WolfPack™ 4K 60 2x9 Video Wall Processor

Model No. HDTV-B29VW

Version 2.2

⚠️**Warning**

- Do not expose this device to Rain, Moisture, and Dripping
- Only use accessories specified by the manufacture
- Unplug this device during Lightning Storms
- Product specifications may be subject to technical upgrades without further notice

Contents

HDTVHDPMXB29VM is a HDMI 2.0 Video Wall controller with 2 HDMI input, 2 HDMI loop out and 9 HDMI scaling out for video wall processing. The Toslink jack terminal provides analogue LR audio and digital S/Pdif audio output. 5 way phoenix jackets provide balanced LR audio output. HDTVHDPMXB29VM support RS232 bypass feature for several units daisy chain or cascade connection

Features

- Support Bezel Compensation with two modes
- Support 180° rotation
- Support PIP on video wall
- Support HDMI 2.0,HDCP2.2
- Support 2x HDMI loop out
- Support multi-resolution up to 3840x2160@60Hz video output for video wall
- Support RS232 and TCP/IP control
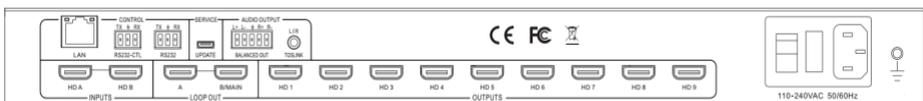- Support CEC control with displayer by PC Tool or commands

Connectors and Controls

Front

Name	Description
PWR-LED	Lit when the unit is powered
HD A-LED	Lit when HDMI A input is connected
HD B-LED	Lit when HDMI B input is connected
LP A-LED	Lit when Loop out A is connected
LP B-LED	Lit when Loop out B connected
HD 1…9-LED	Lit when the corresponding HDMI out is connected

Rear

| Name	Description
LAN	TCP/IP Control, Baud Rate: 57600
RS232-CTL	External RS232 control, Baud Rate: 57600 Data Bits: 8Parity: None Stop Bits: 1
RS232	To bypass RS232-CTL commands to next unit
UPDATE	Firmware upgrade
Balanced Audio out	5 way phoenix Jacket, 20Hz – 20kHz, 1.5Vrms max
Mini Toslink	• L+R Audio Output 3.5mm Stereo Jack. 20Hz – 20kHz, 1.5Vrms max • Optical S/pdif Audio Output
HD A	HDMI A input
HD B	HDMI B input
LOOP OUT A	Bypass HDMI A signal to downstream
LOOP OUT B/MAIN	Bypass HDMI B or A signal to downstream, can be configured by RS232 command
HD 1…HD 9	HDMI scaling output for video wall to display

Using the HDTVHDPMXB29VM

Connect the desired video source to HDTVHDPMXB29VM input HD A or HD B connector and the desired output video wall display devices to HD 1…HD9 HDMI output connector. With PC Tool or RS232 commands to control the unit for different wall display
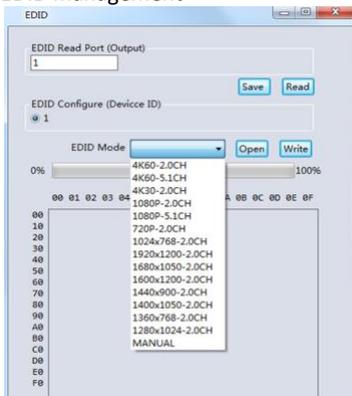
HDTVHDPMXB29VM PC tool

Switch tab on the PC tool

1. PC tool connection with UART or Network
2. Select input source for each scaling output port
3. All Set function, select HD A or B to all the scaling output
4. Select input source for B/MAIN output port
5. Select audio source for balanced audio output and Mini Toslink output
6. EDID configure
7. Reset
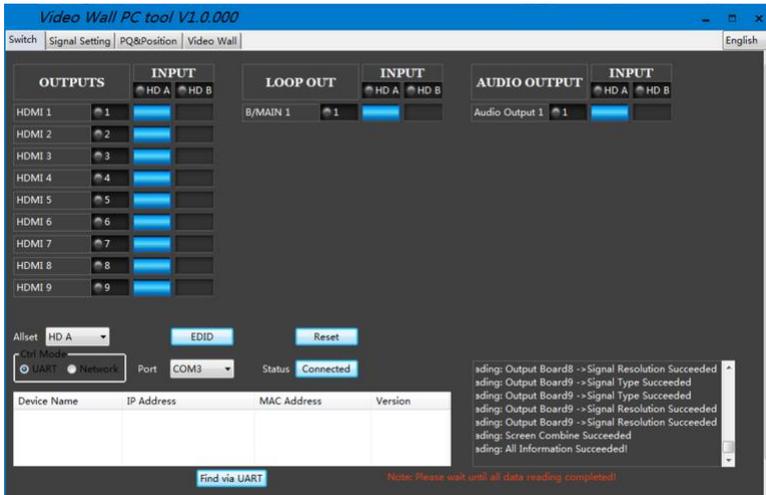
EDID management

User can read each scaling output port downstream EDID and save as a BIN file.
User can open an existing EDID file and write to the HDMI A and B input port as **Manual EDID.**
User can select predefined EDID and write to HDMI A and B input ports
Predefined EDID option like below:

4K60-2.0CH	1920x1200-2.0CH
4K60-5.1CH	1680x1050-2.0CH
4K30-2.0CH	1600x1200-2.0CH
4K30-5.1CH	1440x900-2.0CH
1080P-2.0CH	1400x1050-2.0CH
1080P-5.1CH	1360x768-2.0CH
720P-2.0CH	1280x1024-2.0CH
1024x768-2.0CH	Manual

Signal Setting tab on the PC tool

User can read each input port resolution and set each scaling output resolution here
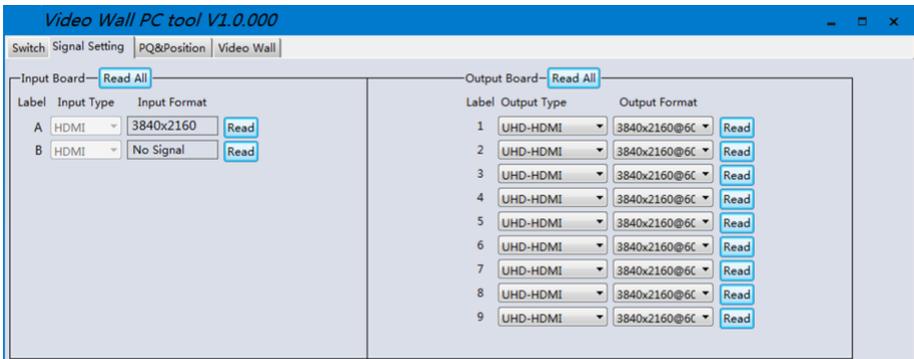
Available output resolutions:

| Number	Output Resolution Setting	Number	Output Resolution Setting
1	3840x2160p 60Hz	9	1440x1050 60Hz
2	3840x2160p 50Hz	10	1366x768 60Hz
3	3840x2160p 30Hz	11	1360x768 60Hz
4	3840x2160p 25Hz	12	1280x1024 60Hz
5	1920x1200 60Hz	13	1280x768 60Hz
6	1920x1080p 60Hz	14	1280x720p 60Hz
7	1920x1080p 50Hz	15	1280x720p 50Hz
8	1600x1200 60Hz	16	1024x768 60Hz

Please note, 3840x2160 25/30Hz can only be used for standalone display, not for video wall

PQ tab on the PC tool
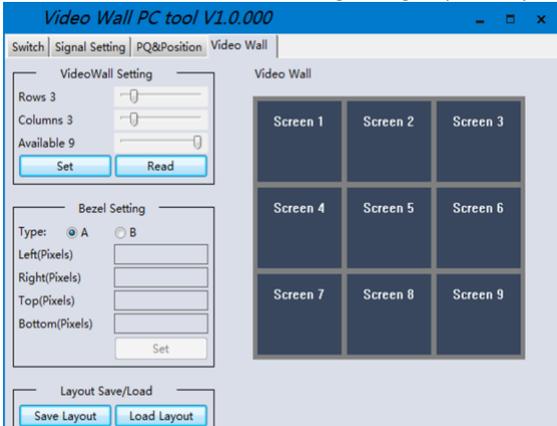Suggest always use the default setting 50/50/50/50
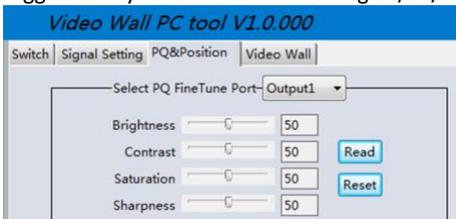

CEC tab on the PC tool
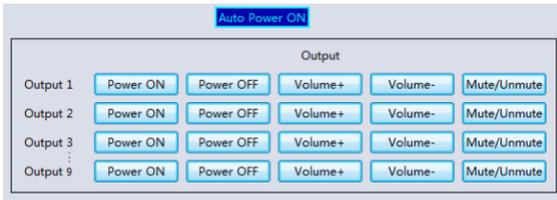
Video Wall tab on the PC tool

The Video Wall tab is used to configure a group of outputs to function as a video wall.

1. Use the Video Wall Setting controls to change how the displays are arranged on the Video Wall tab:
   a. Adjust the Rows and Columns sliders to change the displayed screen arrangement to permit proper Drag-and-Select of the desired screens for the video wall.
   b. Change the Available slider to set how many outputs will be used for the Video Wall.
   c. Click the **Set** button to change the Screen configuration on the Video Wall tab.
2. Use the left mouse button to drag-select the screens that will be set for video wall mode. The selected screens will be shown as bright blue.
3. Use the right mouse button to open a menu.
4. Select **Screen Stitching** from the menu to program the video wall mode. The selected screens will now be shown as bright green.
5. To change the displayed image: either use the methods detailed in the section **Error! Reference source not found.** starting on page 10, or right-click to open the pop-up menu and select the desired input from the **Input Select** menu option.
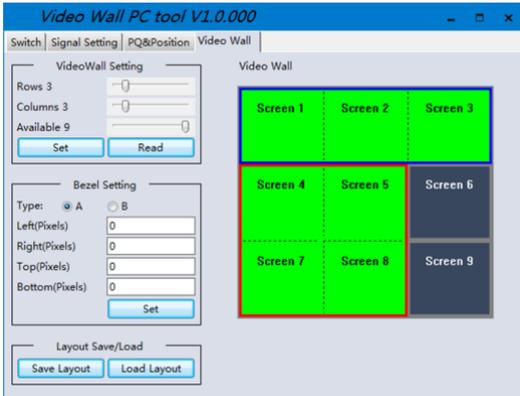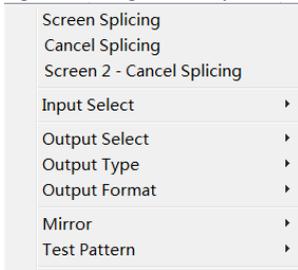
Repeating steps 2 to 5 above with a different set of outputs allows the creation of a second video wall. However, changing the **Rows**, **Columns** and **Available** sliders will automatically delete the current video wall set up when the **Set** button is clicked. The following example shows a more unusual video wall set-up of two video walls with 1x3 and 2x2 configurations:

Video Wall Context Menu

Right clicking on any of the screen icons will display the following context menu:

Screen Stitching	This option connects the selected screens into a video wall configuration.
Cancel Stitching	Return the Video Wall configuration to normal outputs.
Screen x – Cancel Stitching	Removes the single screen x from the video wall to allow the displaying another full frame image within the video wall configuration, as shown in this example: Video Wall display with bezel compensation and different full frame image on display 3
Input Select	Use the sub-menu to select the input to display on the video wall or the secondary input image shown in the above example.

Output Select	This option is only available for any screen that is not assigned to a video wall mode.
Output Type	This option is only available for any screen that is not assigned to a video wall mode. It allows setting of the selected screen output mode as described in the **Error! Reference source not found.** section on page 14.
Output Format	This option is only available for any screen that is not assigned to a video wall mode. It allows setting of the output resolution for the selected screen output.
Mirror	Four sub options : OFF (default), H (Horizontal), V (Vertical) , H+V **When select H+V, you can make 180° rotation with the selected screen**
Test Pattern	When enable this feature, the output will display Color Bar pattern

Bezel Setting

The Bezel Setting section allows the entry of values to compensate for the display bezel thickness. These values may be entered either as pixels (Type A) or as millmetre (Type B).

Type A Bezel Settings

The image size will be adjusted to allow for the number of pixels entered in each of the entry boxes. Click the **Set** button view the effect of the new values.

Type B Bezel Settings

The image size will be adjusted to allow for the Inner and Outer display dimensions as entered in each of the entry boxes. Click the **Set** button view the effect of the new values.

Bezel Compensation

The following images demonstrate the effect of not having bezel compensation and what a correctly configured bezel compensation settings should produce:

No Bezel Compensation   *Correct Bezel Compensation*

Layout Save/Load

The Save Scene/Layout and Load Scene/Layout buttons allow a video wall configuration to be saved or recalled at any time. Up to 10 configurations, each with their own name can be saved or recalled. When saving, each Scene can optionally be given a name to identify that video wall

scene setup.

Specifications

General

HDMI Version	HDMI 2.0,18Gbps
HDCP Compliance	HDCP 2.2 and HDCP 1.4
RS232	57600 baud, 8 data bits, 1 stop bit, no parity

Video and Audio

Input Video Formats Supported	1024x768@60, 1280x1024@60, 1360x768@60, 1440x900@60, 1600x900@60, 1680x1050@60, 480p@60, 720p@50, 1080i@50, 1080p@24, 1080p@30, 1080p@60, 3840x2160@25, 3840x2160@50, 4096x2160@24, 4096x2160@50,	1280x800@60, 1280x960@60, 1366x768@60, 1400x1050@60, 1600x1200@60, 1920x1200@60, 576p@50, 720p@60 1080i@60, 1080p@25 1080p@50 3840x2160@24, 3840x2160@30, 3840x2160@60, 4096x2160@30, 4096x2160@60
Audio Format Supported	2.0 channel ,5.1 channel LPCM,Dolby,AC3,DTS	

Power Supply

Power Consumption	70W max.
Supply Voltage	110-220 VAC

Environmental and Physical

Operating Temperature Range	0 to +40°C (+32 to +104 °F)
Operating Humidity Range	10 to 50 % RH (non-condensing)
Dimensions	L430 x W220 x H44 mm
Mass (Main Unit)	5kg

Package Contents

Item	Qty
HDTVHDPMXB29VM unit	1
HDTVHDPMXB29VM User Manual	1
5 pin female captive screw connector	1
3 pin female captive screw connector	2
AC Power cord	1

Safety Instructions

To ensure reliable operation of this product as well as protecting the safety of any person using or handling this device while powered, please observe the following instructions.

1. Do not operate either of this product outside the specified temperature and humidity range given in the above specifications.

2. Ensure there is adequate ventilation to allow this product to operate efficiently.

3. Repair of the equipment should only be carried out by qualified professionals as these products contain sensitive devices that may be damaged by any mistreatment.

4. Only use this product in a dry environment. Do not allow any liquids or harmful chemicals to come into contact with these products.

NOTES: