LVP605
LED HD Video Processor

USER'S MANUAL

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I.   Safety Precautions

Danger!

There is high voltage in the processor, to prevent any unexpected hazard, unless you are maintenance, please do not open the cover of the device.

Warning!

1. This device shall not encounter water sprinkle or splash, please do not place anything containing water on this device.
2. To prevent fire, keep this device far from any fire source.
3. If this device gives out any strange noise, smoke or smell, please immediately unplug the power cord from receptacle, and contact local dealer.
4. **Please do not plug or unplug DVI signal cable if the device is powered on.**

Caution!

1. Please thoroughly read this manual before using this device, and keep it well for future reference.
2. In the event of lighting or when you are not going to use the device for a long time, please pull the power plug out of receptacle.
3. Nobody other than professional technicians can operate the device, unless they have been appropriately trained or under guidance of technicians.
4. To prevent equipment damage or electric shock, please don't fill in anything in the vent of the device.
5. Do not place the device near any water source or anywhere damp.
6. Do not place the device near any radiator or anywhere under high temperature.
7. To prevent rupture or damage of power cords, please handle and keep them properly.
8. Please immediately unplug power cord and have the device repaired, when
   1) Liquid splashes to the device.
   2) The device is dropped down or cabinet is damaged.
   3) Obvious malpractice is found or performance degrades.

II. Packing list

Please unpack the product with care, then check whether all the following things are included in the package. If anything is found missing, please contact the dealer.

Standard accessories

The accessories supplied with this LED Video Processor may differ from the figures contained in the User's Manual, but they are applicable for the regions where you live.

DVI cable (150cm), 1pcs

BNC-RCA adapter: 2 pcs, Cabinet stator: 2 pcs, Screws: 6 pcs

User's Manual	Power cord (1.5m)1pcs	S-VIDEO cable (1.5m)

,

DVI cable (1.5m), 1pcs	DVI cable (0.5m), 1pcs	Disk

Rs232 cable (1.5m)	BNC-RCA adapter: 3 pcs	PCB Connector (Audio)

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III. Connections of hardware

1. Rear view
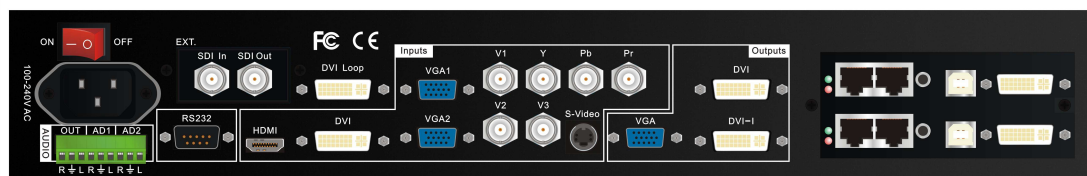
Figure 1

2. Port description

1）Video Input

LVP605 supports 10-channel signal input, including:

Port name	Description
V1~V3	3-channel PAL/NTSC composite video input
S-Video	1-channel PAL/NTSC S-video input
YPbPr	**1-channel component HD signal input**
VGA1~VGA2	2-channel computer analog signal input
DVI	**1-channel computer DVI digital signal input**
HDMI	**1-channel HDMI digital HD signal input**
EXT.	**1-channel extended signal input**

EXT. input signal can be 1xSDI/HD-SDI or 1xVGA/DVI/HDMI.

2）Audio Input

LVP605 supports 5-channel stereo audio switch. Of which, 3 channels are DVI (only available when the input signals are HDMI signals), HDMI and SDI audios, the other 2 channels are AD1, AD2 external input audio. AD1 and AD2 can be mapped to the any one of all video inputs, and will be switched synchronous to the selection of video input signals.

3）Video Output (DVI)

Port	Description
VGA OUT	1-channel analog RGBHV signal output, it can be connected to a local display device and used as monitor (it is strongly

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|	
	recommended to use this port when operating and setting **LVP605**).
DVI OUT1 / DVI OUT2	2 same DVI digital graphic signal output, it can be connected with external LED transmission card or LED transmission box
SDI / HDSDI（OUT）	1-channel digital video signal loop output
DVI Loop OUT	1-channel computer **DVI** digital signal loop output

4）Audio Output (AUDIO OUT)

Corresponds to the selected video input signal, output this channel audio input signals.

5）Signals of other ports

RS232 serial communication port

3. Connection diagram

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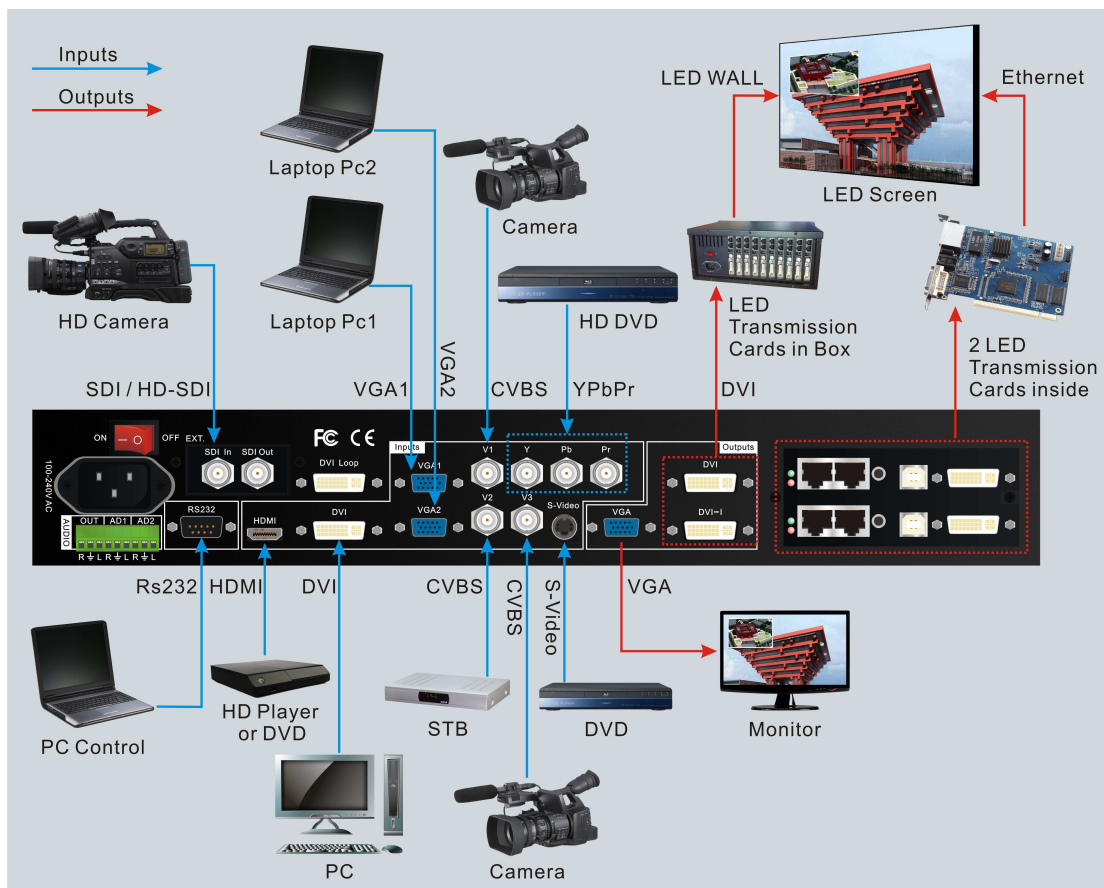
IV. Frontal panel operations

1. Diagram of frontal panel
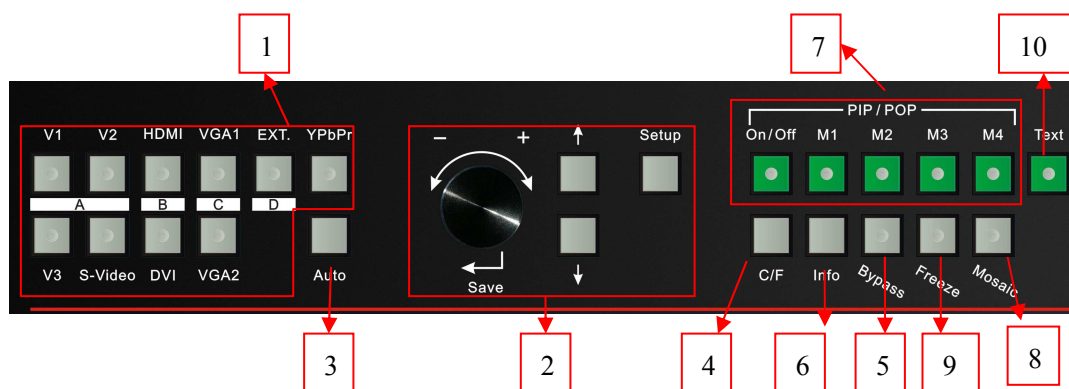
1）**Input selecting buttons** (**V1, V2, V3, S-Video, DVI, VGA1, VGA2, YPbPr, EXT.**):

They are used to select input signals

2）**Setup buttons (Setup, Save, ↑ , ↓ ,←,→)**

They are used to set the image output parameters of the processor.

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3）**VGA auto adjustment** (**Auto**)

To automatically adjust VGA input signals

4）**Cut / Fade switching mode (C/F):**

It is used to select signal switching effects, including seamlessly switching (CUT) and 0.5s, 1.0s and 1.5s Fade in / Fade out.

5）**PC signal bypass output (Bypass):**

It is used to switch full screen/partial screen display of PC signals, and the indicator will indicate the status of current input signal.

6）**Info:**

It is used to display current settings and information of processor

7）**PIP/POP buttons** (**ON/OFF**,**M1**，**M2**，**M3**，**M4**):

ON/OFF: to turn on/off **PIP/POP** functions, when the indicator is on, you can select any signal coming from different groups or current signal as PIP/POP by using input selecting buttons.

M1，M2，M3，M4: used to set or switch PIP/POP modes.

8) Mosaic

It is used to turn ON/OFF multi-machine cascade mosaic function. The indicator indicates current splicing status.

9）**Freeze**

It is used to turn ON/OFF screen freezing function.

10）**Text**

It is used to add Text, company logo or animation.

2. Button instructions (operation mode):

There are 25 buttons on the frontal panel of LVP605, all these buttons will be operable after start. they have the following functions as described below:

1) Select input video source

Port name	Description
V1、V2、V3	3-channel PAL/NTSC composite video input
S-Video	1-channel PAL/NTSC S-video input
YPbPr	**1-channel component HD signal input**
VGA1、VGA2	2-channel computer analog signal input
DVI	**1-channel computer DVI digital signal input**
HDMI	**1-channel HDMI digital HD signal input**
EXT.	**1-channel extended signal input（such as SDI/HDSDI）**

Switch audio input while operating above buttons; select the audio signal input from corresponding video input to output it through **Audio OUT**.

After selecting input signals, the input signal source you

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currently selected such as "input=HDMI" will appear in the first line of LCD, while the status of current input signals will appear in the second line of LCD. If there are no valid signals entered, the message "no valid signal input" will appear in LCD, and the corresponding indicator will blink and dark screen appear; if the signal is valid, the format of input signals such as " 1080p_60Hz " will appear in LCD.

Input= HDMI
1080p_60Hz
Cut

2) VGA input auto adjustment (Auto)

When the current VGA input source of **LVP605** is a valid signal, press this button, **LVP605** will automatically adjust the sampling parameters of the VGA signals, so as to make VGA picture clean and complete.

In general, this operation is made only when new VGA signal source is to be connected in. Sometimes user need repetitively do such adjustment till VGA picture looks clean, complete and stable.

3) Information display (Info)

Press this button to view current settings and information of **LVP605**, it consists of 25 items. If you press "**Info**" again before **LVP605** exit information display, **LVP605** will continue to display the next item of information.

4) Select Cut / Fade mode(C/F)

LVP605 can realize seamless switching effect (Cut) or fading in/out switching effect (Fade) between any two signals from different groups as listed below.. But if the signals come from the same group, dark screen will appear.

A	B	C	D
V1，V2, V3, S-Video	DVI，HDMI	VGA1 VGA2	EXT

Cut (seamlessly switching): while in this mode, "Cut" will appear in the third line of LCD, the system can seamlessly switch between different signals. It is also the default mode of LVP605

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after startup.

Fade (fading in fading out): while in this mode, "Cut: 1.0s" will appear in the third line of LCD, the system can realize fading in fading out switching effect between the signals coming from different groups. Users can set the switching time of fading in and fading out as 0.5 seconds,1.0 second or 1.5 seconds.

Notes: Neither Cut mode nor Fade modes applies to **YPbPr** signals, that is to say, if you attempt to switch between **YPbPr** signals and any other signal, dark screen will appear.

5) PIP / POP（PIP/POP：On/Off，M1, M2, M3, M4）

PIP/POP mode of LVP605 allows user to insert a PIP window in current picture, and the size and location of the PIP window can be set freely. The signals to be displayed in PIP window can be either current signal itself or any signals which are not in the same group as that of current picture. Here we call current picture "background", and call the picture to be overlaid "PIP". The following paragraphs will illustrate the operating procedures of this function:

Enter PIP display mode: Press On/Off button, its indicator will illuminate, LVP605 will enter PIP display mode, then use Preselect button to select PIP input signals, in the meantime, signals of background and PIP and their locations will appear in LCD (see Figure below):

```
Background：V1
  PAL
PIP：VGA
  1280X1024 60Hz
```

Change PIP: While in PIP mode, use **Preselect** button to select proper input signals, the preselected signals will be set as PIP.

Change the background: you must first turn off PIP mode. Press buttons to select appropriate input signal as background, then enter PIP mode again, and select a new PIP picture.

Switch PIP/POP display mode: LVP605 allows for presetting 4 **PIP/POP** display modes, each mode allows for setting its own background and PIP sizes and locations. While **PIP/POP** mode is switched on, user can press the mode switching buttons (M1, M2, M3, M4) to select appropriate display modes quickly.

6) Part/Full（Bypass）

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Press this button to switch between Part / Full display mode.

This function is only available when the current input signal is PC (**VGA 1**/ **VGA 2**/ **DVI** /**HDMI**) signal, while other signals can only be displayed in the Full display mode.

Mode	Description
Full	Full screen display. Entire picture is compressed to display in LED screen, the moment the indicator above the button is OFF.
Part	Part screen display. The picture will not be compressed, but partly exported to entire LED screen, the moment the indicator above the button is ON.

Caution: when the width and height of current input signals are less than the width or height of LED display (say the out_Hori_width or out_Vert_height), Part mode will not work.

7) Freeze

Press this button, the indicator of this button will illuminate normally, and the current picture will be frozen; press this button again or perform other signal switching operations, the indicator of this button will turn out, the picture will get in motion again.

8) Mosaic

Press this button only when current signals are DVI, the indicator of this button will illuminate, LVP605 will enter Mosaic mode. Press this button again, the indicator of this button will turn out, and LVP605 will exit Mosaic mode.

Notes: LVP605 will be unable to enter Mosaic mode in the following events:

1. The input signals are other signals than DVI;
2. BYPASS function has been switched on;
3. The definition of DVI input signals is different from the preset output definition of the processor.

9) Text

LVP605 can add Text, company logo or animation onto current picture, while current picture is normally displayed, press Text button to go to caption adding mode, then select the signal source

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of caption. The captions can be made by office software such as Powerpoint.

V. Setup

The following settings must be made by relevant qualified technicians. For ordinary users, unless they have received adequate technical training, they shouldn't attempt to make the following settings!

There are 3 categories available for you to set in **LVP605**. Technicians can set these items as necessary, for details see the table below:

Category	Items
User parameter setup	Output image setup, text overlay setup Brightness/Color/Contrast/Definition setup Hot spare setup， Audio configuration factory district setup
Mosaic setup	Input parameter setup Output parameter setup Sync. Mosaic setup
PIP/POP setup	Background and PIP output image setup

(

I) User parameter setup

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	Category		Items
1	Language	1	*Language 语言*
2	Output image setup	2	*Out Format*
		3	*Out_Hori_Width*
		4	*Out_ Hori _Start*
		5	*Out_Vert_Height*
		6	*Out_Vert_Start*
3	text overlay setup	7	*Text Mode*
		8	*Threshold Red*
		9	*Threshold Green*
		10	*Threshold Blue*
4	Brightness/Color Contrast/Definition setup	11	*Brightness*
		12	*Contrast*
		13	*Saturation*
		14	*Sharpness*
5	Audio configuration	15	*Audio1 Config*
		16	*Audio2 Config*
6	Hot spare	17	*Hot spare < V1→V3>*
		18	*Hot spare < V2→S-Video >*
		19	*Hot spare < HDMI→DVI>*
		20	*Hot spare <VGA1→VGA2>*
		21	*Device ID*
9	Factory district Setup	22	*ADC Calibration*
		23	*De interlace*
		24	*Device init*

1. Enter Setup of LVP605

Enter setup: While in operation mode (make sure that PIP mode and Mosaic mode have been switched off), press "**Setup**" button, then press the knob(（"**Save" key**）, **LVP605** will enter No.1 setup item.

Exit setup: press "Setup" button while in setup mode, LVP605 will directly exit setup.

After **LVP605** enters setup mode, the knobs and 3 buttons in setup area will respectively have the functions as described in table below:

Name		Functions
Knob	Speed of	The step value in proportion to the

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	knob	speed of knob
	Turn it clockwise	Decrease value or select previous value
	Turn it anticlockwise	Increase value or select next value
	Press it	Save the adjustment or selected values
↑		Move to previous item
↓		Move to next item
Setup		Enter or exit setup mode

After **LVP605** enters setup mode, the relevant setting information will be displayed in LCD as per the layout shown in the figure below:
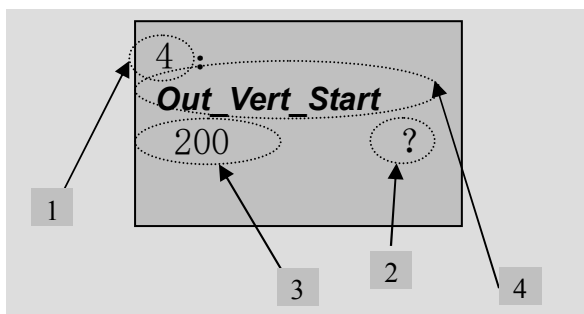

Figure 3

As shown in above figure, LCD consists of five sectors:

Sector	Description
1	The No. of current setting item
2	？: ask you whether to save the adjustment； ！: The adjustment already be saved and takes effect.
3	Newly adjusted value
4	Name of current setting item

2. Select language

Item 1: "*Language 语言*"

After entering setting mode, **LVP605** will enter the first setting item "*Language 语言*". **LVP605** supports Chinese and English display, turn the knob to select either of them, then press the knob to save it and make it valid.

3. Output image setup

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LVP605 outputs images from VGA and two DVI output ports. There are 10 output formats as listed in the table below. User can enter the No.2 setting item "*Out Format"* to select one of them.

|	Format
1	1024×768_60
2	1024×768_75
3	1280×1024_60
4	1280×1024_75
5	1600×1200_60
6	1920×1080_50
7	1920×1080_60
8	1366×768_60
9	1440×900_60
10	2048×1152_60

Item 2: "*Out Format*"

In this item, turn the knob to select either of them, then press the knob to save it and make it valid.

For example, if you select "**1280×1024_60**", it means that the output definition of LVP605 has been set as 1280×1024, and vertical refresh rate is 60Hz.

Please select the output definition equal to or greater than the actual definition of LED screen.

Items 3~6："*Output image setup*"

The actual definition of LED can be any value, so we should set LVP605 to make it output an image with the same definitions as that of the LED, so that the LED could display a full image. See figure below:

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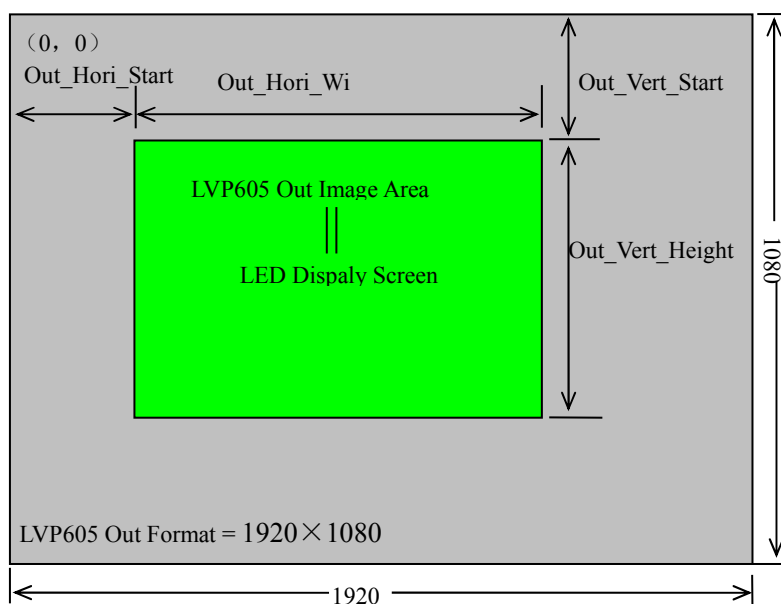
As above figure shows: the size and location of the images in **LVP605** output window for the LED display are defined by the following 4 groups of parameters:

Item No.	Parameters
3	*Out_Hori_Width*
4	*Out_ Hori _Start*
5	*Out_ Vert_Height*
6	*Out_Vert_Start*

Notes: user can change current parameter settings by rotating the knob. The speed at which you rotate the knob decides the step value of the adjustment. The location and size of the output image will be previewed in the white box while you are making the adjustment, then you can press the knob to save and validate the settings you made.

4 . Text Overlay Setup

| Item No.	Setup Item Name
7	*Text Mode*
8	*Threshold Red*
9	*Threshold Green*
10	*Threshold Blue*

Item 7: *"Text Mode"*

LVP605 allows user to set caption knock-out "< threshold" or ">threshold". If it is less than threshold value, it means that the image of caption signal less than current color threshold value will be added to background, while the part greater than threshold will be automatically filtered. If it is greater than threshold value, it means that the image of caption signal greater than current color threshold value will be added to background.

Item 7~10: " *Threshold Red/Green/Blue*"

The three options are used to set R, G, B values respectively as a certain value within 0~248.

The following figure shows an example of caption adding function. The caption document in this sample is made using Powerpoint. Its parameters are set as below:

No. of setup item	Setup Item Name	parameters
7	*Text Mode*	*<Threshold*
8	*Threshold Red*	*248*
9	*Threshold Green*	*248*
10	*Threshold Blue*	*248*
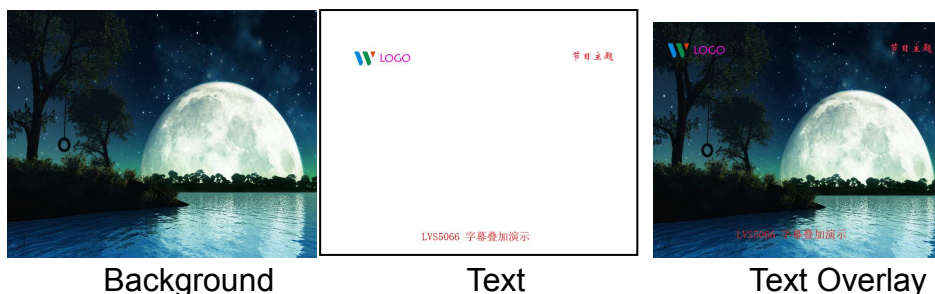
| Background | Text | Text Overlay |

5. Brightness / Contrast / Situration/ *Sharpness*

LVP605 supports customized brightness, contrast, color Saturation and definition settings. For details see table below:

Item No.	Description	Definition
19	*Brightness*	Range: 0~100, default value: 50
20	*Contrast*	Range: 0~100, default value: 50
21	*Saturation*	Range: 0~100, default value: 50
22	*Sharpness*	Option is "Sharp" or "Normal", default value: Normal

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Caution: (1). In order to ensure output images in complete gray, the output parameters are usually set as default values ！

(2). The color parameters only apply to V1、V2、V3、S-Video、YPbPr、SDI and HDMI signals.

6. Audio configurations

LVP605 supports 3-channel stereo audio switch. Of which, 3 channels are DVI (only available when the input signals are HDMI signals), HDMI and SDI audios,, the other 2 channels are **AD1**, **AD2** external input audio. **AD1** and **AD2** can be mapped to the any one of all video inputs, and will be switched synchronous to the selection of video input signals.

If **DVI(** or **SDI**, **HDMI)** is configured as external input audio, when audio signal is switched to **DVI(** or **SDI**, **HDMI)**, external audio will be chosen as input signals, otherwise the audio signals contained in **DVI(** or **SDI**, **HDMI)** signals will be chosen as input signals.

Item No.	Description	Definition
23	*Audio1 Config*	*Audio configuration option for AD1 port*
24	*Audio2 Config*	*Audio configuration option for AD2 port*

Notes: AD1, AD2 can't be allocated to the video input signals in the same channel!

7. Hot Spare setup

LVP605 supports hot spare of input signals, that is to say, once the current input signals are lost, the processor will automatically switch to backup input signals at once, so as to avoid image interruption caused by the fault of signal source.

Item	Description	
17	*Hot spare*	*< V1→V3>*
18	*Hot spare*	*< V2→S-Video >*
19	*Hot spare*	*< HDMI→DVI>*
20	*Hot spare*	*<VGA1→VGA2>*

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As above figure shows, if "***Hot spare < V1→V3>"*** is turned on, the processor will automatically switch the output image to backup port V3 once signal V1 is lost.

8. Factory district setup

The following are factory district setups, users are recommended to make these setups under the guidance of manufacturer's technicians, any improper setting or operation may result in abnormal happening to the processor.

Item 21: "***Device ID***"

This item is used to number LVP605 while controlling several processors by RS232. The number scale is from 1 to 255.

Item 22: "***ADC Calibration***"

After inputting a analog signal to the video processor whose white balance has not been calibrated, the picture on the display may appear some bad phenomena, such as color cast, extreme-darkness. **LVP605** can solve the above problems by automatically calibrating white balance based on the input analog signals（**CVBS、S-Video、YPbPr、 VGA**）. Operating procedures:

Switch to the corresponding analog input signal, enter Item No. 21 "***Device ID.***" after the processor detects input signals and exports the signals to the display, press "V1" for 5 times, then press " ↑ " to shift to Item 22 "***ADC Calibration***", press knob to calibrate white balance.

Caution: The white balance of all video processors has been calibrated using standard signals in the factory, please don't set this item unless necessary!

Item 23: "***De interlace***"

When **CVBS/S-Video/HDMI/SDI** signals are interlace input formats (e.g.: 1080i) and used as PIP, due to limits of the processor, tremble may take place, it can be dispelled by setting the option "***De interlace***". Operating procedures:

enter Item No. 21 "***Device ID***", press "V1" for 5 times, then press " ↑ " to shift to Item 23 "***De interlace***", turn knob to select "ON", and press knob to make it valid.

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Item 24: "*Device Init*"

After entering item No. 21 "*Device ID*", press "V1" for 5 times, then press "↑" to shift to Item 24: "*Device Init*", turn knob to select "Yes", then press knob to reset the factory settings, the moment the system will remind you "*Please restart.*", just follow the instruction.

(II) PIP/POP setup

Category		Items	
1	background Output setup	1	*Main_ Hori_Width*
		2	*Main_ Hori_Start*
		3	*Main_Vert_Height*
		4	*Main_Vert_Start*
2	PIP Output setup	5	*PIP_ Hori_Width*
		6	*PIP _ Hori_Start*
		7	*PIP _Vert_Height*
		8	*PIP _Vert_Start*

LVP605 allows for presetting 4 PIP/POP display modes, each mode allows for setting any background and PIP/POP size and location you need.
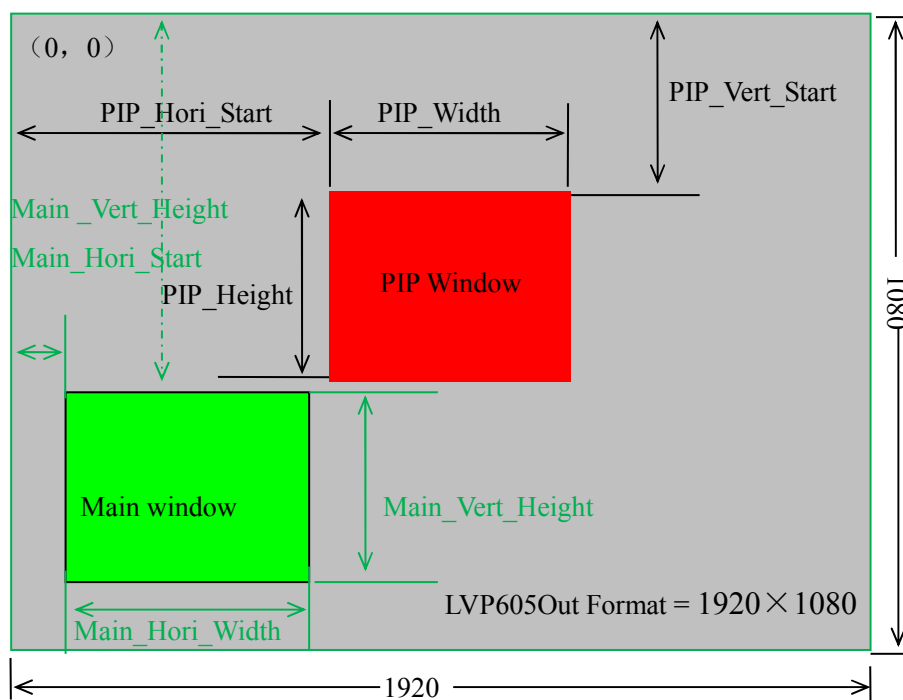
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Figure 5

As above figure shows: the size and location of the images in **LVP605 background and PIP** output window for the LED display are defined by the following 8 groups of parameters:

Item	Description
1	*Main_ Hori_Width*
2	*Main_ Hori_Start*
3	*Main_Vert_Height*
4	*Main_Vert_Start*
5	*PIP_ Hori_Width*
6	*PIP _ Hori_Start*
7	*PIP _Vert_Height*
8	*PIP _Vert_Start*

Operating procedures:

Enter PIP/POP setup mode: while PIP/POP mode is turned on (make sure that Mosaic mode have been switched off), press "**Setup**" button, then press the knob, **LVP605** will enter the first setup item of **PIP/POP** setup mode. The information as follows will appear in LCD:

```
1.
Main_Hori_width
1216            ?
PIP/POP Mode=M1
```

Switch current PIP modes: press mode buttons (i.e.: M1, M2, M3, M4), the processor will directly switch current PIP modes.

Switch adjustment items: press " ↑" and " ↓" to switch current adjustment items.

Change output parameters: user can change current parameter settings by rotating the knob. The speed at which you rotate the knob decides the step value of the adjustment. The locations of the background and PIP will be previewed respectively in the white rectangle and blue rectangle while you are making the adjustment, then you can press the knob to save and validate the settings you made.

Exit PIP/POP setup mode: directly press "**Setup**" button while in **PIP/POP** setup mode, **LVP605** will exit directly.

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(III) Mosaic setup

Category		Items	
	Input image setup	1	*Out_Hori_Width*
		2	*Out_ Hori _Start*
		3	*Out_ Vert_Height*
		4	*Out_Vert_Start*
		5	*In_Hori_Width*
		6	*In_ Hori _Start*
		7	*In_ Vert_Height*
		8	*In_Vert_Start*
		9	*Mosaic Mode*

The maximum output definition of **LVP605** is 2048×1152 or 1600×1200, to drive so high definition, LED display requires two transmission cards in cascade, so LVP605 provides two locations to hold two built-in transmission cards; if the actual definition of LED display exceeds the maximum output definition of LVP605, you may divide the whole LED into pieces of smaller LED screen, then put them together in Mosaic manner by connecting multiple sets of LVP605 in parallel, so as to integrate the smaller pieces of LED into a large LED display.

With frame synchronization technology, LVP605 solves the problems of misplacement and delay of output image existing in ultra-large LED mosaic, able to provide real-time, clear and fluent displaying effects.

LVP605 supports multi-machine mosaic in parallel, in this way, smaller pieces of LEDs can be integrated into a large display. For example, if the output definition of LVP605 is set as 1920×1080, and we put 2 sets of LVP605 together horizontally in parallel, it will be able to connect any LED display of up to 3840×1080 pixels.

Below is a 2×2 mosaic example using 4 sets of LVP605, telling us how to use multi-machine cascade of LVP605 and what we should pay attention to.

The definition of each LED is 3456×1920, we can divide it into the

four small pieces of LED of 1728×960 pixels as shown in figure below, each piece of small LED is driven by a set of LVP605. With total 4 sets of LVP605, the large display of 3456×1920 pixels is able to display a full picture.

#1（1728×960）	#2（1728×960）
#3（1728×960）	#4（1728×960）

Below is the system topological diagram:
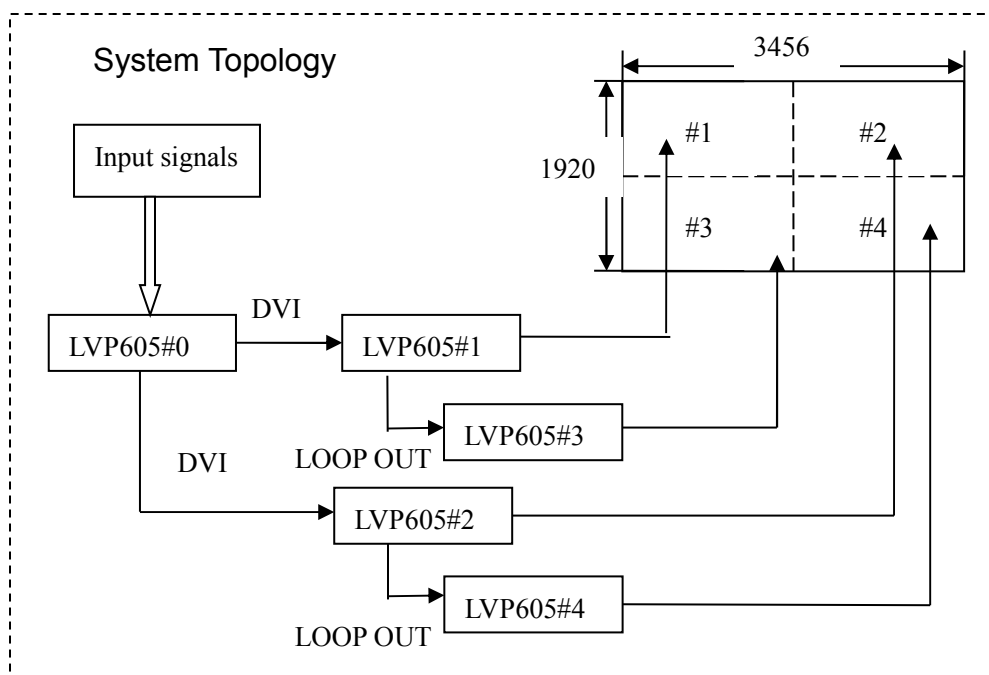
As above figure shows, all input signals are connected to and switched by #0 **LVP605**, the DVI signals exported by this machine are output via DVI loop of each mosaic processor to 4 sets of LVP605 for cutting or enlarging, the image that they output will be finally displayed as a whole picture in 4 pieces of LEDs.

To use multiple sets of LVP605 in parallel, we should set the parameters of input image for each set of LVP605. The table below lists all the items to be adjusted.

Item	Description
1	*Out_Hori_Width*
2	*Out_ Hori _Start*
3	*Out_ Vert_Height*
4	*Out_Vert_Start*

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5	*In_Hori_Width*
6	*In_ Hori _Start*
7	*In_ Vert_Height*
8	*In_Vert_Start*
9	*Mosaic Mode*

Caution: while in Mosaic mode, in order to keep the consistency of the image, each processor must be set to be identical in the parameters of brightness/color/gray/definition.

Enter setup: While in operation mode (mosaic mode is turned on), press "Setup" button, then press OK button, **LVP605** will enter mosaic setup item.

Exit setup: press "Setup" button while in setup mode, LVP605 will directly exit setup.

The setup of 5 PCS LVP605 is as follow:：

Setup items		parameters of processor				
		#0	#1	#2	#3	#4
1	Out_Hori_Width	1920	1728			
2	Out_ Hori _Start	0				
3	Out_ Vert_Height	1080	960			
4	Out_Vert_Start	0				
	Out Format	1920×1080				
5	In_Hori_Width	1920	960	960	960	960
6	In_ Hori _Start	0	0	960	0	960
7	In_ Vert_Height	1080	540	960	540	540
8	In_ Vert_Start	0	0	0	540	540
9	Mosaic Mode	Not Sync	Sync			

In order to ensure all output images are synchronous to each other, please note the following settings:

1. The input signals can be only DVI signals, and if the processor is in mosaic mode, it will be unable to switch input signals;
2. All the 5 processors must to be set to be the same in output definitions.
3. Please reduce the number of DVI rings of the processor to the most extent, so as to prevent signal instability caused by signal attenuation.

Items 1~4：" *Output image setup* "

Items 3~6 of user setup menu are image output parameters, the

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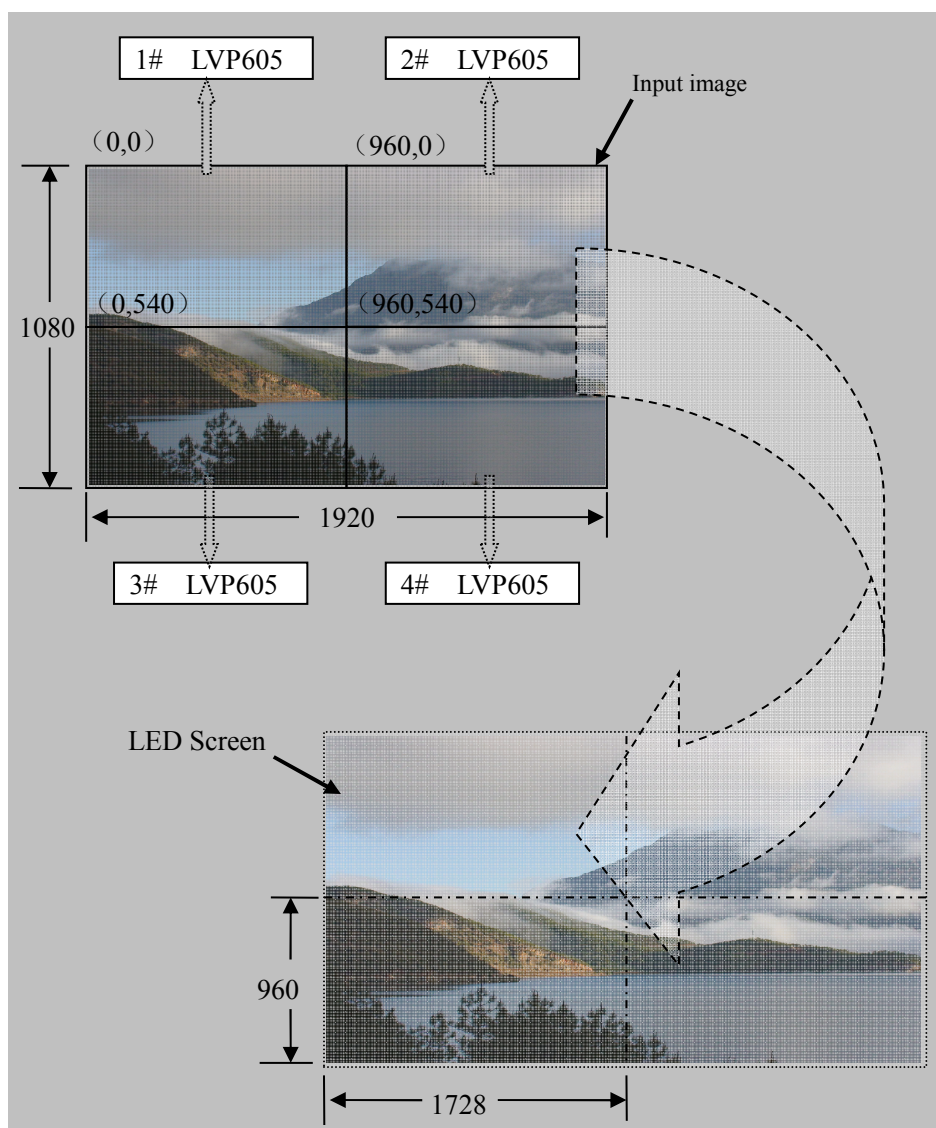parameters adjusted are the data in the same group.

Figure 5

Item 5："*In_Hori_Width*"

It is used to set the horizontal width of input image from which **LVP605** will capture.As shown in Figure 5, the width of input image for the 4 sets of **LVP605** should be set as:
In_Hori_Width = 1 / 2

Item 6："*In_ Hori _Start*"

It is used to set the horizontal start point of input image from which **LVP605** will capture. As shown in Figure 5, the the horizontal start point

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of the four sets of **LVP605** are set as below respectively:

    1#   **LVP605** *In_ Hori _Start* **= 0**

    2#   **LVP605** *In_ Hori _Start* **= 960**

    3#   **LVP605** *In_ Hori _Start* **= 0**

    4#   **LVP605** *In_ Hori _Start* **= 960**

Item 7：" *In_ Vert_Height* "

It is used to set the vertical height of input image from which **LVP605** will capture. As shown in Figure 5, the the vertical height of the four sets of **LVP605** are set as below respectively:

    In_ Vert_Height **= 540**

Items 6：" *In_ Vert_ Start* "

It is used to set the vertical start point of input image from which **LVP605** will capture. As shown in Figure 5, the the vertical start point of the four sets of **LVP605** are set as below respectively:

    1#   **LVP605** *In_ Vert_ Start* **= 0**

    2#   **LVP605** *In_ Vert_ Start* **= 0**

    3#   **LVP605** *In_ Vert_ Start* **= 540**

    4#   **LVP605** *In_ Vert_ Start* **= 540**


Item 9: " *Sync Mosaic* "

The system provides the options of "Sync Mosaic" and "Not sync Mosaic". "Sync Mosaic" ensures all output images are completely real-time and synchronous to each other; while "Non-sync Mosaic" has better compatibility, and is usually used for mosaic commissioning.

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VII. Specifications

Inputs		
Nums/Type	3×Composite 1×S-Video 1×YPbPr 2×VGA（RGBHV） 1×HDMI（1.3a with HDCP ） 1×DVI（HDMI） 1×EXT.（Extended）	
Video system	PAL/NTSC	
Composite Video Scope/Impedance	1V（p_p）/ 75Ω	
S-VIDEO Scope/Impedance	Y：1.0V（p_p）/ 75Ω，C：0.35V（p_p）/ 75Ω	
VGA Format	PC（VESA）	≤2048x1152 @60Hz
VGA Scope/Impedance	R、G、B = 0.7 V（p_p）/ 75Ω	
DVI Format	SD/HD（CEA-861）	≤1920x1080P @60Hz
	PC（VESA）	≤2048x1152 @60Hz
HDMI 1.3 Format (HDCP)	SD/HD（CEA-861）	≤1920x1080P @60Hz
	PC（VESA）	≤2048x1152 @60Hz
YPbPr Format	SD/HD（CEA-861）	≤1920x1080P @60Hz
YPbPr Scope/Impedance	Y= 1.0V（p_p）/ 75Ω Pb= 0.35V（p_p）/ 75Ω Pr= 0.35V（p_p）/ 75Ω	
SDI format	SDI-SMPTE 259M-C	576i @50Hz 480i @60Hz
HDSDI 3GSDI format	HDSDI-SMPTE 292M SMPTE 274M/296M	1080P @50Hz/60Hz 1080i @50Hz/60Hz 720P @60Hz
AUDIO Scope/Impedance	2.0Vp-p/10KΩ	
Input Connectors	VGA：15pin D_Sub(Female) DVI：24+1 DVI_D YPbPr: BNC×3 Composite：BNC S-VIDEO：4pin mini DIN(Female) SDI/ HDSDI ：BNC	
Outputs		
Nums/Type	1×VGA（RGBHV） 2×DVI	

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VGA/DVI Format	1024×768@60Hz/75Hz 1280×1024@60Hz/75Hz 1600×1200@60Hz 1920×1080p@50Hz/60Hz 1366×768@60Hz 1440×900@60Hz 2048×1152@60Hz
VGA Scope/Impedance	R、G、B = 0.7 V（p_p）/ 75Ω
Output Connectors	VGA OUT：15pin D_Sub(Female) DVI OUT1：24+5 DVI_I DVI OUT2：24+1 DVI_D
Others	
Control	Panel Button,RS232
Power	100-240VAC 35W 50/60Hz
Operating Temp	5-40 ℃
Humidity	15-85%
Dimensions（Package）	166 mm (height) ×428mm (width) ×545mm (length)
Weight（G.W.）	5.0 Kg
Weight（N.W.）	3.2Kg

Dimensions：

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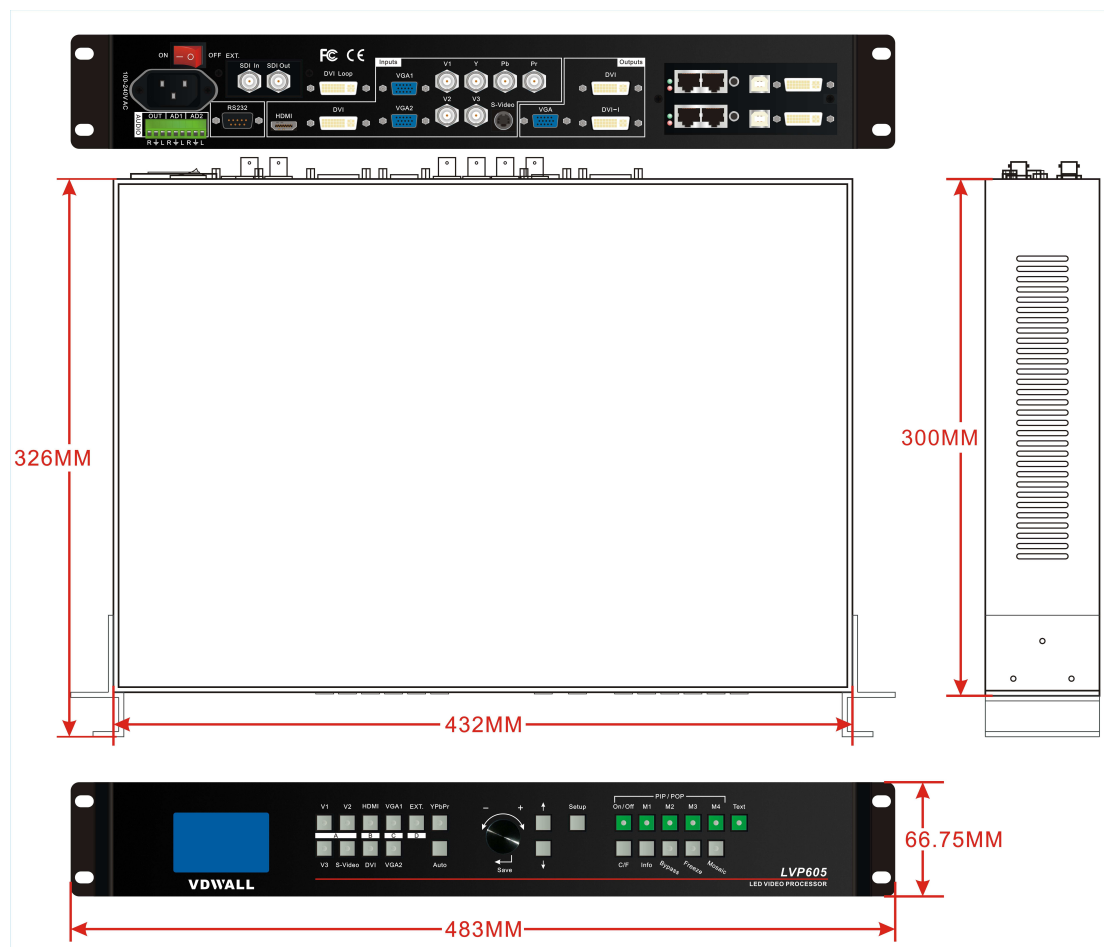
VIII. Copyright info

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