

# GATEWARE<sup>®</sup> USER MANUAL

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# 1. Important Safety Instructions

## ❖ Warning Symbol Explanation

- Please refer to the safety symbols throughout the manual and read all instructions carefully for correct usage of device to protect against risks or damages to property.



### Warning

- Violating the instructions or improper use may lead to possibility of death or serious injury.



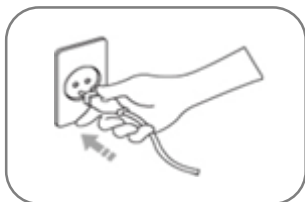
### Caution

- Proceed with caution when handling as improper use may lead injury or damage to device.

## ❖ Power Supply

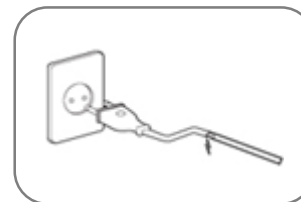


### Warning



#### ❖ Properly plug into an electric outlet.

- Unstable connection may cause fire or electric shock.



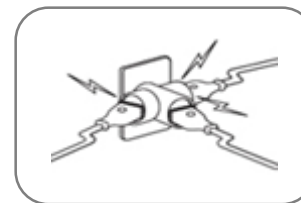
#### ❖ Do not use a damaged plug or a loose outlet.

- Unstable connection may cause fire or electric shock.



#### ❖ Do not handle the power supply with wet hands.

- This may cause fire or electric shock.



#### ❖ Do not use multiple plugs in one outlet.

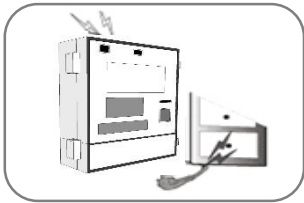
- This may cause overheating of the outlet and a potential fire hazard.

# 1. Important Safety Instructions

## ❖ Power Supply

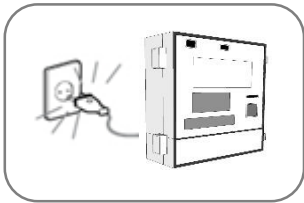


### Warning



❖ Do not press on the power line with heavy objects or forcibly bend or pull.

- This may cause fire or electric shock.

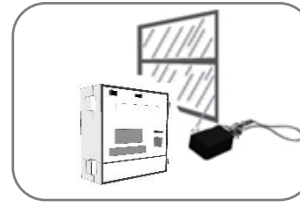


❖ When moving the device, make sure the power switch is turned off and unplug the device before moving.

- This may cause fire or electric shock.

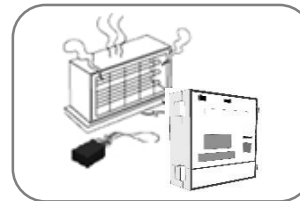


### Caution



❖ Do not let the DC power supply (adapter) get wet and keep away from water.

- This may cause fire or electric shock.

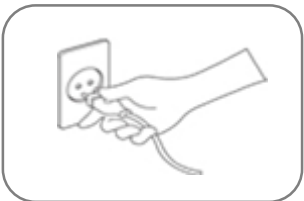


❖ Keep power supply device or power supply cord away from heated surfaces.

- This may cause fire.



### Caution



❖ Do not unplug the power supply by pulling on the cord. To unplug, grasp the plug, not the cord as this may damage the cord.

- This may cause fire or electric shock.

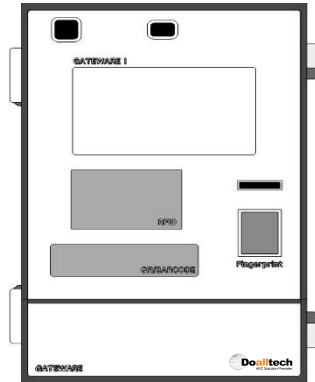


❖ During a thunderstorm or lightning, unplug the power supply from the outlet.

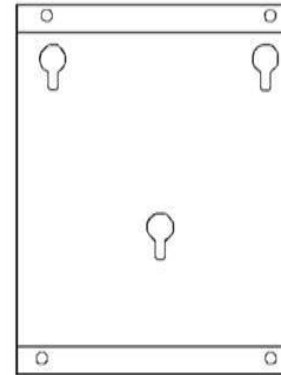
- This may cause fire or pose electric hazard

## 2. Device Contents

The components may be changed without prior notice to improve the performance or quality of the equipment.



Gateware\_EM Main body



Main body Holder



WiFi Antenna



Main body key



User Guide

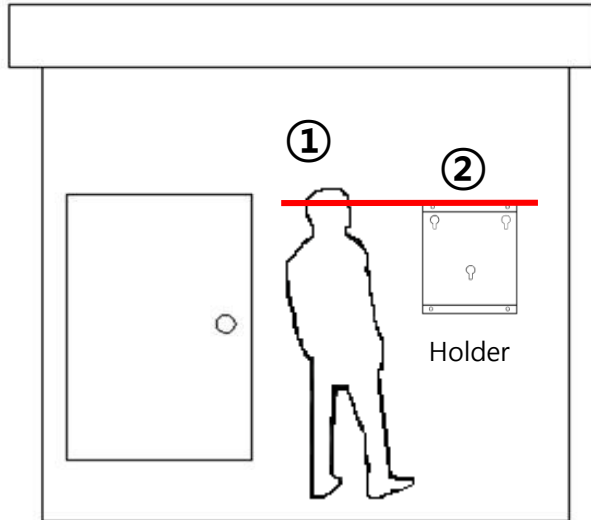


### Caution

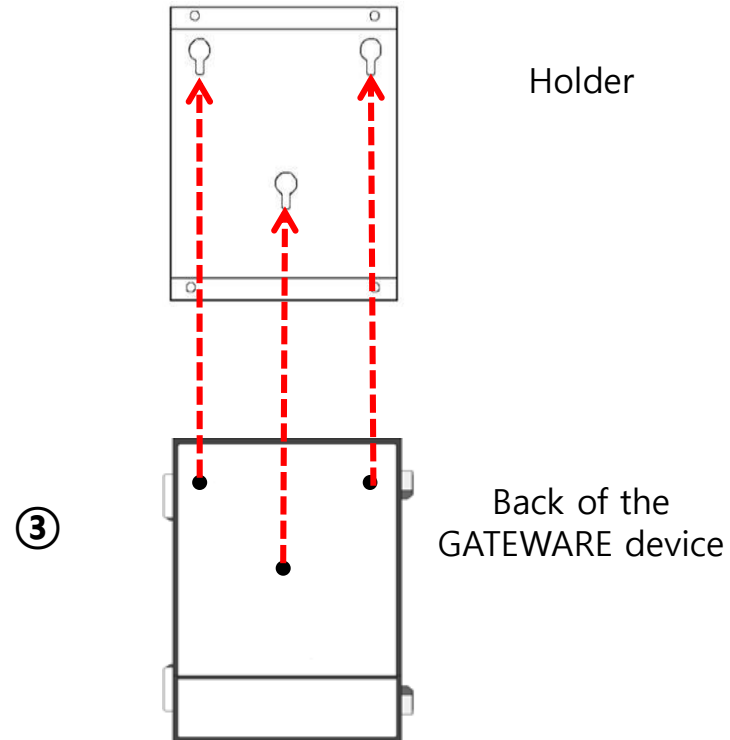
The body key must be kept by the administrator or carried

## 3. Installation Method

### ❖ Installation Example



[Installation Guide]

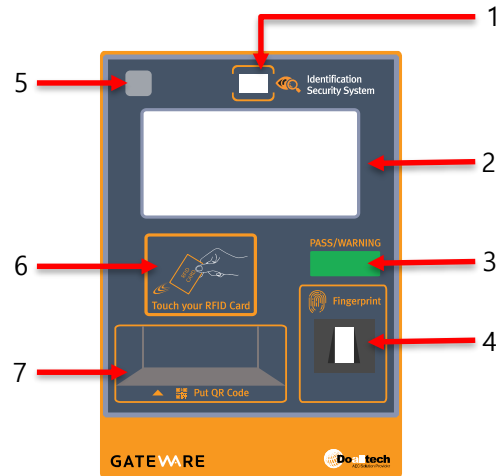


### Ex) In case of installing at gate guard post

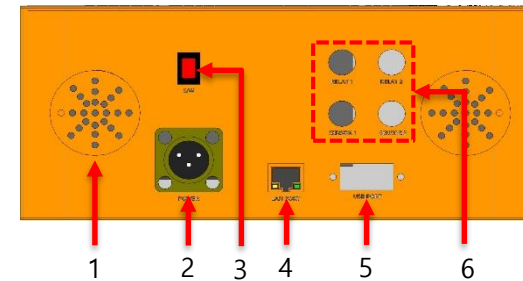
- ① Confirm the installation position after matching each end of the Holder at eye level of the worker.
- ② Install the Holder to installation position by using steel plate screws.
- ③ Hang it by hanging the back bolt of the device on the fixing hole of the Holder.

## 4. Device Part Name & Function (Front / Bottom)

### FRONT



### BOTTOM

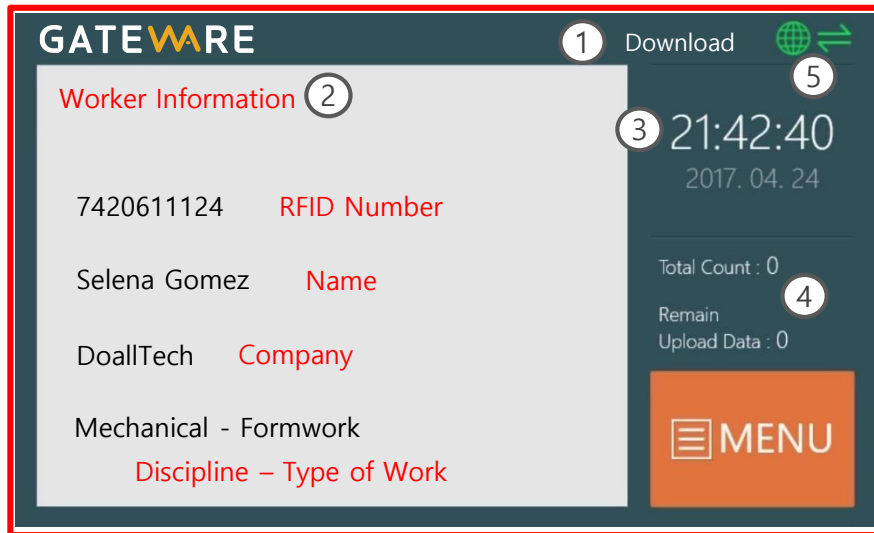


Part Name	Function
<b>1. Iris Camera / Web CAM</b>	Camera for iris scanning/ picture taken at authentication
<b>2. LCD</b>	Camera view & product status
<b>3. Status LED</b>	Device status indicator (Green, Red)
<b>4. Fingerprint Scanner</b>	For fingerprint authentication
<b>5. Iris IR Sensor</b>	Infrared for iris scanning in the dark
<b>6. RFID Register</b>	For RFID card authentication
<b>7. QR / Barcode Register</b>	For QR code / barcode authentication

Part Name	Function
<b>1. Speaker</b>	Sound output
<b>2. PWR</b>	Power supply adapter connection terminal
<b>3. S/W</b>	Product on/off button
<b>4. LAN Port</b>	Internet connection port
<b>5. USB Port</b>	USB connection port
<b>6. Signal in/out put terminal</b>	Installation port for Relay, Sensor

## 5. Screen User Interface

### Main Screen



#### ① Status Information

Messages related to the operation of the device is displayed.  
- Worker data download, update, saved data, etc.

#### ② Worker Information

After card authentication, the card number, name, company name, work type, and occupation information are displayed.

#### ③ Date & Time

Current year, month, day, and the current time are displayed.

#### ④ Card Data Status

The total number of workers and the number of uploaded data are displayed

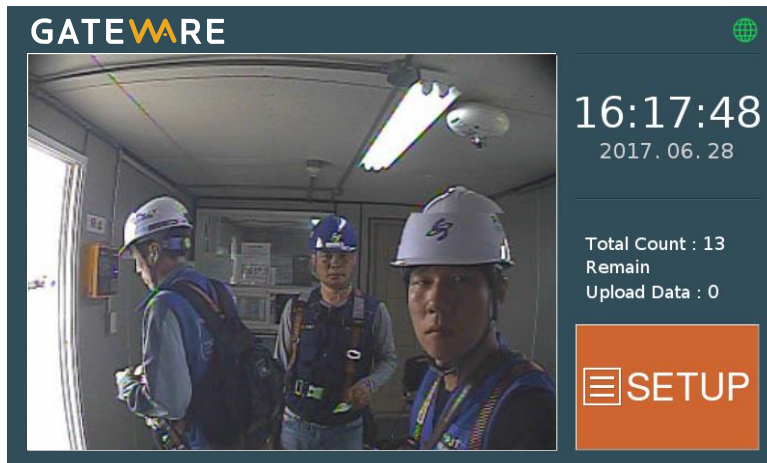
#### ⑤ Device Status


The internet connection status and server synchronization status are displayed.



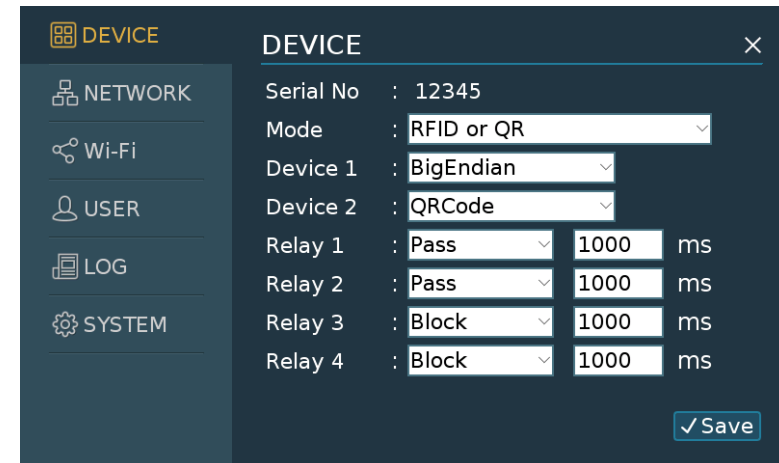
## 6. Menu Settings


### Main Screen



- ① Camera image is displayed on the main screen.
- ②  Touch the screen to enter the setup menu.

### DEVICE Settings



- ① The DEVICE menu is the default device settings menu.
- ② Serial No is the unique device identification number.
- ③ Mode selects the authentication mode of the device. (RFID, QR, Iris, Fingerprint)
- ④ Assign the authentication methods in Device 1, 2.
- ⑤ Assign Relay when connecting with external devices.
- ⑥ After configuration touch the  button to save.

## 6. Menu Settings

### NETWORK Settings

DEVICE NETWORK Wi-Fi USER LOG SYSTEM

NETWORK

DHCP : Manual

IP Address : [ ][ ][ ][ ]

Subnet : [ ][ ][ ][ ]

Gateway : 0 0 0 0

DNS1 : 210 94 0 73

DNS2 : 8 8 8 8

Save

- ① Assign the device IP Address in the NETWORK menu.
- ② Choose whether to use DHCP or STATIC.
- ③ To apply STATIC, touch the IP Address field to input the IP address.
- ④ Press the Save button to save the changed IP address.

### Wi-Fi Settings

DEVICE NETWORK Wi-Fi USER LOG SYSTEM

Wi-Fi

Wi-Fi On/Off : ON

SSID : TP-LINK\_2E0364

Password : [ ] Connect

Reload Connect to "TP-LINK\_2E0364"

SSID

- TP-LINK\_2E0364
- TP-LINK\_2E0364
- Doall meeting room\_2.4GHz
- INSAMANSA2
- Gateway\_2.4GHz

Save

- ① The Wi-Fi menu is for setting the wireless internet signal.
- ② Touch the Reload button to search for available wireless SSID.
- ③ Select the SSID to connect, enter the password and touch the Connect button.
- ④ Press the Save button to save the Wi-Fi settings.

## 6. Menu Settings

### USER Settings

Card No.	Company	Name
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- ① The USER menu is used to search for registered workers in the device.
- ② If a registered worker is not recognized, search for the worker and confirm that it is registered normally.

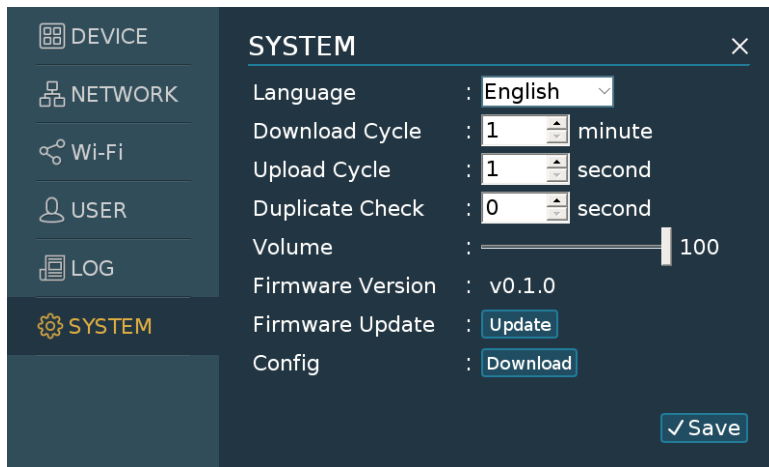
### LOG Settings

Time	Message
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- ① The LOG menu searches for events that occur on the device.
- ② Search the LOG by selecting the event.

## 6. Menu Settings

### SYSTEM Settings



- ① The SYSTEM menu allows to perform general device settings such as device language, redundancy check, and firmware update.
- ② Select a system language.
- ③ Set worker data upload/download times.
- ④ Update the latest firmware for your device.

## 7. FAQ

### No. 1

Q : System is not working.

A : Please check the Power supply connection.  
Please check the Battery charge status.

### No. 2

Q : Data download and upload is not working.

A : Please check the internet connection.  
Please check the Wi-Fi & 3G router.

### No. 3

Q : Camera is not displayed.

A : Please check the camera connection.  
Please check the Menu Settings.

### No. 4

Q : LCD Screen is monotonous in the state of ash or black color.

A : Push the RESET or Power switch to restart.  
If the same error occurs after restart, contact DoallTech for technical support.

### No. 5

Q : There is an error message window on the screen.

A : If the keypad does not work, restart by pushing the RESET button or Power switch.  
If the same error occurs after restart, contact DoallTech for technical support.

### No. 6

Q : System is nonresponsive. (Ex : time stop)

A : Push the RESET button to restart.

## 7. FAQ

### No. 7

Q : There is no sound.

A : Please check the volume button using the key pad.  
If the same error occurs after restart, contact DoallTech for technical support.

### No. 8

Q : RFID card reader does not work.

A : Please check the RFID reader connection.  
Please check the Menu Settings.

### No. 11

Q : Iris recognition does not work.

A : Make sure you recognize it at about 13 ~ 15cm away from the iris recognition window.  
Recognize according to the camera position indicator.

### No. 9

Q : The battery is not being charged.

A : Please check the power supply cable, adapter, and internal battery terminal connection.  
Change to a new battery.

### No. 10

Q : QR code reader does not work.

A : Please check the QR code reader connection.  
Please check the Menu Settings.

### No. 12

Q : Fingerprint recognition does not work.

A : Position the center point of the fingerprint at the center of the sensor.  
If you have water or sweat on your fingers, wipe off the water and enter.

## 8. Product Specifications

### Size

#### Hardware

CPU	Quad Cortex A53 @ 1.2GHz
RAM	1GB SDRAM
SoC	BCM2837
Instruction set	ARMv8-A
GPU	400MHz VideoCore IV
Storage	Micro-SD
Ethernet	10/100
Wireless	802.11n / Bluetooth 4.0
Video Output	HDMI / Composite
Audio Output	HDMI / Headphone
GPIO	40

USB Ports	Quad USB 2.0 Port
Camera	15pin MIPI Camera Serial interface (CSI-2)
Display Connector	HDMI / DSI
Relay	Signal Out Relay x 2
AC Power	AC100-240V~0.62A, 50/60Hz
LED	Color LED x 3
Operating temperature	-10~+50°C

#### Software

O/S	Linux_Raspbian
Application	Doalltech Gateway, Gateway CS

## FCC compliance information

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class 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 to 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 may void the user's authority to operate the equipment under FCC rules.

This appliance and its antenna must not be located or operated in conjunction with any other antenna or transmitter.

A minimum separation distance of 20cm must be maintained between the antenna and individuals for this appliance to

satisfy the RF

exposure requirements.

Transmit power : -0.23 dBm

Bluetooth Frequency: 2402 MHz ~ 2480 MHz

WLAN Frequency: 2412 MHz ~ 2462 MHz

RFID Frequency: 13.56 MHz

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

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