User Manual

V1111B-THM-TB

Biometric Kiosk

XX300-45-00

DISCLAIMER: The V1111-THM-TB Biometric Kiosk is a screening device and is not intended for use in the detection or diagnosis of any disease and, as such, is not an FDA approved medical device. Subjects that have elevated body temperatures detected by the kiosk should be subject to secondary evaluation methods, including NCIT or clinical grade contact thermometer.

Vicon Industries Inc.
Tel: 631-952-2288
Fax: 631-951-2288
Toll Free: 800-645-9116
24-Hour Technical Support:
800-34-VICON (800-348-4266) UK:
44/(0) 1489-566300
www.vicon-security.com

Document Number: 8009-8300-45-00
Product specifications subject to change without notice.

Precautions

Precautions

Read this document completely before using this device, and strictly observe rules in this document when using this device. If you install this device in public places, provide the tip "You have entered the area of electronic surveillance" in an eye-catching place. Failure to correctly use electrical products may cause fire and severe injuries. To prevent accidents, carefully read the following context:

Symbols

This document may contain the following symbols whose meanings are described accordingly.

Symbol	Description
⚠ DANGER	Alerts you to fatal dangers which, if not avoided, may cause deaths or severe injuries.
⚠ WARNING	Alerts you to moderate dangers which, if not avoided, may cause minor or moderate injuries.
⚠ CAUTION	Alerts you to risks. Neglecting these risks may cause device damage, data loss, device performance deterioration, or unpredictable results.
🔑 TIP	Provides a tip that may help you resolve problems or save time.
📖 NOTE	Provides additional information.

⚠ **DANGER**

To prevent electric shocks or other dangers, keep power plugs dry and clean.

⚠ **WARNING**

Strictly observe installation requirements when installing the device. The manufacturer shall not be held responsible for device damage caused by users' non-conformance to these requirements.

Strictly conform to local electrical safety standards and use power adapters that are marked with the LPS standard when installing and using this device. Otherwise, this device may be damaged.

Use accessories delivered with this device. The voltage must meet input voltage requirements for this device.

If this device is installed in places with unsteady voltage, ground the device to discharge high energy such as electrical surges in order to prevent the power supply from burning out.

When this device is in use, ensure that no water or any liquid enters the device. If water or liquid unexpectedly enters the device, immediately power off the device and disconnect all cables (such as power cables and network cables) from this device.

Do not place the thermal imaging camera and unpackaged products at a radiation source with a high intensity regardless of whether the device is in the normal power-on state, for example, the sun, laser, and electric arc welder, and do not place the thermal imaging camera and unpackaged products against objects with a high heat source, for example, the sun. Otherwise, the accuracy of the thermal imaging camera will be affected. In addition, the detector in the thermal imaging camera may be permanently damaged.

If this device is installed in places where thunder and lightning frequently occur, ground the device nearby to discharge high energy such as thunder strikes in order to prevent device damage

⚠ **CAUTION**

Unless otherwise specified, do not use the camera in a temperature lower than 0 °C (32°F) or higher than +50 °C (+122 °F). Otherwise, the images displayed by the thermal imaging camera are abnormal and the device may be damaged if working beyond the temperature range for a long period.

The thermal camera should be powered on for half-hour, so that the temperature measurement is normal; powered on for more than 1.5 hours provides the best results.

The camera is designed for indoor installations and should not be installed in outdoor locations.

Avoid heavy loads, intense shaking and soaking to prevent damage during transportation and storage. The warranty does not cover any device damage that is caused during secondary packaging and transportation after the original packaging is taken apart.

Protect this device from falling and intense strikes; keep the device away from magnetic field interference, and do not install the device in places with shaking surfaces or under shocks.

Clean the device with a soft dry cloth. For stubborn dirt, dip the cloth into a mild neutral cleanser, gently wipe the dirt with the cloth, and then dry the device.

Do not jam the ventilation opening. Follow the installation instructions provided in this document when installing the device.

Keep the device away from heat sources such as radiators, electric heaters, or other heat equipment.

Keep the device away from moist, dusty, extremely hot or cold places, or places with strong electric radiation.

If the device is installed outdoors, take insect- and moisture-proof measures to avoid circuit board corrosion that can affect monitoring.

Remove the power plug if the device is idle for a long time.

Before unpacking, check whether the fragile sticker is damaged. If the fragile sticker is damaged, contact customer service or sales personnel. The manufacturer shall not be held responsible for any artificial damage of the fragile sticker.

.

Contents

Precautions i

Contents 1

1 Hardware Description 3

1.1 Product Features 3

1.2 Recommendations for Use 7

1.3 Dimensions 8

1.4 Installation and Precaution 9

1.5 Packaging list 14

2 Quick Configuration 15

2.1 System Login and Logout 15

2.2 Modify the Password 17

2.3 Preview Interface 18

2.3.1 Live Video Interface (Preview) 18

3 Configuration Setting 19

3.1 Menu Tree Structure 19

3.2 Basic Information 21

3.3 System Setting 21

3.3.1 Time configuration 21

3.3.2 User Management 22

3.3.3 System Parameters 24

3.4 Video Settings 26

3.5 Image Settings 26

3.5.1 Display Settings 26

3.6 Alarm 28

3.6.1 Alarm Output Settings 29

3.6.2 Alarm Notification Email 29

3.6.3 Alarm Input 30

3.7 Network Service 31

3.7.1 TCP/IP 31

3.7.2 Device Port Configuration 31

3.7.3 Upload Service 32

3.7.4 SMTP 33
3.8 UI & Sound Settings 34
3.9 Thermal Parameters 37
3.10 Access Condition 38
3.11 Upgrade and Maintenance 41
4 Facial Database 44
4.1 Add Face 44
5 Capture History 51

1 Hardware Description

1.1 Product Features

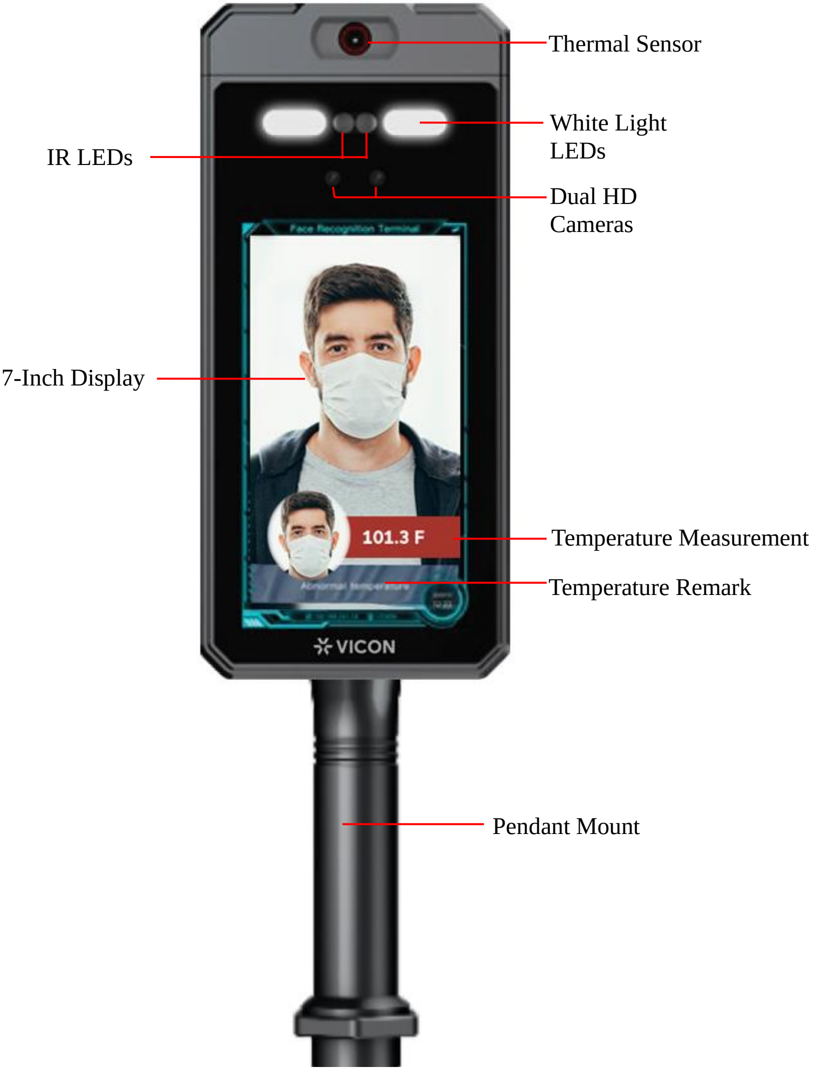
The biometric kiosk is an economical non-contact temperature measurement device designed to provide accurate and fast measurement of a person's body temperature when entering the premises. Combining quick thermal detection of elevated body temperatures with visual detection of faces and conformance to mask wearing requirements, the kiosk is ideal for use in a wide range of applications such as building lobbies and school entrances.

Advantages

- ±0.9° F (±0.5° C) measuring temperature detection accuracy.
- Thermal response time of ≤100 milliseconds
- Thermal imager resolution 120x90
- Integrated 1080p camera with 120 dB WDR
- 7-inch display with 1024x600 resolution
- Facial recognition, mask detection and alarming
- Temperature Display Overlay with alarm notification
- Simple snapshots can be created in standalone software
- 3 alarm inputs, 1 alarm output
- Powered by 12 VDC
- Multiple mounting options
- NDAA compliant
- Easily integrates with VAX Access Control

Appearance Instructions and Cable description

Figure 1-1 Feature Callouts



Thermal Sensor

White Light LEDs

IR LEDs

Dual HD Cameras

7-Inch Display

Temperature Measurement

Temperature Remark

Pendant Mount

Figure 1-2 Multi cable

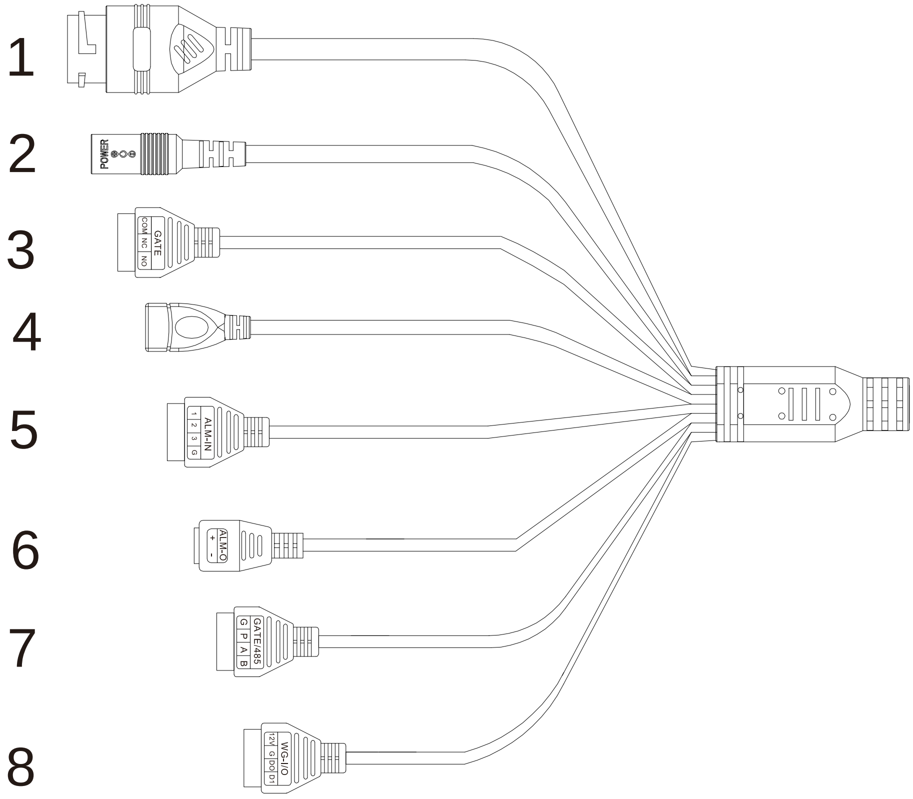


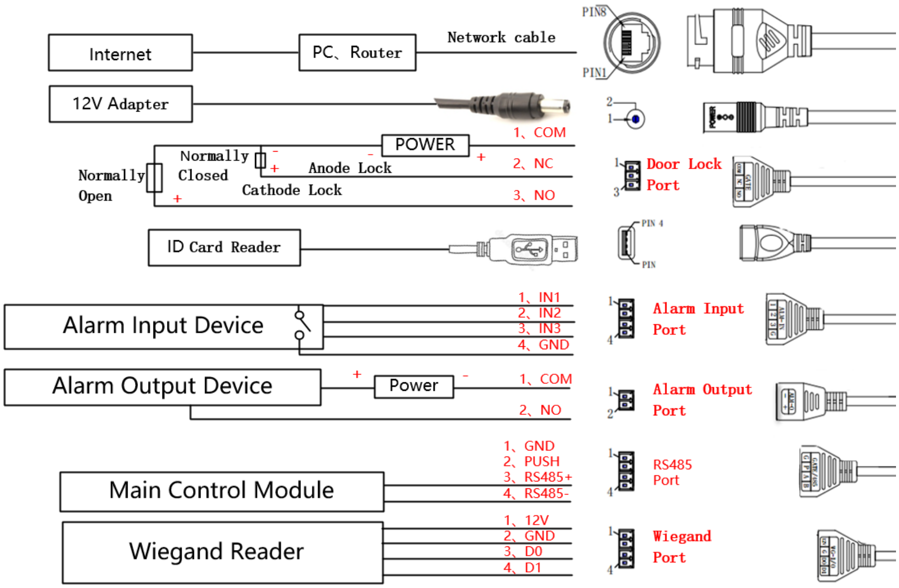
Table 1-1 Cable description

ID	Description	Description	Remarks
1 RJ45	Network port	Connect to Ethernet	Does not support PoE
2 POWER	Power	Connect to 12 VDC	
3 DOOR LOCK	COM	Connect to Access control COM	Access control port When the door lock is triggered, COMNO is short-circuited and NC is suspended
	NC	Connect to Access control COM NC	
	NO	Connect to Access control COM NO	

4 USB	USB port	Connect to USB ID reader.	For Future Use
5 ALARM-IN	1	Connect to alarm device line 1	Alarm IN
	2	Connect to alarm device line 2	
	3	Connect to alarm device line 3	
	G	GND	
6 ALARM-OUT	-	Alarm out COM, negative	Alarm OUT
	+	Alarm out, positive	
7 IO/ RS-485	G	GND	
	P	Connect to alarm light negative	For Future Use
	A	RS485 port A (+)	
	B	RS485 port B (-)	
8 WG-I/O	12V	DC 12V	Wiegand IN/OUT port
	G	GND	
	D0	Wiegand data port 0	
	D1	Wiegand data port 1	

The detail of connection is shown in Figure 1-3.

Figure 1-3 Multi cable connection diagram



1.2 Recommendations for Use

To ensure the measurement accuracy, install the device indoors at 68-95 °F (20~35 °C) ambient temperature.

There should be no other obvious heat source in the surrounding area.

There should be nothing covering the forehead.

It is recommended to start to measure temperature 30 minutes after being powered on.

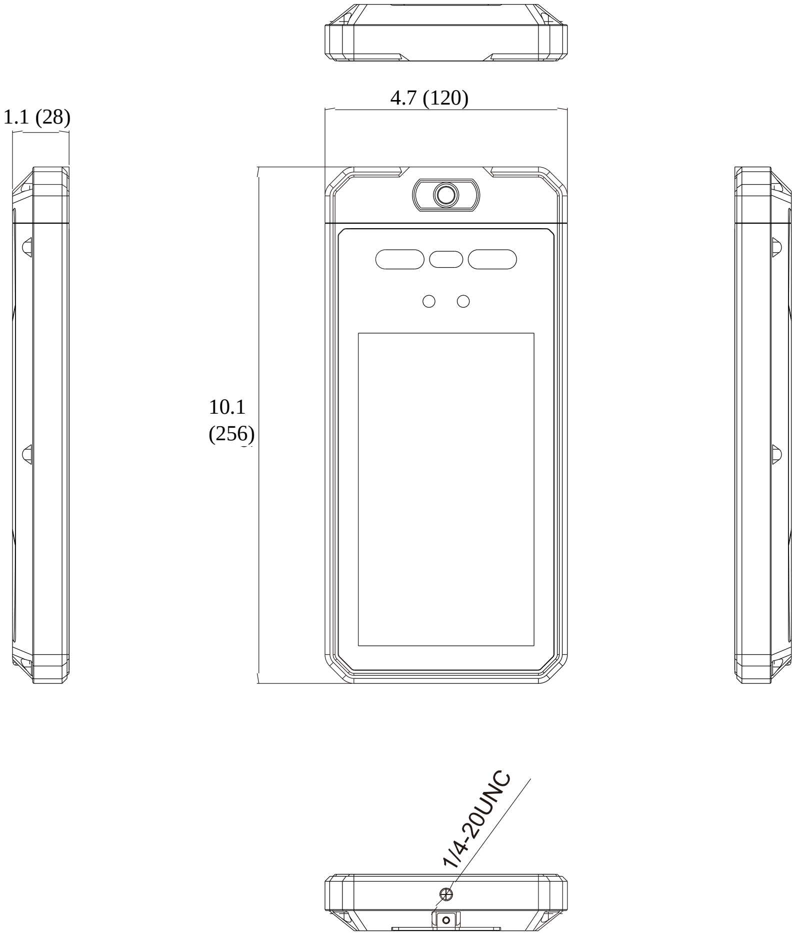
Please wait for 2-3 minutes before measuring temperature when coming from outdoors or other environment with large temperature difference.

The temperature can be measured in real time by aiming the human face at measurement area on the panel; this can trigger high temperature alarm.

1.3 Dimensions

.

Figure 1-4 Dimensions [unit: in. (mm)]



1.4 Installation and Precaution

The kiosk must be mounted at a height that allows the capture of faces and detection of temperature for a wide range of people's heights with the distance of detection considered. The graphic below set shows the recommended height.

Figure 1-5 Installing distance

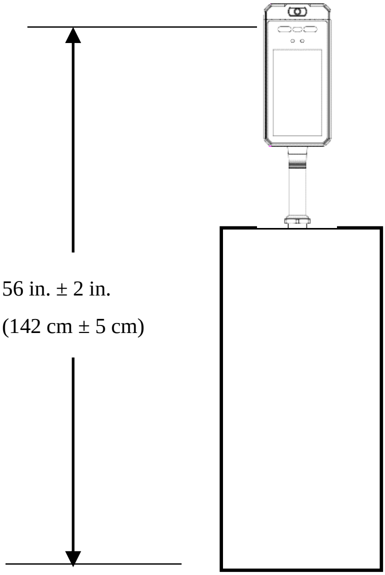
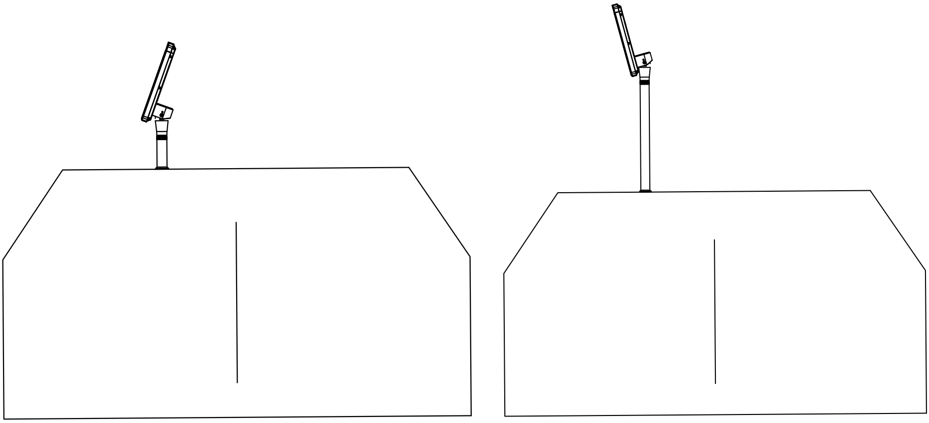


Figure 1-6 Typical mounting to a turnstile



Place at an elevation without adding a pendant mount. Place at an elevation with adding a pendant mount.

Mounting to a surface:

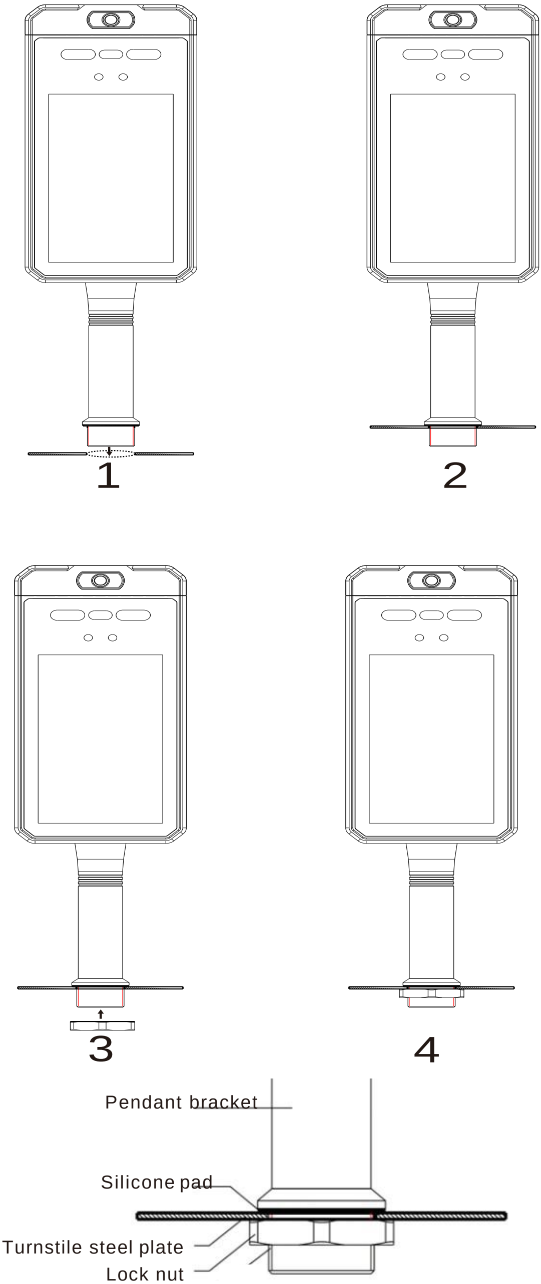
Drill a hole with the diameter is 1.3 in. (34 mm) on the surface according to Figure1-7, 1.

Remove the nut on the pendant and pass the threaded section of the pendant through the hole (Figure1-7, 2);

Screw the pendant nut onto the threaded section of the column and use a wrench or other tools to tighten the nut (Figure1-7, 3);

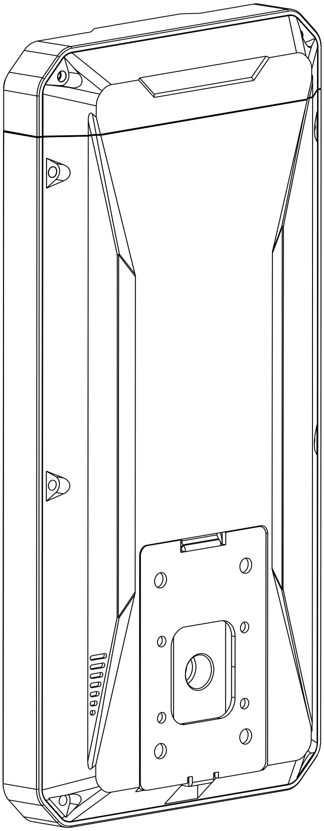
Connect the corresponding functions cable to multi-cable, and the installation is completed (Figure1-7, 4);

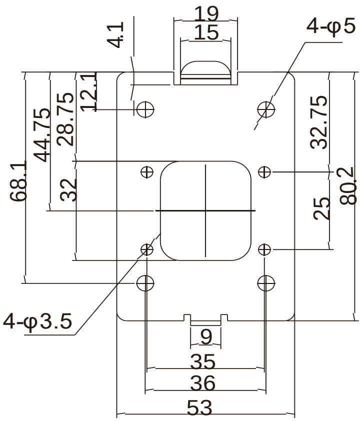
Figure 1-7 Surface mounting steps



Instructions for wall mounting:

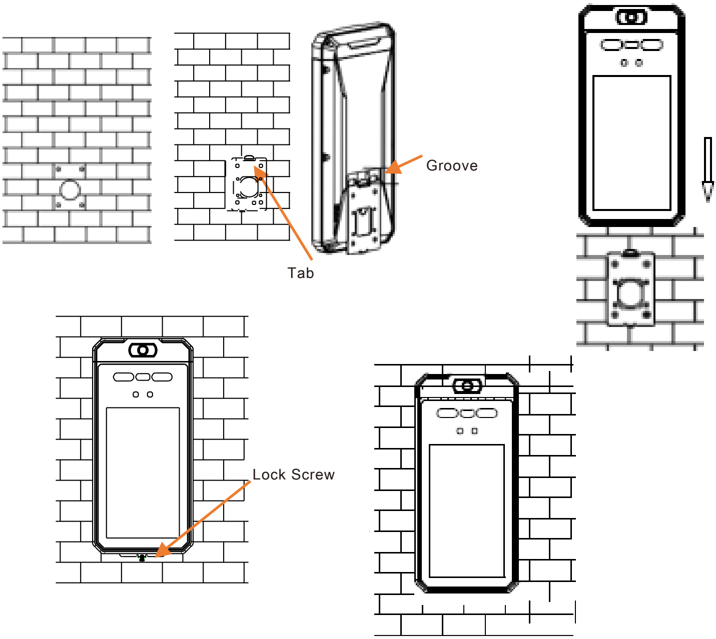
Remove the bracket from the Biometric Kiosk.





.

Figure 1-8 Wall mounting (drill the cable access hole)



Drill mounting holes and a cable access hole on the wall. Bracket should be installed at the recommended height.

Assemble the bracket to the wall according to the figure above.

Slide the kiosk onto the wall plate. The kiosk will hang from the groove on the back of the kiosk onto the mounting tab of the bracket.

Tighten the lock screw to secure to the wall.

1.5 Packaging list

Table 1-2 Package list

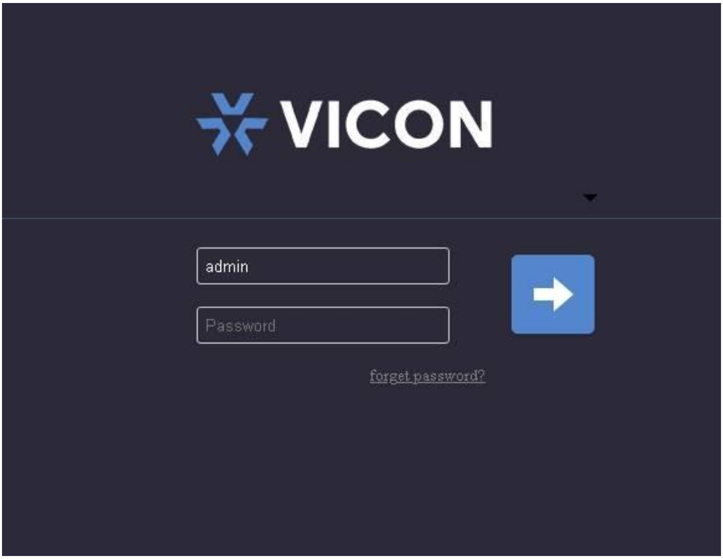
No.	Item	Quantity
1	Biometric Kiosk	1
2	Power supply 12 VDC, 2A	1
3	Screw package	1
4	L hexagonal wrench	1
5	Bracket	1

2 Quick Configuration

2.1 System Login and Logout

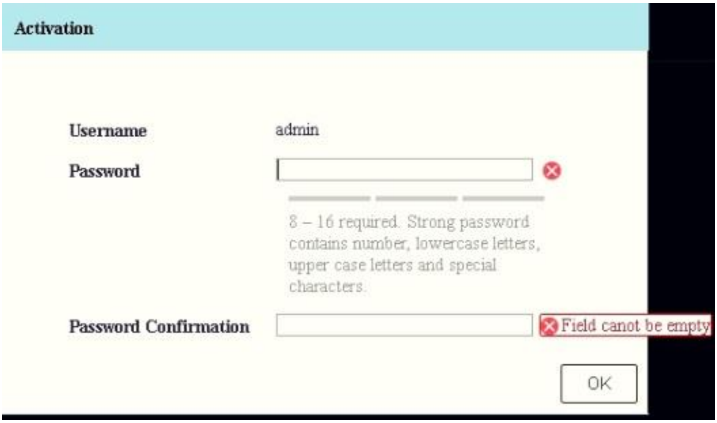
Enter the device IP address in the address bar of the internet browser (device default IP:192.168.0.120, the IP shows on device panel.). Press Enter to open the login page, as shown in Figure 2-1. The camera does have a DHCP option that can be enabled to allow the camera to find an IP address via a DHCP server; refer to the Networking section of this manual to set up DHCP.

Figure 2-1 Login interface



On first login, the default user name, admin, will display; user must click the arrow to use activation to set the password and security configuration questions, as shown in Figure 2-2.

Figure 2-2 Activation page



Activation

Username admin

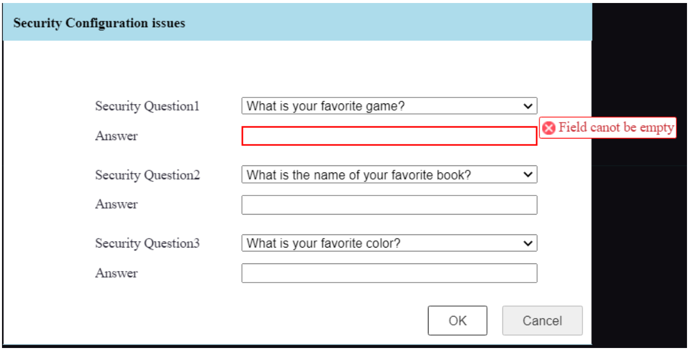
Password

8 – 16 required. Strong password contains number, lowercase letters, upper case letters and special characters.

Password Confirmation

Field canot be empty

Figure 2-3 Security configuration questions



Security Configuration issues

Security Question1 What is your favorite game?

Answer

Field canot be empty

Security Question2 What is the name of your favorite book?

Answer

Security Question3 What is your favorite color?

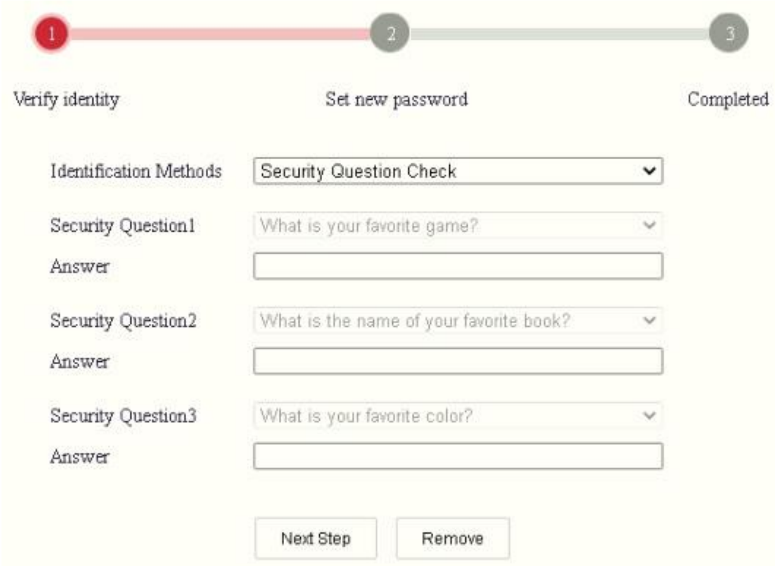
Answer

You can exit to the login page by clicking the Logout button in the top right corner of the page.

If you have forgotten your password, you can answer the security configuration questions to verify identity and then set a new password, as shown in Figure 2-4.

If you have forgotten your password and answers to the security configuration questions, contact technical support.

Figure 2-4 Forgetting password



Identification Methods: Security Question Check

Security Question1: What is your favorite game?

Answer:

Security Question2: What is the name of your favorite book?

Answer:

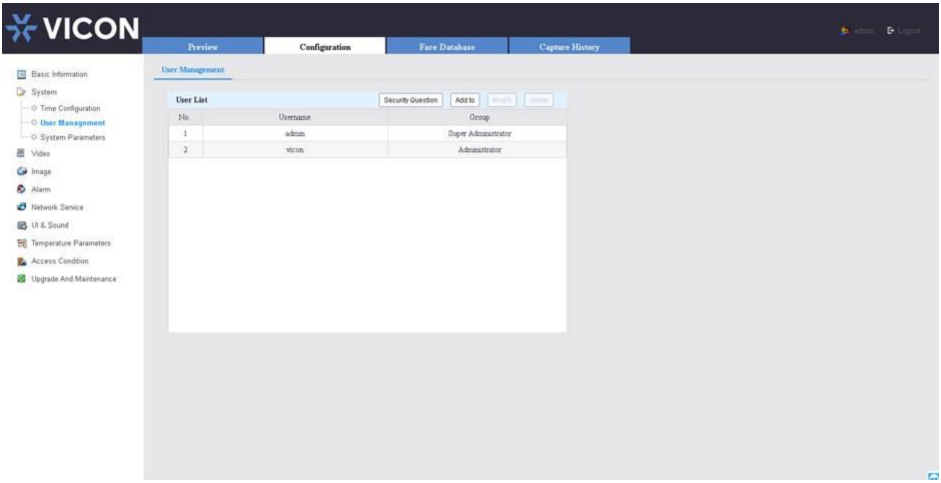
Security Question3: What is your favorite color?

Answer:

2.2 Modify the Password

At “Configuration < System < User Management” interface, the password can be modified, as shown in Figure 2-5.

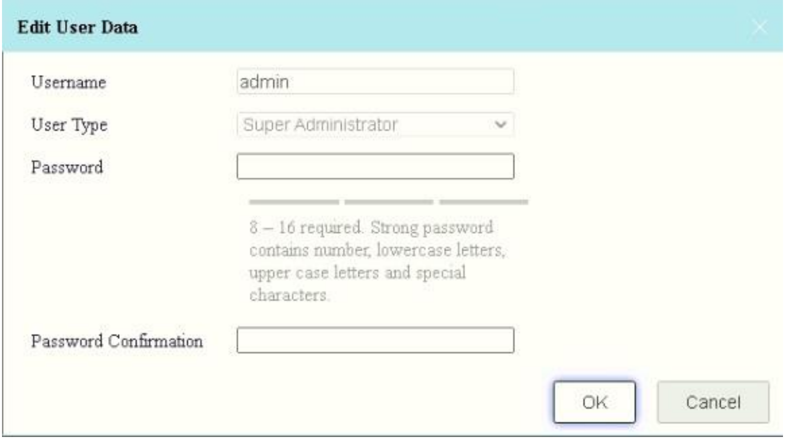
Figure 2-5 User Management



No.	Username	Group
1	admin	Super Administrator
2	vicon	Administrator

Choose the username from the user list and click “Modify” to change password, as shown in Figure 2-6.

Figure 2-6 Modify password



Edit User Data

Username: admin

User Type: Super Administrator

Password

8 – 16 required. Strong password contains number, lowercase letters, upper case letters and special characters.

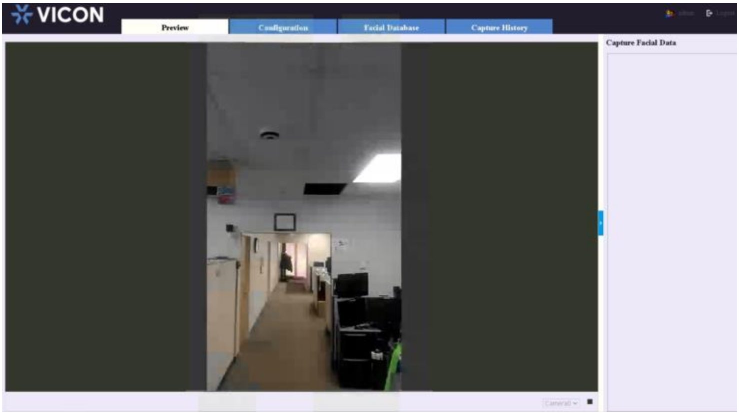
Password Confirmation

2.3 Preview Interface

2.3.1 Live Video Interface (Preview)

From the Live Video page, user can see live video, click tabs to access Configuration, Face Detection and Capture History interfaces and logout, as shown in Figure 2-7.

Figure 2-7 Preview interface

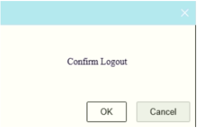


1. Monitor the live video.

2. Tabs for: Configuration settings for the system, video, image, alarm, network service, UI & sound, temperature parameters, access condition and upgrade and maintenance; Face Database, Capture History.

3. User of current logged in account.

4. Logout button. Confirm logout displays.



Confirm Logout

3 Configuration Setting

3.1 Menu Tree Structure

The chart below provides an overview of the menu structure for configuration. Each of these menus is described in detail in the sections that follow:

Basic Information	**System**	**Video**
Device Name	Time Configuration	Resolution
Device ID	Time Zone	Rate Type
Manufacturer Name	Time Format	Video Frame Rate
Device Model	NTP Timing	Max Bitrate
Device Series Number	Manual Timing	Average Bitrate
Hardware Version	User Management	Video Encoding
Software Version	User List	I Frame Interval
Thermal Reader Serial Number	System Parameters	
Thermal Reader Firmware Version	Attribute Settings	
Thermal Reader SDK Version	Facial Recognition Settings	
Device Name	Local Storage Duration	
	Local Storage	
	Time Configuration	

Image	**Alarm**	**Network Service**
Image Adjustment	Alarm Output Settings	TCP/IP
Digital Wide Dynamic Range	Alarm Notification Email	Enable DHCP
Exposure Settings	Alarm Input	DNS Server Configuration
Facial Auto Exposure Settings		Device Port
Other		HTTP Port
		RTSP port
		Upload Service
		HTTP Upload Server Settings
		MQTT Upload Server Settings
		Image Upload Settings
		SMTP
		SMTP Server Address

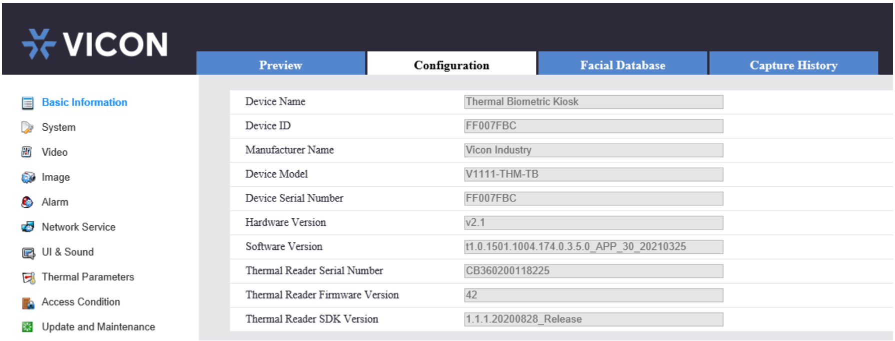
UI & Sound	**Thermal Parameters**	**Access Conditions**
Panel UI Settings	FFC Control	Door Unlock Trigger Condition
Show IP	Show Infrared Image	Enable Thermal Detection
Language	Thermal Parameters	Enable Mask Detection
Panel Sound And Image Settings	Temperature Unit	Enable Guest Access
No Mask Detection	Min Temperature	Unlock Control Param
Over Temperature Detection	Max Temperature	Doorlock Time (ms)
Entry Permitted	Thermal Correction Coefficient	Unlock Delay (ms)
Anti-Spoofing	Env Temp Offset	Wiegand Settings
Unrecognized Person Detection	Env Temperature	Wiegand Mode
		Wiegand Bits
		Wiegand Format
		Type
		ID Reader Link Mode

Update and Maintenance
Language
Reboot
Reset
Update

3.2 Basic Information

At basic information interface, user can set the device name, device ID, view the device model, device serial number, hardware version, web version, thermal serial, thermal SDK version, as shown in Figure 3-1.

Figure 3-1 Basic information



Device Name	Thermal Biometric Kiosk
Device ID	FF007FBC
Manufacturer Name	Vicon Industry
Device Model	V1111-THM-TB
Device Serial Number	FF007FBC
Hardware Version	v2.1
Software Version	t1.0.1501.1004.174.0.3.5.0_APP_30_20210325
Thermal Reader Serial Number	CB360200118225
Thermal Reader Firmware Version	42
Thermal Reader SDK Version	1.1.1.20200828_Release

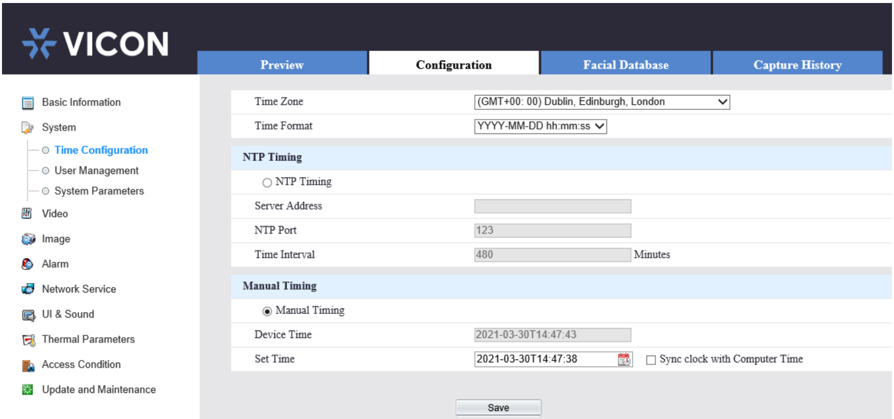
3.3 System Setting

At System interface, user can set time configuration, user management, system parameters.

3.3.1 Time configuration

Set the time zone, time/date format and the time of device, as shown in Figure 3-2.

Figure 3-2 Time configuration page



Time Zone: (GMT+00: 00) Dublin, Edinburgh, London

Time Format: YYYY-MM-DD hh:mm:ss

NTP Timing

○ NTP Timing

Server Address:

NTP Port: 123

Time Interval: 480 Minutes

Manual Timing

● Manual Timing

Device Time: 2021-03-30T14:47:43

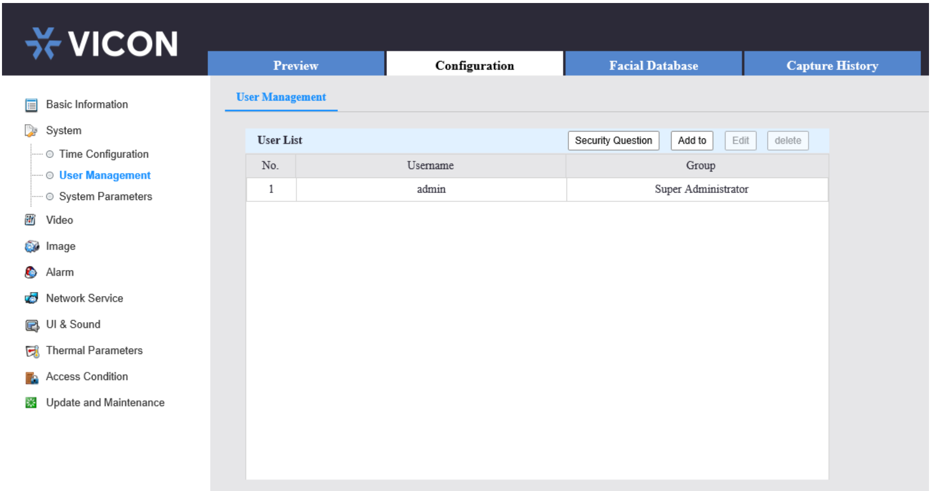
Set Time: 2021-03-30T14:47:38 □ Sync clock with Computer Time

There are two modes to set time, NTP timing or manual timing; select your preference and enter pertinent information. Click Save to save the settings.

3.3.2 User Management

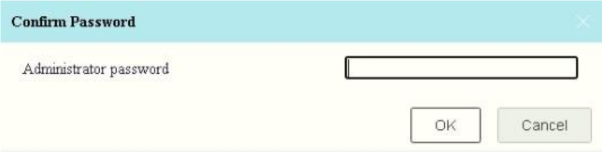
At “Configuration > System > User Management” interface, user can modify the security questions and password, as shown in Figure 3-3.

Figure 3-3 User management interface



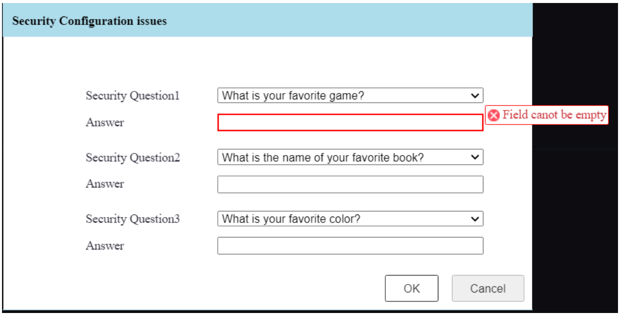
No.	Username	Group
1	admin	Super Administrator

Click “Security question;” the pop-up window shows as following,



Input the password to enter security configuration questions, as shown in Figure 3-4. Click OK to save the settings or cancel the changes.

Figure 3-4 Security questions



Security Configuration issues

Security Question1: What is your favorite game?

Answer:

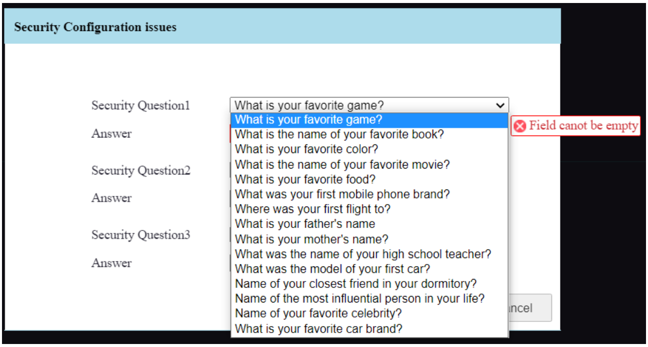
Field canot be empty

Security Question2: What is the name of your favorite book?

Answer:

Security Question3: What is your favorite color?

Answer:



Security Configuration issues

Security Question1: What is your favorite game?

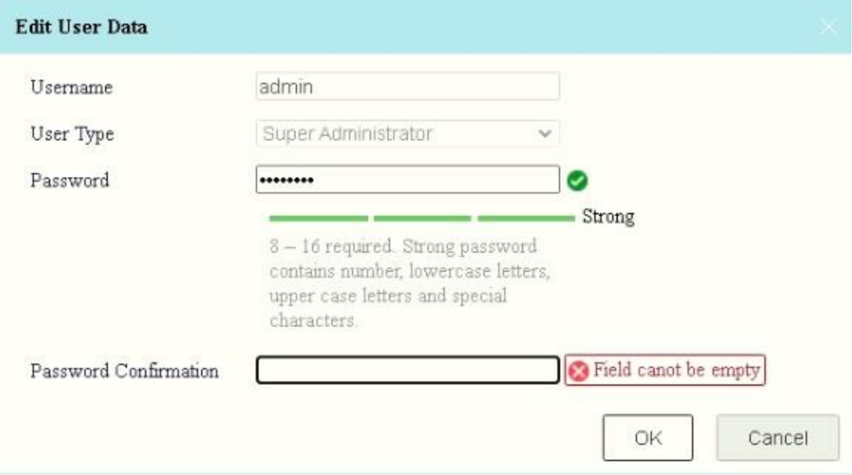
Field canot be empty

Answer
Security Question2
Answer
Security Question3
Answer
What is your favorite game?
What is the name of your favorite book?
What is your favorite color?
What is the name of your favorite movie?
What is your favorite food?
What was your first mobile phone brand?
Where was your first flight to?
What is your father's name
What is your mother's name?
What was the name of your high school teacher?
What was the model of your first car?
Name of your closest friend in your dormitory?
Name of the most influential person in your life?
Name of your favorite celebrity?
What is your favorite car brand?
ncel

Choose the questions and enter the answers; if the password is forgotten, you can use the security questions to verify identity and set a new password. Click OK to save the settings or cancel the changes.

Choose the admin user, click “Modify” to change password, as shown in Figure 3-5. Click OK to save settings or cancel the changes.

Figure 3-5 Users modify



Edit User Data

Username: admin

User Type: Super Administrator

Password: ••••••••• — Strong

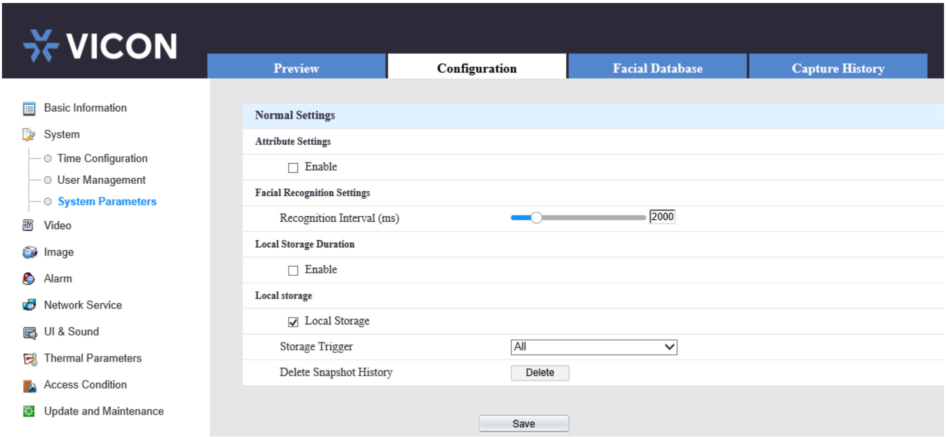
8 – 16 required. Strong password contains number, lowercase letters, upper case letters and special characters.

Password Confirmation: Field canot be empty

3.3.3 System Parameters

At “Configuration > System > System Parameters” interface, set the parameters of system for Normal Settings, including Attribute Settings, Face Recognition Settings, Local Storage Duration and Local Storage, as shown in Figure 3-6.

Figure 3-6 System parameters interface



Normal Settings

Attribute Settings

□ Enable

Facial Recognition Settings

Recognition Interval (ms): 2000

Local Storage Duration

□ Enable

Local storage

☑ Local Storage

Storage Trigger: All

Delete Snapshot History: Delete

Table 3-1 System parameters

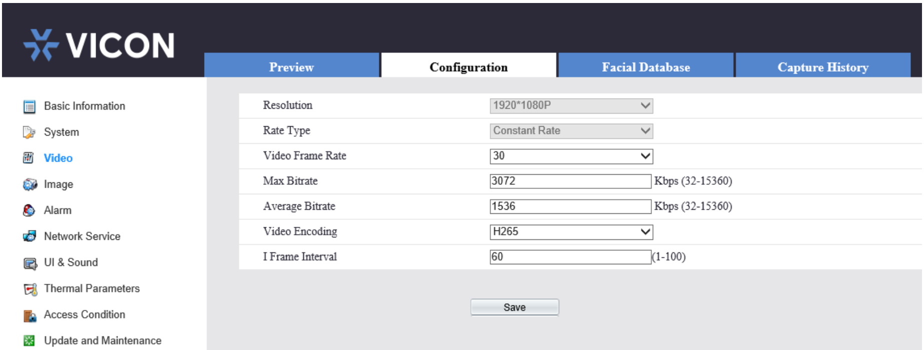
Parameter	Description	Configuration Method
Attribute Settings	Enable the attribute; you can choose whether to detect body temperature or mask detection.	[Setting method] Check
Face Recognition Settings	Set the recognition interval (milliseconds).	[Setting method] Drag the slider.
Local Storage Duration	Enable local storage; you can set the timing duration (day)	[Setting method] Check Input the value from 1 to 30 days
Local Storage	Enable.	[Setting method] Check
Storage Trigger	Select All, Over Temperature, or No mask	[Setting method] Select from dropdown.
Delete Snapshot History	User can delete all snapshot history	[Setting method] Click

Click Save to save the settings.

3.4 Video Settings

At “Configuration > Video” interface, user can set the parameters of video, as shown in Figure 3-7.

Figure 3-7 Video settings interface



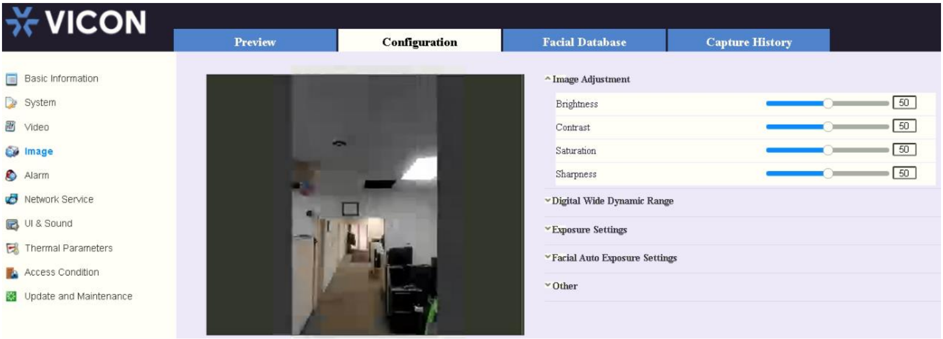
Resolution	1920*1080P
Rate Type	Constant Rate
Video Frame Rate	30
Max Bitrate	3072 Kbps (32-15360)
Average Bitrate	1536 Kbps (32-15360)
Video Encoding	H265
I Frame Interval	60 (1-100)

Set the resolution, rate type, video frame rate, max bitrate, average bitrate, video encoding, and I frame interval from the dropdown lists. Click “Save” to save the settings. The device is restarted; login again and the settings will take effect.

3.5 Image Settings

At “Configuration > Image” interface, user can set display settings, wide dynamic range, exposure settings, facial exposure settings and other settings, as shown in Figure 3-8.

Figure 3-8 Image settings interface



Brightness	50
Contrast	50
Saturation	50
Sharpness	50

3.5.1 Display Settings

At display settings page, user can set image adjustment, digital wide dynamic, HDR, exposure settings, face AE settings and other parameters.

Image adjustment:

Table 3-2 Image adjustment

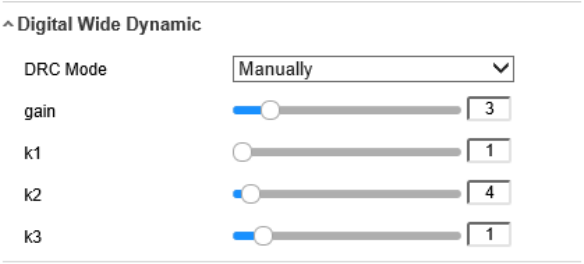
Parameter	Description	Configuration Method
Contrast	Indicates the contrast between the bright part and the dark part of an image. As the value increases, the contrast increases.	[Setting method] Drag the slider. [Default value] **50**
Brightness	Indicates the total brightness of an image. As the value increases, the image becomes brighter.	[Setting method] Drag the slider. [Default value] **50**
Sharpness	Indicates the border sharpness of an image. As the value increases, the borders become clearer, and the number of noise points increases.	[Setting method] Drag the slider. [Default value] **50**
Saturation	Indicates the color saturation of an image. As the value increases, the image becomes more colorful.	[Setting method] Drag the slider. [Default value] **50**

Digital Wide Dynamic：

When low-brightness areas and high-brightness areas appear in the same picture at the same time, it may cause overexposure or loss of details in the dark. Turning on wide dynamic can enhance the dark part and suppress the bright part to get better performance. You can choose manual, automatic or off mode.

When the DRC mode is manual, set the gain, k1, k2, k3 by dragging the slider, as shown in Figure 3-9.

Figure 3-9 Digital wide dynamic page



^ Digital Wide Dynamic

DRC Mode: Manually

gain: 3

k1: 1

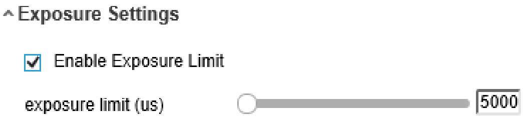
k2: 4

k3: 1

Exposure Settings:

Check “Enable Exposure Limit” to enable the function, as shown in Figure 3-10.

Figure 3-10 Exposure settings page



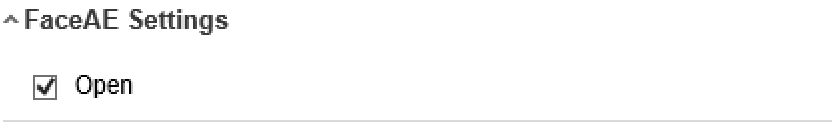
^ Exposure Settings

☑ Enable Exposure Limit

exposure limit (us): 5000

Face AE Exposure Settings:

Figure 3-11 Face AE settings page

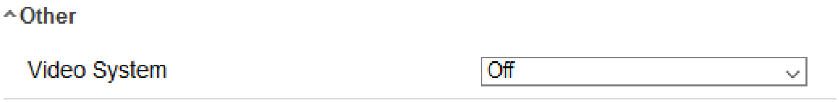


^ FaceAE Settings

☑ Open

Other:

Figure 3-12 Other page



^ Other

Video System: Off

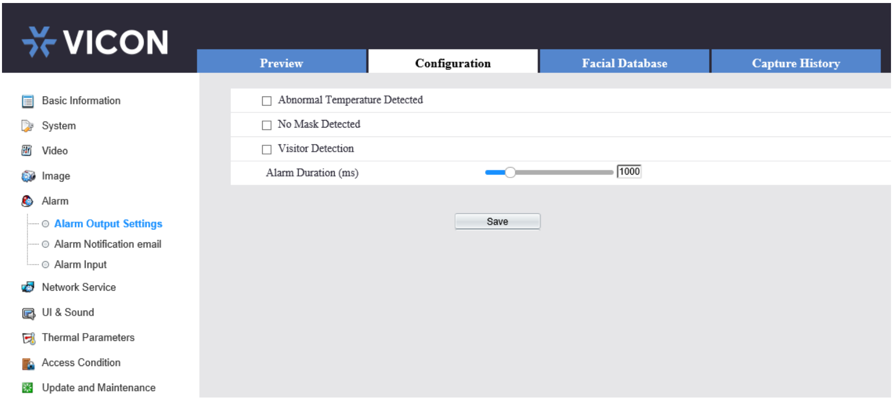
3.6 Alarm

At alarm interface, user can set the Alarm Output Settings, Alarm Notification Email, and Alarm Input.

3.6.1 Alarm Output Settings

At “Configuration > Alarm > Alarm Output Settings” interface, user can check the abnormal temperature detected, no mask, visitor detection no, and set alarm duration, as shown in **Error! Reference source not found.**. User should connect the alarm IO output port to external alarm device first.

Figure 3-13 Alarm Output Settings



□ Abnormal Temperature Detected

□ No Mask Detected

□ Visitor Detection

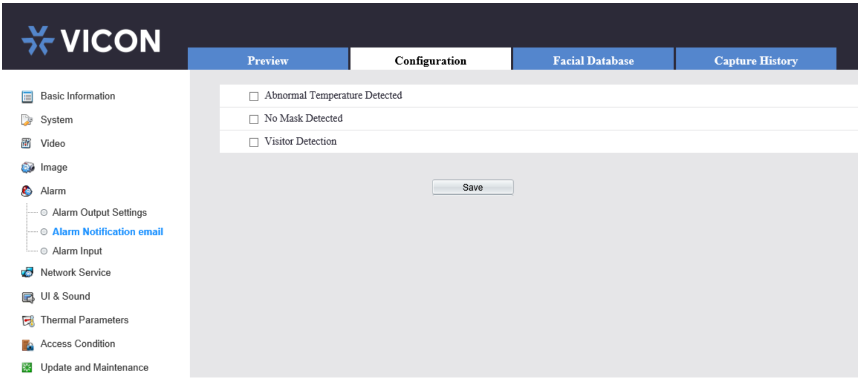
Alarm Duration (ms) 1000

Click Save to save settings.

3.6.2 Alarm Notification Email

At “Configuration > Alarm > Alarm Notification Email” interface, user can check the abnormal temperature, no mask detected, visitor detection, as shown in Figure 3-14. User should set the parameters of SMTP so that the alarm information can be sent.

Figure 3-14 Alarm notification email



□ Abnormal Temperature Detected

□ No Mask Detected

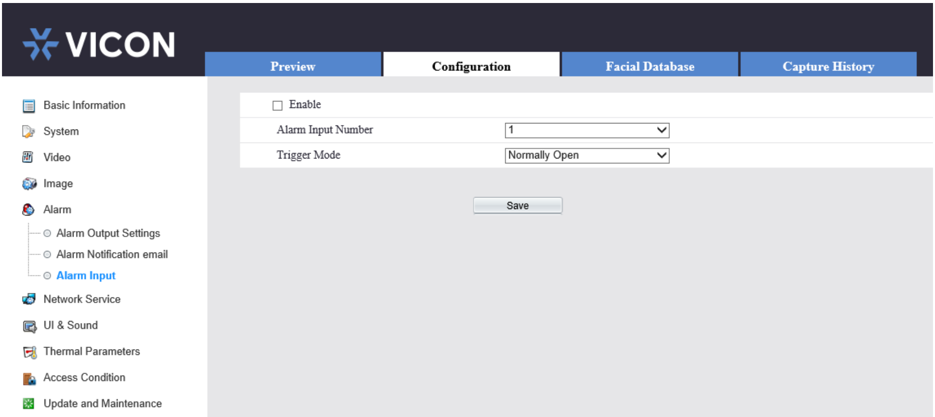
□ Visitor Detection

Click “Save” to save the settings.

3.6.3 Alarm Input

At “Configuration > Alarm > Alarm Input” interface, user can enable the alarm input. Enable the function. Choose the alarm input number (depends on which alarm input port is used.) and the trigger mode (Normally Open/Normally Closed; depends on the feature of alarm input device), as shown in Figure 3-15.

Figure 3-15 Alarm input



□ Enable

Alarm Input Number: 1

Trigger Mode: Normally Open

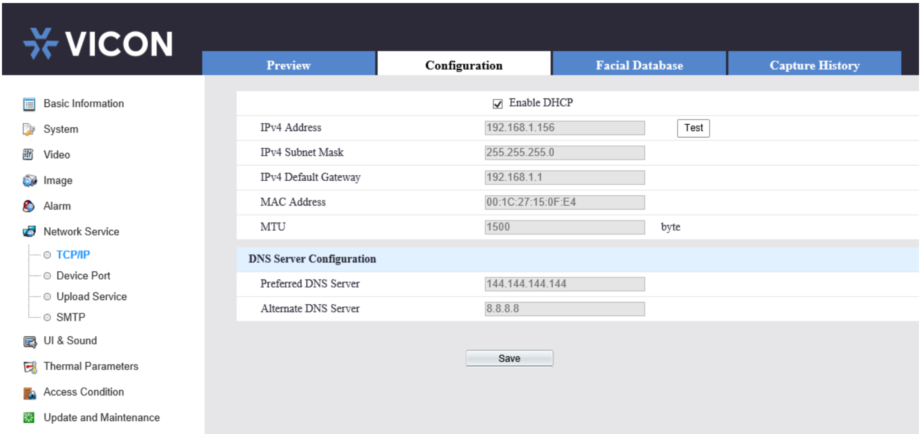
Click “Save” to save the settings.

3.7 Network Service

3.7.1 TCP/IP

At “Configuration > Network Service > TCP/IP” interface, user can set the TCP/IP parameters, as shown in Figure 3-16.

Figure 3-16 TCP/IP configuration interface



☑ Enable DHCP

IPv4 Address	192.168.1.156	
IPv4 Subnet Mask	255.255.255.0	
IPv4 Default Gateway	192.168.1.1	
MAC Address	00:1C:27:15:0F:E4	
MTU	1500	byte

DNS Server Configuration

Preferred DNS Server	144.144.144.144
Alternate DNS Server	8.8.8.8

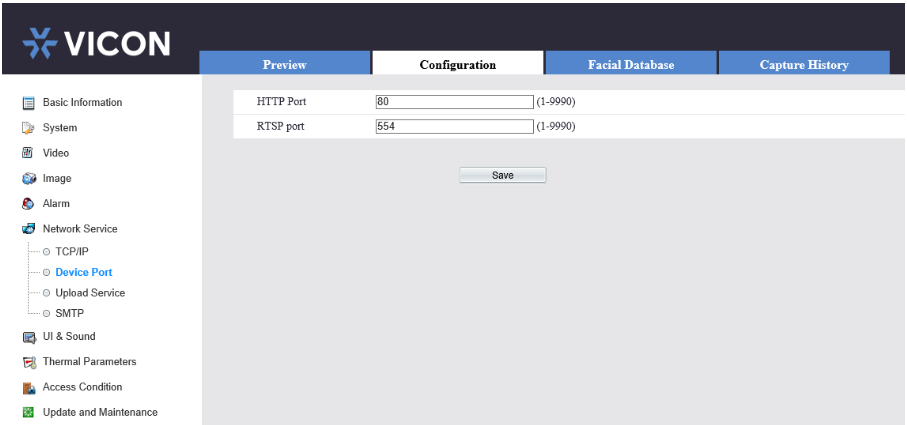
You can check the enable DHCP to obtain parameters automatically or modify the parameter manually.

Click “Save” to save the settings.

3.7.2 Device Port Configuration

At “Configuration > Network Service > Device Port” interface, user can set the HTTP port and RTSP port, as shown in Figure 3-17.

Figure 3-17 Device Port Configuration interface



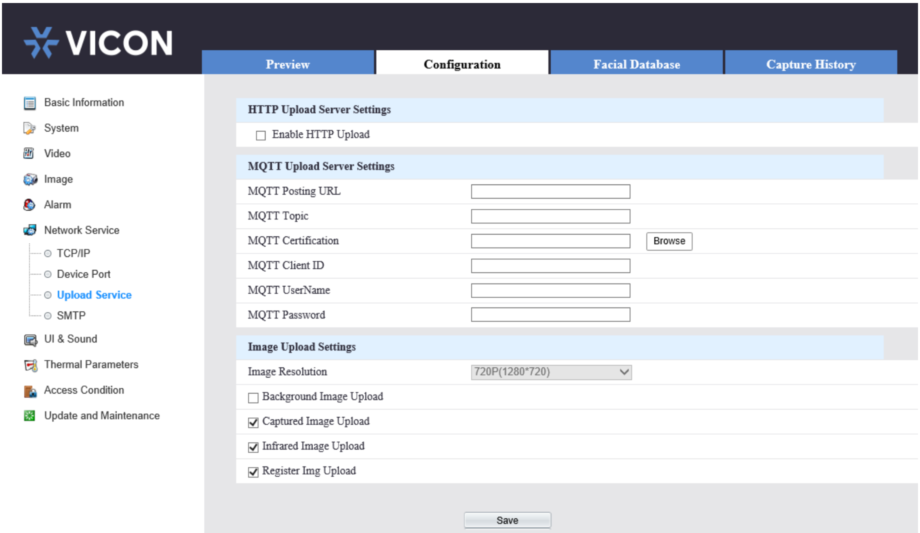
HTTP Port	80	(1-9990)
RTSP port	554	(1-9990)

Input the HTTP port (default is 80) and RTSP port (default is 554). Click "Save" to save the settings. You will need to login to the web using the new port after changing the port.

3.7.3 Upload Service

At "Configuration >Network Service > Upload Service" interface, set the parameters of HTTP Upload Server Settings, MQTT Upload Server Settings, and Background Settings, as shown in Figure 3-18.

Figure 3-18 Server settings interface



HTTP Upload Server Settings

☐ Enable HTTP Upload

MQTT Upload Server Settings

MQTT Posting URL

MQTT Topic

MQTT Certification

MQTT Client ID

MQTT UserName

MQTT Password

Image Upload Settings

Image Resolution: 720P(1280*720)

☐ Background Image Upload

☑ Captured Image Upload

☑ Infrared Image Upload

☑ Register Img Upload

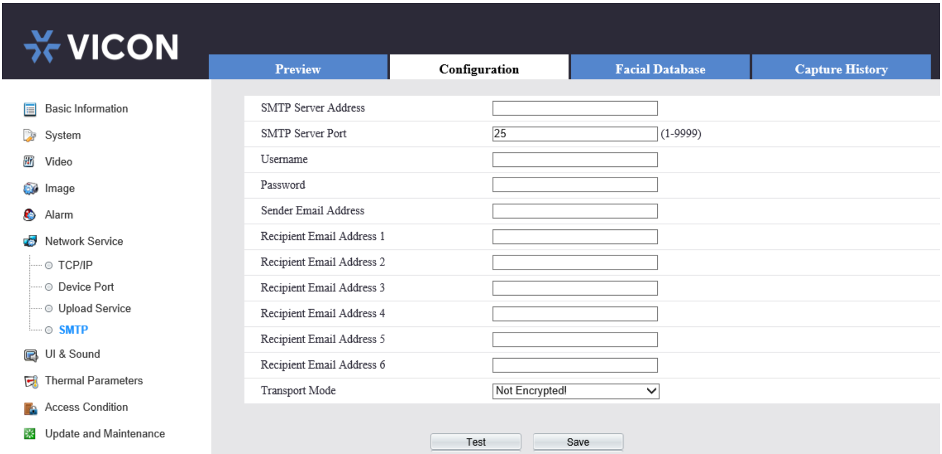
Picture Upload Settings:

User can choose different pictures to upload; check background image upload, capture image upload, infrared image upload, and/or register image upload.

3.7.4 SMTP

At “Configuration >Network Service > SMTP” interface, user can enter SMTP server information and define email sender and recipients, as shown in Figure 3-19.

Figure 3-19 SMTP interface



SMTP Server Address
SMTP Server Port 25 (1-9999)
Username
Password
Sender Email Address
Recipient Email Address 1
Recipient Email Address 2
Recipient Email Address 3
Recipient Email Address 4
Recipient Email Address 5
Recipient Email Address 6
Transport Mode Not Encrypted!

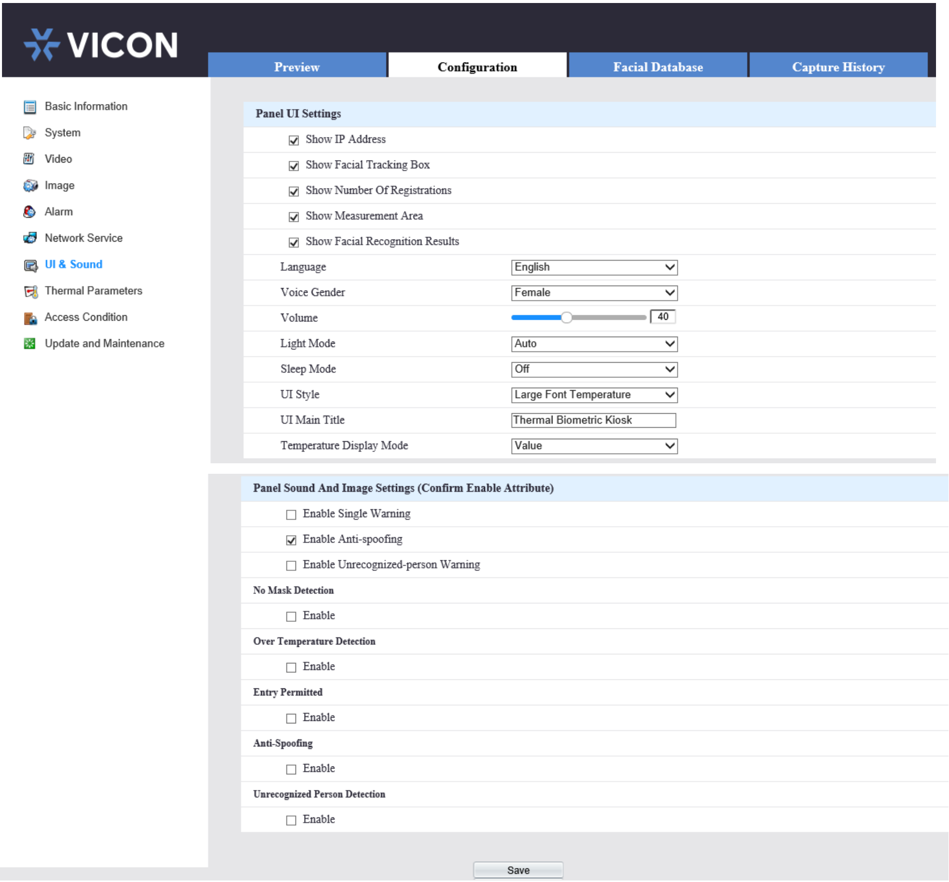
Table 3-3 SMTP

Parameter	Description
SMTP Server Address	The email server address.
SMTP Server Port	The email server port
Username Password	The username of email The password of email
Sender Email Address	The email address of sender
Recipient Email Address (1-6)	The email address of recipient.
Transport Mode	Select from the dropdown list: Not Encrypted, Encrypted

3.8 UI & Sound Settings

At “ Configuration > UI & Sound” interface, set the parameters of panel, as shown in Figure 3-20.

Figure 3-20 UI & Sound interface



Panel UI Settings

☑ Show IP Address

☑ Show Facial Tracking Box

☑ Show Number Of Registrations

☑ Show Measurement Area

☑ Show Facial Recognition Results

Language	English
Voice Gender	Female
Volume	40
Light Mode	Auto
Sleep Mode	Off
UI Style	Large Font Temperature
UI Main Title	Thermal Biometric Kiosk
Temperature Display Mode	Value

Panel Sound And Image Settings (Confirm Enable Attribute)

□ Enable Single Warning

☑ Enable Anti-spoofing

□ Enable Unrecognized-person Warning

No Mask Detection

□ Enable

Over Temperature Detection

□ Enable

Entry Permitted

□ Enable

Anti-Spoofing

□ Enable

Unrecognized Person Detection

□ Enable

Table 3-4 UI & Sound settings

Parameter	Description	Configuration Method
Panel UI Settings	Check the **Show IP Address**, **Show facial tracking box**, **Show number of registrations**, **Show measurement area**, **Show facial recognition results**. Choose the panel's language; choose from a list of languages, including English, Simplified Chinese, Traditional Chinese, Japanese, Korean, Russian, Italian, Spanish, German, French, Portuguese, Turkish, Romanian, Polish. Select voice gender; adjust the volume. Set the **Light mode**, **Sleep mode** (set the mode of LCD), **UI style** (visible image, thermal image, large font temperature), **UI main title** and **Temperature Display Mode**.	[Setting method] Check or choose from drop-down list.
Panel Sound and Image Settings (Confirm Enable Attribute)	Check to enable single warning (the same person will only be warned once when remaining standing before the device), anti-spoofing, unrecognized person warning (stranger). The attribute must be enabled.	[Setting method] Check
No Mask Detection	Enable no mask detection; select picture settings and prompt sound settings. The camera will display and broadcast the set pictures and voices when it detects mask is not worn, as shown Figure 3-21.	[Setting method] Check and choose the file
Over Temperature Detection	Enable; choose picture settings and sound settings. When the temperature is over normal temperature, camera will display and broadcast the set pictures and voices, as shown in Figure 3-22	[Setting method] Check and choose the file
Entry Permitted	Enable the entry permitted to set the picture setting and sound setting. When someone passes it will show picture on UI panel or play the sound reminder, as shown in Figure 3-23.	[Setting method] Check and choose the file
Anti-Spoofing	Enable the anti-spoofing. If there is an inanimate face, the set picture and voice will be displayed, as shown in Figure 3-24.	[Setting method] Check and choose the file
Unrecognized Person Detection	Check to enable the Unrecognized Person Detection. Choose picture settings and sound settings. When a stranger appears, the picture and voice set in the corresponding scene will be displayed, as shown in Figure 3-25.	[Setting method] Check and choose the file

Show IP Address: The IP address can be displayed on the UI interface, and you can directly input the IP address in the browser to access the web.

Show Facial Tracking Box: The face appears in the interface and a white frame appears to frame the face.

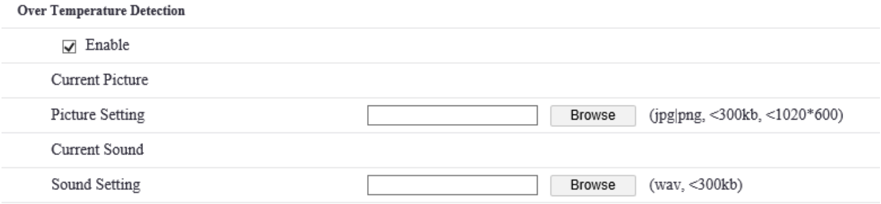
Show Number of Registrations: Display the number of registered users at the bottom of the UI page.

Show Measurement Area: A blue frame of the display area appears on the UI interface to help the personnel choose a suitable standing position.

Show Facial Recognition Results: Compare the captured face with the person in the registered database; if it is a registered person, display relevant information on the UI interface, such as name, work ID, etc.

Show Temperature: The body temperature of the detected person is displayed on the UI interface.

Figure 3-21 No Mask detection



Over Temperature Detection

☑ Enable

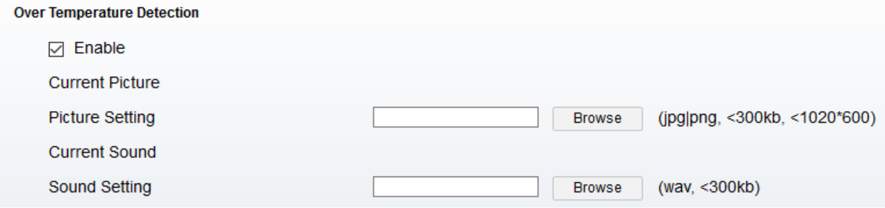
Current Picture

Picture Setting (jpg|png, <300kb, <1020*600)

Current Sound

Sound Setting (wav, <300kb)

Figure 3-22 Over temperature detection



Over Temperature Detection

☑ Enable

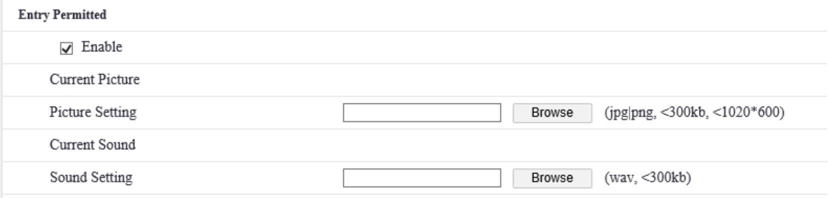
Current Picture

Picture Setting (jpg|png, <300kb, <1020*600)

Current Sound

Sound Setting (wav, <300kb)

Figure 3-23 Entry Permitted



Entry Permitted

☑ Enable

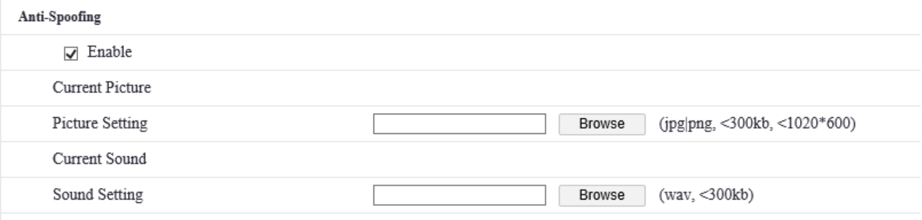
Current Picture

Picture Setting □ Browse (jpg|png, <300kb, <1020*600)

Current Sound

Sound Setting □ Browse (wav, <300kb)

Figure 3-24 Anti-Spoofing detection



Anti-Spoofing

☑ Enable

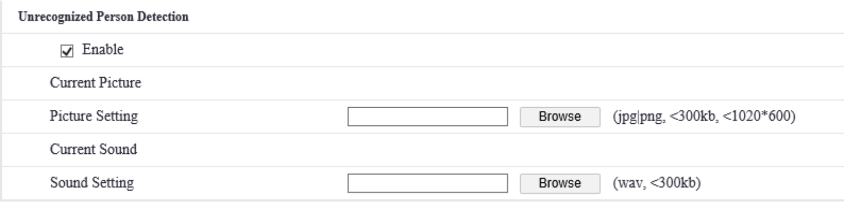
Current Picture

Picture Setting □ Browse (jpg|png, <300kb, <1020*600)

Current Sound

Sound Setting □ Browse (wav, <300kb)

Figure 3-25 Unrecognized person detection



Unrecognized Person Detection

☑ Enable

Current Picture

Picture Setting □ Browse (jpg|png, <300kb, <1020*600)

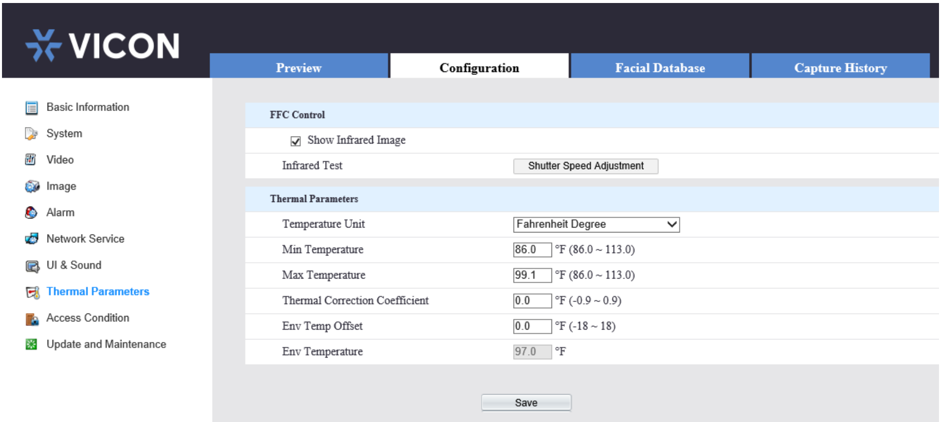
Current Sound

Sound Setting □ Browse (wav, <300kb)

3.9 Thermal Parameters

At “Configuration > Thermal Parameters” interface, set the parameters of temperature, as shown in Figure 3-26.

Figure 3-26 Temperature parameters interface



FFC Control

☑ Show Infrared Image

Infrared Test: Shutter Speed Adjustment

Thermal Parameters

Temperature Unit	Fahrenheit Degree
Min Temperature	86.0 °F (86.0 ~ 113.0)
Max Temperature	99.1 °F (86.0 ~ 113.0)
Thermal Correction Coefficient	0.0 °F (-0.9 ~ 0.9)
Env Temp Offset	0.0 °F (-18 ~ 18)
Env Temperature	97.0 °F

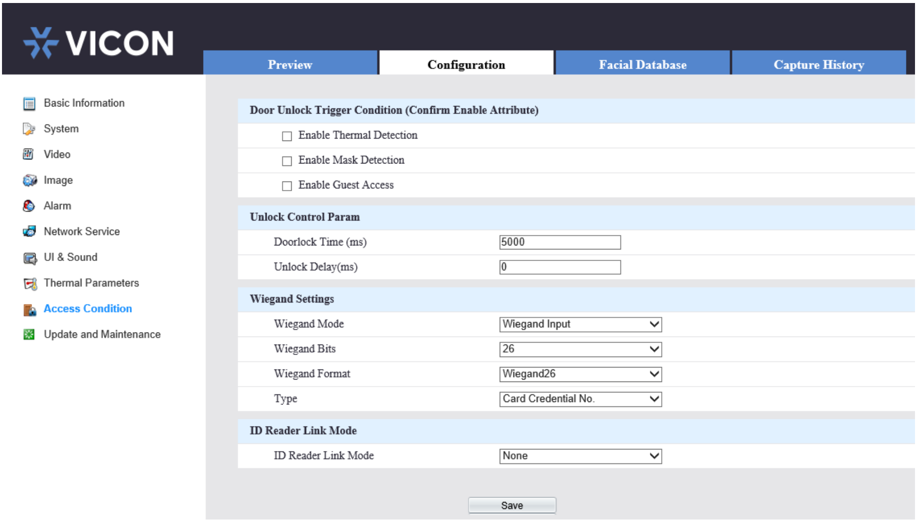
Table 3-5 Thermal parameters

Parameter	Description	Configuration Method
FFC Control	Check the Show infrared image; the infrared video will show on the UI panel. Click “Shutter Adjust” to test the shutter of infrared.	[Setting method] Check Click to restart the shutter.
Thermal Parameters	Set the unit of temperature, min temperature, max temperature, thermal correction coefficient, environment temperature offset, environment temperature	[Setting method] Input the value or choose from drop-down list.

3.10 Access Condition

At “Configuration > Access Condition” interface, set the parameters of access condition, as shown in Figure 3-27.

Figure 3-27 Access condition interface



Door Unlock Trigger Condition (Confirm Enable Attribute)

□ Enable Thermal Detection

□ Enable Mask Detection

□ Enable Guest Access

Unlock Control Param

Doorlock Time (ms)	5000
Unlock Delay(ms)	0

Wiegand Settings

Wiegand Mode	Wiegand Input
Wiegand Bits	26
Wiegand Format	Wiegand26
Type	Card Credential No.

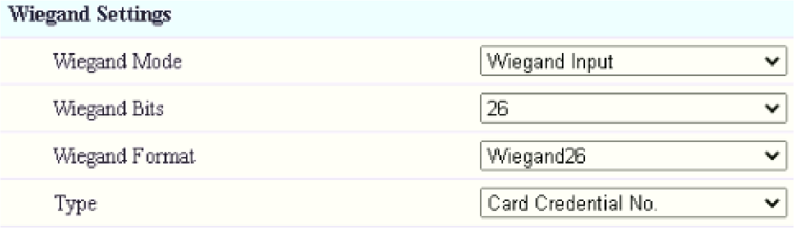
ID Reader Link Mode

ID Reader Link Mode	None

Table 3-6 Access condition

Parameter	Description	Configuration Method
Door Unlock Trigger Condition (Confirm Enable Attribute)	Enable thermal detection, mask detection and guest access mode. Thermal detection mode: As long as the registered person's body temperature meets the set conditions, the door can be opened. Mask mode: As long as the registered person is wearing a mask can open the door. Guest access mode: Anyone can open the door, regardless of whether the body temperature and mask conditions are met. Thermal detection + Guest: Registration is not necessary; as long as the body temperature meets the set conditions, the door can be opened. Mask +Guest: No need to register; any person who is wearing a wear a mask can open the door. Thermal detection + Mask: Only registered personnel who meet the temperature setting conditions and wear a mask can open the door. Thermal detection + Mask + Guest: Registration is not required; as long as the body temperature setting conditions are met and the mask is worn, the door can be opened. No option: The door can only be opened by registered personnel in the whitelist or permission group that meets the temperature setting conditions and wearing a mask at the same time.	[Setting method] Check
Wiegand Settings	There are three Wiegand modes, Wiegand input, Wiegand output, Wiegand shutdown. Choose one mode to set, as shown in the following figures.	----
ID Reader Link Mode	None, USB, two modes	[Setting method] Choose from drop-down list

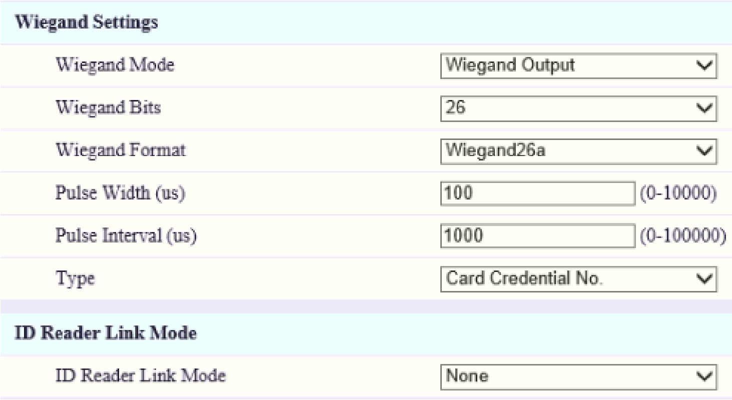
Figure 3-28 Wiegand input interface



Wiegand Settings

Wiegand Mode	Wiegand Input
Wiegand Bits	26
Wiegand Format	Wiegand26
Type	Card Credential No.

Figure 3-29 Wiegand output interface



Wiegand Settings

Wiegand Mode	Wiegand Output
Wiegand Bits	26
Wiegand Format	Wiegand26a
Pulse Width (us)	100 (0-10000)
Pulse Interval (us)	1000 (0-100000)
Type	Card Credential No.

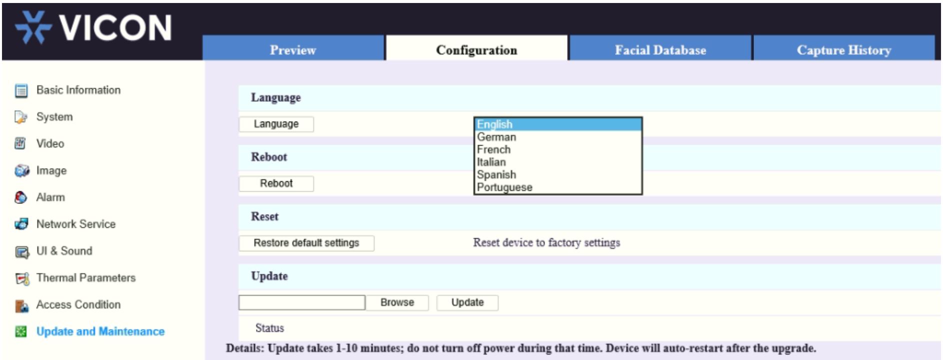
ID Reader Link Mode

ID Reader Link Mode	None

3.11 Upgrade and Maintenance

At “Configuration > Upgrade and Maintenance interface, user can upgrade and maintenance, as shown in Figure 3-30 .

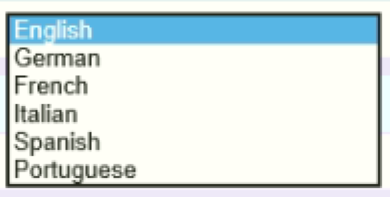
Figure 3-30 System maintenance interface



Details: Update takes 1-10 minutes; do not turn off power during that time. Device will auto-restart after the upgrade.

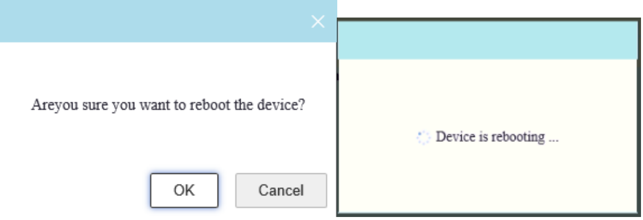
Language:

Change the language of web, as shown in figure



Reboot:

Click “Reboot” on the pop-up window; click “OK.” Wait few seconds; the device will restart.

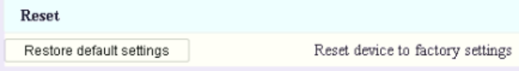


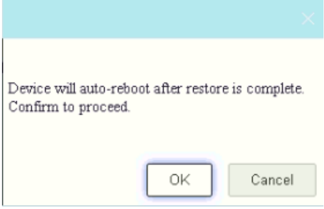
Areyou sure you want to reboot the device?

Device is rebooting ...

Reset:

Reset the device; click “Reset device to factory settings” to recover device to factory settings.





Device will auto-reboot after restore is complete. Confirm to proceed.

; click “OK” to reset. Wait a few moments; the page will go to login interface; activate the device again.

Upgrade

Browse to the local folder where the upgrade software is located; click “Upgrade” to upgrade the device.

NOTE

The upgrade process takes 1-10 minutes. Do not power off the device; it will automatically restart after upgrading.

4 Facial Database

At the Facial database interface, user can add face information to the local database; this supports up to 30,000 entries of face information. User can delete, import, export, search the database.

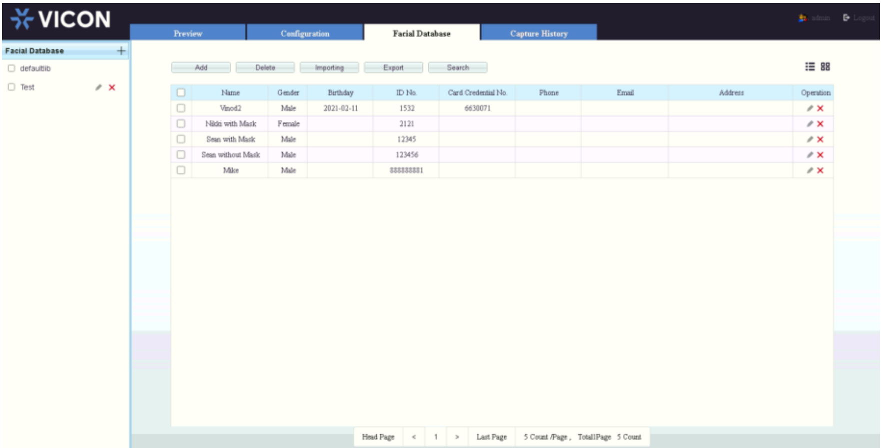
Click "+" to add new face database, as shown in Figure 4-1.

Click ✎ to edit the face database. Click ✕ to delete database.

4.1 Add Face

At the Face Database interface, user can add people to database one by one or import the face database, as shown in Figure 4-1.

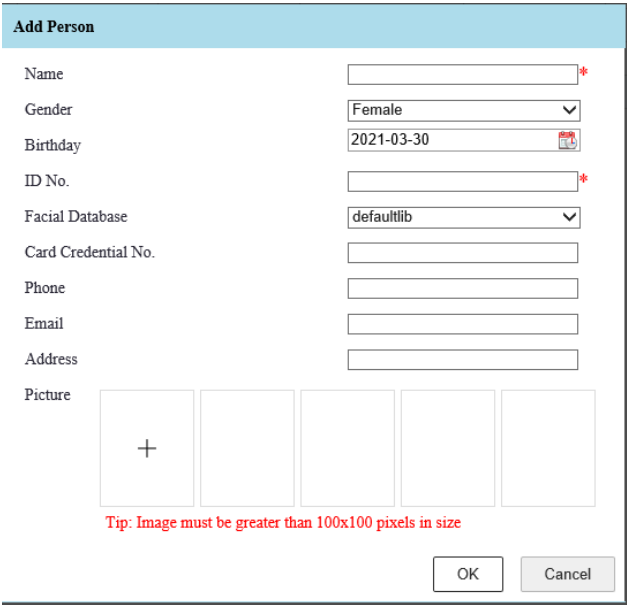
Figure 4-1 Face database interface



□	Name	Gender	Birthday	ID No.	Card Credential No.	Phone	Email	Address	Operation
□	Vinod2	Male	2021-02-11	1532	6630071				✎ ✕
□	Nikki with Mask	Female		2121					✎ ✕
□	Sean with Mask	Male		12345					✎ ✕
□	Sean without Mask	Male		123456					✎ ✕
□	Mike	Male		888888881					✎ ✕

Click "Add " to add the person to database, as shown in Figure 4-2. After successful registration, relevant information will be displayed in the list; the person's details can be shown in two modes, list and graph.

Figure 4-2 Add person



Add Person

Name *

Gender: Female

Birthday: 2021-03-30

ID No. *

Facial Database: defaultlib

Card Credential No.

Phone

Email

Address

Picture

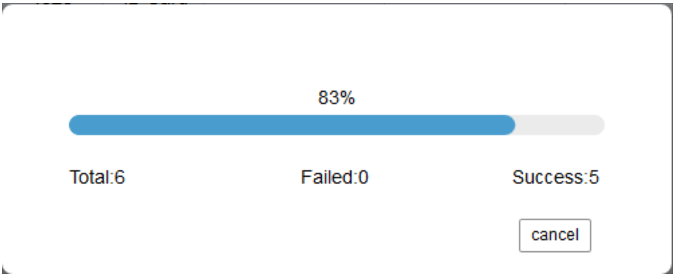
Tip: Image must be greater than 100x100 pixels in size

In the Add person screen, input name, work ID and add picture. Other parameters are optional; the password is used for UI panel to unlock by password.

To delete persons from the list, check the persons you want to be delete and click “Delete.”

Click “Export” to export the data to a local folder; the status is shown as in Figure 4-3.

Figure 4-3 Export database



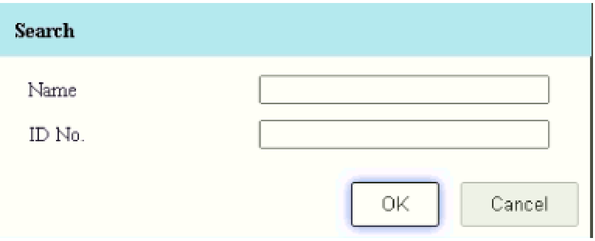
83%

Total:6 Failed:0 Success:5

Import the database means that user can import other thermal biometric kiosk’s database batch.

User can refer to the template of export to finish file.

Figure 4-4 Search person

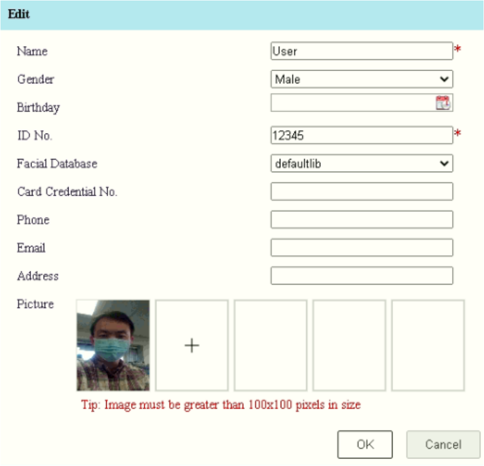


Search

Name	
ID No.	

Click ✎ to modify the information, as shown in Figure 4-5. Click “OK” to save the changes.

Figure 4-5 Modify personal information

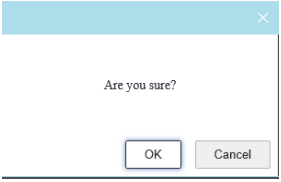


Edit

Name	User *
Gender	Male
Birthday	
ID No.	12345 *
Facial Database	defaultlib
Card Credential No.	
Phone	
Email	
Address	
Picture	

Tip: Image must be greater than 100x100 pixels in size

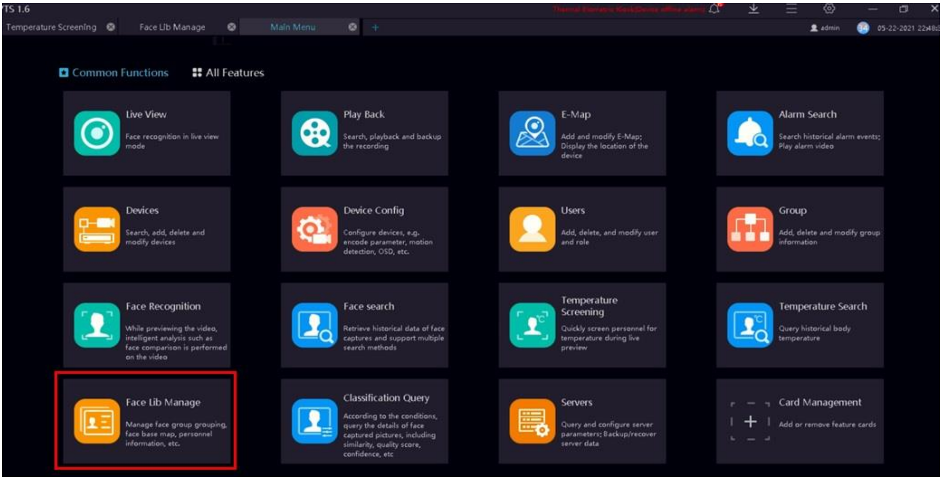
Click ✕ to delete the person’s information; the pop-up window displays; click “OK” to delete.



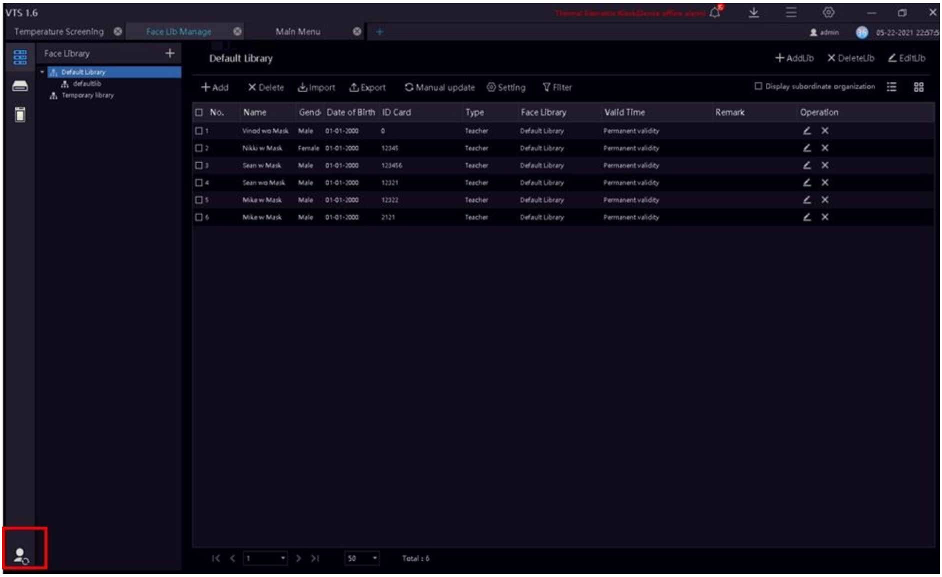
Are you sure?

For users with multiple kiosks, they may choose to manage the credentials centrally from the VTS software. The VTS software is used to synchronize the data from the VTS software to each of the kiosks on the system. The following steps describe that function.

1. From the main VTS interface, click Face Lib Manage.

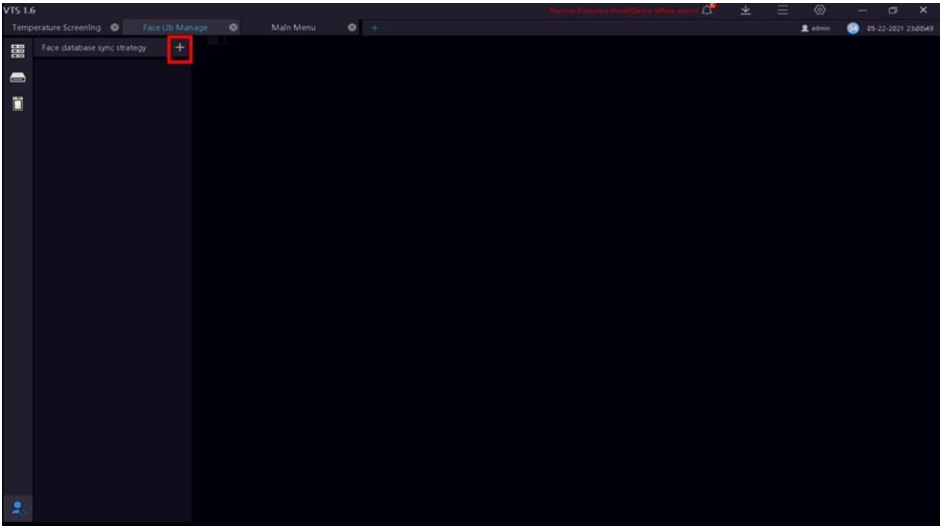

TS 1.6
Temperature Screening
Face Lib Manage
Main Menu
admin
05-22-2021
Common Functions
All Features
Live View
Face recognition in live view mode
Play Back
Search, playback and backup the recording
E-Map
Add and modify E-Map; Display the location of the device
Alarm Search
Search historical alarm events; Play alarm video
Devices
Search, add, delete and modify devices
Device Config
Configure devices, e.g. encode parameter, motion detection, OSD, etc.
Users
Add, delete, and modify user and role
Group
Add, delete and modify group information
Face Recognition
While previewing the video, intelligent analysis such as face comparison is performed on the video
Face search
Retrieve historical data of face captures and support multiple search methods
Temperature Screening
Quickly screen personnel for temperature during live preview
Temperature Search
Query historical body temperature
Face Lib Manage
Manage face group grouping, face base map, personnel information, etc.
Classification Query
According to the conditions, query the details of face captured pictures, including similarity, quality score, confidence, etc
Servers
Query and configure server parameters; Backup/recover server data
Card Management
Add or remove feature cards

2. Click the Face Synchronization icon at the bottom left.

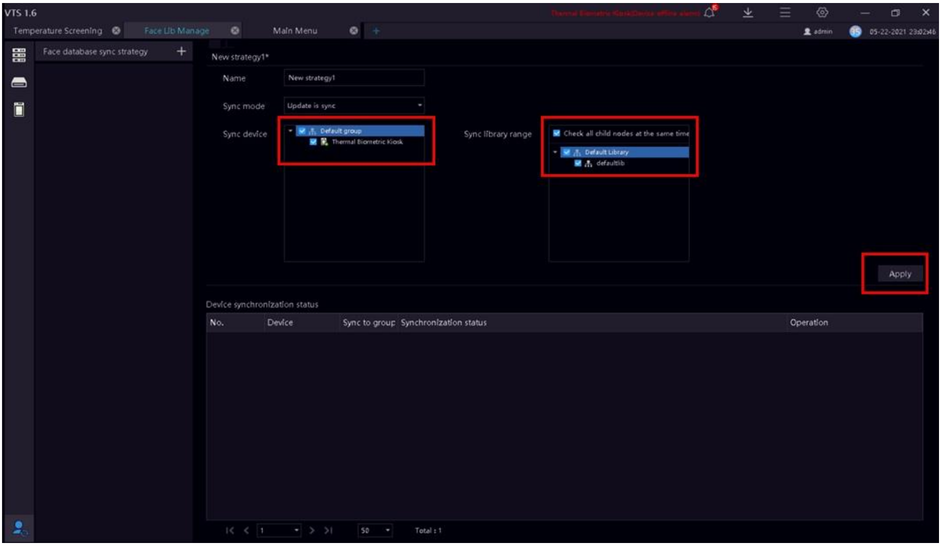


□ No.	Name	Gend	Date of Birth	ID Card	Type	Face Library	Valid Time	Remark	Operation
□ 1	Vinod wo Mask	Male	01-01-2000	0	Teacher	Default Library	Permanent validity		✎ ✕
□ 2	Nikki w Mask	Female	01-01-2000	12345	Teacher	Default Library	Permanent validity		✎ ✕
□ 3	Sean w Mask	Male	01-01-2000	123456	Teacher	Default Library	Permanent validity		✎ ✕
□ 4	Sean wo Mask	Male	01-01-2000	12321	Teacher	Default Library	Permanent validity		✎ ✕
□ 5	Mike w Mask	Male	01-01-2000	12322	Teacher	Default Library	Permanent validity		✎ ✕
□ 6	Mike w Mask	Male	01-01-2000	2121	Teacher	Default Library	Permanent validity		✎ ✕

3. Click the + at top left.



4. Click the check mark in the Synch device and Synch library range. Click Apply.



New strategy1*

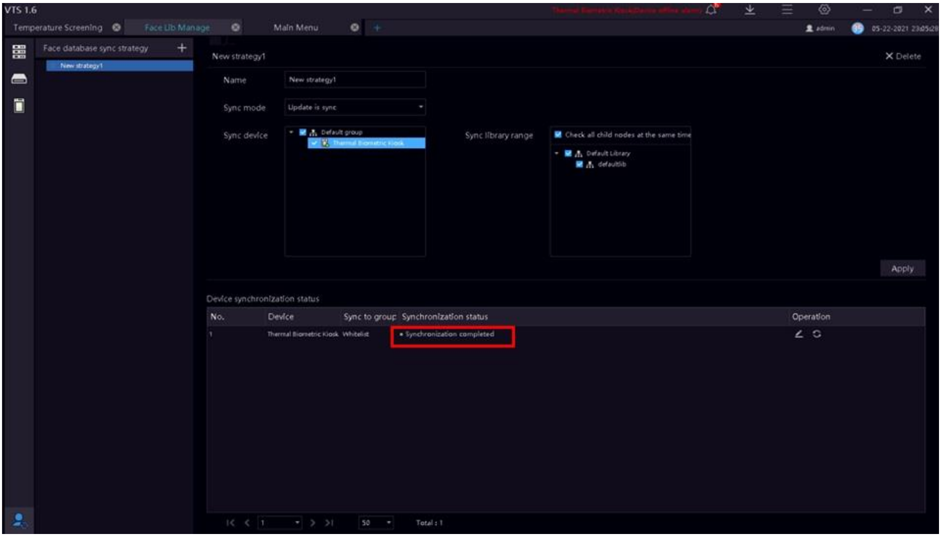
Name: New strategy1

Sync mode: Update is sync

Sync device: ☑ Default group
☑ Thermal Biometric Kiosk

Sync library range: ☑ Check all child nodes at the same time
☑ Default Library
☑ defaultlib

5. After the process is finished, the Device synchronization status will indicate completed.



New strategy1

Name: New strategy1

Sync mode: Update is sync

Sync device: ☑ Default group / ☑ Thermal Biometric Kiosk

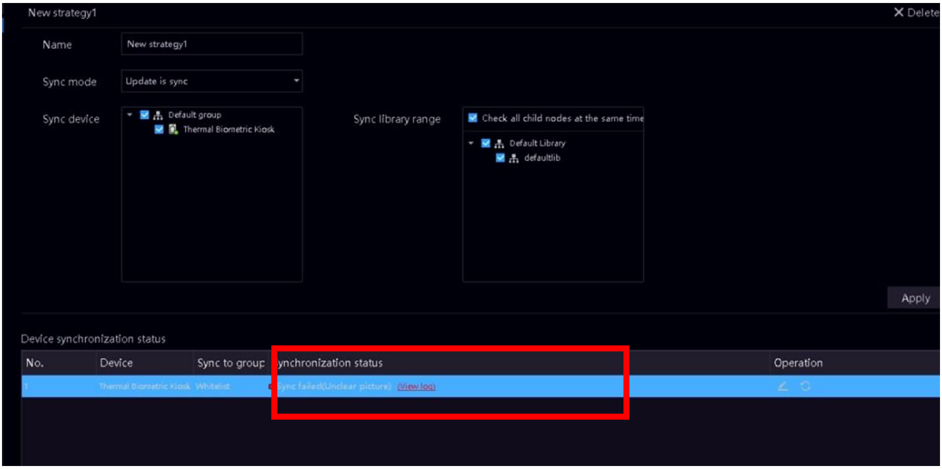
Sync library range: ☑ Check all child nodes at the same time / ☑ Default Library / ☑ defaultlib

Device synchronization status

No.	Device	Sync to group	Synchronization status	Operation
1	Thermal Biometric Kiosk	Whitelist	• Synchronization completed	

1 50 Total : 1

6. If the system indicates the Synch process failed, click View log.



New strategy1

Name: New strategy1

Sync mode: Update is sync

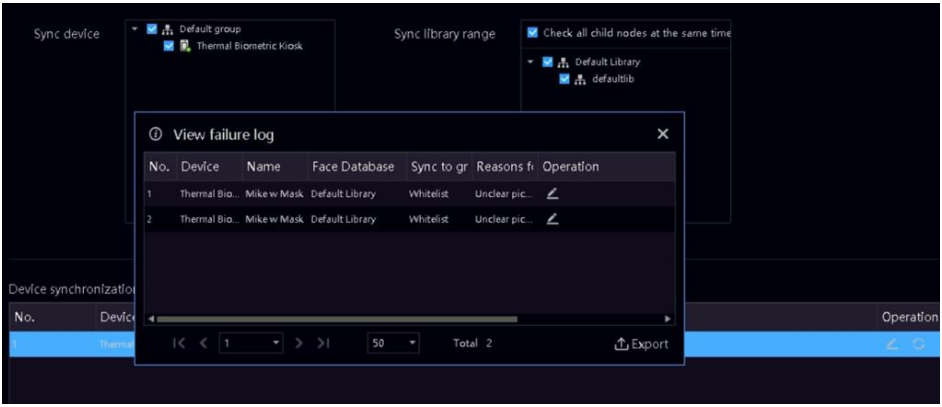
Sync device: ☑ Default group / ☑ Thermal Biometric Kiosk

Sync library range: ☑ Check all child nodes at the same time / ☑ Default Library / ☑ defaultlib

Device synchronization status

No.	Device	Sync to group	ynchronization status	Operation
1	Thermal Biometric Kiosk	Whitelist	ync failed(Unclear picture) (View log)	

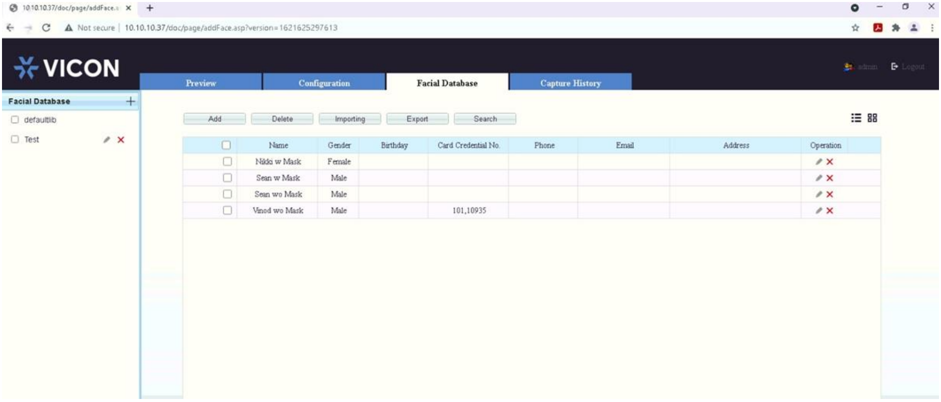
7. The log will indicate the images do not meet the requirement. Retake the image with a higher quality.



View failure log

No.	Device	Name	Face Database	Sync to gr	Reasons f	Operation
1	Thermal Bio...	Mike w Mask	Default Library	Whitelist	Unclear pic...	
2	Thermal Bio...	Mike w Mask	Default Library	Whitelist	Unclear pic...	

8. Open the kiosk web browser; the Facial library should be synchronized from the VTS. If no facial data displays, refresh the page.

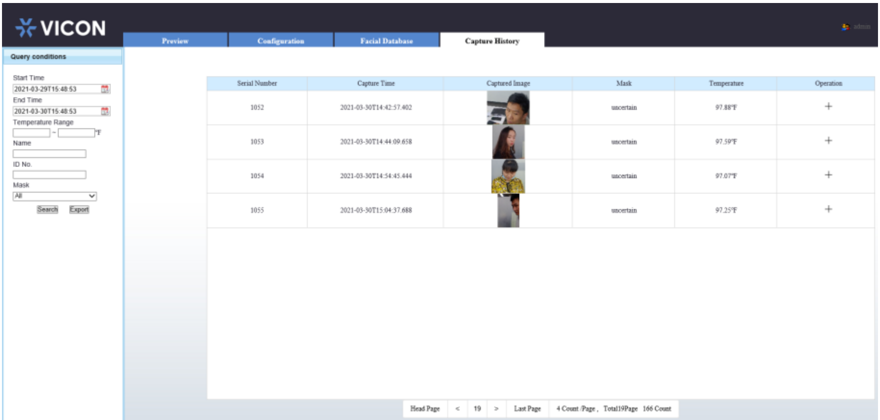


□	Name	Gender	Birthday	Card Credential No.	Phone	Email	Address	Operation
□	Nikki w Mask	Female						✕
□	Sean w Mask	Male						✕
□	Sean wo Mask	Male						✕
□	Vinod wo Mask	Male		101,10935				✕

5 Capture History

Set the start time and end time to search captured images. It will show capture time, FIG sheet, mask, temperature, and the scanning result, as shown in Figure 5-1.

Figure 5-1 Capture History interface



Query conditions

Start Time: 2021-03-29T15:48:53
End Time: 2021-03-30T15:48:53
Temperature Range: ~ ℉
Name:
ID No.:
Mask: All

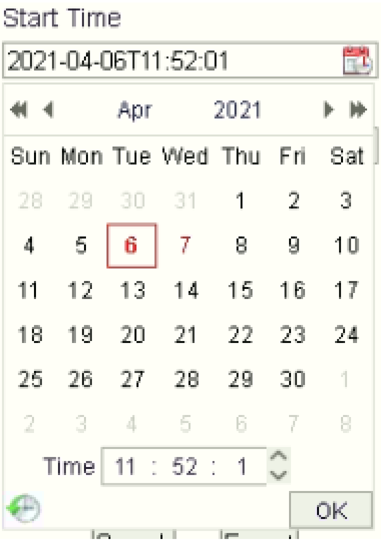
Serial Number	Capture Time	Captured Image	Mask	Temperature	Operation
1052	2021-03-30T14:42:57.402		uncertain	97.88℉	+
1053	2021-03-30T14:44:09.658		uncertain	97.59℉	+
1054	2021-03-30T14:54:45.444		uncertain	97.07℉	+
1055	2021-03-30T15:04:37.688		uncertain	97.25℉	+

4 Count /Page， Total19Page 166 Count

The temperatures that are normal will be green; high temperatures will be red.

The FIG sheets are saved in camera. It can save up to 30,000 image records; the images can be overwritten.

Figure 5-2 Set detail time



Start Time

2021-04-06T11:52:01

Apr 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

Time 11 : 52 : 1

User can set the detailed time to search.

VICON

VICON INDUSTRIES INC.

For office locations, visit the website: vicon-security.com