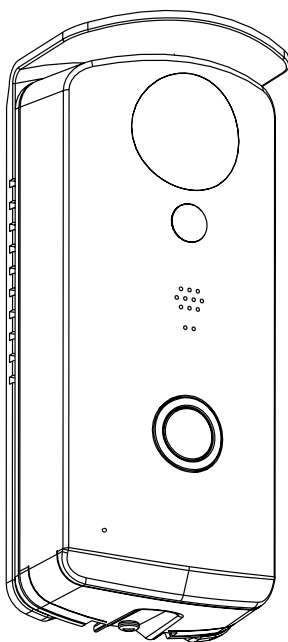# WiFi Doorbell HD

Installation and Operating Instructions

Model: VD40W

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE USING THIS PRODUCT
AND KEEP THIS MANUAL FOR FUTURE REFERENCE.

The state of art Wifi Doorbell HD (VD40W) is capable of deliver High Definition (HD) video to your smart-mobile device(s), **which would require higher internet bandwidth. Due to your local internet environment condition, your mobile device(s) may display black-screen or temporary disconnect to the Wifi Doorbell HD (VD40W).**

* Make sure your VD40W is operating with sufficient internet bandwidth; 1Mbps (upload/download speed) are suggested.
* For best performance, the smart-mobile device(s) need to be on Wi-Fi or 4G mobile network in order to receive maximum download speed. Actual performance will depend on the location internet environment.
* When the internet transmission is insufficient, your VD40W will automatically switch to Relay Mode:
    - **By adjusting to "Better Streaming" in the system setting section may improve the WAPP APP performance.**
* **If your internet bandwidth is limited, for best performance try to avoid more than two users connecting to the VD40W simultaneously.**
* **Make sure your smart-mobile device(s) is equipped with up-to-date technology, 1.5GHz dual core processor or equivalent is suggested.**
* **If the signal strength of your Wi-Fi router is weak, there are several ways to improve transmission:**
    - Change router/camera relative position to receive better signal.
    - Use Wi-Fi repeater/extender to maximize the service range of your Wi-Fi router.
    - Switch your router to 11b/g/n mode in order to improve router service range.
    - Purchase extension cable or high gain antenna for your camera from the WAPP vendor.
* Please make sure the memory card used is CLASS10 rated.

CONTENTS

INTRODUCTION

PLEASE READ BEFORE YOU START

Always use discretion when installing CCTV equipment, especially when there is perceived policy. Enquire relevant local regulations applicable to the lawful installation of video recording/surveillance. Third party consent may be required.

WIRELESS DEVICES OPERATING RANGE

Ensure the signal reception viewed from the wireless camera(s) is the best possible reception between the camera(s) and the Wi-Fi router. If necessary, reduce the distance between the camera(s) and the Wi-Fi router to improve overall system performance. Wireless Color Camera Recordable CCTV Kit operating on a secure digital 2.4GHz frequency which could greatly reduce interference from product such as wireless routers, cordless phones or microwave ovens.

IMPORTANT SAFETY PRECAUTIONS

Damages caused by non-compliance with this operating manual will void the warranty! We will not assume any liability for damages to items or persons caused by improper handling or non-compliance with the safety notices! Any warranty claim will be null and void in such cases.

1. Do not drop, puncture or disassemble the camera; otherwise the warranty will be voided.
2. Avoid all contact with water, and dry hands before using.
3. Never tug on the power cords. Use the plug to unplug it from the wall outlet.
4. Do not expose the camera to high temperature or leave it in direct sunlight. Doing so may damage the camera or cause camera temporary malfunction.
5. Use the devices with care. Avoid pressing hard on the camera body.
6. For your own safety, avoid using the camera or power off the camera when there is a storm or lightning.
7. Remove the power adapter during long periods between usages.
8. Use only the accessories and power adapters supplied by the manufacturer.
9. To meet the regulations pertaining to parental responsibility, keep the devices out of the reach of infants.
10. Check power cables, do not get crushed or damaged by sharp edges whenever the devices are in operation.

FCC Compliance Statement: This device complies with Part 15 of the FCC rules. Operation is subjected 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.

Products with CE Marking comply with EMC Directive (2014/30/EU); Low Voltage Directive (2014/35/EU); RED(2014/53/EU); ROHS Directive (2011/65/EU) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms:
EMC: EN 301 489
LVD: EN 60950
Radio: EN 300 328

FCC / CE WARNING

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC rules and ETSI(EN) 300328. These limits are designed to provide reasonable protection against harmful interference in residential installations. 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 interference to radio or television equipment 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.
- Move the equipment away from the receiver.
- Plug the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for additional suggestions.

You are cautioned that any change or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate such equipment.

DISPOSAL

If the camera system no longer functions or can no longer be repaired, it must be disposed of according to the valid statutory regulations.
Disposal of spent batteries/accumulators:
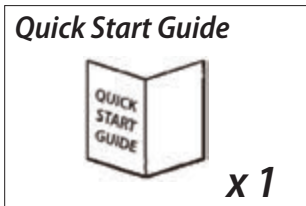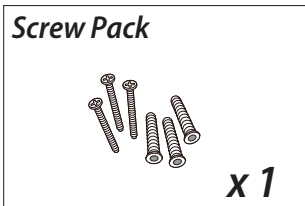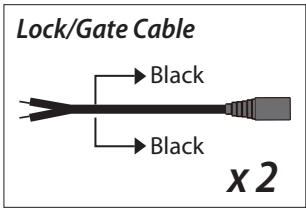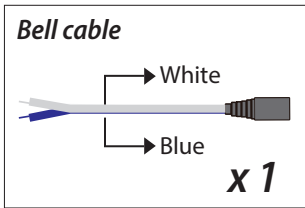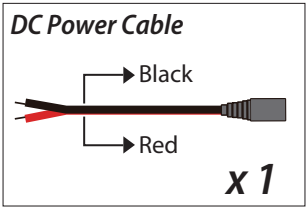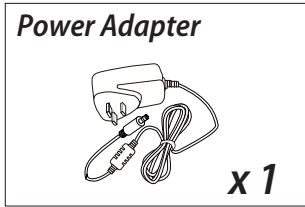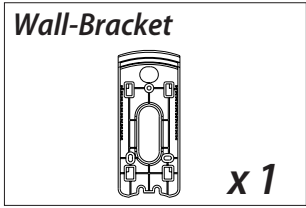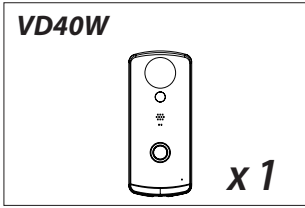You are required by law (Battery Ordinance) to return all spent batteries and accumulators. Disposing of spent batteries/accumulators with common household waste is prohibited! Batteries/accumulators that contain hazardous substances are marked with the symbols on the side. These symbols indicate that it is prohibited to dispose of these batteries/accumulators in the household waste. The abbreviations for the respective heavy metals are: Cd=cadmium, Hg=mercury, Pb=lead. You can return spent batteries and accumulators that can no longer be charged to the designated collection points in your community, outlets or wherever batteries or accumulators are sold. Following these instructions will allow you to fulfill the legal requirements and contribute to the protection of our environment!

CAUTION
- This product is designed with built-in high sensitivity microphone. Please keep the door unit away from the answering unit at least 3 to 5 meters, otherwise continuously howling will occur. Please volume down if short distance use is needed.
- Do not insert or remove SD Card when the system is in operation. This may cause system malfunction. It is strongly recommended to format the SD card before first use.
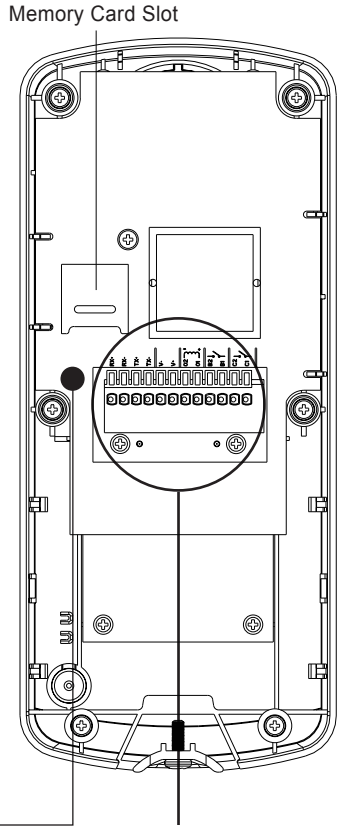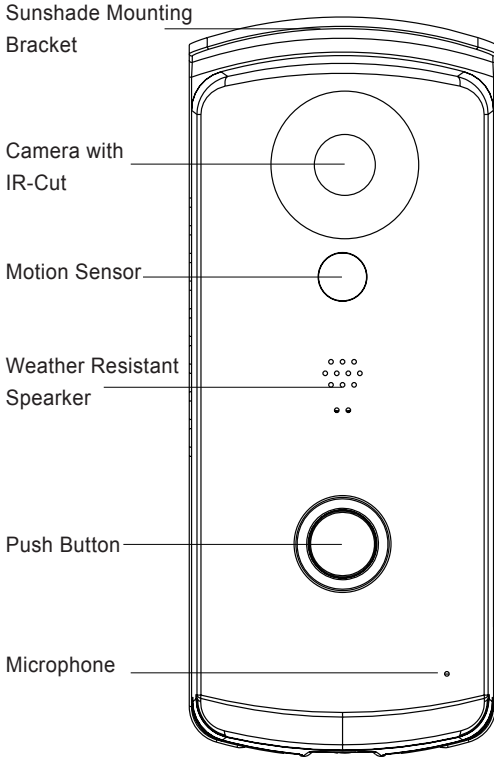
KIT CONTENT

VD40W	Wall-Bracket
x 1	x 1

Power Adapter	DC Power Cable
x 1	Black Red x 1

Bell cable	Lock/Gate Cable
White Blue x 1	Black Black x 2

| Screw Pack	Quick Start Guide
x 1	QUICK START GUIDE x 1

Note: For video recording, BE SURE TO use CLASS 10 memory card or above. Other kinds of memory card may cause unexpected results and should be avoided.

HARDWARE OVERVIEW

Sunshade Mounting
Bracket

Memory Card Slot

Camera with
IR-Cut

Motion Sensor

Weather Resistant
Spearker

Push Button

Microphone

Reset Button

1. RX+/RX-/TX+/TX-: Ethernet Cable I/O*
2. V-/V+: Power Input I/O
3. O2/O1: Wet Contact I/O
4. B2/B1: Bell Contact I/O
5. C2/C1: Dry Contact I/O

*Ethernet cable not included in the package.
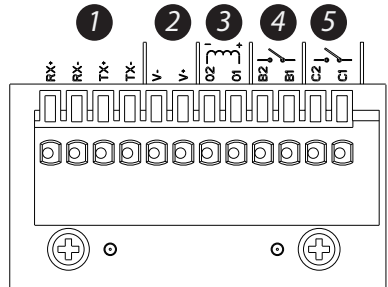
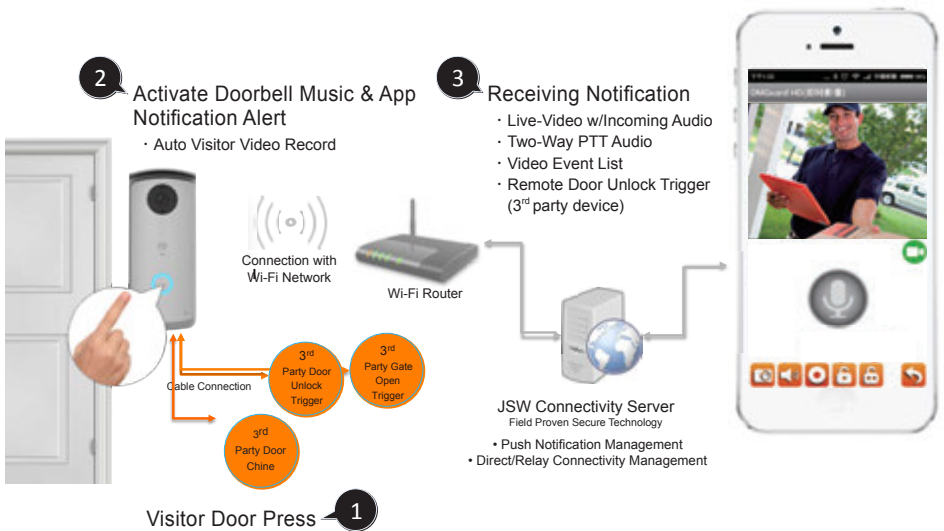# WIFI DOORBELL HD SETUP & INSTALLATION

⚠ BEFORE YOU START

· Do not mount the VD40W until completing the Wi-Fi connection setup.
· First connect power to the VD40W using the supplied Power Input Cable to 9-36V power
  source.
· After connecting power to VD40W, the boot up process will begin (> 2 minutes), the red/green
  LED will become steady on after the boot up process is complete (check connectors and
  power source if red/green LED do not come on).

Memory Card Slot

I/O Pin

Power cable
Connector
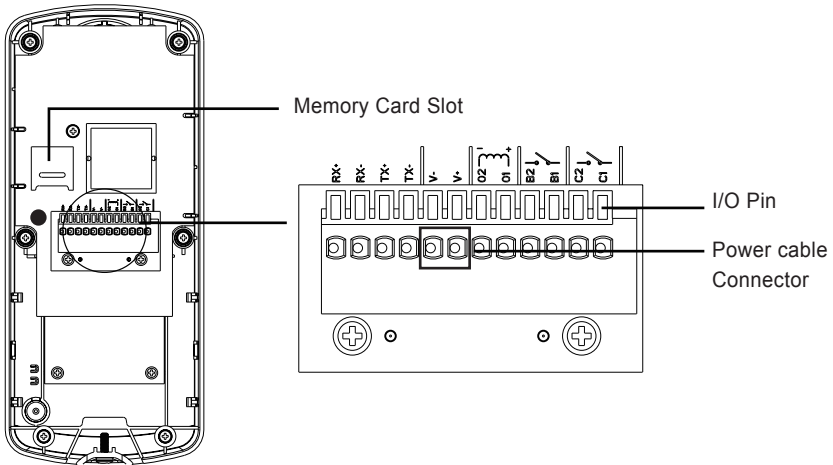
OPERATION DIAGRAM

The Wifi Doorbell HD (VD40W) is designed to deliver live video directly to your smart mobile devices after visitor have pressed the communication button on the door unit. The VD40W app will allow you to see live video, speak to the visitor, manually capture snapshot/video and even open the door (3rd party door lock device required) for the visitor.

② Activate Doorbell Music & App Notification Alert
· Auto Visitor Video Record

Connection with Wi-Fi Network

Wi-Fi Router

Cable Connection

3rd Party Door Unlock Trigger

3rd Party Gate Open Trigger

3rd Party Door Chine

③ Receiving Notification
· Live-Video w/Incoming Audio
· Two-Way PTT Audio
· Video Event List
· Remote Door Unlock Trigger (3rd party device)

JSW Connectivity Server
Field Proven Secure Technology
· Push Notification Management
· Direct/Relay Connectivity Management

Visitor Door Press ➔ **①**

APP DOWNLOAD AND INSTALL

- Please download and install the "OMGuard HD" APP to your device.

For iOS

For Android

APP Setup

1. In the Wi-Fi setting section of your smart phone/tablet, search for VD40W SSID (example: HD-XXXXXX) and connect. The default password is 12345678.

2. Launch the app and tap to add VD40W

3. Tap Search to pull in DID information, or enter the DID manually.

4. Enter name for your VD40W (maximum 20 characters).

5. Enter default Security Code 123456.

6. Tap "Save".

7. Tap and then to enter the advanced setting

8. Tap advanced setting to enter default password:123456
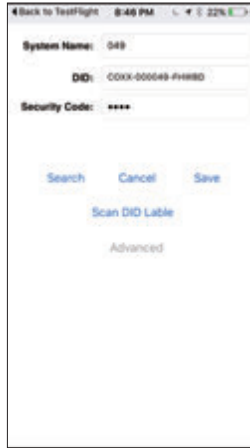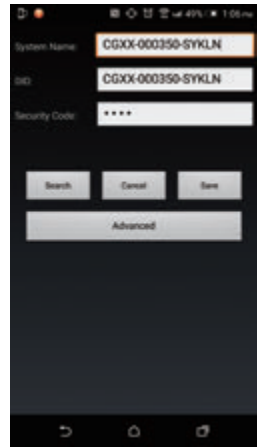
(iOS)　　　　　　　　　　　　(Android)

9. Scroll down to Wi-Fi Setting section, select the Wi-Fi router and enter its pas sword.
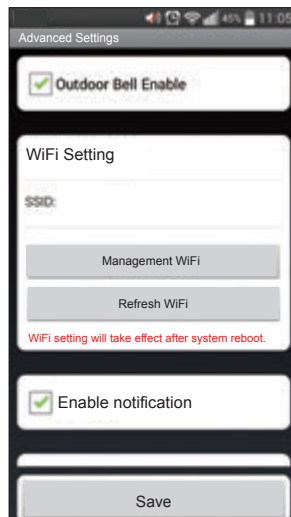
Important Note:

After the default password entered, the app will remind you to change it, which is strongly recommended for security purpose.

In most cases, you can successfully add the camera according to the steps above. However, the camera will not find the network if Wi-Fi router turns off the SSID broadcasting function. Please enable the SSID broadcasting to complete the settings.

Note:

If you do not see your Wi-Fi router in the WI-FI SETTING section, please enable your router's SSID broadcasting function, which usually is the name of your HOME WI-FI NETWORK. Most of the Wi-Fi routers broadcast the Service Set Identifier (SSID) by default.
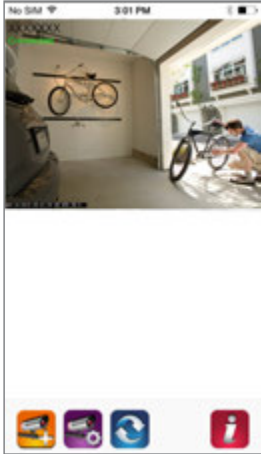
VD40W can only accept SSID composed with English alphabet characters and Arabic numbers. Non-English characters (!@#$%^&*) cannot be accepted.
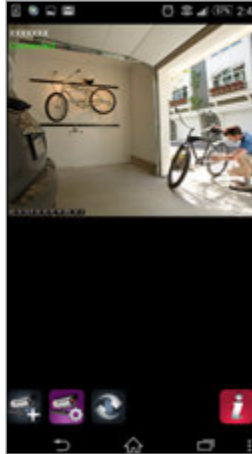
MAIN PAGE OVERVIEW

The MAIN PAGE section offers you an overview for VD40W and access to different management functions.

MAIN PAGE

(iOS)   (Android)

- List of all registered VD40W. You can quickly access preferred VD40W in the list even when multiple VD40W are registered by scrolling the list up or down.

- Tap the camera to enter Live-View.

- The Connection Status (Connected or Disconnected)is indicated for each VD40W in the list.

Add VD40W : To add VD40W.

Setting : Access point for "VD40W Information (enter to find "Advanced Setting Section" and "Wi-Fi Reset), "VD40W Delete" and "Event List".

Refresh : Refresh connections of all the VD40W in the list.

Information : Access VD40W/App firmware version information and app PIN Lock setup.

ADD VD40W

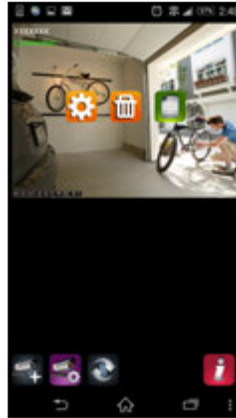Tap to add VD40W Please refer to page 8 "APP Setup" section for more details.

SETTING

Tap and additional setup selection icons will appear. Tap to exit.

Additional setup selection

(iOS)　　　　　　　　　　　　　　(Android)

 VD40W INFORMATION : Change VD40W name, reset Wi-Fi router setting and access Advanced Setting section.

 DELETE VD40W : Remove the VD40W.

 EVENT LIST : View and playback the list of motion triggered event(s) for the particular VD40W

SETUP PIN LOCK

MUST enter PIN code when you have enable PIN lock function with launching the APP.
1. Enable "Enable lock when starting" and enter your PIN code.
2. Confirm PIN code entered.

(iOS)   (Android)

> **Note:**
> If you forgot the PIN code, please delete and reinstall the app.

NOTIFY (PUSH NOTIFICATION)
The WAPP camera supports motion detection. When a motion is detected, you'll receive push notification on the mobile devices for the event recognized by the camera.

For iOS
If you want to enable/disable it, please follow the steps below:
1. Launch Settings from your Home screen.
2. Tap Notifications.
3. Scroll down to find "OMGuard SensorCam" APP and tap on it.
4. Adjust the notification settings, such as On/Off, Sounds, Alert Display, etc.

> **Note:**
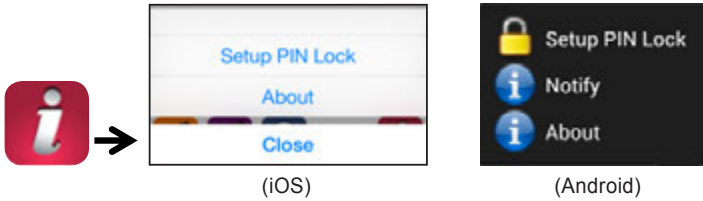> It takes time for the changes to take effect in iOS.

For Android

If you want to enable/disable it, please follow the steps below.
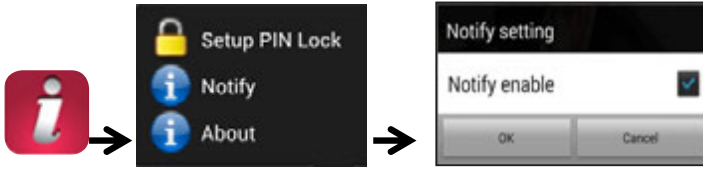
> **Note:**
> The internet connection and wireless network interference may influence the performance of push notification service.
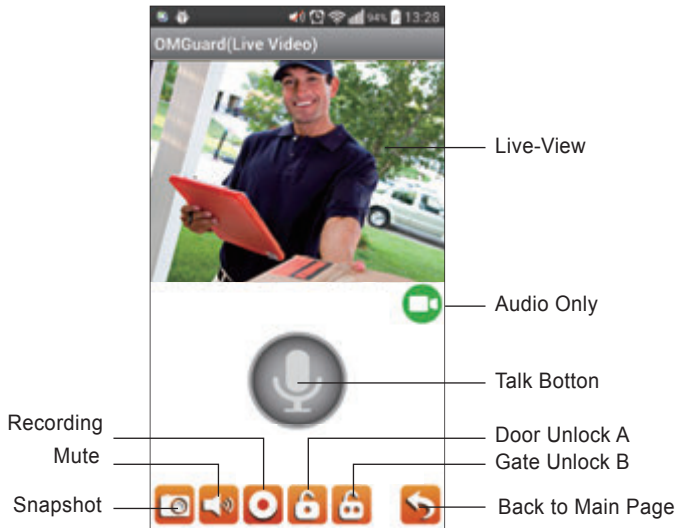
ABOUT APP/API Version Info

(iOS)

(Android)

Tap the ABOUT icon to check the APP Version when necessary.

VISITOR CALL-IN PAGE

Call-In Screen

Live-View

Audio Only

Talk Botton

Recording

Mute

Door Unlock A

Gate Unlock B

Snapshot

Back to Main Page

|		
	Push-To-Talk	Tap and hold to speak with visitor. No sound will be transmitted if you let go.
	Snapshot	Tap once to capture a single still image of the video coming from the door unit. The still image files are stored within your mobile device.
	Mute	Tap once to mute the audio coming from the door unit. Tap again to resume.
	Record	Tap once to record the video coming from the door unit. Tap again to stop recording. The recorded video files are stored within your mobile device. If you have activated the auto visitor recording function of the door unit, recorded files are stored onto the memory card inside the door unit.
	Stop Video	When internet connection speed is low, causing delays with communication with the visitor, you may tap the icon once to stop the video transmission to free up more bandwidth for audio.
	Gate Unlock Trigger	Tap the icon once and enter "admin password" to remotely open the gate (3rd party device required).
	Door Unlock Trigger	Tap the icon once and enter "admin password" to remotely open the door for visitor (3rd party device required).

ANSWERING A CALL
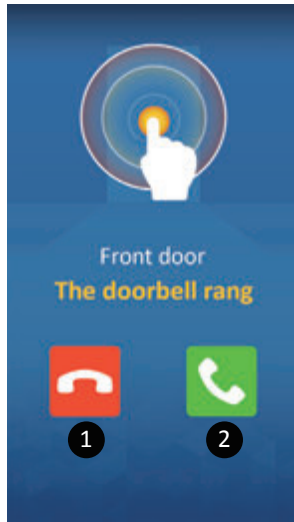
Above screen would appear When visitor pressed the bell button.

1. Ignore the communication request.
2. Accept the communication request.

Note: For iOS user, due to the system fundamental structural design, you will have to confirm/accept incoming communication request via pop-ups first before the answering section would appear. For more details, please refer to the manual.

SETUP THE VD40W

1. Remove the compartment cover with screws.
2. Insert the Micro SD card.
3. Connect power cable by pressing down the power input I/O pins. After supplied power, the boot up process will begin (> 2 minutes), the red/green LED will become steady on after the boot up process is complete (check connectors and power source if red/green LED do not come on).

Compartment Cover

Memory Card Slot

I/O Pin

Power cable Connector
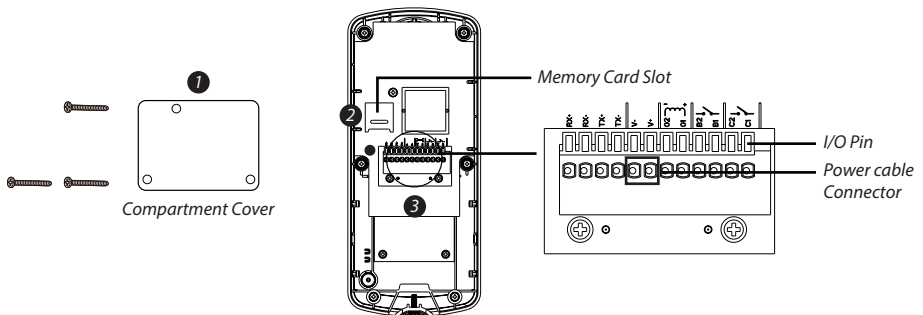
Note: For how to connect VD40W with existing doorbell wires, electronic lock/gate, please refer to "Additional Wiring Diagram" section.
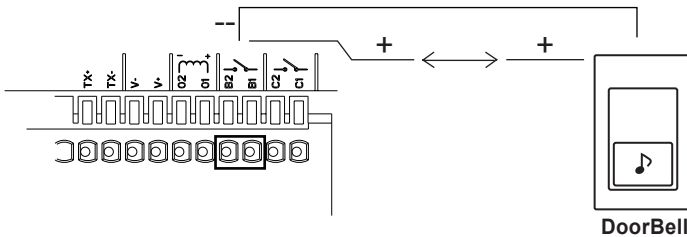
ADDITIONAL WIRING DIAGRAMS
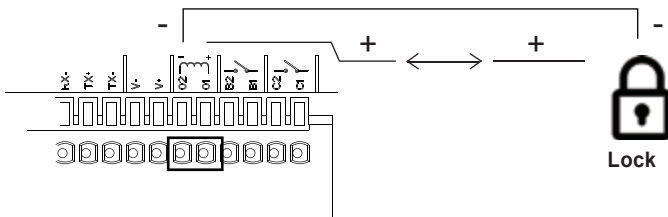
A. Ethernet (Wet suppiler)
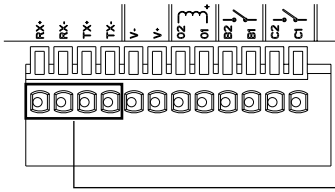
Connection	Cable Color
Tx +	Orange / White
Tx -	Orange
Rx +	Green / White
Rx-	Green

Ethernet Cable

B. Existing Bell Wiring

DoorBell

C. Electronic Lock

Lock

D. Electronic Gate (2/4-Wire Type Connection)

4-WIRE TYPE CONNECTION DIAGRAM

C2
C1

Input − +

+
− Power

2-WIRE TYPE CONNECTION DIAGRAM

C2
C1

+ −

−
+ Power
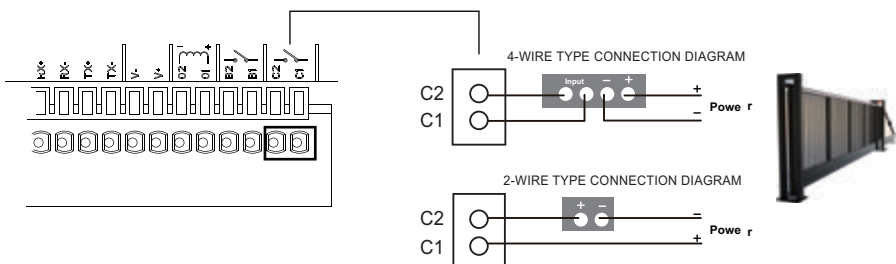
MOUNTING THE DOOR UNIT

Do not mount the VD40W until you have complete the Wi-Fi connection setup and have all the wiring process completed. It is best to test the door unit can function properly with app prior mounting the door unit.

Please make sure the installation location is free from moisture and wires are not exposed in any form.
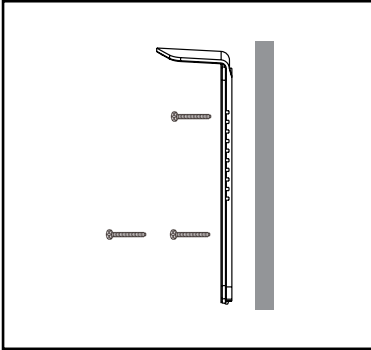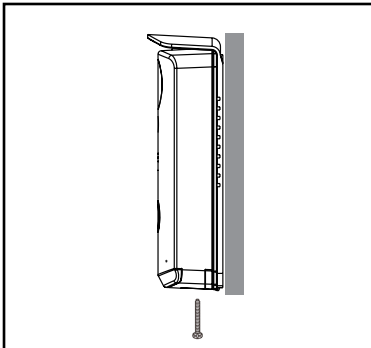

Step 1
Confirm position and mount the bracket via the screws supplied.
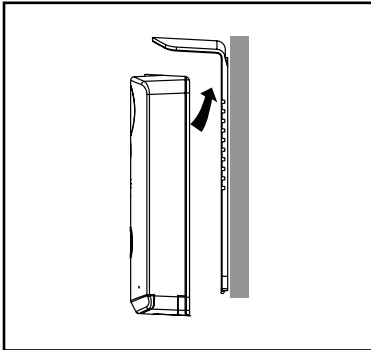
Step 2
Place the device on the mounting bracket.

Step 3
Fastening the door unit onto sunshield with the 1 anti-theft screws.

PRODUCT SPECIFICATION

Wireless Connectivity	Wi-Fi 802.11b/g/n
Transmission Frequency	2.4GHz
Transmission Range	Up to 150 Meters (LoS)
Two-Way Audio	Yes
One-Way Video	Yes
Push Notification	Yes / iOS and Android
Event List	Yes / Snapshot and Video
Playback	App / iOS and Android
Night Vision	Supported
Motion Detection	Supported
View Angle	H:90±3/V:50±3
Audio Input/output	Speaker & Microphone
Video Resolution	720P/VGA
Video FPS	Up To 25FPS
Data Storage	Memory Card (Up to 32GB)
IP Rating	IP55
Electronic Door Unlock Trigger	Support 3rd Party Device via Wire Connection 12V/1A Power Output
Electronic Gate Open Trigger	Support 3rd Party Device via Dry Contact Trigger
Setup Method	Support Quick Setup w/ID & PW Entry from APP (Wi-Fi Direct Mode)
Power Option	AC 7.5V-36V / DC 9V-36V/1A Direct Power Input*
Operating Temperature	-22°F/-10°C ~ 122°F/50°C

*For remote door unlock function with 12V/1A current output trigger, the direct input power must be higher or equal to AC or DC 15V/1.5A.