# User Manual SMART MINI LIBRARY



#### Preface

This user manual generally introduces the features of smart mini library and illustrates how to use it. Please read it before you install and use it, and keep it for future reference.

# Chapter 1 Product Overview1.1 Product Introduction

Smart mini library is an advanced technology that conforms to the trend for modern library development. It is portable, convenient, and possesses a myriad of functions, such as borrow, return, renew, search, etc. It does great help in increasing the circulation of library items, decreasing the stress of librarians, reducing the cost of library as well as giving faster, easier, convenient services for patrons.

#### **Features:**

1. Operating Frequency: 13.56 MHz

2. Communication Protocol: ISO 15693, ISO 18000-3

3. Volume: >120

4. Software System: Android

5. Dimensions: 1630\*1888\*455 mm

- 6. Smart mini library system can cooperates with the current library management system by means of the middleware technology that is used to provide interoperability between all kinds of distributed machines.
- 7. Except for the maintenance, the device can work continuously within 24 hours in the indoors or semi-open environment.
- 8. The device is ergonomically designed in terms of user interface, device height as well as operator location. All these intend to reduce operator fatigue and discomfort.
- 9. It offers self-service mode coupled with other user friendly services, such as voice instruction, touch screen, interactive experience, etc. It is available for two languages, Chinese and English.
- 10. It supports a majority of cards, including IC card, ID card, barcode card, etc.
- 11. The structure of software system is supposed to be in modular structure so as to in accordance with library service and provide convenience for upgrade and maintenance. Additionally, this system is offered by the winning bidder.
- 12. Exchanging data with library server via network, the smart library system is capable of ensuring the real-time upgrade at the aspect of library items' status.
- 13. The system allows patrons to check in/out multiple library items, and automatically verifies the status of these items.
- 14. The system has ability to adjust light according to the environment.
- 15. It provides monitor function to inspect the running state of device, for example, inspect the item's check in/out, check the device resource, receive the malfunction report, repair device, and so on.
- 16. It enables you to search the library items in the current device and libraries, moreover, displays the location and state of these items.
- 17. It is available for single or multiple bookcase(s) at your preference.
- 18. It is equipped with an embedded camera to record the sound and video about the patrons.

# 1.2 Product Types-A-type



## 1.3 Operation Instruction

- 1. Insert library card into the card slot. As the image indicated on the screen, you should insert the card with the chip toward the machine, facing up.
- 2. Enter the default password: 888888.
- 3. Click *Yes*. However, if it is your first time use, you should click *Yes* to activate your account when the message of "Please activate" prompted by the screen. You can finish this step on staff station.
- 4. Continue to click *Yes* to enter the Borrow/Return interface. If your account has been activated, you will directly go to the next step.
- 5. The transparent door will automatically unlock once you press *Borrow/Return* button. After that, you can take or put the library items as needed. Then click *Yes* after closing the door.
- 6. It will show a list of library items that you borrowed or returned. Click *Yes* once again to verify all the transactions you did.
- 7. Continue to click *Yes*, it displays the message "Transaction completed successfully". If you want a written record of your transaction, you can opt to print a receipt.
- 8. Go back to the home page and choose *Exit*. Don't forget to take your card before leaving the machine.

# Chapter 2 Installation

# 2.1 Preparation for Installation

#### 2.1.1 Notice before Installation

Please make sure that all the things are well before installation, including device, components.

#### NOTE:

The height of the power is supposed to be in line with the stipulation of fire protection; Use key to open the device and verify the state of the circuit;

The positions to place the device should be flat and do not affect the fire engine access.

#### 2.1.2 Recommendation for the Device Position

Aisle of the first floor in teaching building

Entrance of dormitory building Beside the gatehouse

#### 2.2 Device Installation

#### 2.2.1 A -type

If you prefer A-type device, you only need to place them in the suitable locations because they have been assembled at factory. In addition, you are required to adjust the height of feet to keep the balance of the device, and select a capacious, suitable position for future operation, maintenance.

# Chapter 3 Device Configuration

## 3.1 Login

When the power is on, you will enter the home page as below:

Double click the Intevision logo to log in administrator interface, input the default password: 666666 to modify the equipment configuration.

#### 3.2 System Setting

There are several options in the system settings:

Navigation Bar: enable to exit software and enter Android original interface;

Device Type: A-type

Supported Card Type: M1 card, FRID card, IC card, SLE4442 card;

Server IP Setting: set the server IP according to the situation;

About the Device: based on the situation to set the device information and administrator password.

#### 3.3 Device Control

There are a lot of features on device control as following:

Inventory: quick identification for the shelved books;

Shelf Inventory Management: inventory check of the books per layer

Light Strip: enable/disable the light band;

Door: open/close the transparent door of bookcase;

Promotion Screen: enable/disable the LED promotion screen;

Fan: open/close the fan;

Timing Control of Light Strip: set the time of automatically opening/closing light strip; Active infrared intrusion detectors: enable/disable the active infrared intrusion detectors

# 3.4 Monitoring Record

You can enable or disable this function, also change the storage space and time of monitoring record.

# 3.5 Developer Mode

Below are various options in developer mode.

Debug Information: aid to detect the malfunction

Sound: voice instruction function

MQTT: MQTT service is used to upload the information about peripheral devices

Test Interface: to check the entire device's function is ok

NOTE: You can manually collapse the software by throwing null pointer to enter Android interface.

# Chapter 4 Network Configuration

Open the navigation bar to enter Android interface:

Go to Settings page to set the WIFI

If you use wired network, please click *More* button, and choose *Ethernet* to set the static or dynamic IP.

# Switching of power

Open the control cabinet door.

Remove the power protection cover plate with the Phillips screwdriver. As the picture follows:



When you open the cover, you can see three switch power sources. From left to right, the first one is 5V, the second one is 24V, and the last one is 12V. Only the input power switch of 12V requires manual switching. As the picture follows:



The red switch can be used to adjust the input of the power supply, and to the left is 100-120v ac input, to the right is 200-240v ac input. As the picture follows:



#### **FCC WARNING**

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

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.

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.

#### RF EXPOSURE STATEMENT

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with minimum distance 20cm between the radiator &you body.