ES1005KI Keyboard



UD.6L0203D1099A01

Regulatory information FCC information

FCC compliance: This equipment has been tested and found to comply with the limits for 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

CE

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 Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC, 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.

A 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 Device Introduction

DS-1005KI keyboard is a kind of USB interface controlling keyboard which supports USB HID protocol; it can be applied with USB joystick mode and supports various programmable keys for users to set custom functions. It is equipped with simple interfaces and the operation is simple. This keyboard can be widely used in public security and transportation as other fields.

1.2 Typical Application



NOTE

Make sure the DVR and PC-DVR connected support the DS-1005KI keyboard access.

DS-1005KI is a USB keyboard independently developed by Hikvision and it can be accessed directly by the client software, platform software of iVMS series, DVR and PC-DVR, and can realize functions such as windows switch, PTZ control, capture, recording, etc.

1.3 Controlling Mode

The DS-1005KI keyboard connects with PC via keyboard USB interface and supports two ways of controlling: USB keyboard mode and USB joystick mode.

DS-1005KI is compatible with the USB joystick via USB HID protocol, and can access to the third-party platform software. It can be applied with USB joystick mode and supports capture,

PTZ control and window switch. The default mode is set as USB joystick mode when it is powered on for the first time; there is no need to install the drive.

USB keyboard mode supports private SDK accessing and functions such as quick switch, PTZ control, capture and recording.



It is required to install a drive before setting the DS-1005KI to USB keyboard mode. Two types of drives can be selected, depending on 32 BIT system or 64 BIT system.

Chapter 2 Device Appearance

2.1 DS-1005KI Keyboard



Refer to the following table for the description of the keyboard:

NO.	Key Name	Function Description						
1	Number Key	USB Keyboard Mode: For selecting window or channel;						
		USB Joystick Mode: For custom shortcuts;						
2	ОК	USB Keyboard Mode: For confirming the input number;						
3	Window/Channel	Press and hold it for 5s to switch between keyboard mode and						
		joystick mode;						
		USB Keyboard Mode: For selecting window switching mode of						
		channel switching mode;						
		(The window indicator lights while in window switching mode;						
		and the channel indicator lights while in channel switching mode.)						
4	Capturing	USB Keyboard Mode: Capture;						
		USB Joystick Mode: Custom shortcut as number 12;						
5	Recording	USB Keyboard Mode: For recording;						
		USB Joystick Mode: Custom shortcut as number 11;						
6	F1, F2, F3	USB Keyboard Mode: Custom Shortcut;						
7	Indicator	Single Indicator: The keyboard is in USB keyboard mode;						
		Double Indicator: The keyboard is in USB joystick mode;						
8	Digital Tube	Display the input number.						

Graphic	Operation	Function
٢	Up	PTZ control mode: Move the PTZ up.
	Down	PTZ control mode: Move the PTZ down.
	Left	PTZ control mode: Move the PTZ left.
Ô	Right	PTZ control mode: Move the PTZ right.
	Contrarotate	Zoom Out(ZOOM-)
	Clockwise Rotate	Zoom In(ZOOM+)
NOTE		

2.2 DS-1005KI Keyboard Joystick

With the joystick moving in different ranges, the PTZ moves with different speeds that can divide in 7 levels of speed.

Chapter 3 Keyboard Application

3.1 USB Keyboard Mode

3.1.1 Setting Keyboard Mode

Press and hold the key **Window/Channel** for 5s, and the keyboard will auto switch its mode. If the single indicator is on, it implies that it is in USB keyboard mode.

3.1.2 Keyboard Control

USB keyboard mode supports window switch between client live view interface and video wall interface, focusing window channel switch and PTZ control functions. The buttons F1, F2 and F3 can be set as functions like previous, next, preset, etc. according to certain needs and it supports capturing and recording functions in the live view interface.

System View Tool Help File iVMS-4200 federica 🛞 🗰 🛗 09:12:09 🔒 🗕 🗖 Control Panel Main View 🚔 Device Management 🛅 Remote Playback Video Wall Enter Video Wall Config 9 0 + 😑 10.16.1.98 Decoder:VGA : Decoder:VGA 2 衝 😂 10.16.1.86 + 😑 10.16.1.232 + 🗐 10 16 1 251 Decoder:VGA 2 coder:VGA 2 10.16.1.72 🛃 😂 10.16.1.253 🛨 😂 10.16.1.11 🛃 😂 10.16.1.35 🛃 🗐 10.16.1.112 + 😋 10.16.1.237 der:VGA 4 Decoder:VGA 7 Þ 😌 🔞 9 Image: 🤚 🔜 🌵 No e-mail account is configured, and all the sending operations are stopped. * =

1. Shortcut Switch:

Click the button **Window/Channel** in the main live view interface or video wall interface, and the window indicator will light. Click the number *I* and the **OK** button, and it will switch to the corresponding window. If the client supports camera switch function, you can click the button **Window/Channel** and the indicator will light; then you click the number **J** and the **OK** button to switch the channel *J* to window *I*.

Example: You can input number 504 or 0504 with the **OK** button as the figure above to switch to the sub window 4 of window 5.

NOTE

• The input number *I* can be at most 4-digit number;

• When the input number *I* is 1-99, it implies the number of the selected window. It can be at most 99 windows;

• When the input number I is 1112, it implies the sub window 12 of window 11. When the input number is 3-digit or 4-digit, the last two numbers implies sub window number, and the first one or two numbers implies the window number. If the input number is 101, the selected window is sub window 1 of window 1; if the input number is 0016, the selected window is window 16.

• When the input number *I* is hundreds (e.g., 100,200), the input number is invalid and the client will not respond.

• The window number and sub window number are counted from left to right and from top to bottom.

- 2. **Joystick:** After selecting window in live view or video wall interface, move the joystick to control the direction and zoom in or zoom out the channel of window. The moving speed of dome is related to the movement of the joystick.
- 3. F1, F2, F3:

		Syst	em Configuration			×
General	Configure t keyboard a	he COM port fo and USB joystic	r DS-1003KI keyboard, :k shortcuts, etc.			
Keyboard and Joystick •	DS-1003KH DS-1003KH Keyboard Ar () Set up	Com Port: NU COM Port: NU Id USB Joystick is shortcuts of keyt	IS: JLL Settings: board and USB joystick for free	quently used functi	ons of the system.	
	Index	Function	PC Keyboard	USB Joystick	USB Keyboard	ń
	2	Speed up				U
	3	Speed down Focus (+)	Ctrl + Home			
	5	Focus (-) Zoom in (+)	Ctrl + End Ctrl + +		Clockwise Rotation	
	7	Zoom Out (-)	Ctrl + -		Anti-clockwise Rotation	
	9	IRIS (-)	Ctrl + Page Down			
	10	Light on				
				Default \	/alue Save	<u> </u>

Click Tool-> System Configuration-> Keyboard and Joystick-> USB Keyboard on client and then configure the corresponding shortcut keys of F1, F2, and F3. Select the window in live view mode or video wall interface and operate according to each shortcut.



• It supports shortcut settings as 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, Pattern; • Speed up, Speed down: Reserved;

• **Previous, Next**: Select the previous window or the next window during the window switch; switch to the previous or next window of channel during the channel switch.

4. Capture, Recording:

	System Configuration ×
General	System Configuration × Set file saving path, (e.g. record files, pictures and device configuation files, etc.). Saving Path of Video File: C:/lvms4200/kideo/ ••• Saving Path of Pictures: ••• C:/lvms4200/capture/ ••• Saving Path of Configuration File: ••• C:/lvms4200/config/ •••
	Default Value Save

Click **Tool**-> **System Configuration**-> **File**; configure the corresponding saving path of pictures and video files. Select the window in the live view interface and press the button on the right side of the joystick to capture or press the button on the left side to record. The pictures and videos will be saved to the configured saving path.

3.2 USB Joystick Mode

3.2.1 Keyboard Parameter Settings

Press and hold the button **Window/Channel** for 5s, and the keyboard automatically switches its mode. When the indicators both light, it shows that the device is in USB joystick mode.

3.2.2 Keyboard Control

It supports PTZ controlling, calling preset, patrol and pattern of client live view interface under USB joystick mode. It supports capturing and customizing key from key 1 to key 12.

	_	System	Configuration	_	_	×				
General	Configure keyboard	the COM port for D and USB joystick s	S-1003KI keyboard, hortcuts, etc.	Confi	gues the COM part for					
Keyboard and Joystick •	DS-1003KI Keyboard Settings: Configure the CUM port for DS-1003KI Keyboard, Keyboard and USB Joystick Settings: Image: Configure the CUM port for DS-1003KI Keyboard and USB Joystick Settings: Image: Configure the CUM port for DS-1003KI Keyboard, Keyboard and USB Joystick Settings: Image: Configure the CUM port for DS-1003KI Keyboard and USB Joystick Settings: Image: Cum port for DS-1003KI Keyboard, Keyboard and USB Joystick Settings: Image: Configure the CUM port for DS-1003KI Keyboard and USB Joystick Keyboard and USB Joystick for frequently used functions of the system.									
	Index	Function	PC Keyboard	USB Joystick	USB Keyboard	*				
	13 F	Preview PTZ Switch		12						
	14	Upward	Ctrl + Up	Up	Up					
	15	Upper Right		Upper Right	Upper Right					
	16	Rightward	Ctrl + Right	Right	Right	U				
	17	Lower Right		Lower Right	Lower Right					
	18	Downward	Ctrl + Down	Down	Down					
	19	Lower Left		Lower Left	Lower Left					
	20	Leftward	Ctrl + Left	Left	Left					
	21	Upper Left		Upper Left	Upper Left					
	22	Auxiliary Focus				•				
				Defaul	t Value Save	•				

Click the **Tool**-> **System Configuration**-> **Keyboard and Joystick**-> **USB Joystick** on client and then configure the corresponding shortcut keys of number 1~12. Select the window in live view mode interface and operate according to each shortcut.

It supports shortcut settings as **Speed Up**, **Speed Down**, **Focus**, **IRIS**, **Preset**, **Patrol**, **Pattern**, etc.;

Live view PTZ switch: It indicates that the joystick is for operating the window's corresponding channel PTZ control or is for different window switch. Click the shortcut key in client live view mode; it will prompt in the lower right corner in the desktop that the current USB joystick is set to be PTZ control mode, indicating that the joystick is for controlling PTZ currently. Click the shortcut key again and it will prompt that the current USB joystick is set to be window switch mode, indicating that the joystick is for selecting different windows live view.



- Number 10: Represents button 0 of USB keyboard;
- Number 11: Represents button **Record** in the left of the top of USB keyboard;
- Number 12: Represents button **Capture** in the right of the top of USB keyboard;

• Under USB joystick mode, custom keys only support number 1-12, as corresponding to number 0-9, left button and right button on the joystick. The buttons F1, F2, F3, Enter and Switch are not available.

Appendix1: Specification

Model	DS-1005KI
Compatible System	Window XP/7/8/8.1
Interface Type	USB 2.0, DirectX
Control	Joystick (3-axis control, rotating zoom)
Dimensions	167*177.5*116(mm)
Operating Temperature	-10 °C ~+55 °C
Operating Humidity	10% ~ 90% (Non-condensing)
Power Supply	5V DC via USB
Consumption	≤5W

Appendix2: Device Upgrade

Steps:

1. Upgrade Preparation:

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



It only supports device upgrade under USB keyboard mode.

2. Search Device:

Open DEMO and click refresh device, the device list will display the current accessed keyboard. (The client should be closed).

Seria J	Devic	Software	Hardware	Serial No.		
COM3 I	DS-1005K	V1.0.1	V1.1.0	412345613		
(eyboard						
Keyboard Time		Message			 	
Keyboard Time		Message			 	
Keyboard Time		Message				
Keyboard Time		Message				
Keyboard Time		Message			 	
Keyboard Time		Message				
(eyboard Time		Message				

3. Upgrade

Select one device and click to upgrade it. It will prompt the window as below after the upgrade order is sent from the DEMO. Click **YES**.

Keyboard	DemoEn 🔜
4	Upgrading
	ОК

4. Send Upgrade File:

Open serial port tool SecureCRT, select the corresponding serial port of the device and open the window. It will print C continuously and the upgrade file can be sent directly:

G Serial-COM3 - SecureCRT	
File Edit View Options Transfer Script Tools Help	
19 19 19 19 19 19 19 19 19 19 19 19 19 1	Ŧ
Serial-COM3	4 Þ
	<u> </u>
	=
	T
Ready Serial: COM3, 115200 1, 17 24 Rows, 80 Cols VT100	CAP NUM IH

Click **Send Ymodem** under the menu **Transfer** to enter the path choosing page of upgrade patch as shown below:

🕞 Serial-COM3 - SecureCRT		
File Edit View Options	Transfer Script Tools Help	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u>S</u> end ASCII	-
Serial-COM3	<u>R</u> eceive ASCII	4 Þ
	Se <u>n</u> d Xmodem	• • • • • • • • • • • • • • • • • • •
	Re <u>c</u> eive Xmodem	
	Sen <u>d</u> Ymodem	
	Recei <u>v</u> e Ymodem	
	Zmodem Upload List	
	Start Zmodem <u>U</u> pload	
		E
Send a file using Ymodem	Serial: COM3, 115200 3, 6	0 24 Rows, 80 Cols VT100 CAP NUM .f

Select the upgrade patch in the path choosing page and double click it to add it to the red box as shown in the picture below, click **OK** to start upgrading it:

🗖 Select	Files	to) Sen	d us	sing	Ym	oden	n								x
Look in:	2	De	esktoj	2						•	6	Ì	Þ	•		
	Sys	ste	/ <mark>огк</mark> em Fo	olde	r											*
1	Se Se	cu	reCR	T 6.	5											
	101	16	byte	s												
	DS BIN	-1 N F	005K File	_RE\	V1.0	.1_2(01409	92								Ш
	55.	.0	KB						J			_	_			-
File name:														Ado	1	
Files of typ	be:	A	ll File	s (*.*	")							•				
Files to se	nd:												_			_
C:\Users	\bys\	рe	.sktop	n/DS	-100)5K_F	REV1	.0.1_	2014	10929	_U.b	in		Remo	ve	
🔲 Upload	files	as	; ASC	II							ОК			Can	cel	
																зđ

It will pop up the words as shown in the picture below after the upgrade is processed successfully.

🝙 Serial-COM3 - SecureCRT	- • •
File Edit View Options Transfer Script Tools Help	
11 N L 41 X L A K L 5 K H L 5 S A L 7 X 1 0 I 7	Ŧ
Serial-COM3	۹ ۵
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	
Programming Completed Successfully!	
Name: D5-1083_REV1.0.0_20140829.bin Size: 31240 Bytes	
>>Upgrade Done<<	
Ready Serial: COM3, 115200 1, 17 24 Rows, 80 Cols VT100	CAP NUM 3

NOTE

When the upgrade is accomplished, please close the current serial port and reboot the keyboard.



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