HANYUE GROUP

HY-100 RFID Reader

User's Manual

Hanyue Group

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Declaration

Disclaimer

Specifications and manuals are subject to change without notice. Hanyue Group assumes no liability for damage incurred directly or indirectly from errors, omissions, or discrepancies between the device and the manuals.

Notes

Depending upon the specific model purchased the color and look of your device and accessories may not exactly match the graphics shown in this document. The screenshots and other presentations shown in this document are for reference only. They may differ from the actual screens and presentations generated by the actual product.

Cautions

Thank you for using HY-100 RFID Reader. This manual provides information about using HY-100 RFID Reader. Before using it for the first time, please read through the following safety instructions and keep the manual for later reference.

⚠ **Warning！**

- ☐ **Disassembly & Reassembly**
    - ■ Do not make any attempt to disassemble or reassemble the device. Take sole responsibility for all your deeds leading to the device unavailable.

- ☐ **Abnormal Situations**
    - ■ Shut down the power immediately and contact the dealer as soon as possible if the device becomes hot or begins to fume and smell. The neglect of it may cause fire or an electric shock.

    - ■ Stop using the device if it smells or is overheated, or in unconventional color and shape.

- ☐ **Foreign Body**
    - ■ Shut down the power immediately in case a foreign body comes into the device and contact the dealer as soon as possible.
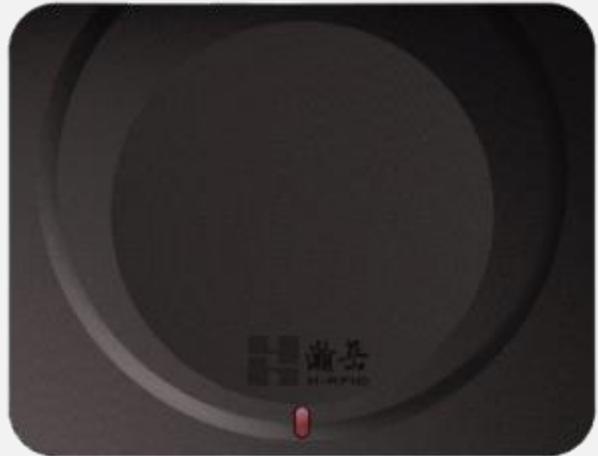
- ☐ **Drop and Damage**
    - ■ Shut down the power immediately if the device drops or damages and contact the dealer as soon as possible.

CONTENTS

Chapter 1 Package Confirmation

Unpack the device and verify that all equipment listed below is included:

Ref.	Name	Photo
1	Reader	
2	Data Cable	
3	User Manual CD	

Please confirm the above equipment within 5 days since you got the product. If there is any equipment missed or damaged, please contact your local dealer at the first time. You can also contact our customer service representative directly at 0086-531-66955507 or sdsale@hiultra.com

When you contact your local dealer or our customer service representative, please present your "Warranty Card" (see affix 1) as proof.

Chapter 2 Product Parameters

Items	Specifications
Physical Parameters	
Model	HY-100
Dimensions	120mm×93mm×27mm
Interface	USB 2.0
Security slot	2 SAM card slots
Operating Temp	0℃ to +50℃
HF RFID Parameters	
Frequency Range	13.56MHz
Protocols	ISO14443 A&B,
Cards Supported	ISO14443—Mifare One S50/S70, Mifare Pro, Mifare Ultralight, contactless CPU card, etc.
Read Range	<10cm (depend on tags)
Contact Card Parameters	
Protocols	ISO7816
Cards Supported	SLE4442, SLE4428,24Cxx SAM card

Features:

1. The reading range for ISO14443A type Mifare cards can reach to 7cm, for ISO14443B type card can reach to 5cm

2. Read and write speed can reach up to 424kbps.

3. Two SAM card slots ensure security.

4. Easy to use with USB 2.0

Applications:

1. Control Network visiting

2. Software locking

3. Digital Signature

4. Customer bonus and commercial promotion

5. Prepaid

6. Identity authentication

7. E-ticketing

8. Parking lot charging

9. Automatic fare collection system

10. Access Control

11. Time Attendance

Notes:

The product specifications and information mentioned in this manual are subject to changes without prior notice. For the latest news and information, please go to www.mwrfidcard.com.

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Chapter 3 Handling Instructions

3-1 Function Description

HY-100 is easy to use with USB simulate plug and play TCP/IP interface. Use the data cable TCP/IP interface connects with HY-100 and the USB interface connect with PC. The PC will automatically recognize the installation program of HY-100. Then you can perform read or write operation with demo provided by Hanyue group.

3-2 Demo Testing Interface
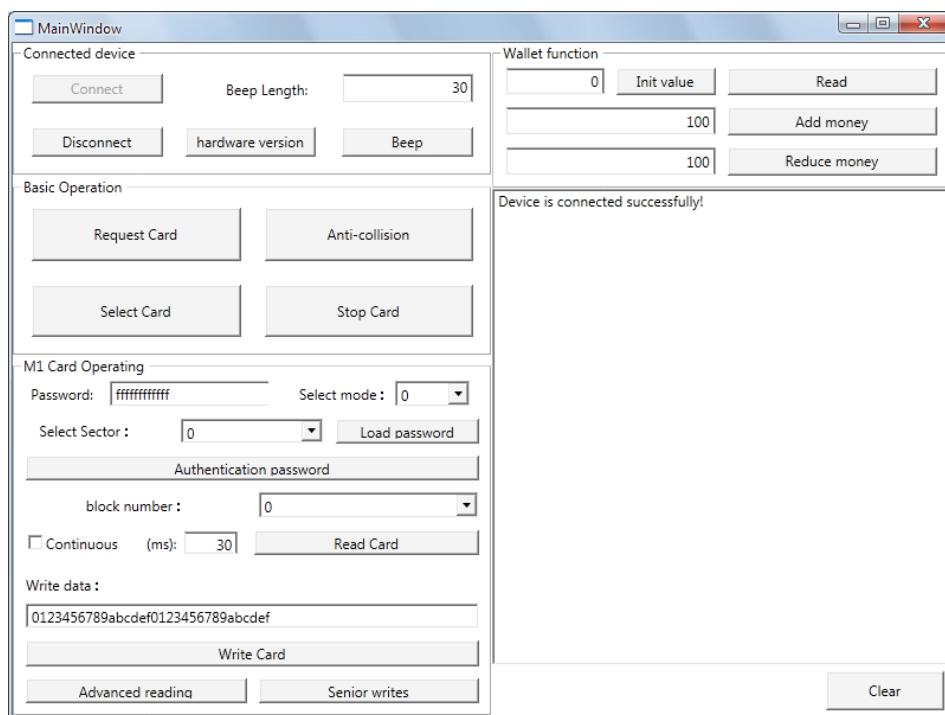
3-1

3-3 Demo

Two Demos will be supplied to you. "HY-100Demo-M1" is the demo for Mifare card operation. "HY-100Demo-SLE4442" is the demo for SLE4442 card operation.

3-3-1 Mifare Card Operation

➢ Open "HY-100Demo-M1" as follows:
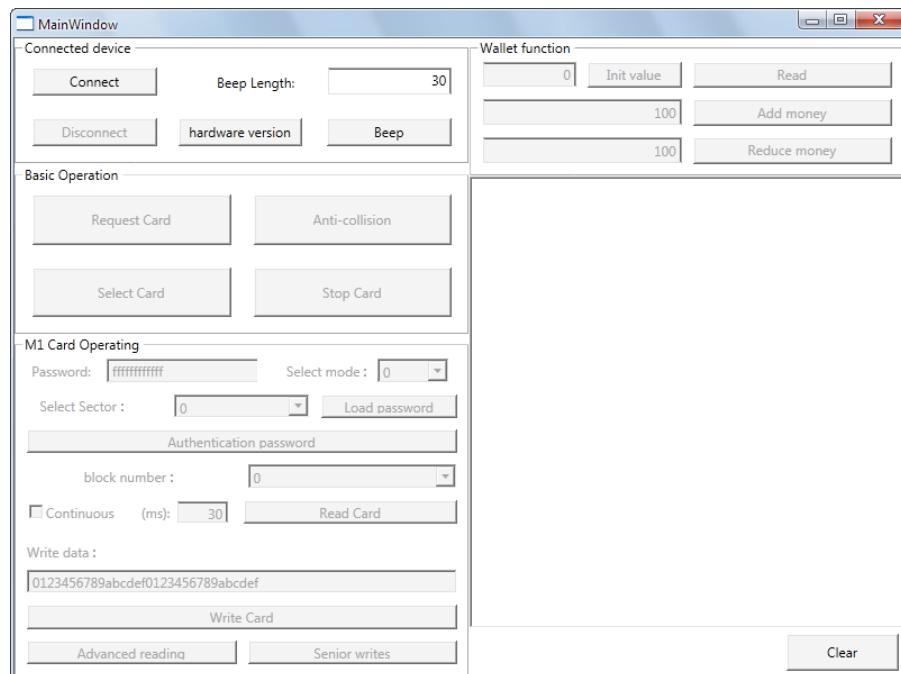
> ➢ Click "Connect" button, "Device is connected successfully!" will be displayed if the connection is successes.
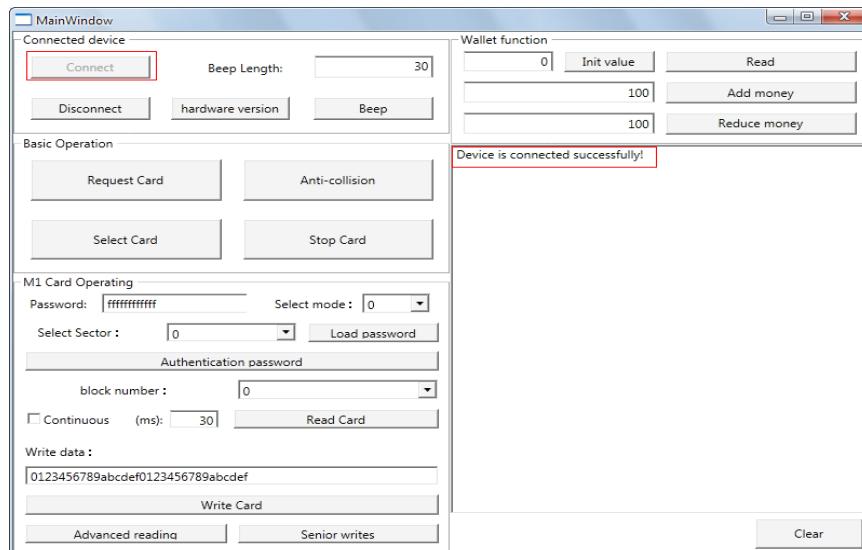
> ➢ This demo offers "Request Card", "Anti-collision", "Select Card", "Stop Card", "Load Password", "Authentication password", "Read Card", "Write Card" functions for Mifare cards.
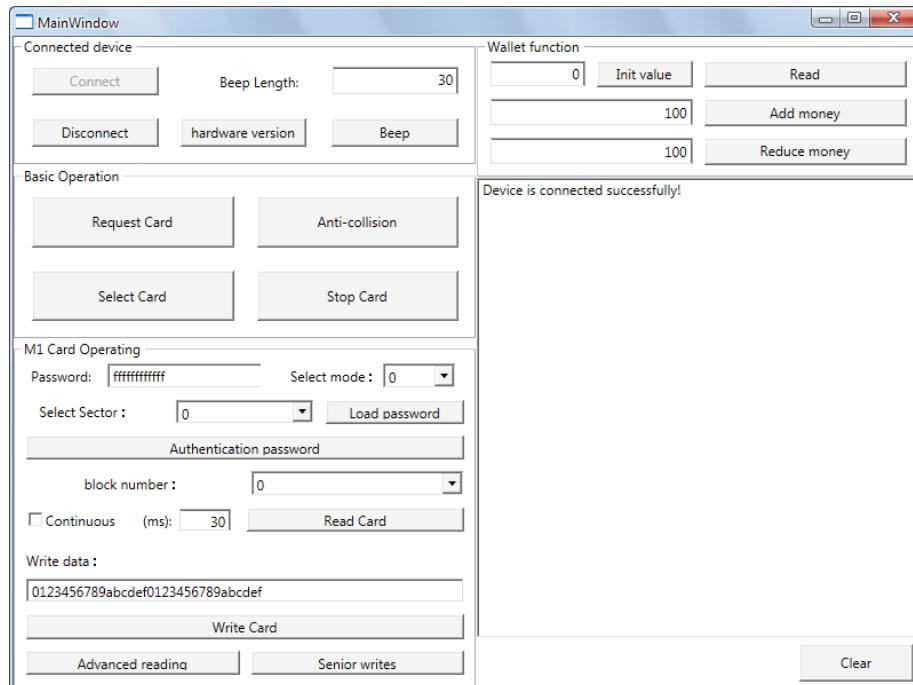
➢ Click **"Request Card"**, "M1 card request success!" will be displayed if the request successes.
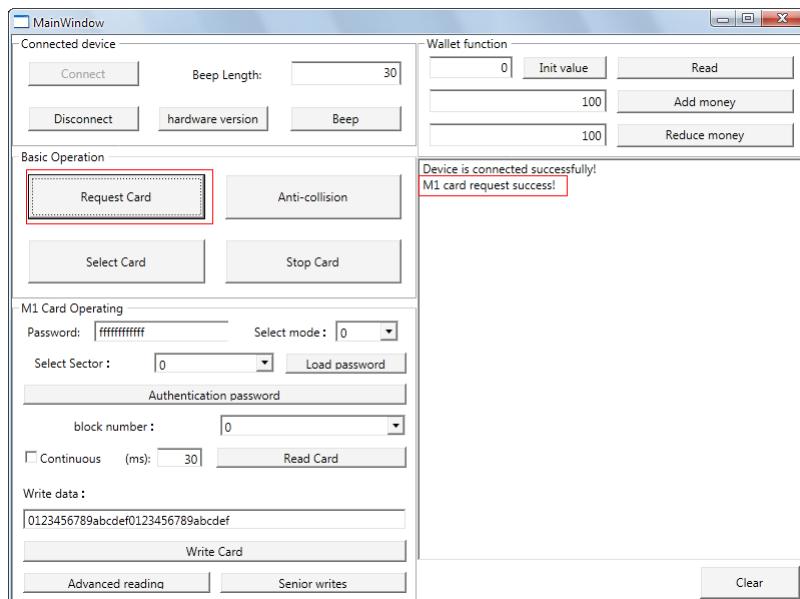

➢ Click **"Anti-collision"**, "Anti-collision success!" and card number (eg: "dfb73d2e") will be displayed if anti-collision is successes.
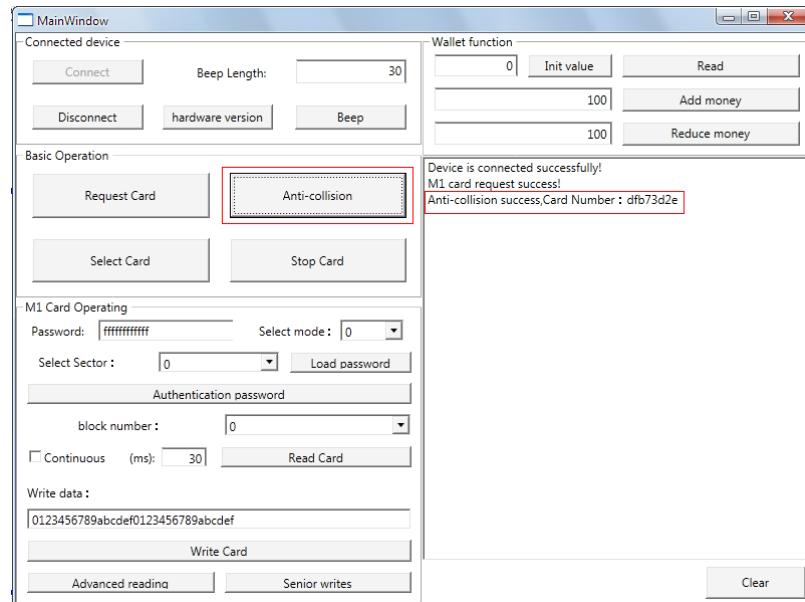
➢ Click "Select Card", "Select a card success!" will be displayed if select card is successes.
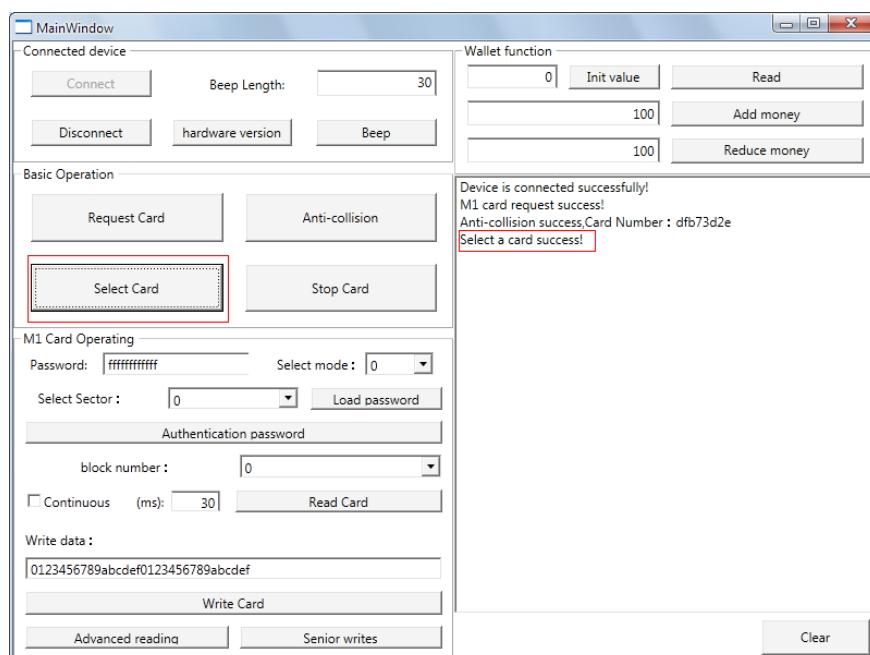
➢ Input M1 card password, the default password is "ffffffffffff", and select corresponding mode and section. (for mode selection: 0-3 stand for 4 types of A type passwords, 4-7 stand for 4 types of B type passwords.).

➢ Click "Load password", "Loading the password!" will be displayed if selected password mode is successfully loaded. Clicks "Authentication password" for authenticate the selected sector's password. "Password verification is successful!" will be displayed if selected sector's password is successfully verified.

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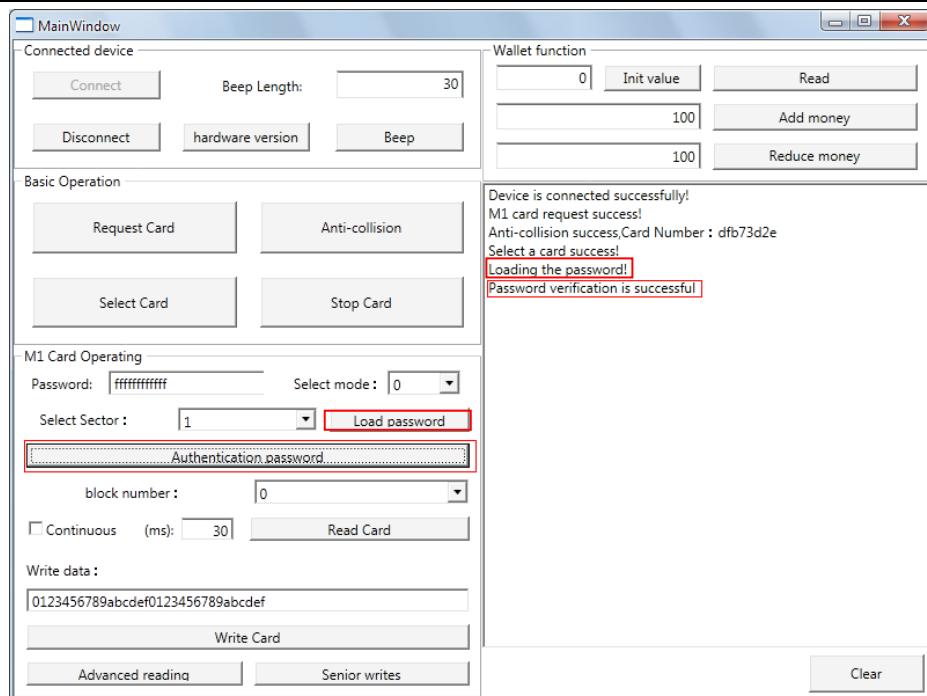
> ➢ Select "block number" and click "Read Card" for reading corresponding card data.

> Input data want to be written into selected block, the data written into card should be 16 bytes hexadecimal data. And click "Write Card" to write the data into the corresponding block.
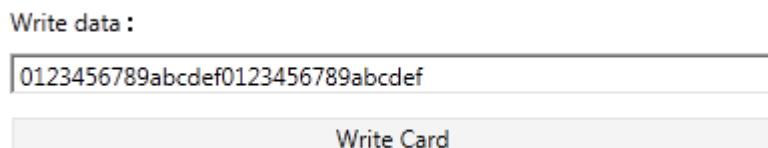
> ➢ The "Advanced reading" and "Senior writes" can simplify the above operation. What you need is just load password and select corresponding sector and block.


> ➢ The demo also has "Wallet function" which can operate e-wallet M1 card. It has "Init value", "Read", "Add money" and "Reduce money" functions.
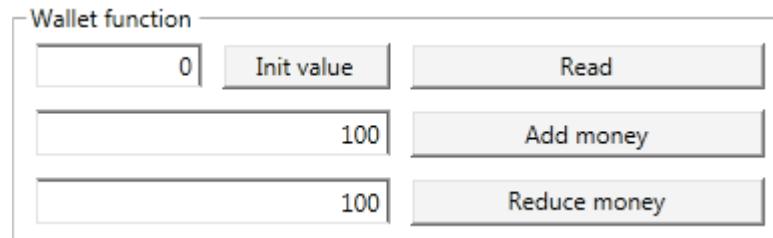
3-3-2 SLE4442 Card Operation

➢ 1、Open "HY-100Demo-SLE4442" as follows:
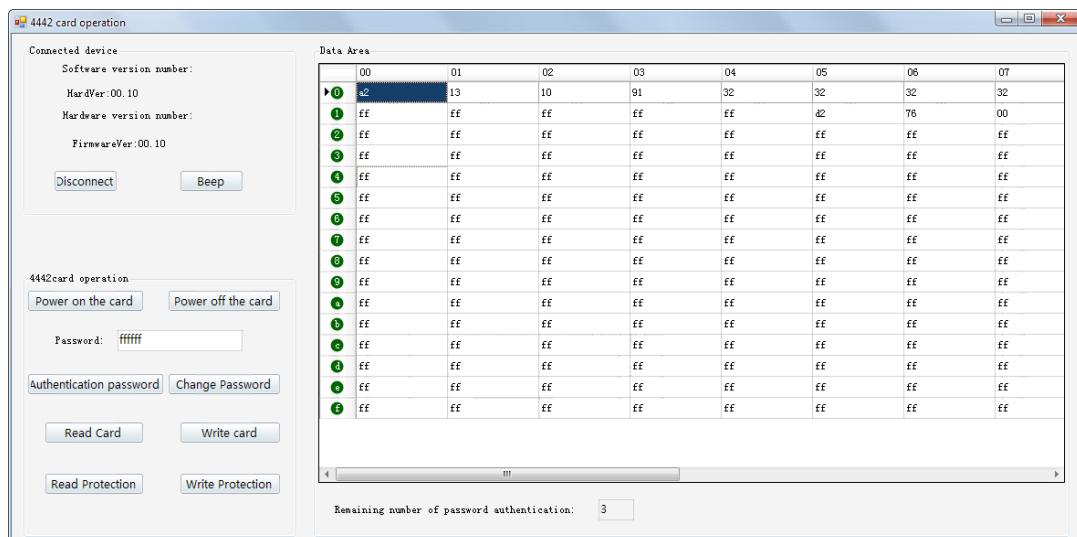
Well connected the data cable and click "connect" button to get the software version

number and hardware version number.
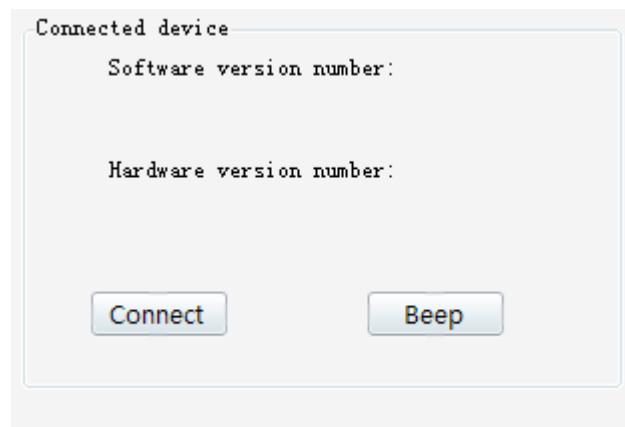
➢ The demo can operate SLE4442 card "Power on the card", "Power off card",

"Authentication password", "Change password", "Read Card", "Write card",

"Read Protection", "Write Proction" functions.

➢ Click "Power on the card" to power on the card and it will display the manufacture

code.
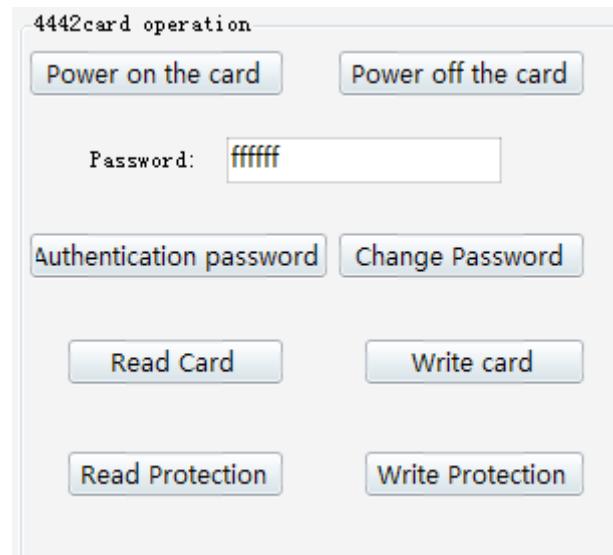
Input password, the default password is "ffffff", then click "Authentication password" for password authentication. It will display "Password authentication is successful!" if password authentication is succeed.
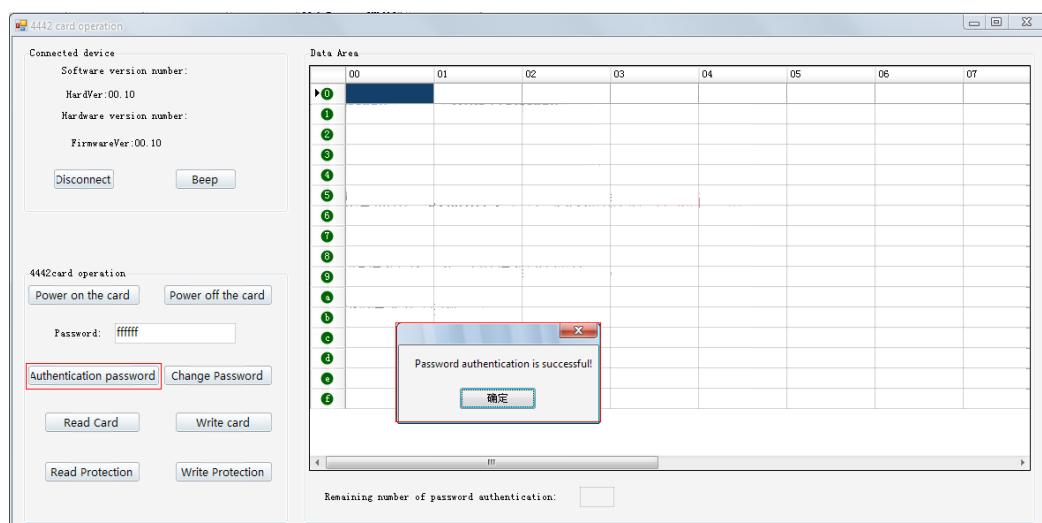
➢ After password authentication, the card can be operating change password, read card, write card, Read Protection and Write protection operations.

➢ Attention: New password is only valid when power off the card after change the password.

Chapter 4 Troubleshooting and Maintenance

This chapter provides troubleshooting solutions to common problems during RFID reader operation.

Common Troubleshooting

Note: If you encounter a problem you cannot solve, contact your dealer for assistance.

Problem	Causes	Solution
The indicator light fails to work.	1. Data cable is not well connected. 2.The LED light breaks down, which happens occasionally.	1.Check data cable connection 2. Try our DEMO, if it is still workable, change the damaged light.
PC fails find the reader.	2. Data cable is not properly connected. 2. Data cable problem 3. Reader hardware problem.	1. Check data cable connection. 2. Change a data cable 3. Change another PC. 4. Contact with your local dealer for maintenance.

Chapter 5 Warranty

Hy-100 RFID READER is warranted for a period of twelve (12) months from the date of original purchase for its hardware.

Terms & Conditions:

A. Warranty service is only available for products purchased from Hanyue Group or its authorized dealers.

B. Please make quantity inspection and quality test of the Products within 5 (five) working days since the customer got the device and feedback the Supplier the receipt of the Products in writing in this period. In case of incompleteness or nonfunctional units of the Products found by such inspection, the claim should be put forward within this period. The Supplier shall inspect the authenticity of the claim within 10 (ten) working days and supply the missing (nonfunctional) pieces of the Products to the Buyer at its own cost within 10 (ten) working days after confirmed the claim.

C. If such claims made over 5(five) working days from the date the Buyer receive the device, the Supplier shall inspect the authenticity of the claim within 10 (ten) working days and be responsible to supply replacement parts to the Buyer or repair the defect products for free within 10 (ten) working days after confirmed the claim. The buyer should pay other relative cost in repairing such as freight cost, and customs fees.

D. The Products may be serviced provided it remains unmodified and is operated under normal and proper conditions, while the Buyer must present the original purchase invoice or receipt for verification when warranty service is rendered.

E. The above warranty provisions shall not apply to the following cases, but repair service may be rendered at the Buyer's expense:

1. Warranty service is expired.
2. The Buyer is incapable of presenting a warranty card or the information in the warranty card is not complete or is altered
3. Defects or damage caused by accident or artificial factors like unusual physical or electrical stress, water or other liquids, etc.
4. Defects or damage resulted from failure to perform operator handling and scheduled maintenance instructions stated in the user's manual.
5. Other defects or damage do not caused by workmanship or material.

F. No repair service shall be applied to the following products:

1. Products not made by Hanyue Group.
2. Products that have been repaired, tampered with, altered or modified without authorization from Hanyue Group.

Affix 1

Warranty Card

Model:_____   Serial No.:_____

Customer:_____

Tel:_____   Fax:_____

Address: _____

Agent/Dealer:_____

Tel: _____   Purchase Date: _____

Stamp:

 Web: http: //www. hiultra.com

 Company: Hanyue Group

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FCC STATEMENT:

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.

Warning: 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.