Wireless External Door Entry Kit
MODEL VDP400

WIRELESS DOOR ENTRY CAMERA
MODEL VDP301

WIRELESS DOOR ENTRY
MONITOR
MODEL VDP404

Version 002

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Product Description

The wirefree VDP400 door entry camera and screen are a great bolt-on to any security system especially a home CCTV set-up.

Operating as a video doorbell with a 2 way intercom and handy "snapshot" recorder of visitors, the system requires no wiring, working on rechargeable battery cells. A 12V DC PSU is supplied with each part as an option too, which is handy for a more permanent installation.

With transmission distances up to 50M in clear line of sight and a working transmission frequency of 2.4 GHz, these units are suitable for use in most domestic and smaller commercial properties to add an extra dimension to a new or existing security system at little extra cost.

Video Doorbell Unit (Part code: VDP301)

Perfect for use in porches or sheltered doorways, the video doorbell unit in an attractive silver finish has a rain hood to prevent water from settling on the camera lens as well as a name plate badge so that the occupant's surname or the house/flat number can be added.

The colour camera produces live images whenever the doorbell is pressed that are transmitted to the display screen (or multiple screens) indoors. If the call remains unanswered for 5 seconds, the receiver/display screen records a snapshot of the caller that can be viewed at a later date. Up to 100 'mugshots' are stored and eventually overwritten or can be manually deleted by the user.

The camera also has built in motion detection that can be operated so a snapshot is sent when movement is detected in the camera's video signal, a useful feature if used on a building with a communal hall or entrance.

A 'true black' IR LED discretely operates at night to add extra illumination to late night callers so a visitor's face is clear before you answer the door.

If suitable, the door camera has an output too that can be activated for opening an electronic or magnetic lock to allow visitors to enter. The occupier simply presses the 'LOCK' button on the monitor to do this, being a more permanent installation this does require the doorbell to be powered using the 12V DC PSU supplied.

Video Display Screen (Part code: VDP404)

Each Video Doorbell unit can be programmed to a number of these compact video display screens allowing you to have several dotted around your property for maximum convenience.

The display unit has a 4.3" colour screen that will display visitors and allow you to use the touch screen buttons to talk to them or even let them in when an electronic or magnetic door lock is connected.

This unit has a time & date stamp and stores the visitor snapshots for viewing at a later date.

A photo frame style bracket allows easy positioning of the screen on a shelf, desk or table top where the unit can be plugged in to charge or left for battery powering and easy mobility.

The user can choose from the 25 available ring tones and 3 volume levels on the screen.

 Available as separate units or as a kit, this range includes:

- Part code: VDP400   DoorKnox Wirefree Kit _(1xVDP404, 1x VDP301)_
- Part code: VDP404   Video Display Screen,
- Part code: VDP301   Video Door Bell & Camera Unit

Kit VDP400 contains:

 1 x VDP301 Wirefree External Door Entry Camera
1 x VDP301 Wirefree External Door Entry Camera
1 x Camera Rain Shield
1 x Screw Pack
1 x VDP404 Wirefree External Door Entry Monitor
1 x USB adapter
1 x 12v DC Power Adapter
2 x 12v DC Lithium Batteries

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Safety Instruction

1. Do not install the equipment in high temperature or high humidity environment.

2. Keep the unit away from televisions or intercom equipment that may cause interference.

3. Do not touch the screen with wet hands.

4. Always clean the equipment with a dry soft cloth. Do not use detergent, thinners, volatile or corrosive liquids.

5. Keep the camera unit away from direct sunlight as this can affect the camera CCD.

6. Sometimes vehicle interference may cause blurred pictures.

7. Building walls or structures separating the camera and monitor will reduce wirefree transmission strength and or distance.

System Installation

VDP404 Monitor

1. Remove battery cover, fit Lithium battery and replace cover. The plug top has a USB type power connector and connect it to the monitor.
2. 2. Plug the power adapter into a 100 ~ 240vAC 0.35A power source and open the bracket stand on the back of the monitor.   The plugtop charger is 5vDC 1A and the battery is a Lithium 3.7v DC battery.

NOTE: The same battery is fitted in the camera unit that also runs off a 12vDC power adapter. You can charge the battery taken from the camera unit, in the monitor, using the USB type plugtop.

Monitor Standby Time: 3 days
Monitor Run Time: 2 hours

VDP301 Camera Unit

1. Connect the battery and fit the camera into the rain shield. Ensure battery is connected to correct polarity. The camera unit can run directly from the battery or be powered using the 100 ~ 240vAC 0.8A power adapter that outputs 12vDC at 1.1A. This can be used to charge the Lithium 3.7vDC battery or you can charge the battery in the monitor using the USB plugtop. **Note the camera only works <u>in</u> the Rain Shield**
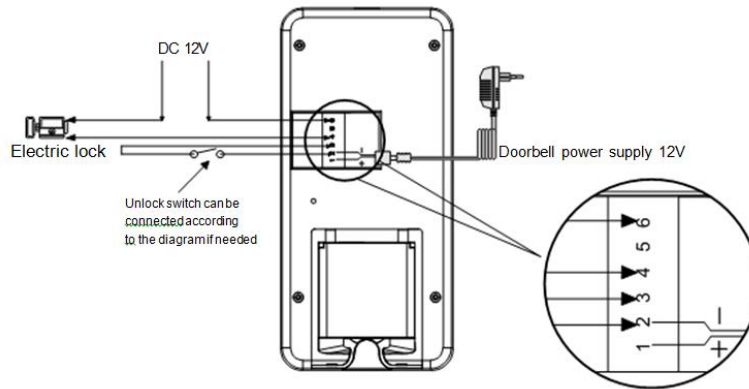

> **Note that there is a magnet located in the rain shield that will trigger the alarm in the camera and on the monitor <u>if the camera is removed</u> when power or battery is connected.**

Camera Standby Time: 31 days   Camera Run Time: 2.5 hours
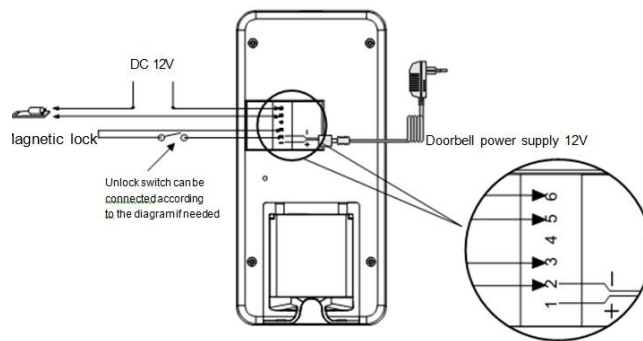
2. Wiring diagrams for magnetic lock and electric lock connections are shown below.
Connect <u>electric</u> lock to terminals 4 and 6 or connect a <u>magnetic</u> lock to terminals 5 and 6.

Note: When the camera is only powered by a lithium battery <u>without any extra power supply</u>, the camera unit <u>electric</u> lock cannot be released.
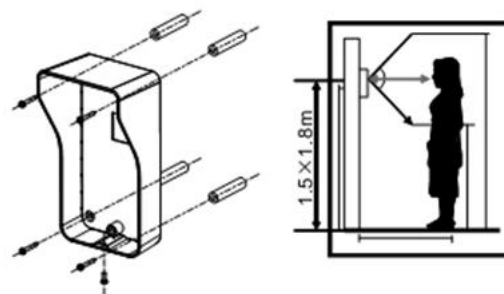
Electric Lock

Magnetic Lock

Terminal	Function
1	12v DC
2	0v
3	Door Release. Link to 0v to operate relay
4	Relay N.O (Normally Open)
5	Relay N.C (Normally Closed)
6	Relay Common

NOTE: Relay Contacts 3A 30v DC

4. Install the weather shield at 1.5m-1.8m above ground level avoiding direct sunlight.

5. If the name plate is needed, take off the name plate cover, put the name plate inside and refit cover.

6. Finish wiring connection of the power supply and the electric lock according to the wiring diagram.
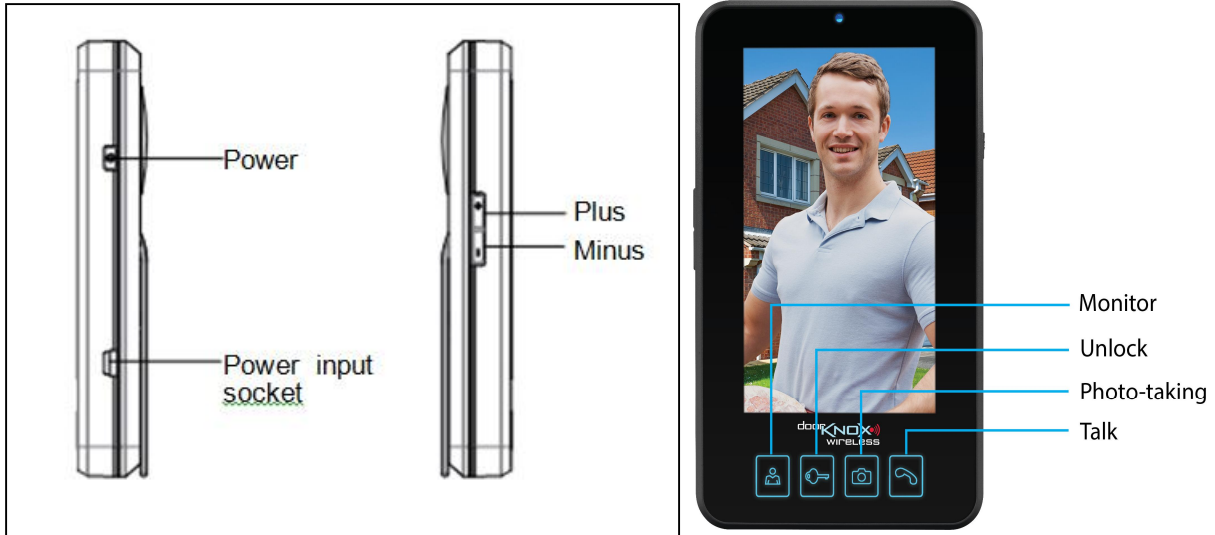

7. Fasten the camera unit rain shield with screws.

8. TheVDP301 outdoor camera unit is not IP rated and is not sealed. Whilst the unit is classed as an outdoor unit, it must be adequately protected from rain and weather conditions and the rain shield sealed to avoid water ingress from the back of the unit. Any cable connections running into the unit must run upwards. It is recommended that additional protection is provided when installed in an exposed position.
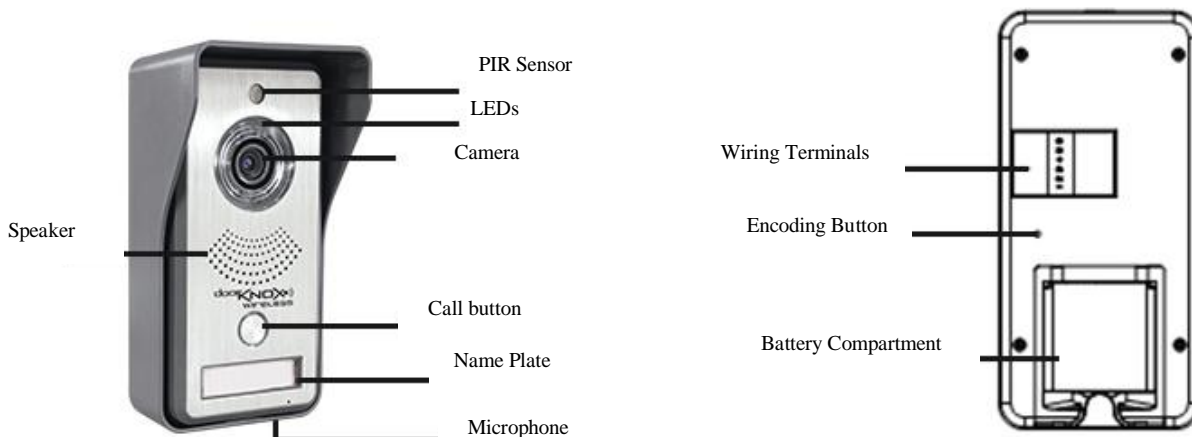
Function Keys and Operational Instructions

VDP404 Monitor

Icons in Standby

	Signal strength			Mute
	Battery			Talking
18:28:05	Time			Unlocking State
	Ringtone			Missed Call

VDP404 Door Entry Monitor

Functions settings can be divided into the following parts: Language setting, Time and Date setting, Ringtone setting, Unlock time setting, Screen brightness setting   etc. Press UNLOCK button to confirm and enter into the next setting page, press TALK button to save the setting for one part and then exit.
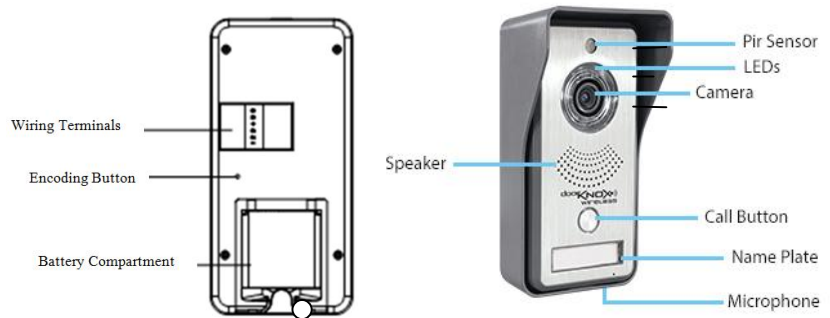
1. Language setting: When the screen is on, press UNLOCK button to enter Function settings. The first part is language setting, including Chinese and English, press the (+ -) button to select language. The default language is English.

2. Date and time setting: When the screen is on, press UNLOCK button to enter Function settings. Press UNLOCK button again to enter Date and Time setting, press Photo taking button to select and press the (+ -) button to amend the value.

3. Ringtone setting: When the screen is on, press UNLOCK button to enter Function settings, press the UNLOCK button twice to enter ringtone setting mode. Press Plus button (+) to select next ringtone and press Minus button (-) to adjust the volume. There are 25 ringtones for selection and there are 3 levels of ringtone volume.

4. Unlock time setting: When the screen is on, press UNLOCK button to enter Function settings. Press the UNLOCK button 3 times to enter Unlock time setting mode. Press the (+ -) buttons to adjust the value. The unlock time can be set from 1 second to 6 seconds and the default value is 1 second.

5. Mute mode setting: When the screen is on, press the TALK button for about 3seconds and the green music button (🎵) will turn into red button (🔇) which means mute mode. Under mute mode, the indoor unit can work normally but will not ring when there is a call. Press and hold the TALK button for 3seconds to cancel the mute mode.

6. Brightness and Chroma setting/ Talking volume setting: In talking mode, press MONITOR button to select brightness, chroma and talking volume setting. Press the (+ -) button to adjust the value. The value of them can be set from level 0 to level 7.

VDP400 Door Entry Kit Operation

1.   Setting up VDP301 camera unit

Connect the battery and fit the camera into the rain shield. Ensure battery is connected to correct polarity. The camera unit can run directly from the battery or be powered using the 100 ~ 240vAC 0.8A power adapter that outputs 12vDC at 1.1A. This can be used to charge the Lithium 3.7vDC battery or you can charge the battery in the monitor using the USB plugtop.
Note the camera only works <u>in</u> the Rain Shield

Note that there is a magnet located in the rain shield that will trigger the alarm in the camera and on the monitor <u>if the camera is removed</u> when power or battery is connected.

2a.   Setting up VDP404 monitor unit

<u>Powering On and Off</u>

After loading batteries, press and hold the Power button to power up the unit. The unit will enter standby mode with no screen display if no further operation occurs after 30 seconds. To power off the unit when the screen is on, press and hold the Power button.

2b.   Turning Screen On and Off

When the screen is on, you can press the TALK button to turn off the screen display. Pressing any button will turn the screen on again.

3. Talking and Unlocking

When visitors press the CALL button on the camera unit, the blue indicator light on the camera unit will come on and will respond with two beeps. The monitor unit will ring immediately and will display the image from camera unit. Pressing the TALK button on the monitor unit will allow you to talk with the visitor. If you press the UNLOCK button it can remotely unlock the door release mechanism if fitted. After the conversation, press the TALK button to hang up and the monitor unit's display will close. If the call is not answered within 5 seconds, a picture will be captured by the camera unit and saved automatically. If the call is not answered within 30 seconds, both the monitor unit and the camera unit will enter standby mode. The monitor unit will indicate a missed call. After a call is answered, and if there is no further operation within 90 seconds, the monitor unit will hang up and enter standby mode automatically.

4. VDP404 Monitor

In standby mode, press the TALK button to start up the camera unit (means the screen is on), then press MONITOR button and you can monitor outside and hear sound from the camera. The monitor state will last for 30 seconds and then switches back to standby mode automatically if there is no further operation. Press TALK button to talk or again to hang up.

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5. Battery Power for Monitor and Camera units

Battery indicator on the Monitor unit:

The battery icon in the top right hand corner of the screen represents the battery power of the monitor unit. When the battery power is low, the battery icon will become red to indicate that the battery needs charging.

Battery condition of the Camera unit:

When in talking state, the small battery icon in the top right hand corner on the monitor unit represents the battery condition of the camera unit. When the battery power is low, the battery icon will become red and the fully charged battery in the monitor unit can be used to replace the battery in the camera unit.

6. Photo Function

Automatic photo-taking:

When there is a call from the camera unit, a photo will be captured and saved by the monitor unit if the call is not answered within 5 seconds.

Manual photo-taking:

In talking or monitor state, press the Photo-taking button to take photos. There will be a "Capture" message displayed. A maximum of 100 photos can be saved. When the maximum number has been reached, any new photos taken will overwrite the oldest ones automatically.

View photos:

In standby mode, when the screen is on, press the Phototaking button to view the pictures. The photos taken most recently will be ranked first. Press (+ -) button to select photos to view, press TALK button to exit to return to the standby page.

Delete photos:

When viewing photos, press the Photo-taking button and then an indication of "whether to delete the photo" will pop up, press (+ -) button to select "Y (delete one photo)", "N(NO)" and "ALL (delete all photos)", and then press Photo-taking button to confirm.

If "Y (delete one photo)" is selected, press the TALK button to turn back to standby mode. If "ALL (delete all photos)" is selected, it will turn back to standby mode automatically.

7. PIR Sensing Function

When camera unit's PIR sensor is triggered, the monitor will show camera picture and a photo will be taken and stored on monitor unit.

8. Pairing the Monitor to the Camera

As these are Wifi units, they need to be paired so that separate sets can be run at the same site. A maximum of three monitors can be paired to a camera. A monitor cannot be paired to more than one camera.

1. When the monitor is powered off, press and hold the Power button for 3 seconds to power it on, the screen will the display "Welcome". Then immediately press the

Power button three or four times quickly and the monitor will enter encoding mode and will display "Pairing".

2. Obtain a paperclip and straighten out one leg and push into the Encoding hole on the back of the camera. Hold down until a "Ding" sound is heard with a blue flashing light. When a "Dong" sound is heard from the monitor, it will display camera images and this means the pairing process is now complete and it has paired one camera unit to one monitor.

3.If you need to pair one camera unit with multiple monitor units (up to 3), after completing step 2 above, press the paperclip into the Encoding hole on the back of the camera unit two to three times quickly and when you hear a "Dong Dong" tone, it means that one camera unit is now paired with two monitor units, and it if you hear a "Dong Dong Dong" tone the camera in paired with three monitor units.

4. After finishing the pairing (encoding) of two or three monitor units, press the CALL button on the camera unit and if all the monitors display images at the same time, it means the pairing has completed successfully.

Technical Specifications

VDP404 Monitor

Power Supply	4.5V DC 1A
Transmission Rate	2 Mbit/s
Max TX Distance (outside)	50 metres
Dimensions	138(W)x80(H)x22(D)mm
Screen Size	4.3"
Screen Display Size	95.04(H) x 53.856(V)mm
Display Resolution	480(H) x 3RGB x 272(V)
Ringtone Volume	≥70dB
Monitoring Time	30 ± 10%S
Talking Time	90 ± 10%S
Enter Standby no operation	30S
Standby current	≤ 8mA
Standby Power Consumption	≤ 0.3W
Working Power Consumption	≤ 2.4W
Battery standby time	≤ 120 Hours
Transmitting Power	≤ 18dBm
Receiving sensitivity	-80dBm
Transmitting frequency	2403 ~ 2478MHz

VDP301 Camera

Power Supply	5vDC 1A
Camera Pixels	300,000
IR light spectrum	940nm
IR Visual distance	4.3 metres
IR visual angle	90°
Ringtone Volume	≥ 70dB
Dimensions	163.2(W)x84.9(H)x62(D)mm
Standby Current	≤ 1mA
Standby Power Consumption	≤ 0.4W
Working Power Consumptn.	≤ 2.8W
Unlock time	1 ~ 6 seconds
Battery standby time	≤ 500 Hours
Transmitting power	≤ 18dBm
Receiving sensitivity	-80dBm
Transmitting frequency	2403 ~ 2478MHz

Lithium Battery*	Nominal voltage	3.7v
	Nominal capacitance	≤ 1200mAh
	Battery charge extinction voltage	4.2v
	Battery discharge extinction voltage	2.75v
	Charging time	About 3 hours
	Charging current	Max: 400mA
Current		≤ 350mA
Environmental suitability	Working humidity	(-20 ~ 60°C)
	Environmental humidity	5 ~ 90%RH
	Storage humidity	(-20 ~ 60°C)

*Note: The above specifications apply to both batteries.

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Troubleshooting

Problem	Resolution
There is no response when the camera unit calls the monitor after powering up.	The camera and monitor have not been paired or have lost the pairing code. Refer to section: VDP400 Door Entry Kit Operation Item 8 "Pairing the Monitor to the Camera."
Monitor feedback noise	If the monitor is installed too close to the camera, it may cause audio feedback. The best answer is to increase distance between the two units or place a screen between them.
No response after calling	Check that there is battery/power available. Check that the camera and monitor are not beyond the limits of wifi connection, over 50 metres line of site or too many obstructions between camera and monitor.
Fails to unlock	Check that electric lock is connected correctly. If the camera is powered by the lithium battery it will not activate an electric lock. Check that the electric lock is correctly connected.

WEE/CG0783SS

This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste. For treatment, recovery and recycling please return this unit to your trade supplier or local designated collection point as defined by your local council.