

# FaceLite

## USER GUIDE

Version 1.08  
English  
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# Safety instructions

Please read this safety instructions before you use the product to prevent injury to yourself and others and to prevent property damage. The term 'product' in this manual refers to the product and any items provided with the product.

## Instructional icons



**Warning:** This symbol indicates situations that could result in death or severe injury.



**Caution:** This symbol indicates situations that may result in moderate injury or property damage.



**Note:** This symbol indicates notes or additional information.



## Warning

### Installation

**When using a high-capacity power supply, please pay special attention to avoid miswiring.**

- Miswiring may result in serious fire, electric shock, or product damage.

**Do not install or repair the product arbitrarily.**

- This may result in electric shock, fire, or product damage.
- Damages caused by any modifications or failure to follow installation instructions can void your manufacturer's warranty.

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

- This may result in fire due to overheating.

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

- Humidity and liquids may result in electric shock or product damage.

**Do not install the product in a location where it will be affected by radio frequencies.**

- This may result in fire or product damage.

### Operation

**Keep the product dry.**

- Humidity and liquids may result in electric shock, fire, or product damage.

**Do not use damaged power supply adapters, plugs, or loose electrical sockets.**

- Unsecured connections may cause electric shock or fire.

**Do not bend or damage the power cord.**

- This may result in electric shock or fire.



## Caution

### **Installation**

Please read this manual before installing the product to ensure a safe and correct installation.

When wiring the power cable and other cables, make sure to connect them with the power turned off for all devices involved.

- The product may malfunction.

Before connecting power to the product, double-check the manual to ensure that the wiring is correct, then connect the power.

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

- This may result in product damage, malfunction, discoloration, or deformation.

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

- This may result in injury or product damage.

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

- The product may malfunction.

Keep the minimum distance between products when installing multiple products.

- The product may be affected by radio frequencies emitted by other products and the product may malfunction.

Use the IEC/EN 62368-1 approved power adapter that supports higher power consumption than the product. It is highly recommended to use the power adapter sold by Suprema.

- If the right power supply is not used, the product may malfunction.
- Refer to the **Power** in the product specifications for maximum current consumption specifications.

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

- If connecting and using the same power supply, the product may malfunction.



## Caution

### **Operation**

**Do not drop the product or cause impacts to the product.**

- The product may malfunction.

**Do not disconnect the power supply while upgrading the firmware of the product.**

- The product may malfunction.

**Do not disclose the password to others and change it regularly.**

- This may result in illegal intrusion.

**Do not press buttons on the product by force or do not press them with a sharp tool.**

- The product may malfunction.

**Do not store your product in very hot or very cold places. It is recommended to use your product at temperatures from -20°C to 50°C.**

- The product may malfunction.

**When cleaning the product, mind the following.**

- Wipe the product with a clean and dry towel.
- If you need to sanitize the product, moisten the cloth or the wipe with a proper amount of rubbing alcohol and gently clean all exposed surfaces. Use rubbing alcohol (containing 70 % Isopropyl alcohol) and a clean, non-abrasive cloth like lens wipe.
- Do not apply liquid directly to the surface of the product.

**Do not use the product for anything other than its intended use.**

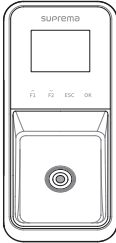
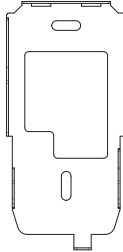
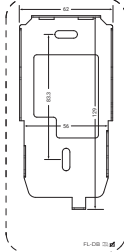
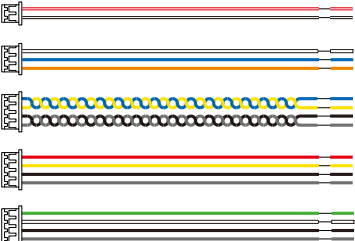





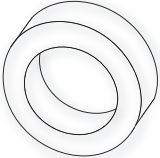
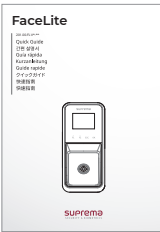

- The product may malfunction.

### **RTC Battery**

Use of an unapproved or incorrect type of battery may result in a risk of explosion. Discard the battery according to the appropriate regional or international waste regulations.

# Introduction

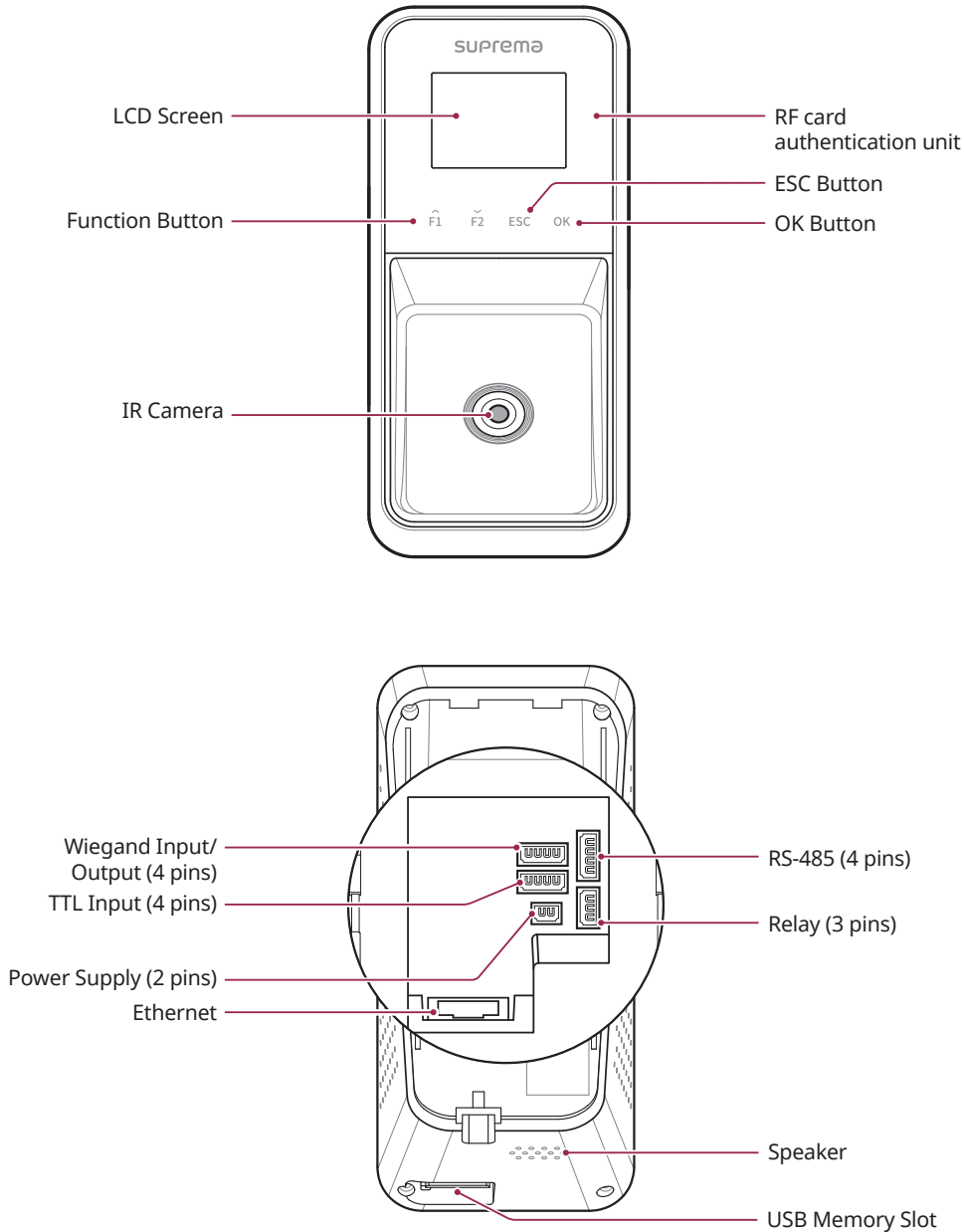
## Components

|   |   |   |
|---|---|---|
|    |    |    |
| <p>FaceLite</p>   | <p>Wall Bracket</p>   | <p>Drilling Template</p>  |
|   |    |    |
| <p>Connection Cables</p>  | <p>Diode</p>  | <p>120 <math>\Omega</math> Resistor</p>   |
|  |  |  |
| <p>PVC Anchor x2</p>  | <p>Fixing Screw x2</p>  | <p>Bracket Fixing Screw<br/>(Star Shaped)</p>   |
|  |  |  |
| <p>Ferrite Core</p>   | <p>Quick Guide</p>  | <p>Open Source Software Guide</p>   |



- 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 more details regarding the product installation, visit the Suprema website (<https://www.supremainc.com>) and refer to the installation guide.

## Name and function of each part



| Name                          | Description   |
|-------------------------------|---|
| LCD Screen                    | Provides UI for operation.  |
| Function Buttons              | Used for T & A key or entering characters. When entering characters, a short push of the function button moves left and right, and a long push moves up and down. |
| IR Camera                     | Capture the infrared face image.  |
| OK Button                     | Used for selecting and setting T&A Mode. If a job code is set, you can change the job code of the user by pressing this button long.                              |
| ESC Button                    | Used for opening the menu, moving to the previous screen or canceling input.  |
| RF card authentication unit   | Part to scan the card for entrance.   |
| Wiegand Input/Output (4 pins) | Connect the Wiegand input/output cable.   |
| TTL Input (4 pins)            | Connect the TTL input cable.  |
| Power Supply (2 pins)         | Connect the power supply cable.   |



| Name            | Description                 |
|-----------------|-----------------------------|
| Ethernet        | Connect the Ethernet cable. |
| USB Memory Slot | Connect USB memory.         |
| Speaker         | Delivers sound.             |
| Relay (3 pins)  | Connect the relay cable.    |
| RS-485 (4 pins) | Connect the RS-485 cable.   |

## Cables and connectors

### Power supply



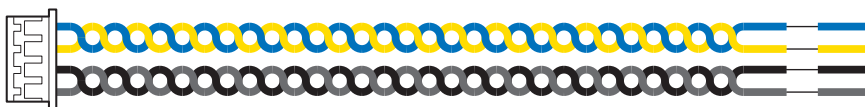
| Pin | Name     | Color                |
|-----|----------|----------------------|
| 1   | PWR +VDC | Red (white stripe)   |
| 2   | PWR GND  | Black (white stripe) |

### 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 IN0 | 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 enrollment and authentication method

### Cautions for enrolling a face

- When enrolling a face, maintain a distance of 40 cm to 80 cm between the device and the face.
- Be careful not to change the facial expression. (smiling face, drawn face, wink, etc.)
- If you do not follow the instructions on the screen, the face registration may take longer or may fail.
- Be careful not to cover the eyes or eyebrows.
- Do not wear hats, masks, sunglasses or eyeglasses.
- Be careful not to display two faces on the screen. Register one person at a time.
- It is recommended for a user wearing glasses to register both faces with and without glasses.

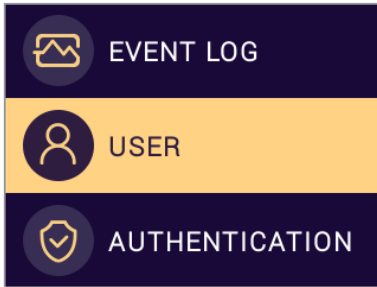
### Cautions for authenticating a face

- Ensure that the face appears inside the guideline displayed on the screen of the device.
- If glasses have been changed, authentication may fail. If the face without glasses has been registered, authenticate the face without glasses. If only the face with glasses has been registered, authenticate the face with the previously worn glasses again.
- 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.

# Admin Menu

## All Menus

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select the desired menu.



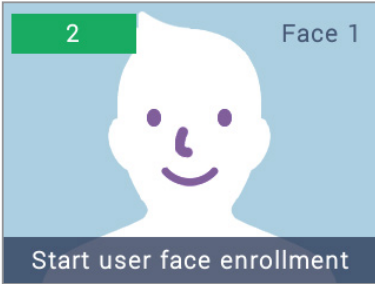
If the administrator has not been designated, the menu screen will be displayed when you press ESC.

# User

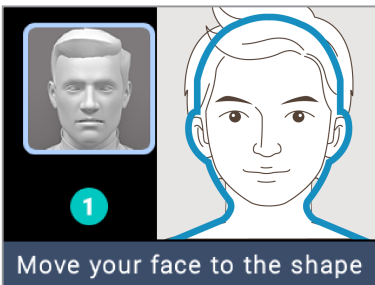
## Registering user information

The user information including credentials can be registered.

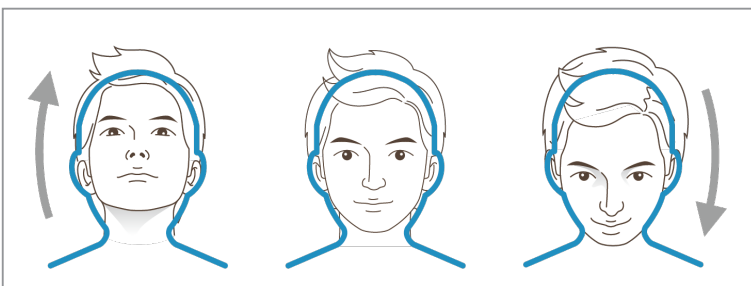
- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **USER** → **Add User** and press **OK**. The face registration wizard will begin.



- 3 To proceed with the face registration wizard, press **OK**. To skip, press **ESC** and go to step 6.
- 4 If you have pressed **OK**, adjust the distance so that the face appears on the guideline of the screen and stare directly at the camera of the device.




- 5 Follow the on-screen instructions to move your head up and down slowly.





- When registering a face, maintain a distance of 40cm to 80cm between the device and the face.
- Be careful not to change the facial expression. (smiling face, drawn face, wink, etc.)
- If you do not follow the instructions on the screen, the face registration may take longer or may fail.
- Be careful not to cover the eyes or eyebrows.
- Do not wear hats, masks, sunglasses or eyeglasses.
- Be careful not to display two faces on the screen. Register one person at a time.
- It is recommended for a user wearing glasses to register both faces with and without glasses.
- To register high-quality face templates, disable **Quick Enroll**. When you set **Quick Enroll** to **Disabled**, the face registration procedure is set to 3 steps.

## 6 Select and set the desired item.

|  > Add User |   |
|--|---|
| User ID  | > |
| 2  |   |
| User Name  | > |
| (Enter Name)   |   |
| Face   | > |
| 1  |   |

- **User 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.
- **User Name:** Enter the user name.
- **Face:** Register a face for user authentication. Press **OK** and register a face according to the instructions on the screen.
- **Card:** Register a card for user authentication. Press **OK** and scan the card that will be assigned to the user. To register an additional card, press **+ Add Card**.
- **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.
- **Start Date:** Set a start date to use the user account.
- **Expiry Date:** Set an expiry date to use the user account.
- **Private Auth Mode:** Change the authentication method according to the user.



Available menus vary according to the set user level.

- **None:** This is the general user level and menus cannot be accessed.
- **Administrator:** All menus can be accessed.
- **Configuration:** **AUTHENTICATION, DISPLAY & SOUND, NETWORK, DEVICE, and EVENT LOG** menus can be accessed.
- **User Management:** **USER and EVENT LOG** menu can be accessed.

## 7 To save settings, press **OK**.

## Modifying User Information

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

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **USER** → **Search User** and press **OK**.
- 3 Select your search terms. You can search for a user by **All**, **User ID**, **Name**, and **Card**.
- 4 Select a user you wish to modify and press **Edit**.
- 5 Modify the information by referring to **Registering user information** and press **Save**.
  - To delete a user, select **Delete** and then press **OK**.



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 **ESC** and authenticate with the Admin level credential.
- 2 Select **USER** → **Delete All Users** and press **OK**.
- 3 When you press **OK**, all registered users will be deleted.

## View User Usage

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

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **User** → **User Usage** and press **OK**.

| User Usage |        |
|------------|--------|
| User       | 2      |
|            | 30,000 |
| Face       | 2      |
|            | 30,000 |
| Card       | 0      |
|            | 30,000 |




- 3 To return to the previous screen, press **ESC**.

# Authentication

## Auth Mode












### Face Mode

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

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **AUTHENTICATION** → **Auth Mode** → **Face Mode** and press **OK**.
- 3 Set the desired authentication mode and select a schedule.
  - : Mode allowing authentication with a face only.
  -  + : Mode to authenticate with a face and PIN.
- 4 To save settings, press **Apply**.

### Card Mode

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

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **AUTHENTICATION** → **Auth Mode** → **Card Mode** and press **OK**.
- 3 Set the desired authentication mode and select a schedule.
  - : Mode allowing authentication with a card only.
  -  + : Mode allowing authentication with a card and then with a face.
  -  + : Mode allowing authentication with a card and PIN.
  -  +  / : Mode allowing authentication with a card and then with a face or PIN.
  -  +  + : Mode allowing authentication with a card and then with both a face and PIN input.
- 4 To save settings, press **Apply**.



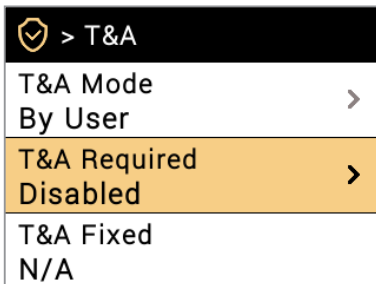
- A schedule can be set in BioStar 2. If there is no set schedule, only **Always** can be selected.
- For detailed contents regarding setting a schedule, refer to BioStar 2 Administrator's manual.



## T&A Mode

You can set how to register T&A Mode.

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Press **AUTHENTICATION** → **T&A** and press **OK**.
- 3 Select and set the desired item.



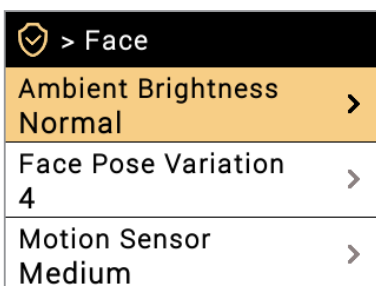
- **T&A Event:** View the set T&A event.
- **T&A Mode:** Set the method to use T&A mode.
- **T&A Required:** Set to require a user to select a T&A event when authenticating.
- **T&A Fixed:** Set to use only a T&A event selected by the administrator. This option can be used when **Fixed** is set for **T&A Mode**.
- **Job Code:** Select whether or not to use **Job Code**.

- 4 To save settings, press **Apply**.

## Face

You can change settings regarding the face authentication.

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Press **AUTHENTICATION** → **Face** and press **OK**.
- 3 Select and set the desired item.



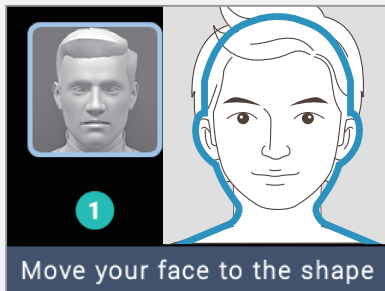
- **Ambient Brightness:** Detect the ambient brightness and adjust the intensity of IR LED. Change settings according to the installation environment.
- **Face Pose Variation:** Set the sensitivity for the position, angle, and distance of a face when registering the face. Set high if you wish to obtain a detailed face template
- **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.
- **Security Level:** Set the security level for 1:N authentication.

- **Group Matching:** Check whether or not to use Group Matching. If Group Matching is used, you can increase the authentication speed by designing various user's faces in a group.
- **Enhanced fake face enrollment block:** You can detect user enrollment using fake faces such as photos. The strength can be set from **Level 1** to **Level 3**. The higher the level, the stronger the level of detection.
- **Quick Enroll:** Set whether or not to use a Quick Enroll. When you set this option to Disabled, the face registration procedure is set to 3 steps.
- **IR Auth Guide:** Set the guideline to be displayed on the screen when authenticating a face. If you set **IR Auth Guide** to **Not Used**, the guideline will not be displayed on the screen. If you set **Use**, the guideline will be displayed after a certain time. When set to **Always**, guide line is always displayed on the screen during authentication.
- **Duplicate Check:** When registering a face, you can check duplicates.

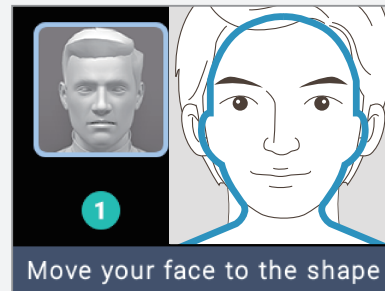


- **Group Matching** can be set in BioStar 2. For detailed contents, refer to the BioStar 2 Administrator Manual.
- If you set **Enhanced fake face enrollment block** to high level, the enrollment of real face may be rejected. If enrollment fails, try again or lower your detection strength.
- When enrolling a face while **Enhanced fake face enrollment block** is enabled, please enroll from a closer distance. If enrollment fails, try again or move closer.

Disabled Enhanced fake face enrollment block



Enabled Enhanced fake face enrollment block



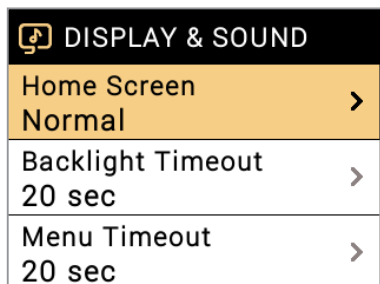
- To register high-quality face templates, disable **Quick Enroll**.

**4** To save settings, press **Apply**.

# Display & Sound

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

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



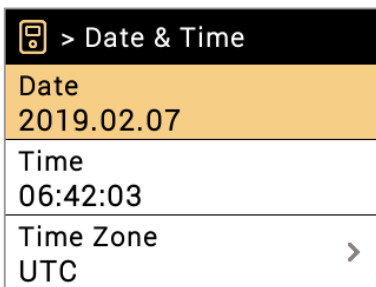
- **Home Screen:** Select items to be displayed in the background of the home screen.
  - **Backlight Timeout:** Set the time (in seconds) to automatically turn off the lighting of the LCD screen.
  - **Menu Timeout:** Set the time (in seconds) for the menu screen to disappear automatically. If there 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.
  - **Language:** Set the language you wish to use.
  - **Voice Instruction:** Set to use the voice instruction instead of alarm sounds.
  - **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 server. 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.
  - **Volume:** Set the volume.
- 4 To save settings, press **Apply**.

# Device

## Date & Time

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

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Date & Time** and press **OK**.
- 3 Change the desired item.



- **Date:** Check the current date. To modify it directly, disable **Time Sync**.
- **Time:** Check the current time. To modify it directly, 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 **ESC** and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **DST** and press **OK**.
- 3 Select the desired item and change the setting.
- 4 To save settings, press **Apply**.

## Relay

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

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Relay** and press **OK**.
  - **Relay:** You can set whether relay is enabled or not. To set the open time and the input port of the exit button, set to **Enabled**.
  - **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.
- 3 To save settings, press **Apply**.

## Device Info

You can view the model name, firmware version of Device ID, and MAC address.

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Device Info** and press **OK**. You can view the information including **Model Name**, **Device ID**, **HW**, **FW**, **Kernel**, and **MAC**.
- 3 To return to the previous screen, press **ESC**.

## Memory Usage

View the status of memory usage.

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Memory Usage** and press **OK**. You can view the memory usage status of the device.
- 3 To return to the previous screen, press **ESC**.

## 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 **ESC** and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **USB Memory** and press **OK**.
- 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.

#### 4 To save settings, press **Apply**.



- 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 8 GB, SUM-PSB 8 GB, SUM-PSB 16 GB, SUM-BSG 32 GB
    - LG Electronics: XTICK J3 WINDY 8 GB, SMART USB MU1 White 8 GB, MU 1 USB 32 GB, MU28GBC 32 GB, XTICK MOBY J1 16 GB
    - SanDisk: Cruzer 16 GB, Cruzer Blade CZ50 4 GB, Cruzer Blade CZ50 32 GB, CZ48 Ultra USB 3.0 64 GB, CZ80 USB3.0 64 GB, CZ52 64 GB, Cruzer Glide Z60 128 GB, Cruzer Force CZ71 32 GB
    - Sony: Micro Vault Click 8 GB, MicroVault CLICK 16 GB, USM-SA1 32 GB
    - Transcend: JetFlash 760 8 GB, JetFlash 760 32 GB, JetFlash 500 8 GB
    - Memorette: MINI500 8 GB
    - A-DATA: S102 PRO 8 GB
    - Trigem Pastel 8 GB
- The supported USB flash drives listed above were all tested with USB Type-A. To connect these USB flash drives to FaceLite, a separate USB Type-C gender is required.

## 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 **ESC** and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Secure Tamper**, and then change the settings.
- 3 To save settings, press **Apply**.

## Restart Device

The user can restart the device.

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

## Restore Default

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

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Restore Default** and press **OK**.
  - **Reset All settings:** You can reset all settings stored on the device. Press **OK** to reset all device settings.
  - **Quick Reset:** 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.



- 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 **ESC** and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **User ID Type** and press **OK**.
- 3 Change to the desired item and press **OK**.
- 4 To save settings, press **Apply**.

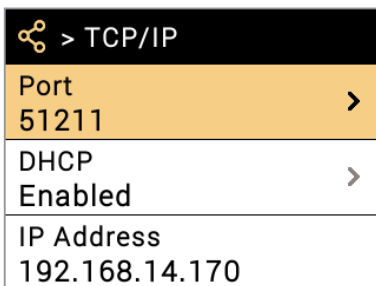
# Network

## Network Settings

You can change the network settings of the device.

### TCP/IP

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **NETWORK** → **TCP/IP** and press **OK**.



- **Port:** Set the device port.
  - **DHCP:** Set whether to use DHCP. If DHCP setting is disabled, the user can modify **Port**, **IP Address**, **Gateway**, **Subnet Mask**, and **DNS**.
  - **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.
- 3 To save settings, press **Apply**.



## Server

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **NETWORK** → **Server** and press **OK**.

| Server           |   |
|------------------|---|
| Connection Mode  | > |
| Server -> Device |   |
| Server URL       |   |
| Server IP        |   |

- **Connection Mode:** When you select **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 URL:** Enter server URL instead of **Server IP**. Input is accepted only when **Device -> Server** is set for **Connection Mode**.
- **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 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**.

- 3 To save settings, press **Apply**.

## RS-485

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **NETWORK** → **RS-485** and press **OK**.

| RS-485    |   |
|-----------|---|
| Mode      | > |
| Default   |   |
| Baud Rate | > |
| 115200    |   |
| Apply     |   |

- **Mode:** Select the RS-485 mode.
- **Baud Rate:** Select the desired baud rate.

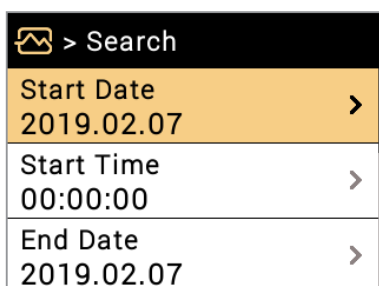
- 3 To save settings, press **Apply**.

# Event Log

## Search Log

You can set a condition and search a log.

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **EVENT LOG** and press **OK**.
- 3 Press **Search** and change the condition. When you press **OK**, a log that matches the condition will be displayed on the screen.



| Search     |              |
|------------|--------------|
| Start Date | 2019.02.07 > |
| Start Time | 00:00:00 >   |
| End Date   | 2019.02.07 > |

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

## Delete All Logs

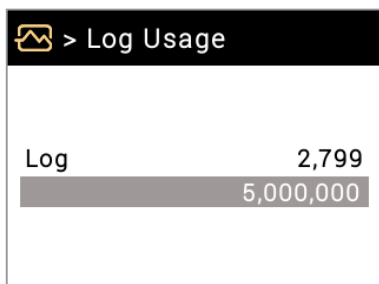
You can delete all saved logs.

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

## View Log Usage

You can check the status of log usage.

- 1 Press **ESC** and authenticate with the Admin level credential.
- 2 Select **EVENT LOG** and press **OK**.
- 3 Select **Log Usage** and press **OK**. You can check the status of log usage.



- 4 To return to the previous screen, press **ESC**.

# Troubleshooting

This troubleshooting provides information to solve unexpected issues that you may encounter when using the device.

| Category     | Problem  | Solution   |
|--------------|--|--|
| Power        | The power is being supplied but the device does not operate.   | <ul style="list-style-type: none"> <li>• If the terminal and the bracket are far away from each other, the device may not operate due to the temper switch.</li> <li>• Check the adapter or the power cable.</li> </ul>  |
| PIN          | I lost my PIN.   | <ul style="list-style-type: none"> <li>• For a normal user PIN, request it from the administrator and enter it again.</li> <li>• If you have lost the Admin PIN, contact the installation company.</li> </ul>  |
|              | I entered my PIN and pressed the <b>OK</b> button, but I still cannot open the door.                       | <ul style="list-style-type: none"> <li>• Check if you have entered the registered PIN correctly.</li> <li>• Check if you have changed the PIN recently.</li> <li>• If you cannot remember the PIN, request it from the administrator and enter it again.</li> </ul>  |
| Face         | The face has been registered but face authentication cannot be done smoothly, and errors occur frequently. | <ul style="list-style-type: none"> <li>• Check <a href="#">Cautions for enrolling a face</a> 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.  | <ul style="list-style-type: none"> <li>• Check <a href="#">Cautions for authenticating a face</a> and try again.</li> </ul>  |
| Door Lock    | The door cannot be locked when I close the door.   | <ul style="list-style-type: none"> <li>• The electric lock may be malfunctioning. Have an inspection through the installation company.</li> </ul>  |
| Time         | Suddenly the time has become incorrect.  | <ul style="list-style-type: none"> <li>• FaceLite 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 <a href="#">Date &amp; Time</a>.</li> </ul> |
| Admin Access | I lost my Admin PIN, so I cannot access the Admin mode.  | <ul style="list-style-type: none"> <li>• The administrator grants an access permission in FaceLite, so only the administrator can access the Admin menu.</li> <li>• If you have lost the Admin PIN, contact the installation company.</li> </ul>   |

# Product specifications

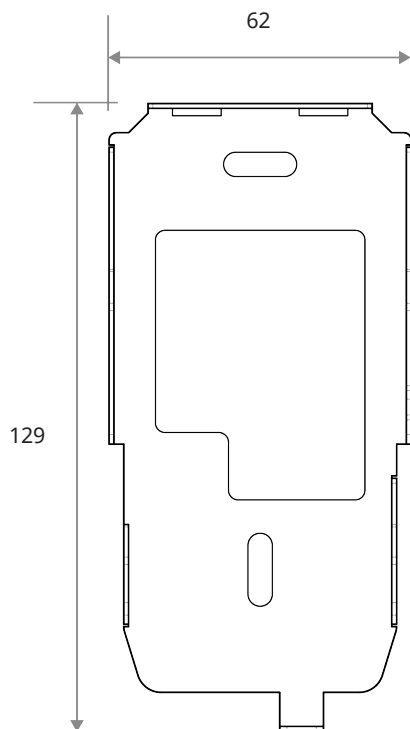
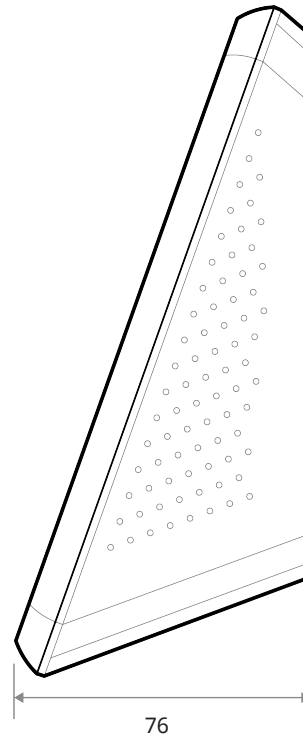
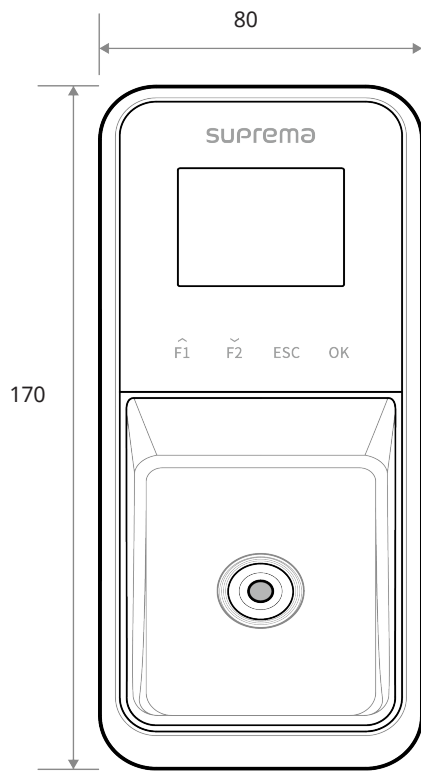
| Category     | Feature  | Specification   |
|--------------|--|---|
| Credential   | Biometric                                      | Face  |
|              | RF Option                                      | <b>FL-DB:</b> 125 kHz EM & 13.56 Mhz MIFARE, MIFARE Plus, DESFire EV1/ EV2 <sup>1)</sup> , FeliCa   |
|              | RF Read Range <sup>2)</sup>                    | MIFARE/DESFire/BLE: 50 mm, EM/Felica: 30 mm   |
|              | Mobile   | NFC, BLE  |
|              | Live Face Detection                            | Supported   |
| General      | CPU  | 1.2 GHz Quad-core   |
|              | Memory   | 8 GB Flash + 1 GB RAM   |
|              | Crypto Chip                                    | Supported   |
|              | LCD Type                                       | 2" color TFT LCD  |
|              | LCD Resolution                                 | 320 x 240 pixels  |
|              | IR LED   | 8 ea (940 nm)   |
|              | Sound  | 24 bit DSP  |
|              | Operating Temperature                          | -20 °C ~ 50 °C  |
|              | Storage Temperature                            | -40 °C ~ 70 °C  |
|              | Operating Humidity                             | 0 % ~ 80 %, non-condensing  |
|              | Storage Humidity                               | 0 % ~ 90 %, non-condensing  |
|              | Camera   | CMOS  |
|              | Camera Resolution                              | 720 x 480 pixels  |
|              | Camera Angle                                   | IR Lens: Diagonal 58°   |
|              | Dimension (W x H x D)                          | 80 x 170 x 76 (mm)  |
|              | Weight   | <ul style="list-style-type: none"> <li>• Device: 296 g</li> <li>• Bracket (Including washer and bolt): 41 g</li> </ul>                                      |
| Certificates | CE, UKCA, KC, FCC, RCM, SIG, RoHS, REACH, WEEE |   |
| Capacity     | Max. User                                      | 30,000 <sup>3)</sup>  |
|              | Max. Credential (1:N)                          | <ul style="list-style-type: none"> <li>• Fingerprint: 30,000<sup>4)</sup></li> <li>• Face: 4,000</li> </ul>   |
|              | Max. Credential (1:1)                          | <ul style="list-style-type: none"> <li>• Fingerprint: 30,000<sup>4)</sup></li> <li>• Face: 30,000</li> <li>• Card: 30,000</li> <li>• PIN: 30,000</li> </ul> |
|              | Max. Text Log                                  | 5,000,000   |
|              | Image Log                                      | Not Supported   |

| Category   | Feature  | Specification  |
|------------|--|--|
| Interface  | Wi-Fi  | Not Supported  |
|            | Ethernet   | Supported (10/100 Mbps, auto MDI/MDI-X)  |
|            | RS-485   | 1 ch Master or Slave (Selectable)  |
|            | RS-485 Communication Protocol                              | OSDP V2 compliant  |
|            | Wiegand  | 1 ch Input or Output (Selectable)  |
|            | TTL Input  | 2 ch Inputs  |
|            | Relay  | 1 Relay  |
|            | USB  | USB 2.0 (Host)   |
|            | Tamper   | Supported  |
| Electrical | Power  | <ul style="list-style-type: none"> <li>Voltage: 24 Vdc</li> <li>Current: Max. 1.2 A</li> </ul> |
|            | Switch Input VIH   | <ul style="list-style-type: none"> <li>Min.: 3 V</li> <li>Max.: 5 V</li> </ul>                 |
|            | Switch Input VIL   | Max.: 1 V  |
|            | Switch Pull-up Resistance                                  | 4.7 k $\Omega$ (The input pots are pulled up with 4.7 k $\Omega$ .)                            |
|            | 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 k $\Omega$   |
| Relay      | 2 A @ 30 VDC Resistive load<br>1 A @ 30 VDC Inductive load |  |

- 1) DESFire EV2 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with FaceLite.
- 2) RF read range will vary depending on installation environment.
- 3) The number of users registered without having any credential data.
- 4) If a device with a fingerprint sensor is connected as a slave, the slave device can be used for fingerprint authentication.

# 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.



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

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

- This appliance and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.
- A minimum separation distance of 20 cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

## 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.

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Version 3, 29 June 2007

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