

QR Code Reader User Guide

Version: V1.1 Date: 2020.04.10

Important Statement

About us

Thank you for choosing this product. Please read the user's Guide (hereinafter referred to as the instruction manual) carefully before use to ensure that the product is used properly, has good use effect and verification speed, and avoids unnecessary damage to the product.

No part of this manual may be reproduced or transmitted in any form without the written consent of the company.

Due to the continuous updating of the products, the company cannot promise that the information is consistent with the actual products, and does not assume any disputes caused by the actual technical parameters and the inconsistency of this information, and any changes are not notified in advance. The company reserves the right of final change and interpretation.

Change History

Version	Date	Description
V1.0	2019-09-30	The first official release.
V1.1	2020-04-10	Update DEMO software page.

Content

1 EQUIPMENT INSTALLATION
2 PRODUCT INTRODUCTION
3、WIRING INSTRUCTIONS
3.1 WIRING DEFINITION
3.2 INSTRUCTIONS
4、SET THE QR CODE READER WITH DEMO SOFTWARE
4.1 ONE-CLICK CONFIGURATION
4.2 BASIC OPERATION
4.3 PARAMETER SETTING12
4.4 CARD READING PARAMETER SETTING1
4.5 Reader Parameter Setting14
4.6 IMPORT AND EXPORT CONFIGURATION1
4.7 FIRMWARE UPGRADE10

1、Equipment Installation

Installation precautions: In order to ensure the normal use of the equipment, please strictly follow the installation instructions.



Then install the device into the Type 86 dark (bottom) box as shown in the figure, and fix the device with two M4*15PB mechanical teeth screws. Note that the device has the boss facing downward.



The standard type 86 dark (bottom) box is purchased from the market with a mounting pitch of 60mm or 66mm. The installer places a dark (bottom) box on the wall surface according to the length and width of the standard type 86 dark (bottom) box and fixes it with cement sand.



The panel is printed upright, and the notch below the shell is aligned with the boss below

First find the right point, then buckle the shell (with panel) into the device (as shown), pay attention to the assembly direction during installation and check whether the printing on the rear panel is upright.

2 Product Introduction

The QR code Reader is a new generation of intelligent access control card reader developed by our company. The product has high-end appearance, high scanning speed, high recognition rate, strong compatibility, and can be connected to any access controller that supports Wiegand input. Adapt to various application scenarios, and support the identification of RFID radio frequency cards and QR codes, which can be applied in community management, visitor management, hotel management, unmanned supermarkets and other fields.

The characteristics of the QR code reader are as follows:

- New QR code access control technology development;
- Comes with a card reader antenna and working frequency is 13.56MHz
- Support MF, CPU, NFC (analog card), DESFire EV1, Chinese resident ID card, QR code;
- Support Wiegand, RS485, USB, TCP/IP network output mode;

3 Wiring Instructions

3.1 Wiring Definition



From the reverse side from left to right (As shown above):

DC(+12V)	GND	485+	485-	WGO	WG1	NO	СОМ	NC	Config
Power	Ground	RS485 Ir	nterface	WG Inter	rface	/	/	/	/

3.2 Instructions

Notice: Please connect to other equipment according to the wiring definition of the QR code reader. In addition, the following only refers to the partial wiring of the QR code card reader and the controller. It does not represent all the wiring definitions of the controller. Please refer to the actual controller wiring definition.

1. Wiegand or RS485 Communication

①First, connect the QR code card reader to the controller via Wiegand or RS485, and then connect the +12V power supply.

The two-dimensional code reader does not need to be connected to the lock body when it is used as a read head. When it is used as an integrated machine, it is necessary to connect the lock to control the switch door. The controller in the figure only lists some of the wiring, and there are many kinds of connection between the machines. Wiegand or RS485 common connection reference as shown below:



⁽²⁾Then put the card or QR code (paper, electronic, mobile phone) into the reader recognition range, the card reader will automatically obtain and transmit the information carried by the card or QR code to the controller.

2. USB Communication

①First, connect the QR code card reader to the PC terminal through the USB cable.

QR Code Reader Side Interface



⁽²⁾First open the **HID keyboard** in the DEMO software settings. Then put the card or QR code (paper, electronic, mobile phone) into the reader recognition range, the card reader will automatically obtain and transmit the information carried by the card or QR code to the PC, which can be demonstrated by text.

3. TCP/IP Network Communication

Notice: Only a few models support TCP/IP network communication.

①First, the QR code card reader is connected to the PC through the network terminal.

QR Code Reader Side Interface



⁽²⁾Then put the card or QR code (paper, electronic, mobile phone) into the reader recognition range, the card reader will automatically obtain the information carried by the card or QR code and transmit it to the PC, which can be demonstrated by text.

4、Set The QR code Reader With DEMO Software

This section describes how to configure the card reader through the Demo software.

4.1 One-click Configuration

Operation

 Connect the QR code reader to the computer with a USB cable, open the Demo software, select the USB-HID port, click OK, the connection is successful. (Remarks: If serial port connection is selected, the default baud rate is 115200) Notes:

1) Support for connecting configuration tools via USB and serial ports.

2) If you select RS485 communication mode to connect to the configuration tool, the baud rate defaults to 115200.

3) The version number in the screenshot only represents the version number of the test prototype, please refer to the actual product version number.

ana Qr code reader demo	-1.81	Qr code reader demo	-	*
1. Connect device		1. Connect device		
C USE-HID		🔿 USB-HID	ł	
O 115200		() 115200	*	
Come.		DisConnect		
		Firmware version: 0400-3.07-May 13 2019-16:52:1	6	
2. Download configuration		2. Download configuration		
Set address		Get address		
L.	×	L.		
Download		Download		
		Connect successful.		

2. The connection is successful. In the download configuration area below, click Download.

Dow	mloading

3. A pop-up page prompts that the download configuration is complete, you can complete the QR code reader configuration with one click, and the operation is simple.

2.	Download configuration	
	Set address	
[1.	
Hint		×
	Download configuration is complete !	
	ОК	

4.2 Basic Operation

Operation

1. If the user needs to set the parameters of the QR code reader by himself, open the Demo software, after the

connection is successful, enter the advanced settings page in the upper right corner of the page.



2. Enter the main page of advanced settings.

	OBU		Saix setting-1				
в ,	asic setting Bask setting-1	•	Supering desize	17 Une Browsbart andreas	bet version The territor		
	tasic setting-2 tasic setting-1		Aramatar settings Kiddi Addrees				
D	evice	4	Opaning team	. 9	Seld number	-	
• •	lelp .	ε.	W1485 Austine welch	Closer	Riddl astronetic spread	tion	×
			Work washe	Reader mude	HD keyliced	Close	x
			Meged function subth	Open 📕	Read take	artime .	

- 3. On the Basic settings-1 page, set the configuration parameters of the reader as needed.
 - a) Click **Find device** to view the address of the card reader.

Notes: If you choose RS485 communication, you need to click "Scan Device" to get the correct device address before you can perform other operations.

Scan	ning device			
	Find device	Address	1]

b) Click Get version to view the version number information of the card reader.

Get version	
Get version	R400-2.07-May 13 2019-16:52:15

c) Click **Read configuration** to view the configuration information of the current reader.

R5485 Address	1		
Opening times	5	Serial number	00000000000
RSA85 function switch	Close	RSARS automatic upload	Clase
Work mode	Reader mode	HED keybowrd	Close
Wegand function switch	Open	Baud rate	115200

d) The user can set the parameter information of the card reader and click **Write configuration** to configure

Parameter	Description
	0: Broadcast address, that is, the communication connection can be made
DC495 Address	regardless of whether the machine 485 address is set to 0~255.
K5485 Address	If the machine 485 address is set to 1~255, fill in the corresponding, you can also
	communicate.
	When the card reader is directly connected to the door lock, the length of time the
Opening times	door is opened when the card or QR code with normal door opening permission
	is swiped.
Serial number	The serial number of the device of the reader.
RS485 function	Turn RS485 communication on or off the card reader.
switch	The configuration tool can still be connected via 485 when it is turned off.
DC495 and a model	When opened, the card reader data is automatically uploaded to the server under
KS485 automatic	the 485 interface.
upioad	When closed, the reader data will not be uploaded to the server.
	Reader mode: When the card reader is connected, the read head mode is selected,
W/	and the parameters of the read head are set by the DEMO software.
work mode	Offline mode: When connecting to the all-in-one, select the all-in-one mode and
	set the parameters of the all-in-one through the DEMO software.
	When turned on, USB communication can transfer the card number/information
LUD Izezih e and	to a computer (such as a text document).
HID keyboard	When turned off, the swipe/QR code will have normal feedback, but USB will
	not transfer the card number/information to the computer.
	When opened, USB communication can transfer the card number / information to
	the computer (such as a text document).
HID keyboard	When closed, the card / QR code will have normal feedback, but the USB will
	not transfer the card number / information to the computer.
Baud rate	If you choose a serial port connection, you can set the baud rate.
	After modifying the above parameters, click Write Configuration, that is, the
write configuration	new configuration information is successfully written to the card reader.
Read configuration	Get the current configuration information of the reader and display it.

the parameter information of the QR code card reader.

4. Supports the factory reset of the card reader.

Factory settings

Reset factory default

-----END

4.3 Parameter Setting

Operation

1. On the **Basic settings-2** page, set the relevant parameters of the QR code.

2020 0.00	17546478	00-1-11-5-5-	- 10	
Or code decryption key	12343078	On code enective time	34	
Door ID	1			
QR code mode	Not encrypted			
Light mode	Constantly bright	X		
	-	_		
	Write coefficiention	Hand to figuration		

Parameter	Description	
QR code decoding	The description law of the OP and when the ensuration mode is selected	
key	The decryption key of the QK code when the encryption mode is selected.	
QR code effective	The effective time of the OP and a display	
time	The effective time of the QK code display.	
Door ID	Access ID number, support setting output or not output ID number.	
OD aada mada	The output mode of the two-dimensional code: Not encrypted, Custom	
QK code mode	encryption, Dynamic QR code.	
Light mode	QR code light mode: Constantly bright, intermittent, induction.	
Write configuration	After modifying the above parameters, click Write Configuration, that is,	
while configuration	the new configuration information is successfully written to the card reader.	
Read configuration	Get the current configuration information of the reader and display it.	

2. On the **Basic Settings-2** page, set the parameters for Wiegand.

Output format Rev	enie output	Pulse interval	0	1100 - 1000a
Whether to sheck Ope	m.			

Parameter	Description
Wiegand mode	Choose WG26, WG34, or WG66.
Output format	When Wiegand outputs the card number information, the card number can be
	selected for forward or reverse output.

Whether to check	Choose whether to output the Wiegand check digit or not.
Pulse Width	Wiegand pulse width, optional (1~99) *10ms
Pulse interval	Wiegand pulse gap, optional (0~89) *100+1000ms
White configuration	After modifying the above parameters, click Write Configuration, that is,
write configuration	the new configuration information is successfully written to the card reader.
Read configuration	Get the current configuration information of the reader and display it.

4.4 Card Reading Parameter Setting

Operation

1. On the **Basic Settings-3** page, set the card reader's card reading parameters.

CPU user key		HITTI	***************	***	
Start block	1		Start byte	0	
MF user key			FFFFFFFFFFFFFFF		
			Prior choice	CPU priority	
(P) CPU card	UED	×	😥 M# card	UED	
(V) SFZ card	LED	×	(V) 15015691 card	UID	

Parameter	Description
App ID	The directory file number of the user card content to be read.
File ID	The file number of the user card content to be read.
Key ID	The key identifier for external authentication of the CPU card.
	The key of the CPU user card content to be read.
CPU user key	Note: The authentication key of the user card must be the same as the
	user card key set on the configuration card.
Start block	The content of the user card to be read starts from the first block.
Start byte	The content of the user card to be read starts from the first few bytes.

MF user key	The sector key of the MF user card content to be read.
Drior aboico	Select the CPU priority or MF card priority when setting the card reader
FIIOI CHOICE	composite card.
Deading Card mode	Custom settings read the physical card number or content of the CPU
Reading Card mode	card, MF card UID or content, ISO15693 card UID or content.
	After modifying the above parameters, click Write Configuration, that
Write configuration	is, the new configuration information is successfully written to the card
	reader.
Read configuration	Get the current configuration information of the reader and display it.

4.5 Reader Parameter Setting

Operation

1. On the Reader Operation page, set the parameters of the reader.

Parameter			Description	on
	Play voic	ie)	Save voice	. Get voice
	Voice type	Open door voice		×
	Encoding	G82312		
	Opcode	255		R
	Text data	legist bod data		
Voice control				
Guestral	Mode Oper	the door remotely		
Control door				
Set lime	Time 2020-	04-10 15:49:39	0.	
Write RTC				
(Prt Street)	Time	2020-04-10 15:49:40	Friday	Tel fina
Read RTC				Write in real time RTC

1 al allietel	Description
Read RTC	Get the time of the reader.
Write RTC	Set the time of the reader.
Write in real time RTC	The time when the reader is connected to the PC.

Control door	Support setting remote door opening and remote closing.		
Opcode	1~23 is a fixed ringtone, and 255 is a vocal broadcast.		
Encoding	GB2312, GBK is a different Chinese coded character set.		
Taut data	You can enter the text you want to play. When the opcode is 255, click		
Text data	Play voice, the card reader will play the text.		
	You can select the small ringtone from 1~23, or enter "Hello" as the		
Save voice	opening voice and save it. The card reader will play the voice		
	automatically when you open the door next time.		
Get voice	Let the saved open door voice play out.		

4.6 Import And Export configuration

Operation

1. On the Page Configuration page, click Export Configuration.

Notes:

This function is used for operations before and after restoring factory settings, After the factory settings are restored, the function parameters are restored to the default values, and it is necessary to reload the setting parameters that can read PDF417 and QRcode. Therefore, it needs to be configured according to function 4.6. .Json needs to be backed up before restoring the factory settings. Otherwise, please do not restore the factory settings.

- a) The configuration file for import and export can only be a cfg.json file.
- b) The exported configuration file can be used for one-key configuration. When entering the advanced settings page, the configuration information will also be loaded according to the cfg.json configuration file.
- c) If there is no cfg.json configuration file in the .exe directory, the cfg.json file will be generated by default in the background when you enter the advanced settings page.





4.7 Firmware Upgrade

Operation

 On the Firmware Upgrade page, click Open file, select the upgrade program, click the Start button, plug in the USB and reconnect the computer to the computer to view the prompt message, indicating that the upgrade is successful.

Firmwar	e Information	
The path	The International State	Open file
File size	His Information .	
Base address	the Microsoftee	

FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception,

which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
 - -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.