



Video/Audio Distributor

User Manual

User Manual

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

Series	Model
Video/Audio Distributor	DS-KAD308
	DS-KAD312

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.

Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the RoHS Directive 2011/65/EU.



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

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

- The working temperature of the device is from -15° C to 55° C.
- 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.)
- The power supply must conform to LPS. The recommended adaptor models and manufacturers are shown as below. Use the attached adaptor, and do not change the adaptor randomly. Device supports to power indoor station, the output voltage is 24V, and output current is 0.3A.

Model	Manufacturer
KPL-060M-II,24V2.5A,60W	Channel Well Technology Co., Ltd



Cautions

- Do not drop the device or subject it to physical shock, and do not expose it to high electromagnetic 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.

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1 Overview

1.1 Introduction

The video/audio distributor is designed for the video intercom products. It supports decoding and output analog video and audio signal, helps to realize the communication between indoor station and door station.

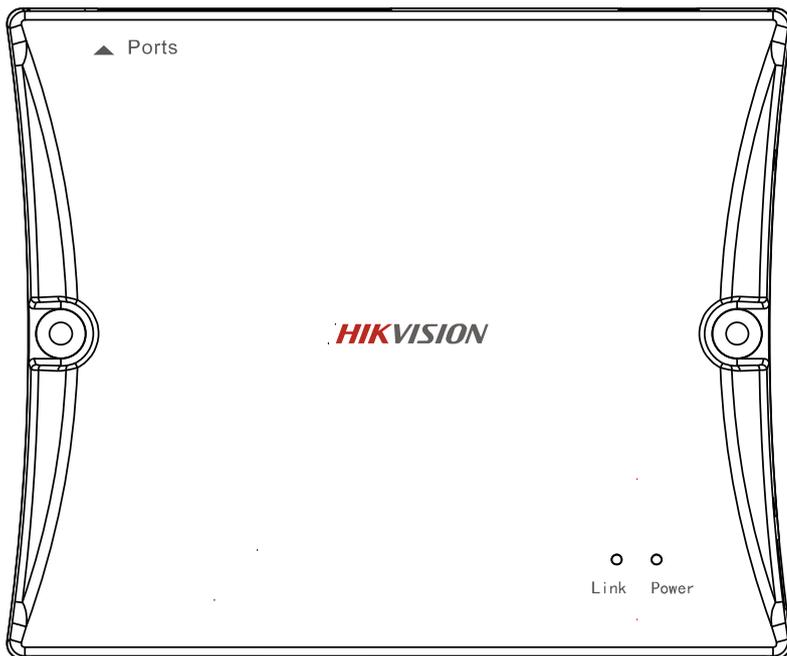


Figure 1-1 Video/Audio Distributor

1.2 Main Features

- Supports configure floor via DIP switch
- 1 power indicator, 1 signal indicator
- Supports provide power for indoor station

2 Appearance

2.1 Front Panel/Back Panel of DS-KAD308/DS-KAD312

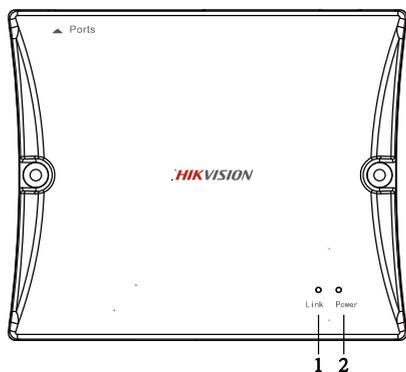


Figure 2-1 Front Panel

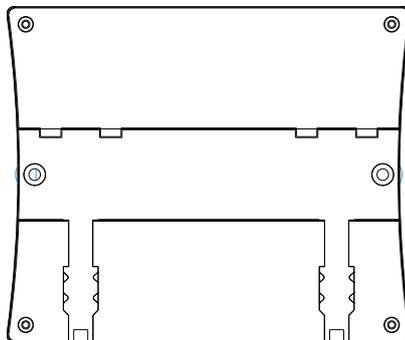


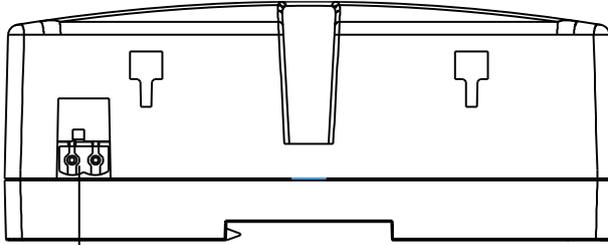
Figure 2-2 Back Panel

Table 2-1 Components Description

No.	Description
1	Signal Indicator
2	Power Indicator

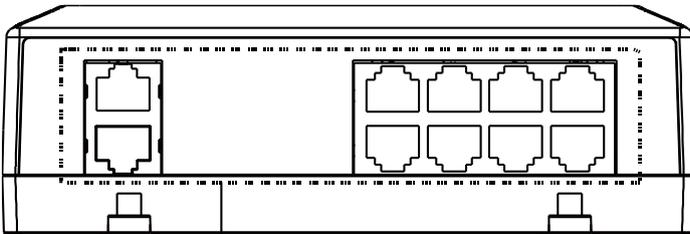
2.2 Side Panel

2.2.1 Side Panel of DS-KAD308



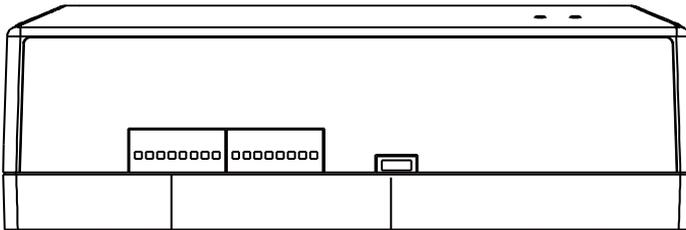
1

Figure 2-3 DS-KAD308 Side Panel 1



2

Figure 2-4 DS-KAD308 Side Panel 2



3

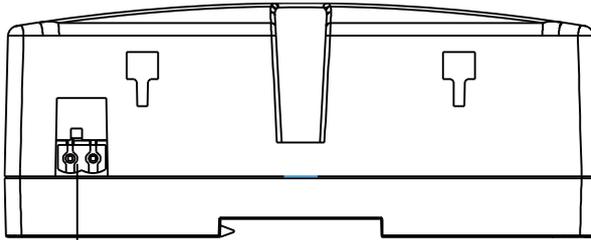
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Figure 2-5 DS-KAD308 Side Panel 3

Table 2-2 Components Description

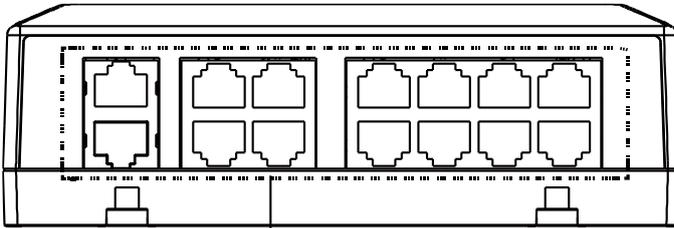
No.	Description
1	Power Socket
2	Network Interface
3	DIP Switch
4	Serial Port

2.2.2 Side Panel of DS-KAD312



1

Figure 2-6 DS-KAD312 Side Panel 1



2

Figure 2-7 DS-KAD312 Side Panel 2

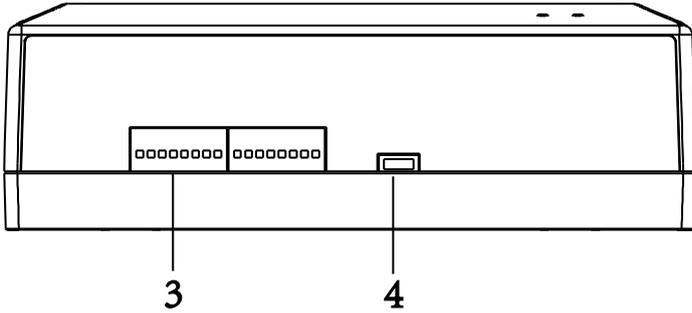


Figure 2-8 DS-KAD312 Side Panel 3

Table 2-3 Components Description

No.	Description
1	Power Socket
2	Network Interface
3	DIP Switch
4	Serial Port

3 Network Interface Description

3.1 Interface Description of DS-KAD308

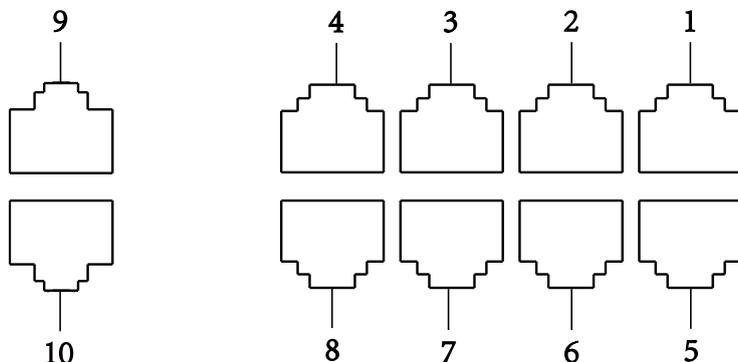


Figure 3-1 Network Interfaces of DS-KAD308

Table 3-1 Descriptions of Interfaces

No.	Description	No.	Description
1	Decoding Output Interface 1	6	Decoding Output Interface 6
2	Decoding Output Interface 2	7	Decoding Output Interface 7
3	Decoding Output Interface 3	8	Decoding Output Interface 8
4	Decoding Output Interface 4	9	Bus Output Interface
5	Decoding Output Interface 5	10	Bus Input Interface



- Interface (No.1 to 8) can provide power (24 VDC) for indoor station. It cannot connect to other device directly.
- Interface (No.9) is the bus output interface. It supports connect signal-amplifier or other video audio distributor.
- Interface (No.10) is the bus input interface. It supports video and audio input and audio output, and connects to door station and other video audio distributor.

3.2 Interface Description of DS-KAD312

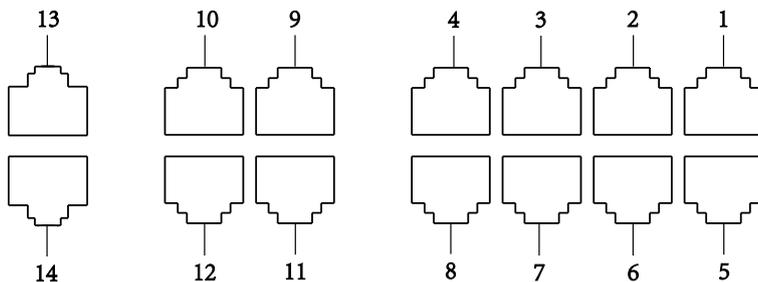


Figure 3-2 Network Interfaces of DS-KAD312

Table 3-2 Descriptions of Interfaces

No.	Description	No.	Description
1	Decoding Output Interface 1	8	Decoding Output Interface 8
2	Decoding Output Interface 2	9	Decoding Output Interface 9
3	Decoding Output Interface 3	10	Decoding Output Interface 10
4	Decoding Output Interface 4	11	Decoding Output Interface 11
5	Decoding Output Interface 5	12	Decoding Output Interface 12
6	Decoding Output Interface 6	13	Bus Output Interface
7	Decoding Output Interface 7	14	Bus Input Interface



- Interface (No.1 to 12) can provide power (24 VDC) for indoor station. It cannot connect to other device directly.
- Interface (No.13) is the bus output interface. It supports connect signal-amplifier or other video audio distributor.
- Interface (No.14) is the bus input interface. It supports video and audio input and audio output, and connects to door station and other video audio distributor.

4 DIP Description

4.1 DIP Description of DS-KAD308

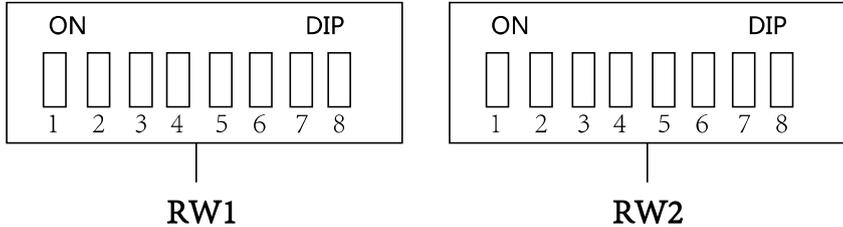


Figure 4-1 DIP Switches of DS-KAD308

Table 4-1 Descriptions of RW1 and RW2

Digit (RW1)	1	2	3	4	5	6	7	8
Function (RW1)	Floors	Floors	Reserved	Room No.	Room No.	Room No.	Reserved	Mode
Digit (RW2)	1	2	3	4	5	6	7	8
Function (RW2)	Floors	Floors	Floors	Floors	Floors	Floors	Floors	Floors



- The DIP switch (RW1) is used to configure the DIP rules. Digit 8 (RW1) is used to control the mode.
- Before configure the device, set Digit 8 (RW1) as ON to adapt to the current indoor station version.
- The DIP switch (RW2) is used to configure the start floor No..

4.1.1 Configure RW 1

RW 1 Configuration for Single Distributor

When there is only one distributor in the system, configure the Digit 1 and Digit 2 of RW1 to define the floor number.

Table 4-2 RW1 Configuration for Single Distributor

Digit (RW1)	1	2	3	4	5	6	7	8	Floor No.
Status	OFF	OFF	*	*	*	*	*	ON	1 floor with 8 households
	ON	OFF	*	*	*	*	*	ON	2 floors with 4 households each
	OFF	ON	*	*	*	*	*	ON	4 floors with 2 households each



- * means irrelevant, ON means 1, OFF means 0.
- Digit 1 and Digit 2 (RW1) are set as OFF by default, means 1 floor with 8 households.
- Digit 8 (RW1) is used to set the distributor mode. ON means the current indoor station version, OFF means the former version.

RW 1 Configuration for More than One Distributor

When there are more than 8 households in one floor, you need more than one distributor. The configuration steps as below:

Steps:

1. Set the digit value of Digit 1, Digit 2 to define the floor No..

Table 4-3 RW1 Configuration for More than One Distributor

Digit (RW1)	1	2	3	4	5	6	7	8	Floor No.
Status	OFF	OFF	*	*	*	*	*	ON	1 floor with 8 households
	ON	OFF	*	*	*	*	*	ON	2 floors with 4 households each
	OFF	ON	*	*	*	*	*	ON	4 floors with 2 households each



- * means irrelevant, ON means 1, OFF means 0.
- Digit 1 and Digit 2 (RW1) are set as OFF by default, means 1 floor with 8 households.

- Digit 8 (RW1) is used to set the distributor mode. ON means the current indoor station version, OFF means the former version.

2. Set the digit value of Digit 4, Digit 4 and Digit 6 to define the room No..

Table 4-4 RW1 Configuration for More than One Distributor

Digit (RW1)	1	2	3	4	5	6	7	8	Room No. of Floor 1	Room No. of Floor 2	Room No. of Floor 4
Status	*	*	*	OFF	OFF	OFF	*	*	1-8	1-4	1-2
	*	*	*	ON	OFF	OFF	*	*	9-16	5-8	3-4
	*	*	*	OFF	ON	OFF	*	*	17-24	9-12	5-6
	*	*	*	ON	ON	OFF	*	*	25-32	13-16	7-8
	*	*	*	OFF	OFF	ON	*	*	33-40	17-20	9-10
	*	*	*	ON	OFF	ON	*	*	41-48	21-24	11-12
	*	*	*	OFF	ON	ON	*	*	49-56	25-28	13-14
	*	*	*	ON	ON	ON	*	*	57-64	29-32	15-16



- * means irrelevant, ON means 1, OFF means 0.
- Digit 4, Digit 5 and Digit 6 (RW1) are set as OFF by default, and when Digit 4 and Digit 5 are OFF, it means 1 floor with 8 households.
For example, if the RW1 is set as the table below, then the Room No. are 9, 10, 11, 12, 13, 14, 15 and 16.

Table 4-5 RW1 Configuration Example of DS-KAD308 (for More than One Distributor)

Digit (RW1)	1	2	3	4	5	6	7	8
Status	OFF	OFF	*	ON	OFF	OFF	*	ON

4.1.2 Configure RW 2

- RW2 is used to set the start floor No.. The configuration as below:
- Set the status (ON/OFF) of each digit to define the start floor. The sum of the binary values of digits is the start floor No..

Table 4-6 RW2 Configuration of DS-KAD308

Digit (RW2)	1	2	3	4	5	6	7	8
Binary Value	1	2	4	8	16	32	64	128
Status	ON/OFF							

For example, if you set Digit1, Digit2 and Digit4 to be ON (as the table below), then the start floor No. is 11. That is, 1+2+8=11.

Table 4-7 RW2 Configuration Example of DS-KAD308

Digit (RW2)	1	2	3	4	5	6	7	8
Binary Value	1	2	4	8	16	32	64	128
Status	ON	ON	OFF	ON	OFF	OFF	OFF	OFF

4.2 DIP Description of DS-KAD312

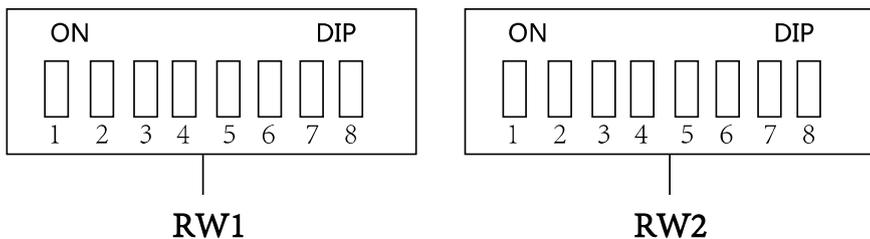


Figure 4-2 DIP Switches of DS-KAD312

Table 4-8 Descriptions of RW1 and RW2

Digit (RW1)	1	2	3	4	5	6	7	8
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Digit (RW1)	1	2	3	4	5	6	7	8
Function (RW1)	Floors	Floors	Reserved	Room No.	Room No.	Room No.	Reserved	Mode
Digit (RW2)	1	2	3	4	5	6	7	8
Function (RW2)	Floors	Floors	Floors	Floors	Floors	Floors	Floors	Floors



- The DIP switch (RW1) is used to configure the DIP rules. Digit 8 (RW1) is used to control the mode.
- Before configure the device, set Digit 8 (RW1) as ON to adapt to the current indoor station version.
- The DIP switch (RW2) is used to configure the start floor No..

4.2.1 Configure RW 1

RW 1 Configuration for Single Distributor

When there is only one distributor in the system, configure the Digit 1, Digit 2 and Digit3 of RW1 to define the floor number.

Table 4-9 RW1 Configuration for Single Distributor

Digit (RW1)	1	2	3	4	5	6	7	8	Floor No.
Status	OFF	OFF	OFF	*	*	*	*	ON	1 floor with 12 households
	ON	OFF	OFF	*	*	*	*	ON	2 floors with 6 households each
	OFF	ON	OFF	*	*	*	*	ON	3 floors with 4 households each
	ON	ON	OFF	*	*	*	*	ON	4 floors with 3 households each
	OFF	OFF	ON	*	*	*	*	ON	6 floors with 2 households each



- * means irrelevant, ON means 1, OFF means 0.
- Digit 1 and Digit 2 (RW1) are set as OFF by default, means 1 floor with 12 households.

- Digit 8 (RW1) is used to set the distributor mode. ON means the current indoor station version, OFF means the former version.

RW 1 Configuration for More than One Distributor

When there are more than 12 households in one floor, you need more than one distributor. The configuration steps as below:

Steps:

1. Set the digit value of Digit 1, Digit 2 to define the floor No..

Table 4-10 RW1 Configuration for More than One Distributor

Digit (RW1)	1	2	3	4	5	6	7	8	Floor No.
Status	OFF	OFF	OFF	*	*	*	*	ON	1 floor with 12 households
	ON	OFF	OFF	*	*	*	*	ON	2 floors with 6 households each
	OFF	ON	OFF	*	*	*	*	ON	3 floors with 4 households each
	ON	ON	OFF	*	*	*	*	ON	4 floors with 3 households each
	OFF	OFF	ON	*	*	*	*	ON	6 floors with 2 households each



- * means irrelevant, ON means 1, OFF means 0.
- Digit 1 and Digit 2 (RW1) are set as OFF by default, means 1 floor with 12 households.
- Digit 8 (RW1) is used to set the distributor mode. ON means the current indoor station version, OFF means the former version.

2. Set the digit value of Digit 4, Digit 4 and Digit 6 to define the room No..

Table 4-11 RW1 Configuration for More than One Distributor

Digit (RW1)	1	2	3	4	5	6	7	8	Room No. of

									F1	F2	F3	F4.	F5
Status	*	*	*	OFF	OFF	OFF	*	*	1 -12	1-6	1-4	1-3	1-2
	*	*	*	ON	OFF	OFF	*	*	13- 24	7- 12	5-8	4-6	3-4
	*	*	*	OFF	ON	OFF	*	*	25- 36	13- 18	9-1 2	7-9	5-6
	*	*	*	ON	ON	OFF	*	*	37- 48	19- 24	13- 16	10- 12	7-8
	*	*	*	OFF	OFF	ON	*	*	49- 60	25- 30	17- 20	13- 15	9-1 0
	*	*	*	ON	OFF	ON	*	*	61- 72	31- 36	21- 24	16- 18	11- 12
	*	*	*	OFF	ON	ON	*	*	73- 84	37- 42	25- 28	19- 21	13- 14
	*	*	*	ON	ON	ON	*	*	85- 96	43- 48	29- 32	22- 24	15- 16



- * means irrelevant, ON means 1, OFF means 0.
- Digit 4, Digit5 and Digit 6 (RW1) are set as OFF by default. When Digit4 and Digit5 are set as OFF, it means 1 floor with 12 households.
For example, if you set the device as the table below, then the Room No. are 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24.

Table 4-12 RW1 Configuration Example of DS-KAD312 (for More than 1 Distributor)

Digit (RW1)	1	2	3	4	5	6	7	8
Status	OFF	OFF	OFF	ON	OFF	OFF	*	ON

4.2.2 Configure RW 2

- RW2 is used to set the start floor No.. The configuration as below:
- Set the status (ON/OFF) of each digit to define the start floor. The sum of the binary values of digits is the start floor No..

Table 4-13 RW2 Configuration of DS-KAD312

Digit (RW2)	1	2	3	4	5	6	7	8
Binary Value	1	2	4	8	16	32	64	128
Status	ON/OFF							

For example, if you set Digit1, Digit2 and Digit4 to be ON (as the table below), then the start floor No. is 11. That is, $1+2+8=11$.

Table 4-14 RW2 Configuration Example of DS-KAD312

Digit (RW2)	1	2	3	4	5	6	7	8
Binary Value	1	2	4	8	16	32	64	128
Status	ON	ON	OFF	ON	OFF	OFF	OFF	OFF

5 Typical Application

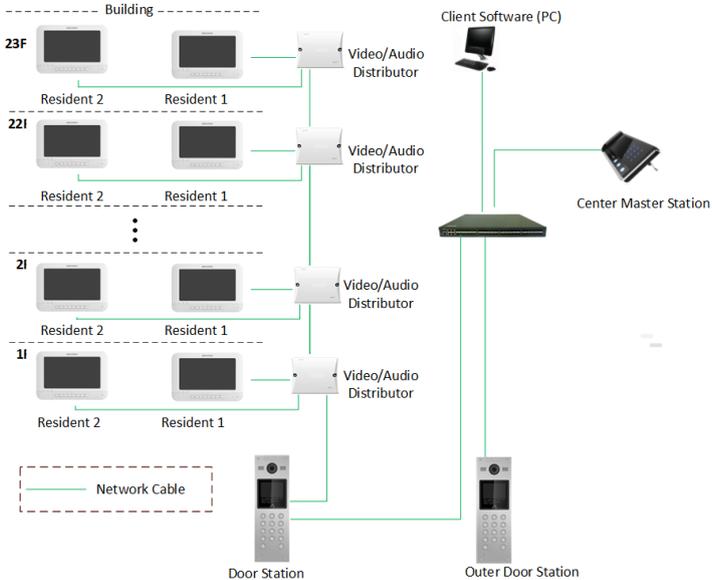


Figure 5-1 Typical Application of Video/Audio Distributor



- Configure the room number before build the system on the video/audio distributor.
- The indoor station, door station and video/audio distributor are connected via network cable transferring analog signal.
- The door station, outer door station and master station should all connect to the same LAN via network cable transferring digital signal.

6 Installation

The installation of DS-KAD308 and DS-KAD312 are same.

Video/audio distributor can be set on a desk and also support wall mounting.

The wall mounting steps as below:

Steps:

1. Chisel two holes in the wall. The diameter of the hole is 3 mm, and the distance between two holes is 136 mm.
2. Fix the device onto the wall by it with two PA4 screws.

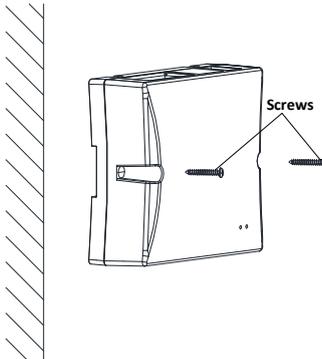


Figure 6-1 Wall Mounting-1

3. Installation completes.

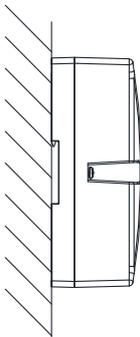


Figure 6-2 Wall Mounting-2



See Far, Go Further