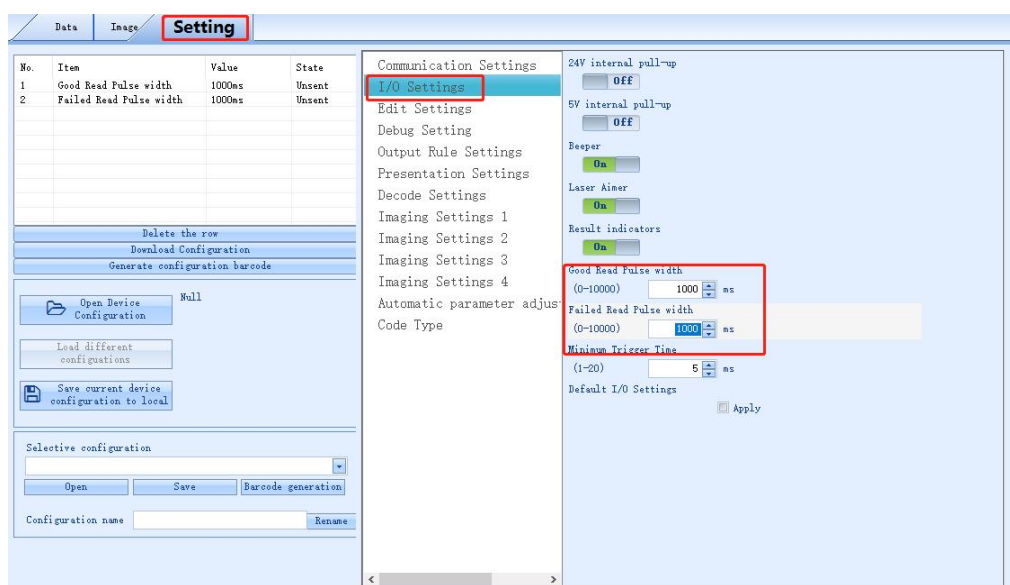
6-6 Setting output signal level, duration pulse width

1. The FV6X barcode reader provides two specifications of output level signal settings. If "24V pull-up" is set to on, the output signal level is 24V;



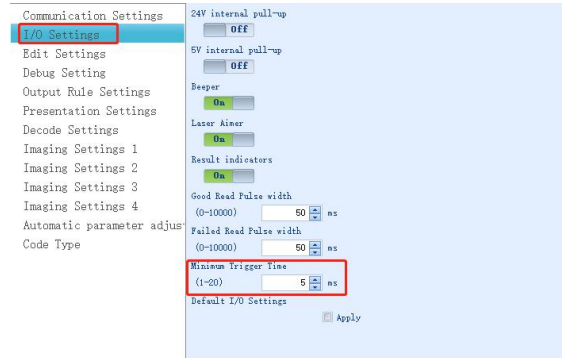
2. IO output logic, OUT1-OUT2 output level signals are all 24V;

3. Default IO output logic, OUT1 is success, OUT2 is failure, the output level signal pulse width of reading success and reading failure are both 50ms, the signal pulse width can be set according to needs, the maximum can be set to 10000ms. After setting, "Download Configuration" must be clicked to download the set configuration to the reader.



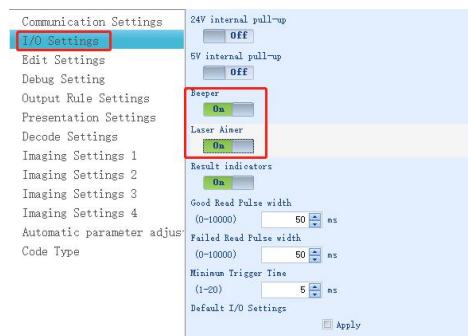
6-7 Setting the minimum valid trigger time

1. The validity of the external trigger signal to FV6X barcode reader can be set as required, and the default "minimum effective trigger time" is 5ms;

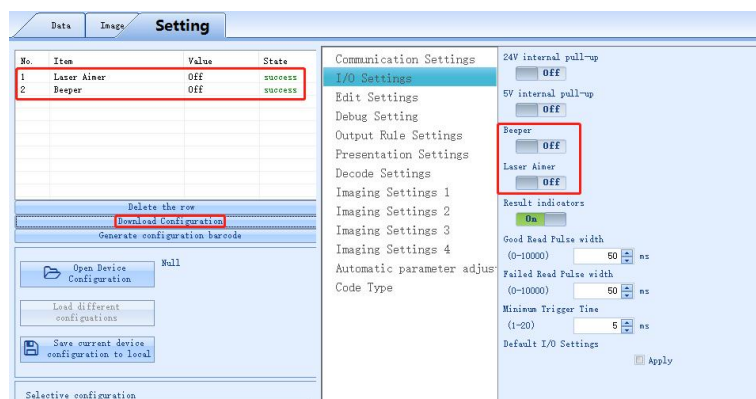


2. Click "Download Configuration" to complete settings.

6-8 Setting the buzzer and laser aiming function while good or failure reading

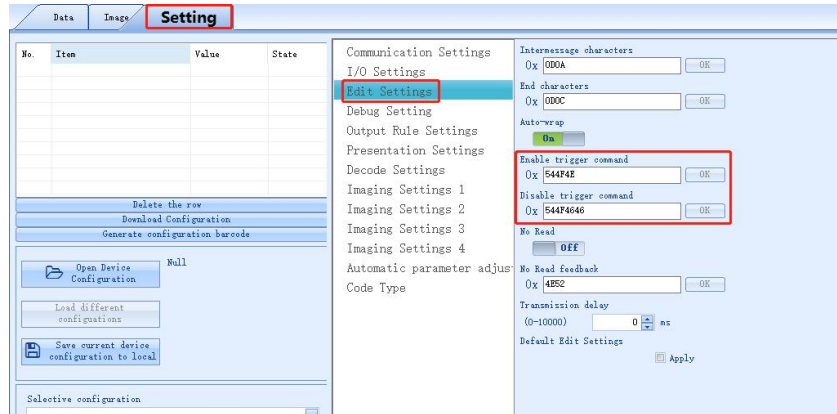


1. When FV6X reader succeeds or fails in reading the code, the buzzer and the laser aiming functions are open by default;
2. The FV6X reader has a buzz for successful or failed code reading, and the laser aiming function can be set to on or off according to requirements. Click "Download Configuration" to complete the setting.

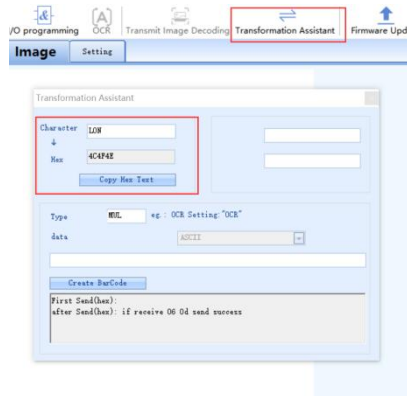


6-9 Trigger command generating and cancelling

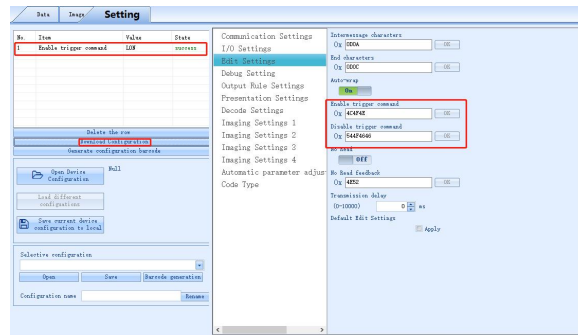
1. The FV6X can be controlled by the command from computer or PLC to read the codes. The default trigger command (hex) is "544F4E", and the trigger cancellation command (hex) is "544F4646";



2. Set the trigger command, for example, set "LON" as the trigger command, select "Transformation Assistant", and input "LON" to convert "LON" to the corresponding hexadecimal;



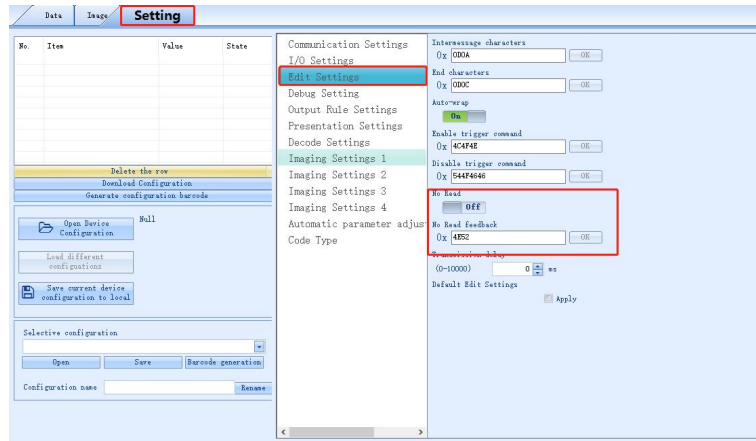
3. Copy the Hex content converted by "LON", paste it into "Enable trigger command", click "OK", you can view it in the setting list, click "Download Configuration" to complete the setting;



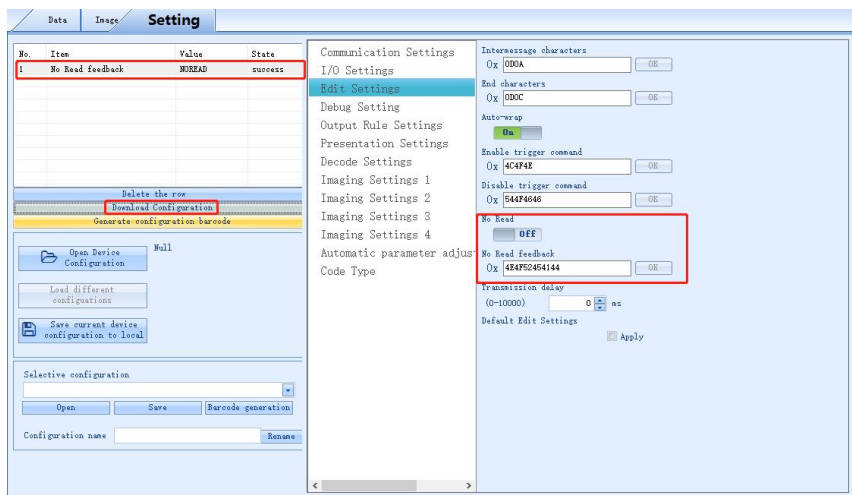
4. The custom trigger cancellation command is as the same set process as above.

6-10 Generating the failure feedback command

1. The FV6X reader can output reading failure characters, the default output character content (hex) is "4E52", and the reading failure feedback is closed by default;

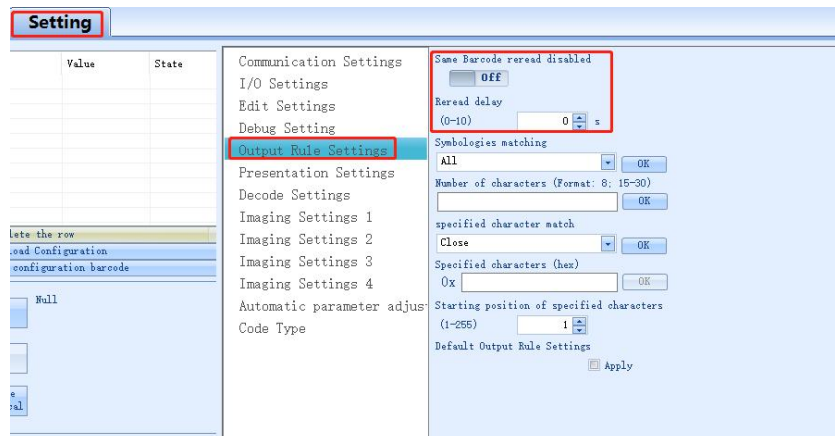


2. The reading failure feedback switch is set to on, and the reading failure character feedback character (hex) is set to "NoRead". Use the conversion assistant to convert "NoRead" to hexadecimal, paste the hexadecimal content into the reading failure character feedback character, click "OK", view the list, click "Download Configuration" to complete the setting.

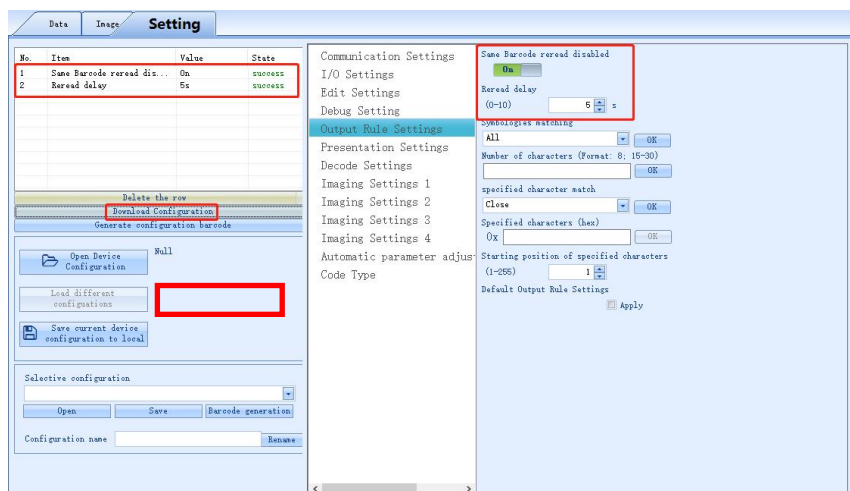


6-11 Rereading the same barcode

1. FV6X barcode reader's repeated barcode reading function is off by default, and rereading time is 0 S by default;



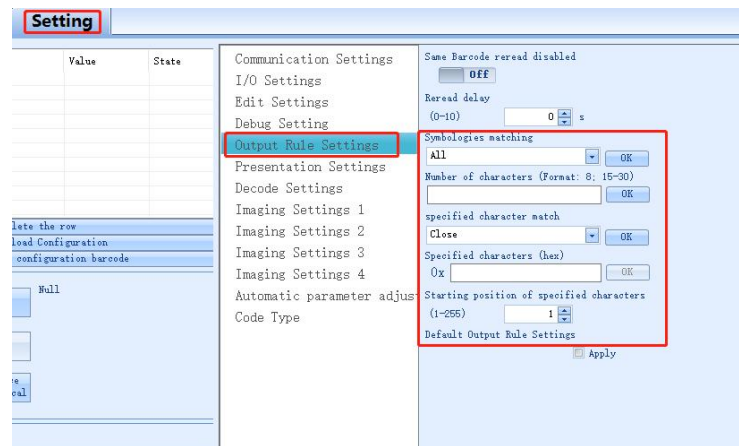
2. FV6X barcode reader's repeated barcode reading is set active, repeated reading delay time is set to "5";



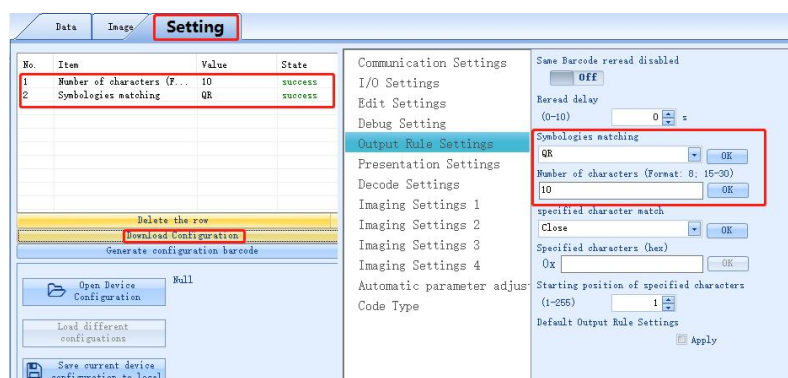
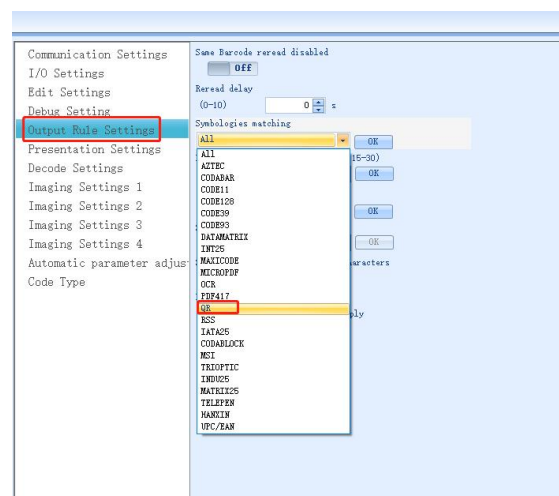
3. The repetition reading time is set to 5s, and the repetition barcode reading function is kept for 5s.

6-12 Setting the barcode filter parameters

1. If the output barcode needs to be displayed, FV6X provides the barcode screening function, which can be set according to the code system, the number of characters, special characters, etc. to achieve screening;



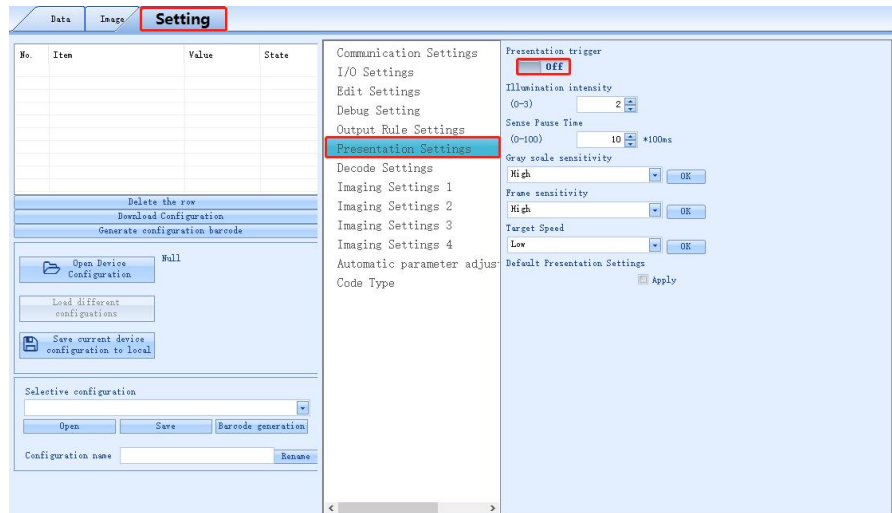
2. For example, if the output code system is QR barcode, the number of characters is 10, then the settings are as follows:



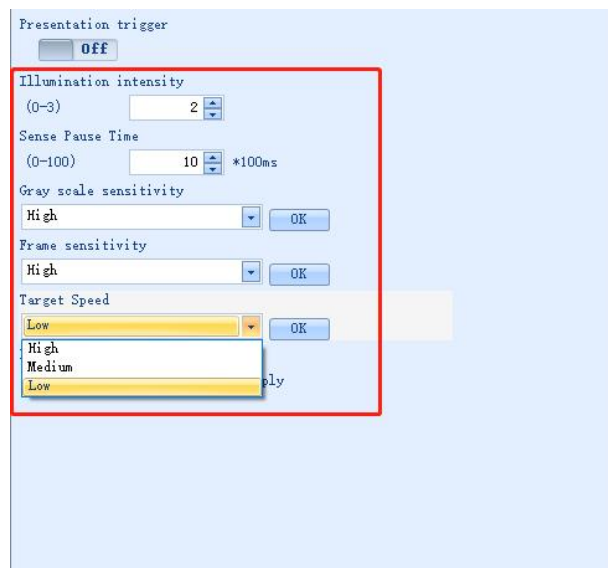
3. Special character matching can be set to filter.

6-13 Auto-induced reading mode

1. The inductive reading capability of FV6X code reader, the inductive reading mode is off by default;



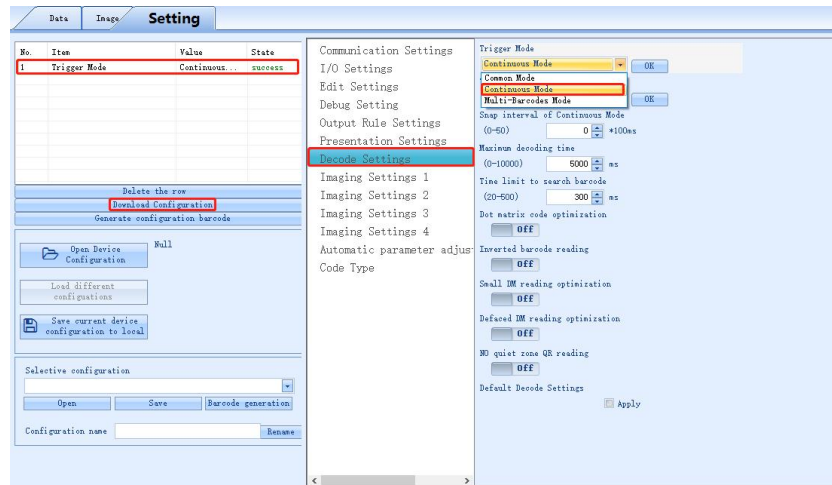
2. If the induction trigger is set to open, you can set the induction trigger lighting intensity, induction pause time, grayscale, frame, moving speed, etc.;



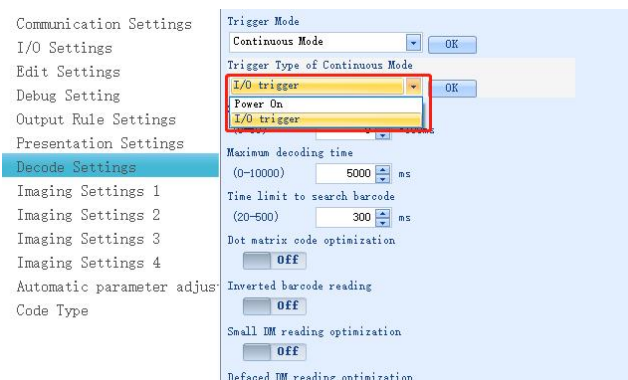
3. The induction reading mode of the FV6X code reader is suitable for a specific environment.

6-14 Continuous trigger mode

1. In the trigger mode, the continuous trigger mode can be selected;

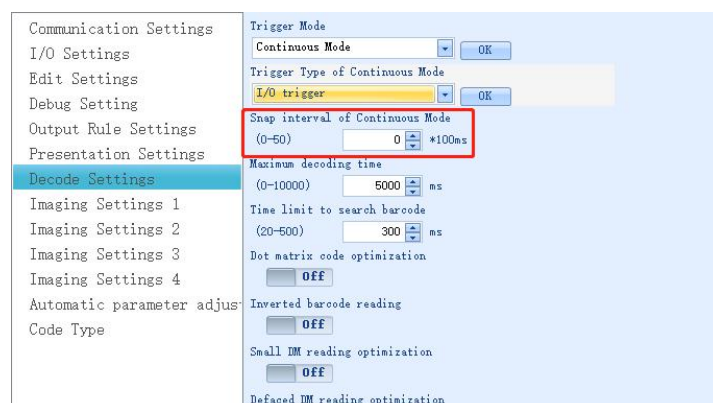


2. The startup mode of continuous trigger mode is divided into boot startup and I/O trigger. The default is I/O trigger;



3. Continuous trigger mode shooting interval time.

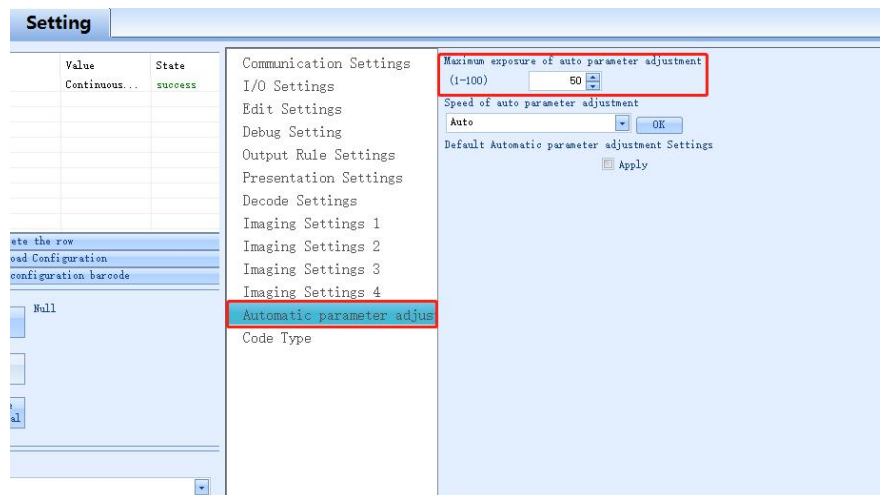
The default value is 0*100ms, optional 0-50, which can be set according to actual application requirements.



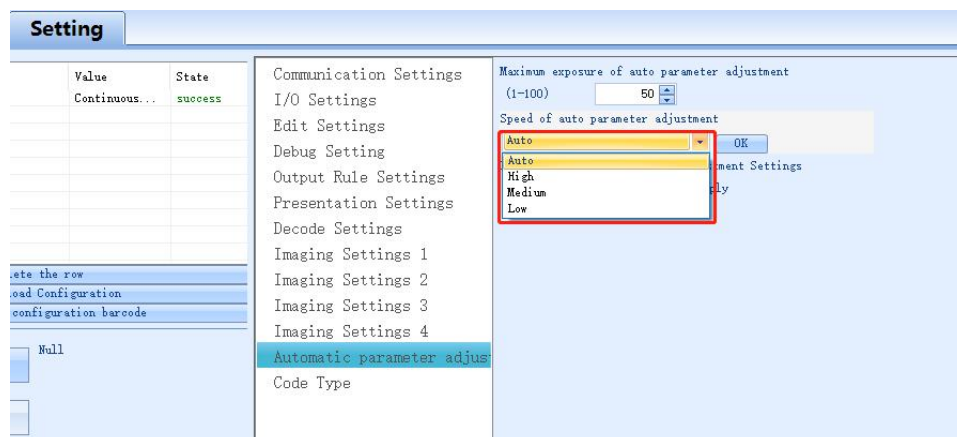
6-15 Automatic parameter adjustment function

1. Automatically adjust the maximum exposure time: control the maximum amount of light entering.

The default value is 50, and the value range is 0-100, which can be adjusted according to actual application requirements;

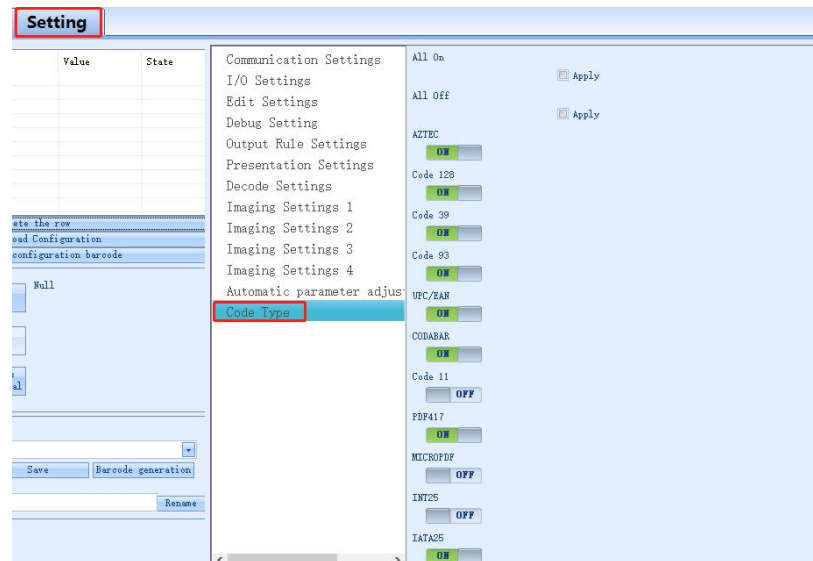


2. Automatic parameter adjustment speed: The default is automatic (self-adaptive), automatic, high-speed, medium-speed and low-speed can be selected;



6-16 Selecting the readable symbologies

1. The setting window -- Code type information can be set;



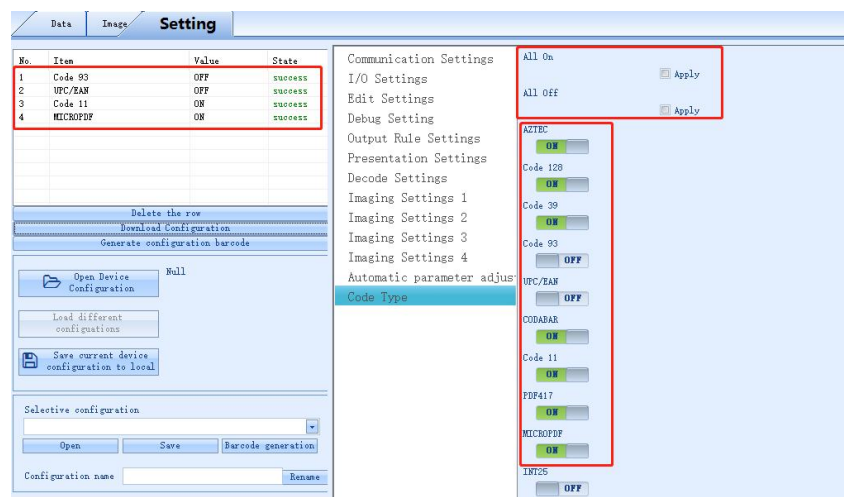
2. Symbology setting

Full code system on: After checking, click the download, you can open all code system.

Full code system off: After checking, click the download, you can turn off all code systems.

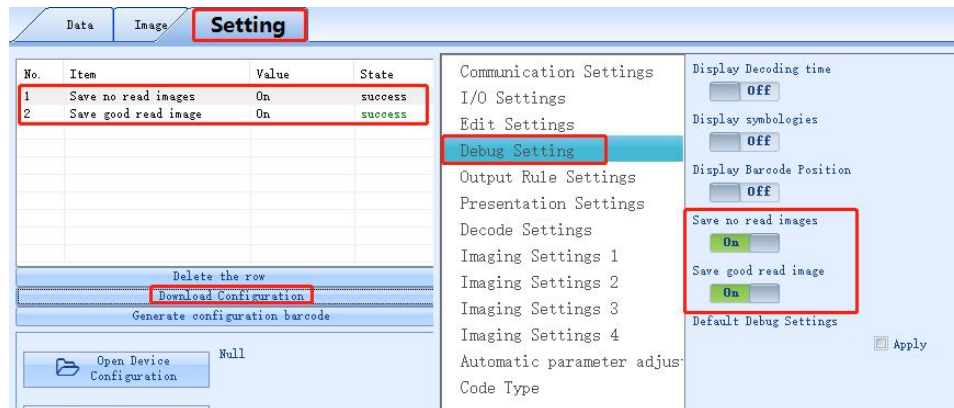
A code symbology can be turned on or off separately, and each has a corresponding switch button.

In applications, unnecessary code systems can be turned off, which can improve decoding efficiency;



6-17 How to get the pictures of a barcode

1. Setting window - save decoding success images and save decoding failure images sets in "Debug Setting";

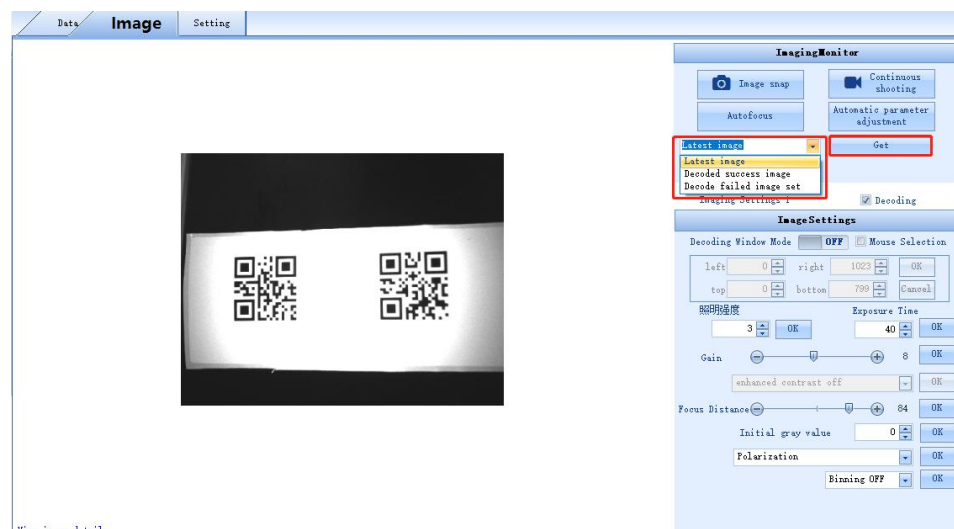


2. Image window—obtain, you can view the latest image, successfully decoding image and failed decoding image set.

Latest image: The latest image taken by the reader (success/failure).

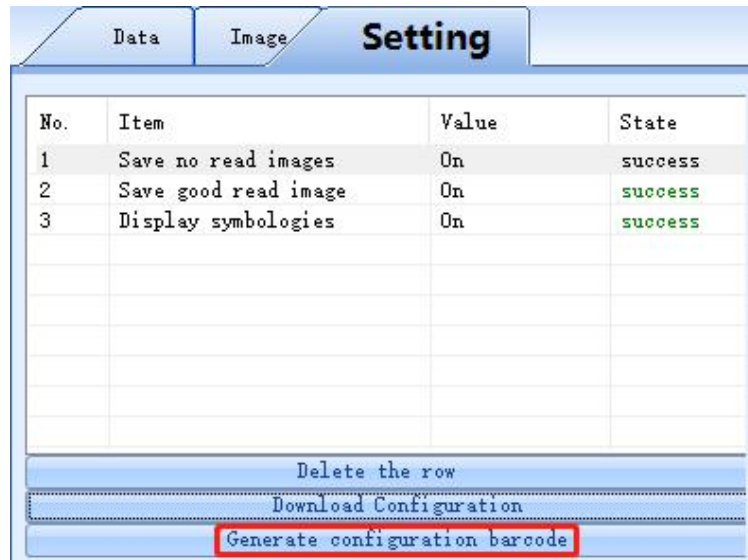
Decoding success image: the image that the barcode reader successfully decoded last time.

Decoding failed image set: The image set that the barcode reader failed to decode last time.



6-18 How to generate setting codes for the selected parameters for cloning other readers

1. After selecting some download items with successful settings, click “Generate configuration barcode”;

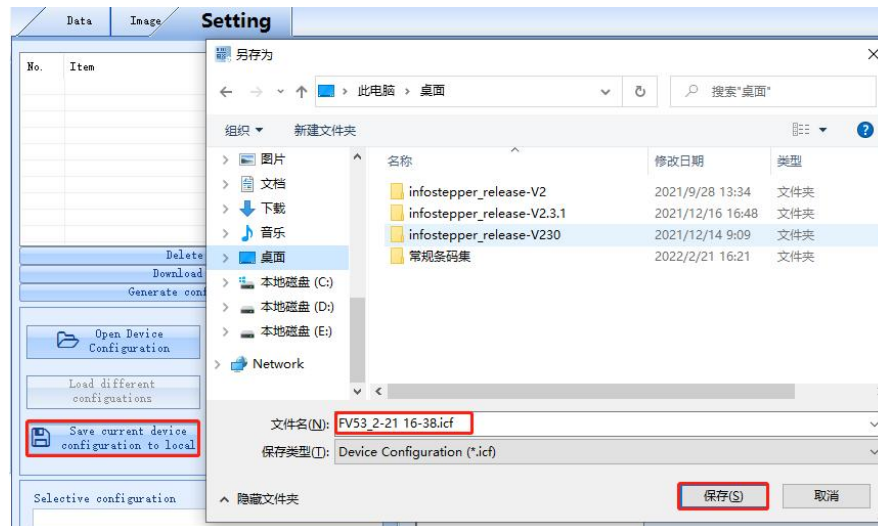


2. According to the prompt, it can be pasted into the word file or viewed in the image window (the picture is viewed in the image window), and the current parameter settings can be set by reading the setting code with the reader.

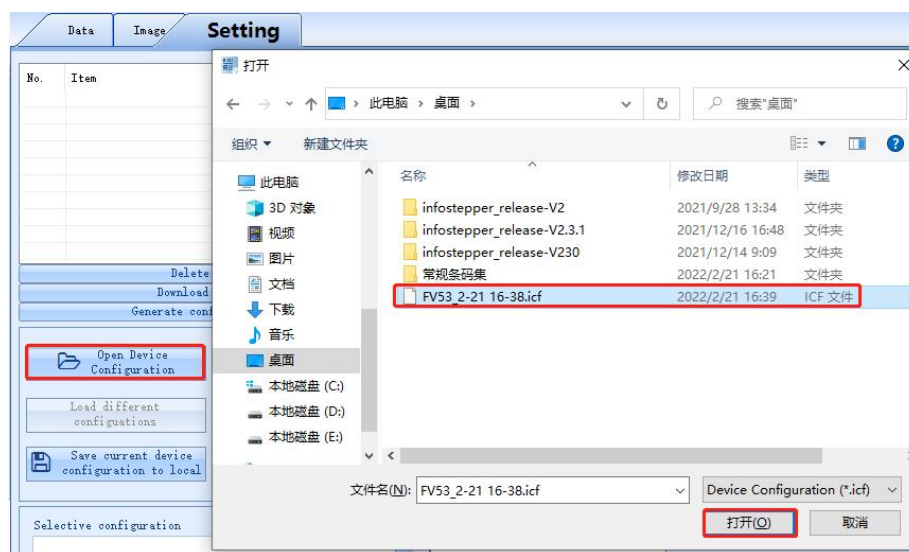


6-19 How to save and operate the configuration file

1. In the setting window, click to save the current device configuration to the local storage;



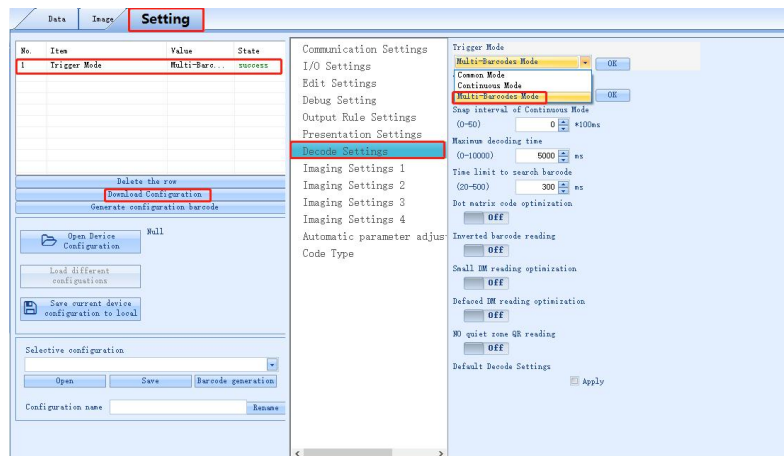
2. Click “Open Device Configuration”, select the corresponding configuration file, then the parameters of the saved configuration file will be imported into the device.



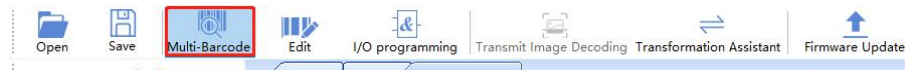
7 Settings for special applications

7-1 How to read multiple barcodes in the same time

1. The multi-barcode mode of FV6X barcode reader needs to be set in Settings-Decoding Settings-Trigger Mode;



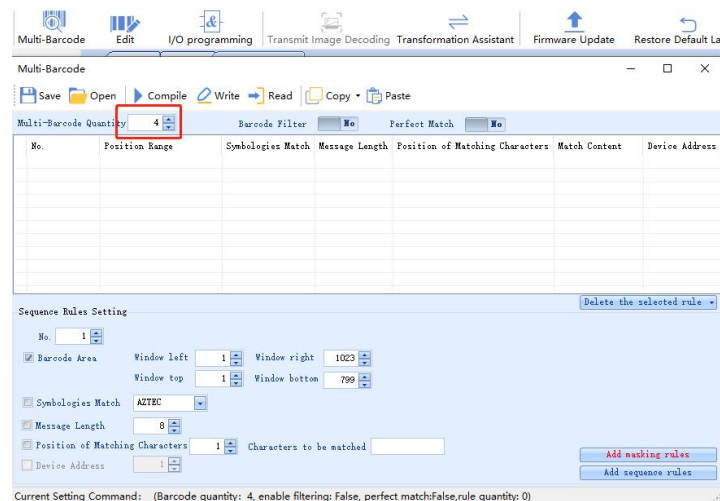
2. Open “Multi-Barcode” rules, you can set multiple barcode rules.



Number of barcodes read: The number of read barcodes can be set according to specific application requirements.

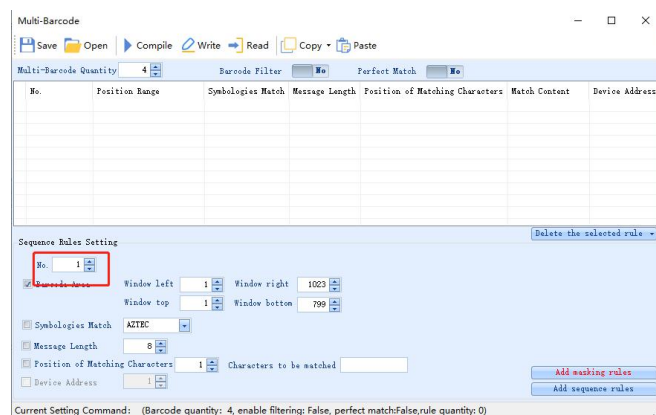
When the quantity is set to 0, all barcodes recognized by the reader will be decoded and output.

The number is set to non-0, and the set number of decoded information is output. e.g.If set to 3, 3 barcodes information will be output.

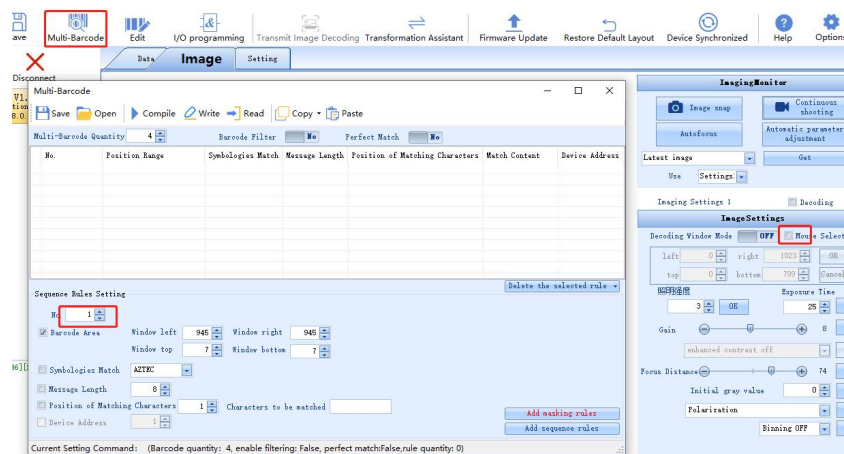


7-2 Set up selected position and sequence in multi-barcode interface

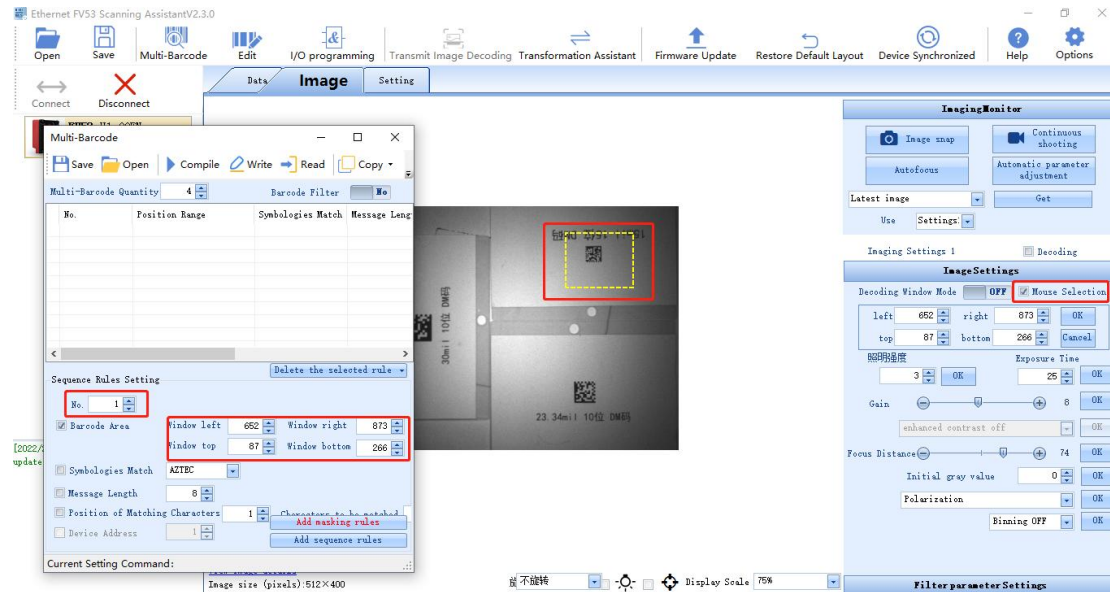
When multiple barcode rules are enabled, you can set the current number of output barcodes in the output sequence;



Pull the multi-barcode rule window to one side, and check the “mouse selection” box in Image Settings;



After selecting the box of the mouse selection function, the current address information will be automatically updated to the multiple barcode rules, as shown in the figure:



To set the second barcode, set the output sequence to 2 and re-select the box to select a new address.

And so on, set the third output barcode, set the output sequence to 3.....

The above settings are completed, compiled, and written. You can set the output barcode sorting function in the selection area.

The sorting can also be set by the following rules:

Code system matching: you can choose different code systems (one of the barcode rules);

Barcode length: According to application requirements, you can choose different lengths of barcodes (one of the barcode rules);

Match characters

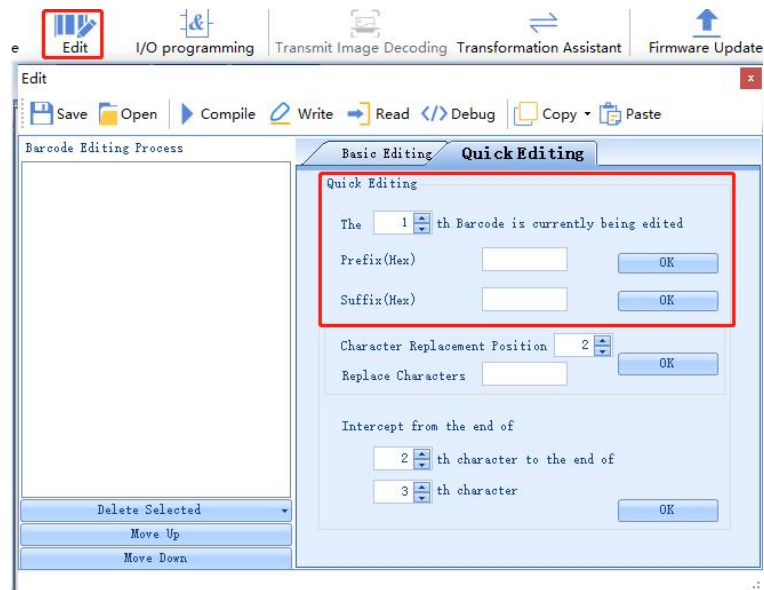
Position: Select the position of a barcode, such as barcode ABC23, if you need to find the position of C, the position is 3.

Characters to be matched: Select the characters to be used as barcode rules.

Note: There are new rules that need to be added to the rule table, compiled and written, after these the rules will take effect .

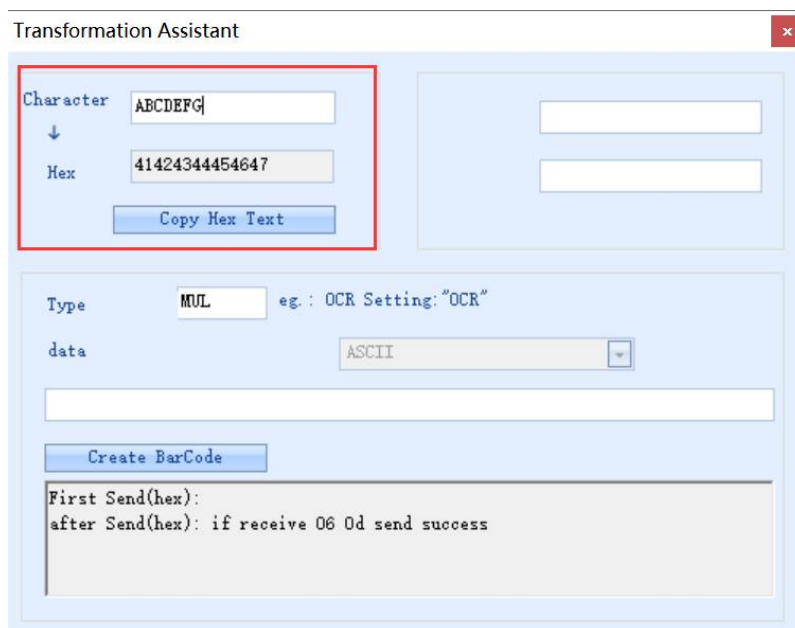
7-3 Defining the prefix or suffix

Open Edit

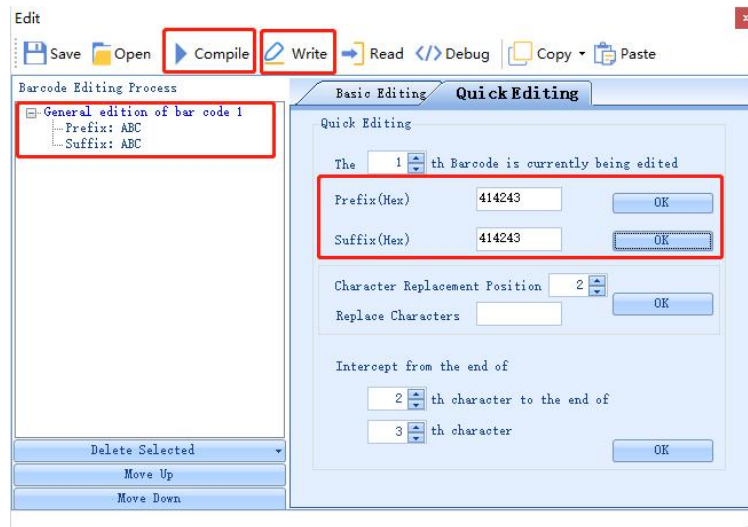


You can enter the required characters (using hexadecimal, which can be converted by the conversion assistant) in the text boxes. The input text is in

If you want to add "ABC" characters before and after the barcode, open the conversion assistant, enter "ABC", it will be automatically converted to hexadecimal, click to copy the hexadecimal text.



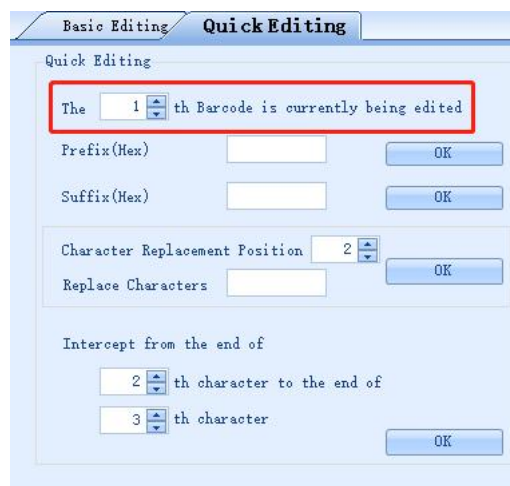
Paste the copied hexadecimal text into the corresponding prefix character input box in the barcode editor. Confirm, compile, write.



As shown in the figure, the barcode information prefix and suffix are "ABC".

```
1234567890
1234567890
ABC1234567890ABC
ABC1234567890ABC
```

In the multi-barcode mode, suffixes can also be added to multiple different barcodes. On the barcode editing page, you can select the number of barcodes currently being edited.



7-4 The logic diagram of IO output

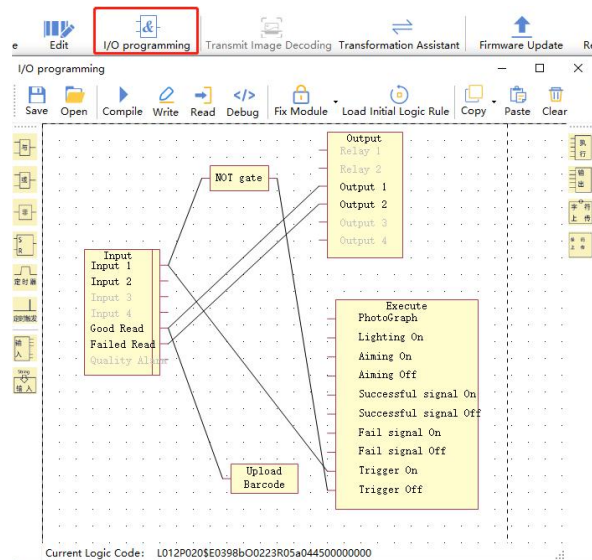
Open I/O programming

Save: save the current I/O logic

Open: open I/O logic

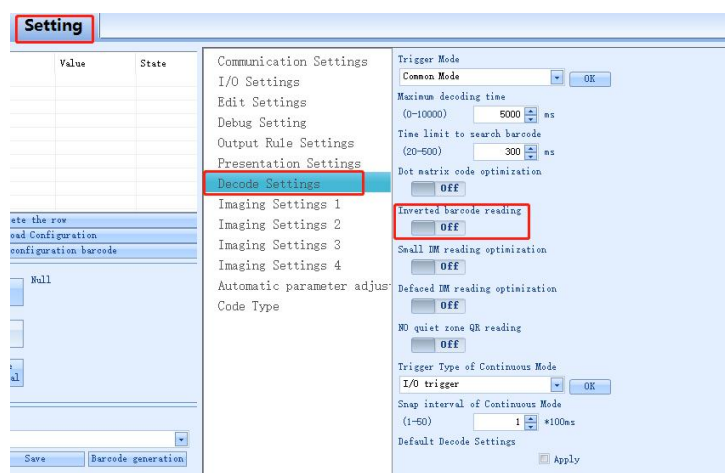
Compile, Write: the modified I/O logic needs to be clicked to compile, then it will take effect after writing

Load initial logic rule: restore Factory



7-5 How to read a color-reversed barcode

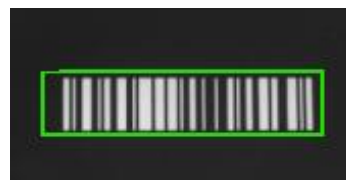
In the settings-Decoding settings, turn on the “Inversed barcode reading” and set the download.



Inversed barcode reading closed

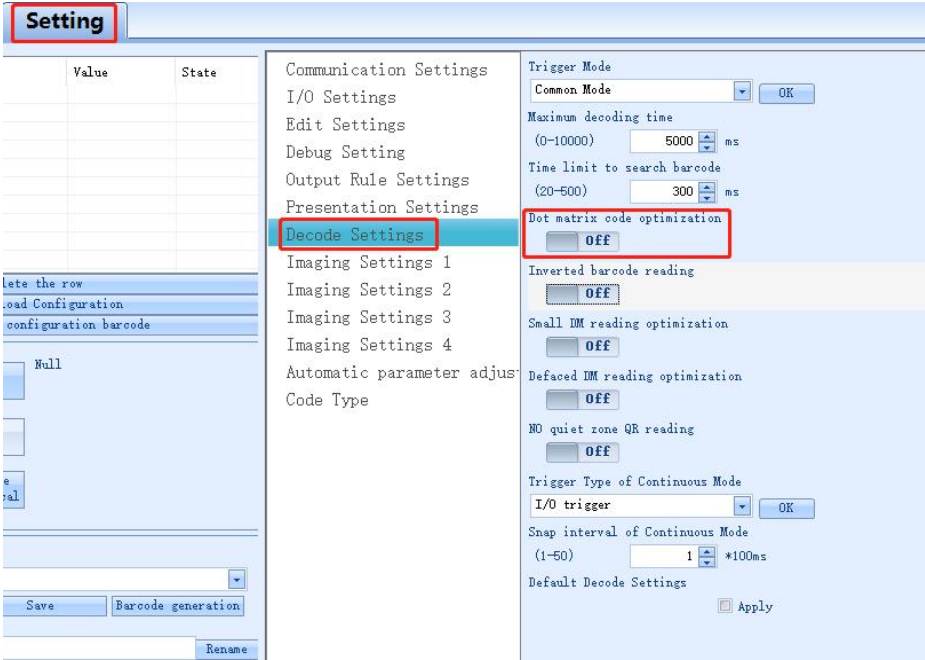


Inversed barcode reading open

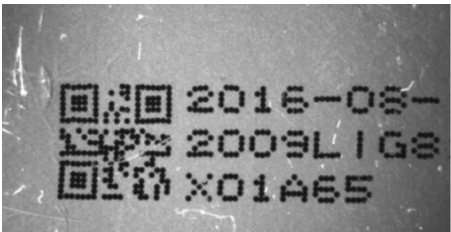


7-6 How to read Dot-matrix barcode

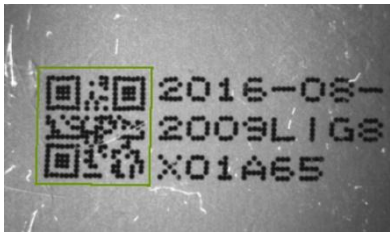
In the settings-Decoding settings, turn on the “Dot-matrix code optimization” and set the download.



Dot matirx code optimization closed



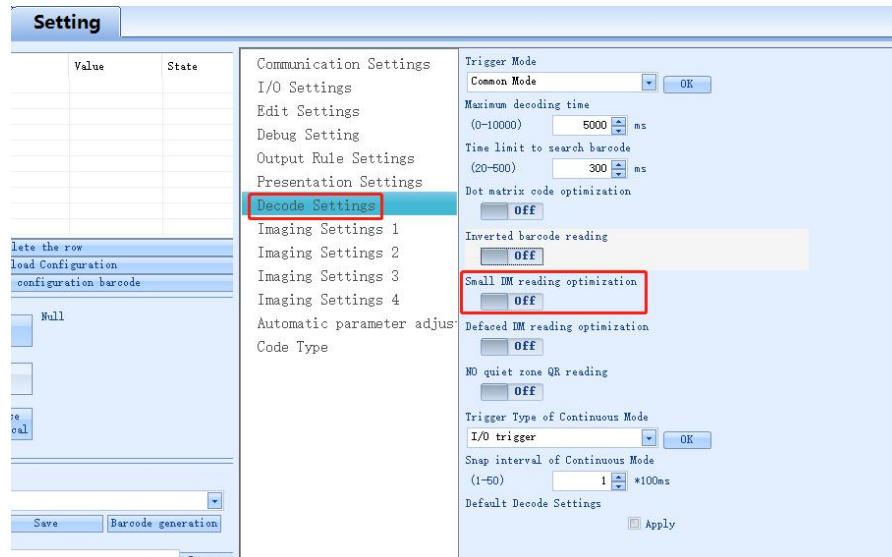
Dot matirx code optimization open



7-7 How to read small-sized or defaced DM barcode

Small DM reading optimization

In the settings-Decoding settings, turn on the “Small DM reading optimization” and set the download.



Small DM reading optimization closed

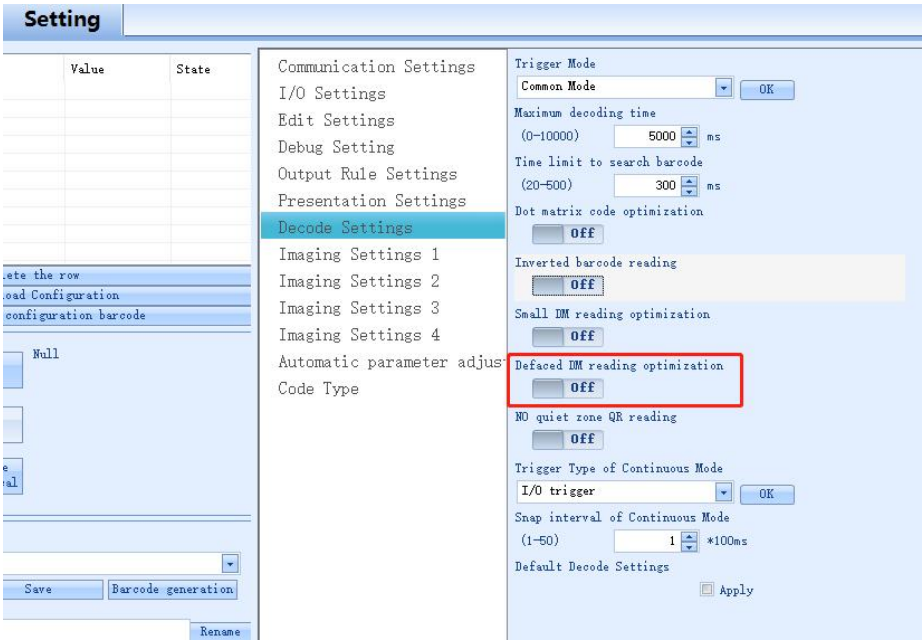


Small DM reading optimization open

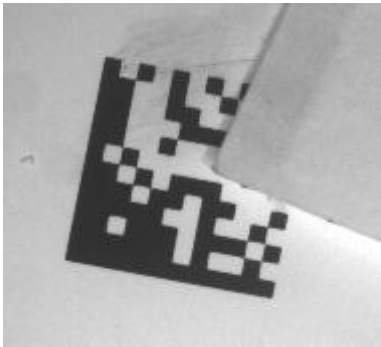


Defaced DM reading optimization

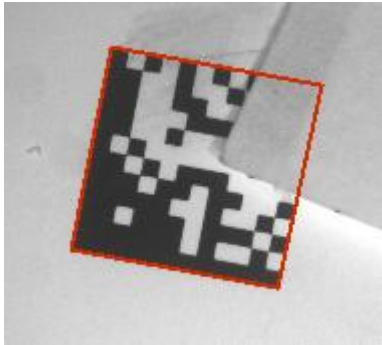
In the settings-Decoding settings, turn on “Defaced DM reading optimization” and set the download.



Defaced DM reading optimization closed



Defaced DM reading optimization open



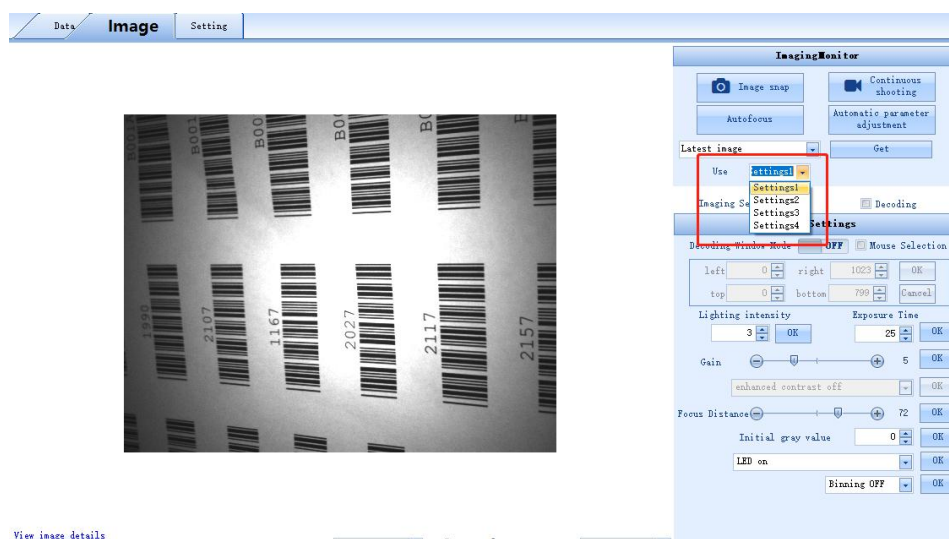
7-8 How to use the polling algorithm for complicated reading

Multiple sets of parameter settings are mainly used in the case of different code symbology, coding media, barcode quality, positions, etc., polling and decoding through different setting parameters.

It can be set through the image interface setting and setting interface.

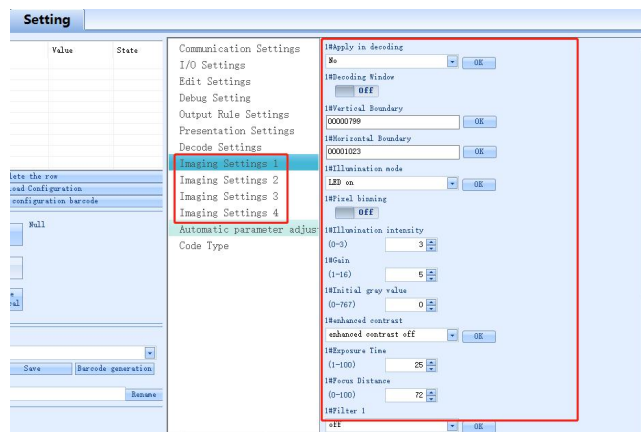
Image window

4 sets of parameters can be set. When setting, you need to confirm the setting of the corresponding imaging parameter group. The parameter group is 1-4. The default is a set of parameter groups, that is, the parameters currently being used. After the setting is completed, you need to tick before "Decoding".



Setting window

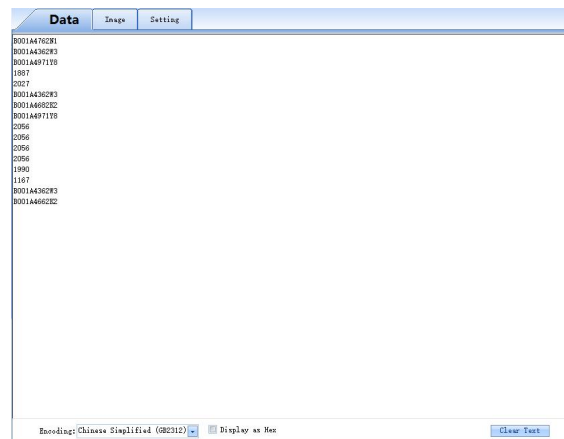
Set the parameters required by the application in corresponding imaging parameter group. After setting, if you want to participate in decoding, select Participate in decoding and set download under whether to participate in decoding.



8 Other settings

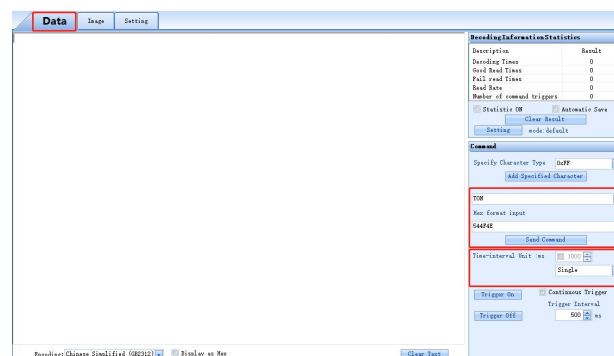
8-1 View decoded data after settings

In the data window, after the device is triggered, if the decoding is successful, the barcode information will be displayed. As shown in the figure:

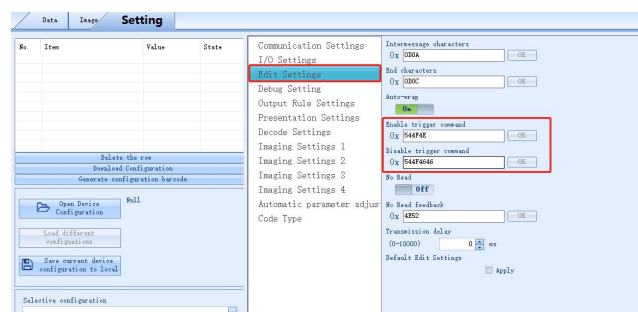


8-2 How to trigger the reader by computer command

In the data window, select the corresponding command, and click Send Command to trigger the device. The device trigger command is "TON" by default, and the cancel trigger command is "TOFF". The command trigger interval can be set, and the timing setting needs to be checked. The default is 1000ms/time.



If you want to change the trigger or cancel the trigger, you can change it in Settings - Edit Settings.



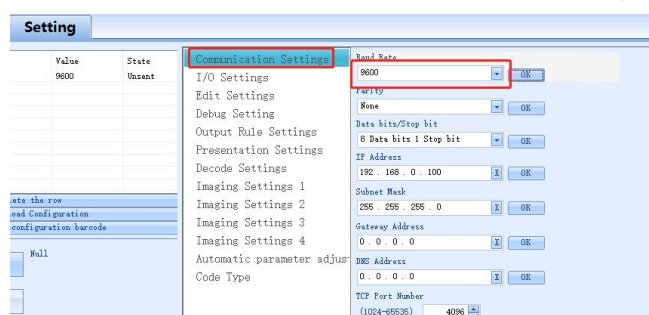
8-3 How to simulate keyboard input

Method 1, through the QHQ line

Connect the DB9 (male) end of the QHQ cable to DB9 (female) of the serial communication cable, and the USB end to the PC end.



In the communication settings, the baud rate is set to 9600, and the download can be set. Data output is keyboard input, and data can be viewed in a text file (English mode).



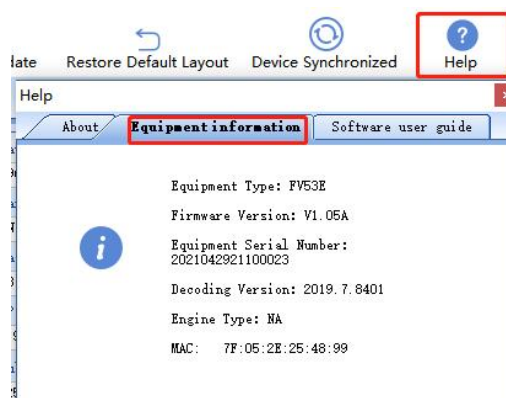
Note: QHQ line is optional, if needed, please ask our sales or technical person to purchase.

Method 2: A converting cable needed

Change the communication mode of the USB port to the USB keyboard port, and the keyboard port output can be realized through the built-in USB cable.

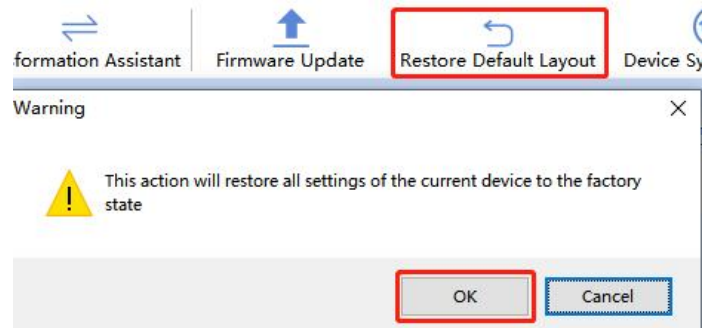
8-4 How to check the reader firmware version information

Click the Help button and click Equipment Information to view the current device model, firmware version number, etc.

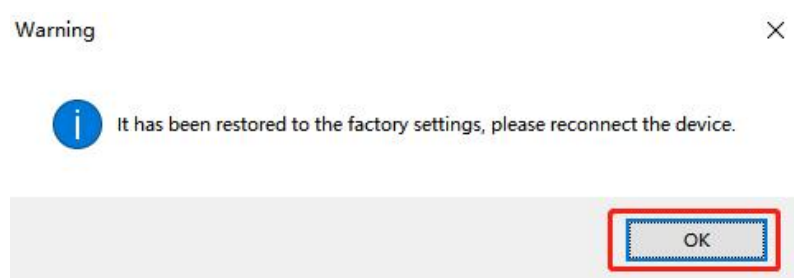


8-5 How to reset the reader to Factory-default settings

Click the Restore Default Layout button, click OK.



After hearing the device beep and seeing the success message, the device has been restored to Factory state successfully.



8-6 How to convert characters to Hex code

Click the Transformation Assistant, enter the required characters, it will be automatically converted to hexadecimal, copy the content, and paste it.

