VSP 5360 Quick Start

- User-defined output resolution
- Preview and program output separately
- Support LOGO capture
- Seamless switching between different inputs
- Multiple cascade with sync mapping
- Genlock with external reference
- Support DSK subtitle overlay function
- 2 LED sending card install slot

CONTENT

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Product Introduction

The VSP 5360 is a landmark product which combines video processing algorithm CSMXP of RGBlink. Seamless switching between the 13 inputs, DSK for subtitle overlay, preview and program separately, 1 to 4 layers layout and seamless switching, multiple cascade with sync splicing.

VSP 5360 is based on module based design, can easily expansion input interfaces including USB inputs for media files play, and supports more outputs with Genlock input for multiple sync control.

VSP 5360 launches the new milestone for video scaler and switcher by introducing the latest 10 bit motion adaptive de-interlace, advance noise reduction and detail enhancement core processor.

VSP 5360 also release with seamless switching, cross and frame rate conversion with pixel based scale and zoom engine up to 4K×2K.

VSP 5360 can be widely applied to switcher and scale market, especially for the best presentation.

System Connection

RGBlink offers solutions to demanding technical problems. Any application questions, or required further information, please contact with our customer Support Engineers.
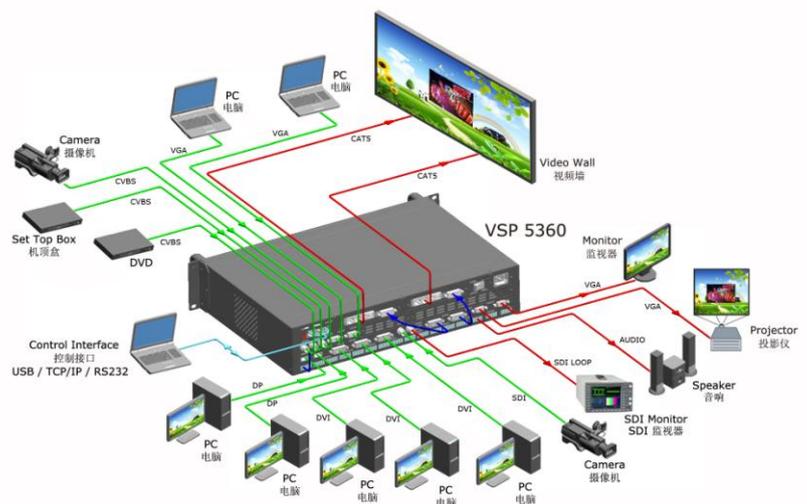
VSP 5360 System Connection Diagram

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Packing Configuration

Power Cord	DB9 to RJ11 Cable	RCA to BNC Cable	DVI-D Cable

USB Cable	USB Disk	Screw Driver	Antistatic Bag

Certification

Note:

AC Power Cable supplied as standard according to destination market.
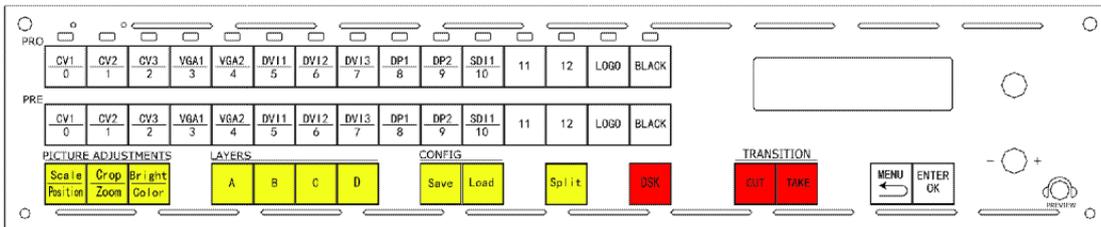
USB is contained on the Warranty/Registration Card. Please keep.

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Hardware Orientation

Front Panel

Button Instruction			
CV1~CV3	CVBS signal source button	Save	Save button
VGA1,VGA2	VGA signal source button	Load	Load button
DVI1~DVI3	DVI signal source button	Split	Split button
DP1, DP2	DP signal source button	DSK	DSK function button
SDI1	SDI1 signal source button	CUT	Seamless cut button
0~12	Number button, use for scale, zoom, save and load setting	TAKE	Fade in fade out button
LOGO	LOGO select and set button	MENU	Menu button
BLACK	Black switch button	ENTER	Confirm button
Scale/Position	Scale and Position function button	Knob	Confirm and adjust OLED menu
Crop/Zoom	Crop and Zoom function reuse button	Volume knob	Adjust the volume
Bright/Color	Bright and Color function button	OLED Panel	Show operation menu items
A~D	Layer A, B, C, D		

Back Panel
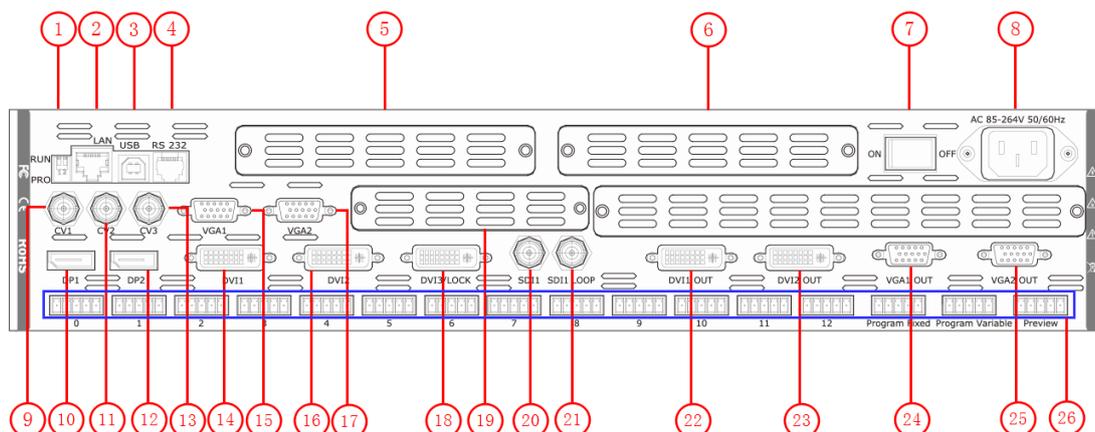
Input Interface	
9.11.13	CVBS Input BNC port
15.17	VGA Input DB15 port
10.12	Displayport Input port
14.16.18	DVI Input DVI-I port
20	3G-SDI input BNC port
21	SDI Loop Out BNC port
26	Audio Input

Other Interface	
1	Dial Switch
2	10/100M Interface RJ45
3	USB Interface
4	RS232 Interface
7	Switch
8	Power IEC-3 port
19	Input Optional Module Slots
5.6	Sender Card Slots

Output Interface	
22.23	DVI Output DVI-I port
24.25	VGA Output DB15 port

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3 Screen Preview Setting

Select 3 Screen Preview Mode

1. Push the [MENU] button, and enter to the menu items, turn the rotary knob, select <SYSTEM>:

```
    AUDIO SETUP              >>
->SYSTEM                     >>
    LANGUAGE                ENG
    FACTORY RESET           >>
```

2. Push the knob to confirm. Turn the knob, and select <SYSTEM MODE>:

```
    OUTPUT MATRIX           >>
    PREVIEW DISPLAY         >>
->SYSTEM MODE               >>
    TRANSITION              >>
```

3. Push the knob to confirm. Turn the knob, and select <3 SCREEN PREVIEW>:

```
->3 SCREEN PREVIEW          >>
    SPLIT                   >>
    OUTPUT MATRIX           >>
    COMMON MODE             >>
```
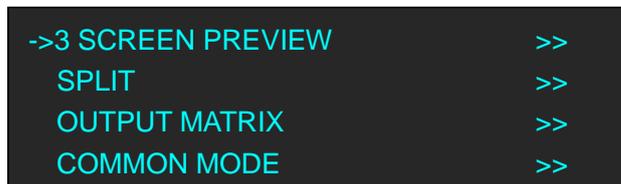
4. Push the knob to confirm, and enter to the 3 screen preview modes.

Screen Preview Setting

VSP 5360 supports 3 Layers Preview and 3 layers Program seamless switching, select the layer, set on Preview output, and switch it to the program output by the [CUT] or [TAKE] button.

Note

Layer A supports DVI3/SDI/LOGO output, and layer B and layer C, any signal.

For example, to display the DVI3, VGA1, CVBS1 on preview monitor.

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1. Select Layer B, and click VGA1 in PRE area, the [VGA1] light is on.
2. Select Layer A, and click DVI3 in PRE area, the [DVI3] light is on.
3. Select Layer C, and click CV1 in PRE area, the [CV1] light is on.

   Then the VGA1, DVI3 and CV1 signals are displayed on the preview monitor display.
4. User can do the scale for any layer, the layer only changed on preview output, but not changed on program output.

Preset

After setting, the layers on the preview output, we do not need to switching to the program output. Push the [Save] button, the button light is on, and some of the buttons 0~12 in PRE area are on, and some flash. The buttons on can be saved, and flash will be overwrite. Select the location that need to save , for example, button 1, OLED shows as follows.
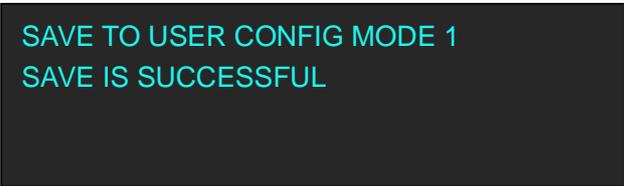
```
SAVE TO USER CONFIG MODE 1
SAVE IS SUCCESSFUL
```

Load

User can load the saved settings by pushing the [Load] button. For example, push button 1, the SAVE 1 will display on preview monitor, then touch [TAKE] button to switch it to the program display after confirmation.

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Single Image Switching

VSP 5360 can realize seamless effects switch between two channels, select the signal in PRE area, then push [CUT] or [TAKE] button, the signal will be switched to LED display.

For example, switch VGA1 to LED display, first push the [VGA1] button in PRE area, then push [CUT] or [TAKE] button, and the LED display will show VGA1 signal.

Default the switch time is 1 seconds for [TAKE] button, if need to adjust the fade in fade out time, push [MENU] button and enter to the menu items, turn the knob, select <SYSTEM>, push the knob to confirm. Turn the rotary knob, select <TRANSITION>, and set the fade time, push the [TAKE] button again, the signal will be switched to the LED display with the adjusted time.

User can also switch the signal by pushing the signal button in PRO area, but the signal in monitor will not change.

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Set the Output Resolution

Select the Output Resolution

1. Push the [MENU] button, and enter to the menu items, turn the rotary knob and select <OUTPUT FORMAT>:

```
->OUTPUT FORMAT              >>
   SCREEN PARAMETERS         >>
   SPLIT                     >>
   INPUT SETUP               >>
```

2. Push the rotary to confirm, and enter to the menus as below:

```
->COMMON FORMAT             >>
   OTHERS FORMAT            >>
   CUSTOMIZED              >>
   GENLOCK                OFF
```

3. Push the rotary to confirm. Turn the rotary knob, select <COMMON FORMAT> or <OTHERS FORMAT>, and select the output resolution according to actual need.

```
    COMMON FORMAT
->1920×1080×60
```

Custom the Output Resolution

1. Push the [MENU] button, and enter to the menu items, turn the rotary knob and select <OUTPUT FORMAT>:

```
->OUTPUT FORMAT              >>
   SCREEN PARAMETERS         >>
   SPLIT                     >>
   INPUT SETUP               >>
```

2. Push the rotary to confirm, and enter to the menus as below:

```
->COMMON FORMAT                    >>
  OTHERS FORMAT                    >>
  CUSTOMIZED                       >>
  GENLOCK                          OFF
```

3. Push the rotary to confirm. Turn the rotary knob, select <CUSTOMIZED>, push the knob to confirm.

```
     CUSTOMIZED
->1920×1080×60
```

4. Enter digits of desired resolution by pushing the red number buttons. For example, input 1536 as following:

```
     CUSTOMIZED
*1536×
```

5. After the digital, push the rotary knob will add ×, means before × is the horizontal size. Same operation for vertical size, For example, input 1536 as following:

```
     CUSTOMIZED
*1536×1536×
```

6. After the digital, push the rotary knob will add ×, means before the × is the vertical size, and after the × is the refresh rate. Only digital 50 or digital 60 supports for the refresh rate. For example, input 60 as following. Use the digital buttons to finish the settings.

```
     CUSTOMIZED
->1536×1536×60.0
```

7. After input all the values, push the rotary knob to enable VSP 5360 to output this resolution. VSP 5360 will take 5~10 seconds to enable this output resolution.

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Add or Clear the Layer

Push any button of A, B, C, D in LAYERS area, or push all the 4 buttons, the button light is on, and the layer is selected, add layer finished.

For example, add layer B, push button B, button B light is on, and the OLED panel shows as follows:

```
ON LAYER B
H POS :      0              V POS :      0
H SIZE: 1024                V SIZE: 768
```

In LAYERS area, push any key of button A, B, C, D that to clear, the button light flashes. Push the button again, key light is off, and clear layer finished.

For example, clear layer B, OLED panel shows as follows:

```
OFF LAYER B
```

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Set the Size and Position

Push the [Scale/Position] button, and enter to the scale menus, the OLED module show as follows:

```
->H SIZE                    1920
  V SIZE                    1080
  H/V                          0
  H POS                        0
```

```
->V POS                        0
  FAST SCALE MODE      FULL SIZE
  RESET
```

The lights of number button 0~9 are on, user can adjust the following items by rotary knob or number buttons.

H SIZE: Width setting.

V SIZE: Height setting.

H/V: Width and height equal proportion scale setting.

H POS: Horizontal phase setting.

V POS: Vertical phase setting.

FAST SCALE MODE: User can select FULL SIZE, SCREEN SIZE, 16:9 or 4:3.

RESET: If image quality distorts by improper operation, it can be recover by reset.

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Crop the Image

1. Push the [Crop/Zoom] button, the button light is on and open the crop function.

```
->H LEFT CROP                0
  V UP CROP                  0
  H RIGHT CROP            1024
  V DOWN CROP              768


->RESET
```

2. The lights of number button 0~9 are on, user can crop H LEFT, V UP, H RIGHT, V DOWN of the image by knob or number buttons.
3. If image quality distorts by improper operation, it can be recover by reset.

Zoom the Image

The image can be zoom in horizontal or vertical separately, to meet the special effects required.

Push the [Crop/Zoom] button, and enter to the menu items, user can zoom the image by the rotary knob or number buttons, settings are as follows:

```
->V UP                                    0
   V DOWN                                 0
   V UP/DOWN                              0
   H LEFT                                 0
```

```
->H RIGHT                                 0
   H LEFT/RIGHT                           0
   CENTER                                 0
   RESET                                  0
```

V UP: Zoom in vertical and the image will be zoom in to the top direction from its bottom.

V DOWN: Zoom in vertical and the image will be zoom in to the down direction from its top.

V UP/DOWN: Zoom in vertical but in both top and down direction from its middle.

H LEFT: Zoom in horizontal and the image will be zoom in to the left direction from its right.

H RIGHT: Zoom in horizontal and the image will be zoom in to the right direction from its left.

H LEFT/RIGHT: Zoom in horizontal but in both left and right direction from its middle.

CENTER: Zoom in 4 corner direction from center.

RESET: If image quality distorts by improper operation, it can be recover by reset.

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Set the Brightness and Color

Push the [Bright/Color] button, and enter to the menu items, user can adjust the brightness and color of the image by the rotary knob or number buttons, settings are as follows:

```
->SET MAX ALPHA              128
  BRIGHTNESS                  50
  CONTRAST                    50
  SATURATION                  50
```

```
->SHARPNESS                   0
  COLOR RED                   0
  COLOR GREEN               1024
  COLOR BLUE                 768
```

```
->RESET
```

SET MAX ALPHA: Set the max alpha of the image, the adjust range is among 0~128.

BRIGHTNESS: It can change the image brightness via BRIGHTNESS setting.

CONTRAST: It can change the image contrast via CONTRAST setting.

SATURATION: It can change the image saturation via SATURATION setting.

SHARPNESS: It can change the image sharpness via SHARPNESS setting.

COLOR RED: It can change the image color red via this setting.

COLOR GREEN: It can change the image color green via this setting.

COLOR BLUE: It can change the image color blue via this setting.

RESET: If image quality distorts by improper operation, it can be recover by reset.

Note: Users can set according to their actual situation, this function mainly suitable for these professional operator who knows how to set the image quality correctly. Others are not comments to do these operations. If image quality distorts by improper operation, it can be recover by reset.

LOGO Capture

1. Push the [MENU] button and enter to the menu items, turn the knob, and select <SYSTEM>, push the knob to confirm, turn the knob, and select <LOGO CAPTURE> option, OLED shows as follows:

```
->SELECT INPUT                 LOGO
   FREEZE IMAGE                 OFF
   H POS                          0
   V POS                          0


->H SIZE                       1024
   V SIZE                        768
   SAVE TO                    LOGO 1
   START CAPTURE LOGO
```

2. Select the input source.
3. Freeze image, when capture LOGO, the program image should be frozen.
4. Set the LOGO horizontal position, vertical position, horizontal size and vertical size.
5. Save the image to LOGO1 or LOGO2.
6. Start to capture LOGO.

Note

The [LOGO] button can also fulfill this setting.

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Screen Size Setting

VSP 5360 supports the screen parameters to meet the requirement where user want to switch between scale screen size and full display size (like monitor). This is only enable for a single display window. Following is an example of a screen size is1408 x 832.

Operator can defined the VSP 5360 output resolution from standard output resolution list or customized the output resolution which is higher than 1408 x 832. For this application 1440x900 is an example:

Push the [MENU] button to go into the menu items, turn the knob and choose <SCREEN PARAMETERS>, push the knob and goes into the screen menus as following:

SCREEN H SIZE--Horizontal pixels, turn knob or use the digital button to input the value1408.

SCREEN V SIZE--Vertical pixels, turn knob or use the digital button to input the value 832.

SCREEN H POS--Horizontal position, default value is 0, set the value as the way of H SIZE and V SIZE.

SCREEN V POS--Vertical position, default value is 0, set the value as the way of H SIZE and V SIZE.

MODE-- Mode option, choose SCREEN SIZE:

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DSK Setting

Before setting the text overlay, please make sure the input channel of the text. For example, select DVI3, the operations are as follows:

1. Push the [DVI3] button, and make sure there is input signal, and OLED shows DVI3 signal.

2. Set the size and position of DVI3: Push the [DVI3] button in PRE area, the button light is on, and the image can be edited, push the [Scale/Position] button to set the size.

```
->H SIZE                          1920
  V SIZE                          1080
  H/V                             1920
  H POS                              0
```

```
->V POS                              0
  FAST SCALE MODE          FULL SIZE
  RESET
```

3. Select the input signal that will overlay in PRE area.

4. Push the [DSK] button, and open the DSK function.

```
->DSK                               ON
  SELECT INPUT                   DVI3
  PRESET                         USER
  ALPHA                             0
```

Turn the knob and select <PRESET>, push the knob to confirm, select the preset mode of DVI3, for example, WhOnBk2, push the knob to confirm.

```
  DSK                               0
  SELECT INPUT                   DVI3
->PRESET                      WhOnBk2
  ALPHA                             0
```

5. Push the [SAVE] button, and save the above settings.

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User Define BLACK Key

Default the [BLACK] button as black function. Push the button, its LED light is on, the output will be switched to black, push the button again, its LED light is off, and output the video image.

For more details, please refer to: Using Black Out.

Besides BLACK, user can define this button as FREEZE, the operations are as follows:

1. Push the [MENU] button, and enter to the menu items, turn the rotary knob, select <SYSTEM>:

```
    AUDIO SETUP                    >>
 ->SYSTEM                          >>
    LANGUAGE                      ENG
    FACTORY RESET                  >>
```

2. Push the knob to confirm, turn the rotary knob, and select <BLACK KEY FUNCTION>:

```
    LOCK FRONT PANEL               >>
 ->BLACK KEY FUNCTION           BLACK
    DSK KEY FUNCTION             DSK
    LICENSE  SETUP                 >>
```

3. Push the knob to confirm, turn the rotary knob, and select <FREEZE>, push the knob to confirm:

```
    LOCK FRONT PANEL               >>
  * BLACK KEY FUNCTION          FREEZE
    DSK KEY FUNCTION             DSK
    LICENSE  SETUP                 >>
```

After selecting <FREEZE>, push the button, its LED light is on, and freeze the image.

```
                FREEZE IMAGE
```

Push the button again, its LED light is off, and output the video image.

```
                VIDEO IMAGE
```

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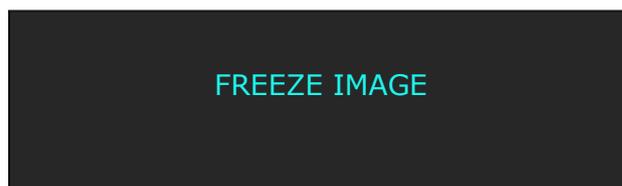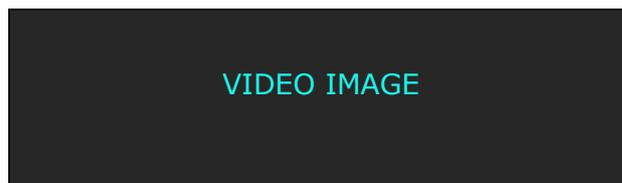
User Define DSK Key

Default the [DSK] button as DSK function. Push the button, its LED light is on, and enter to the DSK menu items.
For more details, please refer to: DSK Setting.
Besides DSK, user can define this button as FREEZE, the operations are as follows:
1. Push the [MENU] button, and enter to the menu items, turn the rotary knob, select <SYSTEM>:

```
    AUDIO SETUP                    >>
->SYSTEM                           >>
    LANGUAGE                       ENG
    FACTORY RESET                  >>
```

2. Push the knob to confirm, turn the rotary knob, and select <DSK KEY FUNCTION>:

```
    LOCK FRONT PANEL               >>
    BLACK KEY FUNCTION          BLACK
->DSK KEY FUNCTION                DSK
    LICENSE  SETUP                 >>
```

3. Push the knob to confirm, turn the rotary knob, and select <FREEZE>, push the knob to confirm:

```
    LOCK FRONT PANEL               >>
    BLACK KEY FUNCTION          BLACK
* DSK KEY FUNCTION             FREEZE
    LICENSE  SETUP                 >>
```

After selecting <FREEZE>, push the button, its LED light is on, and freeze the image.

```
              FREEZE IMAGE
```

Push the button again, its LED light is off, and output the video image.

```
              VIDEO IMAGE
```

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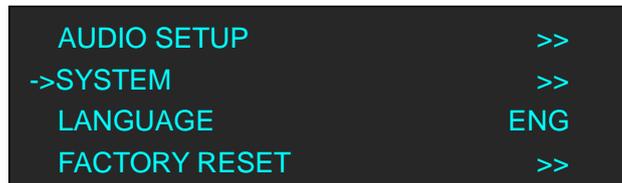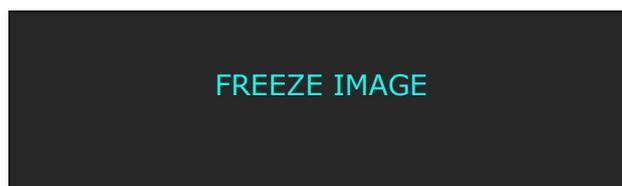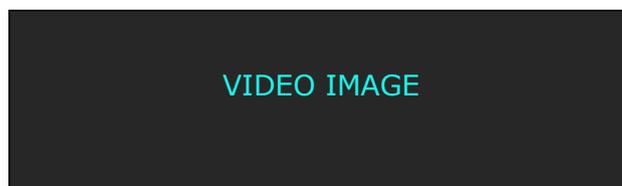
Using Black Out

Black out description:

BLACK signal realizes one-key-touch to the black screen.

VSP 5360 BLACK provides effect processing for Program output and Preview output with fade in fade out effect.

Operations are as follows:

1. Select output signal.

2. Push the [BLACK] button, the button light is on.

3. Then push the [TAKE] button, and the LED display is switched to black with fade in fade out effect, as shown below:
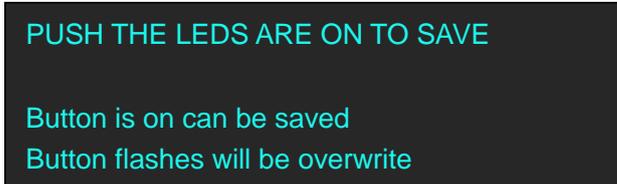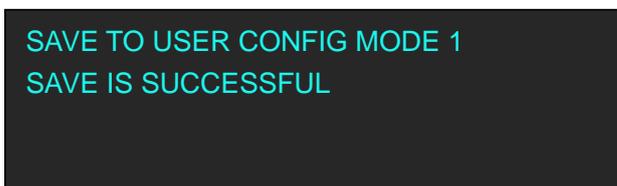
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Saving Views

VSP 5360 provides 12 positions for saving or recording parameters. To save current parameters and settings:
1. Push the [Save] button, the button light is on, and enable the SAVE function.

```
PUSH THE LEDS ARE ON TO SAVE

Button is on can be saved
Button flashes will be overwrite
```

2. Some of the buttons 0~12 in PRE area are on, and some flash. The buttons on can be saved, and flash will be overwrite. Select the location that need to save, for example, button 1, OLED shows as follows.
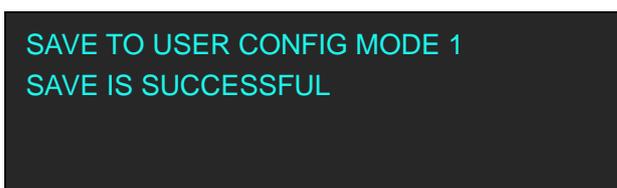
```
SAVE TO USER CONFIG MODE 1
SAVE IS SUCCESSFUL
```

3. User can also push the [MENU] button to enter the menu items, and choose <SYSTEM> option, turn the knob and select <SAVE TO>, show as follows:

```
->SAVE TO                    >>
  RECALL                     >>
  CLEAR                   SAVE1
  CLEAR ALL                  >>
```

4. Push the knob to confirm. Turn the knob again, and select the save mode, for example, save to mode1, OLED shows as follows:

```
SAVE TO USER CONFIG MODE 1
SAVE IS SUCCESSFUL
```

Note

If position 1 is saved, this will be recalled and loaded at power on.

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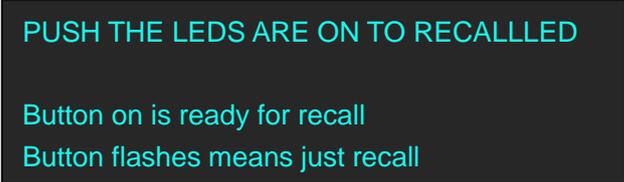
Recall Saved Settings

VSP 5360 provides 12 positions for saving or recording parameters. To recall saved settings:

1. Push the [Load] button, the button light is on, and enable the LOAD function.

    Some of the number buttons 0~12 in PRE area are on and some flash. The buttons on is ready for recall, and flashes means just recall. OLED shows as follows:

> PUSH THE LEDS ARE ON TO RECALLLED
>
> Button on is ready for recall
> Button flashes means just recall

2. Push the button on to load, for example, button 1, OLED shows as follows:

> RECALL USER CONFIG MODE 1
> RECALL IS SUCCESSFUL
> PROGRAM INPUT:CV2

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Product Application

Single Image Preview and Program

Select the signal in PRE area in the front panel, user can preview the signal on the monitor. After it has been confirmed, switch the signal to LED display by pushing [CUT] or [TAKE] button, and then the monitor signal will be switched to LED display.

User can also switch the signal by pushing the signal button in PRO area, but the signal in monitor will not change.

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Warranty:

All video products are designed and tested to the highest quality standard and backed by full 3 years 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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