

## OUTDOOR STATION



### T Series 2-Wire Outdoor Station (Surface Mounting)

User Manual\_V1.0

T-OS16/T-OS17

# Attentions

1、 Please keep devices away from strong magnetic field , high temperature , wet environment ;



2、 Please do not fall the devices to the ground or make them get hard impact ;



3、 Please do not use wet cloth or volatile reagent to wipe the devices ;



4、 Please do not disassemble the devices.

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# Chapter 1 Function Overview

This product is an Outdoor Station in 2-wire analog video door phone system. Twin-core cable is adopted to connect into the system. It supports video intercom with Indoor Monitor and door unlock function for 2 locks (door 1 & 2). With the Relay Actuator Control Module connected, it also supports unlocking 2<sup>nd</sup> door.

## 1.1 Function

- Support calling to Indoor Monitor 1 and Indoor Monitor 2
- Support 2 door locks management
- Support IC card
- Adjustable unlock time
- Support external camera extension (Camera Interface Module is needed )

## 1.2 Parameter

### Working Parameter

Working Voltage: DC 24~32V

Static Current: ≤ 20mA (DC 30V)

Working Temperature: -25℃~55℃

Working Current: ≤ 110mA (DC 30V)

Storage Temperature: -40℃~70℃

Dimension(H/W/D): 168×86×26mm

### Camera

Type: CMOS

Resolution: 600TVL

View Angle: 90°(Horizontal )

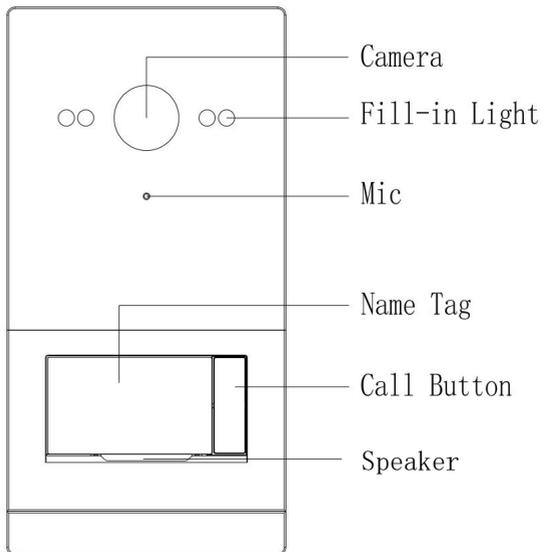
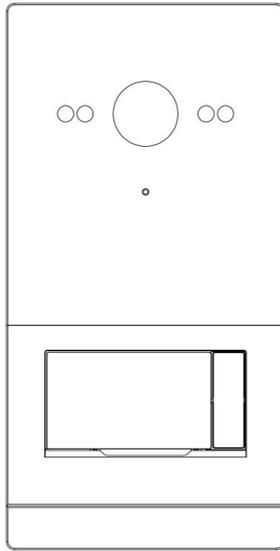
Min. Illumination: 0.1 lux

White Balance: Automatic

Fill-in Light Type: Light Emitting Diode

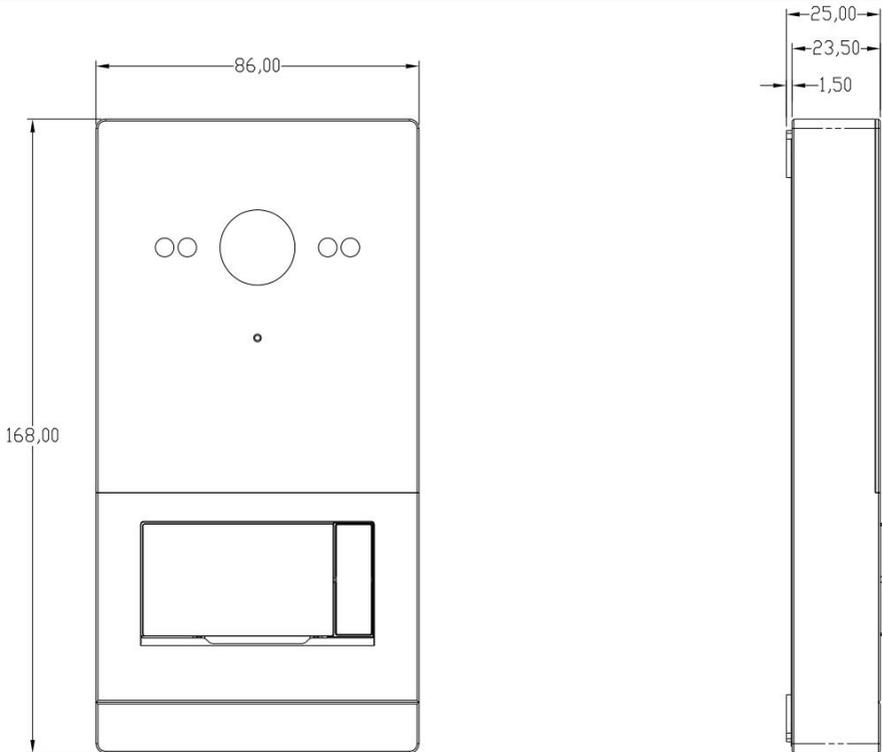
# Chapter 2 Product Introduction

## 2.1 Front View

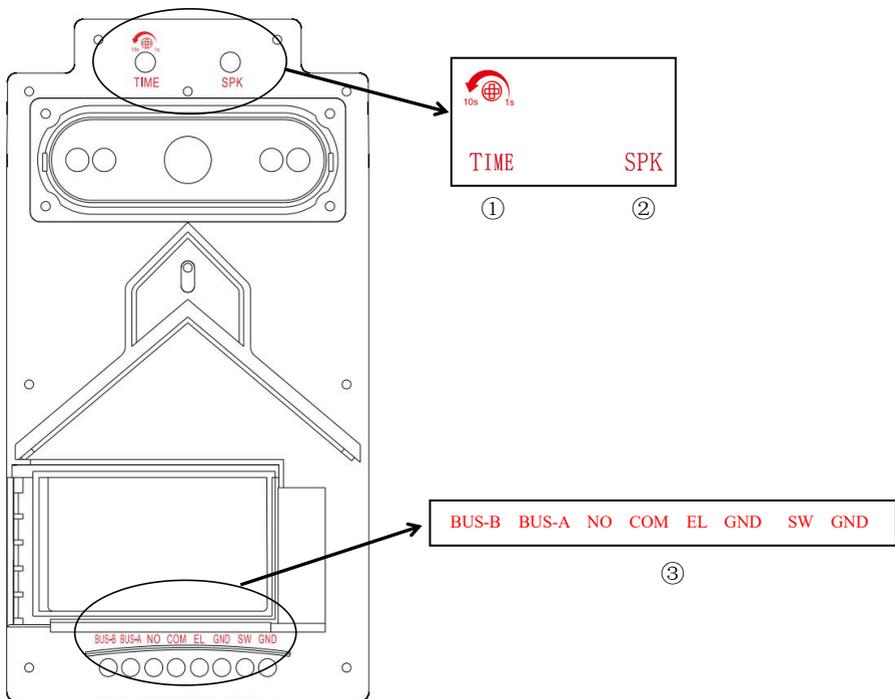


## 2.2 Product Dimension

Unit: mm



## 2.3 Interface Introduction



### Interface①

Unlock time setting;

### Interface②

calling volume setting;

### Interface③

BUS-A, BUS-B: Bus interface;

NO, COM: normal open, common interface; (interface for lock 1)

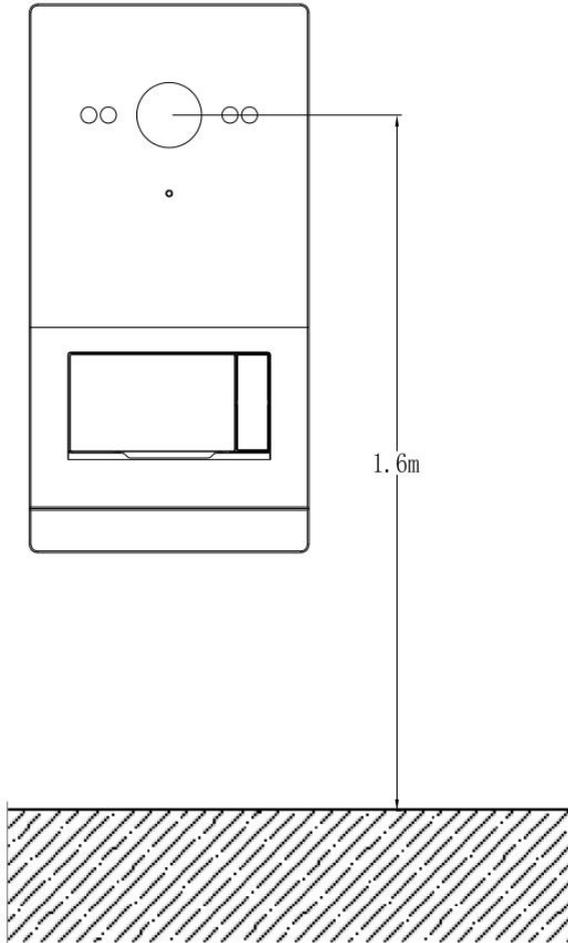
EL, GND: electrical lock, ground interface; (interface for lock 2)

DOOR SW: Unlock inside;

GND: Common ground.

# Chapter 3 Installation

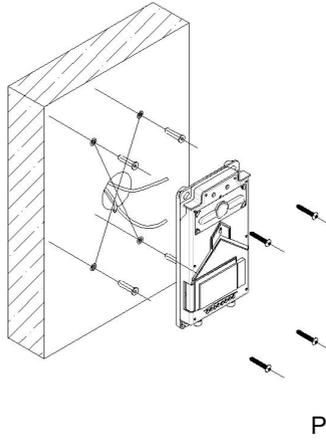
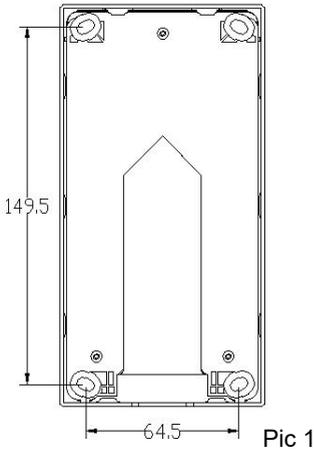
## 3.1 Installation Height



**Suggested Installation Height: camera is 1.6m above the ground**

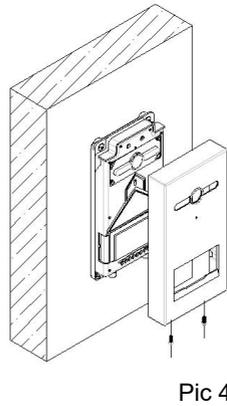
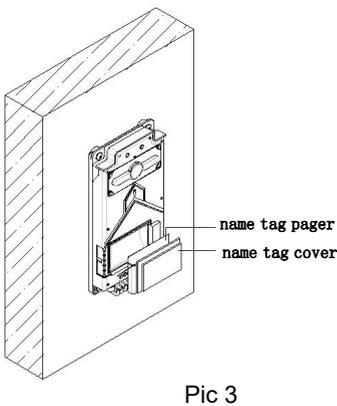
### 3.2 Installation Steps

Step 1: Drill holes on the wall according to the installation size (149.5×64.5mm), fix the capsules into the hole (it is recommended to align the device to the center of the reference line ), then place the device and fasten with self-tapping screws(Pic 2).

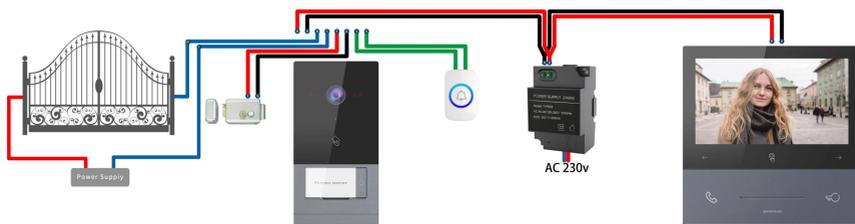


Step 2: Fill the paper with apartment's information, and install it in the name tag area, then complete the wiring (Pic 3).

Step 3: Assemble the metal case onto the device, and fasten with plum blossom screw(Pic 4).



### 3.3 System Wiring



Remarks:

① The outdoor station is suitable for villa system with one or two apartments, and it is possible to make connection with large system;

② Support multiple Indoor Monitors(maximum Qty is 4pcs) in one apartment, address of all Indoor Monitors in one apartment should be same;

**Attention: When there's multiple monitors in one apartment, only one can be set as master Indoor Monitor, otherwise there will be an over-current. Please check the interface introduction for how to set a master Indoor Monitor.**

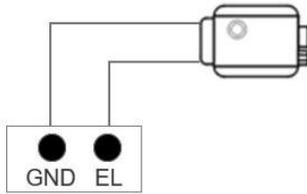
③ When there are multiple Indoor Monitors in one apartment and after they are called, all Indoor Monitors will ring at the same time but only the screen of the master Indoor Monitor is turned on, and after one of the monitors pick up the call, the rest monitors hang up;

④ Power supply is limited, so only 2 monitors are allowed to be operated at the same time (intercom function is not limited);

⑤ The wiring above is recommended for villa system. If there are multiple Indoor Monitors in one apartment, wiring with distributors(Star topology) are recommended.

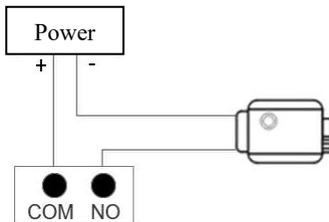
### 3.4 Door Lock Wiring diagram

- **Electrical door lock wiring**



Electric door lock connection (12V)

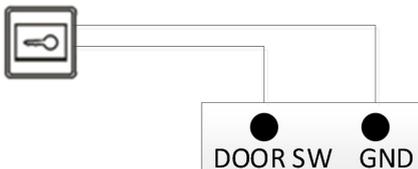
**[Note]** This wiring is non-polarized.



Normal open door lock wiring connection (door lock relay)

**[Note]** DO NOT power up the door lock from the outdoor station.

- **Exit button unlock wiring**



**[Note]** This wiring is non-polarized.

# Chapter 4 User Instruction

## 4.1 Calling resident

Single Calling Function Outdoor Station T-OS16 :

By short pressing the button of T-OS06(Upper button/ Lower button), visitor starts to call the same Indoor Monitor 1, whose ringtone will echo back. Repeating pressing the buttons during the call, then the countdown will be reset (each call waits for 30 seconds); if there's no answer in 30 seconds, the call will be ended.

Dual Calling Buttons Outdoor Station T-OS17:

T-OS10 supports calling Indoor Monitor 1 and Indoor Monitor 2. By short pressing the **lower** button of T-OS10, visitor starts to call Indoor Monitor 1. By short press the **upper** button of T-OS10, visitor starts to call Indoor Monitor 2. If the upper button is pressed while calling Indoor Monitor 1, then the call will be switched to Indoor Monitor 2 and the countdown will be reset (each call waits for 30 seconds). If there's no answer in 30 seconds, the call will be ended.

## 4.2 Unlock

1) Unlock by Indoor Monitor

Door can be unlocked from Indoor Monitor when it's communicating with Outdoor Station or under surveillance mode. Indoor Station can choose to unlock door 1 or 2.

2) Support IC card unlock.

The resident can unlock the door by holding the registered access control card close to the card swiping area on the device, by default the door lock 1 will be unlocked.

3) Unlock by external push button

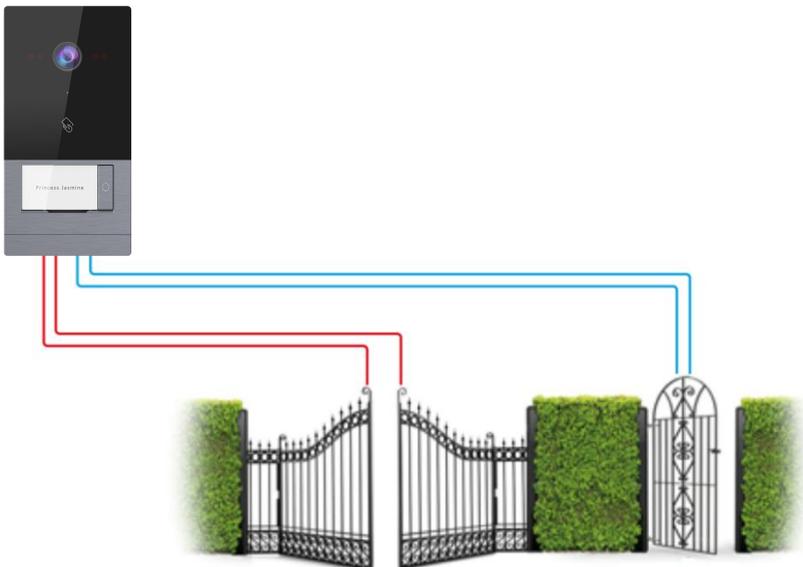
As there is an interface for integration of external push buttons, when this is connected, a normal push button can be used to unlock the door. Exit button unlocks door lock 1 by default.

### 4.3 External camera extension

Outdoor Station is supported to work with Camera Interface for external camera extension. As Outdoor Station been well configured with Camera Interface, while Outdoor Station is calling Indoor Monitor, or Indoor Monitor is monitoring Outdoor Station, the displays can be switch between different cameras. For further information please refer to the user manual of Camera Interface.

### 4.4 Two Door Locks

Outdoor station supports two door locks, i.e a 12V electric lock and a relay signal lock.



## Chapter 5 Settings

### 5.1 Factory Setting

Cut off the power of the outdoor station and power it on within 60 seconds, the unlock button is short-circuited, and long-press any button on the outdoor station for 5 seconds. After a long beep, a factory reset is done.

### 5.2 Unlock Time Setting

The default unlock time is 1 second. There is an adjustable potentiometer on the back side of the outdoor station(①), unlock time can be adjusted by ratio of 180° from 1 second to 10 seconds, lengthen in anticlockwise direction, shorten in clockwise direction.

### 5.3 Calling Volume Setting

The default calling volume is in middle value. There is an adjustable potentiometer on the back side of the outdoor station(②), unlock time can be adjusted by ratio of 180°. Users can freely adjust the calling volume according to the installation environment.

### 5.4 Address Setting

In standby mode, long press any button from outdoor station for 3 seconds, the device will beep-beep to enter the address setting mode. Short press the button to add address number from 1-5, after each short press, the device will beep different times to show what number it is with.

For example: a device with NO. 1 will beep once, if it's set to NO. 5, it will beep 5 times after short press. When a device is already NO. 5, one short press more will make this device become device NO. 1, cyclically.

After address setting, long press any button for 3 seconds to exit setting mode with a long beep, or the setting mode will exit automatically if no operation for over 15 seconds.

## 5.5 Card Management

### ● Registration for Admin Card

Power the outdoor station after factory reset, the first swiped card within 60 seconds will be the admin card. After a long beep from outdoor station, the admin card is registered.

### ● Card Registration Mode

In standby mode, swipe the admin card to enter card registration mode. In 15 seconds, there will be 3 times of short beep if the swiped card is not the admin card. After 15seconds without any operation, there will be 3 times of short beep and the outdoor station will return to standby mode, swipe the admin card again will enter continuously registration mode.

### ● Continuously Card Registration Mode

In card registration mode, swipe the admin card and after a beep, it will enter continuously card registration mode. In 15 seconds, user card can be registered:

- ①If card is registered successfully, outdoor station beeps and timing restarts, new user card can be registered;
- ②If card registration fails, outdoor station will beep 3 times and timing restarts;
- ③If there's no operation for 15 seconds, it will return to standby mode;

After registration is finished, swipe the admin card then it will return to standby mode.

### ● Continuously Card Deletion Mode

In card registration mode, swipe the admin card twice, outdoor station beeps twice, it will enter continuously card deletion mode. In 15 seconds, user card can be deleted by swiping:

- ①If card is deleted successfully, outdoor station will beep once and timing restarts, then more cards can be deleted;
- ②If card deletion fails, outdoor station will beep 3 times then timing restarts;
- ③If there's no operation for 15 seconds, outdoor station beeps and return to standby mode;

After card deletion is finished, swipe the admin card then it will return to standby mode.

### ● Continuously Registration Mode for Admin Cards

In card registration mode, swipe admin card 3 times, outdoor station beeps 3 times, then enters continuously registration mode for admin cards. In the following 15 seconds, admin card can be registered by swiping.

- ① If admin card is registered successfully, outdoor station beeps and timing restarts, more admin card can be registered;
- ② If admin card registration fails, outdoor station beeps 3 times and timing restarts;
- ③ If there's no operation for 15 seconds, the outdoor station beeps and returns to standby mode;

After registration, swipe the admin card then it returns to standby mode.

### ● Continuously Deletion Mode for Admin Cards

In card registration mode, swipe admin card 4 times, outdoor station beeps 4 times, then it will enter continuously deletion mode for admin card. In 15 seconds, admin card can be deleted by swiping.

- ① If admin card is deleted successfully, the outdoor station beeps and timing restarts, more admin card can be deleted;
- ② If admin card deletion fails outdoor station beeps 3 times and timing restarts;
- ③ If there's no operation for 15 seconds, the outdoor station beeps and returns to standby mode;

After deletion, swipe the admin card then it returns to standby mode.

### ● Delete All User Cards

In card registration mode, swipe admin card 5 times, the outdoor station beeps 10 times, then it will enter delete all mode. Within 15 seconds, swipe the admin card then it will delete all user cards:

- ① If delete all user cards successfully, outdoor station beeps and returns to standby mode;
- ② If deletion of all user cards fails (or swipe the wrong card), outdoor station beeps 3 times and return to standby mode;
- ③ If there's no operation for 15 seconds, outdoor station beeps and returns to standby

mode.

**Note: Quantity of Admin card+ User card  $\leq$  200pcs.**