VIEWSIZE THE WORLD

VSP 168HD Quick Start

- Support 10Gbps of transmission rate
- Support HDBaseT protocols and standards
- Support USB upgrade
- Support custom output resolution
- Max 2048×1152@60Hz/2560×816×60Hz input/output resolution
- Seamless switching between inputs
- Multiple cascade for sync mapping
- Support pixel to pixel synchronous mapping

CONTENT

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Product Introduction

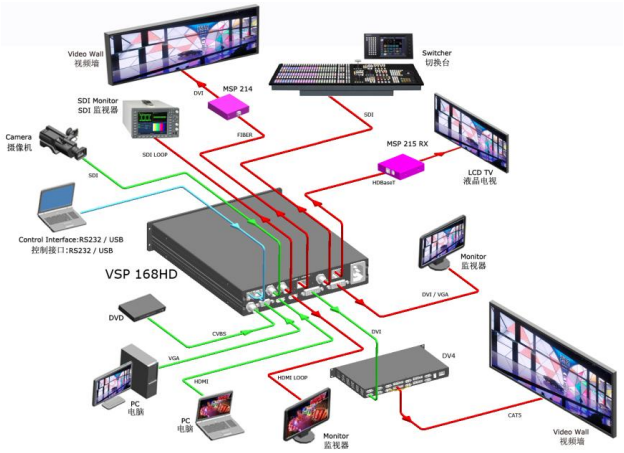
VSP 168HD is a 4 inputs seamless switcher and scaler. VSP 168HD supports all common video and graphic inputs, including 1 CVBS, 1 VGA, 1 DVI, 1 SDI (Option). VSP 168HD meets high end presentation requirement as its qualified image quality and advanced video processing ability, take multiple cascade mapping for example.

VSP 168HD supports following main functions: max output resolution up to 2048×1152 or 2560×816, quick user config scale operation, seamless switching for the inputs, auto input detect, multiple cascade

In addition, VSP 168HD use fiber and HDBaseT output interface, and connect to LED Display via extender, which is especially suitable for the applications that need high quality, long distance transmission and high resolution image. VSP 168HD supports RS232 control and USB port upgrade. And through embedded high quality image processing functions, and format conversion function, VSP 168HD provides the high stability of working hours.

System Connection

RGBlink offers solutions to demanding technical problems. Any application questions, or required further information, please contact with our customer Support Engineers.



VSP 168HD System Connection Diagram

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Packing Configuration

Power Line

USB Cable

DB9 to RJ11 Cable

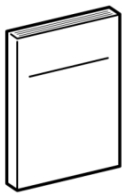
RCA to BNC Cable

DVI to HDMI Cable

SDI Cable

SFP Module

Quick Start



DVD Disk

Antistatic Bag

Certification

Note: SDI cable is only for VSP 168SHD.

Chinese Standard, American Standard or European Standard power line is option.

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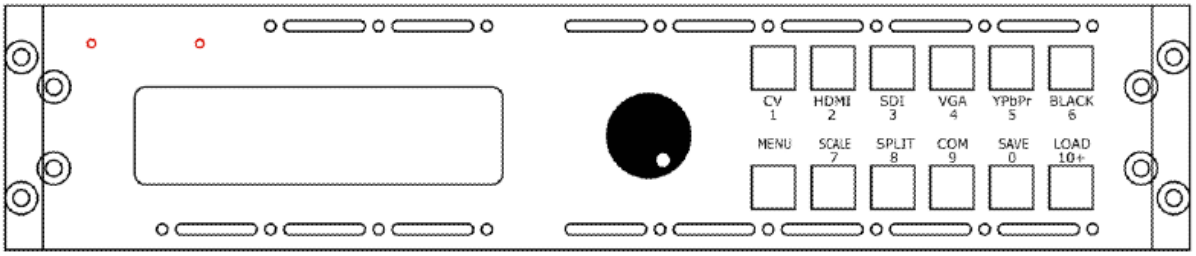
Hardware Orientation

Front Panel



Button Instruction			
CV	CVBS signal source button	SPLIT	Split button
HDMI	HDMI signal source button	COM	Cascade button
SDI	SDI signal source button	SAVE	Save button
VGA	VGA signal source button	LOAD	Load button
YPbPr	YPbPr signal source button	0~9	Number button, use for scale and custom setting
BLACK	Black button	LCD Panel	Show operation menu items
MENU	Menu button	Knob	Confirm and adjust LCD menu
SCALE	Scale button		

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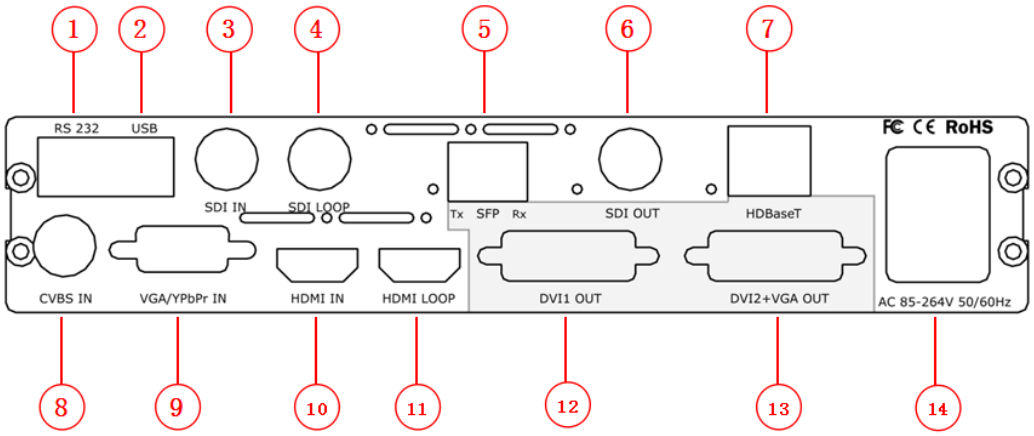
Back Panel



Input Interface	
3	3G SDI input BNC port
4	SDI Loop Out BNC port
8	CVBS Input BNC port
9	VGA Input DSUB15 port
10	HDMI Input HDMI-A port
11	HDMI Loop Out HDMI-A port

Output Interface	
5	Fiber Output LC port
6	SDI Output BNC port
7	HDBaseT Output RJ45 port
12	DVI Output DVI-I port
13	DVI+VGA DVI-I Output

Other Interface	
1	RS232 Interface
2	USB Interface USB-B port
14	Power IEC-3

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Content

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How to Do Customized Output Resolution

1. Push [MENU] button to enter the menu items, turn knob and go to [OUTPUT FORMAT], push knob and confirm to go into the [OUTPUT FORMAT] menu.
2. Push knob and go into [CUSTOMIZED] menu.
3. Turn knob on each bit position, and change the value of the bit by the digital buttons on the front panel.
4. After the digital push knob will add ×, means before × is the horizontal size. Same operation for vertical size.
5. After the digital push knob will add @, means before @ is the vertical size. Same operation by push digital buttons to set the refresh rate.
6. After input all the values, push knob to enable VSP 168HD to output this resolution. VSP 168HD will take 5 to 10 seconds to enable this output resolution.

How to Realize Single Image Switching

1. Boot the system default CV1 to the current input source (key lights and flashes), if need seamless switching other source such as VGA, push VGA button.
2. Choose VGA buttons, button CV1 light is off, and VGA button lights and flashes, it can realize single picture of input signal source switching (switch CV1 to VGA).The same method can switched HDMI and SDI.

Note: Seamless switch: means signal switch will not appear any flash point, black, shaking or delay.

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How to Set up the Size and Position of the Single Image

1. Push MENU button to enter the menu items.
2. Rotate the knob, choose [OUTPUT].
3. Push the knob to confirm, rotate the knob again, choose [SCALE].
4. Push the knob to confirm, and enter [SCALE] option, rotate the knob to choose the corresponding parameters and set to default values, (the default value can also be set via the number button), after setting, push the knob to confirm.
5. If the operation is wrong, or need to factory resetting, user can enter the [SCALE] option and choose “RESET” to recover factory reset.

How to Set up the PIP

1. Push MENU button to enter the menu items.
2. Rotate the knob and choose [OUTPUT].
3. Push the knob to confirm, rotate the knob again, choose [PIP].
4. Push the knob to confirm, rotate the knob, choose ON and confirm, then start PIP mode.

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How to Choose the Signal Source in PIP

1. Push MENU button to enter the menu items.
2. Rotate the knob, choose [OUTPUT].
3. Push the knob to confirm, rotate the knob again, choose [PIP].
4. Push the knob to confirm, rotate the knob again, choose [SELECT], choose IMAGE A as main image.
5. Push CV, VGA, HDMI, SDI as the input signal of Image A.
6. The same steps, select the IMAGE B as sub-image, push CV, VGA, HDMI, SDI as the input signal Image B.
7. With above steps, can complete the choice of signal source in PIP.

How to Set up the Size and Position of PIP

1. Push MENU button to enter the menu items. Rotate the knob, choose [OUTPUT].
2. Push the knob to confirm, rotate the knob again, choose [PIP].
3. Push the knob to confirm, rotate the knob again, choose [SELECT], choose IMAGE A as main image.
4. Push MENU button, rotate the knob, choose [OUTPUT], enter and choose [SCALE]. User can set the size and position of IMAGE A according to actual need.
5. After setting, with the same steps, choose IMAGE B as the sub-image, and the setting is the same with IMAGE A.

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How to Set up the Layout of PIP

1. In PIP mode, for details, please refer to: How to Set up the PIP.
2. Rotate the knob, choose [LAYOUT], push the knob to confirm.
3. Rotate the knob again, choose three PIP layout modes, shown as below:

PIP L+T

PBP L+R

PBP T+B

How to Realize the Screen Size and Full Size Switching

1. Push MENU button, rotate the knob, choose [OUTPUT], enter and choose [SCREEN].
2. Set the size and position of the screen according to actual need.
3. When screen setup is completed, choose SCREEN SIZE or FULL SIZE in [MODE] in [SCREEN] option to realize the screen size and full size switching.

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How to Realize the Text Overlay setting

1. Push MENU button, rotate the knob, choose [OUTPUT].
2. Rotate the knob, choose [TEXT OVERLAY] and enter [TEXT OVERLAY], push the knob to confirm.
3. Rotate the knob, choose [TEXT OVERLAY] mode, choose ON to start TEXT OVERLAY function.
4. Push MENU, return to [TEXT OVERLAY], rotate the knob, LCD screen displays menu options, select 13 modes in PRESET, or select BLEND, which includes two modes:

   Mode 1: Graphic content locate at the top and is non-transparent, background transparency is controlled by double-picture transparency.

   Mode 2: Graphic content is controlled by double-picture transparency, the background is completely transparent.

   Rotate the knob and choose the mode.
5. Push MENU, return to [TEXT OVERLAY], rotate the knob, choose ABOVE/BELOW to select the layer position for IMAGE B.
6. Push MENU, return to [TEXT OVERLAY], rotate the knob, choose BLEND LEVEL, and set the image display transparency, regulating range between 0~16.
7. Push MENU, return to [TEXT OVERLAY], rotate the knob, choose the color value:

   RED: The value range of color RED that to be set, regulating range between 0~255.

   GREEN: The value range of color GREEN that to be set, regulating range between 0~255.

   BLUE: The value range of color BLUE that to be set, regulating range between 0~255.
8. At the same time, user can view the effect through the screen, to get a better setting.

Note: All the above settings are available only for IMAGE B.

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How to Save the Parameter

1. VSP 168HD provides 10 save modes. After setting, push SAVE button to start save function.
2. Rotate the knob, select the location that need to save, for example, save to SAVE2, choose SAVE2, push the confirm, and save the parameter finished.

Note: The operation is same as MENU→ SAVE SETUP→ SAVE TO.

How to Load the Saved Parameter

1. VSP 168HD provides 10 load modes. Push LOAD button to start the LOAD function.
2. Rotate the knob, select the location that need to load, for example, load from SAVE1, choose SAVE1 and confirm, and load the parameter finished.

Note: The operation is same as MENU→ SAVE SETUP→ LOAD FROM.

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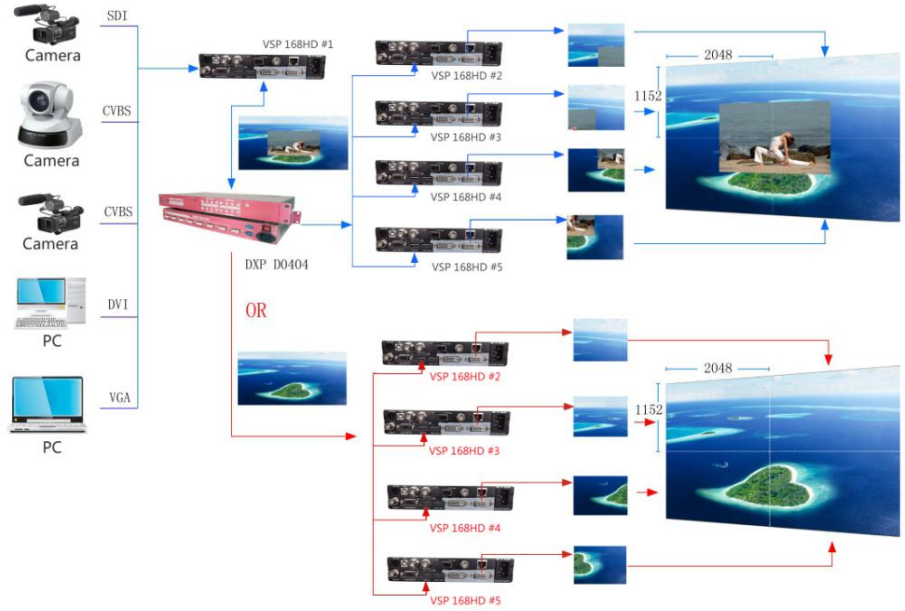
Product Application

Multiple mosaic and LED Display beyond normal control resolution mosaic

Project 1: Set VSP 168HD/1# as PIP mode, and divides signal to VSP 168HD/2# to VSP 168HD/5# for cascade by using DVI matrix (DXP D0404). The split modes, including “FIELD GLYPH”, “HORIZONTAL 1/4”, “VERTICAL 1/4” and “IRREGULAR” can be achieved.

Project 2: VSP 168HD/1# divides signal to VSP 168HD/2# to VSP 168HD/5# for cascade by using DVI matrix (DXP D0404).



HORIZONTAL 1/4 VERTICAL 1/4

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Project 1: Format conversion the front-end signal source with VSP 168HD/1# , connect DVI output interface to the HDMI input interface of VSP 168HD/2#, and output to the next VSP 168HD by HDMI loop. The same method, connect the other VSP 168HD for cascade. The quantity of VSP 168HD depends on the size of LED display.

Project 2: Format conversion the front-end signal source with VSP 168HD/1# , and set PIP mode, output to the HDMI input interface of VSP 168HD/2#, then output to the next VSP 168HD by HDMI loop. The same method, connect the other VSP 168HD for PIP cascade. The quantity of VSP 168HD depends on the size of LED display.

Here we use 4 sets of VSP 168HD for cascade, the split modes includes “FIELD GLYPH”, “HORIZONTAL 1/4”, “VERTICAL 1/4” and “IRREGULAR”.

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Project Description: The project is divide VSP 168HD/1# signal to VSP 168HD/2# to VSP 168HD/17# for cascade by using DVI matrix (DXP D1616), and then output to LED display. This project can achieve super resolution cascade and custom resolution cascade, also can switch among different signals.

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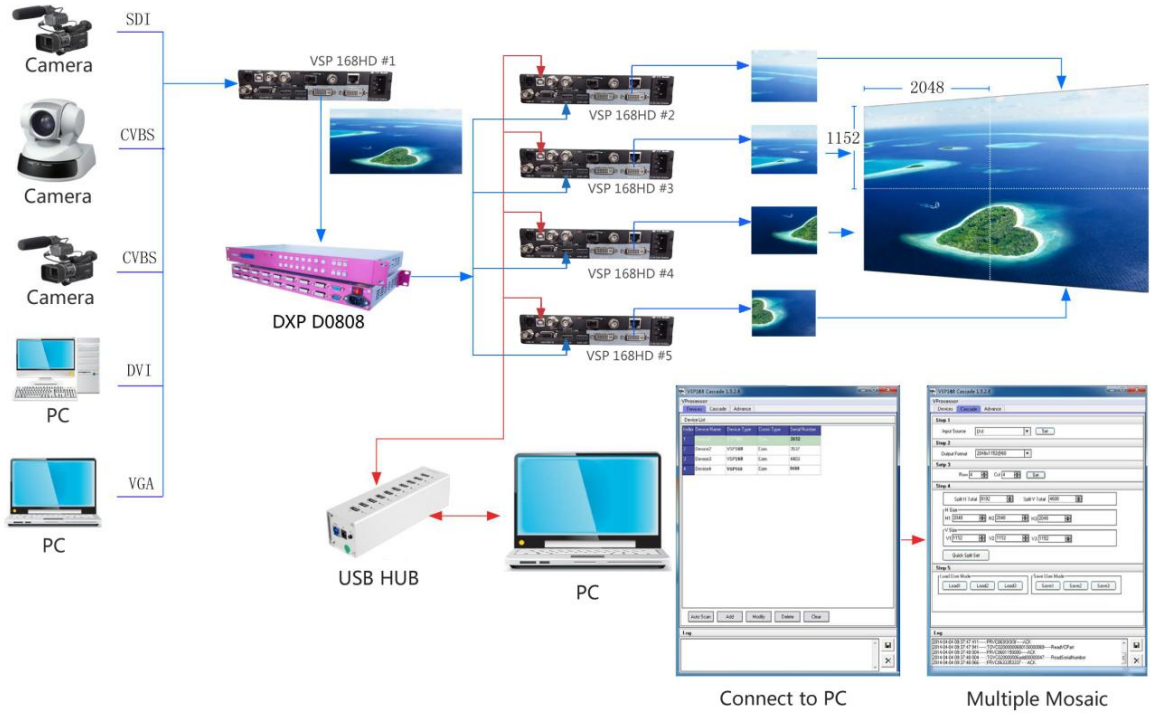
VSP 168HD can also cascade through the upper computer.

Connect the USB interface of VSP 168HD to USB hub, then connect USB hub to the upper computer, and open the split function for cascade through computer.



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Contact Information

Warranty:

All video products are designed and tested to the highest quality standard and backed by a full 3-year parts and labor warranty. Warranties are effective upon delivery date to customer and are non-transferable. RGBlink warranties are only valid to the original purchase/owner. Warranty related repairs include parts and labor, but do not include faults resulting from user negligence, special modification, lighting strikes, abuse(drop/crush), and/or other unusual damages.

The customer shall pay shipping charges when unit is returned for repair.

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