

VENUS X1PRO Quick Start



- 4K input support in DP, HDMI and DVI
- Input standard 2K formats
- Scale and switch seamlessly between 2K and 4K inputs
- Output to any format 2K or 4K
- EDID management on board
- HDCP 2.0 compliant
- DisplayPort 1.2 with MST
- Custom output resolution
- Modular design
- Options for expandability
- Control your way either on board or with a range of remote apps

CONTENT

Product Introduction.....	2
Packing Configuration.....	3
Hardware Orientation.....	4
Front Panel.....	4
Back Panel.....	6
Using Your Product.....	7
Content.....	7
Menu Structure.....	8
Default Mode.....	10
4K Mode.....	14
Split Mode.....	15
Independent Output Mode.....	20
Cascade Mode.....	21
Set the Output Resolution.....	22
User Define Black Key.....	25
Transition Setting.....	27
Screen Size Setting.....	28
Using Black Out.....	29
Saving Views.....	30
Recall Saving Settings.....	31
Contact Information.....	32

Product Introduction

Simply professional 4K scaling and switching.

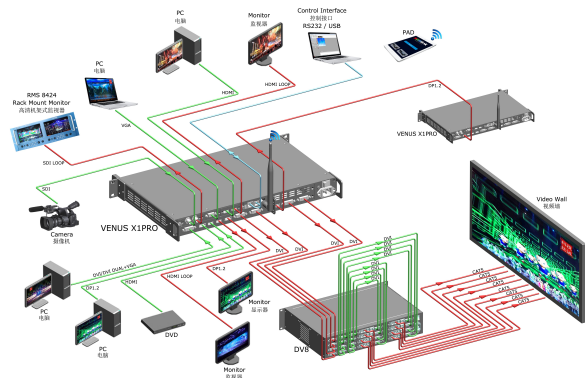
4K switching has never been more practical and straight forward. The modular VENUS X1 platform allows the addition of a range of signal options over and above the standard inputs. Standard inputs include 4K signals on Dual Link DVI, HDMI and DisplayPort. Output to DisplayPort as 4K or scale and split across dual 2K DVI outputs. For those needing 4K distribution and splicing on four DVI, simply add the additional output module. The output module expands VENUS X1PRO to four 2K DVI outputs and adds a further DisplayPort output.

Alternately, VENUS X1PRO with the output module can be become a 4K presentation switcher with the additional DVI outputs (and DisplayPort) becoming a full preview.

All the power and flexibility familiar with RGBlink X series.

System Connection

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



VENUS X1PRO System Connection Diagram

Packing Configuration

AC Power Cord



USB Cable



DVI Cable



Dual Link to
DVI+VGA Cable



Warranty Card
& USB Files



Screw Driver



Antistatic Bag



QC Declaration



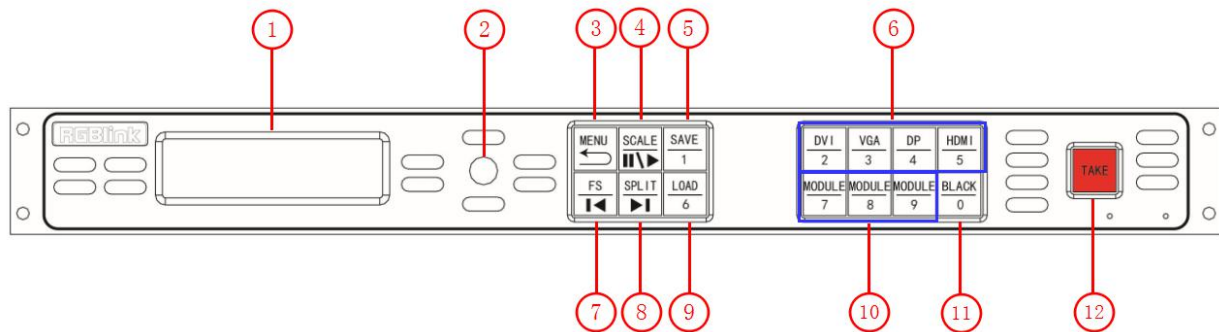
Note:

AC Power Cable supplied as standard according to destination market.

USB is contained on the Warranty/Registration Card. Please keep.

Hardware Orientation

Front Panel



Display

1	OLED Display: Displays current status of the product, and for feature selections provides interactive choices in conjunction with buttons on the front panel.
---	--

Multi-Function Buttons

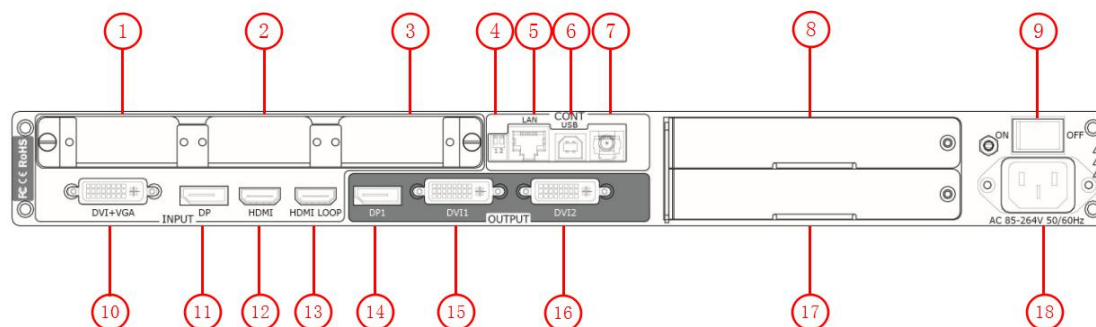
2	Rotary Button: This button used for menu selections and confirmation.
---	--

Illuminated Buttons

3	<p>MENU Button</p> <p>This button used for menu selections.</p> <p>Push the button again will return to the last level menu or exit the menu.</p> <p>Push the button two times to enter the effect switch function menu.</p> <p>Push the button for 3 seconds will lock the front panel, and push the button for 5 seconds to unlock.</p> <p>Push the MENU and TAKE button for 3 seconds will switch the language.</p>
4	<p>SCALE Button</p> <p>This button used for size and position adjusting.</p> <p>When input USB signal, it reused the stop and play button, push the button to stop or play the USB video file.</p>
5	<p>SAVE Button</p> <p>Save all current settings with the VENUS X1PRO to 1 of the 36 available slots.</p> <p>Additionally this button is used for direct numeric entry for numbers 1.</p>
6	<p>Dedicated Signal Buttons</p> <p>For each of inputs on the back panel a dedicated backlit buttons are provided. When lit,</p>

	<p>the signal is selected for use, when red light is flashing, signal is in preview or the signal is not available.</p> <p>Additionally, each button is numbered and can be used as direct number entry when values such as resolution and size.</p>
7	<p><u>FS Button</u></p> <p>Screen parameters setting button.</p> <p>When input USB signal, it reused the move previous button, push the button to play the previous USB video file.</p>
8	<p><u>SPLIT Button</u></p> <p>Split function button.</p> <p>When connect USB signal, it reused the move next button, push the button to play the next USB video file.</p>
9	<p><u>LOAD Button</u></p> <p>Restores/Loads all current settings with the VENUS X1PRO from 1 of the 36 available slots.</p> <p>Additionally this button is used for direct numeric entry for numbers 6.</p>
10	<p><u>Optional Signal Buttons</u></p> <p>If optional input module is fitted, then these two buttons operate as per Dedicated Signal Buttons above.</p> <p>Additionally these buttons are used for direct numeric entry for numbers 7/8/9.</p>
11	<p><u>BLACK Button</u></p> <p>Black button.</p> <p>Additionally this button is used for direct numeric entry for numbers 0.</p>
12	<p><u>TAKE Button</u></p> <p>For seamless effect switching.</p>

Back Panel



Input Connectors

10	DVI Input DVI-I Port
11	DP Input DP 1.2
12	HDMI Input HDMI Port

Output Connectors

13	HDMI Loop Out HDMI-A Port
14	DP Output DP 1.2
15.16	DVI Output DVI-I Port

Control Connectors

4	DIP Switch
5	LAN port RJ45
6	USB interface USB-B port
7	WIFI Port

Power Connection

9	Power Switch
18	Main power input AC 85-264V Max 65W, IEC-3

Option Slots

1.2.3	Input Option Slots
8.17	Sender Card/Output Option Slots

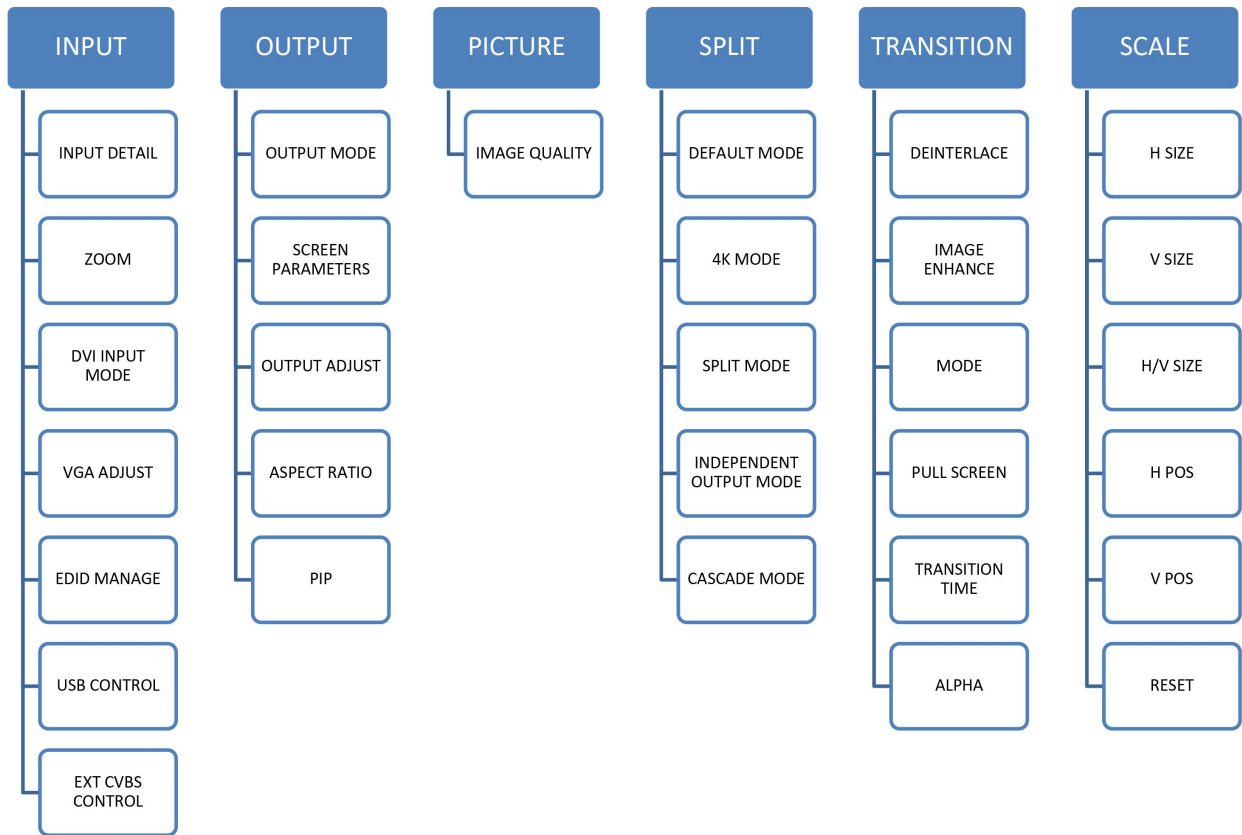
Using Your Product

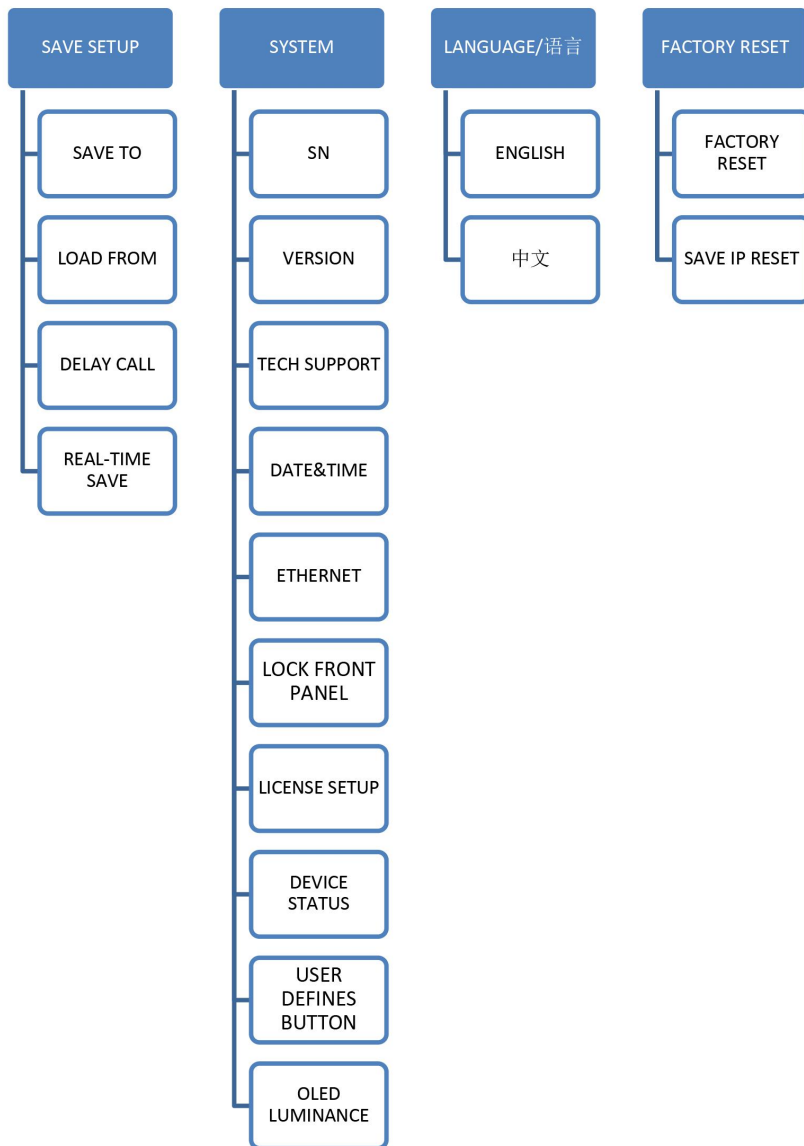
Content

- Menu Structure
- Default Mode
- 4K Mode
- Split Mode
- Independent Output Mode
- Cascade Mode
- Set the Output Resolution
- User Define Black Key
- Transition Setting
- Screen Size Setting
- Using Black Out
- Saving Views
- Recall Saved Settings

Menu Structure

The menu structure is shown in the figure below:





Default Mode

In default mode, both output channels output the same signal and resolution.

PIP is available for use.

This is the default mode following a reset.

Single Image Switching

Default DP for the current input source, if need switch other signal, for example, DVI, push the DVI button.

DP button light will be off after pushing the DVI button, and DVI button light will be on if the DVI signal is effective and stable. If the DVI signal is invalid or no input, DVI button light will flash.

same with above, switch the signals among HDMI and input option signal.

PIP Setting

Enable the PIP function

VENUS X1PRO supports seamless switching for single image and double images.

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



2. Push the knob to confirm, turn the rotary knob again, and select <PIP>.



3. Push the knob to confirm, and enter to the menu items as follows:

```

->PIP                ON
  LAYOUT             PIP L+T
  SELECT             IMAGE A
  SWAP WINDOW        OFF

->ALPHA              0

```

4. Turn the rotary knob again, select <PIP>, and set "ON".

Layout :

Select any one from PIP L+T, PIP R+T, PIP L+B, PIP R+B, PIP CENTER, PBP L+R and PBP T+B, take 3 layouts for example, shown as follows:



Select:

Select image A or image B. For example, select image B, the settings will be available for image B.

Swap Window:

Enable or disable the swap window function.

Alpha:

Image transparency setting, the adjustment range is 0 to 16.

Scale the Image

Push the [SCALE] button, and enter to the scale menus as follows.

```

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

->V POS              0
  RESET

```

User can adjust the following items by the rotary knob or number buttons.

H SIZE: Width setting.

V SIZE: Height setting.

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

H POS: Horizontal phase setting.

V POS: Vertical phase setting.

RESET: 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 [MENU] button to go into the menu items, turn the rotary knob and select <INPUT>, push the knob to confirm. Turn the rotary knob again, select <ZOOM>, and enter to the zoom menus 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	

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.

Image Quality Setting

1. Push the [MENU] button, and enter to the menu items. Turn the rotary knob, and select <PICTURE>, push the knob to confirm, and enter to the menu items as follows:

->IMAGE QUALITY	>>
-----------------	----

2. Push the knob to confirm, and enter to the menu items as follows.

->BRIGHTNESS	50
CONTRAST	50
SATURATION	50
SHARPNESS	50

->COLOR RED	50
COLOR GREEN	50
COLOR BLUE	50
GAMMA	LINEAR

->RESET

3. Adjust the brightness, contrast, saturation, sharpness, color red, color green, color blue and gamma according to actual need. If image quality distorts by improper operation, it can be recover by reset.

Note

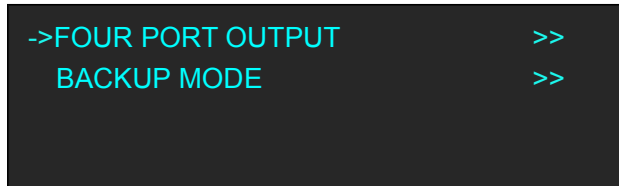
If user define the [BLACK] button as "BRIGHTNESS", push the [BLACK/BRIGHTNESS] button will enter to the above menu items.

4K Mode

VENUS X1PRO equipped with 4K module, and the output resolution can up to 4K×1K. Same with default mode, it supports single image switching, PIP setting, scale the image, zoom the image and image quality setting. Additionally, 4K mode supports split and preview.

Split Mode

Push the [SPLIT] button, and enter to the output mode menus. Turn the rotary knob, and select <SPLIT MODE>, which including <FOUR PORT OUTPUT> and <BACKUP MODE>.



FOUR PORT OUTPUT

Default <FOUR PORT OUTPUT> option. Push the knob to confirm, and enter to the menu items as follows:



<DEMO> and <SYNC> with the same operation steps, the difference is for the end device. DEMO is used when connect the device to the display, while SYNC is used when connect the device to the LED screen. Select any one, for example, select <DEMO>, and enter to the menu items as follows:



CROSS

Turn the rotary knob, and select <CROSS>, push the knob to confirm, and enter to the menu items as follows:



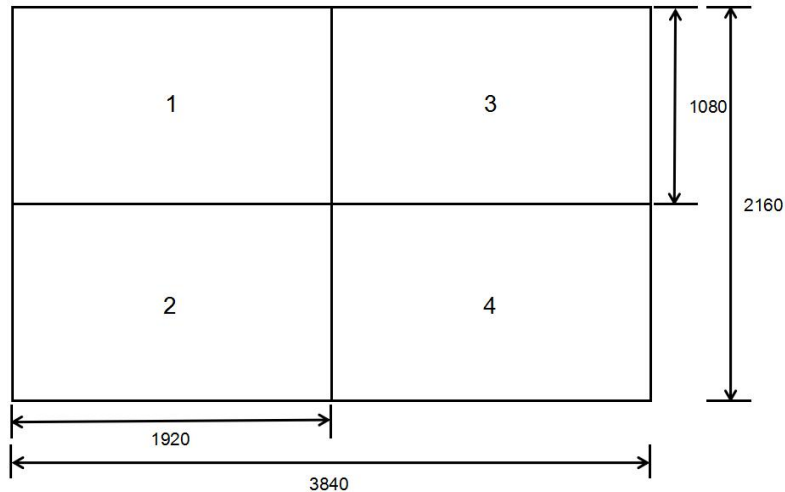


Set H total, V total, width and height of each screen according to actual need.

For example, set H total as 3840, V total as 2160, Width 1 as 1920 and Height 1 as 1080, then Width 3 will be 1920 (H total <3840> - Width 1 <1920> = Width 3 <1920>).

Height 2 will be 1080 (V total <2160> - Height 1 <1080> = Height 2 <1080>).

As shown in the figure below:



H 1/4

Turn the rotary knob, and select <H 1/4>, push the knob to confirm, and enter to the menu items as follows:

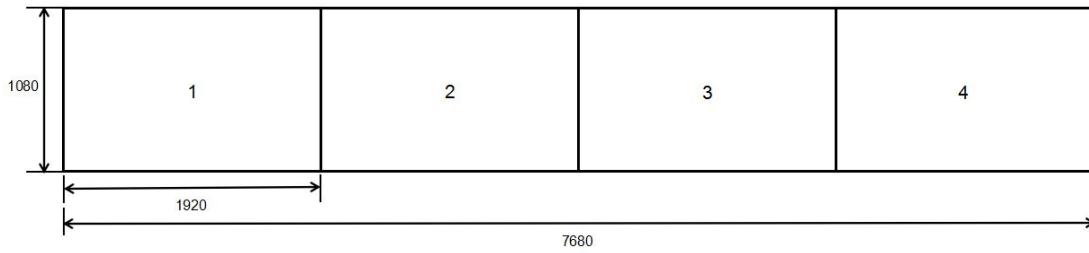


Set H total, V total, width and height of each screen according to actual need.

For example, set H total as 7680, V total as 1080, Width 1, 2, 3 and 4 as 1920 (H total <7680> = Width 1 <1920> + Width 2 <1920> + Width 3 <1920> + Width 4 <1920>).

Height 1 is 1080, same with V total.

As shown in the figure below:



V 1/2

Turn the rotary knob, and select <V 1/2>, push the knob to confirm, and enter to the menu items as follows:

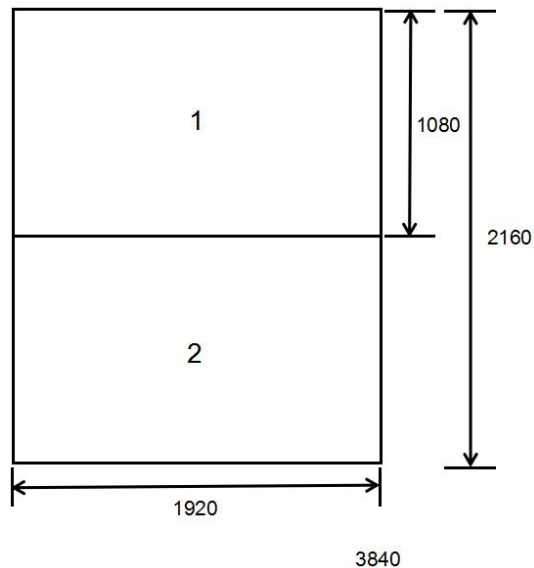
->H TOTAL	1920
V TOTAL	2160
WIDTH 1	1920
HEIGHT 1	1080
->HEIGHT 2	1080
RESET	

Set H total, V total, width and height of each screen according to actual need.

For example, set H total as 1920, V total as 2160, Width 1 is 1920, same with H total.

Set Height 1 as 1080 and Height 2 will be 1080, (V total <2160> - Height 1 <1080> = Height 2 <1080>).

As shown in the figure below:



H 1/2

Turn the rotary knob, and select <H 1/2>, push the knob to confirm, and enter to the menu items as follows:

```

->H TOTAL          3840
  V TOTAL          1080
  WIDTH 1          1920
  WIDTH 2          1920

```

```

->HEIGHT 1        1080
  RESET

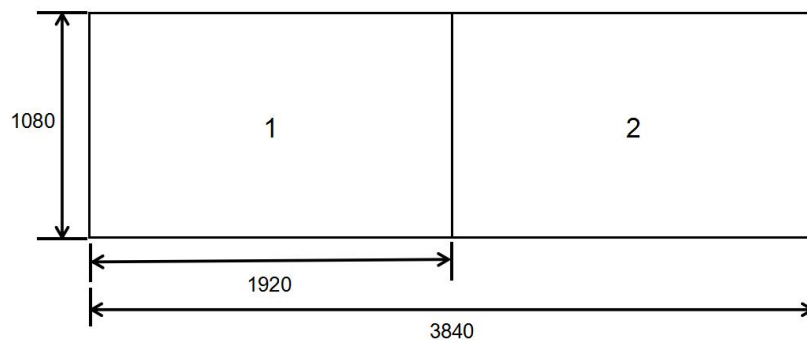
```

Set H total, V total, width and height of each screen according to actual need.

For example, set H total as 3840, V total as 1080, Height 1 is 1080, same with V total.

Set Width 1 as 1920 and Width 2 will be 1920, (H total <3840> - Width 1 <1920> = Width 2 <1920>).

As shown in the figure below:



BACKUP MODE

Turn the rotary knob, and select <BACKUP MODE>, push the knob to confirm, and enter to the menu items as follows:

```

FOUR PORT OUTPUT  >>
->BACKUP MODE    >>

```



```

->H TOTAL          1920
  V TOTAL          1080
  H POS            0
  V POS            0

```

->H SIZE	1920
V SIZE	1080
RESET	

Backup mode is same with two port output, settings are as follows:

H TOTAL: LED screen Horizontal total size.

V TOTAL: LED screen Vertical total size.

H POS: This device display image Horizontal size.

V POS: This device display image Vertical size.

H SIZE: This device display image Width setting.

V SIZE: This device display image Height setting.

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

Note

The split mode can not support seamless switching,
recommend to add a seamless switcher in front-end.

Independent Output Mode

Each of the two output channels can have individually have resolution and scale set.
There is no PIP in this mode.

Note

VENUS X1PRO V1.2 can not support this function.

Cascade Mode

Allows splitting a input signal across both output channels, and also provides setting where the source is to be split across more than one device.

There is no PIP in this mode.

Note

VENUS X1PRO V1.2 can not support this function.

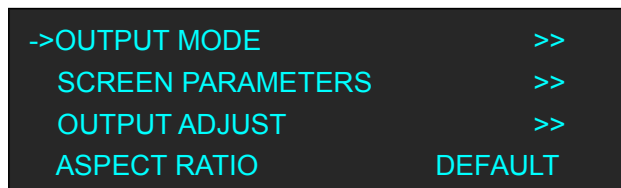
Set the Output Resolution

Select the Output Resolution

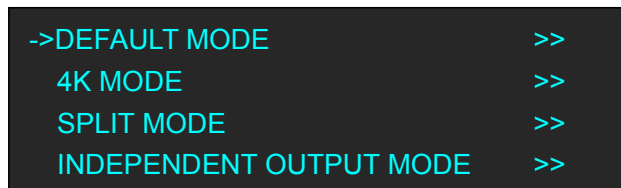
1. Push the [MENU] button, and enter to the menu items, turn the rotary knob, and select <OUTPUT>:



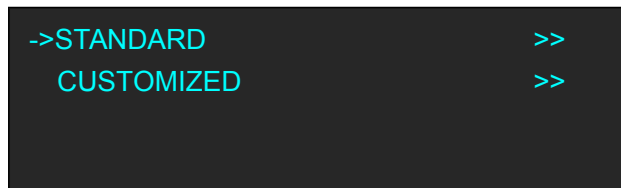
2. Push the knob to confirm, and enter to the menu items as follows:



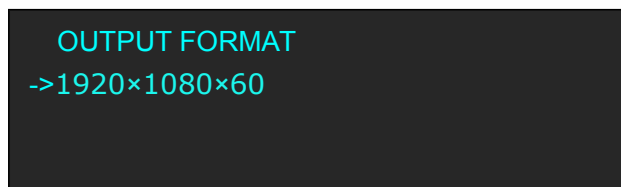
3. Default <OUTPUT MODE> option, push the knob to confirm, and enter to the menu items as follows:



4. Select <DEFAULT MODE> or <4K MODE> according to actual need, push the knob to confirm, and enter to the menu items as follows:

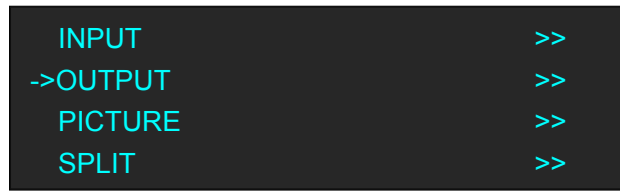


5. Default <STANDARD> option, push the knob to confirm. Turn the rotary knob, and select the output format according to actual need.

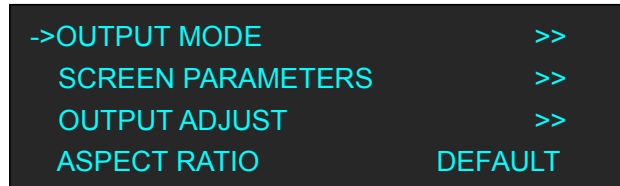


Custom the Output Resolution

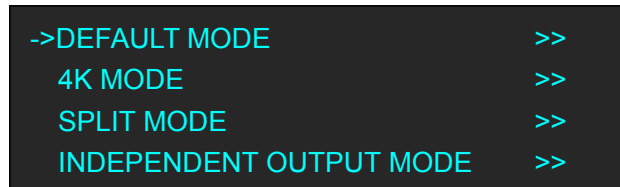
1. Push the [MENU] button, and enter to the menu items, turn the rotary knob, and select <OUTPUT>:



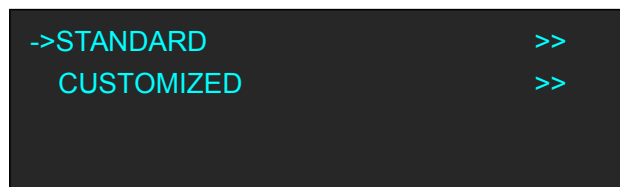
2. Push the knob to confirm, and enter to the menu items as follows:



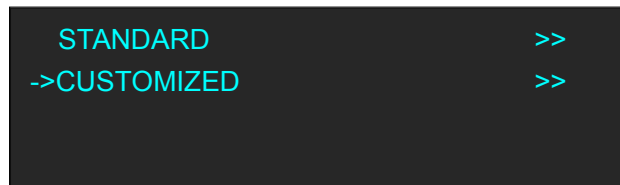
3. Default <OUTPUT MODE> option, push the knob to confirm, and enter to the menu items as follows:



4. Select <DEFAULT MODE> or <4K MODE> according to actual need, push the knob to confirm, and enter to the menu items as follows:



5. Turn the rotary knob, and select <CUSTOMIZED>, push the knob to confirm, and enter to the menu items as follows:



CUSTOMIZED:
->1920×1080@60

6. Turn the rotary knob on each digital position, and change the value of the digital by the digital buttons on the front panel. For example, input 1536 as following:

CUSTOMIZED:
*1536×

7. After the digital, push the knob will add *, means before the * is the horizontal size. Same operation for vertical size, for example input1536 as following:

CUSTOMIZED:
*1536×1536@

8. After the digital, push the 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. Use the digital buttons to finish the settings. For example, input refresh rate 60:

CUSTOMIZED:
->1536×1536@60

9. After input all the values, push the knob to enable VENUS X1PRO to output this resolution. VENUS X1PRO will take 5~10 seconds to enable this output resolution.

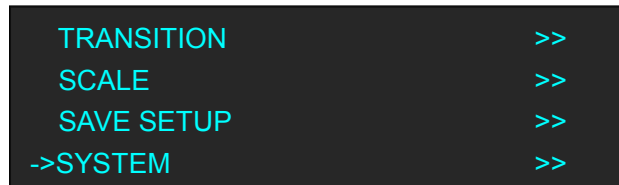
User Define Black Key

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.

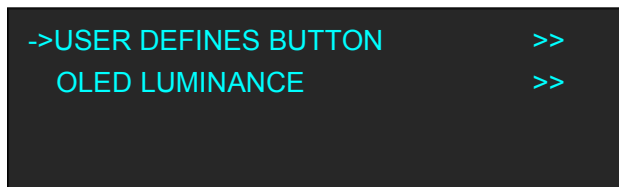
For more details, please refer to: [Using Black Out](#).

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

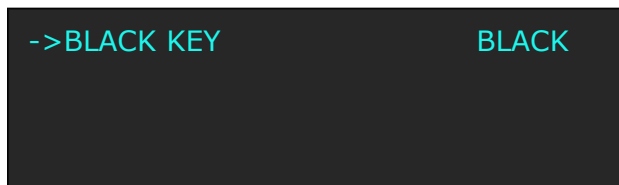
1. Push the [MENU] button, and enter to the menu items, turn the rotary knob, select <SYSTEM>:



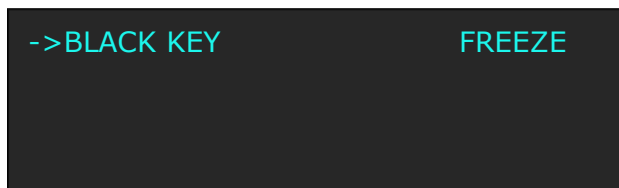
2. Push the knob to confirm, turn the rotary knob, and select <USER DEFINES BUTTON>:



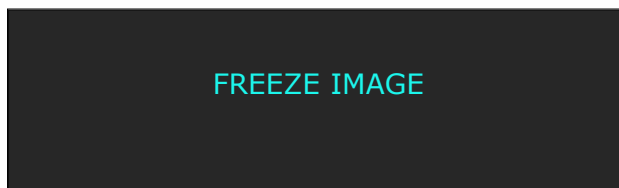
3. Push the knob to confirm, and enter to the menu items as follows:



4. Push the knob to confirm, turn the knob, and select <FREEZE>, <TP> or <BRIGHTNESS>, push the rotary knob to confirm.



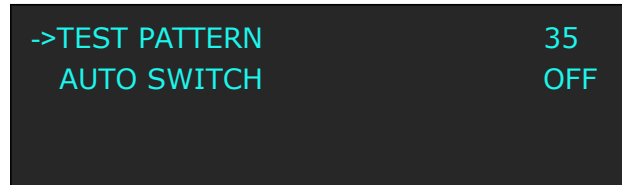
(1) If select <FREEZE>, push the button, its LED light is on, and freeze the image.



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

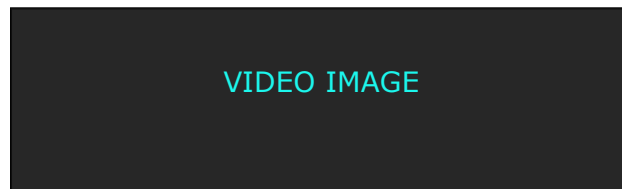


(2) If select <TP>, push the button, its LED light is on, the output will be switched to test pattern.

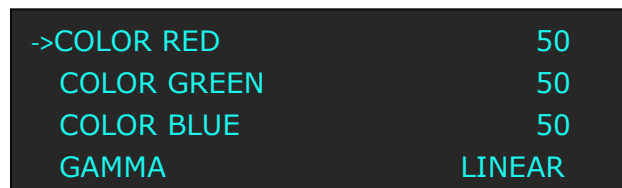
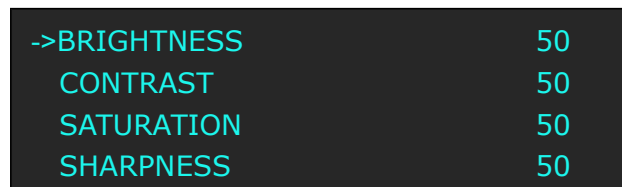


There are 66 kinds of test patterns. If select <AUTO SWITCH>, VENUS X1PRO will output all the test patterns one by one, and the interval between is 1 to10S.

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



(3) If select <BRIGHTNESS>, push the button, its LED light is on, user can adjust the brightness, contrast, saturation, sharpness, color red, color green, color blue and gamma. If image quality distorts by improper operation, it can be recover by reset.



Transition Setting

Push the [MENU] button for two times, and enter to the transition function menus, transition menu shown as follows:

->DEINTERLACE	ON
IMAGE ENHANCE	OFF
MODE	DISSOLVE
PULL SCREEN	OFF

->FADE TIME	0.5s
ALPHA	16

DEINTERLACE: Force Deinterlace function, select "ON" or "OFF".

ON: Force deinterlace.

OFF: No deinterlace.

IMAGE ENHANCE: Image enhancement function, for image edge sharpening, color reduction and image scaling.

MODE: Special effects switching modes, including DISSOLVE, CUT, WIPE SQUARE IN, WIPE SQUARE OUT, WIPE TOP LEFT IN, WIPE TOP LEFT OUT, WIPE TOP RIGHT IN, WIPE TOP RIGHT OUT, WIPE BOTTOM LEFT IN, WIPE BOTTOM LEFT OUT, WIPE BOTTOM RIGHT IN, WIPE BOTTOM LEFT OUT, WIPE LEFT IN, WIPE LEFT OUT, WIPE RIGHT IN, WIPE RIGHT OUT, WIPE TOP IN, WIPE TOP OUT, WIPE BOTTOM IN and WIPE BOTTOM OUT.

PULL SCREEN: Enable or disable pull screen function.

FADE TIME: Switch time setting. Turn the rotary knob to select the fade time and push the knob to confirm. The switching time ranges from 0 to 3S.

ALPHA: Set the image transparency, the adjustment range is 0 to 16.

Screen Size Setting

VENUS X1PRO 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 is 1408 x 832.

Operator can defined the VENUS X1PRO 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 main menu, turn the knob and choose <OUTPUT>, push the knob to confirm, turn the knob to choose <SCREEN PARAMETERS>, push the knob and goes into the SCREEN PARAMETERS menus as following:

H SIZE: Horizontal pixels, turn the knob or use the digital button to input the value 1408.

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

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

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

MODE: Mode option, select SCREEN SIZE.

SCREEN FOLLOW SCALE: User can enable or disable this function. When select "ON", the size of the screen will change according to scale setting

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



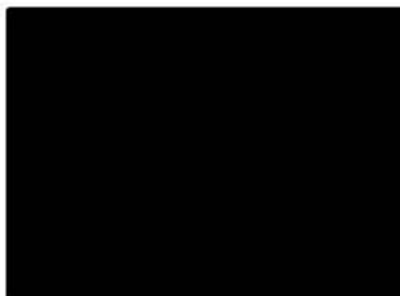
Using Black Out

Black out descriptions:

Black signal realizes one-key-touch to a black screen.

VENUS X1PRO provides black effect processing for output with cut black effect. Operation is as below:

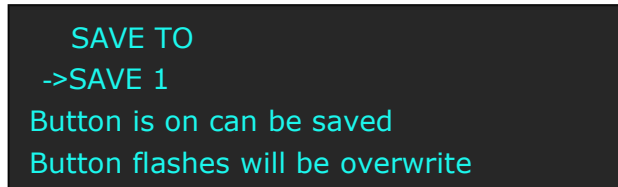
Push the [BLACK/0] button, then output will cut to BLACK, shown as below:



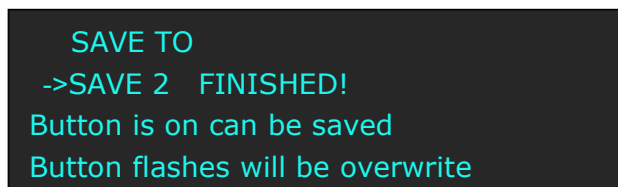
Saving Views

VENUS X1PRO provides 36 positions for saving or recording parameters. To save current parameters and settings:

1. Push the [SAVE/1] button, the button light is on, and enable the SAVE function.



2. Turn the rotary knob, and select the position that will save, push the knob to confirm.
3. The number button 1, 2, 3, 4, 5, 6, 7, 8, 9, 0 means SAVE1~10, push any button on to save. For example,, push number button 2 and save to SAVE 2, the OLED panel will show as follows after saving.



4. Push the [SAVE/1] button again, the button light is off, and disable the SAVE function.

Recall Saving Settings

VENUS X1PRO provides 36 positions for saving or recording parameters. To recall saved settings:

1. Push the [LOAD/6] button, the button light is on, and enable the LOAD function:

RECALL SAVE
->SAVE 1
Button on is ready for recall
Button flashes means just recall

2. Turn the rotary knob, and select the position that will load, push the knob to confirm.

3. Push the [LOAD/6] button again, the button light is off, and disable the LOAD function.

Contact Information

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.

Headquarter: S603~604 Weiye Building Torch Hi-Tech Industrial Development Zone Xiamen, Fujian Province, P.R.C

- **Tel:** +86-592-5771197
- **Fax:** +86-592-5788216
- **Customer Hotline:** 4008-592-315
- **Web:**
 - ~ <http://www.rgblink.com>
 - ~ <http://www.rgblink.cn>
- **E-mail:** support@rgblink.com