

Instruction Manual

Three-in-one processor **HD-KV410**

V1.0 20240619



1 Introduction

HD-KV410 is a powerful 3-in-1 controller integrating single-screen video processing and sending card

functions .

Features:

- (1) Load range: 2.6 million pixels, maximum width 3840, maximum 2500;
- (2) 2- channel digital video input, USB playback of video and picture files;
- (3) 2 HDMI audio inputs (choose one for playback), 1 audio output;
- (4) Integrated sending card function, 4 Gigabit Ethernet output ports.
- (5) Support limited to full conversion;
- (6) Support one-key brightness adjustment, no complicated operation required;
- (7) Supports locking buttons to prevent display screen abnormalities caused by misoperation;
- (8) Support arbitrary switching, cropping and scaling of video signals;
- (9) Support infrared remote control (optional).



2 Application Scenarios



3 Appearance

Front Panel



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	İ	
1	switch	Control AC power input
	RUN	Operation status indicator
	IR	Receive infrared remote control signal
	BRIGHT+	Brightness + / Play a program file on the USB disk
	BRIGHT-	Brightness - / Play the next program file in the USB flash drive
2	HDMI 1	Select HDMI 1 signal playback / Pause or play the USB program
	HDMI 2	Select HDMI 2 signal playback / Stop playing the USB program
	USB	Select to play the USB program / Exit U disk quick switch mode
	SCALE	Partial /full screen switch button/U disk program loop playback
	FREEZE	One-click freeze /video and picture switching
		idu
Rear Par	nel	

Rear Panel

			ED2 LED1 INPUT AUDIO CTRL HDMI 2 HDMI 1 USB OUT USB-B DC 12V				
9	()	1	2 3 4				
input in	terface						
Serial numbe r	Interface Name	quantity	illustrate				
2	USB	1	USB2.0 input interface, compatible with USB3.0				
		-	Can insert U disk to play videos and pictures				

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Shenzhen Huidu Technology Co., Ltd.



			Video file formats: mp4, avi, mpg, mkv, mov, vob and rmvb; Video encoding: MPEG4(MP4), MPEG_SD/HD, H.264(AVI, MKV), FLV; Image file formats: jpg, jpeg, png and bmp Video resolution: Maximum support 1920×1080@30Hz
	HDMI	2	HDMI input interface Interface type: HDMI-A Signal standard: HDMI1.4 backward compatible Resolution: VESA standard, ≤1920×1080@60Hz Support audio input
4	power supply	1	DC 12V 1.5A
Output	Interface		
Serial numbe r	Interface Name	quantity	illustrate
1	Gigabit Ethernet	4	Used to cascade receiving cards to transmit RGB data streams; each network port controls 650,000 pixels. Support docking multi-function card
3	AUDIO OUT	1	TRS 3.5mm dual-channel audio output interface Connect to an audio amplifier for high-power external speakers

Control	interface			
Serial numbe r	Interface Name	quantity	illustrate	
3	USB-B	1	Connect to a computer for debugging the device	



4 Dimensions





5 Product Use

5.1 Operation steps

- step 1 Connect the display power supply to power on the screen
- Step 2 Connect a playable input source to the HD- KV410
- Step 3 Use USB-B serial cable to connect to computer to debug screen parameters

5.2 Input source switching

HD - KV410 supports simultaneous access to three signal sources and can switch to the input source to

be played at any time according to needs.

Switch input source

There are three ways to switch input sources. One is to press the input source button on the front panel to switch quickly. One is to select and switch the input source through the software HDSet. One is to select and switch the input source through the remote control (remote control optional).

5.3 Zoom settings

HD - KV410 supports full screen zoom and point-to-point zoom modes

Full Screen Zoom

The system adaptively scales the current input resolution to full-screen display according to the screen resolution in the display configuration.

peer to peer

Point-to-point display, without scaling, press the SCALE button, the SCALE button indicator lights up and the display is point-to-point.



5.4 USB playback

HD - KV410 supports playing pictures or video files stored in USB flash drives.

When the media type is "Picture", it also supports turning on and off "Picture Effects" and setting the

interval between picture switching. Such operations need to be set on the software HD Set , as shown

below

10 VP Setting(WII	N1)			1.210		×
Signal Source			Window Resolution: 1920x1080			
0	۲					
HDMI1	HDMI2	USB				
Convenient Opera						
0		0				
Scale	Black Screen	Freeze				
*		100%				
↓ >		50				
Function						
Layout Set	Display Cut	EDID Set				
Layout Set	bispiay cut	EDID Set				
Image Quality	Reset					
Win Usb						
	File Name					
	0	S 🗧 🕏				
ommand fails!					1	Clos
						54036

- Play the previous file of the current file;
- II Play or Pause;
- Play the next file of the current file;
- Stop play;
- Play mode switch;
- Switch the playback file category;



Display mode switching;

Special effects turned on.

Playback Controls

USB " in the input source area of the front panel to switch to the USB input source, press the USB button

again to enter the USB playback control, after enabling the USB playback control, the HDMI 1 and HDMI

2 button lights are on, and the corresponding multiplexing function of the button is enabled. Press USB

again to exit the playback control.

BRIGHT+ ₩ Play the previous file of the current file;

BRIGHT- ▶ Play the next file of the current file;

HDMI 1^M Play or Pause;

HDM2 Stop play;

SCALE Play mode switch (sequential play or single file loop);

FREEZE Switch the playback file category.

5.5 Button lock

HDMI1 + FREEZE Press HDMI1, FREEZE, 3S at the same time, the key lock function is turned on, HDMI1, HDMI2, USB lights are all on, and the lights of non-current input sources flash. When in the key lock state, press HDMI1, FREEZE again at the same time for 3S to release the key lock.

5.6 Button indicator light description

1) When the device is powered on (i.e. when it starts up), the indicator lights HDMI1, USB, and FREEZE light up first, and then all lights up. After the startup is complete, RUN flashes, and the input source light that was last saved flashes.





- RUN: System operation indicator. If the green light flashes, the operating system is running normally.
 If the green light is always on or off, the system is running abnormally.
- 3) The indicator light of the currently selected input source with signal input is always on, and the indicator light of the currently selected signal source without signal flashes;
- 4) When the key lock is enabled, the indicator light of the current input source is always on, and the indicators of other input sources flash;
- 5) USB playback, in quick operation mode, the HDMI1, HDMI2 USB indicators are always on;
- 6) In upgrade mode, the HDMI2 and USB FREEZE indicators flash;
- 7) In the debt collection mode, all indicator lights are always on when the payment is due;
- 8) In point-to-point mode (local mode), the SCALE indicator light is always on;
- 9) In freeze mode, the FREEZE indicator light is always on.

5.7 Screen layout

HD - KV410 supports users to manually adjust the image size and position, as shown below



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Signal Source			Window Resolution: 1	920x1080				
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HDMI1	HDMI2	USB						
Convenient Operat								
0	0	0						
Scale	Black Screen	Freeze						×9.
*		100%						
		50						
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Command fails!							Clos	e

5.8 Interception

HD-KV410 supports users to manually intercept input signals, as shown below

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<pre>i low i /pre>	Image Quality Reset n Usb Display Cut ID Signal Source Size Cut Resolution Cut Y	ad 64 0 64 0 0 0 0 0
	HUMI HUMI HUM2 Scale Elack Soreen Freeze Elack Soreen Freeze Elack Soreen Freeze VP Cut Set Inage Quality Reset Inage Quality Reset Inage Quality Reset Inage Quality Signal Source Size Cut Resolution I Signal Source Size Cut Resolution Set	ad 64 0 64 0 0 0 0 0
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Such Back Steven In Back Steven <td>Scale Elack Soreen Freeze</td> <td>ad 64 0 64 0 0 0 0 0</td>	Scale Elack Soreen Freeze	ad 64 0 64 0 0 0 0 0
Image: Size Size Size Size Size Size Size Size	I 100% S0 notion Layout Set Bisplay Cut EDID Set Image Quality Reset Out Enabl Cut Width Cut Height Cut Width Cut Height Cut Y Set	ad 64 0 64 0 0 0 0 0
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5.9 EDID settings

Modify the input resolution, you can customize the input resolution; HDMI input , if the display is green,



VP Setting(WIN	11)			— 🗆 🗙
Signal Source —			Window Resolution: 1920x1080	
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HDMI1	HDMI2	USB		
Convenient Opera	tion	here and the second sec		
۲	0	۲		
Scale	Black Screen	Freeze		
*		100%		<u></u>
		50		
Function			VP EDID Setting(WIN1)	
Layout Set	Display Cut	EDID Set	Fix color mistake(HIMT)	
Image Quality	Reset		Resolution 1920x1080@60Hz -	
			Width 1920 ‡	
Win Usb	Source Size Cut :	Presidentia	Height 1080 \$	
win in Signal :	Source Size Cut	Resolution	нд 60 -	
			Set Close	
	Add	Delete		
	Add	Delete		

check the HDMI correction color cast, and the setting is successful. As shown below

5. 10 Image quality adjustment

HD-KV410 supports users to manually adjust the image quality of the output image, making the large-screen display more delicate and bright, and improving the display effect. When adjusting the image quality, you need to observe and adjust it at the same time, and there is no specific reference value.

This type of operation requires settings on the software HDSet , as shown below.



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VP Setting(WIN1)		- 🗆 ×	
Signal Source	Window Resolution: 1920x1080		
HDMI1 HDMI2 USB			
Convenient Operation			
<u> </u>			
Scale Black Screen Freeze			
* 100%			
₽ 50</th <td>VP Quality Setting(WIN1)</td> <td></td> <td></td>	VP Quality Setting(WIN1)		
Function Layout Set Display Cut EDID Set Image Quality Reset Win Usb Win Usb Win ID Signal Source Size Cut Resolution Add Delete	Brightness 50 ♀ Sharpness 50 ♀ Contrast 50 ♀ Saturation 50 ♀ Hue 50 ♀ Color Temperature warm ♥ Re 0 ♀ Gr 0 ♀ B 0 ♀ Set Close		

5.11 Factory Reset

HD-KV410 supports factory reset of the device, password 1 68, as shown below

🙆 VP Setting(WII	N1)				
Signal Source			Window Resolution: 1920x1080		
	0	0			
HDMI1	HDMI2	USB			
Convenient Opera					
0		0			
Scale	Black Screen	Freeze			
*		100%			
		50			
unction					
Image Quality	Reset		Password OK Exit		
Vin Usb	Source Size Cut 1	Recolution	UK Exit		
in in organiz					
	bba	Delete			



5.12 Remote Control (Optional) Description



other instructions:

1. Welcome to choose Huidu Technology products. There may be slight differences between the product pictures in the specification and the actual appearance. If you have any questions, please contact technical support or salesperson for confirmation.

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