

4x1 HDMI Matrix Switch with Picture-in-Picture – 1080p

VS421HDPIP



*actual product may vary from photos

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FCC Compliance Statement

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

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by StarTech.com could void the user's authority to operate the equipment.

Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (B)/NMB-3(B)

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Introduction

Packaging Contents

- 1x 4-Port HDMI Switch w/PAP
- 1x Remote Control
- · 2x Mounting brackets
- 1x Universal Power Adapter (NA/UK/EU)
- · 1x Instruction Manual

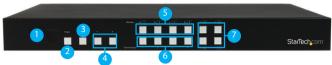
System Requirements

- Up to 4 x HDMI-enabled Video Source Devices (i.e. computer, Blu-ray Player)
- Up to 1x HDMI-enabled Display Devices (i.e. television, projector)
- Up to 5x M/M HDMI cables for your display, and video sources



Product Diagram

Front View



- 1. IR Sensor
- 2. Power Button / LED
- 3. Menu Button / LED
- 4. Menu Operation Buttons / LEDs
- 5. Input Selection Buttons / LEDs
- 6. Picture-in-Picture Selection Buttons / LEDs (A-H)
- 7. All Display Operation Buttons / LEDs (E-H)

Back View



- 1. HDMI Input Ports
- 2. HDMI Output Port
- 3. LAN Port
- 4. USB Service Port
- 5. DB9 Service Port
- 6. Power Adapter Port



Hardware Installation

- Connect up to four HDMI cables (not included) from each of your HDMI video source devices (i.e. computers, Blu-ray Players) to each of the HDMI input ports on the matrix switch.
- Connect up to an HDMI cable (not included) from the HDMI output port on the matrix switch to the HDMI input port on your display device (i.e. televisions, projectors).
- Connect the power adapter from an available power outlet to the Power adapter port the Matrix switch.
- 4. (Optional) If you would like to control your Matrix Switch over your network, connect a network cable (not included) from the LAN port on the matrix switch to an available LAN port on your network device.

Hardware Operation

Full Screen Display Operation

- 1. Press the Output select button (that corresponds with the numbered output display) you wish to select.
- 2. Your selected video input will now be displayed on your video output.

Dual Mode Picture-in-Picture Operation

- Select your primary video input, by pressing the Output select button (that corresponds with the numbered output display) you wish to select.
- 2. Press the Picture-in-Picture Selection Button (A through D) that corresponds with your desired secondary video output.

Note: A through D represents video Inputs 1 through 4 respectively.

3. Your secondary display is displayed along with your primary display.

All Input Display Operation

- Press the All Display button (E through H) that corresponds with your desired display configuration.
- 2. All Video sources will now display in your desired video output.

Note: The Audio output will be the source device connected to Input 1.



On Screen Display Menu

The OSD menu gives you access to advanced functionality. The below table lists each OSD menu option. The description field outlines the functionality of each menu selection.



Main Menu	Sub Menu	Sub Menu	Adjustments	Default	Description
	Output Re	esolution	480P, 579P, 720P50/60, 1080P24/25/ 30/50/60, 1024x768, 1280x800, 1280x1024, 1366x768, 1440x900, 1600x900, 1600x1200, 1680x1050, 1920x1200, NATIVE	720p60	Enables you to select your desired output resolution.
		Returns to main menu.			
	OSD Settings	Info display	On/Off	Off	
I/O Setup		H Offset	0~20 (5)	5	Enables you to adjust the specified
		V Offset	0~20	5	
		Timeout	Off~50	Off	attributes in
		Gain	0~10	2	relation to the On the Screen display positioning and operation. Note: TIMEOUT = OFF means MENU and INFO will continue showing on the screen
		Menu Back			Returns to previous menu.
		Returns to main menu.			

		CH 1	0~100	50	
	Brightness	CH 2	0~100	50	
	Adjust	CH 3	0~100	50	Enables you
		CH 4	0~100	50	to adjust the specified
		CH 1	0~100	50	attributes for your desired
Image Adjust		CH 2	0~100	50	picture quality.
	Contrast	CH 3	0~100	50	
	Adjust	CH 4	0~100	50	
			Restores default image settings.		
		Returns to Main Menu.			
			CH1 Wxxx F		
		Size	Width Unit		Enables you to physically
			Width Ten		
			Width Hund	dred	define the size of the video
			Height Unit		source on your display.
			Height Ten		
Window	Channel 1		Height Hundred		
Setup	Select		CH1 Hxxx Vxxx		
			Horizontal Unit		Enables you
			Horizontal		to physically define the
		Position	Horizontal Hu	ndred	position of the
			Vertical U		video source on your display.
			Vertical Te		•
			Vertical Hun	dred	

		lmage Output	On/Off	On	Enables or disables the output of the specific video source.
	Channel 1 Select	Priority	CH1->4, CH2 -> 3, CH 3->2, CH4->4	CH1->4, CH2->3, CH 3->2, CH4->4	Enables you to define the device priority for automatic switching.
			Window Reset		Restores your default settings for the specified source device.
			Menu Exit		Returns to Main Menu.
Window		Size	CH1 Wxxx Hxxx		Enables you to physically define the size of the video source on your
Setup			Width Unit		
			Width Ten		
			Width Hundred		
			Height Unit		
			Height Ten		display.
	Channel 2		Height Hundred		
	Select		CH1 Hxxx Vxxx		
			Horizontal	Unit	Enables you to physically define the
	7		Horizonta	ten	
		Position	Horizontal H	undred	position of the video
			Vertical U	Vertical Unit	
	· · · · ·		Vertical T	en	your display.
			Vertical Hundred		

		lmage Output	On/Off	On	Enables or disables the output of the specific video source.
	Channel 2 Select	Priority	CH1->4, CH2 -> 3, CH 3->2, CH4->4	CH1->4, CH2-> 3, CH 3->2, CH4->4	Enables you to define the device priority for automatic switching.
			Window Reset		Restores your default settings for the specified source device.
			Menu Exit		Returns to Main Menu.
Window		Size	CH1 Wxxx Hxxx		
Setup			Width Unit		Enables you
			Width Ten		to physically define the
			Width Hun	Width Hundred	
			Height Unit		video source on your display.
			Height Ten		
	Channel 3		Height Hundred		
	Select		CH1 Hxxx Vxxx		
			Horizontal	Unit	Enables you to physically define the
			Horizonta	ten	
		Position	Horizontal Hundred		position of the video
			Vertical U	nit	source on
			Vertical T	en	your display.
			Vertical Hundred		

		lmage Output	On/Off	On	Enables or disables the output of the specific video source.
	Channel 3 Select	Priority	CH1->4, CH2 -> 3, CH 3->2, CH4->4	CH1->4, CH2-> 3, CH 3->2, CH4->4	Enables you to define the device priority for automatic switching.
			Window Reset		Restores your default settings for the specified source device.
			Menu Exit		Returns to Main Menu.
Window		Size	CH1 Wxxx	Hxxx	
Setup			Width Unit		Enables you
			Width Ten		to physically define the
			Width Hun	Width Hundred	
			Height Unit		video source on your display.
			Height Ten		
	Channel 4		Height Hundred		
	Select		CH1 Hxxx Vxxx		
			Horizontal	Unit	Enables you to physically define the position of
			Horizontal	ten	
		Position	Horizontal Hı	undred	
			Vertical U	Init	the video source on
			Vertical T	en	your display.
			Vertical Hur	ndred	

	lmage Output	On/Off	On	Enables or disables the output of the specific video source.
Channel 4 Select	Priority	CH1->4, CH2 -> 3, CH 3->2, CH4->4	CH1->4, CH2-> 3, CH 3->2, CH4->4	Enables you to define the device priority for automatic switching.
		Restores your default settings for the specified source device.		
		Returns to Main Menu.		
		Enables you to specify a label for each video		
Labal Calaas				
Label Select		output.		
		Returns to previous menu.		
	FAV 1 Store			Enables you
		to access the save		
Favours		and recall features from		
Store		the OSD menu.		
	Menu Exit			Returns to previous menu.
	Returns to Main Menu.			
-	Techcom			

Window Setup

		Mirror	On/Off	Off	Enables you to mirror the specified video source on your display.
	Channel 1	Fade In- Out	Off/1.0/1.1/1.2 Convert /1.3/1.4 /1.5/1.6/1.7/1.8/ 1.9/2.0/2.1/2.2/ 2.3/2.4/2.5/2.6/ 2.7/2.8/2.9/3.0	Off	Enables you to implement transition effects while switching between video sources.
	Convert	Rotation	R90/L90/Up-Side Down180/Off	Off	Enables you to rotate the video source on your display.
			Restores default Convert settings for the specified display.		
			Returns to previous menu.		
			Enables you to mirror the specified video source on your display.		
	Channel 2 Convert	Fade In- Out	Off/1.0/1.1/1.2 Convert /1.3/1.4 /1.5/1.6/1.7/1.8/ 1.9/2.0/2.1/2.2/ 2.3/2.4/2.5/2.6/ 2.7/2.8/2.9/3.0	Off	Enables you to implement transition effects while switching between video sources.
ıal				Star	Tech s om

Window Convert

		Rotation	R90/L90/Up-Side Down180/Off	Off	Enables you to rotate the video source on your display.
	Channel 2 Convert		Restores default Convert settings for the specified display.		
			Returns to previous menu.		
t	Channel 3 Convert		Enables you to mirror the specified video source on your display.		
		Fade In- Out	Off/1.0/1.1/1.2 Convert /1.3/1.4 /1.5/1.6/1.7/1.8/ 1.9/2.0/2.1/2.2/ 2.3/2.4/2.5/2.6/ 2.7/2.8/2.9/3.0	Off	Enables you to implement transition effects while switching between video sources.
		Rotation	R90/L90/Up-Side Down180/Off	Off	Enables you to rotate the video source on your display.
		Window Reset			Restores default Convert settings for the specified display.
				<u> </u>	



Window Convert

	Channel 3 Convert		Menu Exit		Returns to previous menu.
			Enables you to mirror the specified video source on your display.		
	Channel 4 Convert	Fade In-Out	Off/1.0/1.1/1.2 Convert /1.3/1.4 /1.5/1.6/1.7/1.8/ 1.9/2.0/2.1/2.2/ 2.3/2.4/2.5/2.6/ 2.7/2.8/2.9/3.0	Off	Enables you to implement transition effects while switching between video sources.
		Rotation	R90/L90/Up- Side Down180/ Off	R90/L90 / Up-Side Down180 /Off	Enables you to rotate the video source on your display.
			Restores default Convert settings for the specified display.		



Window Convert

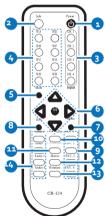
	Minimum For R	000~255	0	
	Maximum For R	000~255	15	
	Minimum For G	000~255	0	The Chromakey
Chromakey Setup	Maximum For G	000~255	15	Setup section enables you to isolate a particular color for chroma keying special effects.
	Minimum For B	000~255	0	
	Maximum For B	000~255	15	
	Switch			
		Exit	Returns to main menu	
	IP Mode	Static/DHCP	DHCP	
	Static Set	IP/Ma	ask/Gate	
	Byte1 High	XXX 192 255 192	000~255	
Ethernet	Byte2	XXX 168 255 168	000~255	Enables you to define Network
Setup	Byte3	XXX 5 255 5	000~255	communication protocols for remote
	Byte4 Low	XXX 159 0 254	000~255	operation.
	Re-Link	No	o/Yes	
		Exit		7
	Static/ DHCP IP	LINKED/N	NOT LINKED	



			<u>:</u>
	IP	IP/Mask/Gate	
Ethernet	Mask	XXX.XXX.XXX	
Setup	Gate	XXX.XXX.XXX	
	Мас	XXX.XXX.XXX	
		Sink HDMI / DVI	
Information		Model	Enables you to
		Native	view the technical specifications of the
		F/V Version	specified attributes.
	M	enu Exit	Closes OSD menu.

IR Remote Control Operation

An IR remote control is included with the VS421HDPIP for hassle-free remote operation. Please review the legend below for a detailed description of each remote control function.



- 1. **Power:** Press this button to switch on the device or press it again to set it to standby mode.
- 2. Info: Press this button to show the device's firmware version.
- 3. Input CH 1~4: Press these buttons to rotate HDMI 1~4 input source on each

channel to be

4. **WA~WH:** Press these hot keys to select the screen setting where WA~WD are display a full screen of each channel and WE~WH are a different combination of a full screen setting with all 4 channels.

Note: Functions are limited to Window A to D. The system will force to switch to Window A when operate under Window E~H.

- 5. Mute: Press this button to disable the audio from HDMI output port.
- ▲▼▶◀ & OK: Press this buttons to scroll through the OSD selection and press OK to enter and confirm the setting.
- 7. Menu: Press this button to enter into the OSD menu.
- 8. Exit: Press this button to exit the OSD menu or the OSD settings.
- 9. FAV. 1~4: Press these buttons to bring up the customized screen settings.
- 10. **Fade-In-Out:** Press this button to switch on or off the Fade-in-out function.
- 11. **Chromakey:** Press this button to enter into Chroma function where CH 1 is the background and CH 2 is the top image.
- 12. Mirror: Press this button to display the screen in mirror image.ç
- 13. **Rotation:** Press this button to rotate the image 90° left and right or 180° upside down.
- 14. **Audio 1~4:** Press these buttons to select audio from HDMI input source 1~4.



RS232 Protocols

Baud Rate: 115200bps

Data Bit: 8 bits Parity: None

Flow Control: None

Stop Bit: 1

RS232 Telent Commands

Note: All commands will be not executed unless followed with a carriage return (0x0D) and commands are case-sensitive.

RESO 0~18	SET OUTPUT RESOLUTION	
	(0) 480p, (1) 576p, (2) 720p 50Hz, (3) 720p 60Hz, (4)	
	1080p 24Hz, (5) 1080p 25Hz, (6) 1080p 30Hz, (7) 1080p	
	50Hz, (8) 1080p 60Hz, (9) 1024x768 60Hz, (10) 1280x800	
	60Hz, (11) 1280x1024 60Hz, (12) 1366x768 60Hz, (13)	
	1440x900 60Hz, (14) 1600x900 60Hz, (15)1600x1200	
	60Hz, (16) 1680x1050 60Hz, (17)1920x1200 60Hz,	
	(18) Native	
OSDDIS 0/1	ENABLE/DISABLE ONSCREEN DISPLAY	
	(0) OFF, (1) ON	
OSDH 0~20	OSD H OFFSET	
	0~20	
OSDV 0~20	OSD V OFFSET	
	0~20	
OSDTIME 0~50	OSD TIMEOUT	
	0~50	



OSDGAIN 0~10	OSD GAIN VALUE 0∼10
BRI 0~4 0~100	SET BRIGHTNESS VALUE FOR CHANNEL (0) All, (1~4) CHANNEL, (0~100) VALUE
CON 0~4 0~100	SET CONTRAST VALUE FOR CHANNEL PORT (0) All, (1~4) CHANNEL, (0~100) VALUE
SAT 0~4 0~100	SET SATURTATION VALUE FOR CHANNEL PORT (0) All, (1~4) CHANNEL, (0~100) VALUE
HSIZE 1~4 0~X	SET HUE VALUE FOR CHANNEL PORT (0) All, (1~4) CHANNEL, (0~100) VALUE
HSIZE 1~4 0~X	SET IMAGE HORIZONTAL SIZE (1~4) CHANNEL, (0~X) X=HORZONTAL PIXEL FOR CURRENT RESOLUTION
VSIZE 1~4 0~X	SET IMAGE VERTICAL SIZE (1~4) CHANNEL, (0~X) X=VERTICAL PIXEL FOR CURRENT RESOLUTION
HPOS 1~4 0~X	SET HORIZONTAL POSITION OF SPECIFIED CHANNEL (1~4) CHANNEL, (0~X) X=HORZONTAL PIXEL FOR CURRENT RESOLUTION
VPOS 1~4 0~X	SET VERTICAL POSITION OF SPECIFIED CHANNEL (1~4) CHANNEL, (0~X) X=VERTICAL PIXEL FOR CURRENT RESOLUTION

CHANNEL(S) OUTPUT ON/OFF (1~4) CHANNEL, (0/1) OFF/ON
SET CHANNEL PRIORITY (1~4) CHANNEL, (1~4) PRIORITY
ASSIGN A VIDEO NAME (1~4) VIDEO, (XXX) ABCEDFGH
SAVE THE CURRENT WINDOW STATE TO FAV. (1~4) FAV.
RECALL A WINDOW STATE (1) WINDOW A, (2) WINDOW B, (3) WINDOW C, (4) WINDOW D, (5) WINDOW E, (6) WINDOW F, (7) WINDOW G, (8) WINDOW H, (9) WINDOW FAV. 1, (10) WINDOW FAV. 2, (11) WINDOW FAV. 3, (12) WINDOW FAV. 4
ENABLE/DISABLE MIRROR EFFECT (0/1) OFF/ON
ENABLE/DISABLE FADE EFFECTS (0) OFF, (1) 1.0 s, (2) 1.1 s, (3) 1.2 s, (4) 1.3 s, (5) 1.4 s, (5) 1.5 s, (6) 1.6 s, (7) 1.7 s, (8) 1.8 s, (9) 1.9 s, (10) 2.0 s, (11) 2.1 s, (12) 2.2 s, (13) 2.3 s, (14) 2.4 s, (15) 2.5 s, (16) 2.6 s, (17) 2.7 s, (18) 2.8 s, (19) 2.9 s, (20) 3.0 s
SET VIDEO ROTATION VIDEO TO PRESET POSITIONS (0) ROTATE OFF, (1) R90, (2) L90, (3) 180

(R/G/B) COLOR CHANNEL (MIN/MAX) COLOR VALUE (0~15) SET PRESENT VALUE 0~255 RBG MAX (0)15, (1)31, (2)47, (3)63, (4)79, (5)95, (6)111, (7)127, (8)143, (9)159, (10)175, (11)191, (12)207, (13)223, (14)239, (15)255 RGB MIN (0)00, (1)16, (2)32, (3)48, (4)64, (5)80, (6)96, (7)112, (8)128, (9)144, (10)160, (11)176, (12)192, (13)208,
(0~15) SET PRESENT VALUE 0~255 RBG MAX (0)15, (1)31, (2)47, (3)63, (4)79, (5)95, (6)111, (7)127, (8)143, (9)159, (10)175, (11)191, (12)207, (13)223, (14)239, (15)255 RGB MIN (0)00, (1)16, (2)32, (3)48, (4)64, (5)80, (6)96, (7)112, (8)128, (9)144, (10)160, (11)176, (12)192, (13)208,
RBG MAX (0)15, (1)31, (2)47, (3)63, (4)79, (5)95, (6)111, (7)127, (8)143, (9)159, (10)175, (11)191, (12)207, (13)223, (14)239, (15)255 RGB MIN (0)00, (1)16, (2)32, (3)48, (4)64, (5)80, (6)96, (7)112, (8)128, (9)144, (10)160, (11)176, (12)192, (13)208,
(0)15, (1)31, (2)47, (3)63, (4)79, (5)95, (6)111, (7)127, (8)143, (9)159, (10)175, (11)191, (12)207, (13)223, (14)239, (15)255 RGB MIN (0)00, (1)16, (2)32, (3)48, (4)64, (5)80, (6)96, (7)112, (8)128, (9)144, (10)160, (11)176, (12)192, (13)208,
(6)111, (7)127, (8)143, (9)159, (10)175, (11)191, (12)207, (13)223, (14)239, (15)255 RGB MIN (0)00, (1)16, (2)32, (3)48, (4)64, (5)80, (6)96, (7)112, (8)128, (9)144, (10)160, (11)176, (12)192, (13)208,
MIN/MAX 0~255 (13)223, (14)239, (15)255 RGB MIN (0)00, (1)16, (2)32, (3)48, (4)64, (5)80, (6)96, (7)112, (8)128, (9)144, (10)160, (11)176, (12)192, (13)208,
RGB MIN (0)00, (1)16, (2)32, (3)48, (4)64, (5)80, (6)96, (7)112, (8)128, (9)144, (10)160, (11)176, (12)192, (13)208,
(0)00, (1)16, (2)32, (3)48, (4)64, (5)80, (6)96, (7)112, (8)128, (9)144, (10)160, (11)176, (12)192, (13)208,
(6)96, (7)112, (8)128, (9)144, (10)160, (11)176, (12)192, (13)208,
(13)208,
(14)224 (15)240
(14)224, (15)240
CHRSW 0/1 SET THE CHROMA KEY ON/OFF (0) OFF, (1) ON
(0) OFF, (1) ON
IPMODE 0/1
(0) DHCP, (1) STATIC
IPADD XXX.XXX. XXX.XXX
(XXX) 0~255
MAADD XXX. XXX.XXXX SET SUBNET ADDRESS (XXX) 0~255
SET GATEWAY ADDRESS
GAADD XXX. XXX.XXX.XXX (XXX) 0~255



ETHTIME 0~6	ETHERNET TIMEOUT
	(0) OFF, (1) 10 MINUTE, (2) 20 MINUTE, (3) 30 MINUTE,
	(4) 40 MINUTE, (5) 50 MINUTE, (6) 60 MINUTE
RELINK	RELINK THE UNIT IN 2 SECONDS
DEFAULT	RESET THE UNIT TO FACTORY DEFAULTS
VICH 1~4 0~4	VIDEO CHANNEL COMMAND (1~4) VIDEO,
	(0) ALL CHANNEL OUTPUTS,
	(1~4) CHANNEL OUTPUTS
MUTE 0/1	MUTE AUDIO
	(0) OFF, (1) ON
POW 0/1	POWER THE UNIT ON/OFF
	(0) OFF, (1) ON
AUDIO 1~4	CHANGE OUTPUT AUDIO TO SPECIFIED SOURCE (1~4) AUDIO SOURCE
IMRE B/C/S/H	RESET THE IMAGE TO FACTORY DEFAULTS
	(B) BRIGHTNESS, (C) CONTRAST, (S) SATURATION, (H) HUE
PIRE	RESET THE UNIT PICTURE SETTINGS TO FACTORY
CHRE 0~4	DEFAULTS
WICORE	RESET THE WINDOW CONVERT TO FACTORY DEFAULTS
RIPM	SHOW CURRENT IP MODE
IPCONFIG	SHOW IP CONFIGURATION
HELP	HELP PRINTS ALL AVAILABLE RS-232/ TELNET COMMANDS
	TO THE SCREEN



IP Operation Using Web Browser Before you begin:

- · Power Status must be set to on, and source status must be unlocked
- Ensure step 5. of hardware Setup has been completed.
- Obtain the IP address of the VS421HDPIP using the OSD menu.

Access the following sub menu:

FTHFRNFT -> IP

Your IP address will be displayed next to IP.

Note: The switch supports DHCP and it is activated by default. As a result if you connect it to a piece of network equipment that supports DHCP your IP address will automatically change. If your network equipment does not support DHCP your default IP address will be 192.168.5.155

Access IP Operation Web GUI

- 1. Open your web browser.
- 2. In the address bar type the IP address obtained from your OSD menu, and press enter.
- 3. The VS421HDPIP web GUI is now displayed.

Operate your VS421HDPIP using the Web GUI

The web GUI enables you to remotely operate your VS421HDPIP with basic and advanced functionality. The below sections outline the features and navigation of the Web GUI.

Operation Pane

The operation pane gives you a high level overview as well as access to basic switch operation. The Operation pane is always visible at the top of every page in the Web GUI.





The **Information-in** and **information-out** sections gives you an overview of the current connected video source and display devices.

The Status section enables you to power off the device.

The **Source** section enables you to select your desired mode as well as define which video source devices will be shown on each display.

The Save/Factory section enables you to save and action the customized input and output corresponding settings.

Advanced Menu

The Advanced menu is available on the left hand side of the GUI, and enables you to navigate between advanced sections of operation.



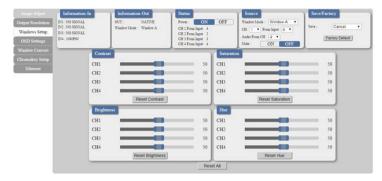
Descriptions outlining navigation as well as the available functionality for each tab are listed below.

Image Adjust

By default, the **Image Adjust** tab is the first window displayed when the web GUI is opened. If you would like to access the **Image Adjust** tab, and have navigated away from the Window, click **Image Adjust** tab from the side menu.

The **Image Adjust** tab enables you to define the specific attributes listed for optimal picture quality based on the requirements of your application.





Note: In Matrix mode, all four pictures adjust simultaneously.

In Dual/TV Wall mode, each picture can adjust individual and support individual last memory feature.

Output Resolution

To access the **Output Resolution** tab, click **Output Resolution on** the side menu.

The Output Resolution tab enables you to set your desired output resolution from the available drop down menu.



Notes:

- 1080i@50/60 are supported in Matrix mode only.
- Selecting NATIVE enables the VS421HDPIP to use EDID to determine the best output resolution automatically.

OSD Settings

To access the OSD settings tab, click OSD Settings on the side menu.

The **OSD settings** tab enables you to adjust the specified attributes in relation to the On the Screen display positioning and operation.



Note: TIMEOUT =OFF means MENU and INFO will continue showing on the Screen.

Window Convert

To access the **Window Convert** tab, click **Window Convert** on the side menu.

The **Window Convert** tab enables you to implement transition effects while switching between video sources.



Chromakey Setup

To access the **Chromakey Setup** tab, click **Chromakey setup** on the side menu.

The Chromakey Setup section enables you to isolate a particular color for chroma keying special effects.



Ethernet

To access the **Ethernet** tab, click **Ethernet** on the side menu.

The ${\bf Ethernet}$ section enables you to define Network communication protocols for remote operation.





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