# FaceStation F2 USER GUIDE

Version 1.00 English

EN 102.00.FSF2-ODB V1.00A



# **Contents**

| Sarety Instructions                                 | 4   |
|---|-----|
| Introduction  | 6   |
| Components  | 6   |
| Name and function of each part                      |     |
| Cables and connectors                               |     |
| Correct face registration and authentication method |     |
| Cautions for registering a face                     |     |
| Cautions for authenticating a face                  |     |
| How to enroll a fingerprint                         |     |
| Selecting a finger for fingerprint input            |     |
| Fingerprint enroll method                           |     |
| Admin Menu  | 13  |
| All Menus   |     |
| User  | 1.4 |
|   |     |
| Registering User Information                        |     |
| Registering a face                                  |     |
| Registering a fingerprint                           |     |
| Modifying User Information                          |     |
| Delete All Users                                    |     |
| View User Usage                                     | 16  |
| Authentication                                      | 17  |
| Auth Mode   | 17  |
| Registering auth mode                               | 17  |
| Modifying auth mode                                 |     |
| Deleting auth mode                                  |     |
| Server Matching                                     |     |
| Face  |     |
| Fingerprint   |     |
| T&A Mode  |     |
| Display & Sound                                     | 22  |
| Network   | 23  |
| Network Settings                                    |     |
| Ethernet  |     |
| Server  |     |
| Serial Setting                                      |     |
| Device  | 25  |
|   |     |
| Relay   |     |
| Date & Time   |     |
| Daylight Saving Time                                |     |
| Device Info   |     |
| Memory Info   |     |
| USB Memory  |     |
| Secure Tamper                                       |     |
| Restart Device                                      |     |
| Restore Default                                     |     |
| User ID Type  | 30  |

| Event Log   |                |
|---|----------------|
| Search Log  |                |
| Delete All Logs   |                |
| View Log Usage  | 32             |
| Troubleshooting   | 33             |
| Checklist before reporting a failure  |                |
| Product specifications  | 34             |
| Dimensions  |                |
| FCC compliance information  | 36             |
| EU Declaration of Conformity (CE)   | 36             |
| Appendices  |                |
|   |                |
| Disclaimers   |                |
| Disclaimers   | 37             |
| Disclaimers   | 37<br>37       |
| Copyright notice  | 37<br>37<br>37 |
| Copyright notice  Open Source License  GNU General Public License  BoringSSL License                  | 3737373737     |
| Copyright notice  Open Source License  GNU General Public License  BoringSSL License  OpenSSL License |                |
| Copyright notice  Open Source License  GNU General Public License  BoringSSL License                  |                |

# **Safety Instructions**

Observe the following instructions to use the product safely and prevent any risk of injury or property damage.



Noncompliance with instructions can lead to serious injury or death.

#### **Installation**

Do not install the device under direct sunlight or UV light.

• Product damage, malfunction, discoloration, or deformation may occur.

Do not install the product in a location with direct sunlight, moisture, dust, or soot.

• Fire or electric shock may occur.

Do not install the product in a location with heat from an electric heater.

• Fire or electric shock may occur due to overheating.

#### Install the product in a dry location.

• Otherwise, product damage or electric shock may occur due to moisture.

#### Install the product in a location with no electromagnetic interference.

• Otherwise, product damage or electric shock may occur.

#### The user should not install or repair the product independently.

- Fire, electric shock, or personal injury may occur.
- If the product has been damaged due to independent installation or repair of the product by the user, free A/S service will not be provided.

## Operation

Do not allow liquids such as water, beverages, or chemicals get into the product.

• Fire, electric shock, or product damage may occur.



Noncompliance of instructions could lead to minor injury or product damage.

## **Installation**

Do not install the power supply cable in a location where people pass by.

• Product damage or physical injury may occur.

Do not install the product near a highly magnetic object such as a magnet, TV, monitor (especially CRT), or speaker.

• Product failure may occur.

Use only a D.C 24 V and 2.5 A or higher power supply adaptor.

• If the proper power supply is not used, the product may not operate properly.

Use a separate power supply for the Secure I/O 2, electric lock, and FaceStation F2, respectively.

• If connecting and using the power supply to these devices together, the devices may malfunction.

Keep the minimum separation distances between the devices when install multiple devices.

• Otherwise, RF performance is affected to the other device, the devices may not operate normally.

## Operation

Do not drop the product or apply an impact to the product.

• Product failure may occur.

Manage the password with care; do not to disclose it to others and change it periodically.

• Otherwise, illegal intrusion may occur.

Do not press the buttons on the product forcibly or using a sharp tool.

• Product failure may occur.

When cleaning the product, wipe the product with a soft and dry cloth. Do not apply water, benzene, or alcohol.

• These may cause product failure.

FaceStation F2 uses a capacitive screen and buttons. If the environment is moist from wet weather, or the product surface is smeared with a large amount of water, wipe the product off with a dry towel before using it.

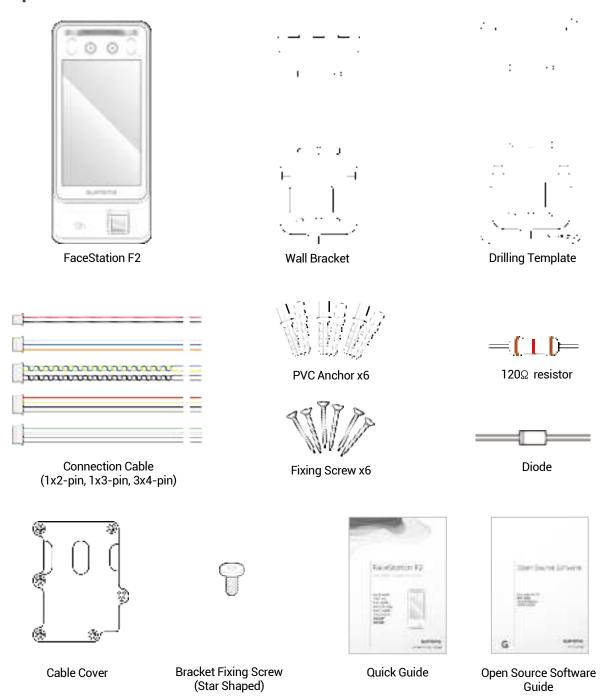
#### **RTC battery**

Replacing the battery with an incorrect type of battery may cause explosion.

Discard the battery according to appropriate regional or international waste regulations.

# Introduction

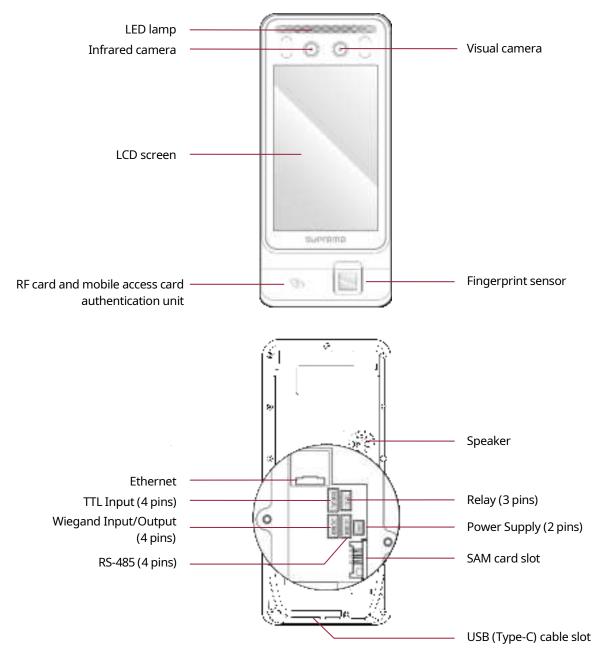
# **Components**



## NOTE

- Components may vary according to the installation environment.
- When assembling the product with the bracket, you can use the included bracket fixing screw (Star Shaped) instead of the product fixing screw for enhanced security.
- For additional content regarding product installation, visit the Suprema website (https://www.supremainc.com) and view the installation guide.

# Name and function of each part



| Name   | Description                                      |  |
|--|--|--|
| LED lamp   | Turned on when the user is detected in the dark. |  |
| Infrared camera                                    | Capture the infrared face image.                 |  |
| Visual camera                                      | Capture an actual face image.                    |  |
| LCD screen   | Provides UI for operation.                       |  |
| RF card and mobile access card authentication unit | Part to scan the card for entrance.              |  |

| Fingerprint sensor               | Reads fingerprints.                     |  |
|----------------------------------|---|--|
| Speaker                          | Delivers sound.                         |  |
| Ethernet                         | Connect the Ethernet cable.             |  |
| TTL input (4 pins)               | Connect the TTL input cable.            |  |
| Relay (3 pins)                   | Connect the relay cable.                |  |
| Wiegand input/output<br>(4 pins) | Connect the Wiegand input/output cable. |  |
| Power supply (2 pins)            | Connect the power supply cable.         |  |
| RS-485 (4 pins)                  | Connect the RS-485 cable.               |  |
| SAM card slot                    | Insert the SAM card.                    |  |
| USB (Type-C) cable slot          | Connect the USB cable.                  |  |

# **Cables and connectors**

Power supply



| Pin | Name     | Color                |
|-----|----------|----------------------|
| 1   | PWR +VDC | Red (white stripe)   |
| 2   | PWR GND  | Black (white stripe) |

Relay



| Pin | Name    | Color  |
|-----|---------|--------|
| 1   | RLY NO  | White  |
| 2   | RLY COM | Blue   |
| 3   | RLY NC  | Orange |

RS-485



| Pin | Name     | Color  |
|-----|----------|--------|
| 1   | 485 TRXP | Blue   |
| 2   | 485 TRXN | Yellow |
| 3   | 485 GND  | Black  |
| 4   | SH GND   | Gray   |

TTL input



| Pin | Name    | Color  |
|-----|---------|--------|
| 1   | TTL INO | Red    |
| 2   | TTL IN1 | Yellow |
| 3   | TTL GND | Black  |
| 4   | SH GND  | Gray   |

Wiegand input and output



| Pin | Name   | Color |
|-----|--------|-------|
| 1   | WG D0  | Green |
| 2   | WG D1  | White |
| 3   | WG GND | Black |
| 4   | SH GND | Gray  |

# Correct face registration and authentication method

## Cautions for registering a face

- When registering a face, maintain a distance of 60 cm to 100 cm between the device and the face.
- Be careful not to change the facial expression.
- Be careful not to cover the eyes or eyebrows.
- Do not wear masks or sunglasses.
- Be careful not to display two faces on the screen. Register one person at a time.
- If you do not follow the instructions on the screen, the face registration may take longer or may fail.

# Cautions for authenticating a face

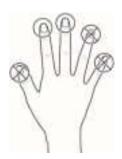
- Ensure that the face appears in the center of the device's screen. When the guideline is displayed, follow the instructions shown on the screen to authenticate the face.
- If a part of the face is covered with a hat, a mask, an eye patch, or sunglasses authentication may fail. Do not cover the face; allow the device to recognize both the eyebrows and the face.

# How to enroll a fingerprint

In order to improve the fingerprint authentication rate, register the fingerprint correctly. FaceStation F2 can recognize a fingerprint even if the angle and position of a user's fingerprint input change. If you register the fingerprint with attention to the following matters, the authentication rate can be improved.

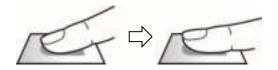
## Selecting a finger for fingerprint input

- In preparation for the case that the fingerprint of a specific finger cannot be used, for example if the user is lifting a load with one hand or a finger gets hurt, up to 10 fingerprints for each user can be registered.
- In the case of a user whose fingerprint cannot be recognized well, the authentication rate can be improved by enrolling the same finger twice repeatedly.
- If a finger has a cut or the fingerprint is blurry, select another finger for the fingerprint.
- It is recommended to use the index finger or the middle finger when scanning the fingerprint. The authentication rate can be reduced if it is difficult to place another finger at the center of fingerprint sensor accurately.



## Fingerprint enroll method

**1** When a message saying "Place your finger on the sensor." is displayed on the LCD screen for enrolling the fingerprint, place the finger with the fingerprint you wish to enroll on the fingerprint authentication unit and press the finger gently for better authentication.



When the re-input screen is displayed after a beep sound, scan the fingerprint of the enrolled finger again (scan the fingerprint of a finger to be enrolled twice).

#### NOTE

#### Cautions for enrolling a fingerprint

When a fingerprint is recognized, it is compared with the initially registered fingerprint, so the initial fingerprint enroll is the most important. Pay attention to the following matters when enrolling the fingerprint.

- Place the finger deep enough to contact with the sensor completely.
- Place the center of the fingerprint in the center of the sensor.
- If a finger has a cut or the fingerprint is blurry, select another finger for the fingerprint.
- Scan the fingerprint correctly without moving according to the instruction on the screen.
- If you make the finger upright so that the contact area with the sensor is decreased or the angle of finger is warped, fingerprint authentication may not be performed.









## When the fingerprint recognition fails

FaceStation F2 can recognize a fingerprint regardless of a change in season or finger condition. However, the authentication rate may vary according to the external environment or fingerprint input method.

If the fingerprint authentication cannot be done smoothly, it is recommended to take the following measures.

• If the finger is smeared with water or sweat, dry off the finger and then scan the finger.

- If the finger is too dry, blow your breath on the fingertips and then scan the finger.
- If the finger has a cut, register the fingerprint of another finger.
- The initially enrolled fingerprint often may have not been scanned correctly, so enroll the fingerprint again according to 'Cautions for enrolling a fingerprint'.

# **Admin Menu**

# **All Menus**

- Press  $\blacksquare$  and authenticate with the Admin level credential.
- Select the desired menu.



## NOTE

If the administrator has not been designated, the menu screen will be displayed when you press

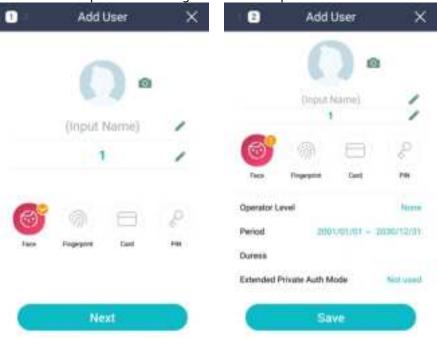
# User

# **Registering User Information**

The user information, including the face and fingerprint, can be registered.

- 1 Press  $\blacksquare$  and authenticate with the Admin level credential.
- 2 Select **USER** > \_\_\_, and choose a credential you want to register.

There are two steps for the user registration. Some options are available after the credential has been registered.



- Register a user photo.
- Name: Enter the user name.
- **ID**: Enter a number between 1 and 429467295 to register as the user ID. If **User ID Type** set to **Alphanumeric**, a combination of alphanumeric characters and symbols (\_, -) can be used for the ID. Up to 32 characters can be input.
- **Face**: Register a face for user authentication. Press **Face** > **Next** and register a face according to the instructions on the screen. To add more faces, press Refer to Registering a face to learn more about the face registration.
- **Fingerprint**: Register a fingerprint for user authentication. Press **Fingerprint** > **Next** and register a fingerprint according to the instructions on the screen. To add more fingerprint, press . Refer to Registering a fingerprint to learn more about the fingerprint registration.
- Card: Register a card for user authentication. Press Card > Next and scan the card that will be assigned to the user. To register an additional card, press .
- **PIN**: Enter the PIN you wish to use. Enter the PIN you wish to use, and then reenter the same PIN for confirmation. Enter a number between 4 and 16 digits to prevent leaking.
- **Operator Level**: Select the level you wish to assign to a user.

## NOTE

Available menus vary according to the set operator level.

- None: This is the general user level; menus cannot be accessed.
- **Administrator**: All menus can be accessed.
- Configuration: AUTHENTICATION, DISPLAY & SOUND, DEVICE, NETWORK and EVENT LOG menus can be accessed.
- User Management: USER and EVENT LOG menu can be accessed.
- **Duress**: Select this option to add the fingerprint as a duress fingerprint. When threatened by someone to open the door, the user can authenticate using this fingerprint to send an alarm signal to BioStar 2.
- Period: Set an expiry date to use the user account.

- **Extended Private Auth Mode**: Change the authentication method according to the user. You can set whether to use the extended private auth mode. this mode allows you to combine user authentication methods, including both faces and fingerprints. Otherwise, you can use the device's basic authentication mode. You can modify it in BioStar 2.
- **3** To save settings, press **OK**.

## Registering a face

- 1 Press Pand authenticate with the Admin level credential.
- 2 Select USER > \_\_\_\_.
- 3 Select Face > Next.
- 4 Adjust a distance between the face and screen and look straight at the camera of the device.
- 5 Once your face is captured successfully, press **OK** > **Save**. To retake a photo, press **Re-Shot**.

#### NOTE

- When registering a face, maintain a distance of 60 cm to 100 cm between the device and the face.
- Be careful not to change the facial expression.
- Be careful not to cover the eyes or eyebrows.
- Do not wear masks or sunglasses.
- Be careful not to display two faces on the screen. Register one person at a time.
- If you do not follow the instructions on the screen, the face registration may take longer or may fail.

# Registering a fingerprint

- 1 Press  $\blacksquare$  and authenticate with the Admin level credential.
- 2 Select USER > \_\_\_\_.
- 3 Select Fingerprint > Next.
- 4 Scan your fingerprint and verify the same fingerprint again.

#### NOTE

- Place the finger deep enough to contact with the sensor completely.
- Place the center of the fingerprint in the center of the sensor.
- If a finger has a cut or the fingerprint is blurry, select another finger for the fingerprint.
- Scan the fingerprint correctly without moving according to the instruction on the screen.
- If you make the finger upright so that the contact area with the sensor is decreased or the angle of finger is warped, fingerprint authentication may not be performed.

# **Modifying User Information**

User Management or Administrator can modify the registered user information. A user's face, fingerprint, or card can be added, and the PIN and level can be modified.

- 1 Press  $\square$  and authenticate with the Admin level credential.
- 2 Select USER > Q.
- 3 Select your search terms. You can search for a user by All, User ID, Name, Face, Fingerprint, and Card.
- 4 Select a user you wish to modify.

Modify the information by referring to Registering User Information and press OK.

To delete a user, select in and then press OK.

#### NOTE

• Access Group can be registered in BioStar 2. For detailed contents regarding registering an access group, refer to the BioStar 2 Administrator Manual.

## **Delete All Users**

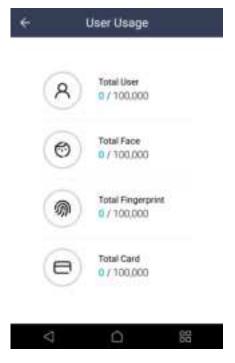
You can delete all registered users at once.

- 1 Press and authenticate with the Admin level credential.
- 2 Select USER >
- 3 Check **Delete All** to delete all registered users and press **OK**.
- 4 When you press **OK**, all registered users will be deleted.

# **View User Usage**

You can see the number of registered users, faces, fingerprints, and cards at a glance.

- **1** Press  $\blacksquare$  and authenticate with the Admin level credential.
- **2** Select **USER** > ①. User usage information appears.



# **Authentication**

## **Auth Mode**

Set the authentication mode. You can make a combination of face, fingerprint, PIN, card, or ID and you can also set a schedule for each authentication mode.

# Registering auth mode

- 1 Press 🔐 and authenticate with the Admin level credential.
- 2 Select AUTHENTICATION > Auth Mode, and press ...
- **3** Press + and select one of options you want to use. To add additional options, repeat this step.
- 4 Press **Schedule** and set a schedule.

#### NOTE

- You can combine selected authentication mode to authenticate all in order or only some of the selected authentication mode to authenticate. For example, if you combines the authentication mode with (a) + (b) + (c) + (d) + (d)
- A schedule can be set in BioStar 2. If there is a no preset schedule, only **Always** can be selected.
- For detailed content regarding setting a schedule, refer to BioStar 2 Administrator's manual.
- **5** Press **OK** to save the settings.

# Modifying auth mode

You can set the schedule to be used for each authentication method using a card.

- 1 Press 🔐 and authenticate with the Admin level credential.
- 2 Select AUTHENTICATION > Auth Mode.
- **3** Select the authentication mode to modify.
- 4 Modify the authentication mode by referring to Registering auth mode and press **OK**.

#### **Deleting auth mode**

You can set the schedule to be used for each authentication method using a card.

- 1 Press  $\square$  and authenticate with the Admin level credential.
- 2 Select AUTHENTICATION > Auth Mode.
- **3** Press in and select the authentication mode to delete. You can select multiple options.
- 4 Press **OK**. To delete the selected option, press **OK**. Or, press **Cancel** to cancel the deletion.

# **Server Matching**

You can set the server matching. When this option is activated, it performs user authentication matching in BioStar 2, not in the device. It can be used when the device has too much user information or when the device is installed outside.

- 1 Press  $\square$  and authenticate with the Admin level credential.
- 2 Select AUTHENTICATION and activate Server Matching.

#### NOTE

- It is only available for fingerprint and card options.
- When you use the server matching option, you need to activate the option in both Biostar 2 and the device. Refer to the administrator manual of BioStar 2 to learn how to set the server matching settings in BioStar 2.

#### **Face**

You can change settings regarding the face authentication.

- **3** Press  $\blacksquare$  and authenticate with the Admin level credential.
- 4 Select AUTHENTICATION > Face.
- **5** Select and set the desired item.



- Ambient Brightness: Detect the ambient brightness and adjust the intensity of IR LED. Change settings according to the
  installation environment.
- Motion Sensor: Set the sensitivity for detecting motion near the device. If Motion Sensor is set to OFF, press and hold the ESC button to authenticate the face.
- Enroll Timeout: If a face is not registered during the set time, the face registration will be canceled.
- Auth Timeout: If the authentication is not completed during the set time, the authentication will fail.
- Duplicate Check: When registering a face, you can check duplicates.
- Face Detect Setting: set the face recognition area by adjusting the size and position of the detected area.

#### NOTE

- It is recommended to maintain the default values of options under Face Detect Setting. The default values of each option are as follows:
  - Maximum Head Rotation Angle: 15
  - Minimum Face Width: 66

- Maximum Face Width: 250
- Search Range X coordinate: 144
- Search Range Width: 432
- **Security Level**: Set the security level for 1:N authentication.
- Operation Mode: Set the operation mode of the device when the face is authenticated.
  - Fusion Matching: Use both visual and infrared cameras to increase the face authentication accuracy.
  - **Walkthrough**: The device authenticates users who pass an access point without a pause within the authentication distance.

#### • Face Detection:

- **Fusion Matching**: Use both visual and infrared cameras are activated, and you can set the strength of matching.
- **Walkthrough**: You can select whether to use the fake face detection feature. When enabled, you can detect whether the authentication target is a person or a fake face, such as a photo.
- Advanced Settings: Set the settings of the face recognition, such as mask detection, thermal camera.
  - **Check Mode**: Set the check mode depending on the usage.
  - **Authentication Fail Sound**: Set the alarm to trigger when a user is not wearing a mask, or the measured temperature is higher than preset threshold.
  - Mask Detection: Set the mask detection mode to detect whether a user is wearing a mask or not. If you select Enabled (Hard), it refuses authentication of users who are not wearing a mask and saves event logs. If you select Enabled (Soft), users who are not wearing a mask can authenticate but event logs still be saved.
  - **Thermal Camera**: Set the thermal camera options. If you select **Enabled (Hard)**, it refuses authentication of users with elevated temperature than the preset threshold and saves event logs. If you select **Enabled (Soft)**, users with elevated temperature than the preset threshold can authenticate but event logs still be saved.

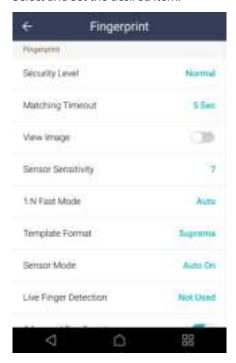
#### NOTE

- Set the Check Mode depending on the usage when Mask Detection or Thermal Camera is activated.
  - Check After Authentication: Measure the temperature after a successful authentication.
  - **Check Before Authentication**: Authenticate only when the user is within the range of the preset temperature threshold. When this mode is activated, it does not attempt to authenticate user's identity if their temperature has been detected to be above the threshold.
  - **Check Only**: Detect temperature without authentication. This mode allows users within the range of the preset threshold to access without checking their identity or access rights.
- When **Thermal Camera** is enabled, you can set advanced settings.
  - **Celsius/Fahrenheit**: Change the unit of temperature.
  - **Threshold Temperature**: Set the threshold temperature to limit the access. Users with detected temperature over the threshold will be denied access.
  - **Save Temperature Data**: Save temperature data. When this mode is activated, it saves both authentication and temperature logs. When this mode is deactivated, it only saves authentication logs.
  - Show Thermal Infrared Image: Display infrared imaging on the screen of the devices.
  - Camera Configuration: Configure the thermal camera settings for accurate measurement.
- When **Thermal Camera** is enabled, you can configure the thermal camera settings for accurate measurement depending on environment.
  - **Distance(cm)**: Set up the distance between the user and device.
  - **Emission Rate**: Set up the emissivity to precisely measure the temperature of the user.
  - ROI X(%), ROI Y(%), ROI Width(%), ROI Height(%): If there are lights in the device field of view they may be detected instead of the desired subject. Set the temperature measurement area by adjusting the size and position of ROI (Region of Interest).
  - **Body Temperature Compensation**: You can set the thermal camera to adjust its temperature value automatically measuring the ambient conditions.
- It is recommended to maintain the default values of the camera configuration settings for the best performance. The default values of each option are as follows:
  - **Distance(cm)**: 50
  - **Emission Rate**: 0.98
  - ROI X(%): 30
  - ROI Y(%): 40
  - ROI Width(%): 40
  - ROI Height(%): 20

# **Fingerprint**

You can change settings regarding the fingerprint authentication.

- 1 Press 📮 and authenticate with the Admin level credential.
- 2 Select AUTHENTICATION > Fingerprint.
- **3** Select and set the desired item.



- **Security Level**: Set the security level for 1:N authentication.
- Matching Timeout: Set the fingerprint matching timeout. If the authentication is not completed during a set time, the authentication will fail.
- **View Image**: Set to view the original image when scanning the fingerprint.
- **Sensor Sensitivity**: Set the sensitivity of the fingerprint authentication sensor. To obtain more precise fingerprint information by increasing the sensor sensitivity, set the sensor sensitivity higher.
- **1:N Fast Mode**: Set the fingerprint authentication speed. If you select **Auto**, the authentication speed will be set according to all fingerprint templates enrolled on the device.
- **Template Format**: Set the fingerprint template format. SUPREMA is set as the default, and if you change the template format, all fingerprints saved previously cannot be used. Use caution when changing the Template Format.
- Sensor Mode: When Auto On is set, the fingerprint sensor recognizes a user's fingerprint and turns on. When Always On is set, the sensor is always on.
- **Live Finger Detection**: Set the level of the fake fingerprint detection. The higher the fake fingerprint detection level, the higher the rejection rate of fingerprint.
- Advanced Enrollment: Inspect the quality of a scanned fingerprint in order to save high quality fingerprint information When
  Use is set and the quality of the fingerprint is low, it notifies such information to the user and helps the user scan the fingerprint
  correctly.
- **Duplicate Check**: When registering fingerprints, you can check duplicates.

# **T&A Mode**

You can set how to register T&A Mode.

- 1 Press 👭 and authenticate with the Admin level credential.
- 2 Select AUTHENTICATION > T&A.
- **3** Select and set the desired item.



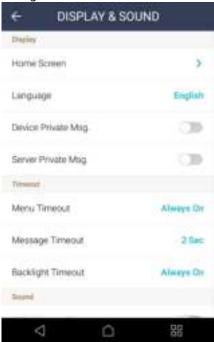


- **T&A Mode**: Set the method to use T&A mode.
- **T&A Code**: You can register T&A events. Select **T&A Code** > to register a T&A event and set an icon, name of T&A event, and schedule.
- T&A Required: Set to require a user to select a T&A event when authenticating.
- **T&A Fixed**: Set to use only a T&A event selected by the administrator. This option can be used when **Fixed** is set for **T&A Mode**.
- **Job Code**: Select whether or not to use Job Code.

# **Display & Sound**

You can change the display and sound settings of the device.

- 1 Press 🔛 and authenticate with the Admin level credential.
- 2 Select **DISPLAY & SOUND**.
- **3** Change the desired item.



- **Home Screen**: Select items to be displayed in the background of the home screen.
- Language: Set the language you wish to use.
- **Device Private Msg.**: Set whether or not to use a Private Message, which will be displayed on the screen when the user authenticates. You can set **Device Private Msg.** on the device.
- **Server Private Msg.**: Set whether or not to use a Private Message, which will be displayed on the screen when the user authenticates. You can set the **Server Private Msg.** on the device. If you have not set it on the server, the device does not display a message when authentication is successful even if **Server Private Msg.** is enabled on the device.
- **Menu Timeout**: Set the time (in seconds) for the menu screen to disappear automatically. If there is no button input during a set time, the screen will return to the home screen.
- Message Timeout: Set the time (in seconds) for a setting complete message or information message to disappear automatically.
- Backlight Timeout: Set the time (in seconds) to automatically turn off the lighting of the LCD screen.
- Voice Instruction: Set to use the voice instruction instead of alarm sounds.
- Volume: Set the volume.

# **Network**

# **Network Settings**

You can change the network settings of the device.

#### **Ethernet**

- 1 Press 🔡 and authenticate with the Admin level credential.
- 2 Select **NETWORK** > **Ethernet**.
- **3** Change the desired item.





- DHCP: Set whether or not to use DHCP. If DHCP setting is disabled, the user can modify Port, IP Address, Gateway, Subnet Mask, and DNS.
- **Device Port**: Set the device port.
- IP Address: View the IP address of the device. To modify, disable DHCP setting.
- **Gateway**: View the gateway of the device. To modify, disable DHCP setting.
- Subnet Mask: View the subnet mask of the device. To modify, disable DHCP setting.
- **DNS**: Set the DNS server address.
- **4** To save settings, press **OK**.

## Server

- 1 Press  $\blacksquare$  and authenticate with the Admin level credential.
- 2 Select **NETWORK** > **Server**.
- **3** Change the desired item.





- **Device -> Server**: You can send a connection signal from the device to a server with the input information directly. When you select **Server -> Device**, **Server IP**, **Server URL** and **Server Port** cannot be entered.
- Server IP: Enter the IP address of the PC on which BioStar 2 is installed. Input is accepted only when **Device -> Server** is set for **Connection Mode**.
- Server URL: Enter server URL instead of Server IP. Input is accepted only when Device -> Server is set for Connection Mode.
- Server Port: Enter the port of the PC on which BioStar 2 is installed. Input is accepted only when Device -> Server is set for Connection Mode.
- **4** To save settings, press **OK**.

## **Serial Setting**

- 1 Press and authenticate with the Admin level credential.
- 2 Select **NETWORK**.
- **3** Change the desired item.



- **RS-485**: Select the RS-485 mode.
- Baud Rate: Select the desired baud rate.
- 4 To save settings, press **OK**.

# **Device**

# Relay

You can set the open time and the input port of the exit button in the device.

- 1 Press 🖁 and authenticate with the Admin level credential.
- 2 Select **DEVICE** > **Relay**.



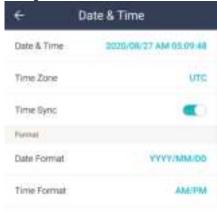


- Relay: You can set whether relay is enabled or not. To set the open time and the input port of the exit button, activate this option.
- Open Time: Set the duration for the door to remain open when standard user authentication has been carried out.
- **Exit Button**: Select the input port where the exit button is connected.

# Date & Time

You can set date and time. Set the date and time accurately in order to collect accurate log data.

- 1 Press 🔡 and authenticate with the Admin level credential.
- 2 Select **DEVICE** > **Date & Time**.
- **3** Change the desired item.



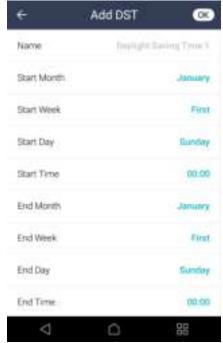


- Date & Time: Check the current date and time. To modify it manually, disable Time Sync.
- **Time Zone:** Set the time reference of the current location.
- **Time Sync**: Synchronize the server and the time. If you wish to synchronize the server and the time, enable Time Sync.
- Date Format: Set the date format. You can select among YYYY/MM/DD, MM/DD/YYYY and DD/MM/YYYY.
- Time Format: Set the time format. You can select either 24-Hour or AM/PM.

# **Daylight Saving Time**

You can use the device by applying daylight saving time. Set the start and end time correctly.

- 1 Press 🔐 and authenticate with the Admin level credential.
- 2 Select DEVICE > Daylight Saving Time and press 🛑 to add additional daylight saving time.
- **3** Select the desired item and change the setting.



- Name: Set the name of daylight saving time.
- Start Month / Start Week / Start Day / Start Time: Set details of when the daylight saving time option begins.
- End Month / End Week / End Day / End Time: Set details of when the daylight saving time ends.
- 4 To save settings, press **OK**.

## **Device Info**

You can view the model name, device ID, serial number, firmware version of device ID, and MAC address.

- 1 Press  $\blacksquare$  and authenticate with the Admin level credential.
- Select DEVICE > Device Info. You can view the information including Model Name, Device ID, Serial No., HW, FW, Kernel, and MAC.

# **Memory Info**

View the status of memory usage.

1 Press and authenticate with the Admin level credential.

2 Select **DEVICE** > **Memory Info**. You can view the memory usage status of the device.

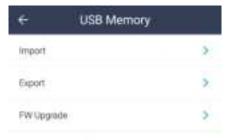




# **USB Memory**

Connect USB Memory and import user information to the device or export log and user information from the device. Upgrade the firmware.

- 1 Press  $\blacksquare$  and authenticate with the Admin level credential.
- 2 Select **DEVICE** > **USB Memory**.
- **3** Select the desired item and change the setting.





- **Import**: Import user information from the connected USB memory.
- **Export**: Select information you wish to export to the connected USB memory.

• FW Upgrade: Upgrade the firmware if the firmware files are saved in the connected USB memory.

#### NOTE

The type of supported USB memory is as follows. If you use a different type of USB memory, the function may not operate normally.

- Samsung Electronics: SUM-LSB 8GB, SUM-PSB 8GB, SUM-PSB 16GB, SUM-BSG 32GB
- LG Electronics: XTICK J3 WINDY 8GB, SMART USB MU1 White 8GB, MU 1 USB 32GB, MU28GBC 32GB, XTICK MOBY J1 16GB
- SanDisk: Cruzer 16GB, Cruzer Blade CZ50 4GB, Cruzer Blade CZ50 32GB, CZ48 Ultra USB 3.0 64GB, CZ80 USB3.0 64GB, CZ52 64GB, Cruzer Glide Z60 128GB, Cruzer Force CZ71 32GB
- Sony: Micro Vault Click 8GB, MicroVault CLICK 16GB, USM-SA1 32GB
- Transcend: JetFlash 760 8GB, JetFlash 760 32GB, JetFlash 500 8GB
- Memorette: MINI500 8GB
- A-DATA: S102 PRO 8GB
- Trigem Pastel 8GB

# **Secure Tamper**

When the tamper is turned on, you can set to delete the entire user, the entire log, and the security key.

- 1 Press 👭 and authenticate with the Admin level credential.
- 2 Select **DEVICE**.
- **3** Activate **Secure Tamper** to delete data of all registered users, all logs, and secure keys when a temper event occurs.

## **Restart Device**

The user can restart the device.

- 1 Press  $\blacksquare$  and authenticate with the Admin level credential.
- 2 Select **DEVICE** > **Restart Device**.
- **3** To restart the device, press **OK**. To return to the previous screen, press **Cancel**.

#### Restore Default

Device settings, network settings, and operator levels will be reset.

- 1 Press 🔡 and authenticate with the Admin level credential.
- 2 Select **DEVICE** > **Restore Default**.
  - All settings: You can reset all settings stored on the device. Press OK to reset all device settings.
  - Keep Network Settings: You can reset all settings except network settings. Press OK to reset all settings except network settings.
  - Factory Default: You can delete all the information saved in the device and the root certificate and restore default settings.
  - Delete the Root Certificate: You can delete the root certificate saved in the device.
- **3** If you proceed to restore the defaults, the device will restart.

## NOTE

- When you reset, the operator level will be reset as well. After resetting, make sure to set the operator level again.
- Language setting will not change after resetting.
- Factory Default menu can be used when the root certificate is saved in the device.
- **Delete the Root Certificate** menu can be used only when the root certificate is saved in the device and Administrator has been designated.

# **User ID Type**

You can set the type of user ID to be registered on the device to a combination of alphabetic characters, numbers, and symbols (\_, -).

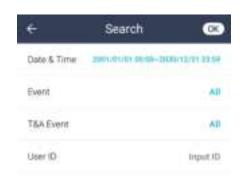
- 1 Press 🔐 and authenticate with the Admin level credential.
- 2 Select **DEVICE** > **User ID Type**.
- **3** Change to the desired item and press **OK**.

# **Event Log**

# **Search Log**

You can set a condition and search a log.

- 1 Press 🔐 and authenticate with the Admin level credential.
- 2 Select **EVENT LOG**. All event logs appear.
- **3** Press Q to search a specific log and change the condition.





4 Press **OK**. A log that matches the condition will be displayed on the screen.

# **Delete All Logs**

You can delete all saved logs.

- 1 Press and authenticate with the Admin level credential.
- 2 Select EVENT LOG.
- 3 To delete all logs, select in and then press **OK**. To return to the previous screen, press **Cancel**.

# View Log Usage

You can check the status of log usage.

- **1** Press  $\blacksquare$  and authenticate with the Admin level credential.
- 2 Select **EVENT LOG** > . You can check the capacity of event and image logs on the device.





# **Troubleshooting**

# Checklist before reporting a failure

| Classification  | Problem  | Solution   |
|-----------------|--|--|
| Power           | The power is being supplied but the device does not operate.   | <ul> <li>If the distance between the terminal and the bracket is too great, the device may not operate due to the temper switch.</li> <li>Check the adaptor or the power cable.</li> </ul>   |
|                 | I forgot my PIN.   | <ul> <li>For a normal user PIN, request it from the administrator and reenter the PIN.</li> <li>If you have lost the Admin PIN, contact the installation company.</li> </ul>   |
| PIN             | I entered my PIN and pressed the <b>OK</b> button, but I still cannot open the door.                       | <ul> <li>Check if you entered the registered PIN correctly.</li> <li>Check if you have changed your PIN recently.</li> <li>If you cannot remember the PIN, request it from the administrator and reenter the PIN.</li> </ul>   |
| Face            | The face has been registered but face authentication cannot be done smoothly, and errors occur frequently. | <ul> <li>Check 'Cautions for registering a face' and register the face again.</li> <li>If there are a large number of registered faces, change Matching Timeout and try again.</li> </ul>  |
|                 | Face authentication has suddenly stopped working.  | Check 'Cautions for authenticating a face' and try again.  |
| Door Lock       | The door does not lock when I close the door.  | The electric lock may be malfunctioning. Have an inspection performed by the installation company.   |
| Time            | The time has suddenly become incorrect.  | FaceStation F2 is equipped with a built-in battery; however, if power is not supplied for a long period of time, the built-in battery may die, causing the time to become incorrect. For information on correcting the time, referring to Date & Time.   |
| Admin<br>Access | I lost my Admin PIN, so I cannot access the Admin mode.  | <ul> <li>The administrator grants access permission in FaceStation F2, so only the administrator can access the Admin menu.</li> <li>If you need to access the Admin menu, you can have a PIN issued through a special procedure. Ask the installation company for the procedure to issue the password.</li> </ul> |

# **Product specifications**

| Category        | Feature  | Specification   |
|-----------------|--|---|
|                 | Biometric  | Face, Fingerprint   |
|                 | RF Option  | 125kHz EM & 13.56MHz MIFARE, MIFARE Plus, DESFire EV1/EV2, FeliCa |
| Credential      | RF read range*   | EM/MIFARE/DESFire: 50 mm, FeliCa: 30 mm                           |
|                 | Mobile   | NFC, BLE  |
|                 | CPU  | 1.8 GHz Dual Core + 1.4 GHz Quad Core                             |
|                 | Memory   | 16GB Flash + 2GB RAM  |
|                 | LCD type   | 7" IPS color LCD  |
|                 | LCD resolution   | 800 x 1280 pixels   |
|                 | Sound  | 16bit   |
|                 | Operating temperature                                    | -20°C ~ 50°C  |
|                 | Storage temperature                                      | -40°C ~ 70°C  |
| General         | Operating humidity                                       | 0% ~ 80%, non-condensing  |
| <b>30.10.0.</b> | Storage humidity   | 0% ~ 90%, non-condensing  |
|                 | Camera   | 2MP 2EA   |
|                 | Dimension (W x H x D)                                    | 119.8 x 268.4 x 49.7 (mm)   |
|                 | Differsion (W XTTX D)                                    | Device: 670g  |
|                 | Weight   | Bracket (Including washer and bolt): 205g                         |
|                 | IP rating  | IP65  |
|                 | Certificates   | CE, FCC, KC, RoHS, REACH, WEEE                                    |
|                 | Recognition Distance                                     | 0.5 ~ 1.3m  |
|                 | Recognition Height                                       | 1.4 ~ 1.9m  |
| Face            | Matching speed   | Less than 0.5 sec   |
|                 | Live Face Detection                                      | Supported   |
|                 | Image dimension  | 300 x 400 pixels  |
|                 | Resolution   | 500 dpi   |
|                 | Template   | SUPREMA / ISO19794-2, ANSI-378                                    |
| Fingerprint     | Extractor / Matcher                                      |   |
|                 | Sensor Certificates                                      | MINEX certified and compliant  FBI PIV and FBI Mobile ID FAP20    |
|                 |  |   |
|                 | Live Face Detection                                      | Supported (SW-based)  |
|                 | Max. User (1:1)  * Based on one face enrollment per user | 100,000   |
|                 | Max. User (1:N)  | • Face: 50,000  |
| Capacity        | * Based on one face enrollment per user                  | • Fingerprint: 100,000  |
|                 | Max. Text Log  | 5,000,000   |
|                 | Max. Image Log   | 50,000  |
|                 | Ethernet   | 10/100 Mbps, auto MDI/MDI-X                                       |
|                 | RS-485   | 1ch Host or Slave (Selectable)                                    |
|                 | Wiegand  | 1ch Input, 1ch Output   |
| Interface       | TTL input  | 2ch Inputs  |
| interrace       | Relay  | 1 Relay   |
|                 | USB  | USB 2.0 (Host)  |
|                 | Tamper   | Supported   |
|                 | Power  | Voltage: DC 12V / DC 24V  |
|                 | - Over   | Current: Max. 2.5 A   |
|                 | Switch input VIH   | Min.: 3 V<br>Max.: 5 V  |
|                 | Switch input VIL   | Max.: 1 V   |
| Electrical      | Switch Pull-up resistance                                | 4.7 kΩ (The input pots are pulled up with 4.7 kΩ.)                |
|                 | Wiegand output VOH                                       | More than 4.8 V   |
|                 | Wiegand output VOL                                       | Less than 0.2 V   |
|                 | Wiegand output Pull-up resistance                        | Internally pulled up with 1 kΩ                                    |
|                 |  | Voltage: Max. 30 VDC  |
|                 | Relay  | Current: 1 A, Max. 2 A  |

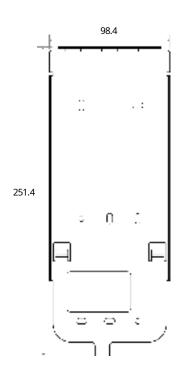
<sup>\*</sup> RF read range will vary depending on installation environment.

# **Dimensions**

(Unit: mm)







# **FCC compliance information**

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 A 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:

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

This equipment complies with RF exposure requirements set forth for an uncontrolled environment..

# **EU Declaration of Conformity (CE)**

This product is CE marked according to the provisions of the Radio Equipment Directive (RED) 2014/53/EU. Hereby, Suprema Inc. declares that this product is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive (RED) 2014/53/EU.

• Bluetooth Transmit Power: -0.1 dBm

Bluetooth Frequency: 2402~2480 MHz

NFC Frequency: 13.56 MHz

RFID Frequency: 13.56 MHz + 125 kHz

For more information, contact us at the following contact information.

Suprema Inc.

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Version 3, 29 June 2007

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# compliance information

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### **Warning & Safety Information**

### Safety Symbols

## A Warning

 When encountering this symbol in the manual, you must follow these recommendations to avoid imparable damage to your car, system or connected devices or to avoid accidents with injuries or death.

#### IC Information

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

 this device may not cause interference, and
 this device must accept any interference, including interference

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes :

 l'appareil ne doit pas produire de brouillage, et
 l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

### **FCC** Information

This device compiles with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

#### FCC notification to users

NOT E: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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

## **Appendix**

### **Escape clause**

- The information in this manual is provided with regard to the Suprema's products.
- The right to use is acknowledged only for products included in the terms and conditions of the sales agreement guaranteed by Suprema. The right of license to other intellectual property rights not discussed in this manual is not acknowledged.
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- Do not use the product of Suprema under the situations related to medical, rescue of human lives, or maintenance of life, as a person may get injured or lose his/her life due to product malfunction. If an accident occurs while a consumer is using the product under the situations described as examples above, employees, subsidiaries, branches, affiliated companies and distributors of Suprema do not accept responsibility nor will they reimburse for all related direct and indirect expenses or expenditure including attorney fees even if the consumer has discovered any shortcomings in the product design or manufacturing process and claims this as a significant fault.
- Suprema may modify the product size and specifications at any time without proper notice in order to improve the safety, function and design of the product. Designers must keep in mind that functions or descriptions indicated as "to be implemented" or "undefined" may change at any time. Suprema will implement or define such functions or descriptions in the near future and Suprema accepts no responsibility for compatibility issues and any other problems arising from such compatibility issues.
- If you wish to obtain the newest specifications before ordering the product, contact Suprema through a Sales Representative or local distributor of Suprema.

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