

# ID IDENT 1500

## RFID and Barcode Reader

### (USB/RSxxx/Wiegand)



## Contents

Disclaimer.....	3
Preface .....	4
Product Introduction.....	4
Product feature .....	4
Precautions .....	5
Product Parameters .....	6
Apparent parameters.....	6
Reading Parameters.....	7
Electrical parameters .....	7
Interface parameters USB .....	8
Interface parameters RS232 .....	8
Interface parameters RS485 .....	8
Interface parameters TTL .....	8
Interface parameters Wiegand.....	9
Interface parameters WIFI .....	9
Wiring instructions.....	10
Pin definition.....	10
USB/WIFI Wiring .....	11
RS232 wiring.....	12
Wiegand/TTL/RS485/WIFI wiring.....	13
Product Configuration.....	14
Common Faults and Troubleshooting Methods .....	18
After the Wiegand output is configured, the scan code has no output:.....	18
After adjusting to the secondary development mode, the product cannot connect to the configuration tool: .....	18
Failed to output when scanning IDs:.....	18
Contact info.....	18

## Disclaimer

Before using the product, please read all the contents in this Product Manual carefully to ensure the safe and effective use of the product. Do not disassemble the product or tear up the seal on the device by yourself, or iDTRONIC will not be responsible for the warranty or replacement of the product.

The pictures in this manual are for reference only. If any individual pictures do not match the actual product, the actual product shall prevail. For the upgrade and update of this product, iDTRONIC reserves the right to modify the document at any time without notice.

Use of this product is at the user's own risk. To the maximum extent permitted by applicable law, damages and risks arising from the use or inability to use this product, including but not limited to direct or indirect personal damage, loss of commercial profits, iDTRONIC. will not bear any responsibility for trade interruption, loss of business information or any other economic loss.

All rights of interpretation and modification of this manual belong to iDTRONIC

## Preface

### Product Introduction

Thank you for using the ID IDENT 1500 QR code reader provided by iDTRONIC.

This product can realize QR code identification and RF card reading. Please read the user manual carefully before use, you will appreciate its perfect function and simple operation method.

This product is mainly used for QR code identification and RF card reading.

The company does not assume responsibility for the property loss or personal injury caused by the user's abnormal operation.

Please design and develop the corresponding product according to the technical specifications and reference in the manual. Also please pay attention to the general safety matters that should be taken into account when using mobile products. Before the statement, the company has the right to modify the contents of this manual according to the needs of technological development.

### Product feature

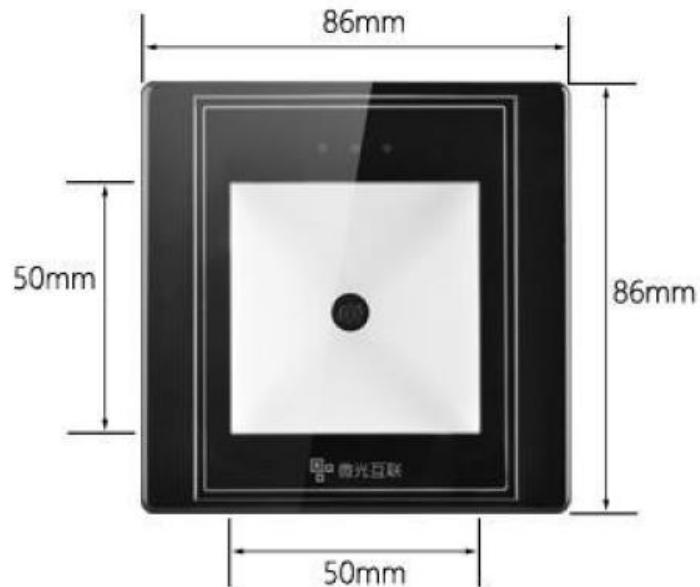
- **Strong reading ability:**  
It can recognize the QR code and one-dimensional code on the screen of the mobile phone, support the enhanced engine mode, and can scan and read the code when the screen of the mobile phone is dark.
- **Paper code reading ability:**  
The main QR codes and various one-dimensional codes printed on the paper can also be read.
- **High speed reading:**  
Different mobile phone LCD screens generally have different contrast, colour, and degree of reflection, which can be read as long as the code system is within the reading window.
- **Easy to use:**  
Scanners can be configured using configuration tools to achieve optimal operation.

## Precautions

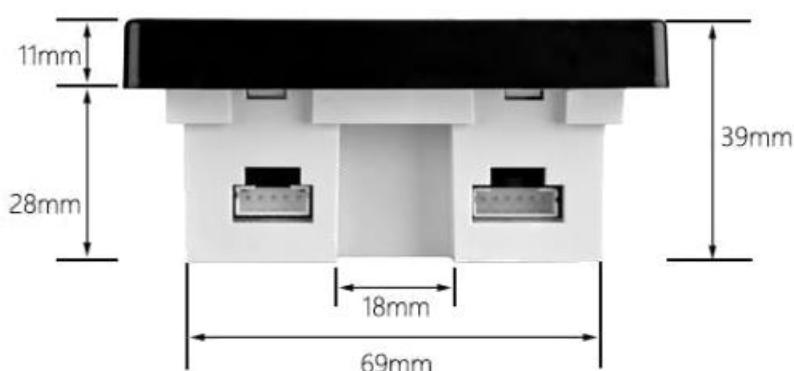
- Dismantling and modification:  
Please do not disassemble or modify the hardware of the product.  
If the equipment is damaged thereof, the company will not be responsible for the warranty.
- Abnormal condition:  
Keep away from fire. If you find unusual odor, overheat or smoke, please immediately turn off the power switch and unplug the plug from the AC outlet, and contact the dealer where you purchased the product or our customer service center.
- Drop damage:  
If the product is damaged due to falling on the ground, please immediately turn off the power and contact the dealer where you purchased the product or our customer service center.
- Placement location:  
Please do not place the product in an unstable or uneven place, so as to avoid the device falling down and causing damage; please do not put the device in a place with large amount of moisture or dust, so as to avoid causing electric leakage or fire.
- Please keep the illuminating glass lens clean. When wiping, use soft cotton or lens paper. Do not wipe the window glass with detergent or dissolved liquid.
- Do not touch the window glass with abrasive substances, so as to avoid wearing the window glass and affecting the reading effect.

## Product Parameters

### Apparent parameters



Vertical View



Side View

## Reading Parameters

Reading parameters QR	
Identification code	QR code: QR Code, Data Matrix, PDF417, etc. One-dimensional cod : EAN-8,EAN-13,ISBN-10,ISBN-13, UPC-E,UPCA,CODE39,CODE93,CODE128 etc;
Decoding support	All prints such as mobile phones, screens, and paper
Reading depth of field	0mm-100mm
Reading accuracy	≥5mil
Reading rate	15 /s
Reading speed	100ms each time (average), supports continuous reading
Reading direction	360 degrees

Reading parameters NFC	
Identification card type	MifareClassic, MifareUltraLight, MifareDESFire
RF operating frequency	13.56MHz
Effective operating distance	<5cm
Reading rate	15 /s

Note:

The RF antenna is related to the environment. If there is metal around the product, the quality of swiping card will be affected.

## Electrical parameters

Electric parameter	
Support interface	USB (HID Analog Keyboard, Custom HID) RS485, RS232, TTL, WIFI, Wiegand
Light source	LED diffuse illumination: white light (adjustable brightness), red light, green light, status light (configurable on), blue indicator light
Image sensor	300,000 pixel CMOS sensor
Maximum resolution	640*480
Indicator	Buzzer, LED indicator
Operating temperature	-20 to 70 °C
Storage temperature	-40 to 80 °C
Humidity	Relative humidity 5%~95% (non-condensing, non-waterproof)
Ambient light	0~100000LUX
Data cable	6pin cable, USB cable, DB9 cable
Power supply	VCC=4.7V-15V or VUSB=4.8-5.5V
working current 5V input voltage, USB output mode	150mA (average), 190mA (instantaneous maximum)
working current 5V input voltage, WIFI output mode	230mA (average), 330mA (instantaneous maximum)
Materials	Body: imported PC Top cover bottom cover: imported PC Recognition Window: tempered glass
supported OS	Windows (XP, 7, 8, 10), Linux, Android, Mac, etc.

## Interface parameters USB

Interface parameters USB	
Wiring type	USB Type-A to 5PIN 2.0mm terminal
Support interface	USB2.0 backward compatible, slave device
Theoretical bandwidth	480Mbit/s high-speed interface
Interface voltage	5V
Protection standard	IEC 61000-4-2 Level 4 ESD Protection

## Interface parameters RS232

Interface parameters RS232	
Wiring type	DB9 to 6PIN 2.0mm terminal
Support interface	point-to-point
Baud rate	300 bps to 460800bps, default 115200bps
Interface voltage	±6V
Protection standard	±15kV Human Body Mode ±15kV IEC61000-4-2 Air Discharge Mode ±8kV IEC61000-4-2 Contact Discharge Mode

## Interface parameters RS485

Interface parameters RS485	
Wiring type	DB9 to 6PIN 2.0mm terminal
Support interface	Point-to-point or multi-machine communication
Baud rate	300 bps to 460800bps, default 115200bps
Interface voltage	0-3.3V
Protection standard	±18kV Human Body Mode ±13 kV IEC61000-4-2 Contact Discharge +4 kV IEC61000-4-4 Fast Transient Burst

## Interface parameters TTL

Interface parameters TTL	
Wiring type	6PIN 2.0mm to 6PIN 2.0mm terminal
Support interface	TTL COMS
Baud rate	300 bps to 460800bps, default 115200bps
Interface voltage	3.3V

## Interface parameters Wiegand

Interface parameters Wiegand	
Wiring type	6PIN 2.0mm to 6PIN 2.0mm terminal
Support interface	Wiegand 26, Wiegand 34
Interface voltage	4.3V
Protection standard	±15 kV HBM protection

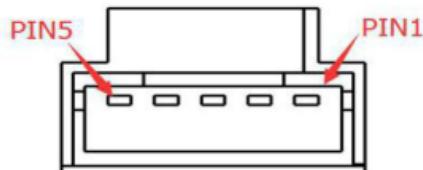
## Interface parameters WIFI

Interface parameters WIFI	
Wiring type	6PIN 2.0mm to 6PIN 2.0mm terminal USB Type-A to 5PIN 2.0mm terminal
Support interface	TCP/HTTP
Theoretical bandwidth	40Mbps
OPEN interface	3.3V (default high level at startup)

## Wiring instructions

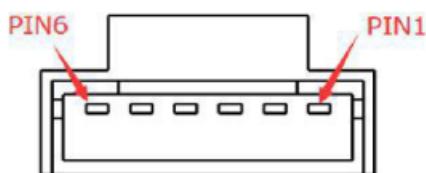
### Pin definition

ID IDENT 1500 output 5-pin interface



Pin Nr.	Signal Name	I/O	Description
1	GND_EARTH		Shield ground, connect to USB shield
2	GND		Power ground
3	DATA +		Data +
4	DATA -		Data -
5	VUSB		USB power supply

ID IDENT 1500 output 6-pin interface

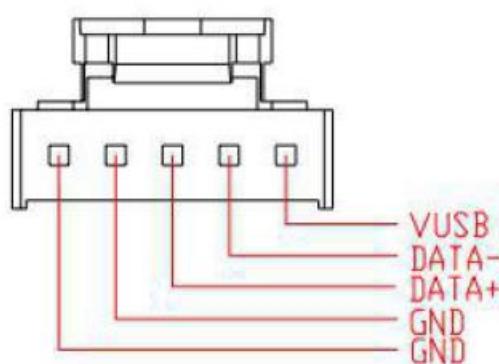


Pin Nr.	Signal Name	I/O	Description
1	RX	INPUT	Serial logic level input
	DATA0	OUTPUT	Wiegand data 0
	OPEN	OUTPUT	Access control output
2	TX	OUTPUT	Serial logic level output
	DATA1	OUTPUT	Wiegand data 1
3	GND		Power ground
4	VCC		Power input
5	RS485-A	I/O	RS485 Level Driver IO
6	RS485-B	I/O	RS485 Level Driver IO

## USB/WIFI Wiring



USB interface cable

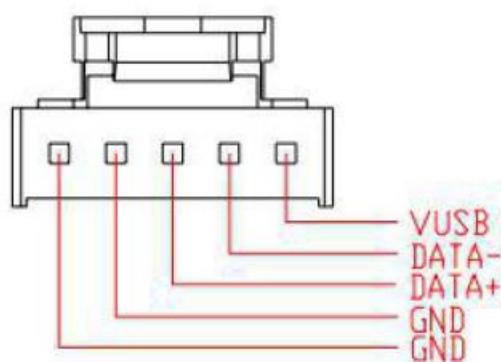


USB interface cable					
USB-A plug 5-pin plug	1	2	3	4	shielded wire
1					GND_EARTH
2				GND	
3			DATA +		
4		DATA -			
5	VUSB				

## RS232 wiring

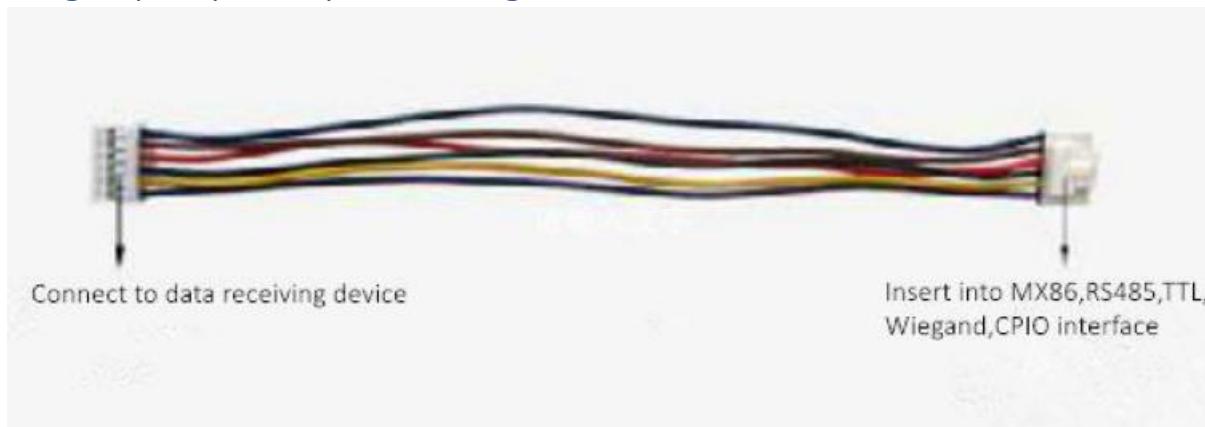


RS232 interface cable

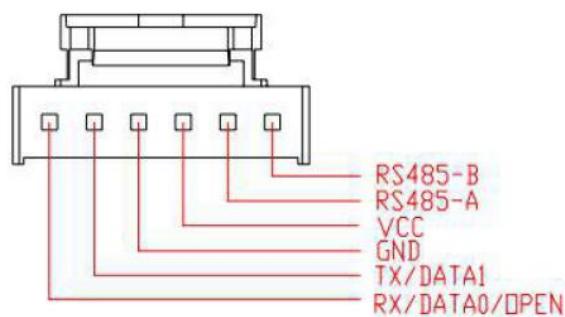


RS232 interface cable									
DB9 plug	1	2	3	4	5	6	7	8	9
5-pin plug									
1									
2									
3					GND				
4				VCC					
5			232-RX						
6		232-TX							

## Wiegand/TTL/RS485/WIFI wiring



Wiegand/TTL/RS485/WIFI cable



Wiegand/TTL/RS485/WIFI cable		
Pin Nr.	Colour	Signal description
1	purple	RX/ DATA0/OPEN
2	yellow	TX/ DATA1
3	black	GND
4	red	VCC
5	brown	RS485-A
6	blue	RS485-B

## Product Configuration

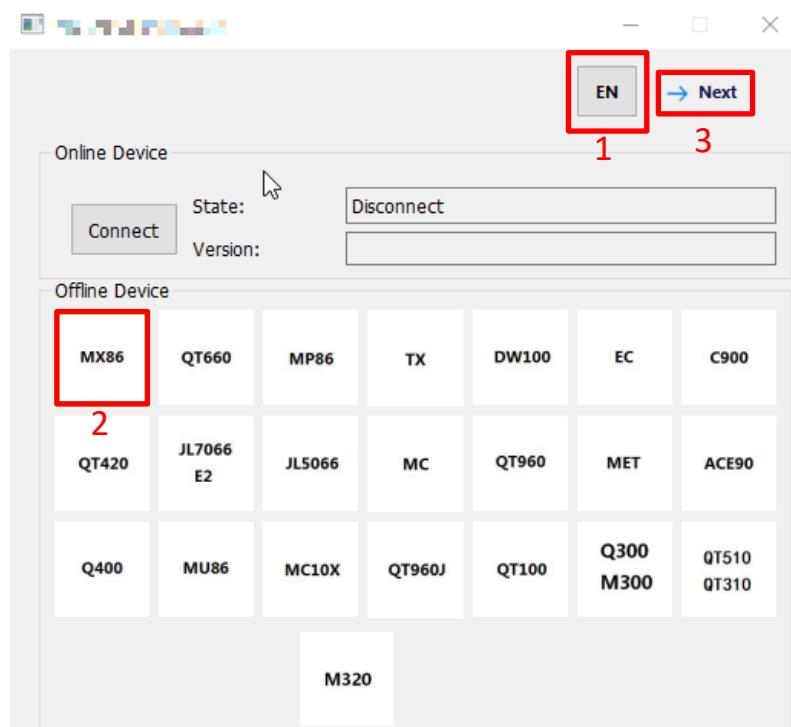
Use the IDENTconfig tool to configure the device, which can be download from our official website

 IDENTconfigv2.3.17.exe

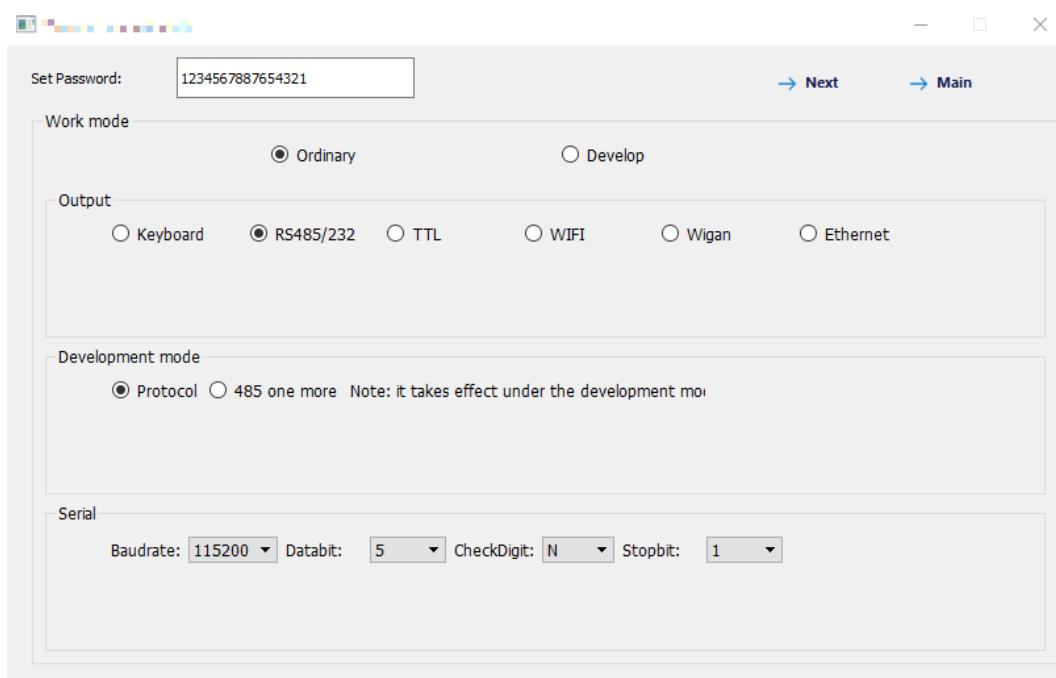
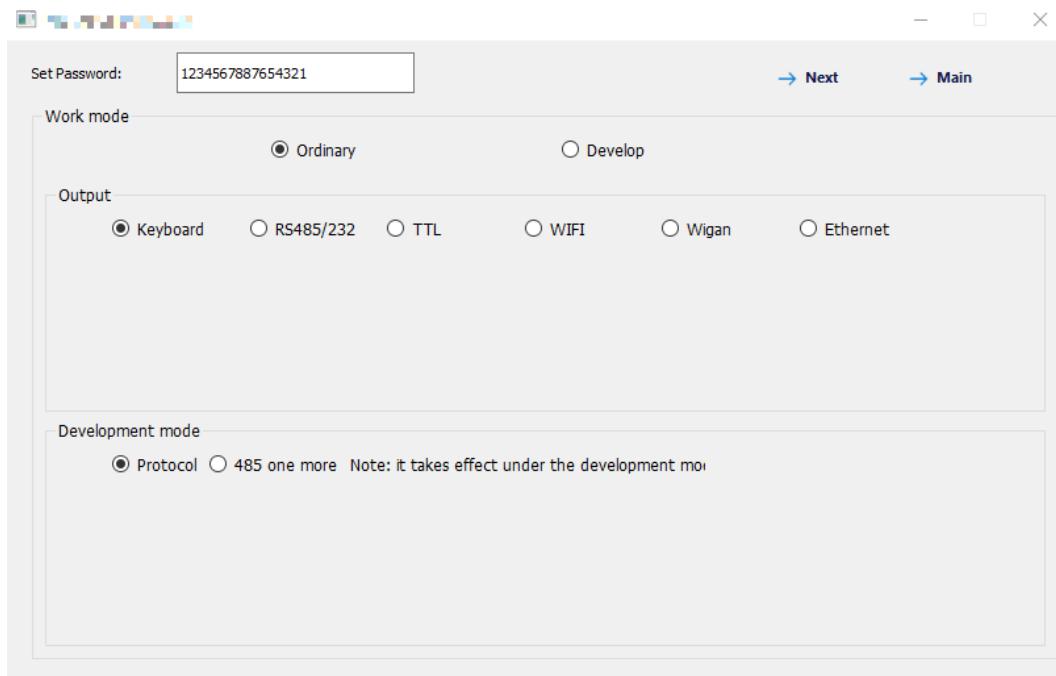
(For more information about the configuration tool, please refer to the IDENTconfig user manual).

Configure the server address as the step shows:

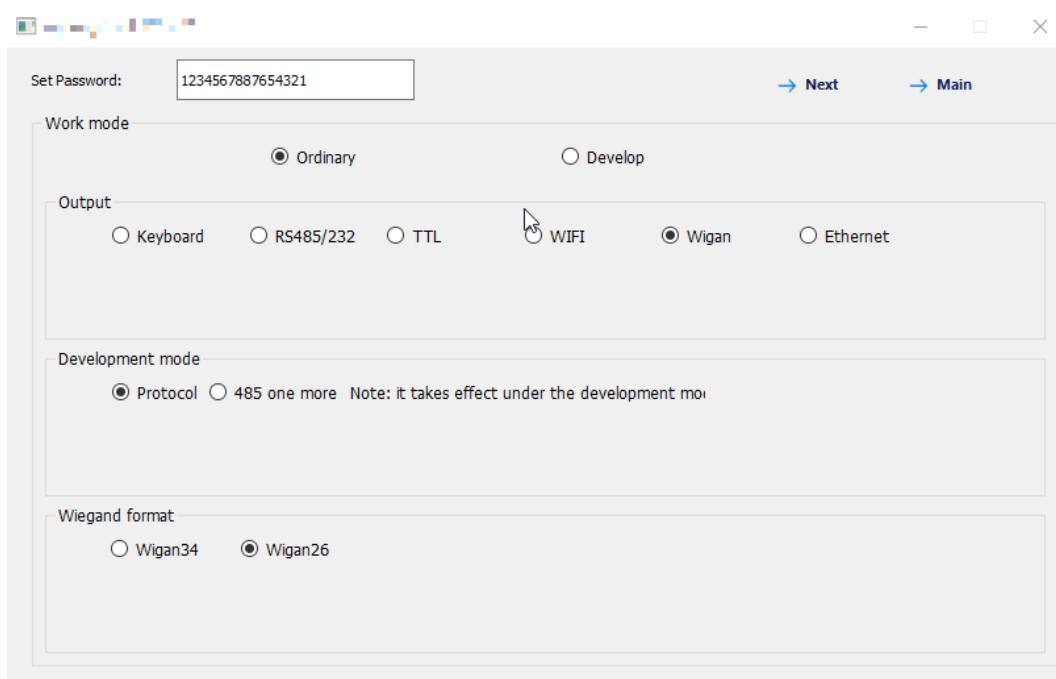
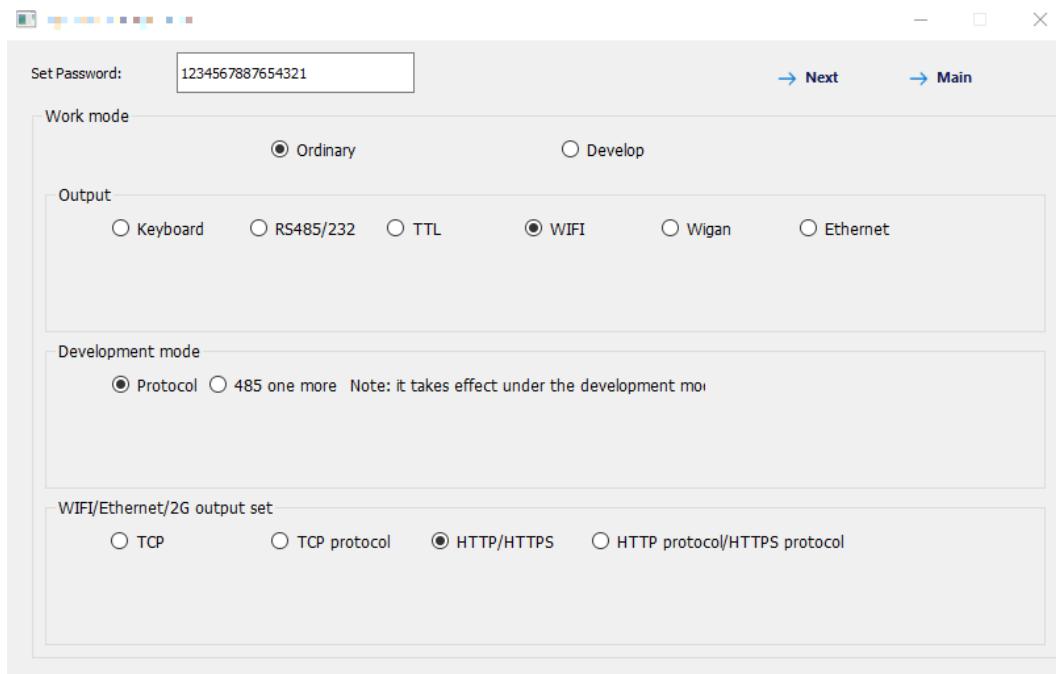
Step 1: select language and device



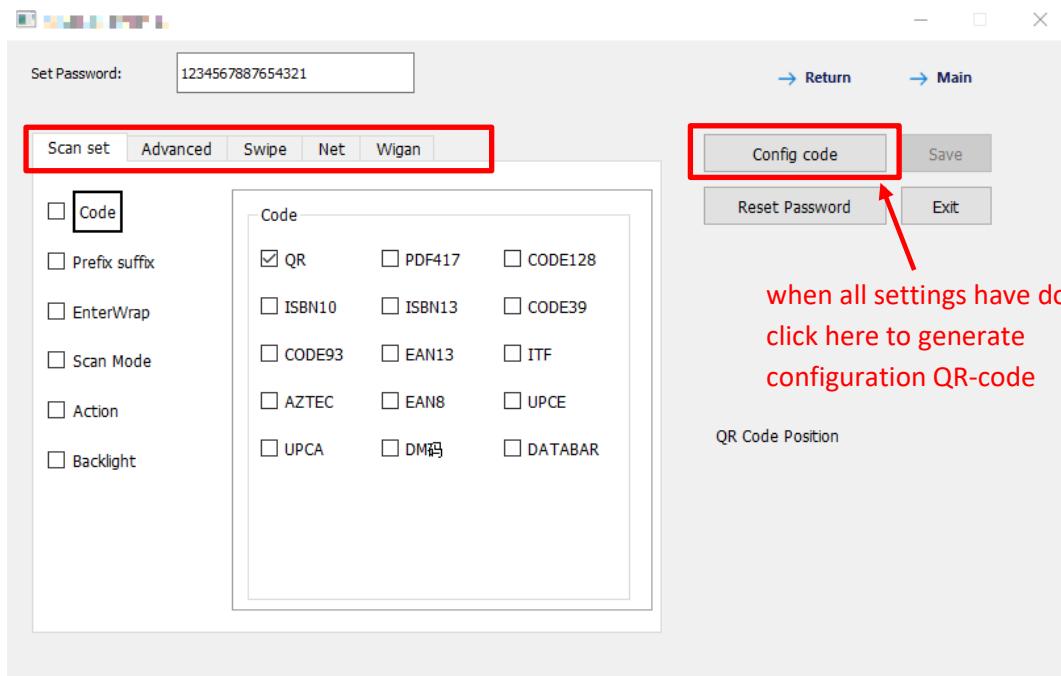
## Step 2: select output method



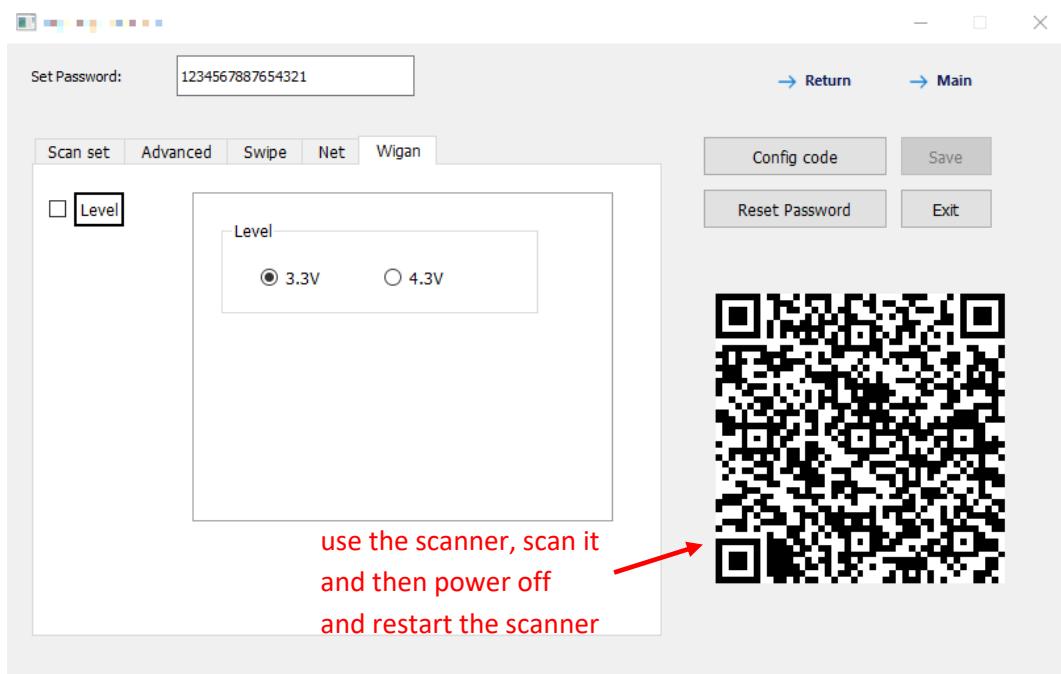
(on RS485/RS232 and TTL devices you have to set baudrate, databit, check digit and stopbit)



Step 3: make the desired settings in each tab



when all settings have done,  
click here to generate  
configuration QR-code



## Common Faults and Troubleshooting Methods

### After the Wiegand output is configured, the scan code has no output:

When at Wiegand 34 output, the scanner's QR code output only supports 6-10 characters output, so if the QR code information is less than 6 bits, complement 0 to the front bit to get 6 bits to generate output. In addition, the Wiegand output only supports pure digital output. Please check whether the scanned QR code/ID card content conforms to the specification.

### After adjusting to the secondary development mode, the product cannot connect to the configuration tool:

If you adjust the work mode from normal mode to secondary development mode that the secondary development output mode does not match the output mode in the normal configuration, the configuration tool cannot be connected after the configuration is saved. After adjusting the configuration in the configuration tool, configure it by scanning the configuration QR code.

### Failed to output when scanning IDs:

If you need to scan the ID card, you need to configure the output length to 4 in the NFC configuration column of the configuration tool. Otherwise, it will not be output correctly.

## Contact info

iDTRONIC GmbH  
Ludwig-Reichling-Straße 4  
67059 Ludwigshafen  
Germany

E-Mail: [info@idtronic-secureaccess.de](mailto:info@idtronic-secureaccess.de)  
Web: [www.idtronic-secureaccess.de](http://www.idtronic-secureaccess.de)  
Phone: +49 621 6690094-0  
Fax: +49 621 6690094-9