

# Instruction Manual

VDP300

PhoneSEE WiFi DoorKnox Box

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## Introduction

The VDP300 PHONESEE WiFi DoorKnox box is used to integrate DoorKnox cameras and monitors for remote viewing and door relay control via the "Tuya Smart" application.

The VDP300 is installed between DoorKnox cameras and DoorKnox monitors to intercept the images to stream and connect with the Tuya Smart app via the WiFi or via a Ethernet network cable connected to a router.

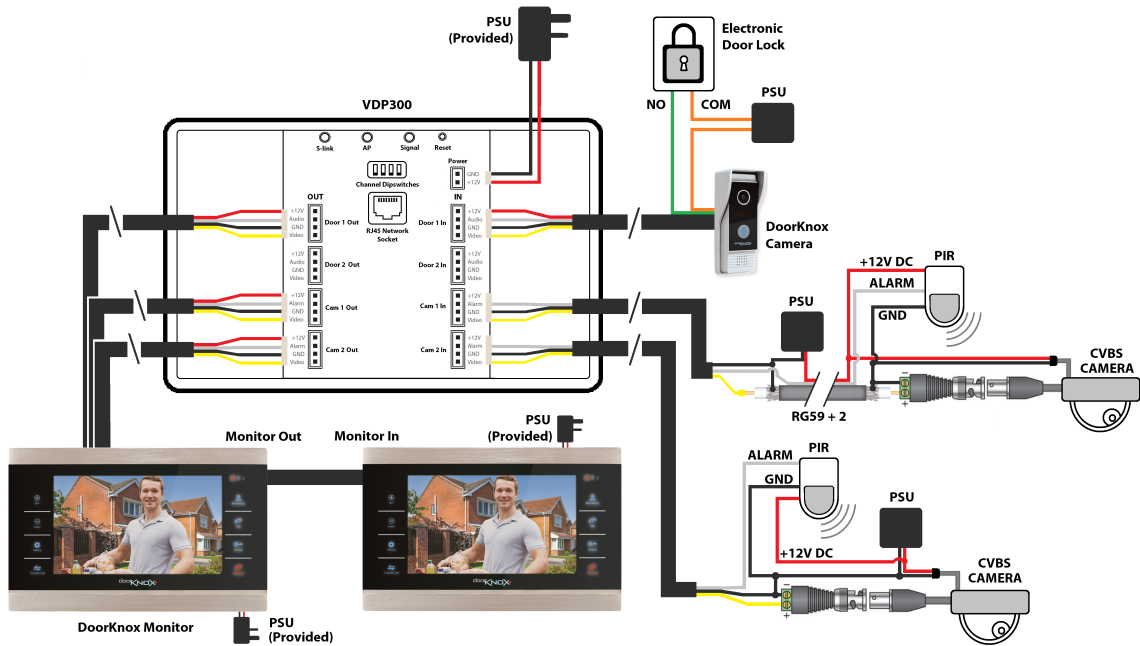
### 1.1 Key Features

- Remote monitoring
- Remote relay control
- Push notifications
- Wi-Fi pairing
- LED connection indicators
- SD card recording

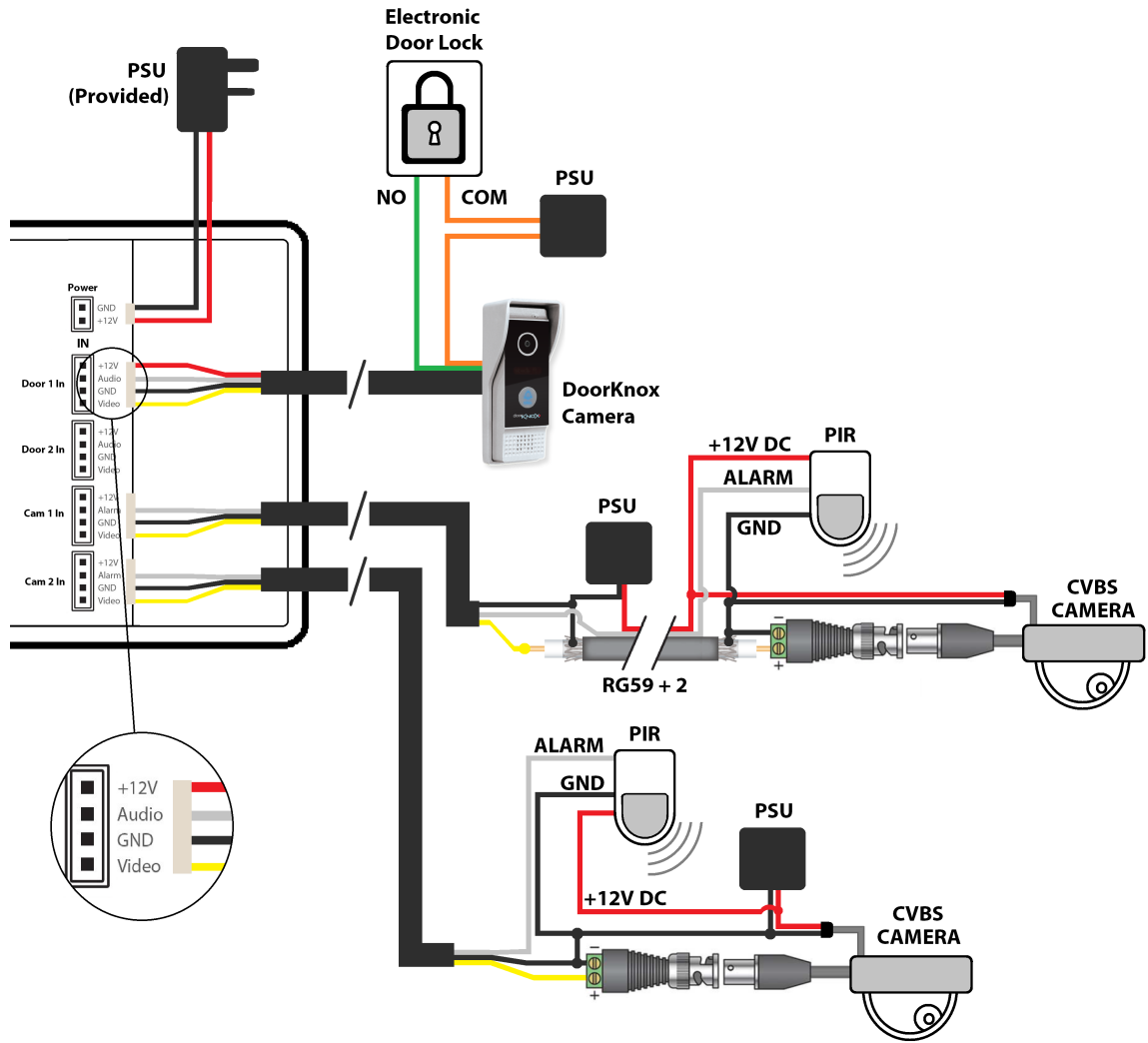
# Connections

## 2.1 Overview

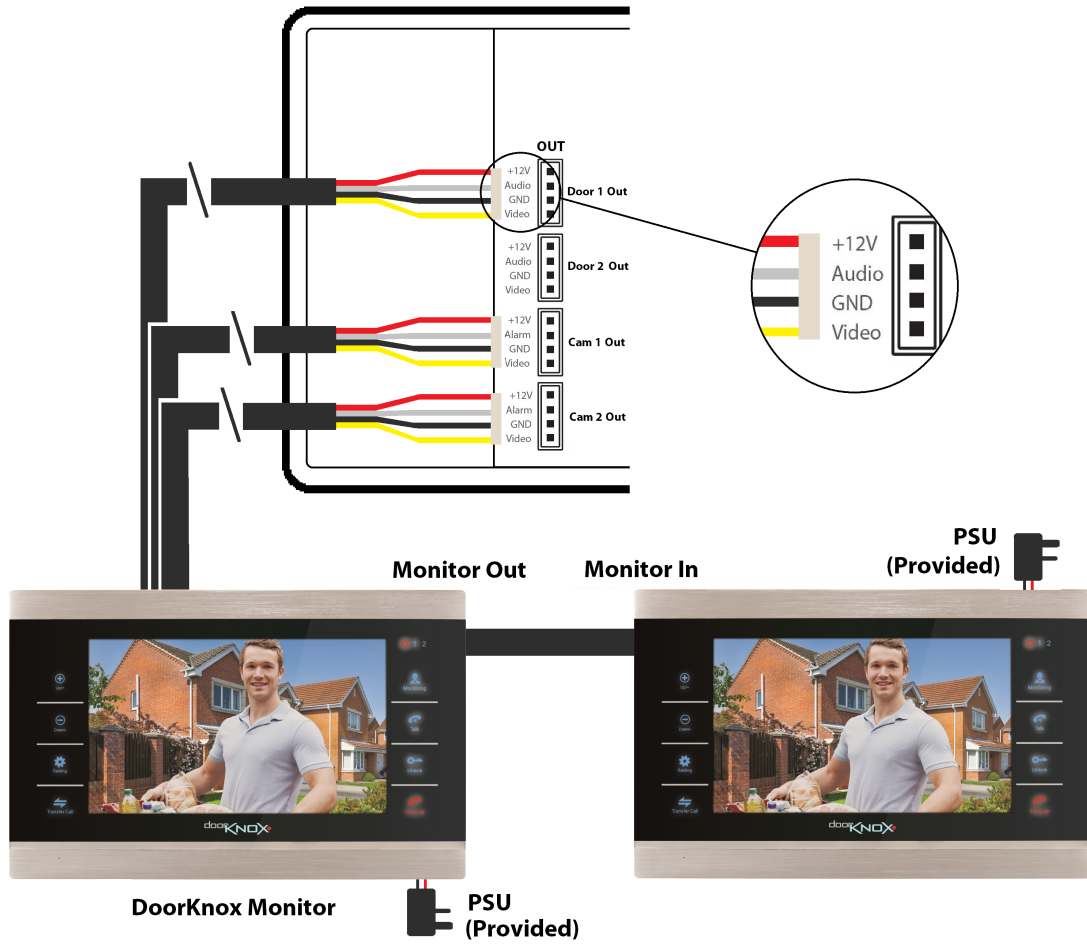
The VDP300 is installed between DoorKnox cameras and DoorKnox monitors in order to intercept the images to stream and connect with the Tuya Smart app via the WiFi or an Ethernet network cable connected to a router.



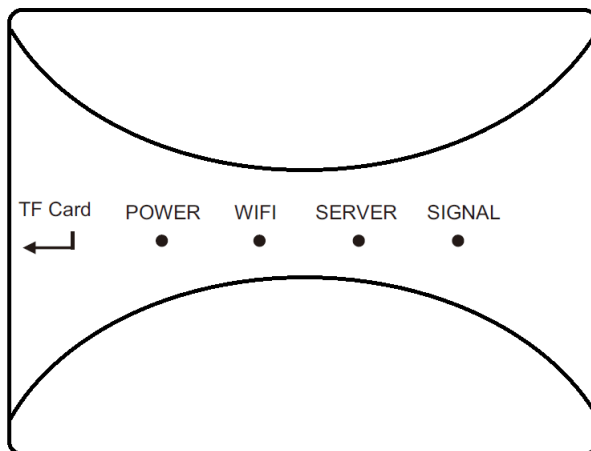
## 2.2 Input Connections



### 2.3 Output Connections



## LED Indicators



### Power LED

ON = Device is powered

Note:-

During boot-up the WIFI, SERVER and SIGNAL LEDs will be ON

Once boot-up is complete the WIFI, SERVER and SIGNAL LEDs will turn OFF

### WIFI LED

ON = Network ok

OFF = Network disconnected

Fast flash = Configuring network

Slow flash = EZ mode

### SERVER LED

ON = Server connection ok

OFF = Server disconnected

Slow flash = WIFI setup mode

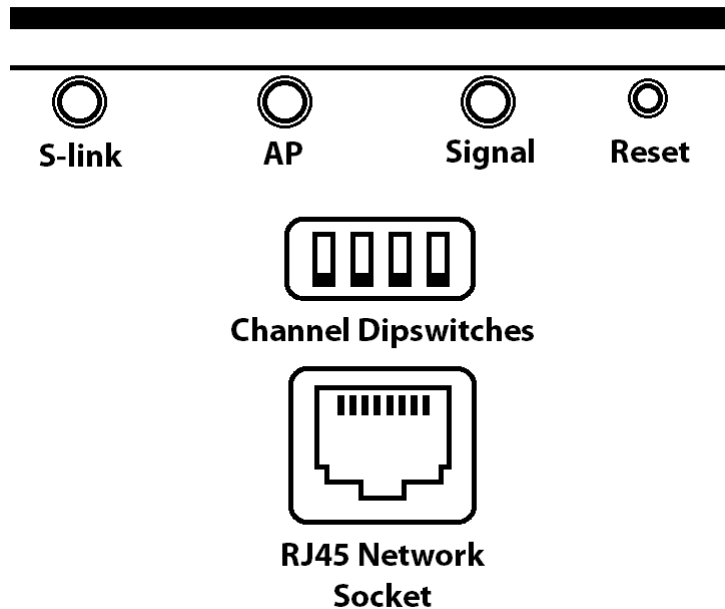
### SIGNAL LED

See [Signal Setup](#) <sup>24</sup>



## Controls

The control buttons on the back of the VDP300, are shown below.



**S-link** (Only use if the SERVER light is not on solid)  
Short Press (>1s) = Restarts the VDP300 and starts "EZ Mode", the WIFILED will flash slowly. See [EZ Mode Setup](#)<sup>[9]</sup>

**AP** (Only use if the SERVER light is not on solid)  
See [AP Mode Setup](#)<sup>[18]</sup>

**Signal**  
See [Signal Setup](#)<sup>[24]</sup>

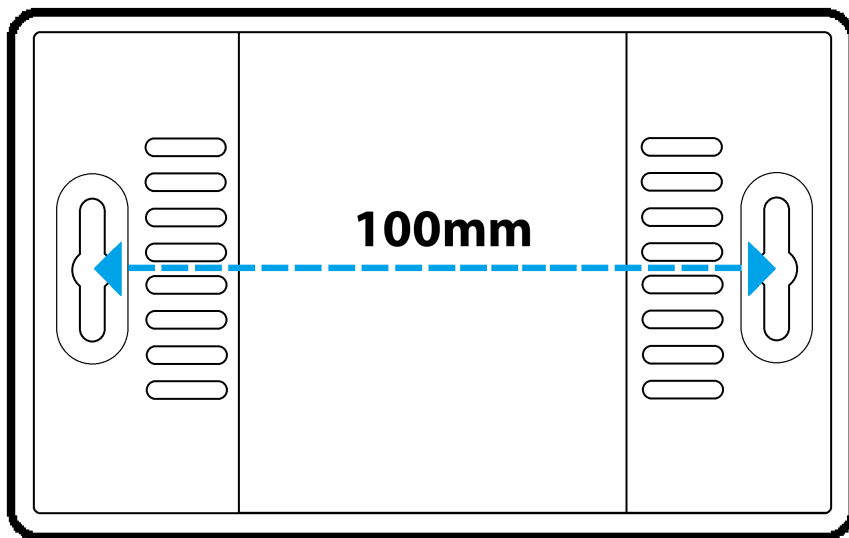
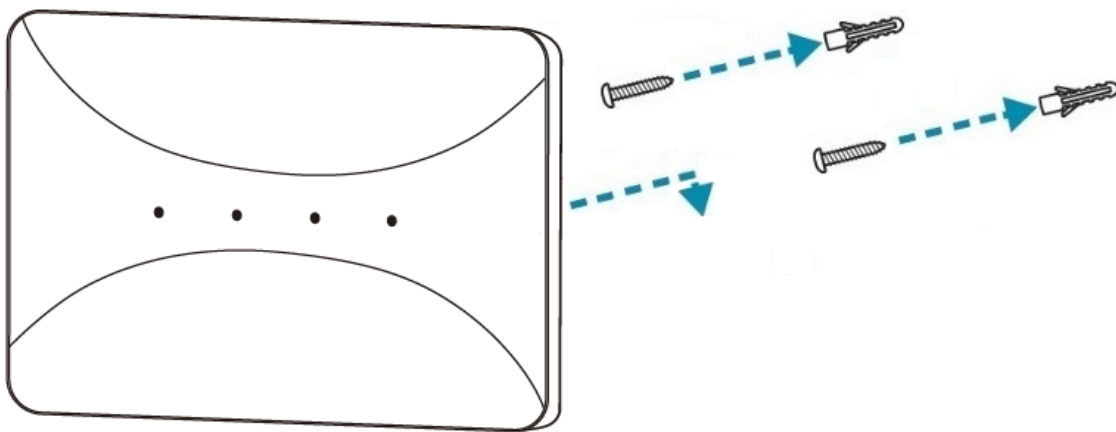
**Reset**  
Long press (5s) = Factory default the VDP300.

**Channel (Dip-switches)**

See [Signal Setup](#)<sup>[24]</sup>

## Mounting

The VDP300 Hub can be mounted using the screws provided and the mounting holes on the rear.



## Smart App

[Tuya Smart App](#)  Terms and Conditions

1. Download “Tuya Smart” app via the Apple store or Google Play store
2. Open the app to and register an account.



## Tuya Smart



## Network Setup

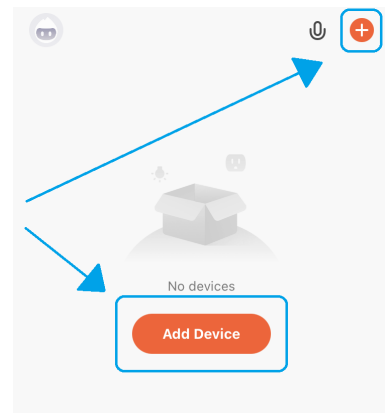
The VDP300 WiFi box can be setup with 3 different modes; EZ Mode, AP Mode, Cable Mode.

### 7.1 EZ Mode Setup

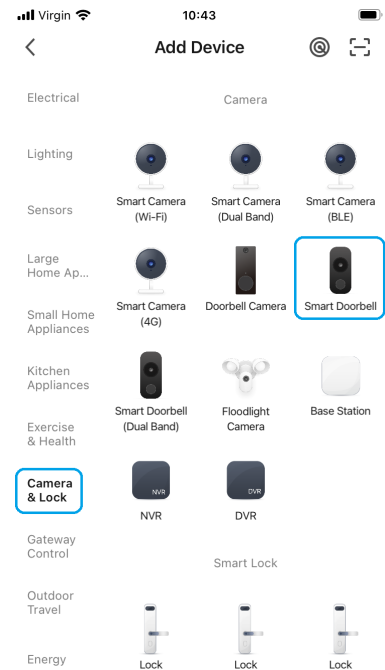
The VDP300 WiFi box can be paired up with a router (wirelessly) using the S-link pairing button on the back of the VDP300 and the "Tuya Smart" app.

1. Short press (1s) the **S-link** to start the EZ pairing. The WiFi LED will flash slowly when in pairing mode

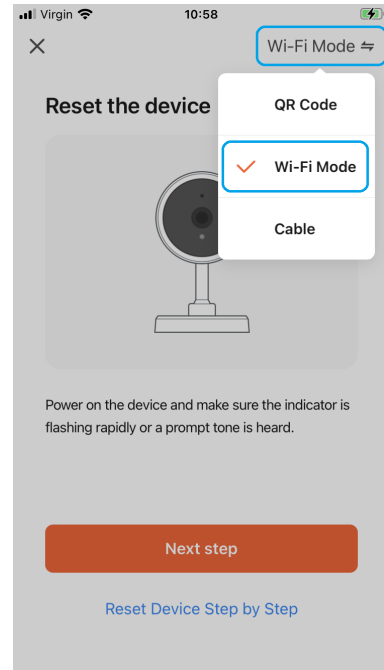
2. Open the "Tuya Smart" app, select "**Add Device**" or press the "+" at the top right to add a device



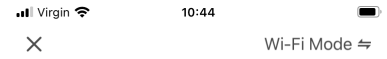
3. Select "**Camera & Lock**" category on the left, then select "**Smart Doorbell**"



4. At the top right, select "Wi-Fi Mode"



5. Select "Next Step", then select "EZ Mode"



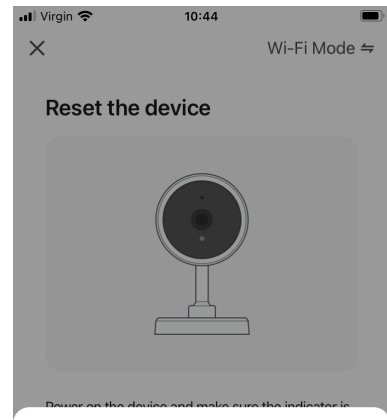
Reset the device



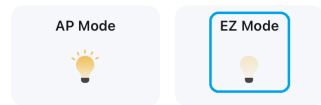
Power on the device and make sure the indicator is flashing rapidly or a prompt tone is heard.



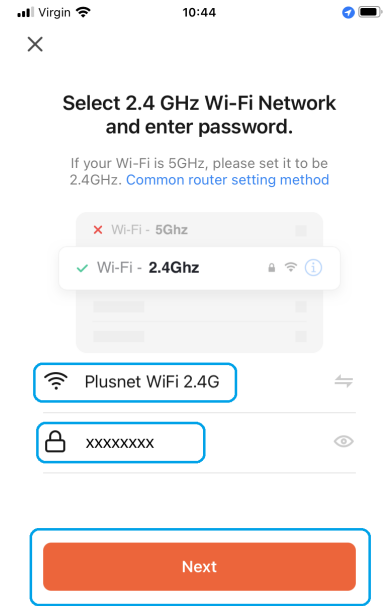
[Reset Device Step by Step](#)



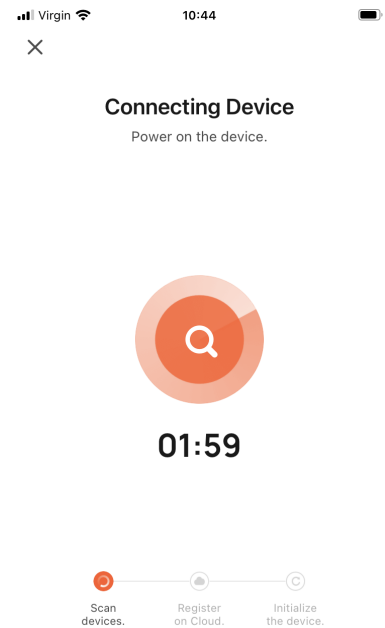
Select the status of the indicator light or hear the beep:



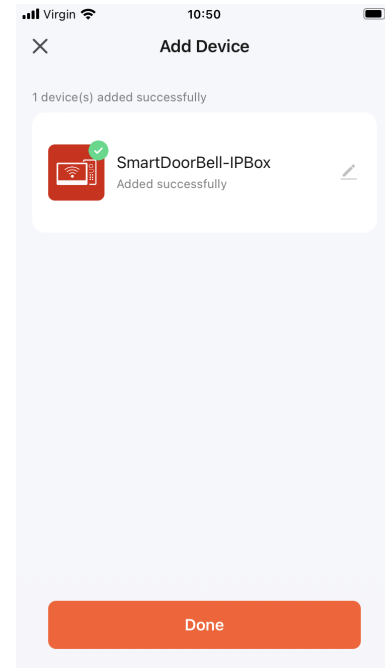
6. Select the WiFi Hub (Router or Access point) and enter the **WiFi password**, then select **Next**



7. The WiFi LED will flash quickly once it starts pairing



8. Once paired the app will show the device is **Added**, select "**Done**"



### Troubleshooting Pairing using EZ Mode;

1. Disconnect the camera unit (doorbell) from the VDP300. Attempt the pairing again, from the start.

2. Press and hold the S-LINK Button a little longer =, this should allow for pairing, up with the VDP300 and Wi-Fi.

3. Reboot (remove power from) the VDP300 and then once powered back up press the S-LINK Button for over 1 second. Then attempt the pairing again.

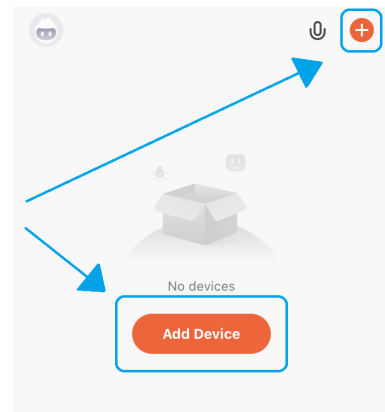
4. Attempt the [AP Mode Setup](#) <sup>18</sup>.



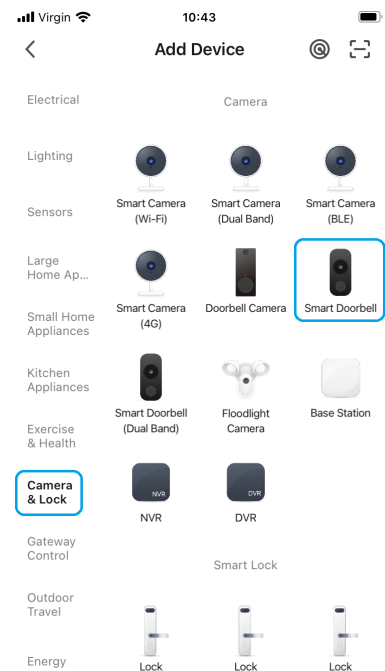
## 7.2 Cable Mode Setup

The VDP300 can be connected to a router directly using the RJ45 network port for remote viewing and door relay control via the "Tuya Smart" application.

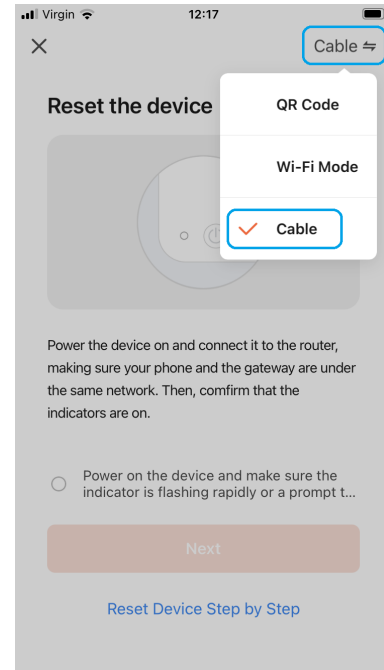
1. Connect an Ethernet (CAT5 / 5e / 6) cable to the RJ45 port on the back of the VDP300. (The network port LED indicators will light up once connected)
2. Press the **S-link** to start pairing. The WiFi LED will flash slowly when in pairing mode
3. Open the "Tuya Smart" app, select **"Add Device"** or press the **"+"** at the top right to add a device



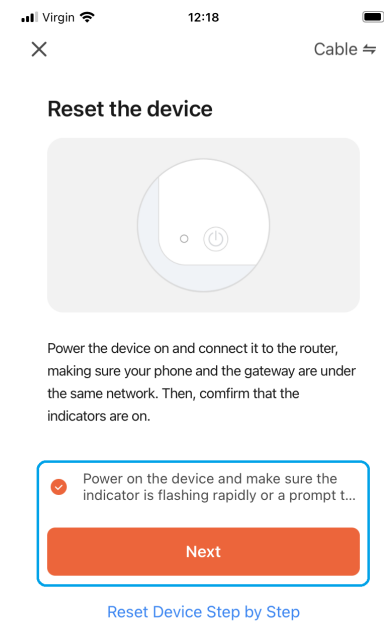
4. Select **"Camera & Lock"** category on the left, then select **"Smart Doorbell"**



5. At the top right, select "**Cable Mode**"



6. Tick to confirm LED is flashing, then select **Next**



7. The app will search the device via the network

Note: Reset the device if the search fails, see - [Controls](#) to reset



12:18

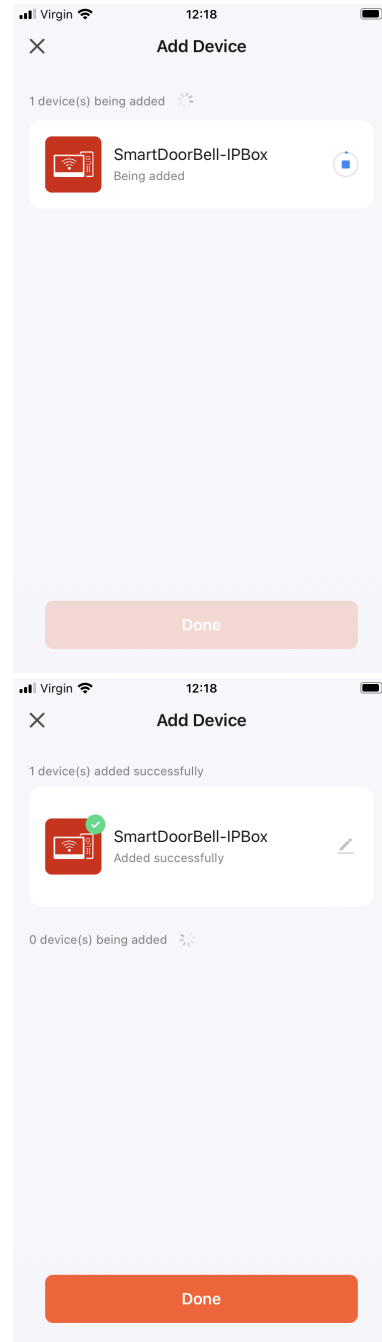


Connecting Device  
Power on the device.



01:59

8. The app will then add the device via the network, then show the device is **Added**, select **"Done"**

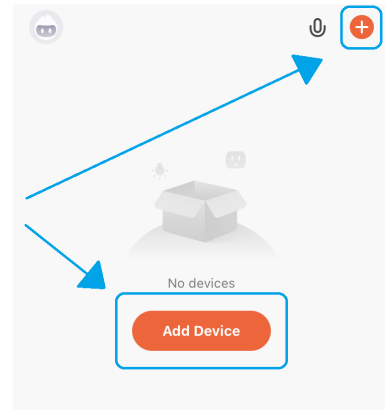


### 7.3 AP Mode Setup

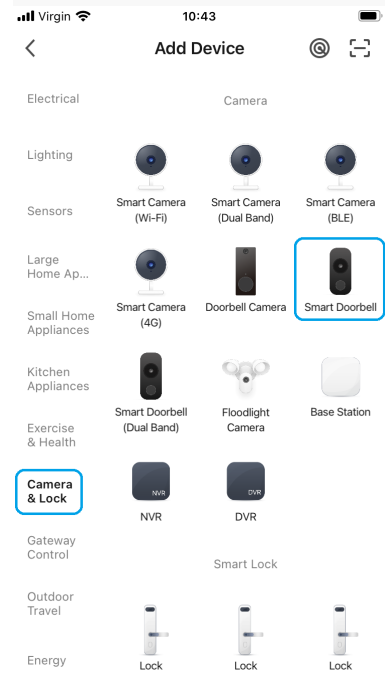
The VDP300 WiFi box can be paired up with a router (wirelessly) using the AP button on the back of the VDP300 and the "Tuya Smart" app.

1. Short press (1s) the **AP** button to set the VDP300 to access point mode.

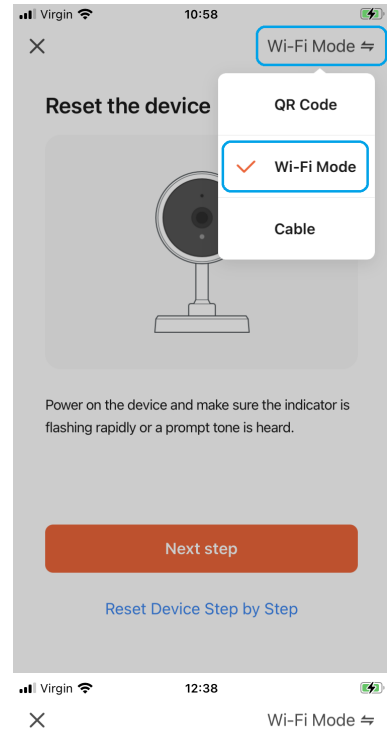
2. Open the "Tuya Smart" app, select "**Add Device**" or press the "+" at the top right to add a device



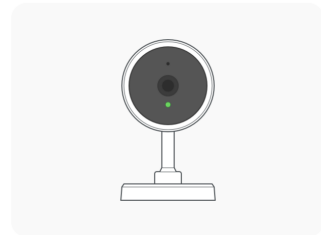
3. Select "**Camera & Lock**" category on the left, then select "**Smart Doorbell**"



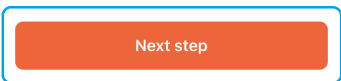
4. At the top right, select "Wi-Fi Mode" then select **Next**



Reset the device

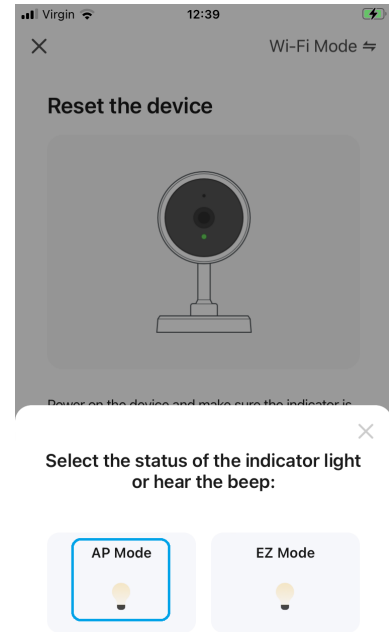


Power on the device and make sure the indicator is flashing rapidly or a prompt tone is heard.

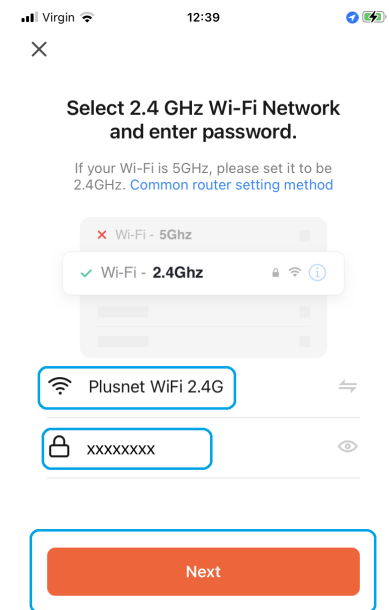


[Reset Device Step by Step](#)

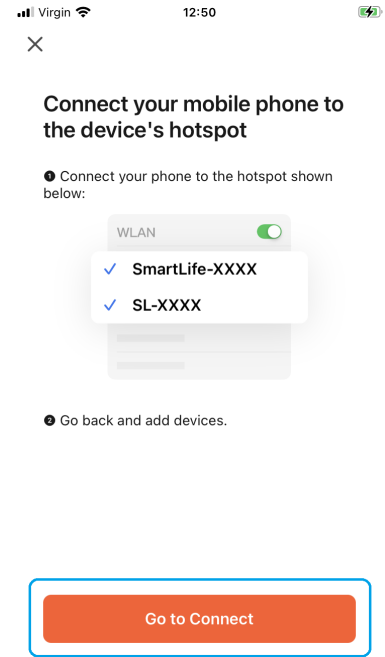
5. Select "AP Mode"



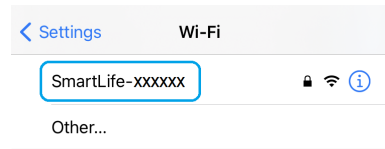
6. Select the WiFi Hub (Router or Access point) and enter the **WiFi password**, then select **Next**



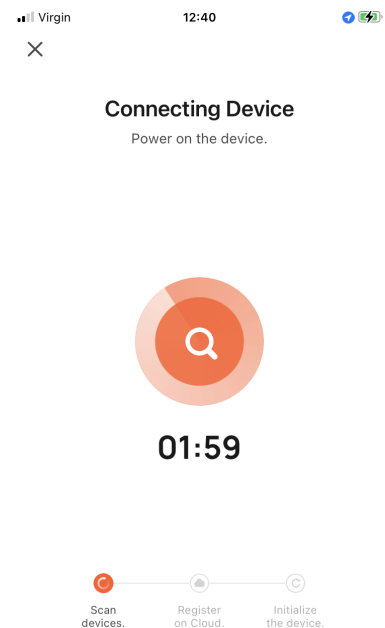
7. Select "**Go to Connect**" to go to your phones Wi-Fi Settings



8. Find and connect to the "**SmartLife-xxxxxx**" Wi-Fi connection, when prompted enter the password "**12345678**"

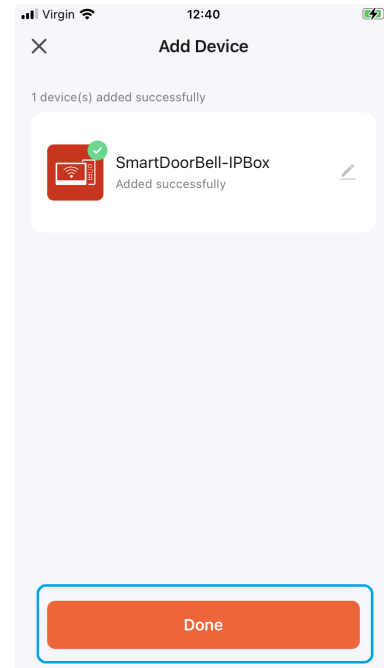


9. Go back to the app, to show the connection, the WiFi LED will flash quickly once it starts pairing





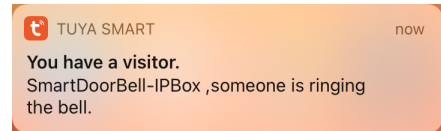
10. Once paired the app will show the device is **Added**, select **"Done"**



## Using the App

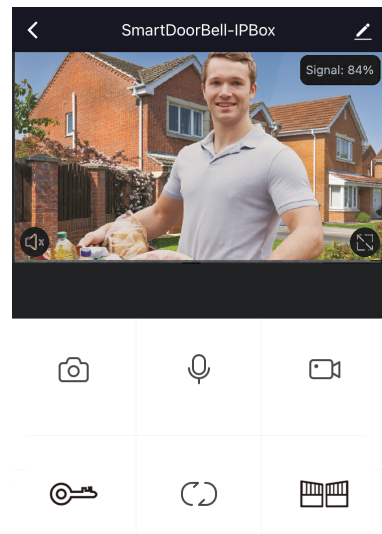
### 8.1 Visitor Calls

When a visitor presses the call button on a door camera connected to the VDP300 a push notification will appear on the phone. To answer the call press the notification.



### 8.2 App Controls

Once connected to the device the image and control options will display.



**Snapshot** - Captures an image and saves it locally on the phone



**Talkback** - Press and hold to talk to the door camera



**Record** - Captures live view and saves it locally on the phone



**Unlock** - Press to unlock the relay built into the door camera



**Switch** - Press to select a different door camera



**Release** - Press to unlock the relay built into the door camera



**Playback** - Press to access SD card footage (requires a SD Card installed in the VDP300)

## SD Card

For local recording on the VDP300 itself an SD card must be installed.

Recording time will vary dependent upon: SD card size.

The maximum size supported is 32G class 10TF card.

Remove power from the camera when inserting or removing the SD card in the "TF Card" slot.

## Signal Setup

Additional features like Signal setup will be added later.

## DoorKnox Wiring

### 11.1 Cameras

All our door cameras have connection cables terminated into the same 7 colour coordinated wires. 4 wires are used to connect to the monitor and then 2 of the 3 remaining wires are used to connect to an electronic door lock.

The common (COM) wire is always used along with either the normally open (NO) or normally closed (NC) wire depending on the lock type, power for the lock is separate as the Door Lock relay does not provide power output.

### 11.2 Monitors

Every monitor is supplied with 6x 4 wire y-leads, 1x 2 wire y-lead and 1x 3 wire y-lead.

The 4 wire y-leads are terminated into 4 pin plugs which are simply inserted into the sockets on the rear of the monitor. These are used for connecting door cameras, auxiliary cameras and auxiliary monitors, the 4 wires are colour co-ordinated to match the 4 wires from the door camera.

The 2 wire y-lead is terminated with a 2 pin plug and is used as the TV out for connecting the door monitor to a TV monitor or DVR.

The 3 wire y-lead is terminated for the local relay plug and is used to unlock a local relay like a door release local to the monitor.

### 11.3 Powering Cameras

Door cameras and auxiliary cameras can be powered in two ways, either locally or via the main monitor.

The DoorKnox monitors can supply a 12V DC output to any of the four cameras but can only supply a maximum of 400mA across all outputs.

To power a camera locally connect the Audio (white) and Video (yellow) to the door monitor, the GND (black) to the PSU and the door monitor and then the 12V DC (red) to the PSU only.

### 11.4 Powering Monitors

Door monitors are supplied with a 12V DC 2A plug-in PSU that terminates into a 2 pin plug which slots into the rear of the monitor.

## 11.5 Cable Runs

The maximum achievable cable run is limited by the voltage drop in the chosen cable and also the quality of the cable used for the video cores which can cause signal loss and interference.

Resistance differs depending on the cable used and the higher the resistance the more the voltage drops hence the shorter cable run achievable.

It is recommended to use one of three types of cable, PTZ combo cable sometimes known as RG59+4, CAT5+2 cable or 4 core cable with 0.3mm<sup>2</sup> cores.

Below shows the maximum recommended cable run for each cable type. Cable runs exceeding the stated maximum run are at risk of issues caused by voltage drop and non performance of equipment.

### Camera to Main Monitor

Cable Type	Max Cable Run
PTZ Combo Cable (RG59+4)	Up To 150m
CAT5+2	Up To 100m
4 Core Cable (0.3mm <sup>2</sup> )	Up To 50m

### Main Monitor to Auxiliary Monitors

Cable Type	Max Cable Run
PTZ Combo Cable (RG59+4)	Up To 30m (Per Monitor)

## Troubleshooting

### 12.1 Signal Loss / No Image

**Poor Connections** - A poor lead connection may cause signal loss or interference so check that each component is firmly plugged in and any joints (soldered or otherwise) have been made well and solid with no shorts or crossed wires.

**Lack Of Power** - May cause a lack of picture or other intermittent results. Check your equipment works on a short lead to rule out unsuitable cable runs. Ensure that each add-on item such as cameras, PIRs etc. have their own adequate power supply source. Finally try powering the unit locally with a suitably rated power supply unit (12V DC 2A). See [Powering Monitors](#)<sup>[25]</sup> for help on this.

**Long Cable Runs Causing Signal Loss** - A long cable run may result in poor or complete signal loss. Firstly check if this is the cause by testing the camera and screen on a short test cable. If the problem disappears then both units are working correctly and the cable being used should be addressed.

Next check if the correct cable is being used. If your cable is below specification then it will need replacing with a more suitable heavier duty cable. See [Connections and Wiring](#)<sup>[25]</sup>

**All above checks should be carried out in any situation where one unit does not appear to be receiving a signal whether video, audio or data from another unit.**

### General Maintenance

- Ensure that the VDP300 is within signal range of the WiFi, ensure there is no large metal objects in between the VDP300 or the Router
- Routinely check the connections for power and data to ensure the connections are secure and solid.
- Check that the VDP300 is firmly attached to the wall mounting bracket.
- Check playback in the VDP300 it is recording & triggering properly on the SD Card

## Specification

<b>Communication</b>	WiFi 2.4GHz
<b>Input Connections</b>	2x Door Cameras / 2x Auxiliary Cameras
<b>Outputs Connections</b>	2x Door Cameras / 2x Auxiliary Cameras
<b>Consumption</b>	600mA (Max)
<b>SD Card</b>	Micro SD / 2GB – 32GB Class 10TD
<b>Input Voltage</b>	12V DC
<b>Build</b>	Plastic
<b>Dimensions</b>	(H) 25 x (W) 140 x (D) 90mm

## Conditions

All specifications are approximate. System Q Ltd reserves the right to change product specifications or features without notice. Whilst every effort is made to ensure that these instructions are complete and accurate, System Q Ltd cannot be held responsible for any losses, no matter how they arise, from errors or omissions in these instructions, or the performance or non-performance of the equipment referred to.

*This symbol indicates that equipment must not be mixed with general household waste. For treatment, recovery and recycling please return to your local designated WEE/CG0783SS collection point as defined by your local council.*



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### 15.1 Tuya Smart App

System Q Ltd does not own or control the “Tuya Smart” application, under no circumstances shall System Q Ltd or its affiliates, partners, suppliers or licensors be liable for any indirect, incidental, consequential, special or exemplary damages arising out of or in connection with your access or use of or inability to access or use the application and any third party content and services, whether or not the damages were foreseeable and whether or not System Q Ltd was advised of the possibility of such damages.



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