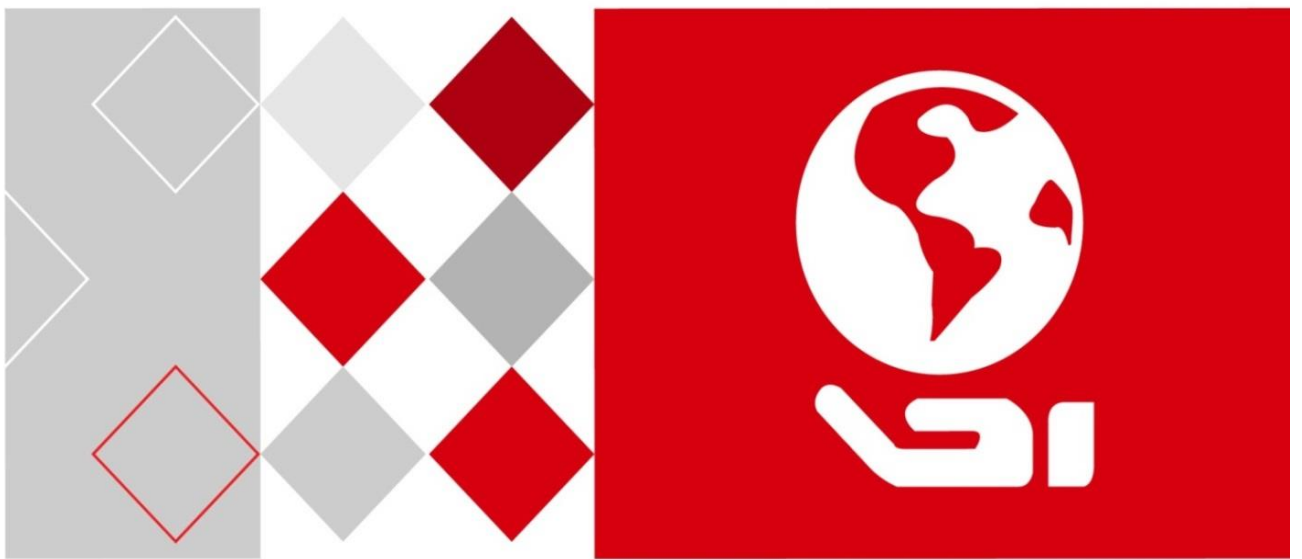


HIKVISION



DS-1005KI USB Keyboard

User Manual

UD05349B

User Manual

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About this Manual

This Manual is applicable to DS-1005KI Keyboard.

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website (<http://overseas.hikvision.com/en/>).

Please use this user manual under the guidance of professionals.

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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.

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 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

Preventive and Cautionary Tips

Before connecting and operating your keyboard, please be advised of the following tips:

- Ensure unit is placed in a well-ventilated, dust-free environment.
- Keep all liquids away from the keyboard.
- Please check the power supply to avoid the damage caused by voltage mismatch.
- Please make sure the keyboard work in the allowed range of temperature and humidity.
- Please keep the device horizontal and avoid the installation under severe vibration environment.
- The dust board will cause a short circuit after damping. Please dedust regularly for the board, connector, and chassis fan with brush.

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Chapter 1 Product Overview

1.1 Introduction

DS-1005KI USB keyboard is accessible directly by the client software or platform software, DVR/NVR, and can realize functions such as windows switching, PTZ control, picture capture, recording, etc.

DS-1005KI is compatible with the USB joystick via USB HID protocol, and can access to the third-party platform software. It provides programmable buttons for setting custom function and has the advantage of simple interface and easy operation.

The product can be widely applied in fields such as finance, transportation, telecommunication, education, water conservancy, public security and so on.

1.2 Key Features

- Power supply and communication by USB interface directly.
- 3D PTZ control and 2 joystick control buttons.
- Up to 15 programmable buttons are available.
- Support digital tube to display the input content.
- Support indicators to show the operation status of keyboard.
- Compatible with a various kinds of client software and platform software.
- Support USB HID protocol.

1.3 Typical Applications

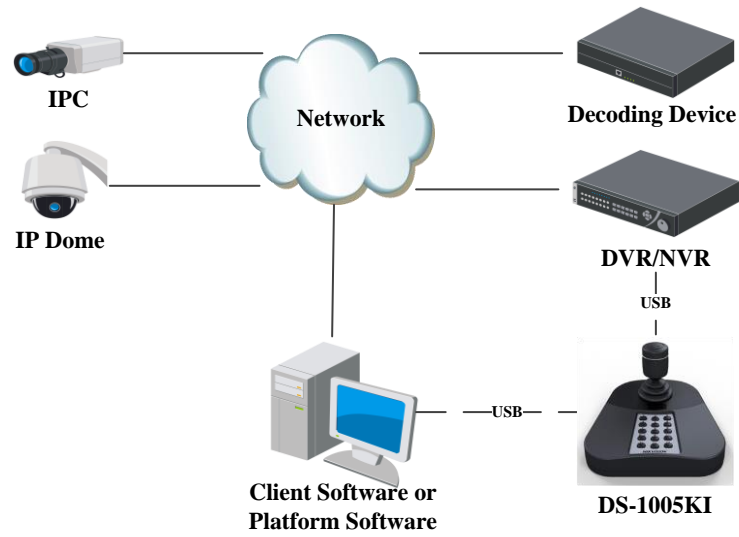


Figure 1-1 Typical Applications

 **NOTE**

Make sure the DVR/NVR connected supports the DS-1005KI keyboard access.

Chapter 2 Functional Buttons and Joystick

2.1 Functional Buttons and Indicators

Refer to the following figure and table for the description of the functional buttons and indicators.



Figure 2-1 Keyboard Buttons and Indicators







Table 2-1 Description of Keyboard

NO.	Button & Indicator	Function Description
1	Capture	USB Keyboard Mode: capture picture; USB Joystick Mode: custom shortcut as number 12;
2	Record	USB Keyboard Mode: record video; USB Joystick Mode: custom shortcut as number 11;
3	Joystick	Pan/tilt movement and zoom in/out control;
4	Window Indicator	In window switching mode;
5	Channel Indicator	In channel switching mode;
6	Digital Tube	Display the input number and message;

6	0 to 9 Number Buttons	USB Keyboard Mode: select window or channel; USB Joystick Mode: customizable;
7	Window/Channel Switch	Press and hold it for more than 5s to switch between keyboard mode and joystick mode; USB Keyboard Mode: select window switching mode or channel switching mode; (The window indicator lights while in window switching mode; and the channel indicator lights while in channel switching mode.)
8	Enter	USB Keyboard Mode: confirm the input number;
9	F1, F2, F3	USB Keyboard Mode: customizable; USB Joystick Mode: F1-13,F2-14,F3-15.

2.2 Joystick Description

Table 2-2 Description of Joystick

Graphic	Operation	Function
	Up	PTZ control mode: tilt up
	Down	PTZ control mode: tilt down
	Left	PTZ control mode: pan left
	Right	PTZ control mode: pan right
	Contrarotate	Zoom out
	Clockwise rotate	Zoom in

 **NOTE**

The PTZ speed varies according to the joystick moving amplitude.

Chapter 3 Keyboard Operation

The keyboard is compatible with the client software and platform software. You can use the keyboard to operate the PTZ control and video wall.



NOTE

- This chapter introduces the application of iVMS-5200 professional system as the example, and you can also use the iVMS-4200 client software to realize the keyboard control.
- Before configuration and operation, plug the keyboard to the USB interface of your computer with the iVMS-5200 professional system installed. And install the driver to computer properly.

3.1 Setting Keyboard Shortcut Functions

The keyboard can provide some frequently used functions of the system. You can set the shortcuts for keyboard to get quick and convenient access to the commonly used actions.

Step 1 Open the iVMS-5200 Control Client.

Step 2 Go to **Control Panel > Local Configuration** page.

Step 3 Click the **Keyboard and Joystick** tab to enter the Keyboard and Joystick Settings interface.

Step 4 Select the COM port from the drop-down list which the keyboard is connected to the PC installed with the Control Client.

Step 5 Set the shortcuts of the keyboard operation.

It supports shortcut settings to speed up, speed down, focus, iris, turn on the light, turn on the windshield wiper, auto-scanning, auxiliary focus, lens initialization, previous, next, preset, patrol, and pattern.

- 1) Select a certain function from the list.
- 2) Double-click the item field under the USB Joystick or USB keyboard column.
- 3) Select the compound buttons operation or number from the drop-down list to set it as the shortcuts for the function of the USB joystick or USB keyboard.

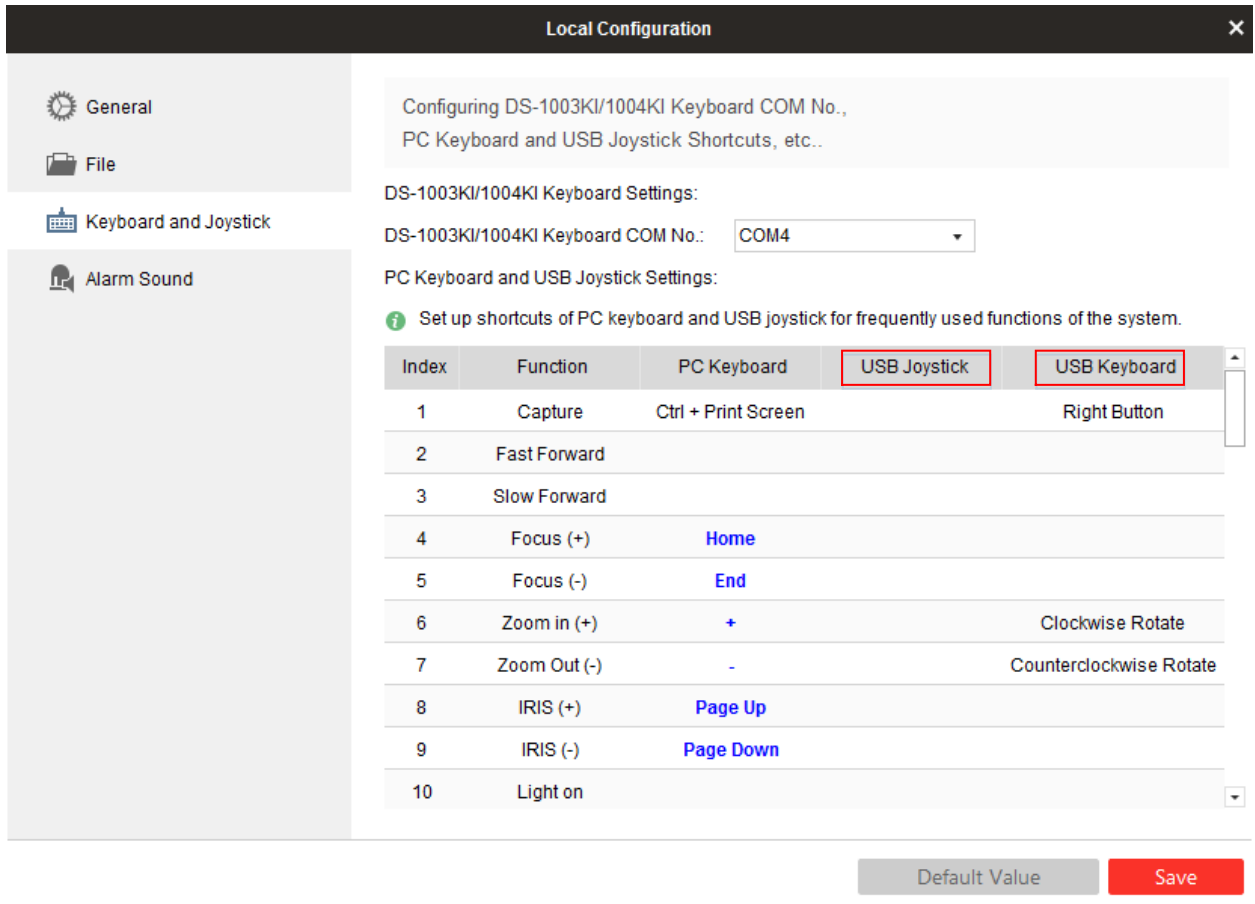


Figure 3-1 Keyboard and Joystick Shortcut Functions

Step 6 Click **Save** to save the settings.


NOTE

Refer to the Chapter 2.1 Functional Buttons and Indicators for the definition of numeric buttons, capture, record, F1, F2 and F3 shortcuts

3.2 USB Joystick Mode

Under USB joystick mode, you can use the keyboard to control PTZ, call preset, patrol and pattern in the live view interface.

3.2.1 Setting USB Joystick Mode

On the operation panel of the keyboard, press and hold the Window/Channel () button for 5s until the two indicators both light to switch to the USB joystick mode.

3.2.2 Operating PTZ Control

You can use the keyboard to control PTZ, call preset, patrol and pattern in the live view under USB joystick mode.

Step 1 Open the iVMS-5200 Control Client.

Step 2 Go to **Control Panel>Main View**.

Step 3 Double-click the camera from the device list or drag it to the window to start playing the live video.

 **NOTE**

You can access the Web Client of iVMS-5200 (**Video Surveillance>Video Management>Physical View**) to add the devices. Refer to the User Manual of iVMS-5200 Professional Web Client for details.

Step 4 Operate the PTZ control via USB joystick.

- Move the keyboard joystick to control the PTZ movement of the camera (which supports PTZ function).
- Rotate the joystick in clockwise/anticlockwise to realize zoom in/out.
- Press the left button at the joystick top to capture the picture.
- Press the right button at the joystick top to start recording for the camera.

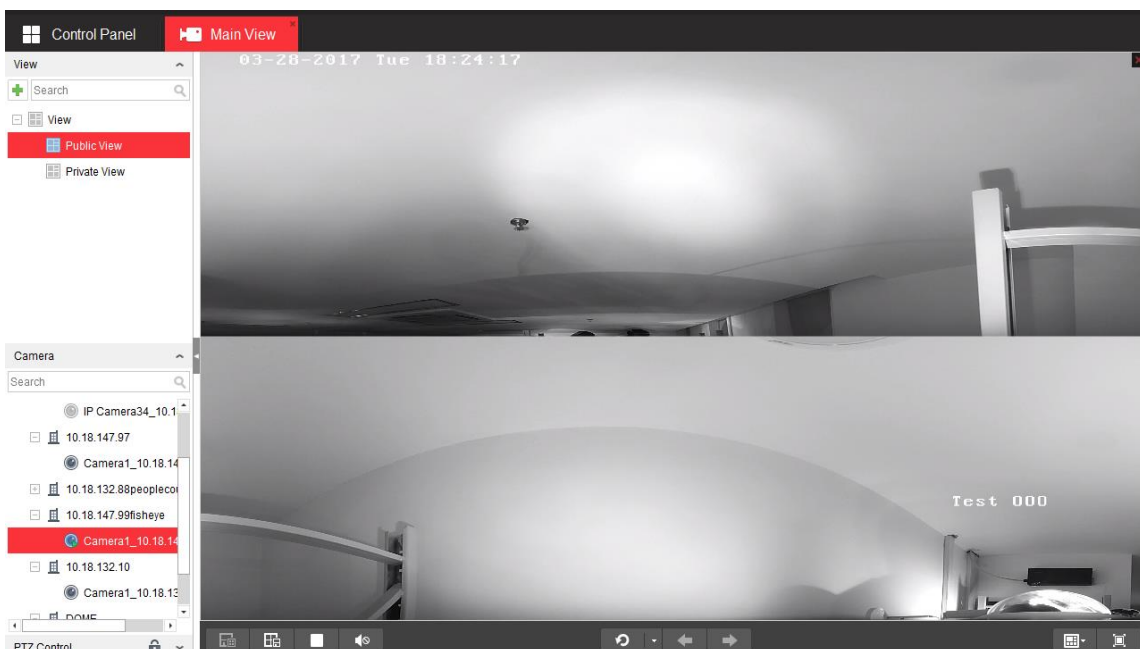


Figure 3-2 PTZ Control

3.2.3 Operating DVR/NVR Control

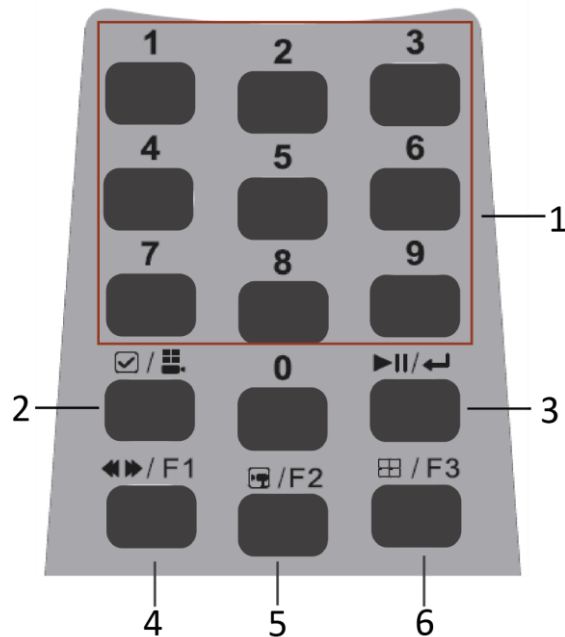



Figure 3-3 Keyboard Buttons

Table 3-1 Description of Keyboard Buttons and Joystick

Index	Name	Description
1	0 to 9 Number Buttons (same with the number buttons on the DVR/NVR control panel)	Press to select displayed channel images corresponding with the selected number buttons in live view or PTZ control; Input numbers or characters in the edit mode; Select channels in all-day playback.
2	Switch	<ul style="list-style-type: none"> ● Press and hold for 5 seconds to switch between joystick mode and keyboard mode of DS-1005KI keyboard; and the DVR/NVR control must be in the joystick mode. ● Enter main menu interface in joystick mode. ● Check the checkbox.
3	Enter (same with Enter button of DVR/NVR)	Confirm operation of menu mode; Check the checkbox and ON/OFF shift; Start/pause in playback; frame forward in single frame play; Pause/recover auto switch in live view.

4	F1 (same with F1 button of DVR/NVR)	Check all list; Control light in PTZ control; Switch between Reverse and Forward in playback.
5	F2 (same with F2 DVR/NVR)	Switch between menu tabs; Switch channels in synchronous playback.
6	F3	Multi-camera switch.
	Joystick	Clockwise rotation for zoom in and counterclockwise rotation for zoom out; Press the left button on the top of the joystick to enter PTZ control interface directly; Press the right button on the top of the rocker to exit and return to the previous menu; The 4 directions (up, down, left, right) of the rocker control respectively the operation of the 4 directions of PTZ control.


 **NOTE**

The functions of buttons may be different when DS-1005KI keyboard controls different types of DVR/NVR devices. Detailed information is in accordance with real devices.

3.3 USB Keyboard Mode

Under USB keyboard mode, you can use the keyboard to control PTZ, switch camera, and switch the window in the live view or video wall interface, as well as capture pictures and record in live view.

3.3.1 Setting USB Keyboard Mode

On the operation panel of the keyboard, press and hold the Window/Channel () button for 5s until only one indicator lights to switch to the USB keyboard mode.

3.3.2 Switching Windows in Video Wall or Live View

You can operate the keyboard in USB keyboard mode to switch the windows in video wall and live view.

 **NOTE**

The following steps introduce the window switch in video wall. The Main View interface of iVMS-5200 Control Client, use the same instructions to switch the window.


Step 1 Open the iVMS-5200 Professional Video Wall Client Software.

 **NOTE**

You can access the Web Client of iVMS-5200 (**Video Surveillance>Video Management>Physical View**) to add the encoding and decoding devices. Refer to the User Manual of iVMS-5200 Professional Web Client for details.

Step 2 Go to Screen Control interface to set the video wall layout and link the video output to the playing window.

Step 3 Go to Video Wall interface, and double-click the camera from the device list or drag it to the window to start playing the decoded video.

Step 4 In the keyboard control mode, press the numeric + OK () buttons to switch the corresponding window.

Example: You can input numeric 504/0504+  button to switch to the sub window 4 of window 5.

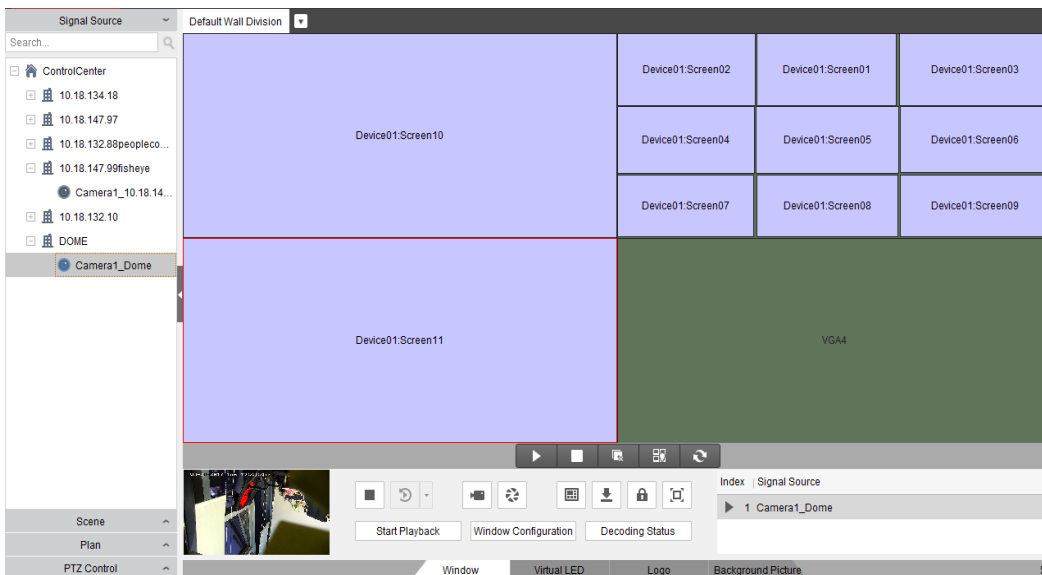


Figure 3-4 Video Wall Control


 NOTE

- The input numeric can be a 4-digit number at most;
- The input numeric in range of 1-99 indicates the number of the selected window.
- When you want to switch the sub-window, you can input a 3-digit or 4-digit numeric, in which the last two numbers indicates the sub-window number. *Example:* if the input numeric is 101, you switch to the sub-window 1 of window 1; and if the input numeric is 1112, you switch to the sub-window 12 of window 11.

3.4 Operate the PTZ control via USB joystick. Refer to the Step 4 of Chapter 3.2 USB Joystick Mode

Under USB joystick mode, you can use the keyboard to control PTZ, call preset, patrol and pattern in the live view interface.

3.4.1 Setting USB Joystick Mode

On the operation panel of the keyboard, press and hold the Window/Channel () button for 5s until the two indicators both light to switch to the USB joystick mode.

Step 1 Operating PTZ Control for the same instructions.


3.5 Setting Files Saving Directory

You can set the saving directory of the recorded video files and captured pictures during the live view or video wall control. You can also configure the FTP settings which can be used for saving the manual recording and pictures to the FTP server.

Step 1 Open the iVMS-5200 Control Client Software.

Step 2 Go to **Control Panel> Local Configuration**.

Step 3 Click the **File** tab to enter the File Saving Path Settings interface.

Step 4 Click the icon  and select a local path for the corresponding files.

- **Saving Path of Video File:** The video file refers to the manual recording files during live view, the clipped video during playback, the downloaded video files during playback and the video files downloaded on Download Center page.
- **Saving Path of Pictures:** The pictures refer to the captured pictures during live view and playback.

Step 5 For FTP settings, enter the IP address, port No., the login user name and password of the FTP server, set a saving path for the uploaded pictures and video files.

Step 6 Click **Save** to save the settings.

The screenshot displays a configuration window with a sidebar on the left and a main content area on the right. The sidebar contains four menu items: 'General' (selected), 'File', 'Keyboard and Joystick', and 'Alarm Sound'. The main content area is titled 'Configuring File Saving Path, and FTP Server Settings, etc...'. It contains three text input fields for file saving paths, each with a browse button (three dots): 'Saving Path of Video File:' (C:/iVMS-5200/Video/), 'Saving Path of Pictures:' (C:/iVMS-5200/Picture/), and 'Saving Path of Audio File:' (C:/iVMS-5200/Audio/). Below these is the 'FTP Settings' section, which includes: 'IP Address:' (empty), 'Port:' (21), 'User Name:' (empty), 'Password:' (empty), and 'Saving Path:' (5200Client with a close button 'x').

Figure 3-5 Keyboard and Joystick Shortcut Functions

Chapter 4 Appendix1: Specifications

Model	DS-1005KI
Compatible System	Window XP/7/8/8.1/10
Interface Type	USB 2.0, DirectX
Control	Joystick (3-axis control, rotating zoom)
Power Supply	5 VDC via USB interface
Operating Temperature	-10 to +55° C (+14 to +131° F)
Operating Humidity	10% to 90% (Non-condensing)
Dimensions	167×177.5×116 mm (6.6×7.0×4.6 inch)
Consumption	≤ 5W

Chapter 5 Appendix2: System Upgrade

Step 1 When the drive is installed, access the keyboard USB with the PC, and it will prompt that device is discovered and auto load the corresponding drive.

 **NOTE**

Make sure the keyboard is in USB keyboard mode before upgrading the device. If the single indicator on the panel does not light, press and hold the **Window/Channel** button for more than 5 seconds to switch to the USB keyboard mode.

Step 2 Search the device.

Open the ButtonBoardDemo software and click **Refresh Device**. The device list will display the current accessed keyboard. (The client should be closed). Remember the corresponding serial number (e.g., COM3) of the keyboard in the list, which will be used for upgrading the device in the following steps.

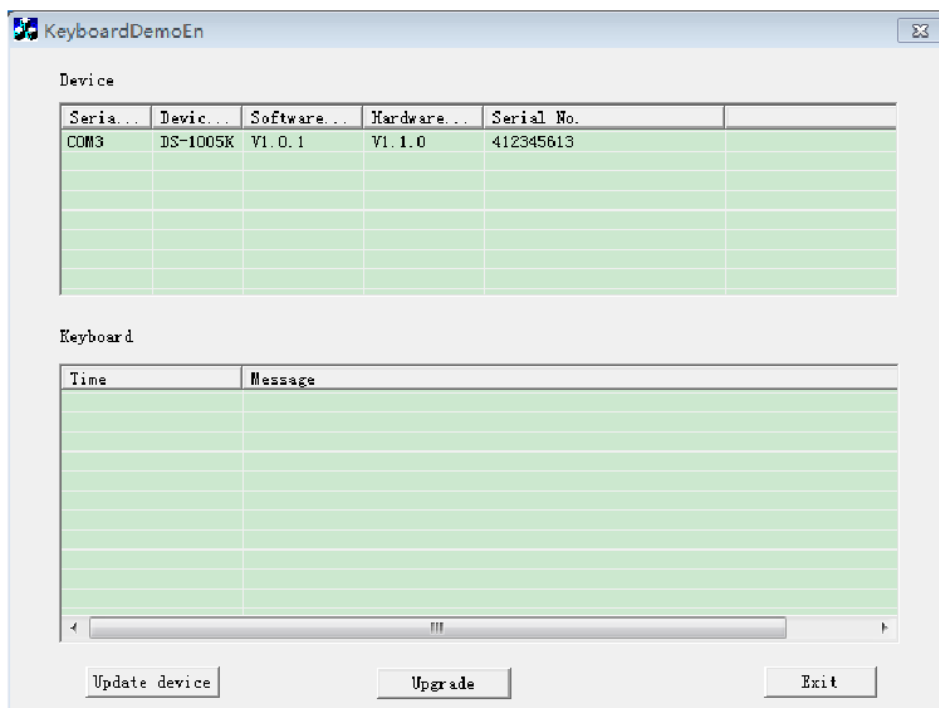


Figure 5-1 Keyboard Demo

Step 3 Select a device from the list and click **Upgrade**.

Step 4 In the prompt window after the upgrade command is sent from the DEMO, click **OK** to continue.

 **NOTE**

Before sending the command, make sure your PC has installed the serial port tool with **Send Ymode** functions, e.g., SecureCRT 6.5.

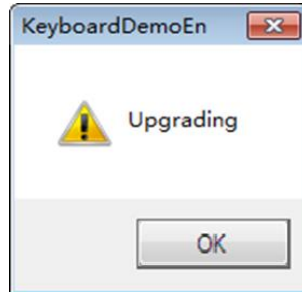


Figure 5-2 Prompt

Step 5 Send upgrade file to upgrade the device.

 **NOTE**

The following steps introduce the serial port tool SecureCRT as the example to upgrade the device.

- 1) Open serial port tool SecureCRT 6.5.
- 2) Select the corresponding serial port of the device (as shown in step2) and configure the port parameters (baud rate: 115200, data bit: 8, parity: none).
- 3) It will print C continuously and the upgrade file is sent directly.

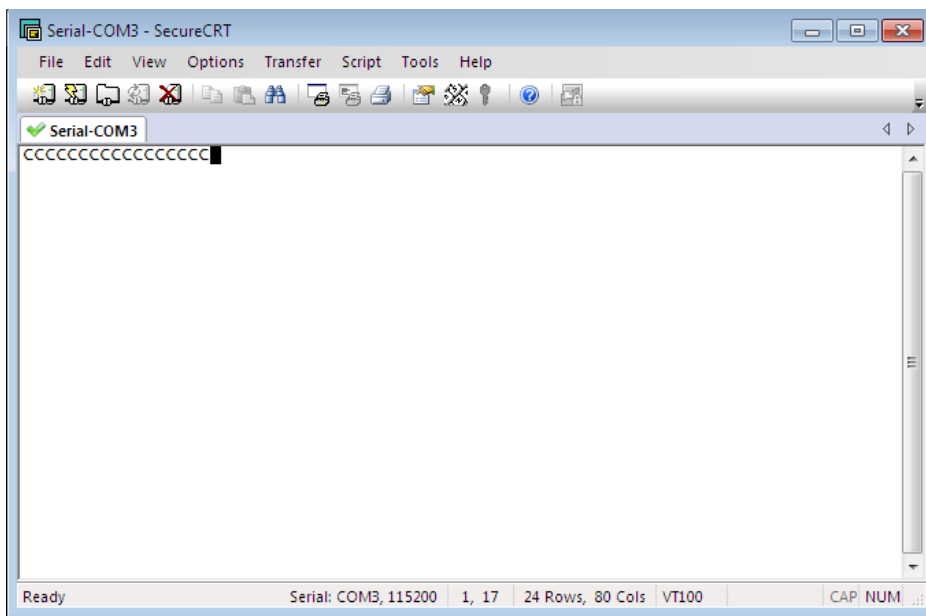


Figure 5-3 SecureCRT

- 4) Click **Send Ymodem** under the menu **Transfer** to enter the path choosing page of upgrade patch.

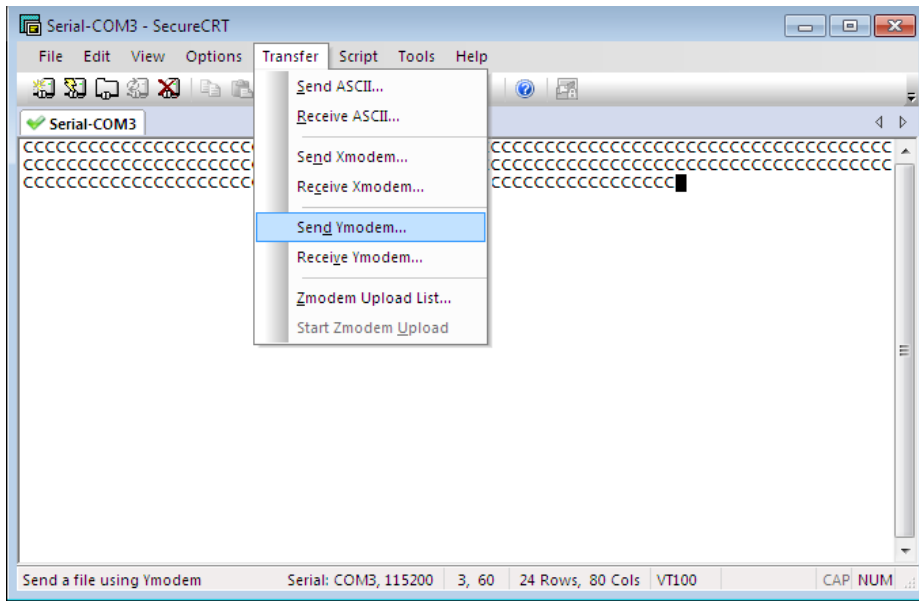


Figure 5-4 Send Command

- 5) Select the upgrade file from the directory and double-click it to add it to the field as shown in the picture below.
- 6) Click **OK** to start upgrading it:

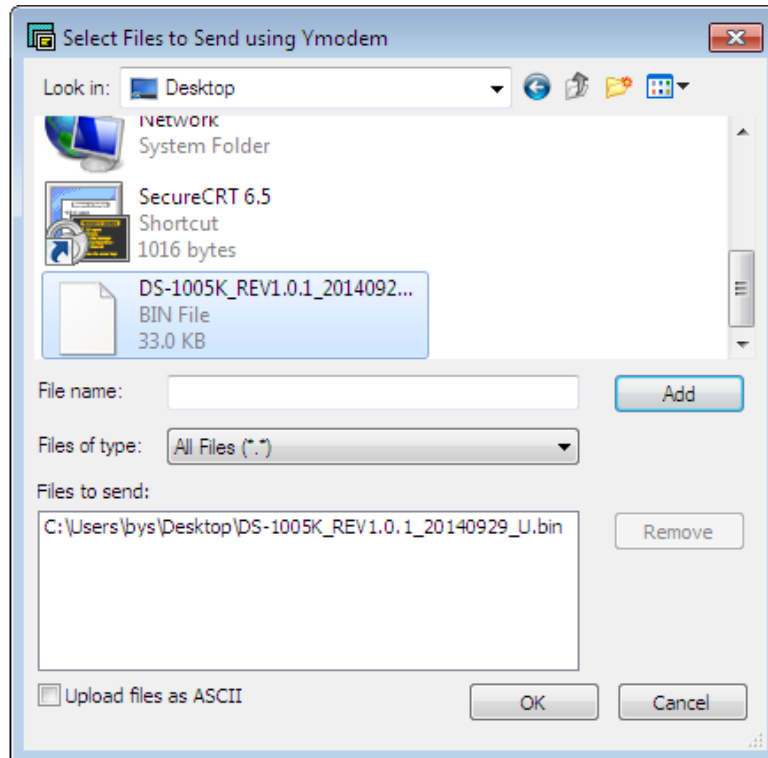


Figure 5-5 Send Upgrade File

- 7) Corresponding prompt is shown when the device is upgraded successfully.

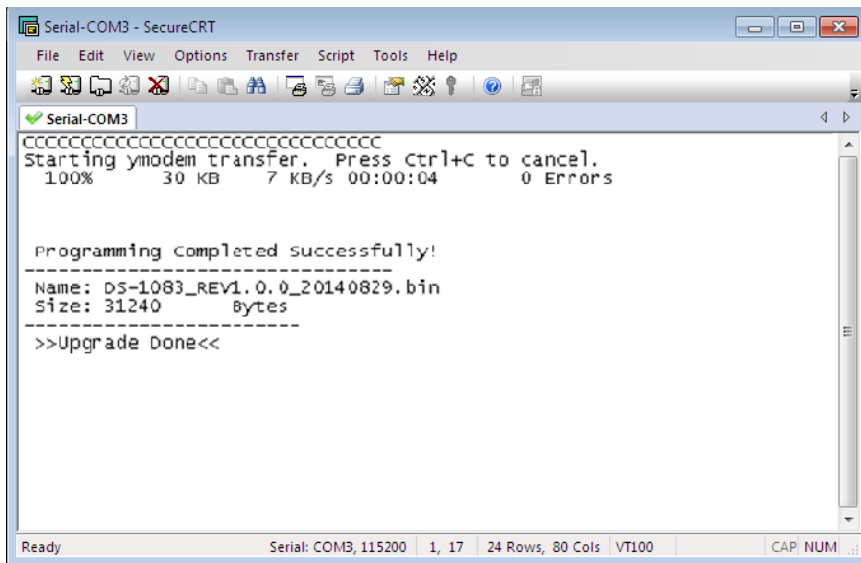


Figure 5-6 Upgrade Completed

 **NOTE**

- When the upgrade is accomplished, please close the current serial port and reboot the keyboard.
- If the upgrade is failed, the digital tube of the keyboard will light always. Reboot the keyboard, open the serial port tool and start to upgrade (step 5).



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