



Video Intercom Door Station

(D Series)

Quick Start Guide

Quick Start Guide

©2017 Hangzhou Hikvision Digital Technology Co., Ltd.

This quick start guide is intended for users of the models below:

Series	Model	
Door Station (D Series)	DS-KD3002-VM	

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.

About this Manual

This Manual is subject to domestic and international copyright protection. Hangzhou Hikvision Digital Technology Co., Ltd. ("Hikvision") reserves all rights to this manual. This manual cannot be reproduced, changed, translated, or distributed, partially or wholly, by any means, without the prior written permission of Hikvision.

Trademarks

HIKVISION and other Hikvision marks are the property of Hikvision and are registered trademarks or the subject of applications for the same by Hikvision and/or its affiliates. Other trademarks mentioned in this manual are the properties of their respective owners. No right of license is given to use such trademarks without express permission.

Disclaimer

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, HIKVISION MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, REGARDING THIS MANUAL. HIKVISION DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE OF THE MANUAL, OR THE CORRECTNESS, ACCURACY, OR RELIABILITY OF INFORMATION CONTAINED HEREIN. YOUR USE OF THIS MANUAL AND ANY RELIANCE ON THIS MANUAL SHALL BE WHOLLY AT YOUR OWN RISK AND RESPONSIBILITY.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT WILL HIKVISION, ITS DIRECTORS, OFFICERS, EMPLOYEES, OR AGENTS BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, SECURITY BREACHES, OR LOSS OF DATA OR DOCUMENTATION, IN CONNECTION WITH THE USE OF OR RELIANCE ON THIS MANUAL, EVEN IF HIKVISION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY OR CERTAIN DAMAGES, SO SOME OR ALL OF THE ABOVE EXCLUSIONS OR LIMITATIONS MAY NOT APPLY TO YOU.

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 B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- —Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/TV technician for help.

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.

ISED RSS Warning:

This device complies with Innovation, Science and Economic Development Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



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

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (B)/NMB-3(B) standards requirements.

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.

A	\triangle
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 -40 °C to 60 °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.)



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.

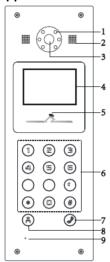
- Please keep all wrappers after unpack them for future use. In case of any failure occurred, you need to return the device to the factory with the original wrapper.
 Transportation without the original wrapper may result in damage on the device and lead to additional costs.
- Improper use or replacement 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 Appearance	
1.3 Appearance of DS-KD3002-VM	3
2 Terminal and Wiring	5
2.1 Terminal Description	5
2.1.2 Terminals and Interfaces of DS-KD3002-VM 2.2 Wiring Description	
3 Installation	17
3.3 Installation of DS-KD3002-VM	23
4 Before You Start	26
5 Local Operation	27
5.1 Keys Description	27 29 30
6 Remote Operation via Batch Configuration Software	34
6.1 Activating Device Remotely 6.2 Editing Network Parameters 6.3 Adding Device 6.3.1 Adding Online Device 6.3.2 Adding by IP Address	35 36 36

Appendix	39
Installation Notice	
Wiring Cables	

1.3 Appearance of DS-KD3002-VM



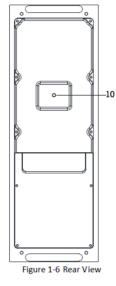


Figure 1-5 Front View

Table 1-3 Descriptions Keys

No.	Description		
1	Low Illumination Supplement Light		
2	Built-in Camera		
3	Loudspeaker		
4	LCD Display Screen		
5	Card Induction Area		
6	Keypad		
7	Call Button		
8	Call Center Key		
9	Microphone		
10	TAMPER		

2.1.2 Terminals and Interfaces of DS-KD3002-VM

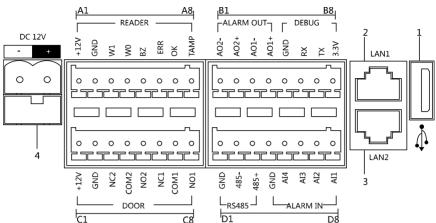


Figure 2-2 Terminals and Interfaces of DS-KD3002-VM

Table 2-2 Descriptions of Terminals and Interfaces

Name	No.	Interface	Description	
USB	1	USB	USB Interface	
LAN	2	LAN1	Network Interface	
LAN	3	LAN2	Analog Interface	
Power Supply	4	DC 12V	DC 12V Power Supply Input	
	A1	12V	Power Supply Output	
	A2	GND	Grounding	
	А3	W1	Data Input Interface Wiegand Card Reader: Data1	
DEADED	A4	W0	Data Input Interface Wiegand Card Reader: Data0	
READER	A5	BZ	Card Reader Buzzer Output	
A6 A7		ERR	Card Reader Indicator Output (Invalid Card Output)	
		ОК	Card Reader Indicator Output (Valid Card Output)	
	A8	TAMP	Tamper-proof Input of Wiegand Card Reader	
ALARM	B1	AO2-	Alarm Relay Output 2	

Name	No.	Interface	Description	
OUT	B2	AO2+		
	В3	AO1-	Alarm Relay Output 1	
	B4	AO1+	Alariii Kelay Output 1	
	B5	GND	Grounding	
DEBUG	В6	RX	Serial Port Debugging/Receive data	
DEBUG	В7	TX	Serial Port Debugging/Send data	
	B8	3.3V	Serial Port Debugging/Power Supply	
	C1	12V	Power Supply Output	
	C2	GND	Grounding	
	C3	NC2	Door Lock Relay Output (NC)	
DOOR	C4	COM2	Grounding Signal	
DOOK	C5	NO2	Door Lock Relay Output (NO)	
	C6	NC1	Door Lock Relay Output (NC)	
	C7	COM1	Grounding Signal	
	C8	NO1	Door Lock Relay Output (NO)	
	D1	GND		
RS485	D2	485-	RS-485 Communication Interfaces	
	D3	485+		
	D4	GND	Grounding Signal	
	D5	Al4	Alarm Input 4	
ALARM IN	D6	AI3	Alarm Input 3	
	D7	AI2	Alarm Input 2	
	D8	Al1	Alarm Input 1	

2.2 Wiring Description

2.2.1 Door Lock Wiring

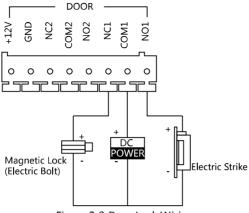


Figure 2-3 Door Lock Wiring



- Terminal NC1/COM1 is set as default for accessing magnetic lock/electric bolt; terminal NO1/COM1 is set as default for accessing electric strike.
- To connect electric lock in terminal NO2/COM2/NC2, it is required to set the output of terminal NO2/COM2/NC2 to be electric lock with Batch Configuration Tool or iVMS-4200.

2.2.2 Door Magnetic Wiring

Door Magnetic Wiring for DS-KD3002-VM

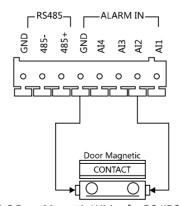


Figure 2-6 Door Magnetic Wiring for DS-KD3002-VM



To connect the door magnetic, it is required to set the output of terminal Al2 to be door magnetic with Batch Configuration Tool or iVMS-4200.

2.2.3 Exit Button Wiring

Exit Button Wiring for DS-KD3002-VM

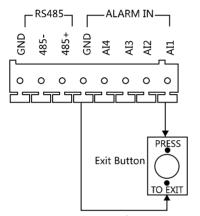


Figure 2-9 Exit Button Wiring for DS-KD3002-VM



Terminal S1 is set as default for connecting exit button.

2.2.4 External Card Reader Wiring



- Please set the DIP switch first before connecting the card reader.
- If the DIP switch should be configured when the card reader is power-on, please reboot the card reader after configuring the DIP switch.
- The DIP switch description is shown in the following table:

No.	Description	How to Configure	
1-4	Set the RS-485 address	ON: 1 OFF: 0	
6	Select Wiegand protocol or RS-485 protocol	ON: Wiegand OFF: RS-485	
7	Set the Wiegand protocol (It is invalid when setting OFF in 6.)	ON: Wiegand 26 OFF: Wiegand 34	

RS-485 Card Reader Wiring

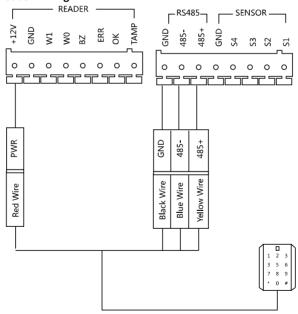


Figure 2-10 RS-485 Card Reader Wiring

Wiegand Card Reader Wiring

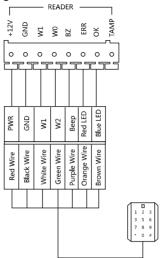


Figure 2-11 External Card Reader Wiring

2.2.5 Alarm Device Input Wiring

Alarm Device Input Wiring for DS-KD3002-VM

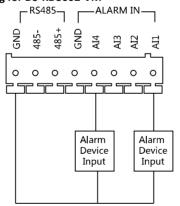


Figure 2-13 Alarm Device Input Wiring for DS-KD3002-VM

2.2.6 Alarm Device Output Wiring

Alarm Device Output Wiring for DS-KD3002-VM

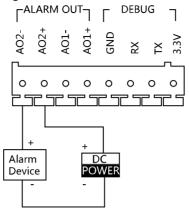


Figure 2-15 Alarm Device Output Wiring for DS-KD3002-VM

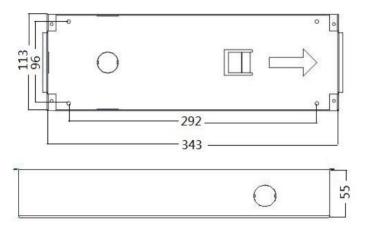
3 Installation

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 door station supports is 12 VDC. Please make sure your power supply matches your door station.
- Make sure all the related equipment is power-off during the installation.
- Check the product specification for the installation environment.

3.3 Installation of DS-KD3002-VM

3.3.1 Gang Box for DS-KD3002-VM





- The dimension of gang box for model DS-KD3002-VM door station is: 343(length) × 113(width) ×55(depth) mm.
- The dimensions above are for reference only. The actual size can be slightly different from the theoretical dimension.

3.3.2 Wall Mounting with Gang Box of DS-KD3002-VM $\,$

Steps:

- 1. Chisel a hole in the wall for inserting the gang box. The size of the hole should be larger than that of the gang box. The suggested size of hole is 343.5 (length) \times 113.5 (width) \times 55.5 (depth) mm.
- 2. Insert the gang box into the hole and fix it with 4 PA4 screws.

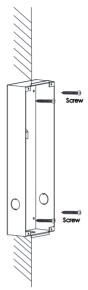


Figure 3-13 Insert the Gang Box into the Wall

- 3. Make sure the edges of the gang box align to the wall.
- 4. Route the cables of the door station through the cable hole.
- 5. Put the door station into the gang box.

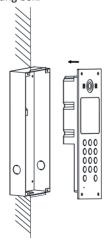


Figure 3-14 Install the Door Station

6. Fix the door station to the gang box with 4 crews.



Figure 3-15 Tighten the Screws of Device

4 Before You Start

For the first time use of the device, you are required to activate the device and set the activation password. You can activate the device via internet with Batch Configuration Tool, or with iVMS-4200 client software.

To activate the device with Batch Configuration Tool or iVMS-4200, refer to 6.1 Activating Device Remotely.

To activate the device locally, refer to 5.2 Activating Device.

To configure the key parameters of device on the user interface of door station, you are required to input the admin password. Here the admin password refers to the configuration password.

The default admin password (configuration password) is 888999.

You can set the login password of the device by yourself.

You must change the default credential to protect against unauthorized access to the product. Please refer to *5.4 Changing Password*.

5 Local Operation

5.1 Keys Description

Key descriptions of door stations are illustrated in Table 5-1.

Table 5-1 Key Descriptions 1

Key	Description		
Numeric Key 2	A		
Numeric Key 4	▼		
Numeric Key 6	◀		
Numeric Key 8	>		
# Call Key (When calling residents or cer			
#	Confirm		
*	Return		
	Delete		

5.2 Activating Device

You cannot use the door station until you activate it.

Steps:

1. Power on the door station to enter the activation interface automatically.

Please press # to activate device.

Figure 5-1 Activate the Device (Option 1)

2. Press the # key.

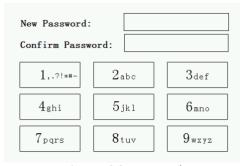


Figure 5-2 Set Password

3. Enter a new password, and confirm the password. The character description for each numeric key is shown in Table 5-2.

5jklJKL

Description Kev Description Kev 1 1,.?!*#-6 6mnoMNO 2 2abcABC 7 7pgrsPQRS 3 8 3defDFF 8tuvTUV 4 4ghiGHI 9 9wxyzWXYZ 5 0

Table 5-2 Character Description



When entering the password, taking the numeric key 2 as example, press the numeric key 2 once, the text field shows "2", and press it again, the text field shows "a", and press it again, the text field shows "b", and so on.

STRONG PASSWORD RECOMMENDED—We highly recommend you create a strong



password of your own choosing (Using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters.) in order to increase the security of your product. And we recommend you reset

0

your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

4. Press the # key to complete the activation.

5.3 Editing Network Parameters

Purpose:

Network connection is mandatory for the use of door station.

Steps:

- 1. Go to the configuration mode.
 - 1) Hold down the * key and the # key for 2s to enter the admin password interface.
 - 2) Enter the admin password, and press the # key.

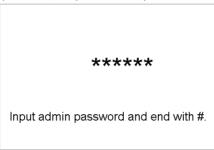


Figure 5-3 Admin Password Interface



The default admin password is 888999.

- 2. Enter the network parameters settings interface.
 - 1) Press the numeric keys 4 and 6 to switch to the network configuration interface

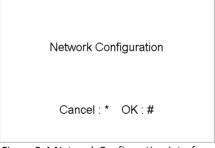


Figure 5-4 Network Configuration Interface

2) Press the # key to enter the network parameters settings interface.

IP Address	192 .	0 .	0 .	65
Sub Mask:	255 .	255 .	255 .	0
Gateway:	192 .	0 .	0 .	1
SIP IP:	0 .	0 .	0 .	0
Master IP:	0 .	0 .	0 .	0
Center IP:	0 .	0 .	0 .	0

Figure 5-5 Network Parameters Settings Interface

- 3. Edit network parameters.
 - 1) Move the cursor to parameters to be configured.
 - 2) Press the # key to enter or exit the editing mode.
- 4. Press the * key to exit the network configuration interface.

5.4 Changing Password

Purpose:

2 kinds of password are available when using the door station: configuration password (admin password) and card activation password.

Configuration Password: It is necessary when you want to configure parameters of the door station, such as IP parameters, door station No., system type, and so on.

Card Activation Password: It is necessary when you want to issue cards via password.



The default configuration password is 888999. We recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Steps:

- 1. Go to the configuration mode.
 - 1) Hold down the * key and the # key for 2s to enter the admin password interface.
 - 2) Enter the admin password, and press the # key.

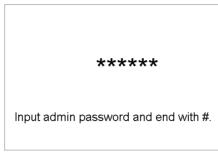


Figure 5-6 Admin Password Interface



The default admin password is 888999.

2. Press the numeric keys 4 and 6 to switch to the password settings interface.

1.Configuration Password

2.Card Activation Password

Press 1 or 2 to select the mode.

Figure 5-7 Password Settings Interface

Chaning Configuration Password

Steps:

1. On the password settings interface, press the numeric key 1 to enter the configuration password changing interface.



Figure 5-8 Configuration Password Changing Interface

- 2. Enter the old password, and the new password, and confirm the new one.
 - 1) Move the cursor to parameters to be configured.
 - 2) Press the # key to enter or exit the editing mode.
- 3. Press the * key to exit the password settings interface.

Chaning Card Activation Password

Steps:

1. On the password settings interface, press the numeric key 2 to enter the card activation password changing interface.



Figure 5-9 Card Activation Password Changing Interface

- 2. Enter the old password, and the new password, and confirm the new one.
 - 3) Move the cursor to parameters to be configured.
 - 4) Press the # key to enter or exit the editing mode.
- 3. Press the * key to exit the password settings interface.

5.5 Calling Resident

You can call residents via the door station no matter the door station is in the network intercom system or the analog intercom system.

The door station can work as main/sub door station, and outer door station, which correspond to different calling resident modes respectively.

Working as Main/Sub Door Station

Steps:

- 1. Enter the Room No..
- 2. Press the # key or the key to start calling the resident.

Working as Outer Door Station

Steps:

1. Enter the Community No. and the # key, the Building No. and the # key, the Unit No. and the # key, and the Room No. and the # key.



2. Press the

key to start calling the resident.

5.6 Unlocking Door

Before you start:

Make sure your door station works as the main/sub door station.

Purpose.

2 ways are available to unlock the door: unlocking door via password, and unlocking door via card.

Unlocking Door by Password

Unlocking the door by inputting the password is only available in the network intercom system.

Steps:

- 1. Enter the # key and the Room No..
- 2. Enter the password and the # key.



- The password varies according to different rooms.
- The default unlocking password is 123456.

Unlocking Door by Card

Before you start:

Make sure the card has been issued. You can issue the card via the door station, or via iVMS-4200 client software. Please refer to *User Manual* for detail steps.

Unlocking the door by swiping the card is available both in the network intercom system and the analog intercom system.

Steps:

Swipe the card on the card induction area to unlock the door.



The main card does not support unlocking the door.

6 Remote Operation via Batch Configuration Software

6.1 Activating Device Remotely

Purpose:

You are required to activate the device first by setting a strong password for it before you can use the device.

Activation via Batch Configuration Tool, and Activation via iVMS-4200 are supported. Here take activation via Batch Configuration Tool as example to introduce the device activation. Please refer to the user manual for the activation via iVMS-4200.

Steps:

1. Run the Batch Configuration Tool.



Figure 6-1 Selecting Inactive Device

2. Select an inactivated device and click the Activate button.



Figure 6-2 Activation

3. Create a password, and confirm the password.

STRONG PASSWORD RECOMMENDED— We highly recommend you create a



strong password of your own choosing (Using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters.) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the

high security system, resetting the password monthly or weekly can better protect your product.

4. Click the **OK** button to activate the device.



- When the device is not activated, the basic operation and remote operation of device cannot be performed.
- You can hold the Ctrl or Shift key to select multiple devices in the online devices, and click the Activate button to activate devices in batch.

6.2 Editing Network Parameters

Purpose:

To operate and configure the device via LAN (Local Area Network), you need connect the device in the same subnet with you PC. You can edit network parameters via batch configuration tool, and iVMS-4200 software. Here take editing network parameters via batch configuration tool as example.

Steps:

1. Select an online activated device and click the Edit NET Parameters button.



Figure 6-3 Clicking Edit NET Parameters Button

- Change the device IP address and gateway address to the same subnet with your computer.
- 3. Enter the password and click the OK button to activate the network parameters modification.

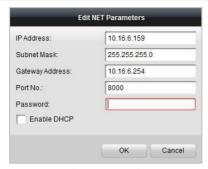


Figure 6-4 Editing Network Parameters



- The default port No. is 8000.
- After editing the network parameters of device, you should add the devices to the device list again.

6.3 Adding Device

For batch configuration tool and iVMS-4200 software, you should add device to the software so as to configure the device remotely.

3 ways for adding the device are supported: adding active online devices within your subnet, adding device by IP address, and adding device by IP segment. Here take adding online device and adding device by IP address via batch configuration tool as example.

6.3.1 Adding Online Device

Steps:

1. Select an active online device or hold the **Ctrl** or **Shift** key to select multiple devices in the online devices list.

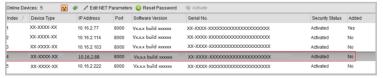


Figure 6-5 Online Devices Interface

2. Click the 🔒 button to pop up the login dialog box.



Figure 6-6 Login Dialog Box

- 3. Enter the user name and password.
- 4. Click the **OK** button to save the settings.



- Only devices successfully logged in will be added to the device list for configuration.
- If you add devices in batch, please make sure selected devices have the same user name and password.

6.3.2 Adding by IP Address

Purpose:

You can add the device by entering IP address.

Steps:

1. Click the 🖶 button to pop up the adding devices dialog box.



Figure 6-7 Adding Button

- 2. Select IP Address in the adding mode drop-down list.
- 3. Enter the IP address, and set the port No., user name and password of the device.



Figure 6-8 Adding by IP Address

4. Click the **OK** button to add the device to the device list.



- You cannot add the device(s) to the device list if the user name and password are not identical.
- When you add devices by IP Address, IP Segment or Port No., the devices should be online devices.

Appendix

Installation Notice

While installing the indoor station, make sure that the distance between any two devices is far enough to avoid the howling and echo. The distance between two devices is recommended to be longer than 10 meters.



Here devices refer to indoor station, outdoor station and master station.

Wiring Cables

Cable	Specification	
Power Cord of Door Station	RVV 2*1.0	
Network Cable of Door Station	UTP-five Categories	
Door Lock Wiring (With Door Magnetic)	RVV 4*1.0	
Door Lock Wiring (Without Door Magnetic)	RVV 2*1.0	
Exit Button Wiring 38	RVV 2*0.5	
External Card Reader Wiring	RVVP 4*0.75	

