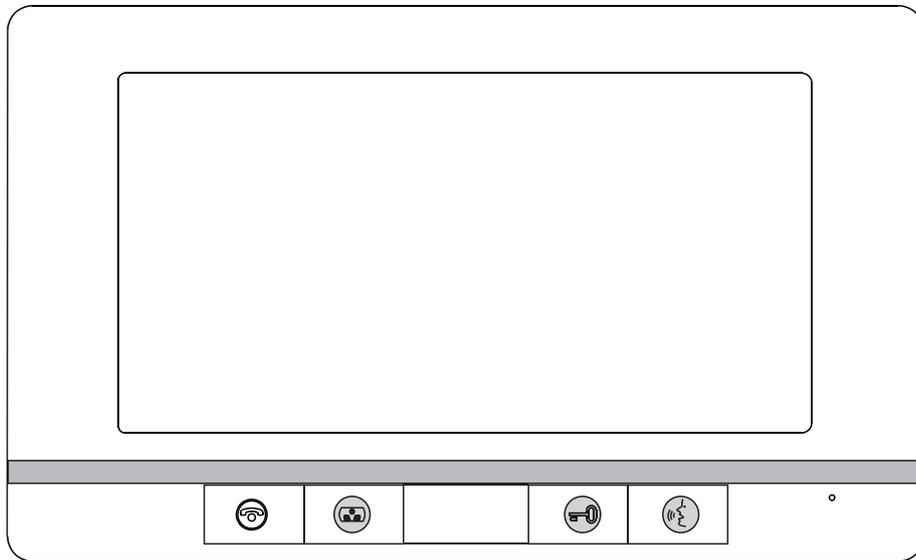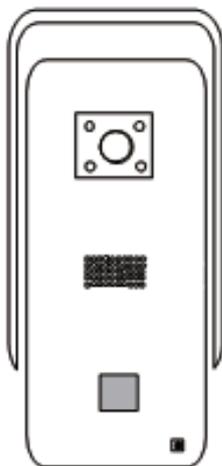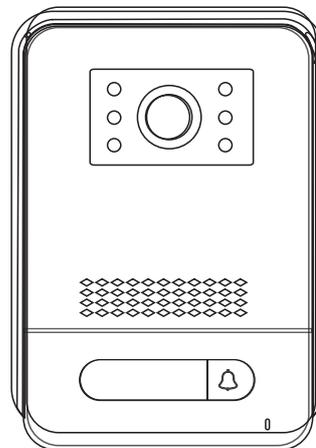# VDP-150

IP Video Intercom System
Instruction Manual

VMT-107

ODS-200

ODS-100

Product Features

Monitor Station

▮ Ultra-thin design
▮ Easy-to-follow user interface
▮ Multi-point, 7" 1024 x 600 capacitive touch screen
▮ Supports TF memory card (max 64GB)
▮ Expandible system – can connect with up to 5 monitor stations
▮ Can connect to 2 video door stations and 2 cameras
▮ WiFi capabilty
▮ Monitor/ Unlock/ Video Intercom/ Motion Detection/ Footage Record and Playback
▮ Locking delay adjustment
▮ Display settings adjustable
▮ 12VDC/ 1A power supply included
▮ Supports English, Russian, French, Spanish, German and Simplified Chinese.
▮ Independent one-to-one call between indoor units

Mobile APP (Tuya Smart)

▮ Supports connection of 5 mobile APP users
▮ Real time video surveillance anytime, anywhere
▮ Remote control of the door stations
▮ IP video intercom call with visitors
▮ Take screenshots, videos through Tuya Smart APP

Video Door Station

▮ 1080p HD/ 2.0MP camera
▮ Rain cover included
▮ Works with a variety of electric locks
▮ Relock time delay setting

Product accessories

▮ Monitor station VMT-107
▮ Video door station ODS-100
▮ 12V/1A power supply
▮ Instruction Manual
▮ Monitor unit mounting bracket MKB-110
▮ Hardware Kit
▮ Rain cover
▮ Cables

Specifications

Monitor Station VMT-107

Display	7-inch TFT LCD Touch Screen (16:9)
Resolution	1024 x 600 HD
Video System	PAL/NTSC compatible
Intercom mode	Semi duplex communication
Conversation Duration	120 seconds
Operating Voltage	12 VDC
Current Draw	650 mA (working) 300 mA (standby)
Power consumption	7.8 Watts
Data Communication	4-wire cables, WiFi Tuya solutions
Power supply	Input: 100~240V (50~60Hz) ,Output: 12VDC /1A
Operational temp.	-10°C~55°C
Installation	Surface mount
Extension Memory	Supports max. 64GB TF card
Video Format	Supports AHD1080, 720V, CVBS
Dimension	220 x 135 x 23 mm

Video Door Stations ODS-100

Camera Sensor	1/3 CMOS, AHD1080P HD camera, 2.2MM Lens
Camera View Angle	120-degree
Resolution	AHD 1080P
LED	Night vision compensation
Operating Voltage	12 VDC
Current Draw	200 mA (working) 30 mA (standby)
Data Communication	4-wire connection to monitor station
Operating Temperature	-20°C~60°C
Dimensions	135 x 88 x 35 mm
Relay	dry contact: NC, COM, NO
Material Housing	Aluminum alloy/ Silver Finish
Weatherproof	IP65
Call buttons	direct call, name plate and light transparent
Installation	Surface mounted

Specifications

Video Door Stations ODS-200

| Camera	1/3 CMOS, AHD1080P HD camera, 3.6MM Lens
Camera View	90-degree
Resolution	AHD 1080P
LED	Night vision compensation
Operating Voltage	12 VDC
Current Draw	200 mA (working) 30 mA (standby)
Data Communication	4-wire connection to monitor station
Operating Temperature	-20°C~60°C
Dimensions	130 x 54 x 39 mm
Relay	dry contact: NC, COM, NO
Material Housing	Aluminum alloy/ Silver Finish
Weatherproof	IP65
Call buttons	direct call, name plate and light transparent
Installation	Surface mounted

Wiring Diagram

Wiring Distance and wire gauge

Be sure to use the equipment within the distance ranges shown in the table. If the distances are exceeded, the video image quality could be affected.

| Wiring run	Wire type		
	Diameter		Length (Max.)
Monitor Station – Video Door Station	1.5 mm	16 AWG	100 m
	1.0 mm	17 AWG	75 m
	0.75 mm	18 AWG	50 m
	0.5 mm	20 AWG	30 m
Electric locks	0.75 mm	18 AWG	20 m

Monitor Station Wiring

Monitor station back view
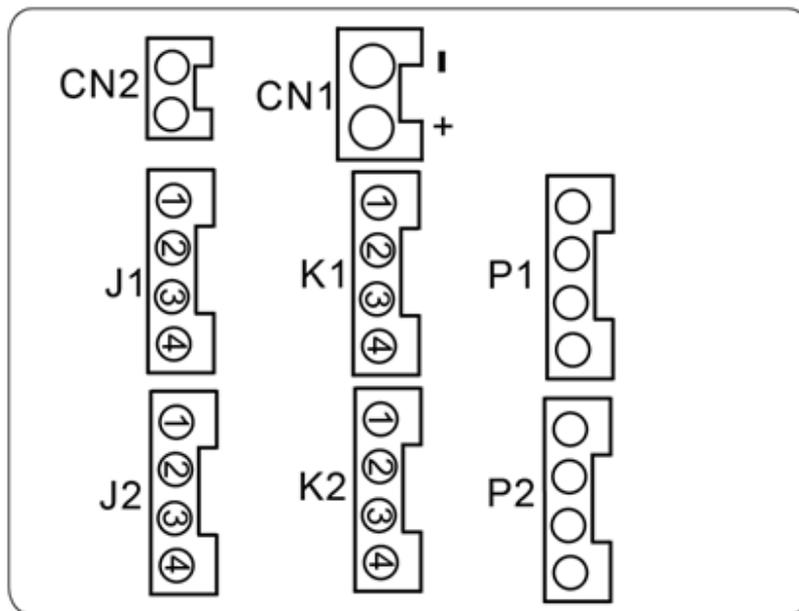
◆ Notes for indoor monitor:

◇ CN1: power DC 12V，the negative "-" and the positive "+".

◇ CN2: lock switch interface, connection to the lock.

◇ J1: to the video door station 1   J2: to the video door station 2

1.audio(red) 2. gnd(blue) 3. v+(yellow) 4. video(white)

◇ K1: to the camera 1   K2: to the camera 2

1.alarm(red) 2.gnd(blue) 3. v+(yellow) 4. video(white)

◇ P1: monitor station input

◇ P2: monitor station output, connection to the next indoor monitor input.
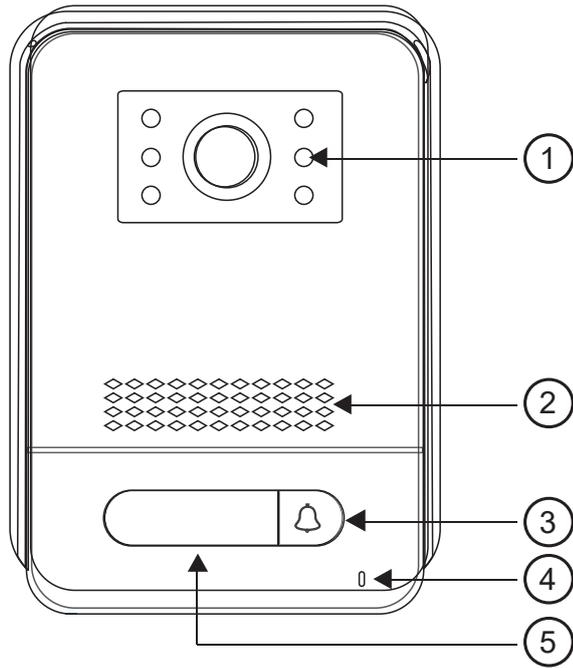
Outdoor station backview

No.	Function Description
①	**camera**
②	**horn hole**
③	**call button**
④	**microphone**
⑤	**nameplate**

J1   no   com   nc   vedio   v+ gnd   audio   VR1
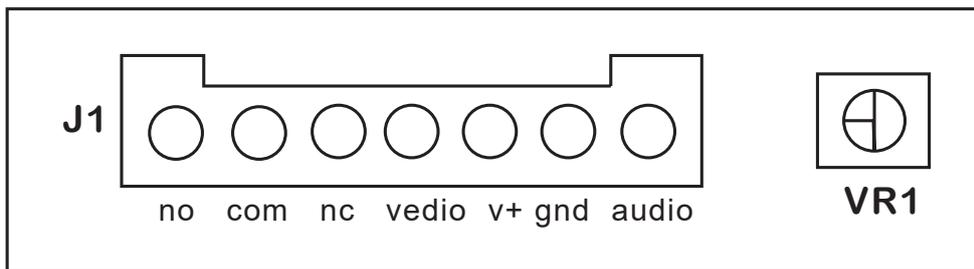
Rear view of outdoor station

◆ Notes for outdoor station:

The outdoor station (audio, gnd, V+, video) is accordingly wired.
with the indoor monitor J1 (audio, gnd, V+, video).
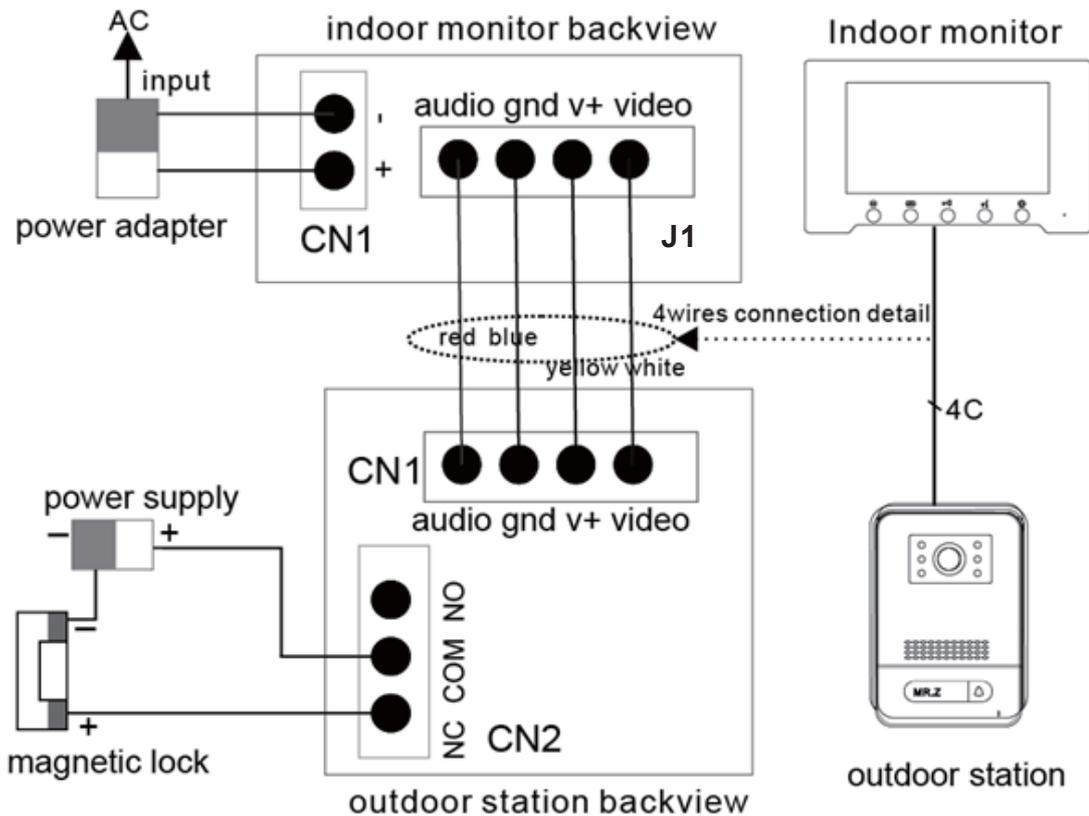
◇ NC,NO and COM is a dry contact of a relay , NC and COM are connected to
magnetic lock, NO and COM are connected to electronic lock.
◇ VR1 is a switch to adjust the volume, clockwise for up, anticlockwise for down.

4-wire villa intercom system

◆ Standard Set Diagram
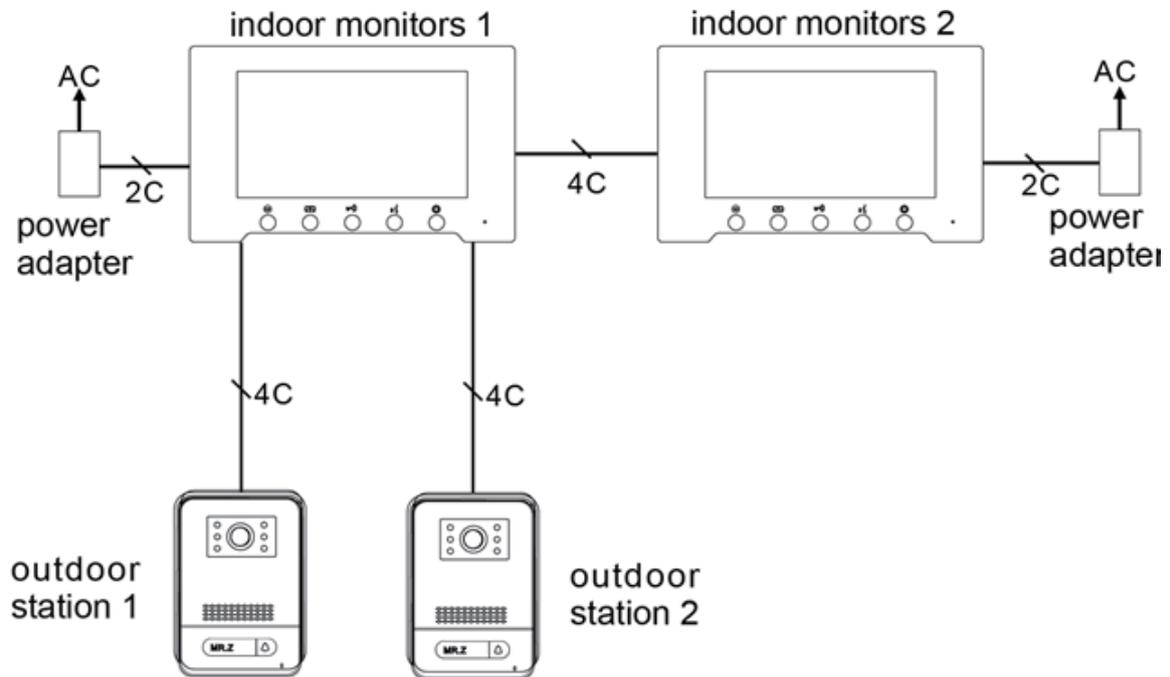(1 outdoor station for 1 indoor monitor):
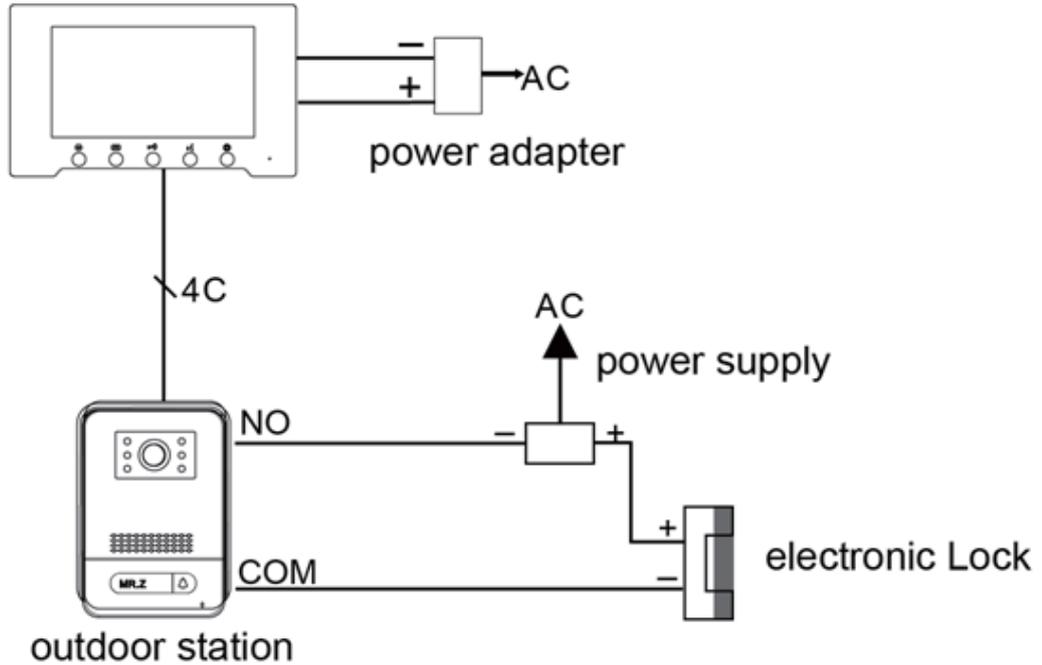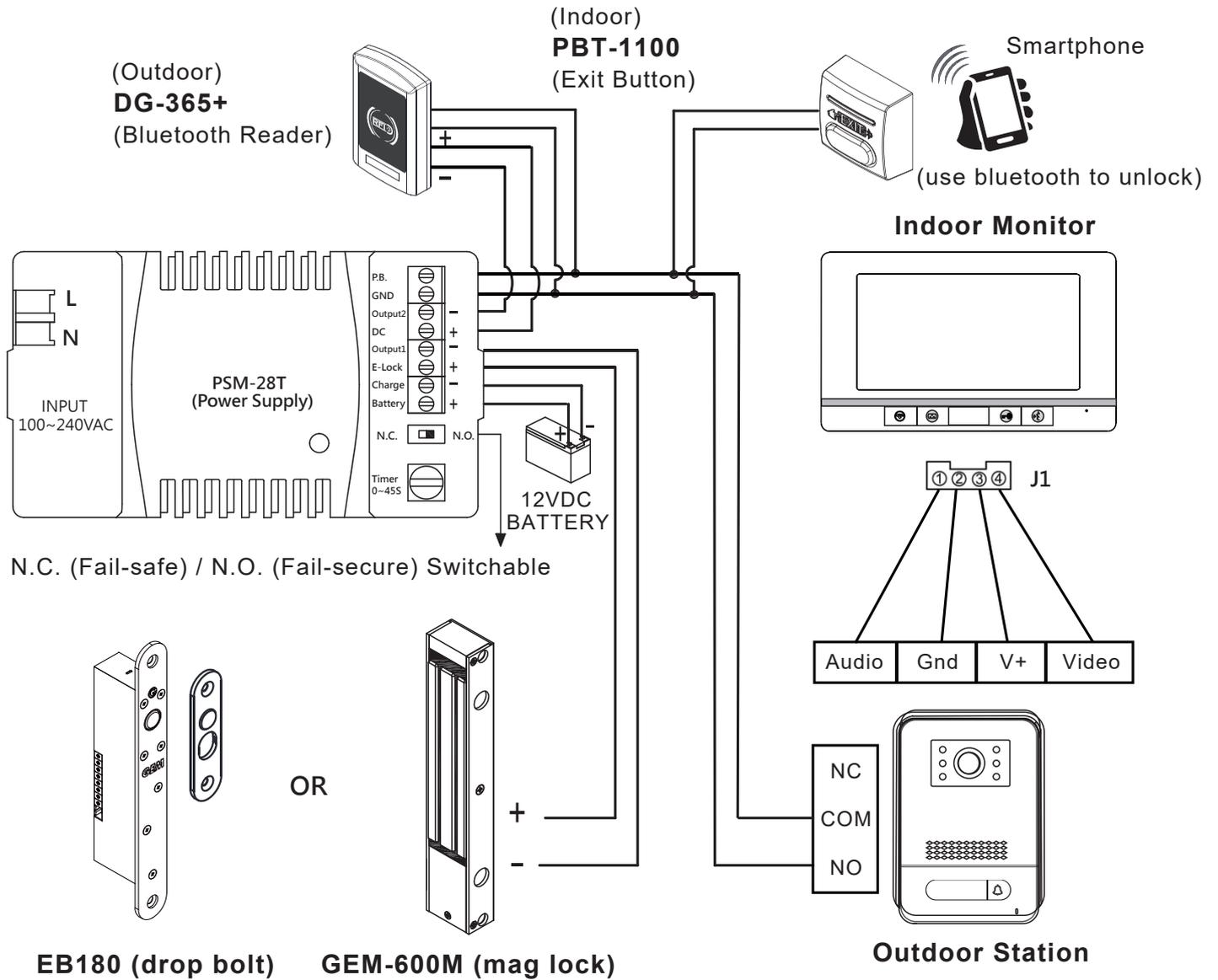

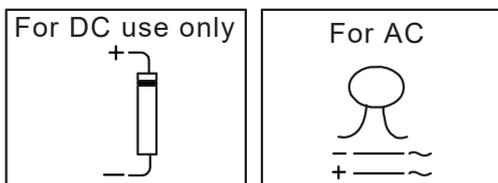◆ Detailed connection diagram

4-wire villa intercom system

◆ Extension Connection Diagram
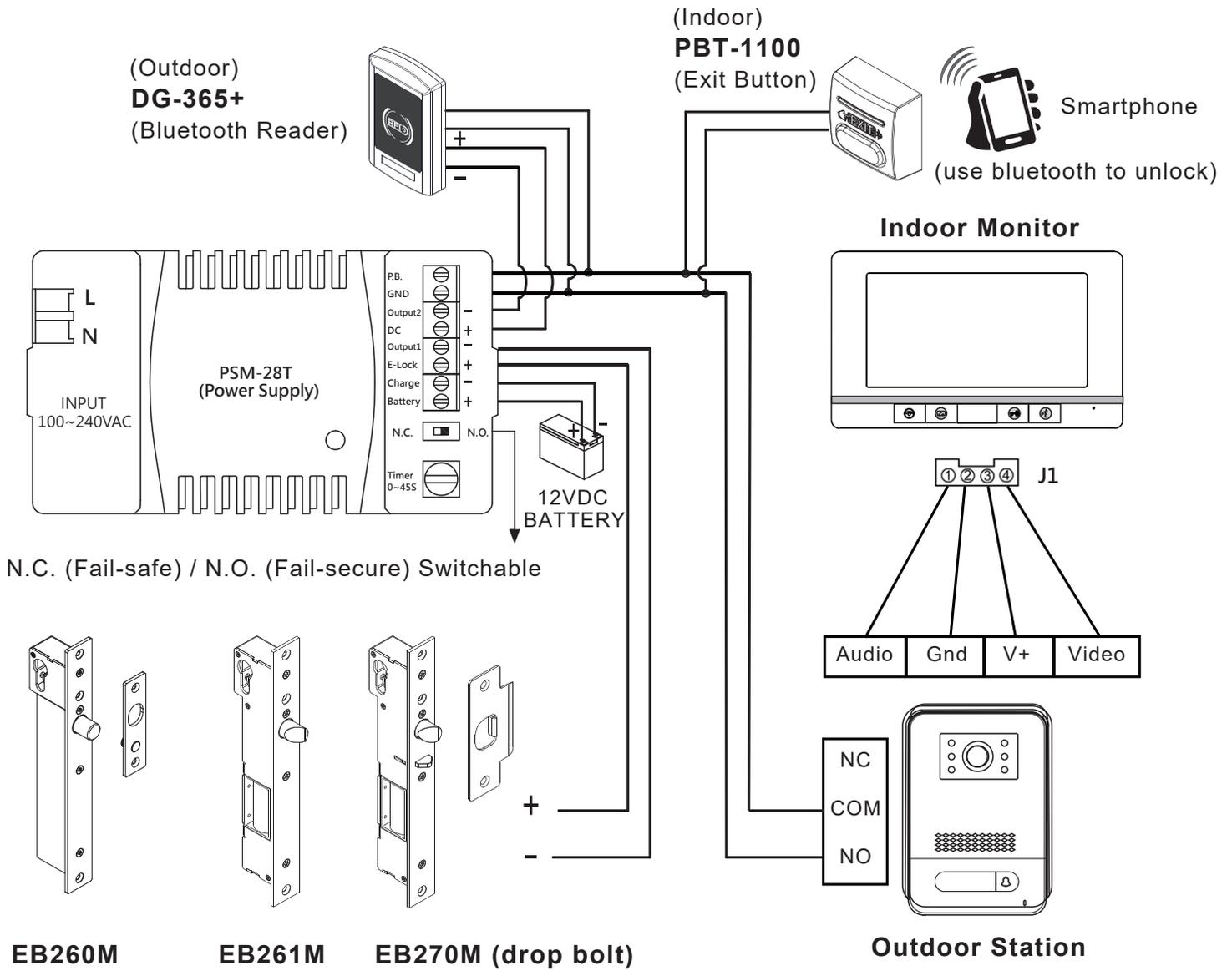   (2 outdoor station for 2 indoor monitors):

◆ The diagram of Access Control System: Fail Safe (power to lock)

(Indoor)
PBT-1100
(Exit Button)

Smartphone

(Outdoor)
DG-365+
(Bluetooth Reader)

(use bluetooth to unlock)

Indoor Monitor

L
N

INPUT
100~240VAC

PSM-28T
(Power Supply)

P.B.
GND
Output2
DC
Output1
E-Lock
Charge
Battery

N.C. ☐ N.O.

Timer
0~45S

12VDC
BATTERY

① ② ③ ④ J1

N.C. (Fail-safe) / N.O. (Fail-secure) Switchable

| Audio | Gnd | V+ | Video |

OR

NC
COM
NO

Outdoor Station

EB180 (drop bolt)   **GEM-600M (mag lock)**

◆* The electric lock or relay must have a varistor or a diode across the electric
   lock terminals to suppress the back EMF of the lock.
   Failure to do so will damage the relay contacts and electronic components,
   or even burn the controller.

For DC use only
+
−

For AC
+ ─── ∼

◆ The diagram of Access Control System: Fail Secure (power to unlock)

(Outdoor)
DG-365+
(Bluetooth Reader)

(Indoor)
PBT-1100
(Exit Button)

Smartphone

(use bluetooth to unlock)

Indoor Monitor

L

N

PSM-28T
(Power Supply)

INPUT
100~240VAC

P.B.
GND
Output2
DC
Output1
E-Lock
Charge
Battery

N.C. ▢ N.O.

Timer
0~45S

12VDC
BATTERY

J1

Audio | Gnd | V+ | Video

N.C. (Fail-safe) / N.O. (Fail-secure) Switchable

NC
COM
NO

+

−

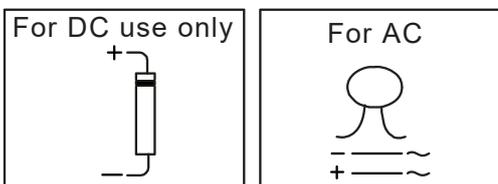**EB260M**　　**EB261M**　　**EB270M (drop bolt)**

Outdoor Station

◆* The electric lock or relay must have a varistor or a diode across the electric
   lock terminals to suppress the back EMF of the lock.
   Failure to do so will damage the relay contacts and electronic components,
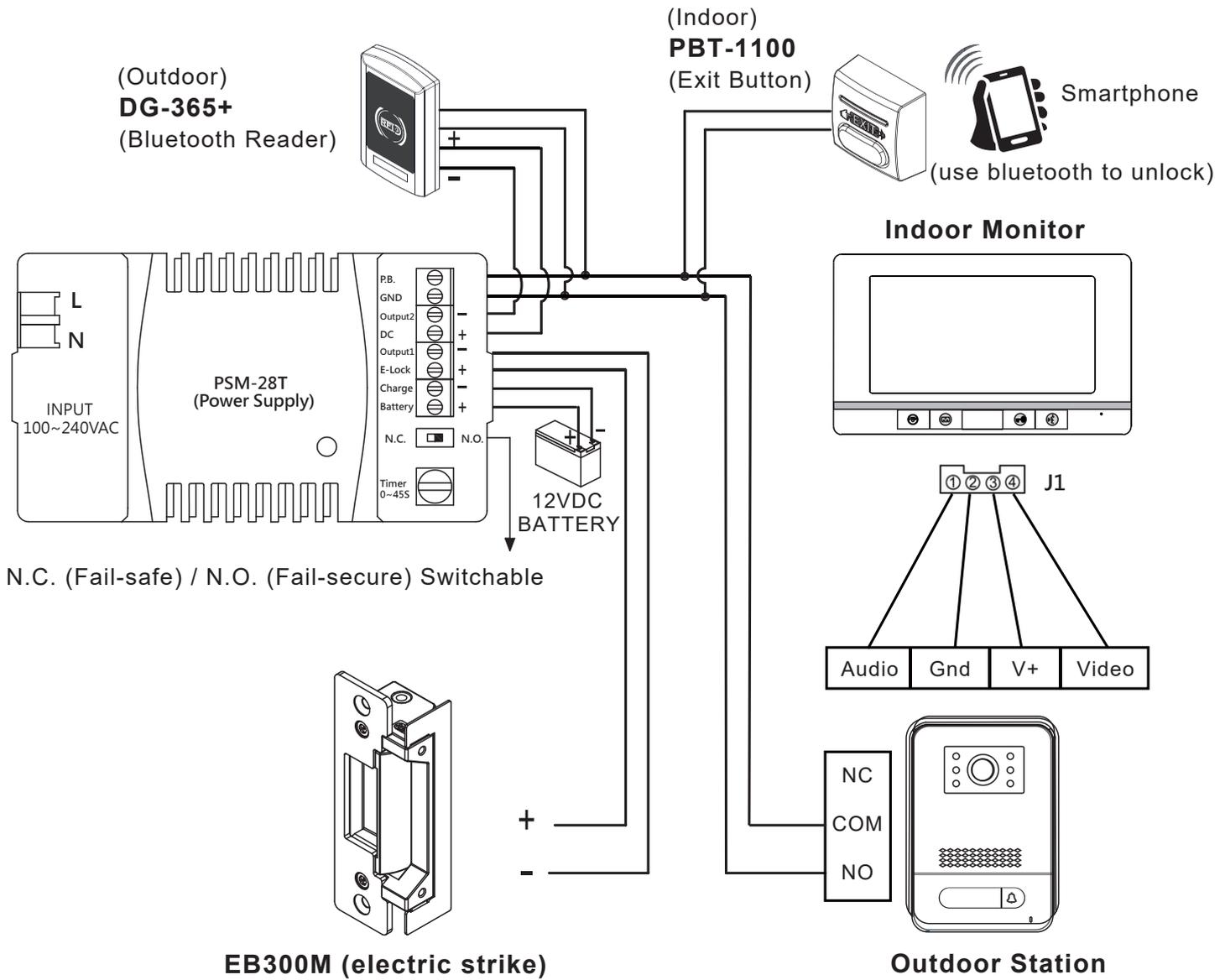   or even burn the controller.

For DC use only
+

−

For AC
+ — ~

◆ The diagram of Access Control System: Fail Secure / Fail Safe Changeable

(Outdoor)
DG-365+
(Bluetooth Reader)

(Indoor)
PBT-1100
(Exit Button)

Smartphone

(use bluetooth to unlock)

Indoor Monitor

P.B.
GND
Output2
DC
Output1
E-Lock
Charge
Battery

N.C. ◻ N.O.

Timer
0~45S

L
N

INPUT
100~240VAC

PSM-28T
(Power Supply)

12VDC
BATTERY

N.C. (Fail-safe) / N.O. (Fail-secure) Switchable

① ② ③ ④   J1

Audio | Gnd | V+ | Video

+
−

NC
COM
NO

EB300M (electric strike)

Outdoor Station

◆* The electric lock or relay must have a varistor or a diode across the electric
  lock terminals to suppress the back EMF of the lock.
  Failure to do so will damage the relay contacts and electronic components,
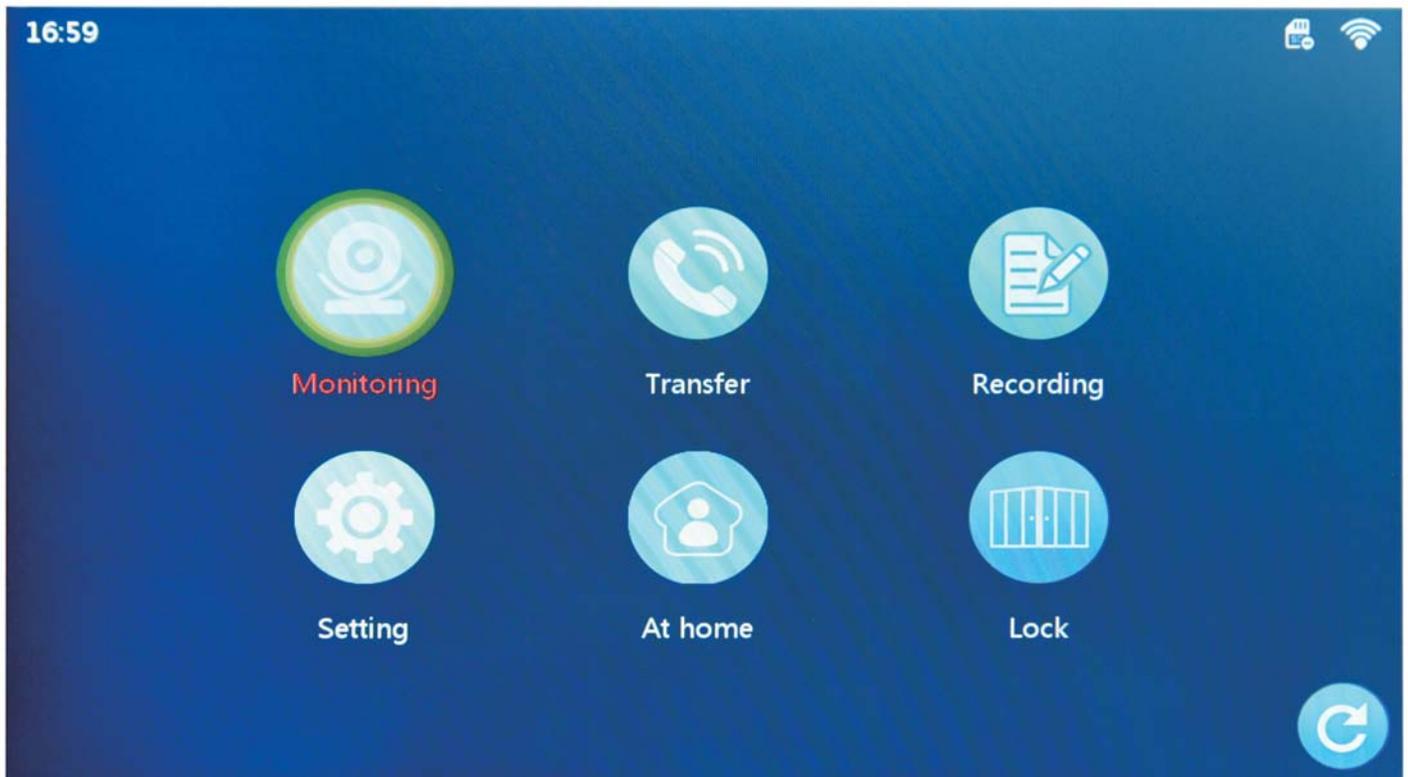 or even burn the controller.

For DC use only
+

−

For AC

−
+ ∼
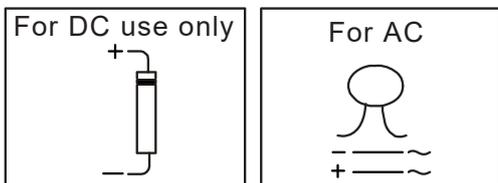
Monitor Station

Shortcut Buttons

Hang up or return   Monitor   Talk

Unlock video door station or press and hold for three seconds to unlock the garage gate.

Home Screen

16:59

Monitoring   Transfer   Recording

Setting   At home   Lock

Monitoring

Choose between Door1 / Door2 / Camera1 / Camera2 to view respective camera.
Once chosen, the following options are available.

Switch view between Door 1/ Camera 1/ Door 2/ Camera 2

Take a screenshot

MF   Record a video

🔒 Unlock the door station

📞↔ Transfer the call to another door station (choose between 1 to 6 or All)

⚏ Adjust display settings: sound, colour, brightness and contrast

📞 Answer intercom call

📞 Hang up the call

Internal call 📞

Dial to speak to another monitor station (choose between 1 to 6 or All)

Recording 📝

Choose between Call record/ Message record/ Motion detect/ Alarm info to view respective records.

Setting ⚙

Choose between System setting/ Door Setting/ Camera setting/ Network setting Advanced setting/ Information

System Setting	Notes
Device_ID	Factory default is 1. When expanding the system, the main monitor station must be set to 1 while others assign a number between 2 to 6.
Time	(Note: The time is automatically updated after the network is configured.)
Date format	
Standby clock format	
Language	EN/CN/DE/FR/RU/ES
Keytone switch	
Ringback	

Door Setting	Notes
Enable switch	Door 1 is on by default. Door 2 needs to be enabled in order to switch view in monitor mode
Unlock delay	Unlock time delay for the door station
Record mode	Choose photo or video. Recorded message will be saved on the TF card
Motion detect switch	When an object moves in front of the door phone for a certain period of time, the indicator light of the door phone will flash once, and the monitor station will record a video or image.
Motion detect sensibility	
Motion detect duration	
Message switch	Set the message recording duration and message switch.
Message time	
Signal mode	PAL / NTSC / automatic
Signal type	AHD1080 / TVI720 / TVI1080 / CVI720 / CVI1080 / CVBS / AHD720
Ring setting	Ringtone duration, volume and type

Camera Setting	Notes
Enable switch	Select ON to be able to view in monitor mode
Sensor type	On / Off status for anti-vandal sensor
Alarm time	1~20S
Alarm record mode	Video / Snapshot
Motion detect switch	When an object moves in front of the door phone for a certain period of time, the indicator light of the door phone will flash once, and the monitor station will record a video or image.
Motion detect sensibility	
Motion detect duration	
Signal mode	PAL / NTSC / automatic
Signal type	AHD1080 / TVI720 / TVI1080 / CVI720 / CVI1080 / CVBS / AHD720

Network Setting	Notes
Net pairing Mode	EZ Mode/ AP Mode
Cloud services	Connected/Unconnected: connection status to Tuya
IP address	
Mac	

Advanced Setting	Notes
Formatting SD disk	Clear all video or picture records in the SD card.
Factory Settings	Restore back to factory settings
Software update	
Restart system	Restart the monitor station while data remains unchanged.

Information	Notes
Software version	
Release date	
SD remain space	Note when memory card is full the older photos and videos will be deleted automatically
UUID	

At home

Tap to change mode between At home/ Not at home/ Dormant

At home: Incoming visitor video call will ring for 30 seconds before leaving a photo/video message in the inbox if not answered.

Not at home: Visitor will be prompted to leave a message. The call can be answered via the T uya app.

Dormant: Visitor call will ring in silence for 30 seconds before leaving a photo/video message in the inbox

Lock

Unlock the garage gate

Tuya Smart App

One of the main features of the IP intercom system is being able to access the intercom to monitor your property via smart phones and this is done on the Tuya Smart app which supports WiFi quick connection mode as well as WiFi AP mode.
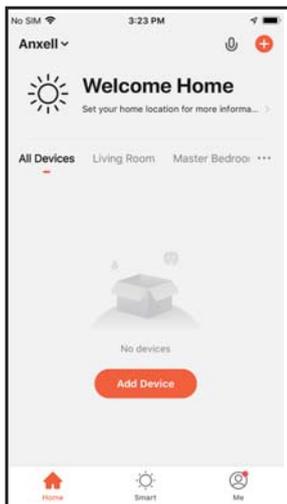
Setting Up Tuya Smart App

Tuya Smart

◆ Download the Tuya Smart APP on the APP stores
◆ On the main monitor station, go to Setting → Network Setting → Network Mode
◆ Select the corresponding network configuration method on the APP to enter the network configuration.

Setting up Network Distribution Mode in Tuya Smart APP
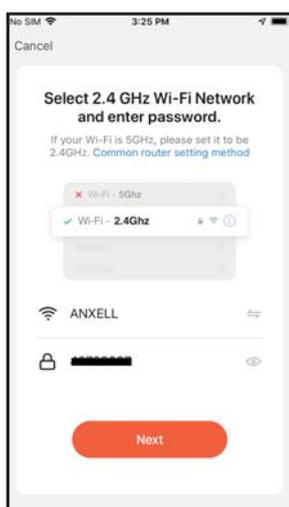
◆ EZ Mode (Recommended)

Start Tuya Smart APP and select "**Add Device**".

Select "**Security & Video Surveillance**" and select "**Smart Camera (Wi-Fi)** ".
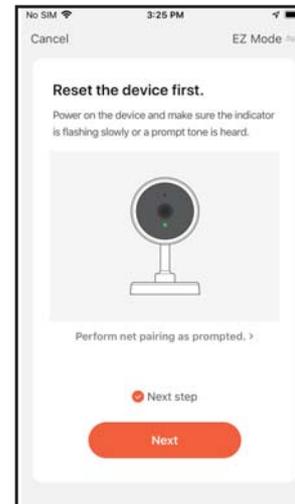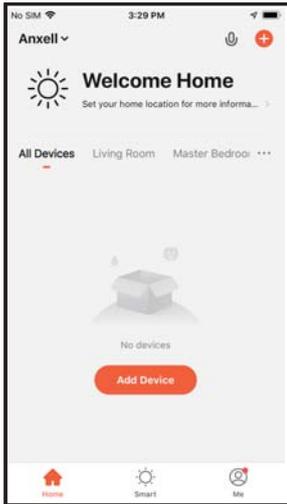
Select "**EZ Mode**" and "**Next**"

Enter Wi-Fi password.
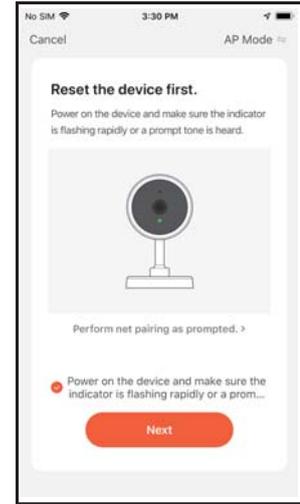
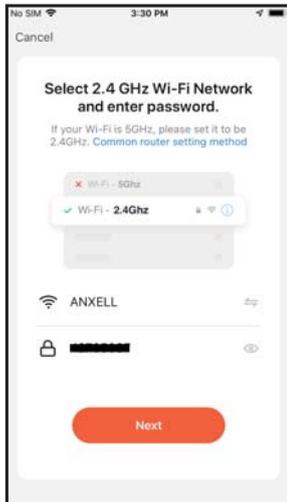Monitor station is now added to your Tuya APP.

◆ AP Mode

Start Tuya Smart APP
and select "**Add Device**".

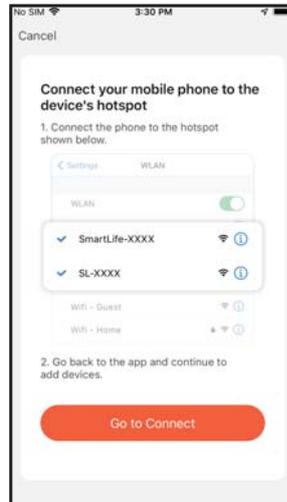Select "**Security & Video
Surveillance**" and select
"**Smart Camera (Wi-Fi)** ".

Select "**AP Mode**"
and "**Next**"

Enter Wi-Fi password.

Connect mobile to your monitor
station. This will appear as
SmartLife-xxxx.

Enter default password
"12345678" to connect.

Monitor station is now
added to your Tuya APP.

Note that each user can only set up one monitor station but can be added as an additional user.

Delete the distribution network
Delete the added device through the APP, and then the indoor unit will automatically restart and restore the product settings.

Adding a new member to your intercom system on the Tuya Smart (up to 5 users)
Go to home management → Go to My Home → Edit the Home Name → Click Save →
Enter in Home Name you just edited → Add Member → Choose Tuya App account →
Key in the name and Tuya registered account (e-mail) → Click Save.

Troubleshooting

Problem		Possible Solutions
Electricity failure	Does not boot	Check whether the power cord of the indoor unit is in poor contact, and whether the power supply has been connected to power
Call failure	Call can't reach Indoor station	Check whether the device number on the indoor unit is correct and whether the system wiring is correct.
Video failure	No picture or unclear video	Check whether the camera signal format and type on the indoor unit settings are correct
Call failure	Calls from door phone cannot be connected to mobile APP	Ensure the indoor unit is connected to the internet.

VDP-150

IP Video Intercom System
Instruction Manual