酷豆物联

Vguang

Configuration Tool

User Manual

Edit history

Version	Description	Date
V1.0.0	Initial version	2020.04.21

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VguangConfig

Introduction

This software is developed by Beijing Vguang Internet Technology Co., Ltd. It is used to support the one-dimensional and two-dimensional handheld barcode scanners, embedded and fixed barcode scanners, mainly for equipment configuration settings and device interaction. Its main functions include:

- ✧ Online device: get the device info and the parameters of the settings, can also modify the settings and interacting with device
- ✧ Offline device: can select the corresponding device and configure
- ✧ Connect or save the device configuration settings
- ✧ Generate configuration QR code
- ✧ Language switch

Supported devices

Access control series scanner: MX series, MP series, DW series

Desktop series scanner: MC series, TX series.

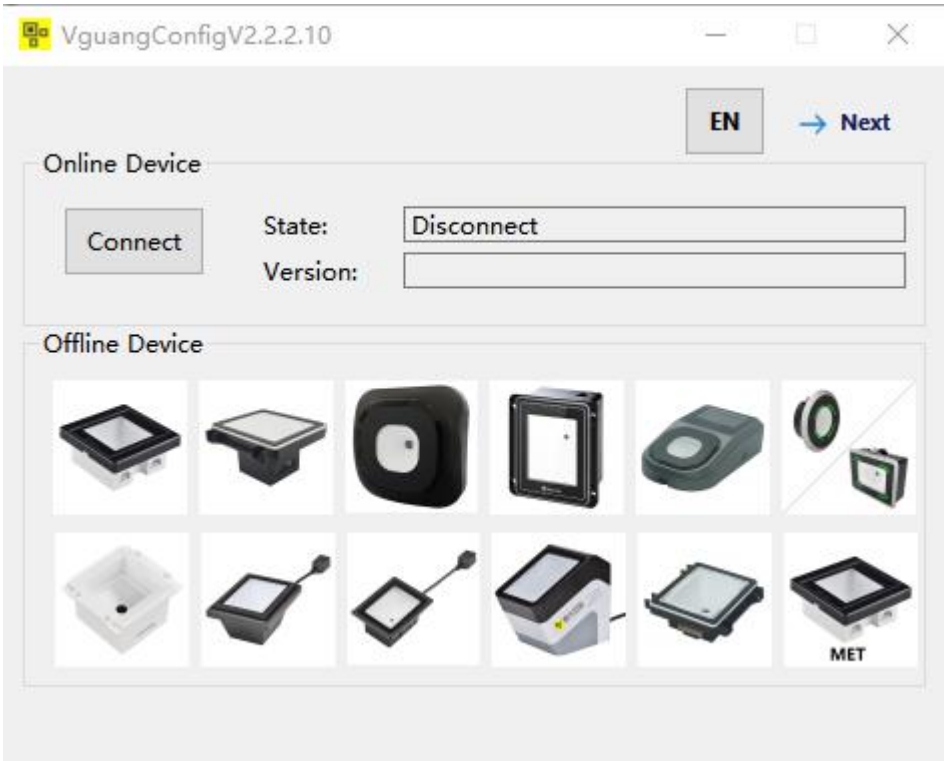
Embed series scanner: JL series, QT series

Installation

This software do not need to install, can be used directly after decompressing the file, can be download from our official website. Only need to double click the Vguangconfig yellow iron.

VguangConfig user guide

1. Main interface



1) Configuration methods

The tool support both online and offline mode.

Online device: (only support USB connection), the device connect to PC, click connect, it will detect the device and get its settings.

Offline device: (all the device will need offline config if the device was not USB connection) the users can select the corresponding devices and modify the settings then generate configuration QR code, and scan it to finish the configuration.

2) Language switch

The VguangConfig tool support both Chinese and English, click “中” or “EN”

3) Help

Click the “help” button to open the Vguangconfig user manual to get help.

4) Switch interface

If already entered the other interface, click “main” to back to the main interface or click “return”. You can also switch the configuration interface via Tab

2. Online device configuration

1) Device info

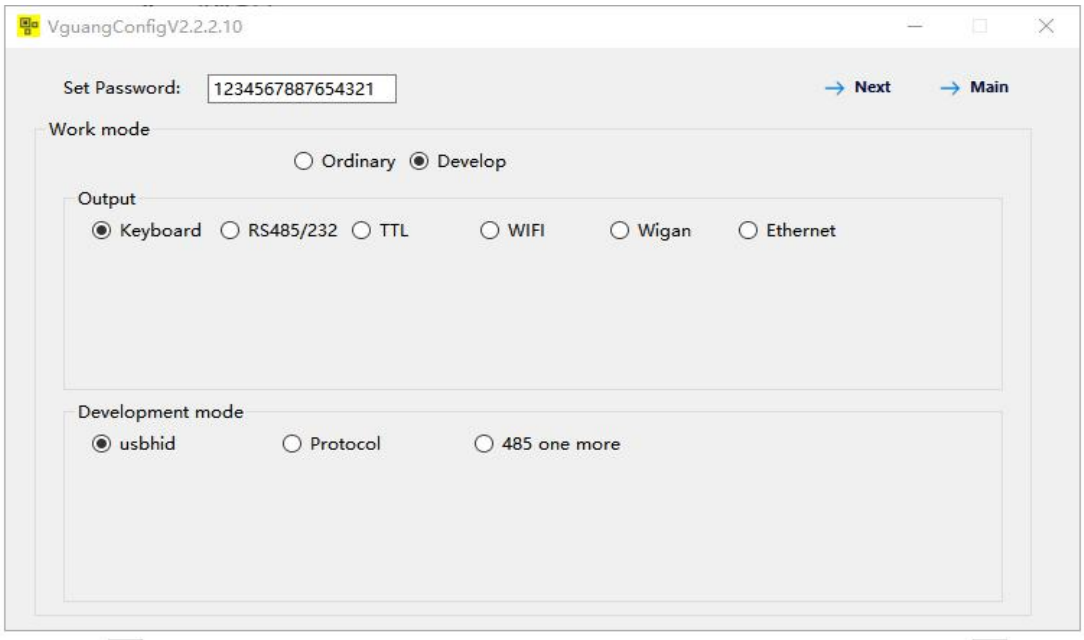
The VguangConfig can detect the device which connected to PC(Only for USB connection), click connect device, after success, it will shows the device connection status and its firmware version.

When the device was connected to computer, click connect the tool will connect with the device successfully.

Notes: if the work mode was develop-USB keyboard-protocol, you will need to configure by scanning the configuration QR code which was generated by the tool. This mode can not connect the tool.

2)Device configuration

After the device was connected successful, click “next” in the main interface, then you will see the pic below and you could modify as your needs, and then click next to enter the detail pages.



3. Offline device

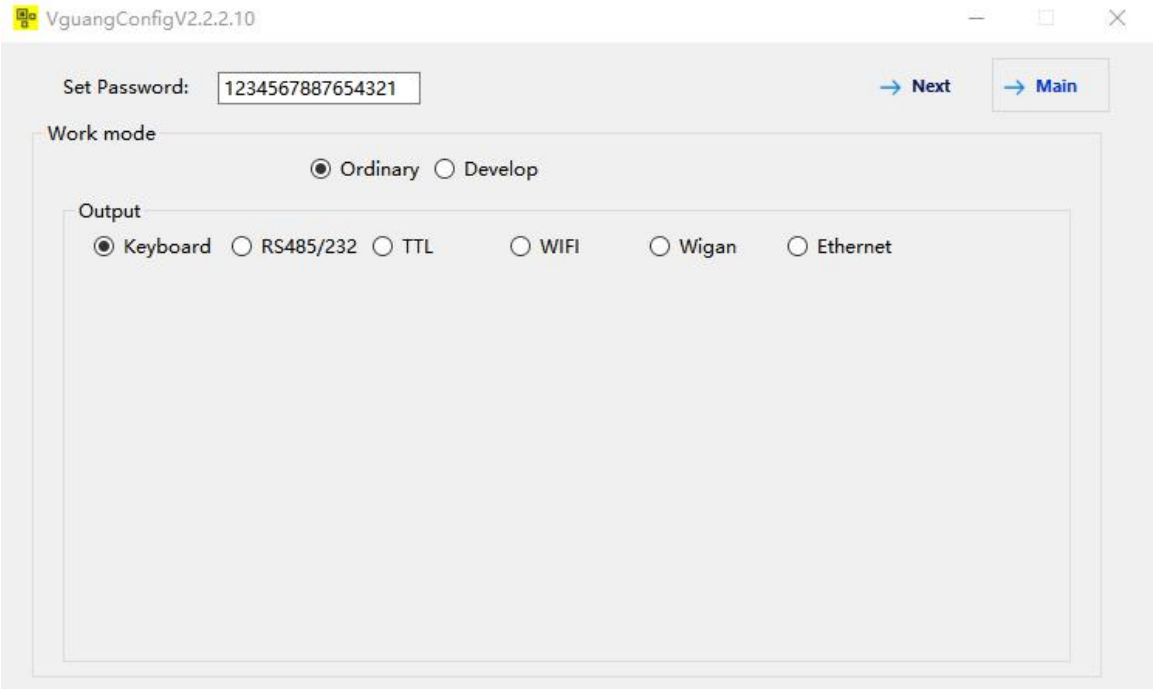
1) Select device

For the devices which can not connect to the tool, you could select the corresponding device in the tool, and then click next to configure the work mode and other detail etc. The default value of the configuration in the tool was the default configuration value of the device.

2) See about device version info.

Type device keyword in the top right corner “ find device”, it will shows automatically.

4. Configuration interface



1) Working mode

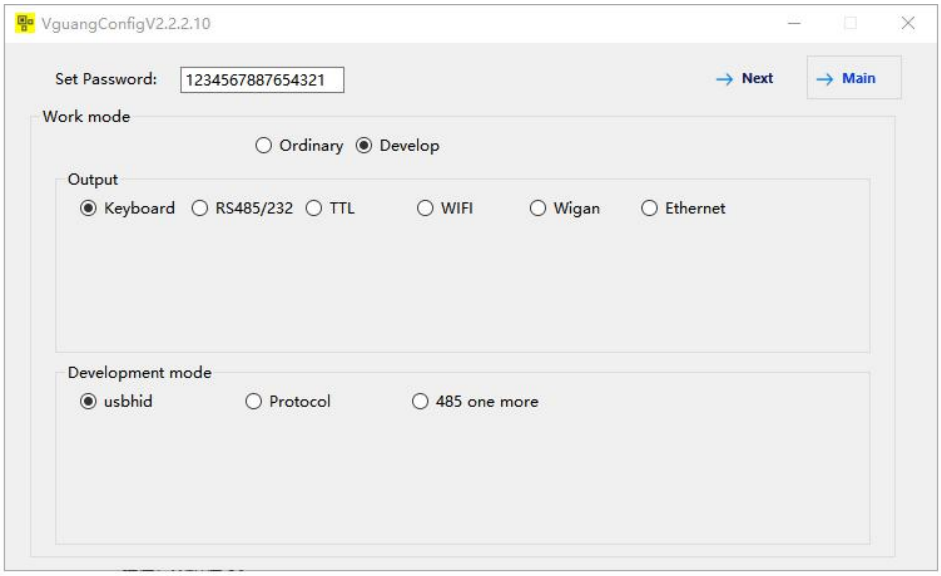
This configuration page belongs to the parameter settings of the working mode of the device, which include:

- Working mode: ordinary, develop

When need to write a program to control the scanner or calling the scanner output interface, need to use develop mode, the others cases use ordinary mode.

- Output interface: select the corresponding output interface according to the device you purchase. One device can only support one output interface.
- Development mode

The development mode means the way you choose when doing develop, all the devices select "protocol" at present.



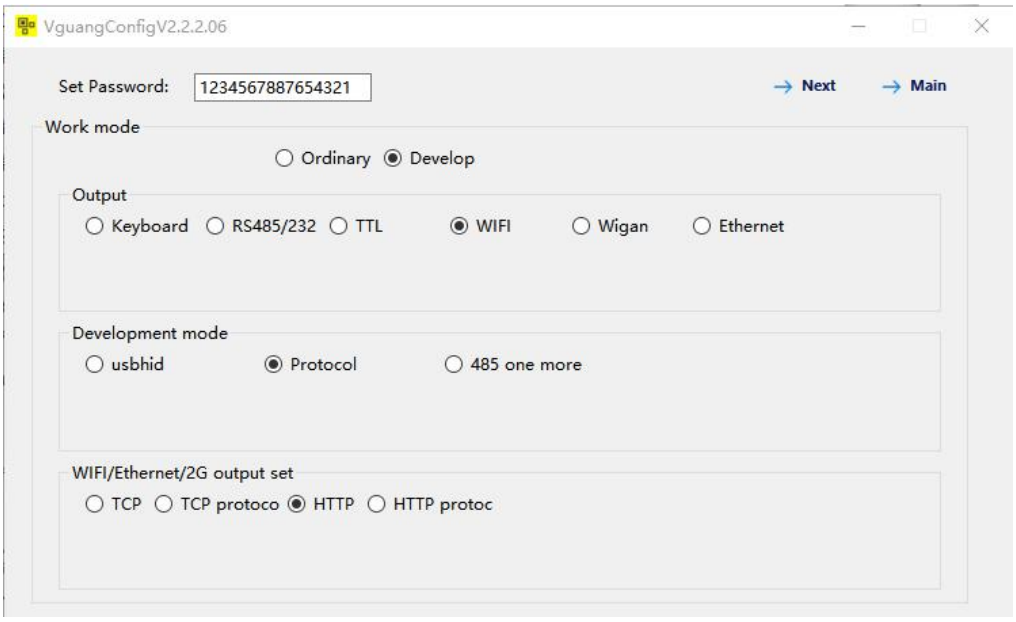
- Serial parameter

When the output interface selected RS232/RS485/TTL, need to set up the corresponding serial parameters, such as baud rate, stop bit, check bit, etc.

- WIFI/Ethernet/2G output interface settings

When the output interface selected WIFI/Ethernet/2G, need to select corresponding networking protocol.

The difference between TCP with TCP protocol, and HTTP with HTTP protocol: TCP/HTTP pass through the content of the QR code, while TCP protocol/HTTP protocol upload character string which has filed format. For more details, plz check "Vguang QR code scanner WIFI interface specification V1.2"



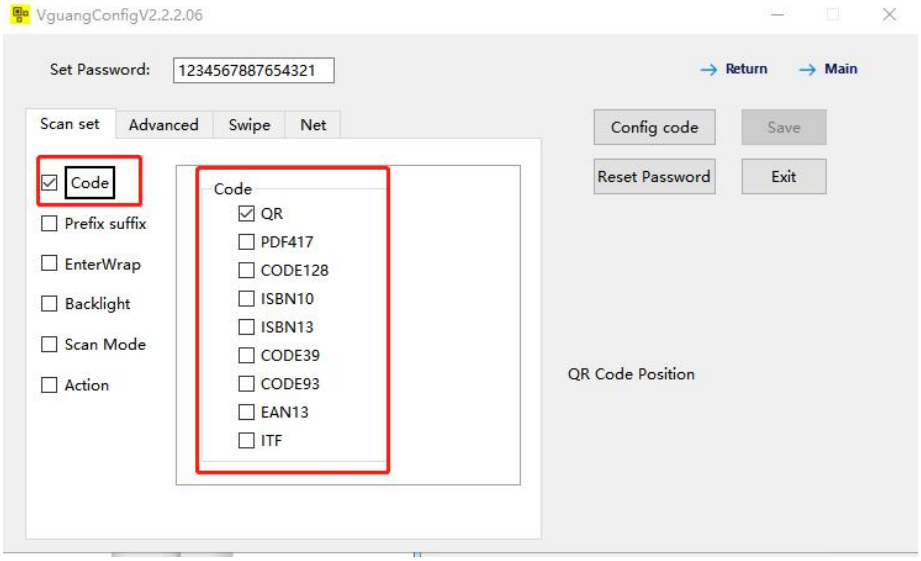
➢ Wiegand output format

If selected wiegand output, need to specify whether to choose wiegand 26 protocol or wiegand 34 protocol, this two protocol can be switch.

2) Scan set

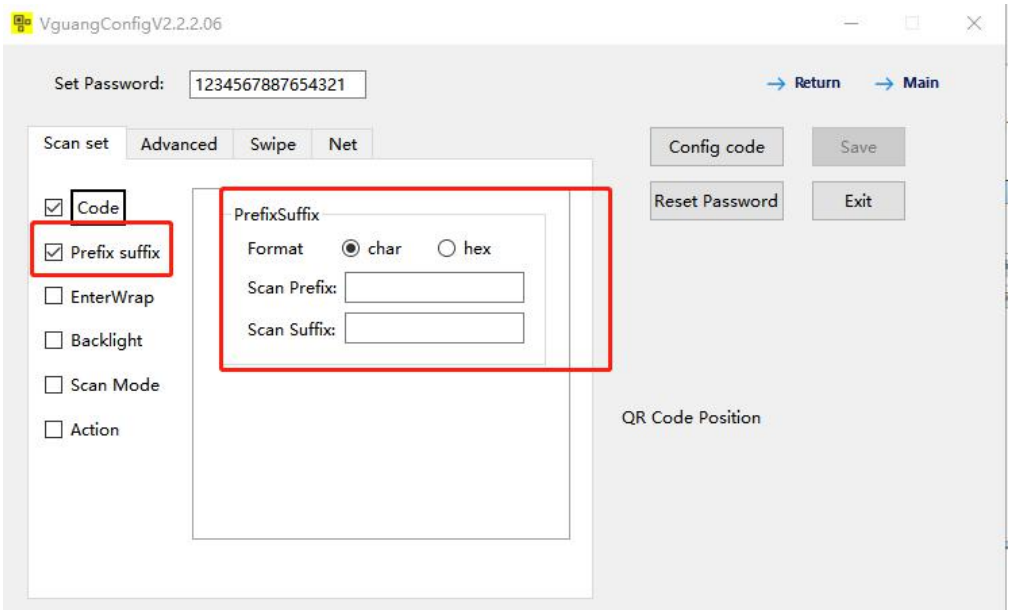
➢ Symbologies

Select the “code” first, and then select the code you need to read in the optional bar



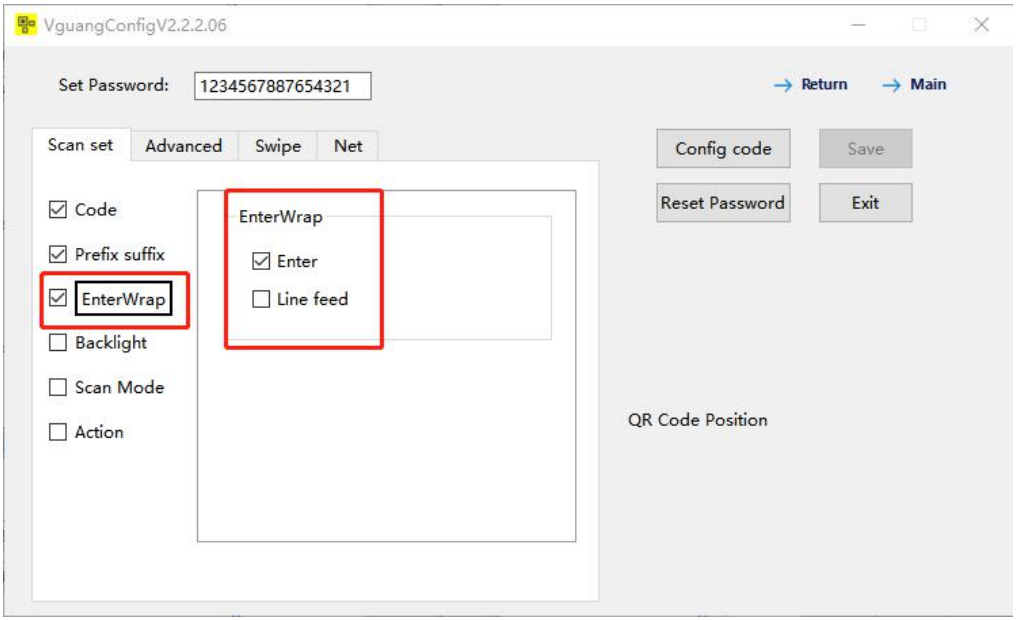
➢ Prefix and suffix

Select “prefix suffix” first, and then fill in the prefix or suffix content which need to set. The prefix and suffix format setting is supported.



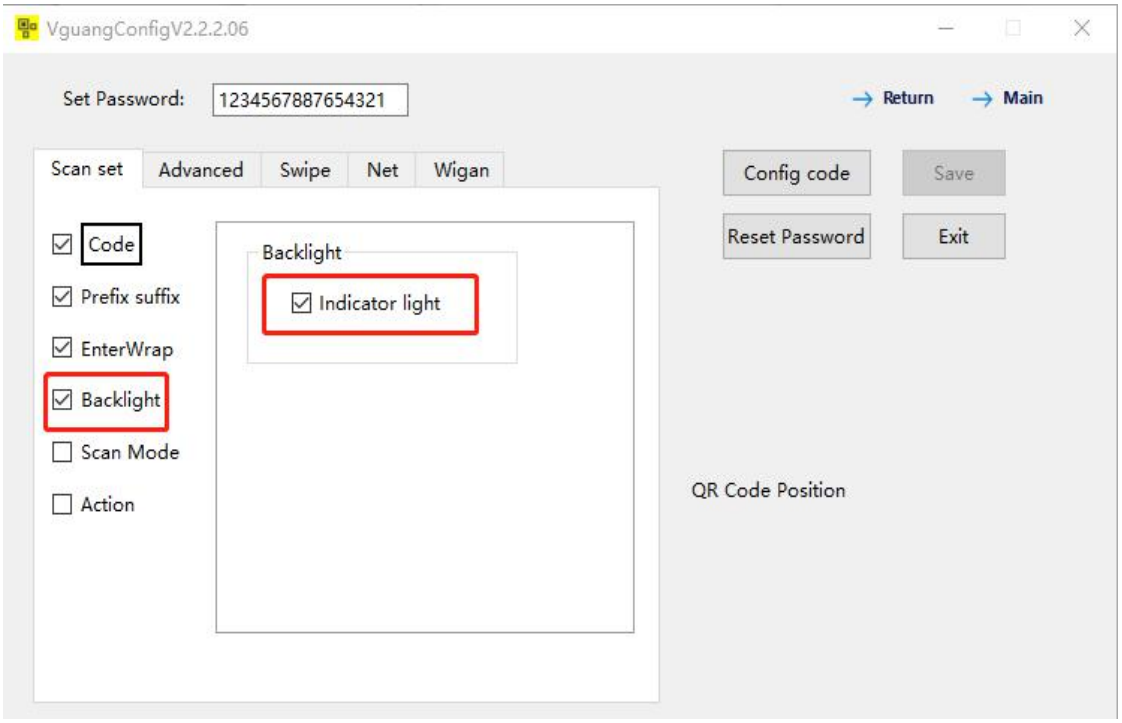
➢ “Enter wrap”

First select “ Enter wrap” and then select enter or line feed.



➢ Backlight

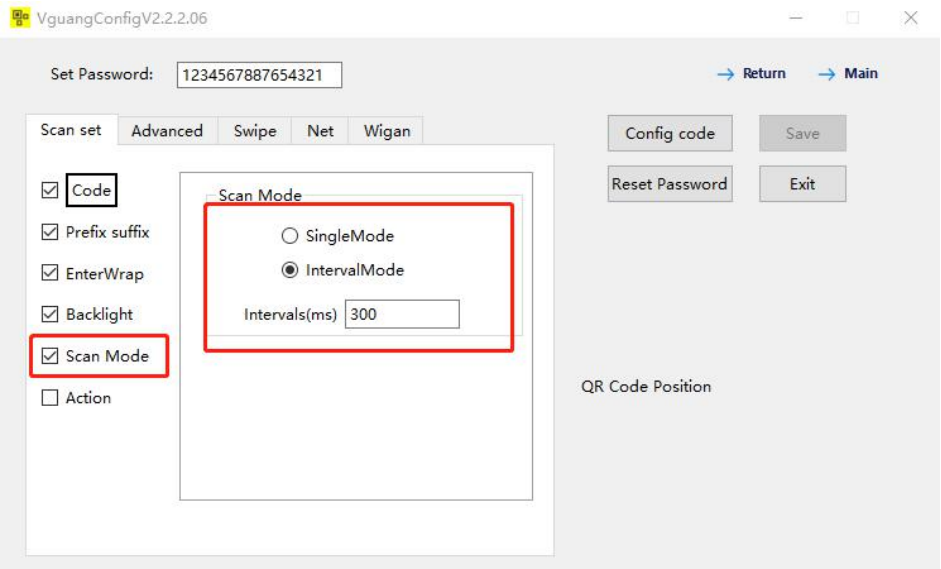
Backlight means the white light fill light in the scanner, or the green indicator of the MP86 reader



➢ The scanning mode

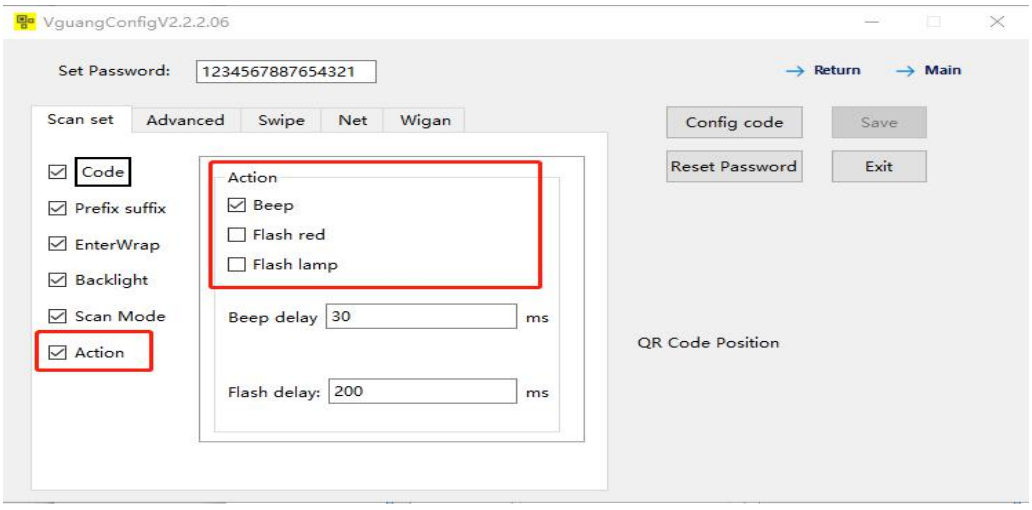
Single mode means that the same QR code can not be scanned twice continuously, for example, i scanned A QR code one time, then i can't scan A QR code again, but, if i scan A QR code one time then scan B QR code one time, after this i can scan A QR code again.

Interval mode means the interval time between the two scan of the same QR code. The units is ms, if need 1 second interval, then fill in 1000.



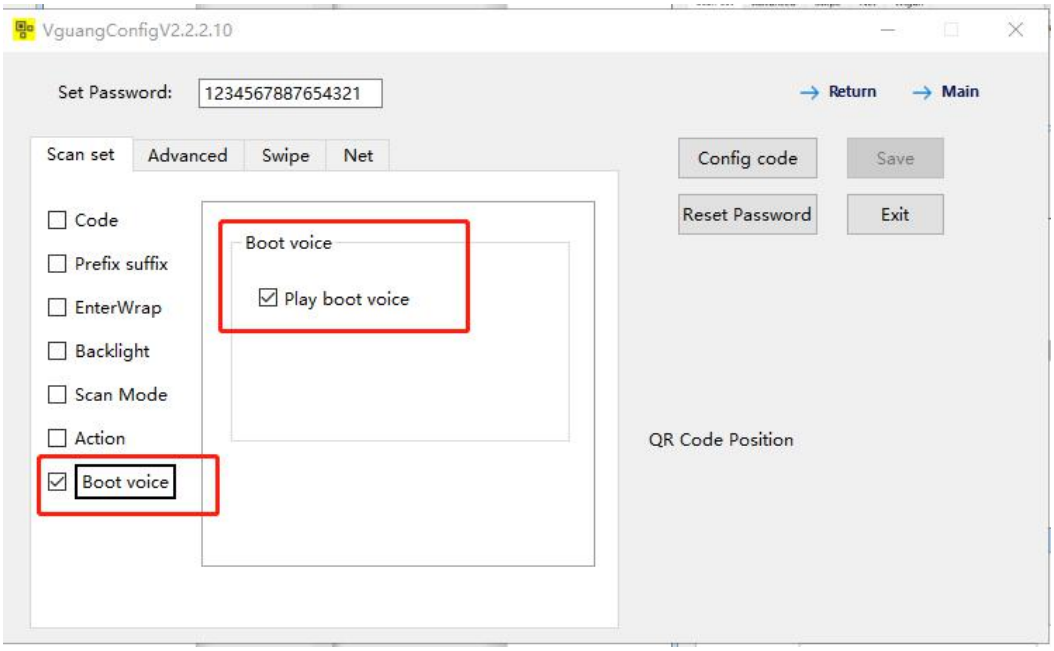
➢ Scan action

The "action" means the device feedback after the device scanned the QR code. According to the function that the device supported, it can be beep, or flash light of different color. The delay means the length of the action, default is okay for most cases.



➢ Boot voice (only for some special model)

When selected boot voice, the device will play the set voice when device was starting



3) Advanced settings

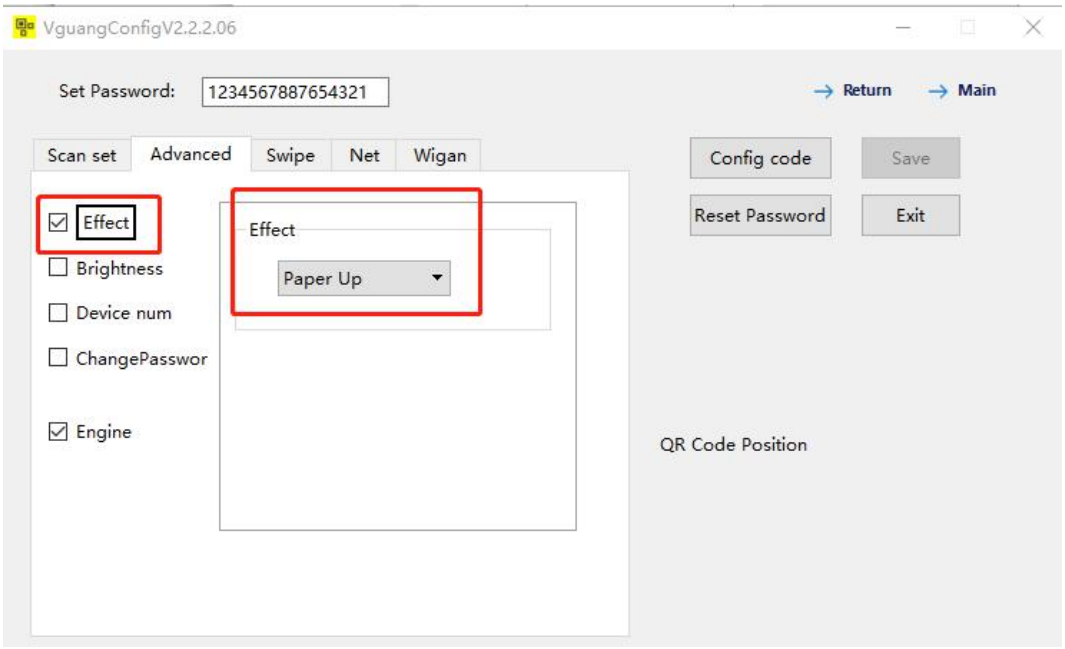
➢ Scan engine

First select engine, and then you could choose bar up or QR up(enhance the ability of scan QR)

➢ Scan effect

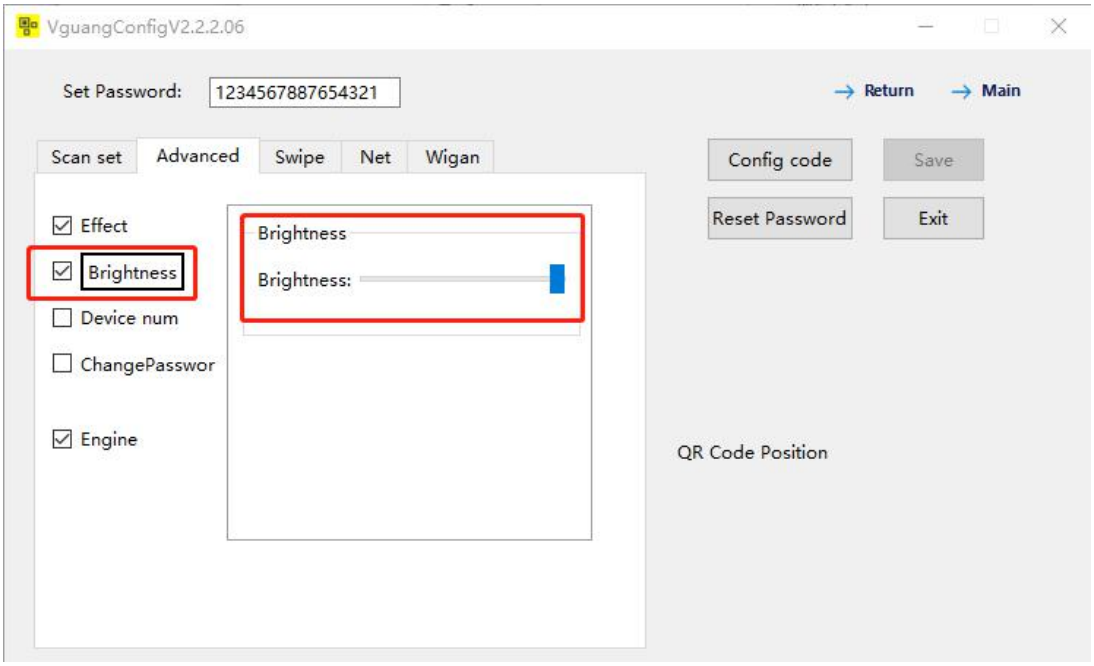
First select “effect”, in most cases please select ” paper up”(enhance the ability of scan printed QR code)

Note: the “motion up” was used in some special cases, if selected it may cause the device can not scan QR code.



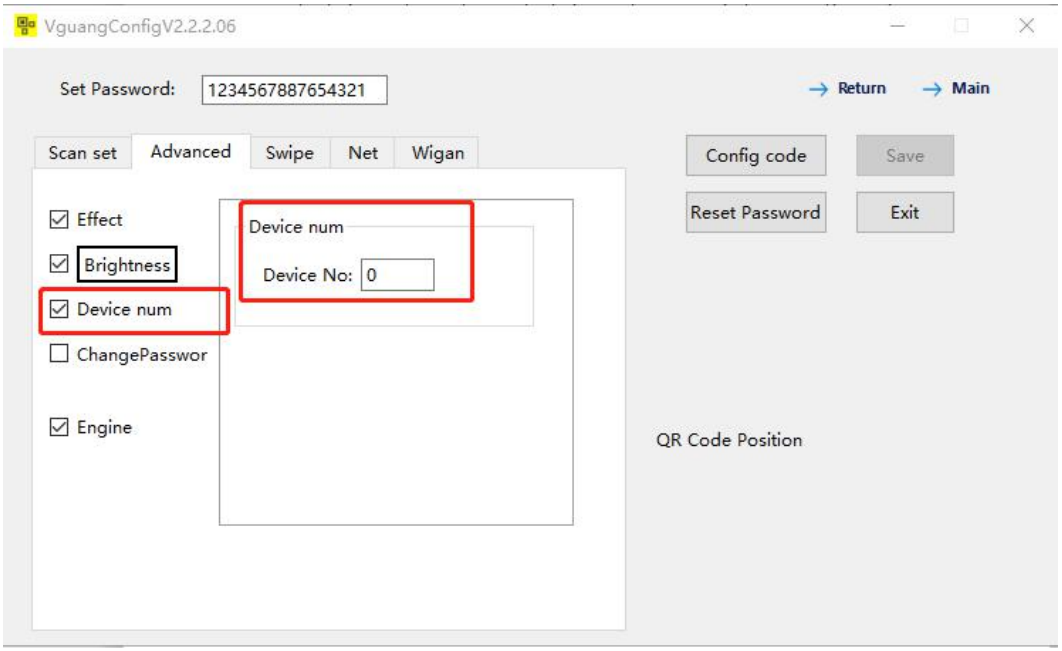
➢ Brightness control

Brightness used to control the bright of the scanner



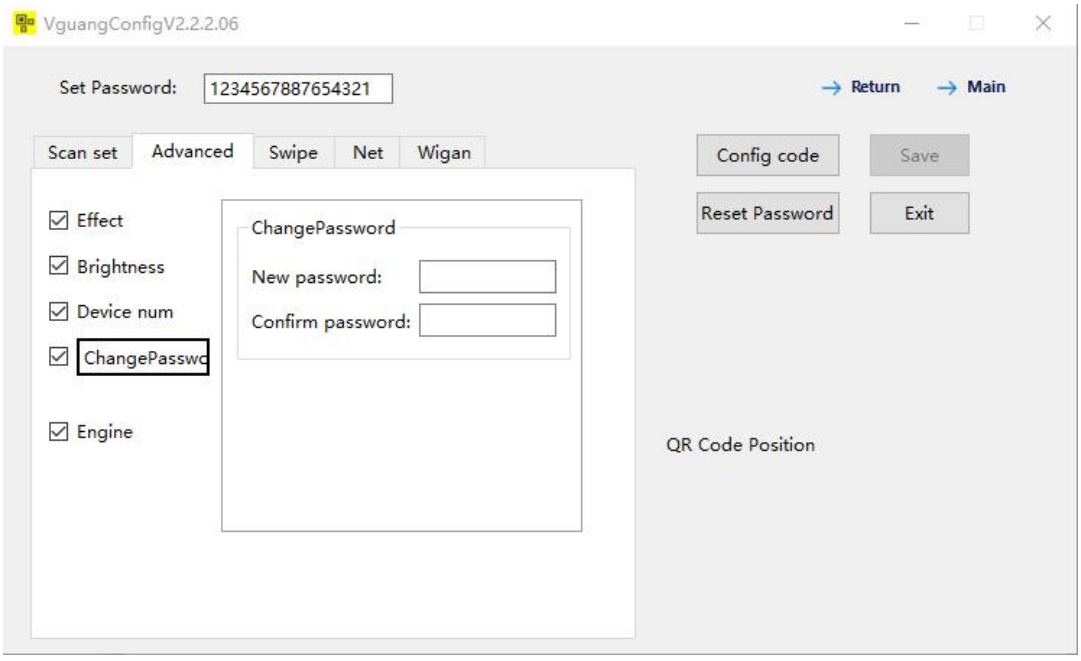
➢ Device number

The device number can bet set, the device number can get via the protocol instruction, or in the Ethernet/WiFi output can be upload to server together with the QR code contents. The content of the device number can only be Int data.



➢ Change the configuration password

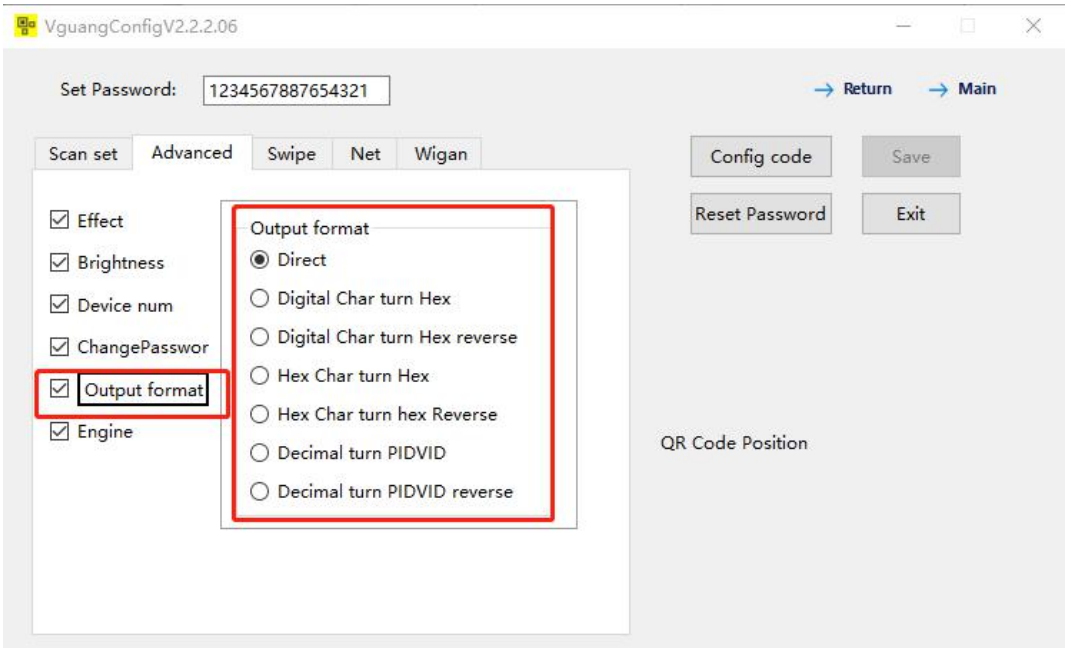
The configuration password can be changed in case of someone tamper it, please keep the new password in mind, will need to fill in the new password first then start config when next configuration is needed.



➢ Output format

This option are only for wiegand device, for the other output device, please select “direct ” output, otherwise there may have no data output when scan code.

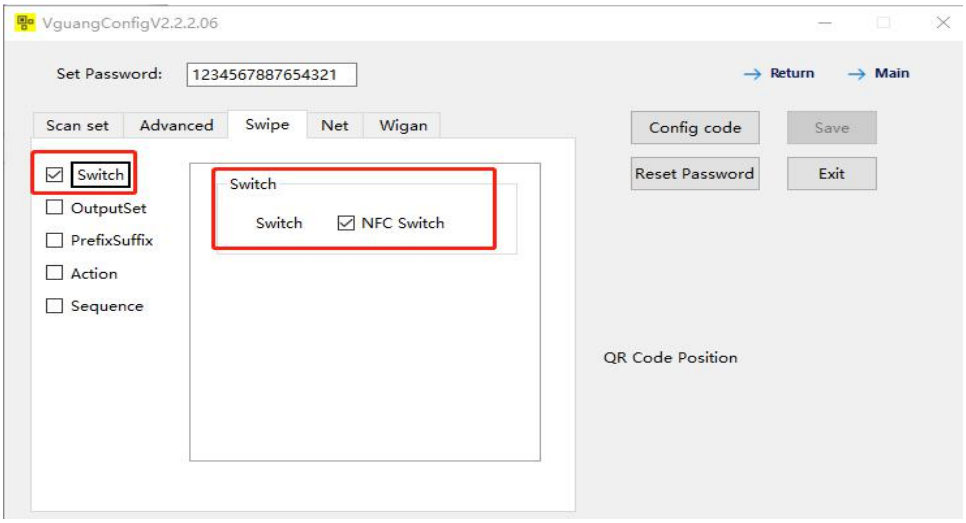
If the device was wiegnd output then select from the other format except the “direct”, select according to the controller you were using. You can also refer the configuration code below.



4) Card swipe set

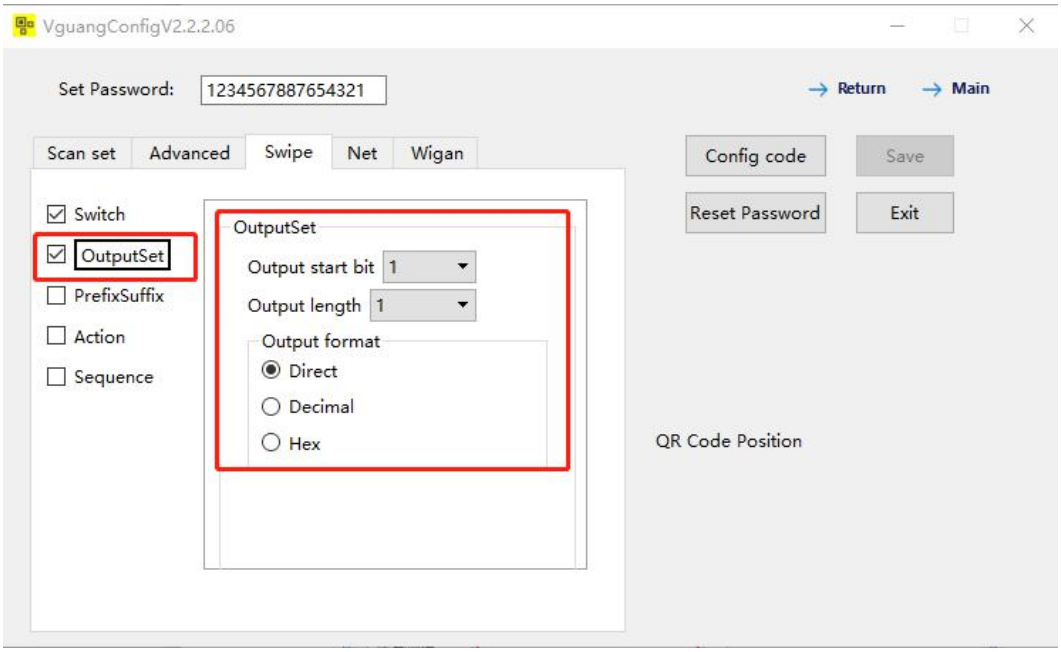
➢ Card swipe switch

If need to read cards then select “switch” first and then select NFC switch.



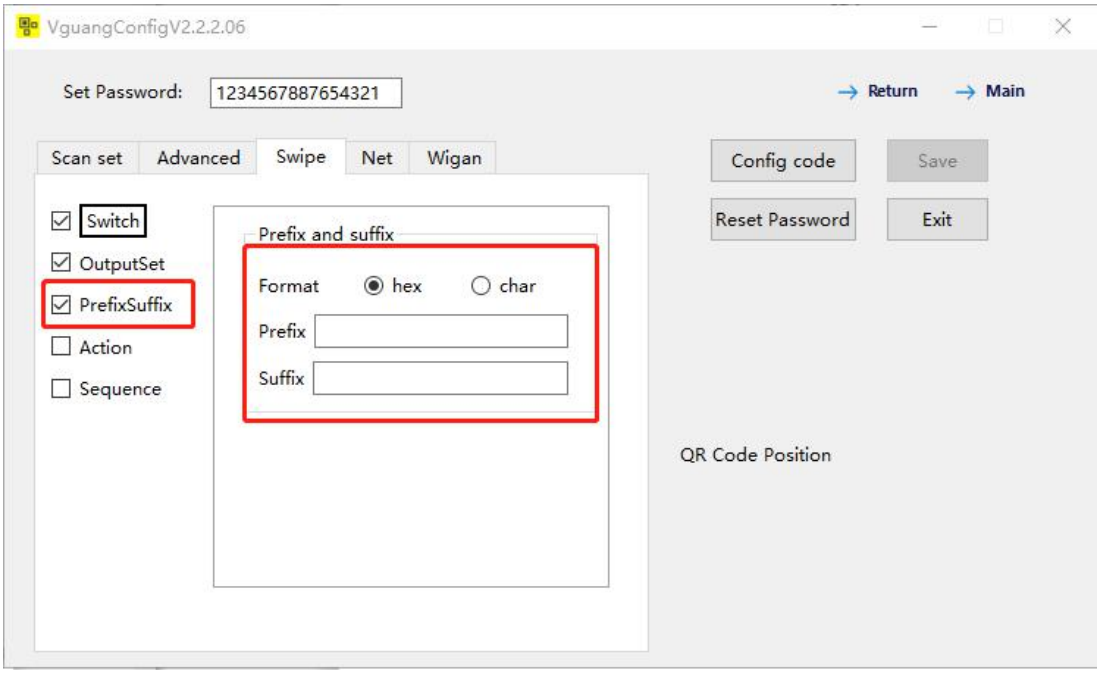
➢ Output set

The card output set can be set, if the device was wiegand output, mostly select “direct”, for other output methods select as your needs. The “start output bit” are only valid for Chinese ID card.



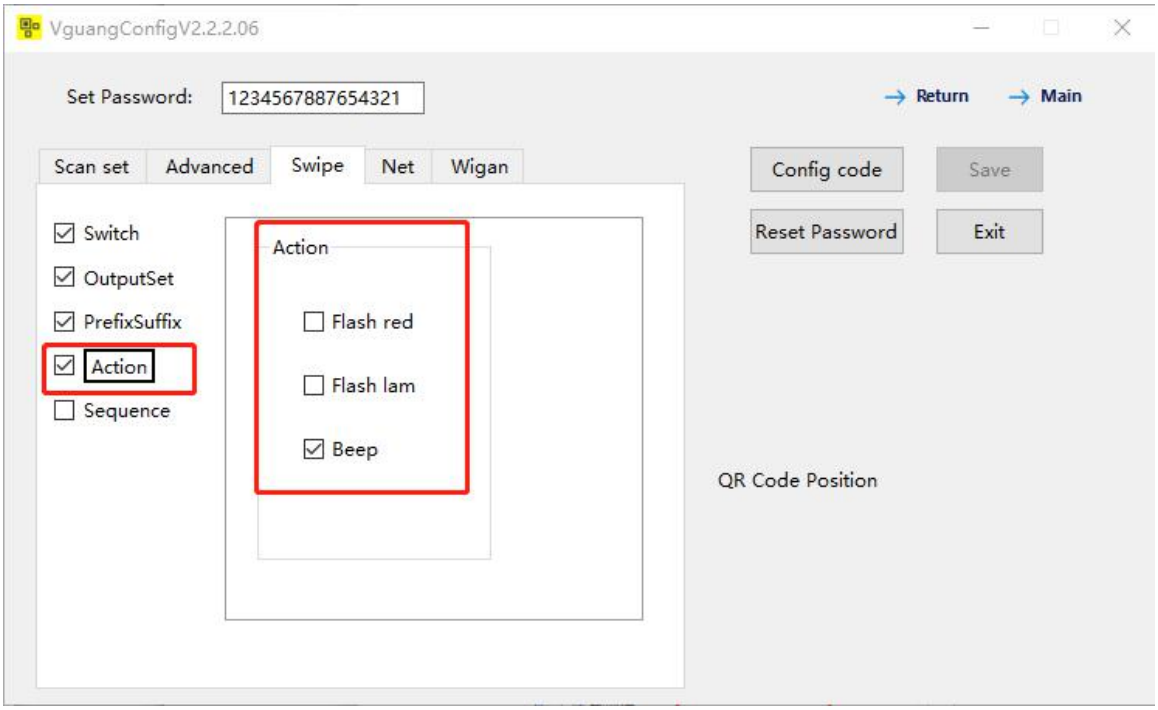
➢ Prefix and suffix

This function can be use for adding prefix and suffix for card number.



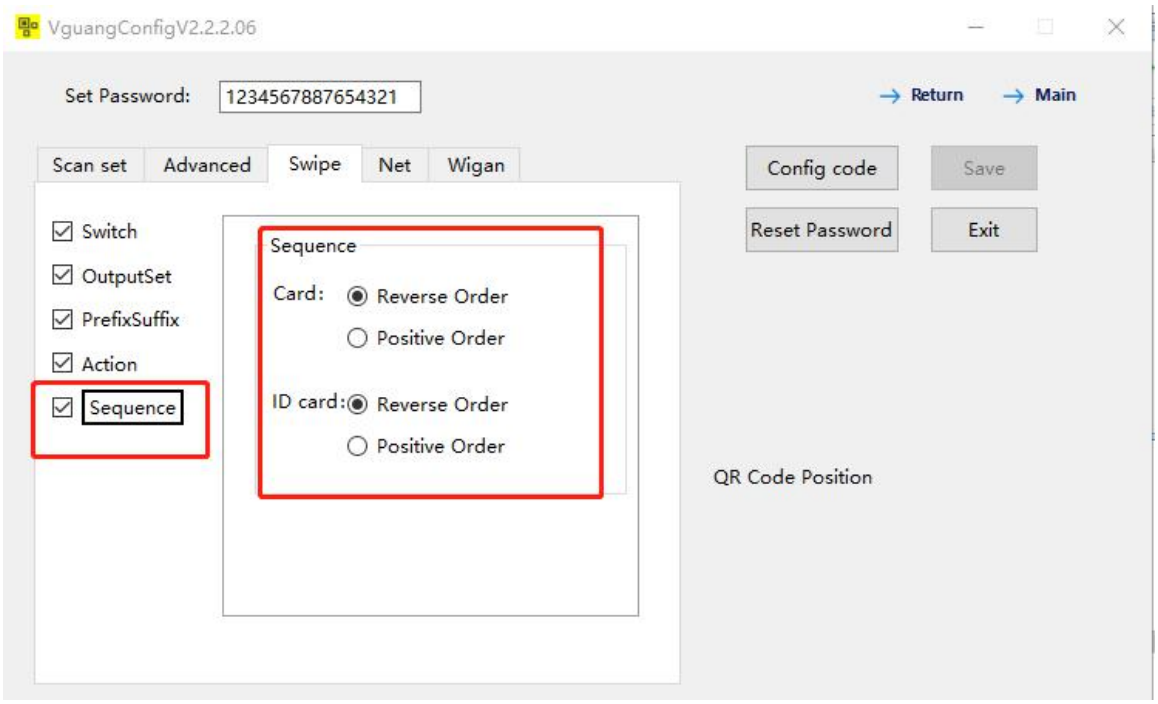
➢ Swipe action

Swipe action means the action when the reader read cards.



➢ Sequence

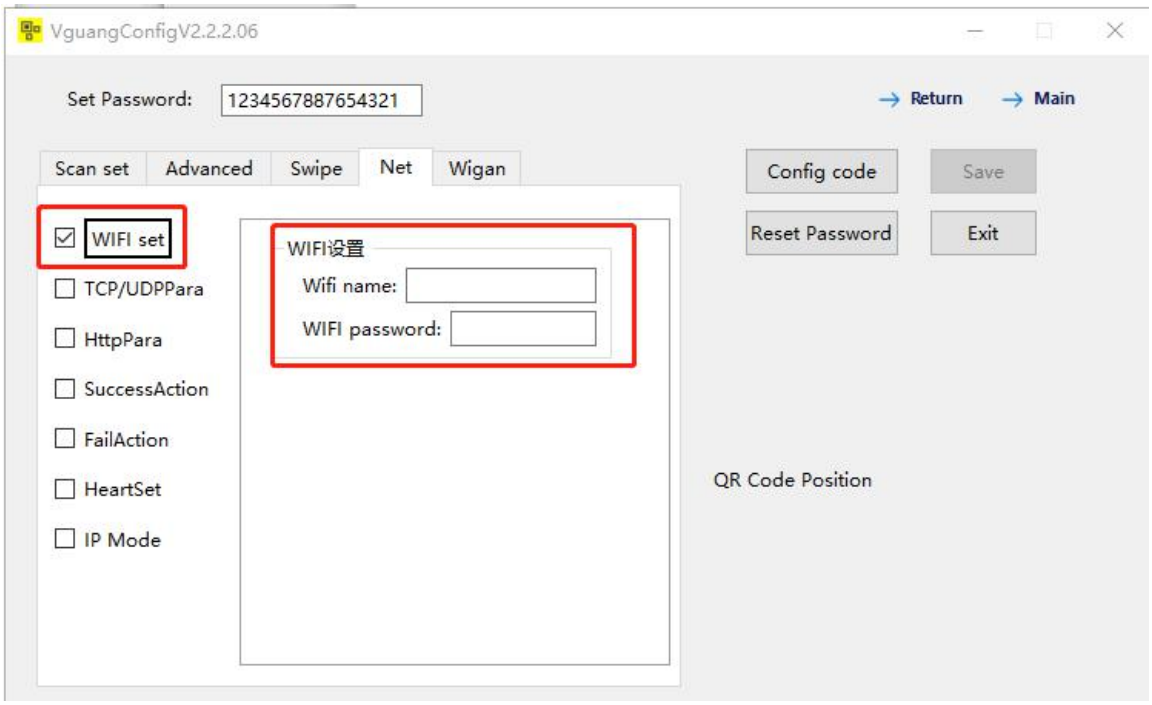
Support the card number output in positive order or reverse order.



5) Network settings

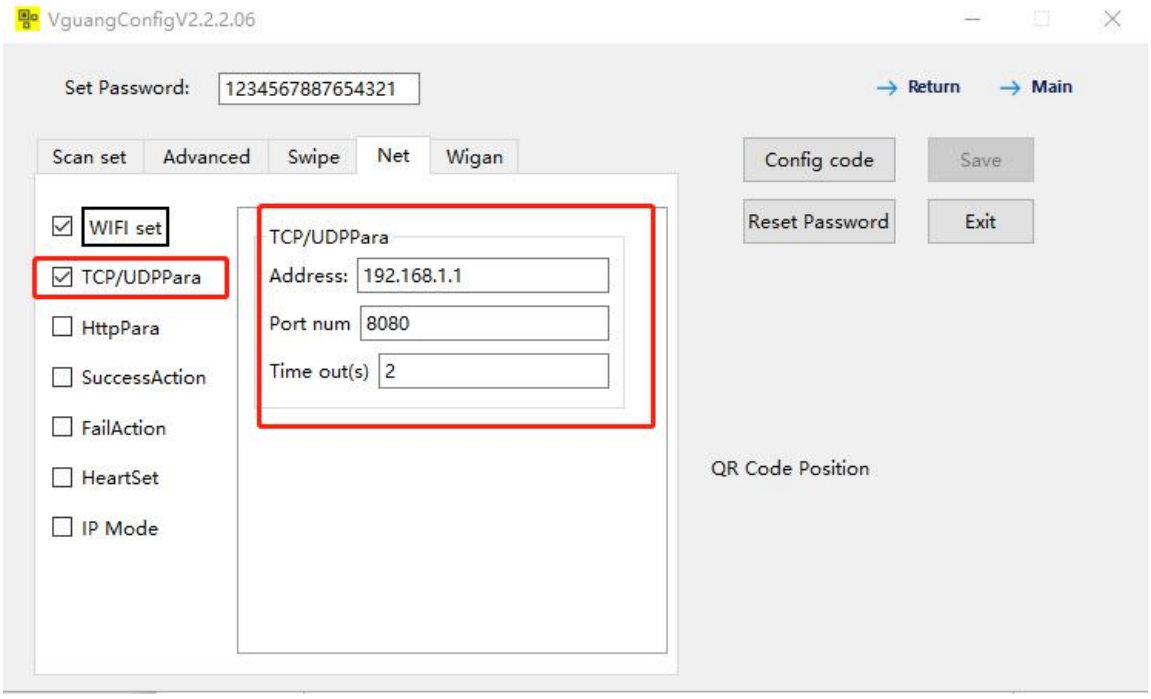
➢ WIFI setting

This option are used to configure the WiFi account and password that the device are going to connect.



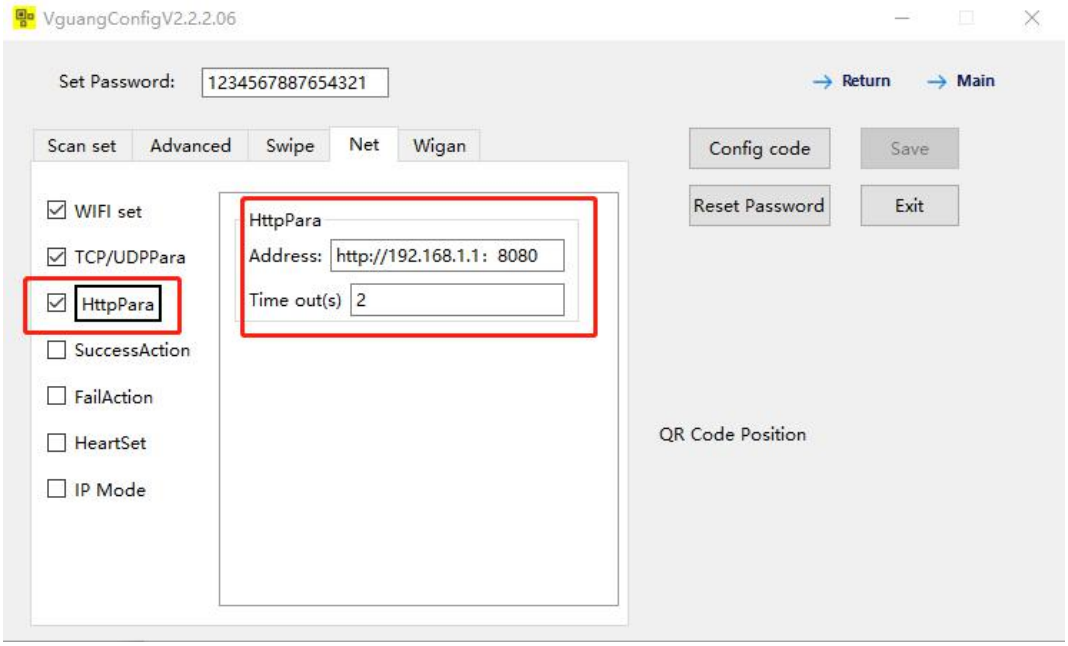
➢ TCP/UDP parameter

Set the TCP server address, port number, and time-out period. (within 5 seconds)



➢ HTTP parameter

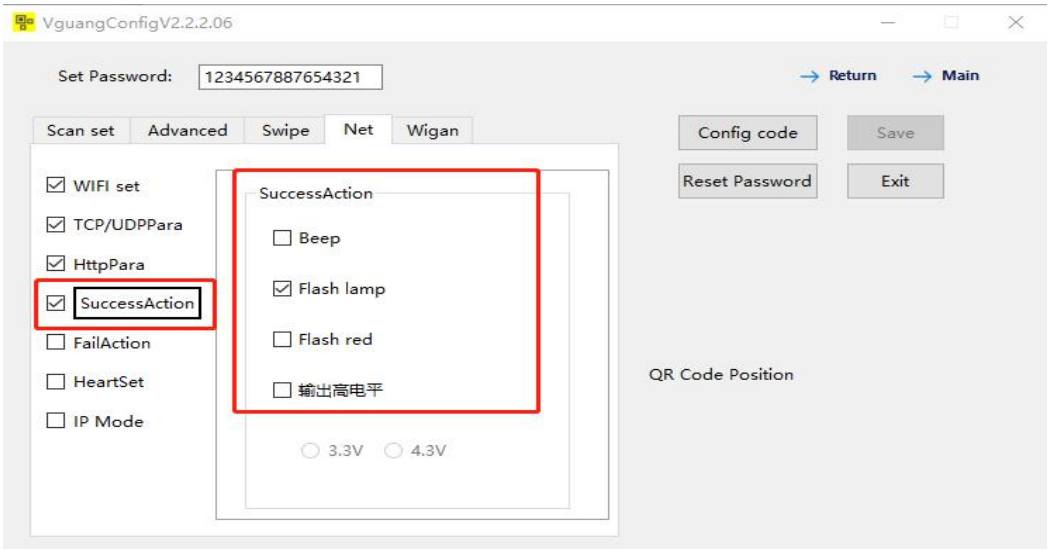
Set the HTTP server address, format: http://serveraddr:port/path.



➢ Transmission success/ failed action

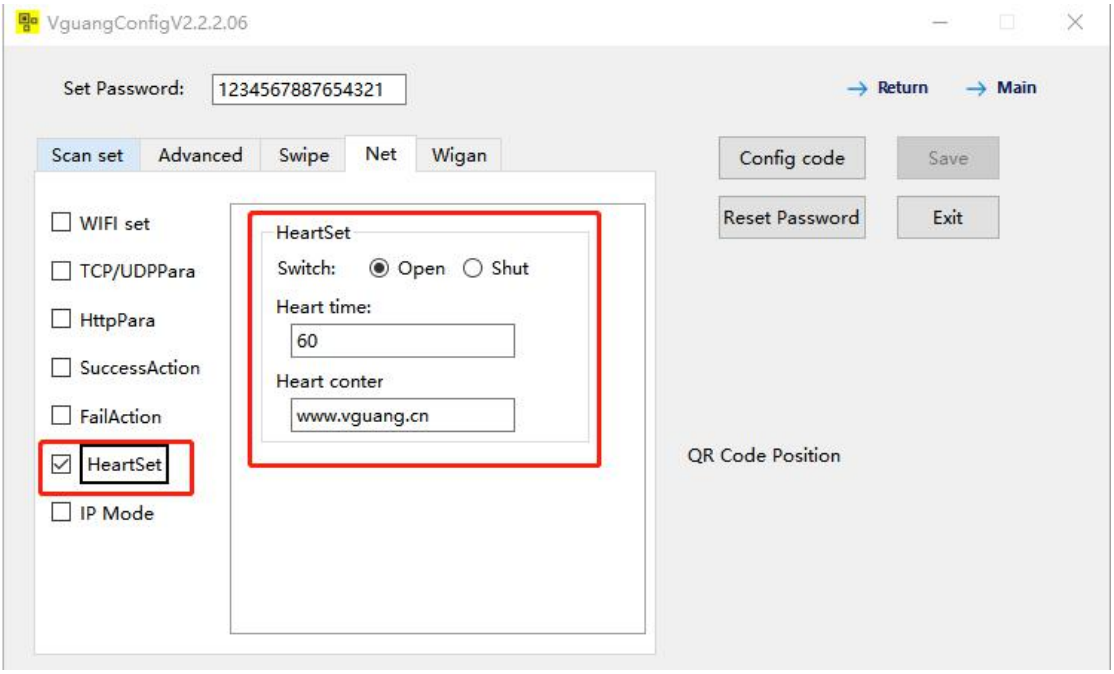
Transmission success/failed: it means the action that the data was sent successfully via internet

If set TCP protocol mode or HTTP protocol mode, after the server received data,it will return “code=0000” first, then will shows the success action, error value or didn't return will shows fail action



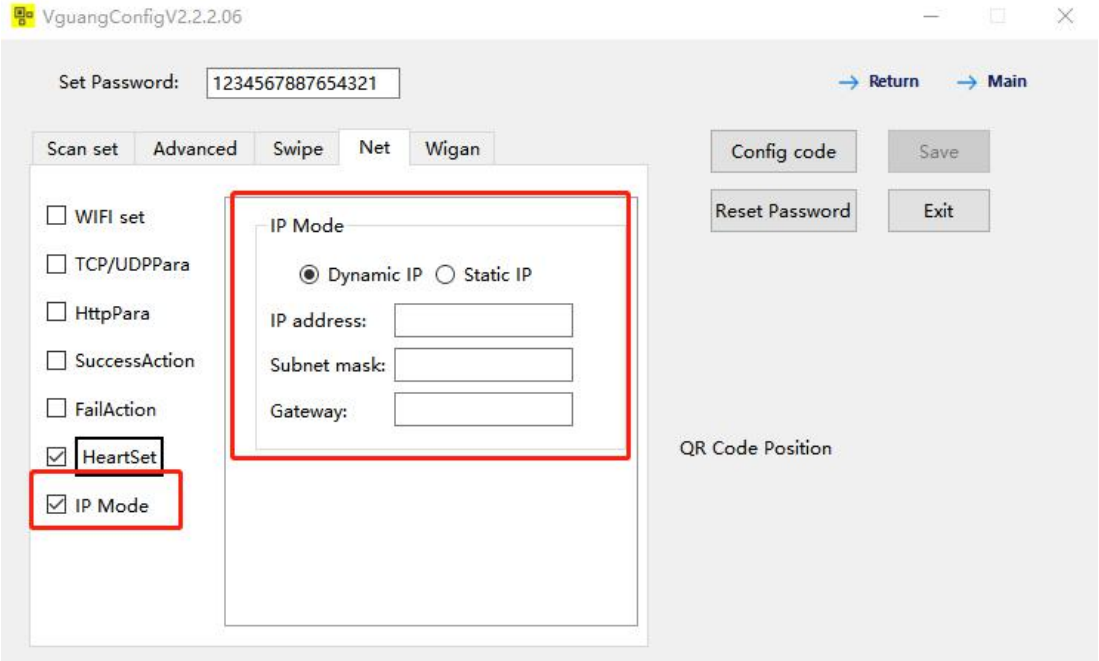
➢ Heartbeat setting

The heartbeat can be set under TCP mode, the http mode was not supported



➢ IP mode

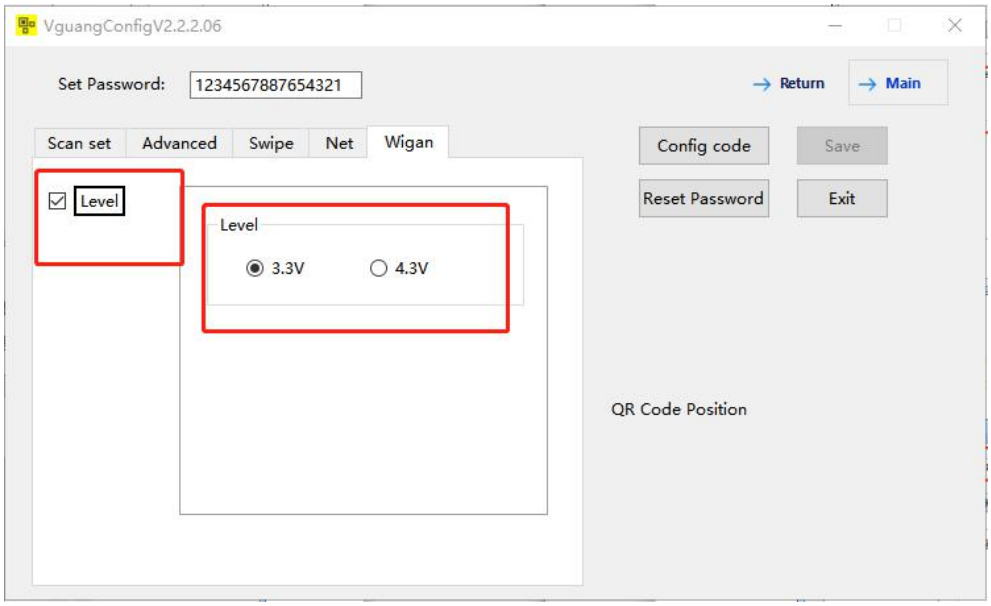
Support dynamic IP and static IP configuration, for static IP, need to fill in the IP address, sub-off mask, gateway. Dynamic IP not needed.



6) Wiegand settings

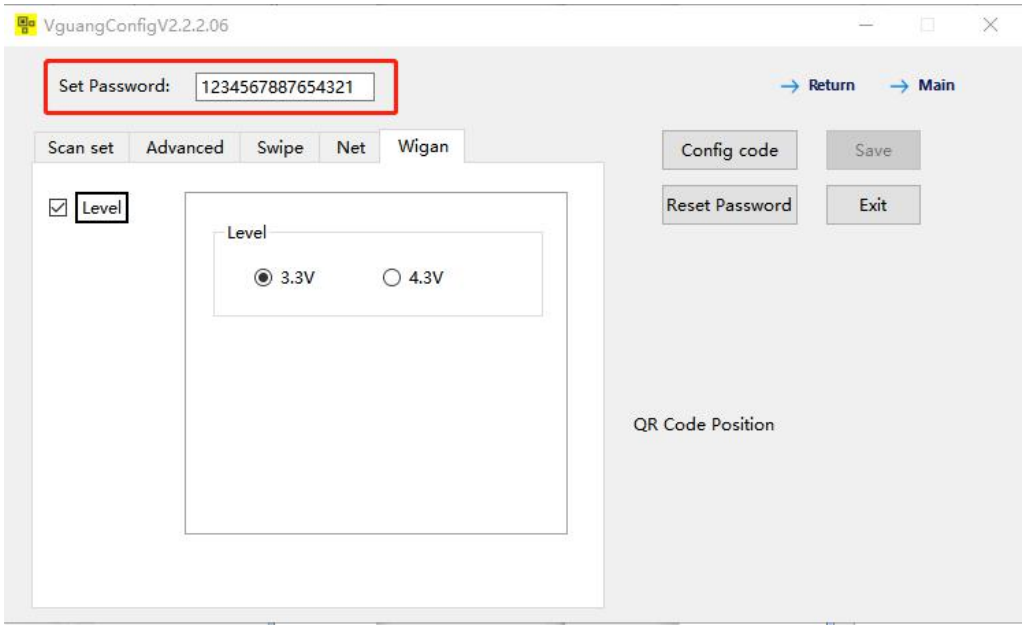
➢ Level control

MX86 wiegand level has 3.3v and 4.3v, 4.3v can drive 5v wiegand level. MX86 support to change level while others do not support.



7) Configure the password

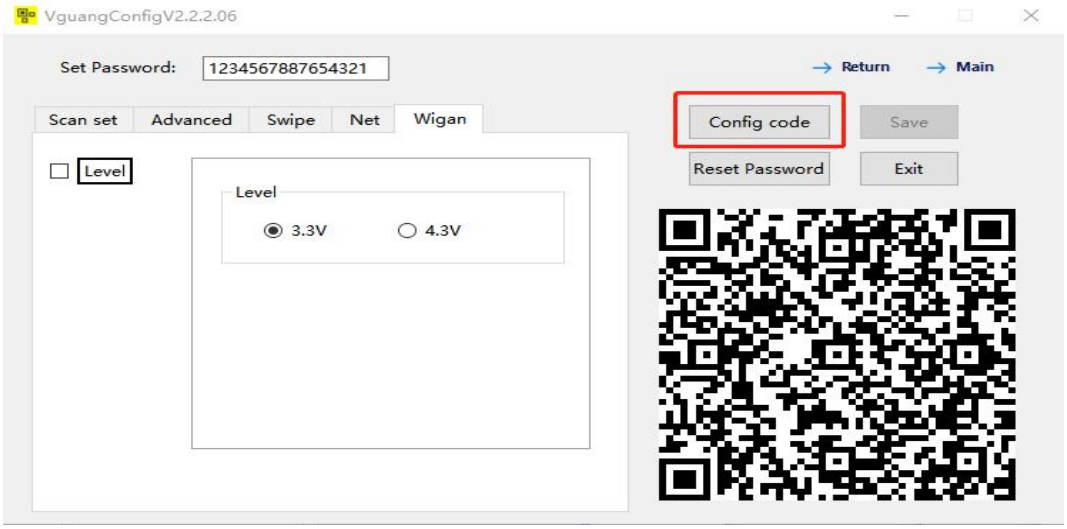
When fill in the configuration, will need to fill in the password(default: 1234567887654321) first. If changed the password in advanced setting, then fill in the changed password.



8) Generate the configuration QR code

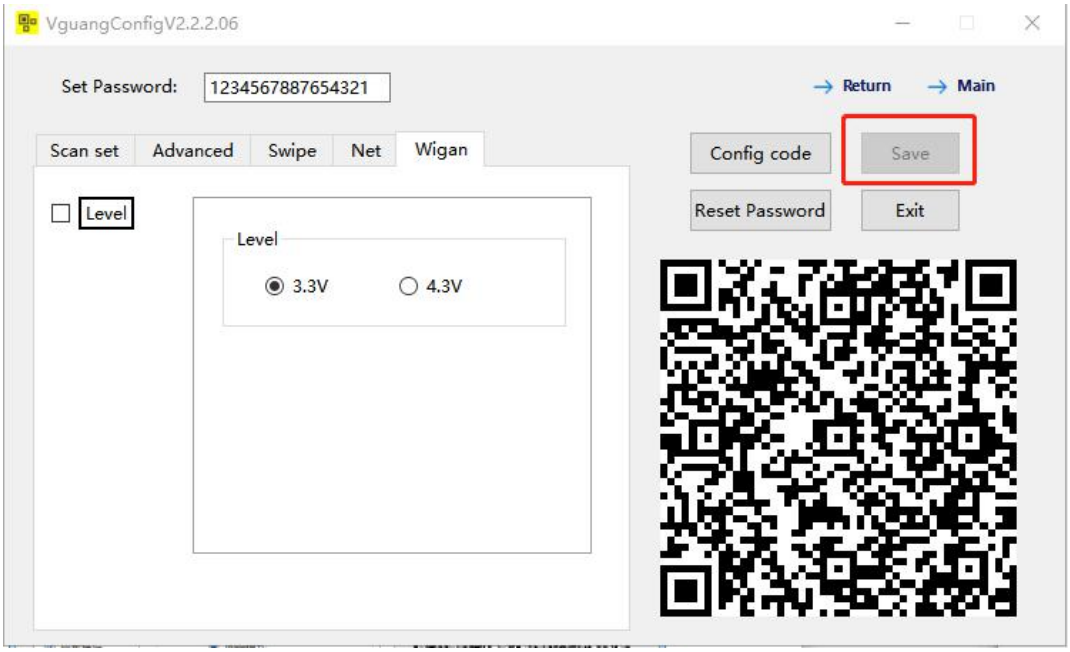
After configured all the above options, click "config code", a configuration QR code will shows in the right corner. Then use the scanner to scan it, after beep sound or light feedback, it means configuration success. Now power off and restart the scanner so that the configuration will become valid.

The above options do not need to select all, just configure as your needs.



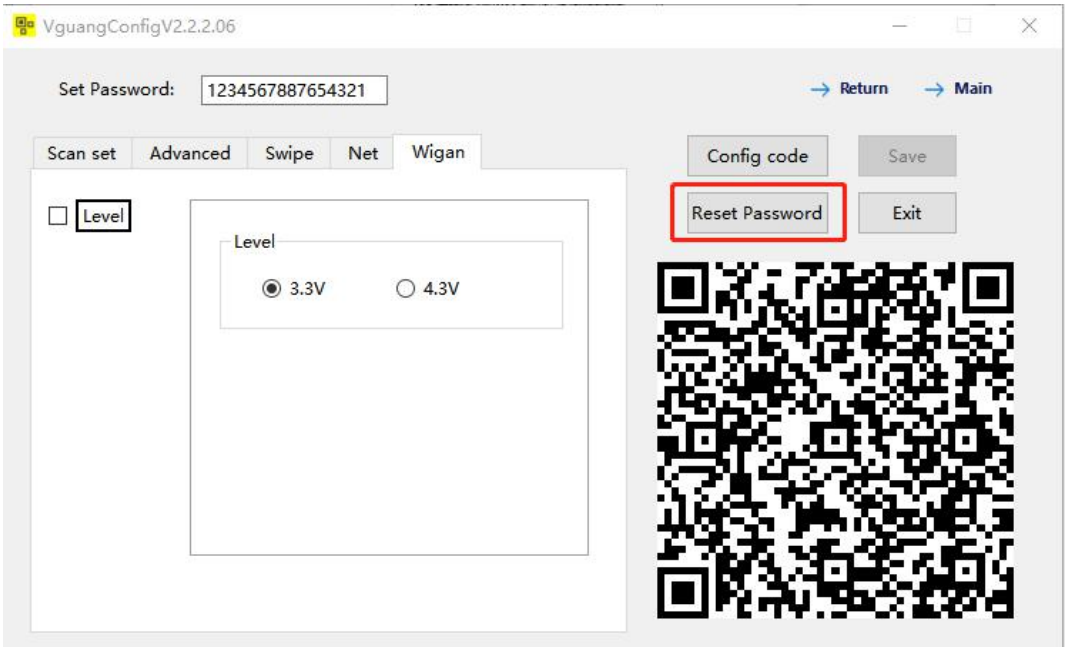
9) Save configuration

For the online device, can click 'save' to save the configuration, after shows success, power off and restart the scanner so the new configuration will become valid.



10) Reset the default password

If forget the changed password, can use online configure, after connected to the tool, click “reset password” the password will become the default password(1234567887654321)



5. Quick configuration QR code

Using methods: after the scanner was start, use the scanner to scan the configuration QR code you need, then restart the scanner, configuration success.

1) USB mode

USB-ordinary mode

USB-develop mode-protocol

USB-develop mode-USBHID

2) 232 mode

RS232-ordinary mode-115200

RS232-develop mode-115200

3) TTL mode

TTL- ordinary mode- 115200

TTL- develop mode-115200

4) 485 mode

485- Ordinary mode-115200

486- Develop mode-115200

5) Wiegand mode

Using method: this configuration was comprised of 3 parts: wiegand protocol(26 or 34) and wiegand level(3.3v or 4.4v) and scan code/read card output format(the read card output format can refer to the universal configuration QR code). The device can scan the wiegand26 or wiegand 34 configuration QR code, if there is still no uploaded data in background, scan the configuration code which change the scanning output format. If doesn't know use which one, could try all of them. (the scanner will need to restart after each configuration)

A. Wiegand 26

Wiegand26-PIDVID inverted sequence-3.3V

Wiegand26-PIDVID inverted sequence-4.3V

B. Wiegand 34

Wiegand34- number to HEX- 3.3V

Wiegand34- number to hex-4.3v

C. Scanning QR code output format

Numeric character to hex

Numeric character to hex inverted sequence

Hexadecimal to HEX

Hexadecimal to hex inverted sequence

Decimal to PIDVID

Decimal to PIDVID inverted sequence

6. Universal configuration QR code.

A. Add barcode function

Add scan barcode function

B. Add enter function

Add enter

C. Add linefeed function

Add linefeed

D. Open read card function

Open read card function

E. Change swipe card output format

swipe card decimal output

Swipe card hexadecimal output

Swipe card output directly

F. Swipe card positive sequence output

General cards positive sequence

ID card positive sequence(Chinese ID card only)

G. Swipe card inverted sequence output

General cards inverted sequence

ID card inverted sequence(Chinese ID card only)

H. Swipe card output length

(for Chinese ID card only)

I. Set single mode

Single mode

J. Set interval mode

1 second time interval

2 second time interval

3 second time interval

K. Set scanning code light feedback

Add lighting feedback function

L. Set baud rate

M. Level change

3.3V

4.3V

N. Restart the device

Device restart

6. FAQ

1) in the configuration tool, it shows connect failed when click connect device.

(1) only the USB device can connect to the configuration tool, while the others need to scan the configuration code to config，which means generate the configuration QR code then use the scanner to scan.

(2) when the USB device was configured into develop mode, it may can not connect to the tool, can scan the configuration QR code to configure the scanner to ordinary mode then connect to the tool

(3) Maybe the USB port of the computer was occupied by other programs. You could scan the configuration QR code to config.

2) when scanning configuration QR code, there is no response

(1) If changed password, then use the changed password to generate the configuration QR code.

If the changed password was lost, connect the config tool then click “reset password”，after this you could use the default password “1234567887654321” to configure. If cannot connected to the tool, please contact customer service.

(2) Please check whether the format of the configuration was correct, for example: if the HTTP server address added port number, if the prefix and the suffix format which was selectd and filled in the tool was correct, whether the device number was “Int” data.

(3) The configuration QR code which was generated by the tool, it’s better to send a screenshot to mobile phone rather than take a photo then use the the scanner to scan.

3) When scanning barcodes there is no response.

Whether the device was configured the scanning barcodes function, if not, you could configure it in the tool. If still cannot scan after configuration, please contact customer service.

4) After the device was configured, there is no output content.

The different output interface has different testing methods. For the USB device, you could see the output content in a TXT or Word file, for the serial device(RS232, TTL etc), you will need to see the output content in a serial debugging tool, for the wiegand device, need to see the output content in the wiegand controller background, and for the Ethernet and WiFi device, you will need to build server first then receive data.

5) After scanning there is error code or messy code.

In the develop mode, the data upload by the scanner was according to the Vguang communication protocol, including command header, command word etc, you could refer to the Vguang communication protocol to proceed the data parsing.

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