Video Door Phone
Door Station and Indoor Station

User Manual

<u>**User Manual**</u>

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This user manual is intended for users of the models below:

Series	Model
Video Door Phone	DS-KIS204
Door Station	DS-KB2411-IM
Indoor Station	DS-KH2220-S

It includes instructions on how to use the Product. The software embodied in the Product is governed by the user license agreement covering that Product.

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Support

Should you have any questions, please do not hesitate to contact your local dealer.

Use only power supplies listed in the user instructions:

Model	Manufacturer	Standard
TS-A018-120015N5	Shenzhen Transin Technologies Co., Ltd.	IS

Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into **Warnings** and **Cautions**:

Warnings: Neglecting any of the warnings may cause serious injury or death.

Cautions: Neglecting any of the cautions may cause injury or equipment damage.

Warnings Follow these safeguards to prevent serious injury or death.	**Cautions** Follow these precautions to prevent potential injury or material damage.

Warnings

● All the electronic operation should be strictly compliance with the electrical safety regulations, fire prevention regulations and other related regulations in your local region.

● Please use the power adapter, which is provided by normal company. The power consumption cannot be less than the required value.

● Do not connect several devices to one power adapter as adapter overload may cause over-heat or fire hazard.

● Please make sure that the power has been disconnected before you wire, install or dismantle the device.

● When the product is installed on wall or ceiling, the device shall be firmly fixed.

● If smoke, odors or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

● If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the device yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

Cautions

● Do not drop the device or subject it to physical shock, and do not expose it to high electromagnetism radiation. Avoid the equipment installation on vibrations surface or places subject to shock (ignorance can cause equipment damage).

● Do not place the device in extremely hot (refer to the specification of the device for the detailed operating temperature), cold, dusty or damp locations, and do not expose it to high electromagnetic radiation.

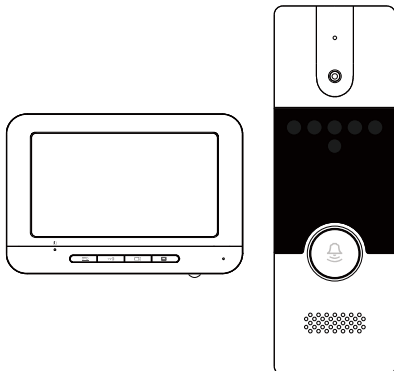● The device cover for indoor use shall be kept from rain and moisture.

- Exposing the equipment to direct sun light, low ventilation or heat source such as heater or radiator is forbidden (ignorance can cause fire danger).
- Do not aim the device at the sun or extra bright places. A blooming or smear may occur otherwise (which is not a malfunction however), and affecting the endurance of sensor at the same time.
- Please use the provided glove when open up the device cover, avoid direct contact with the device cover, because the acidic sweat of the fingers may erode the surface coating of the device cover.
- Please use a soft and dry cloth when clean inside and outside surfaces of the device cover, do not use alkaline detergents.
- Please keep all wrappers after unpack them for future use. In case of any failure occurred, you need to return the device to the factory with the original wrapper. Transportation without the original wrapper may result in damage on the device and lead to additional costs.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

Table of Contents

1 Introduction

1.1 Overview

The video door phone is composed of a four-wire indoor station and a four-wire door station. Featuring in the convenient installation and easy operation, it is mainly applied in the buildings for improving the living security.

1.2 Features

Indoor Station Features

- Hands-free video intercom communication
- Supports three indoor stations simultaneously in the intercom system
- Supports monitoring the door station and the external analog camera
- Supports capturing images and viewing captured images in the indoor station
- Remote unlocking
- Convenient installation and easy operation

Door Station Features

- Hands-free video intercom communication
- Supports two door stations simultaneously in the intercom system
- Self-adaptive IR supplement (with photoresistor)
- One-touch calling
- Pinhole camera with 720 x 576 @ 25 fps
- Unlock controlling
- Anti-oxidant aluminium alloy
- Convenient installation and easy operation

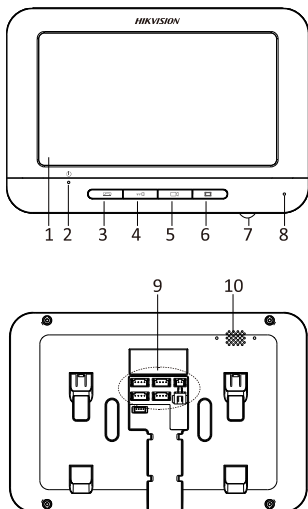1

2 Appearance Description

2.1 Indoor Station

Figure 2-1 Indoor Station Appearance

Table 2-1 Components Description

No.	Description
1	LCD Display Screen
2	Power Supply Indicator
3	Call Accept/Decline Key
4	Unlock Key
5	Live View Key
6	Image Key
7	Volume Wheel
8	Microphone
9	Terminals and Interfaces
10	Loudspeaker

2.2 Door Station
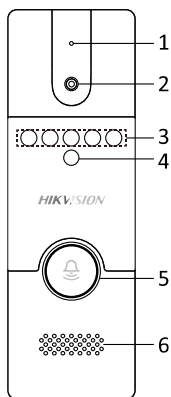
Figure 2-2 Door Station Appearance

Table 2-2 Components Description

No.	Description
1	Microphone
2	Built-in Camera
3	IR Supplement Lights
4	Photoresistor
5	Call Button
6	Loudspeaker

3 Terminals and Wirings

3.1 Terminals and Interfaces
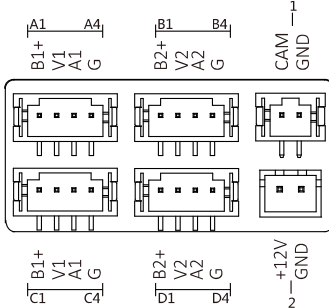
Figure 3-1 Terminals of Indoor Station
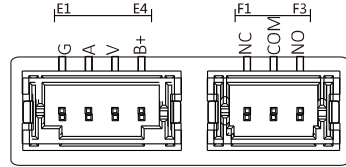
Figure 3-2 Terminals of Door Station

Table 3-1 Descriptions of Terminals and Interfaces (Indoor Station)

Name	No.	Interface	Description
Camera	1	CAM	Analog Camera Access
Power Supply	2	12 VDC	12 VDC Power Supply Input
Four-Wire Interface	A1/B1/C1/D1	B1+/B2+	Power Supply for Door Station
	A2/B2/C2/D2	V1/V2	Video Input
	A3/B3/C3/D3	A1/A2	Audio Input/Output
	A4/B4/C4/D4	G	Grounding Signal

Table 3-2 Descriptions of Terminals and Interfaces (Door Station)

Name	No.	Interface	Description
Four-Wire Interface	E1	G	Grounding Signal
	E2	A	Audio Input/Output
	E3	V	Video Output
	E4	B+	Power Supply (from Indoor Station)
Lock	F1	NC	Door Lock Relay Output/Normally Closed
	F2	COM	Door Lock Relay Output/Common
	F3	NO	Door Lock Relay Output/Normally Open

3.2 Wiring Description

Purpose:

A four-wire video intercom system is mainly composed of the indoor station and the door station. You can connect the analog camera to the indoor station, and connect the electric bolt to the door station.

Up to 2 door stations are supported simultaneously in the intercom system.

Up to 3 indoor stations are supported simultaneously in the intercom system.

Here take 3 wirings as example.

NOTE

● According to different transmission distances among door stations and indoor stations, different RVV4 cable specifications are demanded.

Transmission Distance (TD)	RVV4 Cable Specification
TD ≤ 10 m	RVV4 * 0.2 mm ^2
10 m < TD ≤ 30 m	RVV4 * 0.5 mm ^2
30 m < TD ≤ 50 m	RVV4 * 0.75 mm ^2
50 m < TD ≤ 100 m	RVV4 * 1.5 mm ^2

● On the rear panel of the indoor station, four-wire interface A and four-wire interface C compose a cascading group; and four-wire interface B and four-wire interface D compose a cascading group.

● The communication between A and B/D cannot be realized.

● The communication between C and B/D cannot be realized.
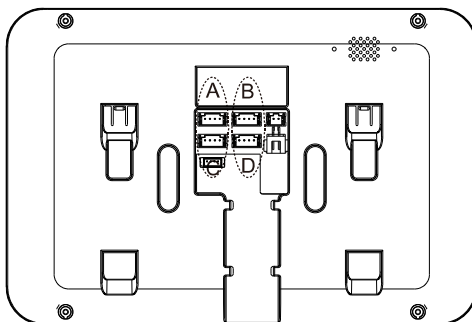
Do not connect the power wire of the four-core cable to the V pin (video wire) or A pin (audio wire) of the four-wire interface.

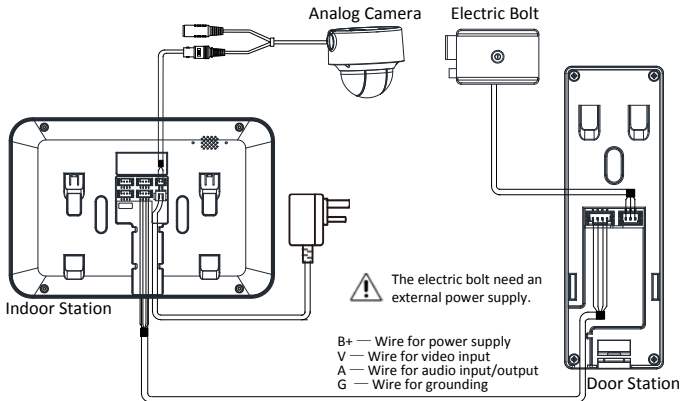## 3.2.1 Wiring 1 (1 Door Station and 1 Indoor Station)

Analog Camera   Electric Bolt

The electric bolt need an
external power supply.

Indoor Station

B+ — Wire for power supply
V — Wire for video input
A — Wire for audio input/output
G — Wire for grounding

Door Station

Figure 3-3 Wiring 1 (1 Door Station and 1 Indoor Station)
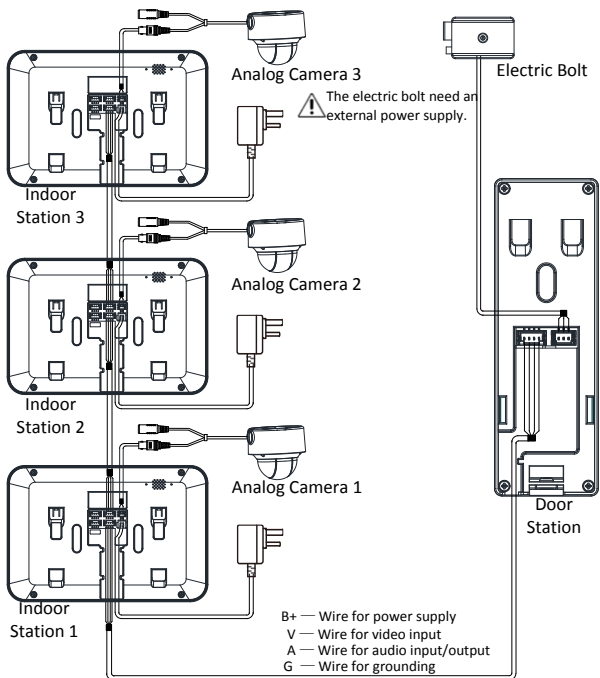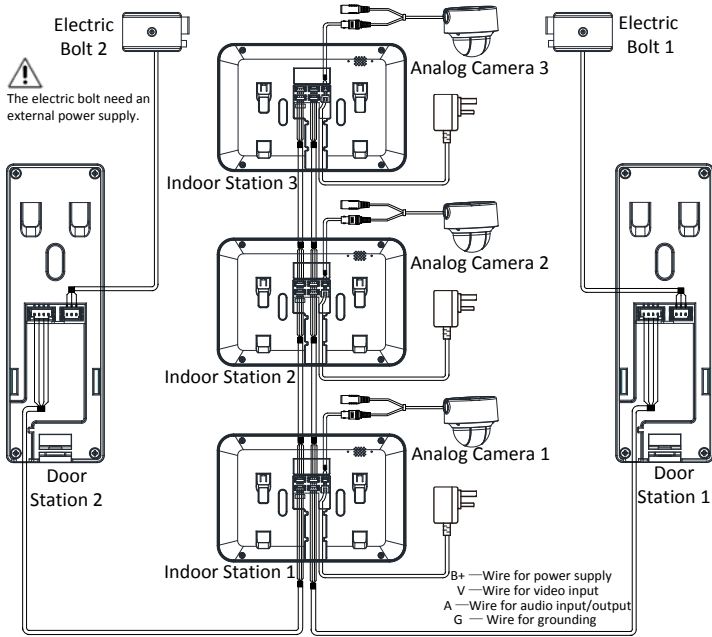
3.2.2 Wiring 2 (1 Door Station and 3 Indoor Stations)

Analog Camera 3   Electric Bolt

The electric bolt need an
external power supply.

Indoor
Station 3

Analog Camera 2

Indoor
Station 2

Analog Camera 1

Door
Station

Indoor
Station 1

B+ — Wire for power supply
V — Wire for video input
A — Wire for audio input/output
G — Wire for grounding

Figure 3-4 Wiring 2 (1 Door Station and 3 Indoor Stations)

3.2.3 Wiring 3 (2 Door Stations and 3 Indoor Stations)

Figure 3-5 Wiring 3 (2 Door Stations and 3 Indoor Stations)

4 Installation

Before you start:

● Make sure the device in the package is in good condition and all the assembly parts are included.

● The power supply the indoor station supports is 12 VDC. Please make sure your power supply matches your indoor station.

● Make sure all the related equipment is power-off during the installation.

● Check the specification of the product for the installation environment.

4.1 Indoor Station Installation

The indoor station supports the wall mounting, including the wall mounting with the junction box, and the wall mounting without the junction box.

For the wall mounting with junction box, the wall mounting plate and the junction box are required. And for the wall mounting without junction box, only the wall mounting plate is required.

(Optional) The dimension of the junction box is 75 mm (width) x 75 mm (length) x 50 mm (depth).

The dimension of the wall mounting plate is shown in Figure 4-1.

Wall Mounting Plate (Indoor Station)
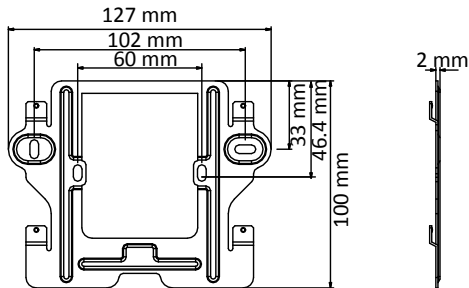
Figure 4-1 Wall Mounting Plate

Wall Mounting (Indoor Station)

You can follow the following steps to install the indoor station.

Here we take the wall mounting with the junction box as example.

Steps:

1. Insert the junction box to the hole chiseled on the wall.

2. Fix the wall mounting plate to the junction box with 2 screws.
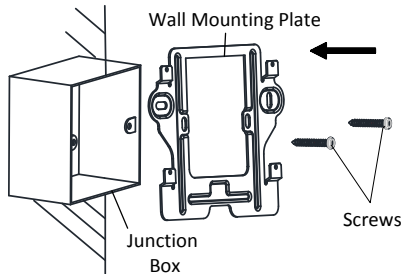
Figure 4-2 Installing the Plate

3. Hook the indoor station to the wall mounting plate tightly by inserting the plate hooks into the slots on the rear panel of the indoor station, during which the lock catch will be locked automatically.
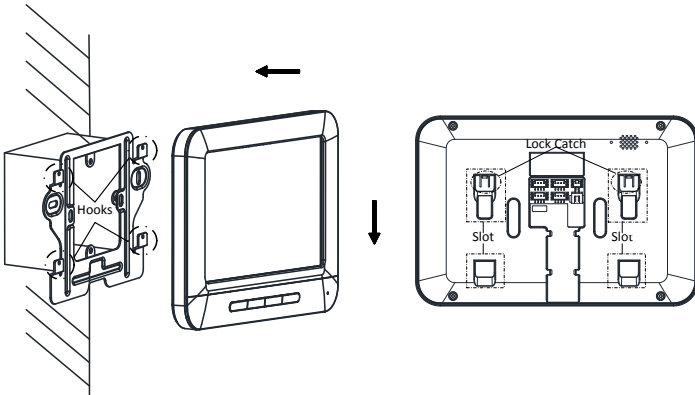

Figure 4-3 Hooking the Indoor Station to the Plate

☐**i** NOTE

For the installation without the junction box, you should fix the wall mounting plate to the wall with 2 expansion screws first, and then hook the indoor station.

4.2 Door Station Installation

To install the door station, the wall mounting shield is required.

The dimension of the wall mounting shield is shown in Figure 4-4.

Wall Mounting Shield (Door Station)
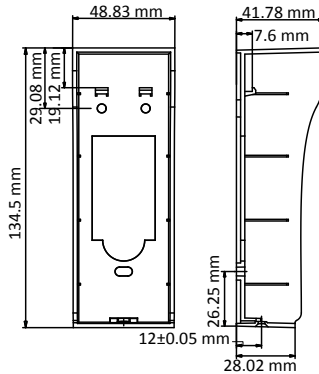
Figure 4-4 Wall Mounting Shield

Wall Mounting (Door Station)

You can follow the following steps to install the door station.

Steps:

1. Fix the wall mounting shield to the wall with 3 screws.
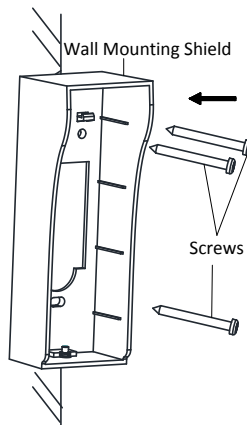
Figure 4-5 Installing the Shield

2. Hook the door station to the shield tightly by inserting the hooks of shield panel into the slots on the rear panel of the door station.

Wall Mounting
Shield Panel

Door Station
Rear Panel

Hooks

Slots
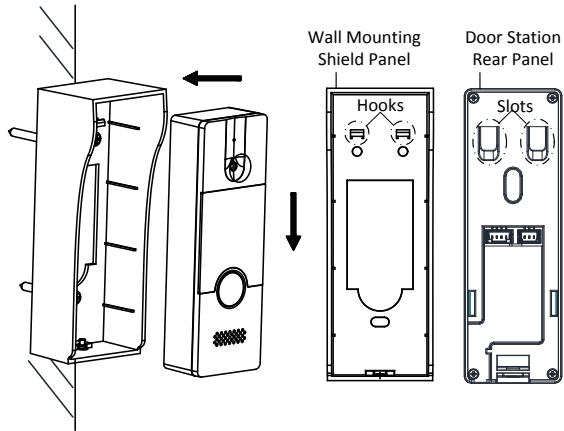
Figure 4-6 Hooking the Door Station to the Shield

3. Secure the door station with the mounting shield with the set screw.

Set Screw
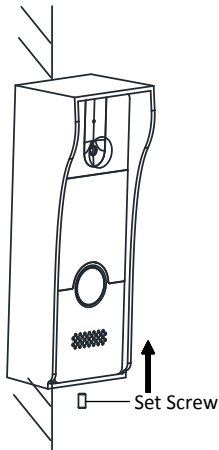
Figure 4-7 Securing the Door Station

5 Local Operation

5.1 Getting Started

Before you start:

● Make sure all devices in the four-wire system have been well connected.

● The power supply the indoor station supports is 12 VDC. Please make sure your power supply matches your indoor station.

Steps:

1. Power on the indoor station.
2. The door station will be powered on via the four-wire cable between the indoor station and the door station.

📘 NOTE

The electric bolt connected to the door station need an external power supply.

5.2 Set Indoor Station

Steps:

1. Hold 🔲 5 seconds to enter **System Configuration** page.
2. Press ⊤⊤▯ (UP) or ▢◁ (DOWN) to switch among items.
3. You can set the ring, the date, and the time, and view the model in this page.

5.3 Initiate Video Intercom

Connect the indoor station with door station. You can call the indoor station via the door station. And the indoor station will capture the image automatically once the door station initiates a call to the indoor station.

Steps:

1. Press the Call button on the door station to start a video call to indoor station.
2. Press 🔲 in the indoor station to answer the call.

📘 NOTE

● The maximum ring duration of the indoor station is 30s.

● The maximum speaking duration is 60s.

● To achieve the optimal pickup effect, the recommended distance range between the speaker and the microphone of the indoor station or the door station is 30 to 40 cm.

5.4 Live View

Connect the indoor station with door station and camera. You can get the live view of door station and analog camera in the indoor station.

For one indoor station, up to 2 door stations and 1 camera can be connected to.

Before you start:

Make sure all devices in the four-wire system have been well connected.

Start Live View

Press ⬛◁ to start the live view of door stations or camera.

Switch Live View

Press ⬛◁ to switch the live view among the first door station, the second door station, and the camera.

ⓘ NOTE

The maximum live view duration is 60s. The live view will be stopped automatically when the live view lasts 60s.

5.5 Unlock the Door

In the following 3 situations, you can unlock the door remotely on the indoor station.

● When someone press the Call button on the door station to call the indoor station, press ⊓◻ to unlock the door.

● When you are answering the call from the door station, press ⊓◻ to unlock the door.

● When you are view the live view of the door station, press ⊓◻ to unlock the door.

ⓘ NOTE

The unlocking status maintains 5 seconds after pressing ⊓◻.

5.6 Capture Image

Auto-Capture

The indoor station will capture one piece of image once the door station calls the indoor station.

Manual-Capture

In the following 3 situations, you can capture the image manually.

- When someone press the Call button on the door station to call the indoor station, press ⬚ to capture the image.
- When you are answering the call from the door station, press ⬚ to capture the image.
- When you are view the live view of the door station or the camera, press ⬚ to capture the image.

5.7 Switch Language

ⓘ NOTE

The default language is English.

Steps:
1. Hold ⬚ 5 seconds to enter **System Configuration** page.
2. Press ⊤⬚ (UP) or ⬚◁ (DOWN) to select **Language**. Press ⬚.
3. The device provides 10 languages: English, Turkish, French, Italian, Spanish, Portuguese, Russian, Arabic, Farsi, Vietnamese, etc. for your selection.

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See Far, Go Further

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