

# FaceStation 2

## USER GUIDE

Version 1.22

English

EN 102.00.FS2 V1.22A

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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

**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 place with direct sunlight, moisture, dust, soot, or a gas leak.**

- This may result in electric shock or fire.

**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 adaptors, 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

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

- If the right power supply is not used, the product may malfunction.

**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.

### 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 including fingerprint sensor. 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.**

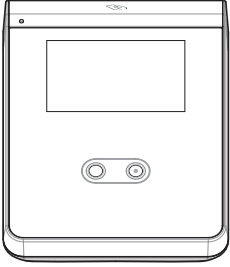
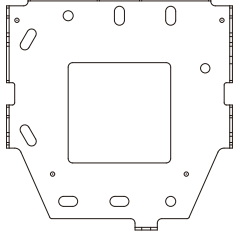
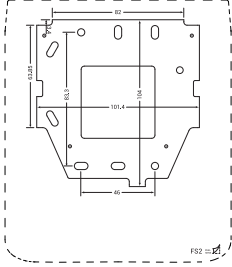
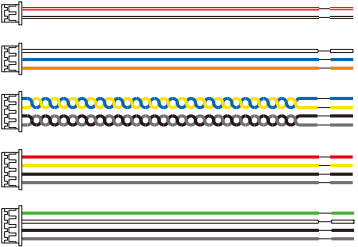


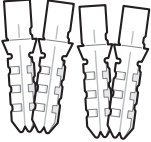


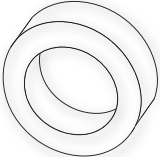


- The product may malfunction.

### **RTC battery**

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

# Introduction

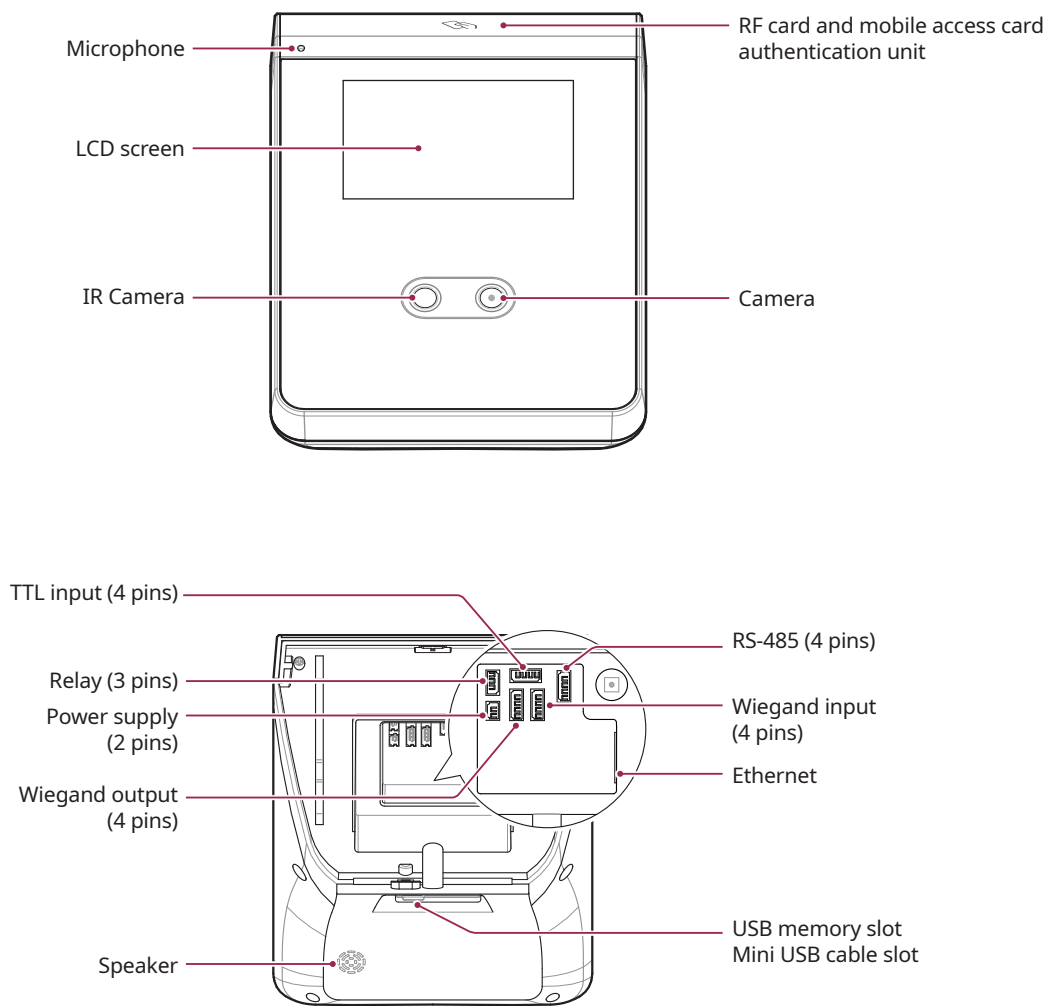
## Components

		
<b>FaceStation F2</b>	<b>Wall Bracket</b>	<b>Drilling Template</b>
		
<b>Connection Cable</b> (1x2-pin, 1x3-pin, 3x4-pin)	<b>Diode</b>	<b>120 Ω resistor</b>
		
<b>PVC Anchor x4</b>	<b>Fixing Screw x4</b>	<b>Bracket Fixing Screw</b> (Star Shaped)
		
<b>Ferrite Core</b>	<b>Quick Guide</b>	<b>Open Source Software Guide</b>



- Components may vary according to the installation environment.
- The tilting bracket and thermal camera for FaceStation 2 is sold separately.
- 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, visit the Suprema website (<https://www.supremainc.com>) and refer to the user guide.

## Name and function of each part



Name	Description
Microphone	Delivers the voice of the user when the interphone is connected.
LCD screen	Provides UI for operation.
IR Camera	Captures the infrared face image.
Camera	Captures an actual face image.
RF card and mobile access card authentication unit	Scans the card for entrance.
Speaker	Delivers sound.
USB memory slot	Connect USB memory. <ul style="list-style-type: none"> <li>Suprema Thermal Camera (TCM10-FS2) and USB memory cannot be used at the same time.</li> </ul>
Mini USB cable slot	Will be supported in the future.
TTL input (4 pins)	Connect the TTL input cable.
RS-485 (4 pins)	Connect the RS-485 cable.
Relay (3 pins)	Connect the relay cable.

Power supply (2 pins)	Connect the power supply cable.
Ethernet	Connect the Ethernet cable.
Wiegand input (4 pins)	Connect the Wiegand input cable.
Wiegand output (4 pins)	Connect the Wiegand output 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 enrollment 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 enroll both faces with and without glasses.

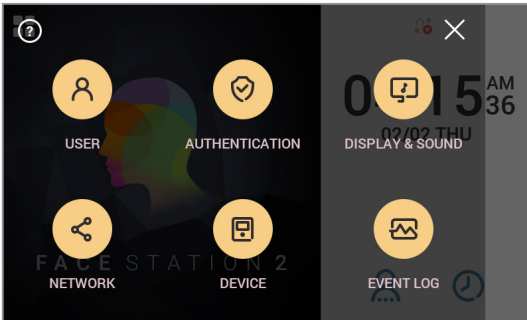
### Cautions for authenticating a face


- 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  and authenticate with the Admin level credential.
- 2 Select the desired menu.

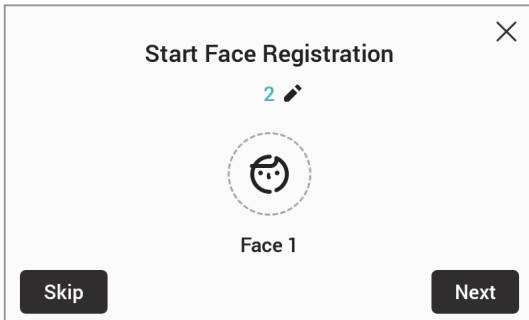


If the administrator has not been designated, the menu screen will be displayed when you press .

## Registering user information

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

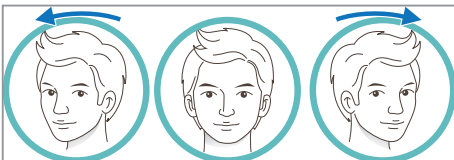
- 1 Press  and authenticate with the Admin level credential.
- 2 Select **User** → . The face registration wizard will begin.



- 3 To proceed with the face registration wizard, press **Next**. To skip, press **Skip** and go to step 5.
- 4 If you have pressed **Next**, register the face according to the instructions on the screen. Face registration is carried out in 3 steps.
  - 1) Registering the front face



- 2) Moving the face up and down



- 3) Moving the face to the left and right

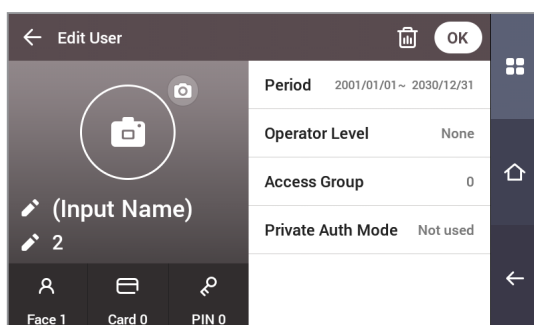


When the face registration wizard is used, only the user's face is registered. Modify other information by pressing **Edit** after registering the face.



- When registering 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.

## 5 If you have pressed **Skip**, select and set the desired item.



- : Take a picture of a user with the built-in camera.
- **Name**: Enter the username.
- **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 and register a face according to the instructions on the screen. To register another face, press again.
- **Card**: Register a card for user authentication. Press and scan the card that will be assigned to the user. To register an additional card, press again.
- **PIN**: Enter the PIN you wish to use. Enter the PIN you wish to use, and then enter the same PIN again for confirmation. Enter a number between 4 and 16 digits to prevent leaking.
- **Validity period**: Set a Start Date and End Date to use the user account. When you press the first date, you can set **Start Date**, and when you press the second date, you can set **End Date**.
- **Operator Level**: Select the level you wish to assign to a user.
- **Face Group**: Select a face group for the user. Face groups can be used only when **Group Matching** is enabled, and these groups can be registered only in BioStar 2.
- **Access Group**: Check an access group for the user. Access groups can only be registered in BioStar 2.
- **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.

## 6 When you press **OK**, settings will be saved.

## Modifying User Information

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



- 1 Press  and authenticate with the Admin level credential.
- 2 Select **User** → .
- 3 Select your search terms. You can search for a user by **User ID, Name, Face** and **Card**.
- 4 Select a user you wish to modify and modify the information by referring to [Registering user information](#) and press **OK**.
  - To delete a user, select  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

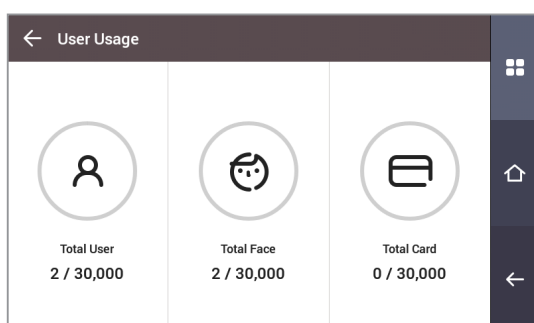
You can delete all registered users at once.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **User** →  and select Delete All or select a user you wish to delete.
- 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  and authenticate with the Admin level credential.
- 2 Select **User** → . User usage information appears.







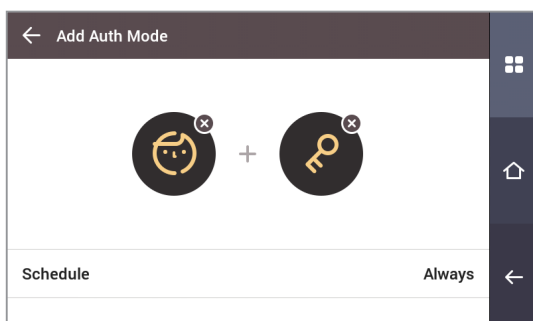
# Authentication

## Auth Mode

























### Modifying Auth Mode

You can set the authentication method and schedule according to each credential.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **AUTHENTICATION** → **Auth Mode**.
- 3 Press  to add an authentication mode or press an authentication mode you wish to modify.
- 4 Pressing the  icon will delete the selected credential, and pressing  will display an addable credential on the screen.



- 5 Set the desired auth mode and select a schedule.



Classification	Description
Face	<ul style="list-style-type: none"> <li>•  : Mode allowing authentication with a face only.</li> <li>•  +  : Mode to authenticate with a face and PIN.</li> </ul>
Card	<ul style="list-style-type: none"> <li>•  : Mode allowing authentication with a card only</li> <li>•  +  : Mode allowing authentication with a card and then with a face.</li> <li>•  +  : Mode allowing authentication with a card and PIN.</li> <li>•  +  /  : Mode allowing authentication with a card and then with a face or PIN.</li> <li>•  +  +  : Mode allowing authentication with a card and then with both a face and PIN input.</li> </ul>
ID	<ul style="list-style-type: none"> <li>•  +  : Mode allowing authentication by entering ID and then authenticating the face.</li> <li>•  +  : Mode allowing authentication by entering ID and then a PIN.</li> <li>•  +  /  : Mode allowing authentication by entering ID and then authenticating the face or entering a PIN.</li> <li>•  +  +  : Mode allowing authentication by entering ID and then using both face authentication and PIN input.</li> </ul>

- 6 Press **OK** to save the settings.






- 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.


## Delete Auth Mode

- 1 Press  and authenticate with the Admin level credential.
- 2 Select AUTHENTICATION → Auth Mode.
- 3 Press  and select an item to delete.
- 4 When you press OK, the selected item will be deleted.

## Add Auth Mode

- 1 Press  and authenticate with the Admin level credential.
- 2 Select AUTHENTICATION → Auth Mode.
- 3 Press .
- 4 Set the desired auth mode by pressing , then select a schedule.
- 5 When you press OK, the auth mode will be added.

## Operation

- 1 Press  and authenticate with the Admin level credential.
- 2 Press AUTHENTICATION and then modify the items below Operation.


Operation			
Ambient Brightness	Normal	Face Pose Variation	4
Motion Sensor	Medium	Enroll Timeout	60 Sec
Auth Timeout	5 Sec	Duplicate Check	<input checked="" type="checkbox"/>
Server Matching			<input type="checkbox"/>

- **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.
- **Auth Timeout:** If the authentication is not completed during the set time, the authentication will fail.
- **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.
- **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
- **Enroll Timeout:** If a face is not registered during the set time, the face registration will be canceled.
- **Duplicate Check:** When registering a face, you can check duplicates.



## Face Recognition

Change settings regarding face authentication.

- 1 Press  and authenticate with the Admin level credential.
- 2 Press **AUTHENTICATION** and then modify the items below **Face Recognition**.

Face Recognition			
Security Level	Normal	Group Matching	<input checked="" type="checkbox"/>
Backward Compatibility (Enrollment in v1.0.1)		<input type="checkbox"/>	
Enhanced fake face enrollment block		Disabled	
Quick Enroll	<input type="checkbox"/>		


- **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.
- **Backward Compatibility (Enrollment in v1.0.1):** Turn on this option if the firmware of the device that enrolled the face template is v1.0.1 or older.
- **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 Enabled, the face registration procedure is set to 1 step. If you set the option to Disabled, it is set to 3 steps.



- **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 you fail to enroll, try again or lower your detection strength.
- To register high-quality face templates, disable **Quick Enroll**.

## T&A Mode

You can set how to register T&A Mode.

- 1 Press  and authenticate with the Admin level credential.
- 2 Press **AUTHENTICATION** then modify the items below **T&A Mode**.

T&A Mode			
T&A Mode	By User	T&A Code	0
T&A Required	<input type="checkbox"/>	Job Code	<input type="checkbox"/>


- 3 Select and set the desired item.
  - **T&A Mode:** Set the method to use T&A mode.
  - **T&A Code:** Register a new T&A code.
  - **T&A Required:** Set to require a user to select a T&A event when authenticating.
  - **Job Code:** Select whether to use **Job Code**.

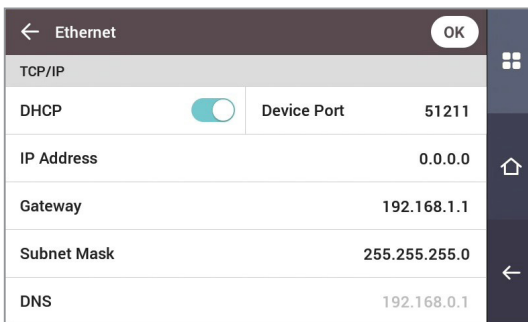
# Network

## 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**.




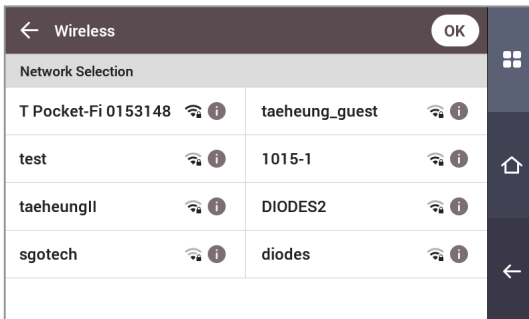
- **DHCP:** Set whether to use DHCP. If DHCP setting is disabled, the user can modify **IP Address**, **Gateway** and **Subnet Mask**.
  - **Device Port:** Set the device port.
  - **IP Address:** View the IP address of the device. To modify, disable DHCP setting.
  - **Gateway:** View the gateway of 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.
- 3 Press **OK** to save the settings.




Ethernet cannot be used at the same time as **Wireless**.

## Wireless

- 1 Press  and authenticate with the Admin level credential.
- 2 Select NETWORK → Wireless.
- 3 The list of available networks for connection will be displayed.




- 4 Select the network to which you wish to connect and enter the password. When you press OK, the connection to the wireless network will be made.
- 5 To set the network information of the wireless LAN manually, press  of the network name you wish to use and disable DHCP setting. You can modify **IP Address**, **Gateway**, **Subnet Mask** and **DNS**.



- **Wireless** cannot be used at the same time as **Ethernet**.
- To connect to **Wireless**, a wireless router is required. For content regarding the installation and configuration of a wireless router, refer to the user manual of the wireless router.

## Server


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



- **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 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**.

## Serial Setting

### RS-485


- 1 Press  and authenticate with the Admin level credential.
- 2 Select **NETWORK** and then modify the items below **Serial Setting**.

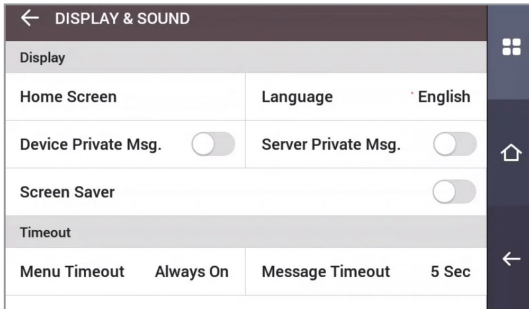
Serial Setting			
RS-485	Default	Baud Rate	115200

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

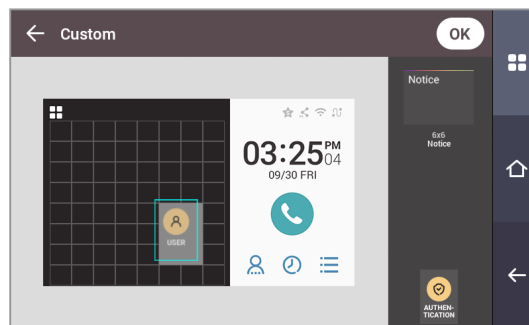
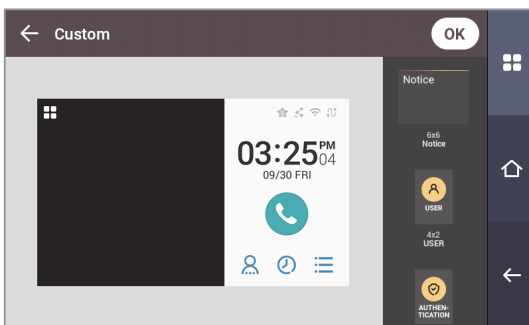
# Display & Sound

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. When **Custom** is selected for **Style**, the user can modify the Home Screen directly. Edit the Home Screen by pressing and holding the desired object, then dragging and dropping it to a desired location.




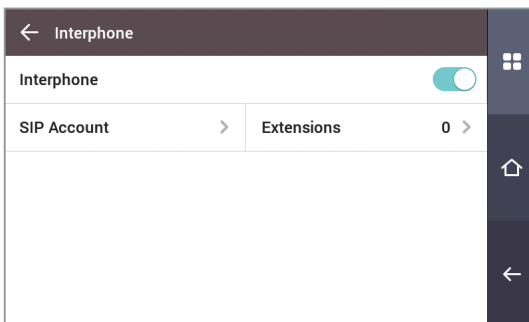
- **Language:** Set the language you wish to use.
- **Device Private Msg.:** Set whether or not to use a Private Message, which will be displayed on the screen when the user authenticates. You can set the **Device Private Msg.** on the device.
- **Server Private Msg.:** Set whether to use a Private Message, which will be displayed on the screen when the user authenticates. You can set the **Server Private Msg.** by using the BioStar 2 API. 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.
- **Screen Saver:** Set this option to use the screen saver feature. It reduces unnecessary energy consumption by lowering the brightness of the LCD screen when the device is not in use.
- **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.

# Device

## Interphone


Set the account and extensions of SIP interphone.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Interphone**.
- 3 When Enable is set for Interphone, you can set the SIP account and the extensions. Ensure to set each item correctly.




## Relay

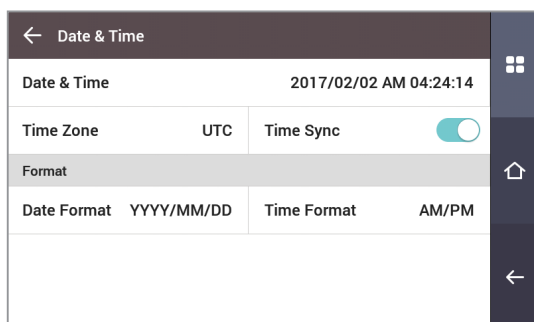
You can set the open time and the input port of the exit button in the device.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Relay**.
  - **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.
  - **Switch:** Select the relay type (N/O or N/C).

## 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**.
- 3 Select the desired item and change the setting.


## Device Info

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

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Device Info**.
- 3 You can view the information including **Model Name**, **Device ID**, **Serial No.**, **HW**, **FW**, **Kernel**, **MAC** and **WiFi MAC**.


## Memory Info

View the status of memory usage.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Memory Info**.

## 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  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.



- 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


## 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** → **Secure Tamper**, then change the settings.

## Restart Device


The user can restart the device.

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

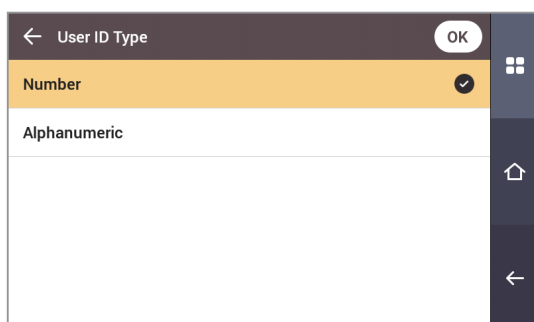


- When you reset, the operator level will be reset as well. After resetting, make sure to set the operator level again.
- Language setting will not change after resetting.
- **Factory Default** menu can be used when the root certificate is saved in the device.
- **Delete the Root Certificate** menu can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

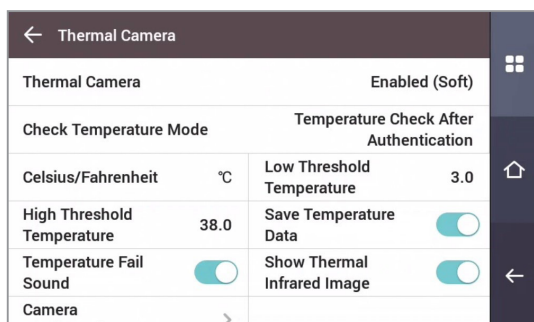


- 3 Change to the desired item and press **OK**.

## Thermal Camera

Thermal camera with FaceStation 2 measures temperature of users passing the access point and limit the access of users with higher temperature than preset threshold.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **DEVICE** → **Thermal Camera**.
- 3 Change the desired item.



- **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.
- **Check Temperature Mode:** Set the Check Temperature Mode depending on the usage when Mask Detection or Thermal Camera is activated.
  - **Temperature Check After Authentication:** Measure the temperature after a successful authentication.
  - **Temperature 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 Temperature 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.
- **Celsius/Fahrenheit:** Change the unit of temperature.
- **Low Threshold Temperature:** Set the minimum threshold temperature to limit the access. Users with detected temperature below the threshold will be denied access. It can be set between 1°C to 45°C and cannot be higher than the value of the maximum threshold temperature.
- **High Threshold Temperature:** Set the maximum threshold temperature to limit the access. Users with detected temperature over the threshold will be denied access. It can be set between 1°C to 45°C and cannot be lower than the value of the minimum threshold temperature.
- **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.
- **Temperature Fail Sound:** Set the alerts to trigger when the temperature is higher than the preset threshold.
- **Show Thermal Infrared Image:** Display infrared imaging on the screen of the devices.
- **Camera Configuration:** Configure the thermal camera settings for accurate measurement.
  - **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).
  - **Skin Temperature Compensation:** You can set the thermal camera to adjust its temperature value automatically measuring the ambient conditions.
  - **Skin Temperature Correction:** You can set the thermal camera to compensate for variations in caused by the ambient environment that consistently affect temperature measurement. For example, if the environment is causing temperature to be measured at 0.1°C higher, set the temperature correction to -0.1.





- 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):** 100
  - **Emission Rate:** 0.98
  - **ROI X(%):** 47
  - **ROI Y(%):** 45
  - **ROI Width(%):** 15
  - **ROI Height(%):**10
- The supported thermal camera is TCM10-FS2.

# Event Log


## Search Log

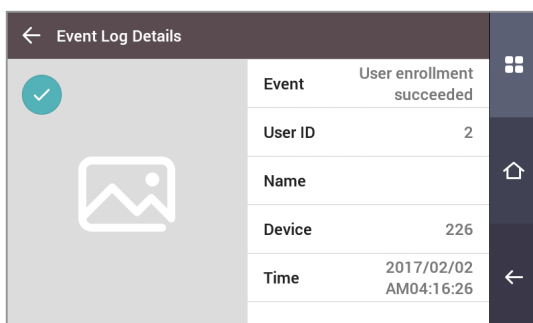
You can set a condition and search a log.

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





## Detail View Log

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **EVENT LOG**.
- 3 Select a log to view detailed contents.





## Delete All Logs

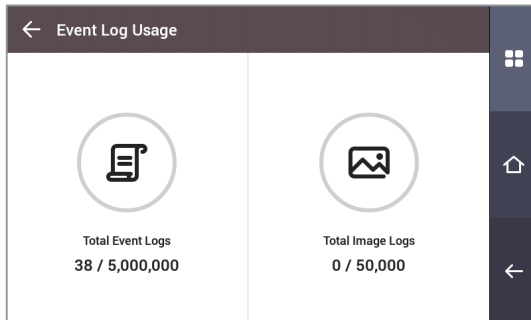
You can delete all saved logs.

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

## View Log Usage

You can check the status of log usage.

- 1 Press  and authenticate with the Admin level credential.
- 2 Select **EVENT LOG**.
- 1 Press .



# Troubleshooting

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

Category	Problem	Solution
<b>Power</b>	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 adaptor or the power cable.</li> </ul>
<b>PIN</b>	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>
<b>Face</b>	The face has been registered but face authentication cannot be done smoothly, and errors occur frequently.	<ul style="list-style-type: none"> <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.	<ul style="list-style-type: none"> <li>• Check 'Cautions for authenticating a face' and try again.</li> </ul>
<b>Door Lock</b>	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>
<b>Time</b>	Suddenly the time has become incorrect.	<ul style="list-style-type: none"> <li>• FaceStation F2 is equipped with a built-in battery but if power is not supplied for a long time, the built-in battery may die, causing the time to become incorrect. You can correct the time by referring to <a href="#">Date &amp; Time</a>.</li> </ul>
<b>Admin Access</b>	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 FaceStation F2, 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	<ul style="list-style-type: none"> <li>• <b>FS2-D</b>: 125kHz EM &amp; 13.56MHz MIFARE, MIFARE Plus, DESFire EV1/EV2*, FeliCa, NFC</li> <li>• <b>FS2-DS</b>: 125kHz EM &amp; 13.56MHz MIFARE, MIFARE Plus, DESFire EV1/EV2*, FeliCa, NFC</li> <li>• <b>FS2-AWB</b>: 125kHz EM, HID Prox &amp; 13.56MHz MIFARE, MIFARE Plus, DESFire EV1/EV2*, FeliCa, iCLASS SE/SR/Seos, NFC, BLE</li> </ul>
	RF read range**	MIFARE/DESFire/iCLASS: 50 mm, EM/HID Prox/FeliCa: 30 mm, BLE: 50 mm
	LFD	Supported
General	CPU	1.4 GHz Quad Core
	Memory	8 GB Flash + 1 GB RAM
	Crypto chip	Supported
	LCD type	4" color TFT touch
	LCD resolution	800 x 480 pixels
	Sound	24 bit/Voice DSP (echo cancel)
	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
	Camera angle	Visual Lens: Diagonal 92.7° IR Lens: Diagonal 58°
	Dimension (W x H x D)	141 mm x 164 mm x 125 mm
	Weight	<ul style="list-style-type: none"> <li>• Device: 628 g</li> <li>• Bracket (Including washer and bolt): 74 g</li> </ul>
	Certificates	CE, FCC, KC, RoHS, REACH, WEEE
Capacity	Max. User	30,000***
	Max. Credential (1:N)	<ul style="list-style-type: none"> <li>• Face: 4,000</li> </ul>
	Max. Credential (1:1)	<ul style="list-style-type: none"> <li>• Face: 30,000</li> <li>• Card: 30,000</li> <li>• PIN: 30,000</li> </ul>
	Max. Text Log	5,000,000
	Max. Image Log	50,000
Interface	Wi-Fi	Supported (Built-in, IEEE802.11 b/g)
	Ethernet	Supported (10/100/1000 Mbps, auto MDI/MDI-X)
	RS-485	1 ch Host or Slave (Selectable)
	Wiegand	1ch Input, 1ch Output
	TTL input	2 ch Inputs
	Relay	1 Relay
	USB	USB 2.0 (Host)
	Tamper	Supported

Electrical	Power	Voltage: 24 VDC Current: Max. 2.5 A
	Switch input VIH	Min.: 3 V / Max.: 5 V
	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 1 A @ 30 VDC Inductive load

\* DESFire EV2 cards are supported by having backward compatibility of DESFire EV1 cards. CSN and smart card functions are compatible with FaceStation 2.

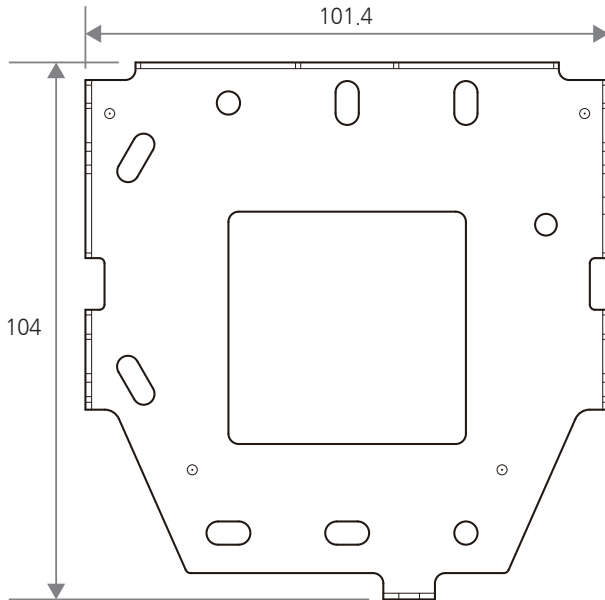
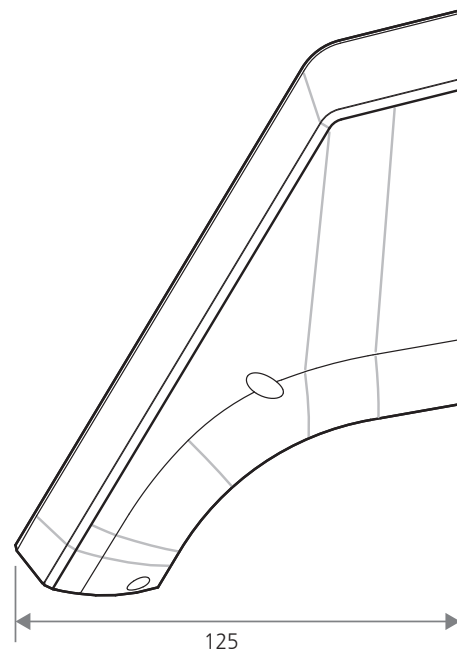
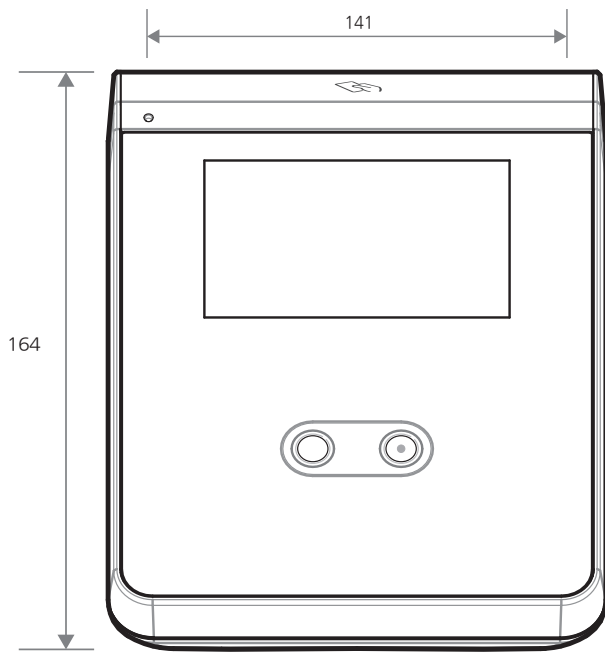
\*\* RF read range will vary depending on installation environment.

\*\*\* The number of users registered without any credential data



# 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 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:

- 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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### 2. Source Code.

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The “Corresponding Source” for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work’s System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

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