Subject. User's Guide of DigitalProjection Projector Controller

Revision History

Revision	Description	Author	Date
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1. Introductions

This document provides information and procedures for using Digital Projection Projector Controller. You can use Digital Projection Projector Controller to monitor and settings of all projectors connected to your computer via LAN.

From a single screen layout you can view all projectors and access settings for an individual projector or for a group of projectors. The software allows you to:

- Create groups of projectors which can be controlled simultaneously.
- View essential information, such as IP address, model, name, serial number, status, system error, light source, filter hours, signal, about all projectors on the network at a glance.
- Add and remove projectors within the network.
- Allows rapid network setup and discovery of projectors when using UDP mode.
- View logs operating status all interaction between the software and the projectors on the network.
- Control panel allow management and setting of the projector grouping.
- Management include: Setting value backup & restore, projectors monitor and scheduling.
- Adjustment include: Picture, Lens, Blend, Geometry, Mask, Color and Others.
- Others include: Display Option, Projector setup, PIP, 3D, Service, Network Configure, and Projector Command Control for professional users.

2. Quick-Start Guide

- 2.1 Operation System requirements
- Windows 10 (64-bit version) Home /Pro / Enterprise / Education.
- Local Area Network port (RJ-45).
- Minimum screen resolution is 1366x768.

2.2 Projector control software installation

The software can be installed within an existing network or you can build the network after the installation. Provided the network setup is correct, Projector Controller will automatically detect available projectors as soon as you start the application.

• Start the installer" Digital_Projection_Projector_Controller_windows_10.x.xxxx.exe" and follow the instructions of the wizard.

2.3 Start Application

 Starting from the shortcut icon, Double-click the "Digital Projection Projector Controller" shortcut icon on the desktop.



 Starting from the start menu, select Windows [Start] > [Program] > [Digital Projection Projector Controller] the Projector Controller screen will appear.

3. Basic LAN setup

3.1 Network Hardware Requirements

Connecting the each projector and computer to a network as shown in Fig. 1.

- (1) Network hub
- (2) Ethernet RJ-45 cable or via a wireless to connect the computer to the same network.
- (3) Ethernet RJ-45 cable for connect the each projectors via a hub, switch or router.

Make sure that the IP address of each projector is correctly set, and the IP address is displayed on the OSD menu of the projector. You may need to contact your network administrator for help setting up the projector's IP address.



Fig. 1: Sample Wired Network

- 3.2 Setting the Computer Network
- Enable LAN settings on your computer.
- Set the Local IP Address according to the operating environment.

뮮 Network Config		×
Local IP Interface	192.168.0.220	▼
TCP Port	🤣 7000	○ 23
UDP Port RX		
UDP Port TX		
Sa	ve & Close	Cancel

- Turn off the firewall. If you do not want to turn it off, register the firewall as an exception. Make the necessary settings to open the port.
- 3.3 Setting the Projector Network
- Set the IP address, subnet mask, and default gateway according to your operating environment.

- Set DHCP to OFF and set a fixed IP address, making sure that the entered IP address is not used by any other device on the LAN. When DHCP is set to On, it may take some time to enter LAN standby status if an available DHCP server is not found.
- If the entered IP address is used by another device, the projector cannot be registered.

4. Main operation window

The user interface consists of the "Main operation window", which is the main user interface.



Menu and Functions in the Main Screen are shown below.

	Main: Projector Management and Adjustment.
	Adjustment Menu: Adjusting the projector picture, lens, edge blend, geometry, masking and color and so on
	Config: User operation setting, local pc network setting and software update.
	View: Open or Off window.
Main Menu	Help: User operation guide for reference.
	Language: To select the operation language list English, Français, Español, Deutsch, Italiana, Svenska, Finnish, Suomalainen,
	Русский, 简体中文, 繁體中文,日本語,한국어
	Theme: To select black / white theme.
	Font Size: To select small / normal / large font size.
Projector List	To provides two layer projector views, and the flexible views that are based on the search queries.
B Layout	Preview the projector layout image for multi-projection.
Management	New / Open / Save / Save as: Projector Controller project file. Monitor: To monitoring the projectors status information and scheduling.
Projector Status Area	When selecting projector group, change to the health status display area.

O Adjustment Area	When selecting a single projector, switch to the visualization adjustment area.
Scheduling	Projector group action schedule planning.
Ommon Setting	Projector common setting area
Setting	Projector Individual Settings area

5. Config

5.1 Users

(2) Users Config	×
Status Poll Interval	
Check for updates on startup 🔲 🔒	
Save & Close Cancel	

Status Poll Interval	Projector polling time setting
Check for updates	Chack for undates on startun
on startup	
Save & Close	Save and Exit
Cancel	Exit

5.2 Network

When you connect a projector to a computer, both must be connected to the same network and share the same subnet. Depending on the number of available ports, you can connect one or multiple projectors to a computer.



Local IP Interface	Setting the Computer Network IP address
TCP Port	Set network TCP protocol, The default setting is 7000
UDP Port RX	Set network UDP protocol, The RX default setting is 30717
UDP Port TX	Set network UDP protocol, The TX default setting is 30718
Save & Close	Save and Exit
Cancel	Exit

5.3 OTA

The Over the air (OTA) can be used to load and install software updates from a network. A software update may contain any combination of application code, projector configuration files.

6. **View**

Projector List	Open or close Projector List window
Layout	Open or close Layout window
Settings	Open or close Setting window
Console	Open or Close log Console window

7. Help

Activation	Please reference to Advanced Align
Contact Us	https://www.digitalprojection.com/
About	Supported Model List

8. Projector List

8.1 Projector view

Projector Controller two layer projector views, and the flexible views that are based on the search queries.

- All Projectors View : Shows the list of all projectors that are defined in the Projector Controller software.
- Projectors Group View : Shows the list of groups and projectors in the selected group.



1 Group	Displays the group name. Found Group: Display the discovered projectors.
Projector	Displays the connecting status, IP address, projector name.

Exercise: Grouping





 \downarrow

8.2 To add a projector

Manual connect the projector to the network.

- 1. Move mouse cursor on the connection icon.
- 2. Click mouse right button on the dropdown list and select add a projector.
- 3. Click [Add a Projector] add a new projector.

4. Enter the Name, IP Address, Port of the projector.



	×
MV27K	
192.168.0 .127	
🥝 7000	○ 23
Group1	▼
ОК	Cancel
	MV27K 192.168.0 .127

Not supported broadcasting. Please using [Add a Projector] to add the projector.

Model	Port
E-Vision 4000 4K-UHD	23
E-Vision 9100 WU	23
E-Vision Laser 5100 WUXGA	23
E-Vision Laser 5900 WUXGA	23
E-Vision Laser 6500 II	23
E-Vision Laser 9000	23

Example



8.3 To remove a projector

Disconnect the projector from the network.

- 1. Move mouse cursor on the connection icon.
- 2. Click mouse right button on the dropdown list and select Delete a Projector.
- 3. Click [Delete Projector] remove a projector.



8.4 Discover Projector

To automatically search for the projectors connected to the same network.

- 1. Move mouse cursor on the connection icon.
- 2. Click mouse right button on the dropdown list and select Discover.
- 3. Click [Discover] auto search for projectors connected to the network connections.



9. Layout

Projector Controller-Untit	ed.pjc											- 8 >
Management Task C	nfig View	Help								Local	IP Interface : 192.168.0.	220 🌐 🔳 🗛
E D D	Save as Monit) or										
📑 Projector List 🛛 🔿	IP Address	Name Mode	I Name Sei	rial Number	Status	Error	Light Hours 1 Light Hou	s 2 Filter Hours	Si	gnal	O Power On	Power Off
Group1	192.168.0.120	M-Vision 270 M-Visio	on 270		Imaging		169		1920×120	0@59.94Hz		
192.168.0.120 M-Vision 102.168.0.140 M-Vision	2 192.168.0.140	M-Vision 270 M-Visio	on 270 W33	0ZQHCY0002	Imaging		188		1920×120	0@59.94Hz		
Found	192.168.0.22	E-Vision Lase E-Visio	n Lase 123	4567890123	Imaging		124		1920×120	0@60Hz RB		
192.168.0.22	192.168.0.42	E-Vision Lase E-Visio	n Lase		Imaging		883		1920×120	0@60Hz RB		
<	X Croup1									+		
Group1	Enable	Scheduled Task	Time	Freq. / Every	Start Date		Content	Last Run		Edit / Del		
- 0 *	~	Power Off	下午 12:00	Daily	2023/10/24			2023/10/24 下午 12:0	00:06	1		
Smart Advanced Layout Align Align Editor												
M-Vision 27000 WU 1930 x 1000 Row:1 Column:2												

Smart Align	Please reference to Smart Align
Advanced Align	Please reference to Advanced Align
Layout Editor	Edit the projector layout
4 Layout Preview	Preview the projector layout image.

9.1 Layout Edit

Display the edit screen of the Layout window.

🌣 Layout Editor		Π×
Group1	2 Row 1 ♀ Column 1 ♀	
IP Address Name		
192.168.0.120 M-Vision 27000 WU 192.168.0.140 M-Vision 27000 WU	2 Add IP Address	
	Save & Close Canc	el

Group	Layout is selected in available Projector List.
Row / Row	Increase or decrease the row / column layout of the projectors
OPlacement	Move the mouse cursor on the projector list, and select a projector, and drag it to the desired position on the layout window

Exercise

Use mouse to drag the projector in the left list to the box in the right.

🌣 Layout Editor		
Group1	Row 1 ¢ Column 1 ¢	
IP Address Name 192.168.0.120 M-Vision 27000 WU 192.168.0.140 M-Vision 27000 WU	2 Add IP Address	
	Save & Close Can	cel

🌣 Layout Editor				
Group1		Row 1	Column	1 🗘
IP Address Name 192.168.0.140 M-Vision 27000 WU	٢	192.168.0; M-Vision 2	(¥) 120 17000 WU	
			Save & Close	Cancel

10. Management

The toolbar include the management functions of these icons correspond as follows:

Projector Controll	er-Untitleo	1.pjc													- 6) ×
A Management Task	k Con	fig View	Help										Loca	al IP Interface : 192.168.0.	220 🌐 🗌 🗛	ļ
Et Don New Open	Save S	iave as														
🗊 Projector List	σx	IP Address	Name	Model Name	Serial Number	3	Status	Error	Light Hours '	1 Light Hours	2 Filter Hours	Signal		O Power On	Off Off	
➡ Group1		192.168.0.120	M-Vision 270	M-Vision 270		۰	Imaging		169		1:	920×1200@5	59.94Hz			
192.168.0.120 1	M-Vision 2	192.168.0.140	M-Vision 270	M-Vision 270	W330ZQHCY0002		Imaging		188		1	920×1200@	59.94Hz			
P 192.168.0.140 1 ▼ Found	M-Vision 2	192.168.0.22	E-Vision Lase	E-Vision Lase	1234567890123	۲	Imaging		124		1	920×1200@€	30Hz RB			
\$ 192.168.0.22		192.168.0.42	E-Vision Lase	E-Vision Lase		۰	Imaging		883		1	920×1200@6	60Hz RB			
		Concerned and the second														
🗄 Layout	đΧ	Group					1.5				6.15	- 14	T			
Group1		Enable	Down Off	ask nm	e Freq. / Every	20	22/10/24		Content		2022/10/24 Tot 12:00:0		. / Dei			
Smart Align	Layout Editor		Power On	1 + 12	2.00 Daily	20	23/10/24				2023/10/24 1-+ 12:00:0	~~ <i>V</i>				
M-Vision 27000 WU 1920 × 1200	27000 WU × 1200															
Row:1 Column:	2															

E,	New	Create a new project.
þ	Open	Restore all grouping projectors configure value.
þ	Save	Save the current configuration.
	Save as	Save the current configuration as a new project.
FÖ	Monitor	Monitoring projectors

10.1 Monitor

The monitor tab displays projector status as a list. The projector Information area is including the IP address, model name, serial number, status, projector errors, light source, filter operational hours and signal .

🛃 Proje	ctor Contro	oller-Untitled	l.pjc														- 8	×
A Manage	ement Ta	sk Cont	ig View	Help										Loca	al IP Interface : 192.16	3.0.220	€ [A	
E+ New	Open	Save S	ave as	20														
Projecto	r List	σ×	IP Address	Name	Model Name	Serial Number	S	Status	Error	Light Hours	1 Light Hours	2 Filter Hours	Signal		O Power On		Power Off	
➡ Group1			192.168.0.120	M-Vision 270	M-Vision 270		۰	Imagir	1g	169			1920×1200@5	9.94Hz				
2 19	2.168.0.120	M-Vision 2	192.168.0.140	M-Vision 270	M-Vision 270	W330ZQHCY0002	•	Imagir	1g	188			1920×1200@5	9.94Hz				
▼ Found	2.168.0.140	M-VISION 2	192.168.0.22	E-Vision Lase	E-Vision Lase	1234567890123	۲	Imagir	1 g	124			1920×1200@6	0Hz RB				
20 19	2.168.0.22		192.168.0.42	E-Vision Lase	E-Vision Lase		۰	Imagir	1g	883			1920×1200@6	0Hz RB				
19	2.168.0.42																	
K		 >																
🗄 Layout		øΧ	Group1											+				
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	0	\$	~	Power Of	下午12	2:00 Daily	203	23/10/24	•			2023/10/24 下午 12:00	:06 🖉	Ŵ				
Smart Align	Advanced Align	Layout Editor																
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M-Vision 27000	WU M-Visi	on 27000 WU																
1920 x 1200		10 x 1200																
Row	1 Colum	n:2																ľ

10.1.1 Projector Status

IP Address	Displays the connection IP address 192.168.0.0 ~ 192.168.xxx.xxx							
Model Name	Displays the projector model name.							
Serial Number	Display the projector serial number							
Status	Shows the list of projectors that are ONLY in Error or Warning state.							
Status Description	0 = Standby 1 = Warm up 2 = Imaging 3 = Cooling 4 = Error							
Err	Projector errors message							
Light Source1	Lamp1 Using Hours							
Light Source2	Lamp2 Using Hours							
Filter Hours	Projector filter operational hours							
Signal	e.g., 1920x1200@60Hz RB							

10.1.2 Group Control

Power On	Turn on group projectors.
Power Off	Turn off group projectors.

10.2 Scheduling

The projector can perform the following events on the specified date and schedule: The scheduling allows you to create scheduled tasks for an individual projector group when they are selected in the projector grouping, where the projector grouping will automatically perform a certain function at a given day/time.

-	Project	or Contro	ller-Untitle	d.pjc													- 8	×
M	anagem	ient Ta	sk Cor	fig View	Help										Local	IP Interface : 192.168.0.	220 🌐 🔲 🗛	
	1	Open 0	Save 1	Save as) or													
📑 Pro	jector L	.ist	σx	IP Address	Name	Model Name	Serial Number	1	Status	Error	Light Hours	1 Light Hours	2 Filter Hours	Signal		O Power On	O Power Off	
- Gro	up1			192.168.0.120	M-Vision 270	M-Vision 270		٠	Imagin	g	169		19	920×1200@5	9.94Hz			
	1 92.	168.0.120	M-Vision 3	2 192.168.0.140	M-Vision 270	M-Vision 270	W330ZQHCY0002		Imagin	g	188		15	920×1200@5	9.94Hz			
T Fou	192. nd	168.0.140	M-Vision :	192.168.0.22	E-Vision Lase	E-Vision Lase	1234567890123	۲	Imagin	g	124		15	92 <mark>0×1</mark> 200@6	0Hz RB			
	9 192.	168.0.22		192.168.0.42	E-Vision Lase	E-Vision Lase		۰	Imagin	g	883		15	920×1200@6	0Hz RB			
🗄 Lay	out		øχ	😧 Group1											+			
Group				Enable	Scheduled T	ask Time	e Freq. / Every	St	art Date		Content		Last Run	Edit	/ Del			
Smar Aligr	t A	O dvanced Align	Cayout Editor	~	Power Of	下午12	:00 Daily	20	23/10/24				2023/10/24 下午 12:00:0	6 0	Ŵ			
M-Visio 1921	27000 WI x 1200	U M-Visio	n 27000 WU 0 x 1200															
	Row:1	Colum	1:2															ſ

9	Group Enable	Check the box for a group scheduled task to enable
+	Add	Click to add a new scheduled task.
ALMAN	Edit	Click the edit button to edit the scheduled task
Ŵ	Delete	Click the delete button to delete the scheduled task.

10.2.1 Creating or Editing a New Scheduled Task

New Scheduled Tas	sk .	×
Enable		
Task		
📀 Power On	○ Power Off	
Frequency	Chart 2022/10/24 マ 10:48 ▲ レオ 10:48	
O Daily		
O Weekly		
O Monthly		
	OK Cancel	

Enable	Check the box for a scheduled task to enable.		
Task	Check the radio button to task you want the projector to perform based on the set schedule. e.g., Power On/Off		
Frequency	Set the frequency for the task. The available options are Once (Default),		
	Daily, Weekly, Monthly, and Custom.		
Start date	Enter the date when the scheduled task will begin.		
Time	Set the time when you want the task to be performed.		

11. Projector Adjustment

The toolbar include the projector setting functions of these icons correspond as follows:



11.1 An individual projector adjustment features

	Lens	Controlling the lens
	Image	Adjusting the picture
•••	Color	The projector color adjustment
\bigotimes	Geometry	This menu allows you to compensate for image distortions caused by an unusual projection angle or irregular screen surface.
Ħ	Warp Mode	This function is used to correct the distortion of image.
1:2	Edge Blend	Edge Blend function requires multiple projectors to simultaneously project on the same screen. Use this function to adjust the uniformity of image. To use this function, Edge Blending must be enabled on both projectors. The functions as follows can be only adjusted when Edge Blend is turned on.
	Mask	Sometimes, fitting an image to a specified screen shape without distorting the image's geometry will affect the shape of the image. This function can mask the extra image at the edge of the image.
Ø	Video Filters	To adjust the sharpness and noise of the projected image.
米	Laser	To adjust the power mode, power level, MUBC.
\Diamond	3D	To adjust the 3D function.
	PIP	This function allows you to split the screen for displaying the images from two input sources.
邼	Memory Presets	Access this submenu to save up to four presets containing custom combinations of image settings, or to recall a saved preset.
()	Information	This menu gives information about software and hardware

		configuration, input source and laser operating times.
	Network	Changing the Network configuration.
ŝ	System Setup	To adjust the OSD, EDID, Infraredetc.
	Gamut	Set up user-defined color gamut values.
\odot	Others	List all the op commands for this projector, you can also change the projector settings by entering the op command

11.2 Common setting



Power on/off	Turns a projector on or off both buttons are active when some of the selected
	projectors are off.
	To select the input source; the Input options are as below.
Input Selection	The available input source of the product is HDMI 1, HDMI 2, VGA, Component
	(BNC), HDBaseT, DVI and 3G-SDI.
Image Blanking	Digital Shutter on or off
	The built-in images are provided for installation and adjustment. You can select
Test Dattern	Test Pattern to show the test pattern. The available test pattern options are
iest Fattern	White, Green, Crosshatch, Color Bar, Black, Blue, H-Burst, Red, Chess Board and
	V Burst by model different and so on.

11.3 View Mode

You can click [Single View] or [Multi View] to switch view mode in [Blend], [Geometry], [Masking] function.





11.4 Lens



Lens Control	The image can be shifted vertically or horizontally without moving the projector. The lens shift range is shown in the percentage of the screen height and width, the maximum vertical shift range can be up to 64% of the projected image height and down to 33% of the height, and maximum horizontal shift range is 24% of the image width to right, 14% of the image width to the left. Button repeat rate: If you have configured a button as an increment step button and given it a repeat rate of 0.3 second, as long as you keep this button pressed, the one step command is sent every 0.3 seconds, and when it is sent
Zoom	To adjust the zoom effect
Focus	To adjust the focus effect
Lens Memory	 This projector supports Lens Memory function, Lens shift, Zoom and Focus memory can be stored in the projector up to 10 sets. You can load the stored memory setting to set up the lens automatically. Load Memory: To select the desired memory setting then the projector will adjust the Lens position, Zoom and Focus automatically. Save Memory: To select the memory set for storing the setting. Clear Memory: Select the memory set to be cleared memory set.
Lens Type	 There are eight projections lens can be used in VVK power lens projector serials; the initial projection position of Ultra Short Throw (UST) Lens is different to other seven projection lenses. The projector preset two initial projection positions for these two types accordingly, Center Lens function can moves the lens to the initial position (center) automatically per the setting. Please set this option to UST Lens if Ultra Short Throw Lens is installed in the projector, otherwise please set it to. Note: There are two default positions, one is for regular zoom or fixed focus lens (Non-UST), the reference position is 0% of image width in horizontal shift and

	0% of the image height in vertical shift; anther one is for Ultra Short Throw
	Lens (UST), the default position is around 0% of image width in horizontal
	shift and 56% of image height in
	• vertical shift. When performing Center Lens functions, projector will move the
	lens to the default position according to Lens type setting.
	• If Ultra Short Throw Lens is installed and UST Lens is selected, you can
	perform Center Lens to move Lens to initial projection position automatically.
	• If using Ultra Short Throw Lens and setting to Non-UST Lens, the lens will be
	moved to the position which is lower than the default position of Ultra Short
	Throw Lens after performing Center Lens function, it causes the projected
	image is blocked by the top cover of the projector. In this case, please
	perform the Lens shift function to move up the Lens till the image can be
	projected normally.
	• Please make sure Lens Type setting is set to Non-UST Lens then perform
	Center Lens function if other zoom lens or fixed focus lens is used, or lens
	shift range is limited, center position of the lens is not correct.
	This function can be used to disable lens control for preventing unauthorized
	operation or disoperation in lens control related functions including Lens Shift,
	Zoom/Focus adjustment and Center Lens. Recommend to turn on Lens Lock
Laws Lasts	function to disable the Lens control after lens adjustment is done.
Lens Lock	Note:
	• Turning on Lens Lock will disable lens control function including Lens Shift,
	Center Lens and Zoom/Focus adjustment, please make sure Lens Lock is
	disable before you perform the lens control function.
	This is the lens calibration function, the projector calibrates the lens shift, focus
	and zoom parameters for the precise lens memory function. After performing
	this function, the lens will be moved to the center position as factory default
	setting.
Homo	Note:
поше	• There are two default center positions for UST (Ultra Short Throw) Lens and
	non-UST Lens, make sure Lens type setting is correct before performing this
	function.
	• If Ultra Short Throw Lens is installed, make sure the support kit is detached
	before performing Center Lens.

11.5 Image



	Picture Mode	 To select desired picture mode High Bright: The highest brightness output mode is suitable for the application where the highest brightness output is needed. Presentation: The best projection effect is suitable for the presentation or picture.
	Brightness	• Video: The mode is suitable for playing video content. Increases or decreases the amount of black in the image The adjustment range is 0 to 99 and the recommend default setting is 50.
	Contrast	Increases or decreases the perceived difference between light and dark areas of the image. The adjustment range is 0 to 100 and the recommend default setting is 50.
	Saturation	To adjusts the color saturation of the image
	Hue	To adjusts the color hue of the image
General	Sharpness	To adjust the sharpness of the image, which changes the high-frequency details.
	Color Temperature	The default of color temperature is Native, and it is suitable for most situations. As color temperature rises, the picture will appear bluer, while as the color temperature decreases, the picture will appear redder. The available options are Native, 5400K, 6500K, 7500K and 9300K
	Gamma	When the ambient light is so bright that may affect the projection of the details in the dim area of the image, you can change the gamma to adjust the chrominance. The available options are 1.0, 1.8, 2.0, 2.2, 2.35, 2.5 and S-Curve.
	Noise Reduction	To adjust the noise of the projected image. This function is used to remove the noise of the image with interlaced scanning input. Generally, noise reduction can lower the high-frequency details and

		make the image softer.
	Dynamic Black	This is function can be used to enhance the black level of the projected image.
	Aspect Ratio	Change the aspect ratio of the current image, depending on the model setting, options include: 5:4 / 4:3 / 16:10 / 16:9 / 1.88 / 2.35 / LetterBox / Source / Native
	Smooth Picture	A feature that can display a higher resolution source than the native resolution of the projector without loosing any pixel data.
	Light Off Timer	When Dynamic Black is On, the Light Off Timer will define if laser light source will turn off after a period of time has passed. The options are: Disable, 0.5, 1.0, 1.5, 2.0, 3.0, 4.0 seconds.
	Freeze	Freezes the current frame.
	HDR	Choose from AUTO, RPQ-500, RPQ500, RPQ1000 and HDRHLG. HDR (High Dynamic Range) is a new form of gamma developed to create more realistic experience when viewing images delivered using this format, such as scenes with bright sunlight. Unlike traditional gamma HDR is not device or installation independent. HDR content will come with a recommended brightness regardless of screen size. For best results as a guideline the following screens sizes are suggested.
Input	Lift	These three options will shift the color spectrum for the whole image and change its brightness, if minimal amount of red, green or blue appears in the gray areas, you can adjust the offset of the corresponding color accordingly. By increasing the offset, the image brightness will become lower.
Balance	Gain	These three options are used to increase or decrease the range of color input for the entire image. If minimal amount of red, green or blue appears in the gray areas, lower the gain of the corresponding color accordingly. As gain increases, the contrast of the image will become lower.

11.6 Color

HSG is a function to adjust Hue, Saturation and Gain independently, it allows for specified color adjustments that are more intuitive. You can adjust Hue, Saturation and Gain for Red, Green, Blue, Cyan, Magenta, Yellow and white independently.



Color Space		In most cases, the Auto setting determines the correct colorspace to
		use. If it does not, you can choose a specific colorspace:
		Choose from Auto, YPbPr, YCbCr, RGB PC and RGB Video.
		Choose from HDTV, Peak, User 1, User 2, 3 Color Matching and 7
	ColorMax	Color Matching. User 1 and User 2 are user-defined color gamuts set
		via the Setup > ColorMax menu.
		HSG is a function to adjust Hue, Saturation and Gain independently, it
	Manual color	allows for specified color adjustments that are more intuitive. You can
Color	matching	adjust Hue, Saturation and Gain for Red, Green, Blue, Cyan, Magenta,
Mode		Yellow and white independently.
	Color	Diagon reference contion 11 F
	temperature	
	Gains and	
	lifts	Please reference section 11.5.
1		

11.7 Geometry

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Lens Image Color	Geometry Mode	Edge Masking	Video Filters Laser 3D	PIP Presets	Information Network	System Setup Gamut	Others		
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M-Vision 27000 WU 1920 x 1200									
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General	Aspect Ratio	Change the aspect ratio of the current image, depending on the model setting, options include: 5:4 / 4:3 / 16:10 / 16:9 / 1.88 / 2.35 / LetterBox / Source / Native
	OverScan	Use this setting to compensate for noisy or badly defined image edges.
	Digital Zoom	Digital zooming enlarges a section of the image, while the area outside the enlarged section is cropped out to preserve the overall image size.

11.8 Warp Mode

This function is used to correct the distortion of image.



11.8.1 Basic

Keystone	To correct horizontal or vertical distortion
Rotation	To correct incorrect horizontal angle of image
Pincushion	To correct horizontal or vertical pincushion distortion.
Arc	To adjust the top, bottom, left and right arc on the projected picture.
Corner	To correct the corner distortion at top-left, top right, bottom-left and bottom-right of the picture.
Blanking	This function can adjust the edges of the image and hide surplus sections of the projection. To adjust the top, bottom, left and right blanking area on the projected picture.
Reset	All the settings toward blanking will set to default.

11.8.2 Custom Warp

Use image warping to correct image distortion and make the image appear correctly on a curved screen.



Memory		User1/2 : Enable custom warp. Custom warp and Basis can only be selected by one of them				
		• Custom warp and Basic can only be selected by one of them.				
Projector Control	W	Write to projector				
	R	Read from projector				
	Grid	Change the Warping Grid Resolution, You can choose the grid resolution 2x2 / 3x3 / 5x5 / 9x9 / 17x17				
	Туре	Flat / Curved lines				
	Symmetric	Horizontal/vertical symmetry				
	Snap Mode	Fixed in horizontal/vertical movement				
	Spread Mode	Spring mode assigns the motion of a point linearly to other points along its vertical and horizontal axes. This reduces the grouping of points and makes the image smooths.				
	Distance	Distance between each step when moving with the keyboard				
	Node Color	Grid node color				
	Node Border	Grid ode border color				
Color	Selected Node	Selected grid node color				
	Selected Border	Selected grid node border color				
	Line Color	Grid line color				
Projector		Open custom warp profile				
Settings		Save custom warp profile				

Customer Warp Edit

Each point is shown to correspond to each specific location on the projected image.

Move a line of points		 When you move a line of points, the line maintains its shape. Click anywhere on a grid line in window to select the entire line. Click and drag the line to a new position.
Move a group of points		 Drag over a group of points. Release the mouse button to complete the selection. Click and drag these points to a new location.
Others War	rp Edit	
	Marco Key	Undo : Ctrl+Z, Redo : Ctrl+Y, Copy : Ctrl+C, Paste : Ctrl+V
		Aligning the selected grid points
Mouse	3	Reset the selected grid point to its original point
Right	; ;	Symmetrical horizontal selection of grid points
Button	ei.	Symmetrical selection of grid points vertically
	:]	Distribute the selected horizontal lines evenly over the length of the lines
		Distribute the selected vertical lines evenly over the length of the line

11.9 Edge Blend

Blend function requires multiple projectors to simultaneously project on the same screen. Use this function to adjust the uniformity of image. To use this function, Blending must be enabled on both projectors. The functions as follows can be only adjusted when Blend is turned on. Recommends that you complete your warp settings before creating a blend.



Edge Blend	If the user would like to function Edge Blend, turn this function to On.
Align Pattern	If user turns this function to On, the projector will show pattern for user to adjust the overlapping part of projection
White Level (Blending)	White Level(Blending) is used to set the overlapped area for blending in multi- projection application, the overlapping. When projecting White, the area where the two images overlap is projected twice the projectors' white output levels. The solution is to adjust the White Level. First make sure that the units connected to the projectors are outputting black. Then increase the White Level (Top, Bottom, Left, Right and All) until the non-overlap area's brightness matches the overlap area.
Black Level (Blending)	The purpose of Black Level is to increase the black level of non-overlapping area. When projecting black, the area where the two images overlap projects twice the projectors' black output levels. The solution is to adjust the Black Level. First make sure that the units connected to the projectors are outputting black. Then increase the Black Level (Top, Bottom, Left, and Right) until the non-overlap area's brightness matches the overlap area.
Gain(R\G\B)	These three options are used to increase or decrease the range of color input for the entire image. If minimal amount of red, green or blue appears in the gray areas, lower the gain of the corresponding color accordingly. As gain increases, the contrast of the image will become lower.
Blend Start	Set the start position (Top, Bottom, Left, and Right) of overlapped area for blending.
Reset	All the settings toward edge blend will set to default.

	Gamma	When the ambient light is so bright that may affect the projection of the details in the dim area of the image, you can change the gamma to adjust the chrominance. The available options are 1.0, 1.8, 2.0, 2.2, 2.35, 2.5 and S-Curve.
Others	Color Temp.	The default of color temperature is Native, and it is suitable for most situations. As color temperature rises, the picture will appear bluer, while as the color temperature decreases, the picture will appear redder. The available options are Native, 5400K, 6500K, 7500K and 9300K depend on model different setting.

11.10Masking

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	Active	Enable the masking function by 'Line Mask'	
Line Mask	Invert	Invert the masking area by 'Line Mask'	
	Edge	Enable / disable individual edge and select its type and color.	
	Active	Enable the bitmap masking function	
Bitmap	Invert	Invert bitmap image	
Mask		Insert a bitmap image from an external bitmap file	
	Î	Delete current selected bitmap image	
	Memory	You can select masking Off / User1 / User2 in the projector	
	¥	Apply and write masking image with masking project file to projector	
Projector Control	R	Read masking project file from projector	
	Preview	Apply masking effect to projector but not saving into	
	View node	View the masking control nodes on projector display	
	4	Open existing masking parameters	
Project	Ð	Save the masking parameters	
Settings	ł	Export masking image to a file	
	¢	Reset masking	
Without	Undo	Undo action	
Bitmap (Mouse Right	Redo	Redo action	
	Edit points	Enable edit control point of line masking	
Button)	Add point	Add a control point to line when mouse at control line	
--	--	--	--
	Delete point	Delete control point	
	Set fine tune	Enable the fine tune mode of selected line (use keyboard to move control line)	
	Copy view	Copy mask view of current IP	
	Paste view	Paste mask view to other IP	
	Rotate view	Rotate current masking to right / left, or flip horizontal / vertical	
	Undo	Undo action	
	Redo	Redo action	
	Edit points	Enable edit control point of line masking	
With	Cut	Cut bitmap image	
Bitmap case (Mouse Right Button)	Сору	Copy bitmap image	
	Paste	Paste bitmap image	
	Change picture	Change picture of current selected bitmap image	
	Bring to top	Bring current selected bitmap image to top most or upper one layer	
	Bring to bottom	Bring selected bitmap image to bottom most or lower one layer	
	Rotate view	Rotate current masking to right / left, or flip horizontal / vertical	
Others Masking Edit			
\mathbf{O}	Mode of masking view aligning to custom warp		
۲	View custom warp in masking view		
R N N	Full screen for mode of masking view aligning to custom warp		

11.11 Video Filters

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	Sharpness	To adjust the sharpness of the image, which changes the high-frequency details.
General	Noise Reduction	To adjust the noise of the projected image. This function is used to remove the noise of the image with interlaced scanning input. Generally, noise reduction can lower the high-frequency details and make the image softer.

11.12Laser

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		The function	on to se	elect the Eco. I	Normal or C	ustom
		Power Lev	el mod	e.		
		Eco: Proje	ction o	perates in the	energy-sav	ing
	Lindat	mode, whi	ch is ec	quivalent to 80	% power of	f light
	Light Power	source.				
Light Power Control		Normal : P	rojectio	n operating wi	th normal lig	ght
		power can	obtain	the brightest	projection d	isplay.
		Custom Po	ower Le	vel : User can	decide the p	ower
		level depe	nding o	on his or her pr	eference.	
	Const.	Turn on or off				
	Brightness	Brightness				
			availabl	ie when multip	he projecto	ns are
		Synced together.			in the	
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MUBC (Multi Unit Brightness		lasers in d	lifferen	t projectors m	nav diminis	h at
Correction)		different r	ates. V	Vhen multiple	units are s	vnced.
		this can le	ead to c	different units	operatina	at
		different l	aser po	ower levels, ca	ausing the	
		projected	images	s to display at	differing	
		brightnes	ses.	. ,	5	

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	Off : Turn off the 3D Display Mode.
	• When Auto, Side by Side, Top and Bottom, or Frame Sequential is selected, the
	3D Mode will be turned on.
	• To turn off the 3D Mode, select "Off" and press "ENTER". Auto: Allow the 3D
	format to automatically detect the formats of Frame Packing,
	• Top and Bottom, and Side by Side. The input signal is HDMI 1.4a 3D.
3D Format	Side by Side (Half): This option is only applicable to input signal HDMI 1.4a 3D or
3D I Office	HDMI signal sent by HDBaseT Transmitter.
	Top and Bottom: This option is only applicable to input signal HDMI 1.4a 3D or
	HDMI signal sent by HDBaseT Transmitter. Frame Sequential: Set input format
	under Frame Sequential.
	This function is to set the 3D format and sync method. The projector detects the
	type of input signals and provides relevant options for setting. Before performing
	3D setting, make sure that the input signal is connected.
	If the 3D image transmitted to the 3D glasses is reverse, you can set the Eye
Eye Swap	Swap to "Reverse" to normalize the image. Otherwise, keeping mode of "Normal"
	would be suggested.
DLP Link	Turns a projector 3D function on or off.
	Adjust 3D dark time (0.65ms,1.3ms,1.95ms)
Dark Time	Creates a blank time interval between left and right frames to allow for LCD
Dank Time	shutter glasses, Z screen, or rotating 3D wheel to synchronize the output. See
	Dark Time and Output Delay.
Sync Delay	The non-image time in Microseconds (μ S). Offset 3D stereo sync output in
	relation to dark time interval. Valid values are -0 to 99.
	External : Signal is sent from external 3D sync signal receiver.
	Internal : Signal is sent by the projector, 3D sync signal is DLP Link
Sync Reference	The projector provides DLP Link and 3D IR sync for 3D display, you can specify
	the built-in DLP Link or external 3D IR transmitter to synchronize the signal of the
	3D glasses, or select Auto to set the sync signal depended on the 3D format and

if external 3D sync device is connected. This function is only applied to the
condition that 3D Format is Frame Sequential or external 3D sync device is
connected to the projector.

11.14 PIP

This function allows you to split the screen for displaying the images from two input sources.



PIP Option	on/off, enable PIP by choosing "ON", and two windows will be shown on the projected picture. The larger one is the primary picture, the smaller one is the sub picture. By choosing "Off", PIP function will be disabled, and only one picture window projected.
PIP Input	HDMI1, HDMI2, VGA, Component BNC, DVI-D, 3GSDI, New Item, HDBaseT, Select the display available sources for the sub picture, and then select a source.
PIP Position	To find preferred location of PIP window :Top Left, Top Right, Bottom Left, Bottom Right, Picture By Picture,

11.15 Memory Presets

Access this submenu to save up to four presets containing custom combinations of image settings, or to recall a saved preset.



11.16 Information

This menu gives information about software and hardware configuration, input source and laser operating times.



11.17 System Setup

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1920 x 1200 1920 x 1200	Clock Setup	agement	
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11.17.1 Display Option

	Select desisted language, the available languages options are English, Española,
Language	Deutsch, Portuguese, 简体中文, 繁體中文, 日本語, 한국어. depend on different
	model.
	Adjust projector OSD menu position through this function, the available position
Position	options are at Top-Left, Top-Right,
	Bottom-Left, Bottom-Right and center of the screen.
	Change the transparency of projector OSD Menu, the background color of the
Transparency	OSD can be adjusted from darker to lighter if you want to display complete
	projected image.
Time Out	Set up the timer to exit OSD menu, the available options are Always On, 10
Time Out	Seconds, 30 Seconds and 60 Seconds.
Maaaaga Day	This function allows you to disable the pop-up message at bottom-right of the
Niessaye DOX	screen.

11.17.2 Projector Setup

Projection Mode	The projection mode option can be used to change the orientation of the projected image or flip the projected image.
	Front Desktop : Install the projector on the table and project the image on the screen forward.
	Front Ceiling : Mount the projector on the ceiling and project the image on the screen forward, the image is overturned.
	Rear Desktop : Install the projector on the table and project the image from the rear of the screen.
	Rear Ceiling : Mount the projector on the ceiling and project the image from the rear of the screen, the image is overturned.
Auto Source	The Auto Source functions "ON" lets projector automatically search for the input signal.

	This function is set to OEE by default. When it is set to ON and no input signal is
Auto Power off	received within 20 minutes, the projector will turn off automatically.
Auto Power on	This function is set to OFF by default. When it is set to ON, the projector will turn on automatically when y AC power is turned on next time. You can use this function and the power switch (instead of the remote control) to turn on the projector. Set this function to OFF if it's unnecessary.
Screen Format	Sleet the screen format to 16:10, 16:9 and 4:3.
Trigger	The projector is provided with a set of trigger output. User can connect the trigger to the screen with projector by the cable. If user does so, once the projector is powered, the screen would be automatically turned on as well. There is a 2-3 second delay to activate this function. The selectable aspect ratios are as follows: Off : Turn off screen trigger. 5:4 : Outputs 12V of power on Trigger when Aspect Ratio is set to 5:4. 4:3 : Outputs 12V of power on Trigger when Aspect Ratio is set to 4:3. 16:10 : Outputs 12V of power on Trigger when Aspect Ratio is set to 16:10. 16:9 : Outputs 12V of power on Trigger when Aspect Ratio is set to 16:9. 1.88 : Outputs 12V of power on Trigger when Aspect Ratio is set to 1.88. 2.35 : Outputs 12V of power on Trigger when Aspect Ratio is set to 2.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 2.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 1.88. 2.35 : Outputs 12V of power on Trigger when Aspect Ratio is set to 1.88. 2.35 : Outputs 12V of power on Trigger when Aspect Ratio is set to 0.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 0.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 0.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 0.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 0.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 0.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 0.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 0.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 0.35. Letterbox : Outputs 12V of power on Trigger when Aspect Ratio is set to 0.35. Letterbox : Outputs 12V of power on Trigger when 0.35. Letterbox : Outputs 12V of power on Trigger when 0.35. Letterbox : Outputs 12V of power on Trigger when 0.35. Letterbox
Remote Sensor	The default is On. However, there are three conditions that will be suggested to turn off "Remote Sensor"; the possible condition is that if the user uses wired control, he can set this function to Off, or that if the projector IR location is exposed to the bright sunlight or fluorescence, or that projector control is not controlled by remote. If the user would like to reset to On, user can only set by OSD panel.

11.17.3 Service

	The projector is equipped with orientation sensor for switching cooling condition automatically; you can set it to Auto or adjust the cooling condition by manual.	
	Front: The projector is installed on the table.	
	Ceiling + Front: The Projector is mounted on the ceiling.	
Colling Condition	Freetilt : The projector is installed with tile angle; the angle is over 30 degree.	
	Auto : Built-in sensor detects the installation orientation and switches to	
	corresponding cooling condition.	
	Note : Incorrect Projection Mode setting may affect hot air exhausting from	
	the projector, the heat and high temperature may cause the projector to	
	enter system protection or damage component.	
	Use this function to adjust the cooling fan of the projector to get well cooling	
High Altitude	if the projector is installed in an area over 5000 feet. The projector is	
	equipped with altitude sensor which is capable of detecting atmosphere	
	pressure for estimating altitude; it can adjust automatically to corresponding	

	 setting based on estimated altitude if this option is set to Auto you can select On or Off. Off : Turn off High Altitude mode if the projector is installed in an area under 5000 feet. On : Turn on High Altitude mode if the projector is installed in an area over 5000 feet. Auto : Set up this mode automatically by estimated altitude. Note : Estimate Altitude is calculated by atmosphere pressure, it may have the tolerance comparing to actual altitude. If any over temperature or system protection message, please adjust High Altitude by Manual. In some application, regular cooling fan setting may not supply enough cold air for system cooling even the projector is installed in an area under 5000 feet. In this case, please set High Altitude to On.
Temperature	Monitor all temperature values in the system in normal
Water Pump RPM	Monitor the Water Pump of system cooling
Factory Reset	Reset all system to default setting
Fan speed(RPM)	Monitor the speed of all cooling fans in the system is normal

11.17.4 Network Config for projector

Standby Power	To turn on /off projector standby power.
IP Address	To specify an IP address, press the Enter button to show the IP address input window. Input the number in the IP address. Network IP Address 172. xxx. xxx. xxx.
Subnet Mask	Set the subnet mask. The input method is the same as the setting for IP address.
Gateway	Set the gateway. The input method is the same as the setting for IP address.
DSN	Set the DNS. The input method is the same as the setting for IP address.
DHCP	Set DHCP to ON/OFF. When DHCP is set to ON, the DHCP server of the domain will assign an IP address to the projector. The IP address will appear on the IP address window without need to make any input. If the domain cannot assign any IP address, 0.0.0.0 will be shown on the IP address window.
Apply	Changing network configuration. Note : Changing the Network configuration may interrupt the connection, please search the projector again. Some system might need to reset.

Note : Changing the Network configuration may interrupt the connection, please discovery the projector again. Some system might need to reset.

11.18 Gamut

Set up user-defined color gamut values.



11.19 Others



11.19.1 Projector Command Control

Instruction set, including function name, op command, value and console.

OP Name	OP name list
OP CMD	OP command list
Send	Send command to target projector

Op command functions example:

Turn On projector:







12. Advanced Align

12.1 System Requirements

Part 1. Computer System

The software runs on Windows 10 and Windows 11

- Use NVIDIA Quadro based system whenever possible. This results in the greatest flexibility in number of projectors and supports all use cases. All current Quadro GPUs (from P series) have the capability to run warp & blend.
- Windows 10 and 11 recommended

Part 2. NVIDIA Card

For Desktop Hooking (Professional NVIDIA GPU, Support Mosaic Function).

2021 Release Information NVIDIA (Quadro / NVIDIA RTX Products).

NVIDIA RTX 6000 Ada Generation, NVIDIA RTX A6000, NVIDIA RTX A5500, NVIDIA RTX A5000, NVIDIA RTX A4500, NVIDIA RTX A4000, NVIDIA RTX A2000 | A2000 12GB, NVIDIA T1000 | T1000 8GB, NVIDIA T600, NVIDIA T400 | T400 4GB, Quadro RTX 8000, Quadro RTX 6000, Quadro RTX 5000, Quadro RTX 4000, Quadro GV100, Quadro GP100, Quadro P6000, Quadro P5000, Quadro P4000, Quadro P2000, Quadro P1000, Quadro P600, Quadro P400, Quadro M6000 24GB, Quadro M6000, Quadro M5000, Quadro M4000, Quadro M2000, Quadro K6000, Quadro K5200, Quadro K5000, Quadro K4000, Quadro K4200, Quadro K2200, Quadro K2000, Quadro K2000D, Quadro K1200, Quadro K620, Quadro K600, Quadro K420, Quadro 410

2023 Release information from NVIDIA (Quadro / NVIDIA RTX Products).

- NVIDIA RTX 6000 Ada Generation, NVIDIA RTX A6000, NVIDIA RTX A5500, NVIDIA RTX A5000, NVIDIA RTX A4500, NVIDIA RTX A4000, NVIDIA RTX A2000 | A2000 12GB, NVIDIA T1000 | T1000 8GB, NVIDIA T600, NVIDIA T400 | T400 4GB, Quadro RTX 8000, Quadro RTX 6000, Quadro RTX 5000, Quadro RTX 4000
- The version we already test.
- NVIDIA A2000 with driver Version.537.13
- NVIDIA K5000 with driver Versions. ---.--
- Consider very special driver and system configuration requirements.

Part 3 Nvidia Card Operating Procedures

Step1 Go to the website where we can download the driver of NVIDIA. Recommend download the driver from the official website

nvidia.com/download/index.aspx		
🕺 NVIDIA. Products Solutions Industries For You	Shop Drivers Support	Q (2)
Download Drivers		
NVIDIA > Download Drivers		
GeForce RTX 40 NVIDIA Driver Downloads		
Select from the dropdown list below to identify the appropriate driver for your 1 Product Type: [NUDIA RTX / Quadro Product Series: [NUDIA RTX / Quadro Product Series: [NUDIA RTX A2000 126B Product [NUDIA RTX A2000	WIDIA product. Help	
Image: Solution of the solution	D vApps or Quadro vDWS), can log formation about how to access	

Fig 1.3.1 Nvidia driver search page – Web URL

Step 2 Select the version of NVIDIA and search the driver

NU 📀	DIA. Products Solutions Industries For You		Shop Drivers Support	Q (2)
	Download Drivers VIDIA > Download Drivers GeForce RTX 40 Series GPUs Image: Series GPUs Product Type: InviDia RTX Product Series: InviDia RTX Product Series: InviDia RTX Product Series: InviDia RTX Operating System: Windows IC Download Type: Production Language: English (US) Search	nloads w to identify the appropriate driver for your NVID / Quadro v Series v A2000 12GB v 164-bit v Branch/Studio v ?	IA product. Help	
	NVIDIA Virtual GPU Customers Enterprise customers with a c into the enterprise software d your purchased licenses visit t RTX. Login	urrent vGPU software license (GRID vPC, GRID vA ownload portal by clicking below. For more inform he vGPU Software Downloads page.	pps or Quadro vDWS), can log lation about how to access	

Fig 1.3.2 Nvidia driver search page – select option

Step3 Check the versions of NVIDIA Card must up U5 Versions and download it.



[Blackmagic][DaVinci Resolve]: performance regression between driver versions R525 and R535

Fig 1.3.3 Nvidia driver download page

12.2 Software Installation

Part 1. Digital Projection Projector Control Tool Installation Procedure

Step 1. Run the execution file as following execution file.



Fig 2.1.1 Digital Projection.exe

Step 2. Press Next to skip the installation



Fig 2.1.2 Software introduction

Step 3. Agree the license

🥽 Digital Projection Projector Controller 10.1.8683 Setup 🦳 🗌	×
License Agreement	
Please review the license terms before installing Digital Projection Projector Controller 10.1.8683.	1
Press Page Down to see the rest of the agreement.	
Şoftware License Statement	^
This Software License Statement (the "Statement") is a legal undertaking between User (including but not limited to an individual, an entity or as well as any individual using the Software on behalf of such entity; hereinafter collectively referred to as "User")and Delta Electronics, Inc. ("Delta") for the use of software provided by Delta (hereinafter collectively referred to as "Software"). User will be deemed to have become fully aware of all the terms and conditions set forth hereunder and understand them completely and irrevocably agree to be bound by this Statement once User install(s), download(s) or use (s) the Software either full or in part on computer or any peripheral device.	~
If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install Digital Projection Projector Controller 10.1.8683.	2
Nullsoft Install System v3.09	
< Back I Agree Can	icel

Fig 2.1.3 License agreement

Step 4. Set the destination folder of software

🐨 Digital Projection Projector Controller 10.1.8683 Setup - 🗆 🗙
Choose Install Location
Choose the folder in which to install Digital Projection Projector Controller 10.1.8683.
Setup will install Digital Projection Projector Controller 10.1.8683 in the following folder. To install in a different folder, dick Browse and select another folder. Click Install to start the installation.
Destination Folder
C:\Program Files (x86)\Digital Projection\Projector_Controller Browse
Space required: 268.0 MB Space available: 146.2 GB
Nullsoft Install System v3.09
< Back Install Cancel

Fig 2.1.4 Destination folder

Step 5. Installing

🐯 Digital Projection Projector Controller 10.1.8683 Setu	- qı	_	×
Installing Please wait while Digital Projection Projector Controller 10.1.8	683 is being ir	nstalled.	
Extract: 1.png			
Extract: 4.png 100% Extract: 5.png 100% Extract: 6.png 100% Extract: 7.png 100% Extract: 8.png 100% Extract: 10.png 100% Extract: 11.png 100% Output folder: C:\Program Files (x86)\Digital Projection\Proj Extract: 0.png 100%	ector_Control	ller\DP\Res	^
Nullsoft Install System v3.09	Next >	Ca	ncel

Fig 2.1.5 Installation procedure

Step 6. Finish



Fig 2.1.6 Finish installation

Part 2. Advanced Align

Step 1. Run the execution file as following execution file.



Fig 2.2.1 Advanced Aligned.exe

Step 2. Select the language



Fig 2.2.2 Select language

Step 3. If you already installed the software, it will uninstall first.



Fig 2.2.3 Uninstall the previews version

Step 4. Accept the agreement and go next.

Setup - VIOSO6_DP x64 Version 6.1.18.10123_Beta -	×
License Agreement Please read the following important information before continuing.	0
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.	
END-USER LICENSE AGREEMENT FOR VIOSO SOFTWARE	^
IMPORTANT - PLEASE READ THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT CAREFULLY BEFORE CONTINUING WITH THIS PROGRAM INSTALL: VIOSOS End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and VIOSO. For the VIOSO software product(s) identified above which may include associated software components, media, printed materials, and "online" or electronic documentation ("SOFTWARE PRODUCT"). By installing, copying, or otherwise using the SOFTWARE PRODUCT, you agree to be bound by the terms of this EULA. This license agreement represents the entire agreement concerning the program between you and VIOSO, (referred to as "licenser"), and it supersedes any prior proposal,	· •
I accept the agreement	
\bigcirc I do not accept the agreement	
Next	Cancel

Fig 2.2.4 License agreement

Step 5. Browse the installation folder.

Setup - VIOSO6_DP x64 Version 6.1.18.10123_Beta	- 🗆 ×
Select Destination Location Where should VIOSO6_DP be installed?	0
Setup will install VIOSO6_DP into the following folder.	
To continue, click Next. If you would like to select a different folder, click Browse.	
C:\Program Files\VIOSO6_DP	Browse
At least 100 F MD of free disk serves is serviced	
At least 120.5 Mb of free disk space is required.	
Back	Next Cancel

Fig 2.2.5 Select the destination location to install

Step 6. Select Full Installation

•			
Setup - VIOSO6_DP x64 Version 6.1.18.10123_Beta	—		×
Salact Components			
Which components should be installed?			
which components should be installed?			<u> </u>
Select the components you want to install; clear the components you do not want	to install. Click	Next	
when you are ready to continue.			
Full installation		~	
VIOSO6_DP		125.3 MB	1
Shared Components		54.9 MB	
Microsoft DirectX		98.2 MB	
Microsoft Visual C++ Redistributable		37.5 MB	
]
Current selection requires at least 319.0 MB of disk space.			
Back	Next	Cano	el 🛛

Fig 2.2.6 Select the components to install

Step 7. Select Start Menu Folder

Setup - VIOSO6_DP x64 Version 6.1.18.10123_Beta	_		×
Select Start Menu Folder Where should Setup place the program's shortcuts?			0
Setup will create the program's shortcuts in the following Start Menu folder.			_
To continue, click Next. If you would like to select a different folder, click Browse.			
VIOSO6_DP	В	rowse	1
Back	ext	Car	icel

Fig 2.2.7 Set start menu folder

Step 8. Create shortcut

Setup - VIOSO6_DP x64 Version 6.1.18.10123_Beta		×
Select Additional Tasks Which additional tasks should be performed?	(0
Select the additional tasks you would like Setup to perform while installing VIOSO6_DP, then dick	Next.	
Additional shortcuts:		
Create a desktop shortcut		
Back Next	Ca	ancel

Fig 2.2.8 Create shortcut

Step 9. Check the installation item and install.

eady to Install		
Setup is now ready to begin installing VIOSO6_DP on your computer.		
Click Install to continue with the installation, or click Back if you want to review of	or change any set	tings.
Destination location: C:\Program Files\VIOSO6_DP		^
Setup type: Full installation		
Selected components: VIOSO6_DP Shared Components Microsoft DirectX Microsoft Visual C++ Redistributable		
Start Menu folder: VIOSO6_DP		
Additional tasks: Additional shortcuts: Create a desktop shortcut		
<		>

Fig 2.2.9 Ready to install

Step 10. Installing



Fig 2.2.10 Ready to install

Step 11. Finish



Fig 2.2.11 Finish

Step 12. First Start, just configured

Ø First Start Initialisation		×
App Configuration:	Single-PC	
Select Network	No network	
Network Subnet clamp:	use adapter settings	
Default Data Path:	n\Documents\VIOSO\VIOSO6_Digital Projection\ Select	
	start VIOSO6 with system start start gelay: 30 s	
	start Exaplay Service with system start	
All is okay.		
	Configure <u>C</u> ancel	

Fig 2.2.12 Configure

12.3 System Preparation Installation

Part 1 NVidia graphics card setup

Before start the calibration, we should follow the procedure as below. Check the NVDIA Driver and Install the driver.

Step 1. Check the NVIDIA driver is in a stable version, Higher than U5, you can follow the section 1.

百元 元妻		
系統資訊 DirectX 執行階段版本: 12.	0	
圖形卡資訊	÷⊬¢m;\$2.64	
카티 NVIDIA RTX A2000 12GB	计如 與行 驅動程式版本: 驅動程式版本: 驅動程式類型: Direct3D 功能層級: CUDA 核心: 可調整大小的基底位 圖形提升時脈: 記憶體資料選举: 記憶體資料選举: 記憶體頻寬: 可用圖形記憶體: 專用視訊記憶燈: 本体标型口包錄	514.08 DCH 12_1 3328 一 200 MHz 1200 MHz 1200 MHz 1200 GBys website 192-位元 288.05 GBys 20326MB 12282 MB GD
		關於(A)

Fig 3.1.1 System information

Step 2. If not, recommend to uninstall current versions before you release the MOSAIC status, then install the stable versions.

There is some situation we encountered that you should reinstall NVIDIA Driver

- GPUs are missing in NVIDIA system topology.
- Connected displays not showing up in Windows, but listed in NVIDIA system topology (check adapters and signal cables first).
- NVIDIA control panel works very slowly.
- NVIDIA control panel nearly empty or not showing the usual set of features.
- Blue screen when operating with NVIDIA features (e.g. setting up Mosaic).
- Other anomalies.

Part 2. EDID Minding Setup

We have the following steps to setup the EDID.

Step 1. Right click on your desktop and click 'NVIDIA Control Panel'.

	View Sort by Refresh	>
	Paste	
	Paste shortcut Undo Move	Ctrl+Z
	Intel® Graphics Settings	
0	NVIDIA Control Panel	
	New	>
.	Display settings Personalize	

Fig 3.2.1 Right click on desktop and click NVIDIA Control Panel.

Step 2. Click on "View System Topology" and locate the display you want to modify and export EDID data. Click on 'EDID' (it should be marked as "Monitor").

Select a Task					
E 3D Settings	÷ Exp	and all 🕐 <u>R</u> efresh			
Adjust image settings with preview Manage 3D settings	Moraic	isolaus			
- Display	System	topology	Status	Settings	
		Moraic Dimlaw	50003	seeings	
-Rotate display		Configuration		1 x 2 Topology	
-View HDCP status	F	Resolution, refresh rate		2560 × 800 pixels, 59.81 Hz	
Set up Digital Audio Set up multiple displays	Displays	and Graphics Cards			
E-Video	System topology			Settings	
Adjust video colour settingsAdjust video image settingsWorkstationNew system topologySeture Mergin	🗉 System				
	(Driver version		391.25	
	1	/ertical sync		3D Application controlled	
-Manage GPU Utilisation	3	3D Stereo		Disabled	
	8	Quadro P600			
		DVI		Connected: Optoma WXGA (2 of 2) EDID (Monitor), Multi-Display Cloning (Disabled)	
		DVI		Connected: Optoma WXGA (1 of 2) <u>EDID</u> (Monitor), <u>Multi-Display Cloning</u> (Disabled)	
		DisplayPort (2)		Not connected EDID (Monitor), <u>Multi-Display Cloning</u> (Disabled)	
		DisplayPort (1)		Not connected <u>EDID</u> (Monitor), <u>Multi-Display Cloning</u> (Disabled)	
		Usage Mode		WDDM	
		Total memory		6088 MB	
		Memory free		1882 MB	

Fig 3.2.2 Click NVIDIA system topology

Step 3. On the "EDID management window", select the "Export" tab. Export the EDID data from the selected projector and save it onto the disk as a file.

Manage	e EDID				×
Exp	oort Load Unload				
Se	elect Connector to Expo	rt EDID:			
	Connector	Display	Status	Video signal	
	Quadro P600(1)			· · · · · · · · · · · · · · · · · · ·	
1	DisplayPort (1)		Not Connected	VGA (Analogue)	
	DisplayPort (2)		Not Connected	VGA (Analogue)	
	DVI	Optoma WXGA (1 of 2)	Monitor	DisplayPort (Digital)	
	DVI	Optoma WXGA (2 of 2)	Monitor	DisplayPort (Digital)	
			h		
				Export EDID Cancel	

Fig 3.2.3 Manage EDID – Export EDID

Step 4. Load tab, browse, select the output and press load EDID.

EDID f	file: sers\VIOSO\Docum	ients\EDID\EDID	MA1.txl Bro	WSP	
Select	Connector to forc	e EDID:			
	Connector	Display	Status	Video signal	Comments*
Qu	adro P600(1) —				
	DisplayPort (1)		Not Connected	VGA (Analogue)	
	DisplayPort (2)		Not Connected	VGA (Analogue)	
	DVI	Optoma W	Monitor	DisplayPort (Digi 🗸	There is a checksum mis
	DVI	Optoma W	Monitor	DisplayPort (Dig	There is a checksum mis
					oitors

Fig 3.2.3 Manage EDID – Load EDID

Step 5. Check the result.

Edit Desktop Workstation Help			
Back 🔹 🜍 🚮			
ct a Task			^
3D Settings Adjust image settings with preview Manage 3D settings	- Expand al C Befresh Mosaic Displays		
Display Change resolution	System topology	Status Settings	
Adjust desktop colour settings	🖂 📴 Mosaic Displays		
-Rotate display	Configuration	1 x 2 Topology	
View HUCP status Set Up Digital Audio	Resolution, refresh rate	2560 × 800 pixels, 59.81 Hz	
Set up multiple displays	Displays and Graphics Cards		
Adjust using colors settings	System topology	Status Settings	
-Adjust video image settings	🗄 System		
Workstation	Driver version	391.25	
View system topology Set up Monaic	Vertical sync	3D Application controlled	
Manage GPU Utilisation	3D Stereo	Disabled	
	🖂 🛲 Quadro P600		
	DVI	Connectedy Optoma WXGA (2 of 2) EDID (File), Multi-Display Clening (Disabled)	
	DVI	Connected: Optoma WXGA (1 of 2) EDID (File), Multi-Display Cloning (Disabled)	
	DisplayPort (2)	Not connected EDID (Monitor), <u>Multi-Display Cloning</u> (Disable	ed)
	DisplayPort (1)	Not connected EDID (Monitor), <u>Multi-Display Cloning</u> (Disable	ed)
	Usage Mode	WDDM	
	Total memory	6088 MB	
	Memory free	1882 MB	
	Optoma WXGA (1 of 2)	Mosaic Display (1 x 2 topology)	
Custom Information	Resolution, refresh rate, co	lour depth 2560 × 800 pixels, 59.81 Hz, 32 bpp	~

Fig 3.2.4 Check the result

Part 3. MOSAIC Setup

We have the following steps to setup the EDID as follows.

Step 1. Right click on your desktop and click 'NVIDIA Control Panel'.



Fig 3.3.1 Right click on desktop and click NVIDIA Control Panel.

Step 2. Select "Set up Mosaic" tab and click 'Create new configuration' in order to start the NVIDIA Mosaic set up.

				 _
Sect a Tark	Set Up Mosaic Mosaic technology creates a single desktop from multiple Create new configuration Create new configuration Create new configuration Create rew configuration	deplays and GPUs. Bezel correction is available to create a seamless i Sync capability	inage.	

Fig 3.3.2 Click set up MOSAIC

Step 3. Select the correct configuration for your setup.

IVIDIA Mosaic set up		-		2
aic Displays	Topology: 1 x 2			_
elect topology 2. Select displays 3. Arrange di	plays 4. Adjust overlap and bezel correction			
Number of displays:	Configuration Name	_		
2 ~	Mosaic setup			
Topology (rows x columns):				
1 × 2 ~				
Orientation of displays:				
Landscape \vee				
I am using recommended connections for th	colorted topology			
am using recommended connections for th	selected topology.			
Enable Mosaic				
lected topology:				
		- 84		
		- 84		
		- 84		
		- 84		
		- 84		4
		- 84		
		- 84		4
		- 84		8
		- 84		
	Back		Next	ī
	a truit			-

Fig 3.3.3 Select topology

Step 4. Check the refresh rate and resolution in each display, you must make the same resolution and refresh rate to your displays.

NVIDIA Mosaic set up			-		×
Mosaic Displays		Topology: 1 x 2			_
1. Select topology 2. Select displays Displays for Mosaic: (2 selected)	3. Arrange displays 4. Adjust over	lap and bezel correction			_
Displays Quadro P600 1. Optome WXGA 2. Optome WXGA	Sync capability	Refresh rate: 59.81 Hertz Resolution per display: 1280 x 800 Total resolution: 2560 x 800 pixels 2 displays are selected for Mosaic Go next step to provide inform arrangement.	with sync. ation about your	display	
Selected display sources:					
		[Back	Next	

Fig 3.3.4 Select display

Step 5. Arrange displays according to their topology by drag and drop or typing the numbers into display slots (you will see the numbers in the projectors or click right on your desktop and go into the "Display settings" and click "Identify displays").



Fig 3.3.5 Arrange display and finish

12.4 Software Activation & Projector Activation

Part 1 License activation from Advanced Align

The Status of PJ-Crtl default is unactivated when finish the installation. If you want to have advanced function as Smart Align or Advanced Align please activate the license first.

Step 1. Your can directly click advanced align and smart align. There will have a reminder to ask you to go to the activation page.

		Untitled.pjc_Projector Contr	roller		- 0 ×
Management Task Config	View Help			Local IP Interface	: 192.168.0.220 🌐 🔲 🗛
E D D D	re as Monitor				
🕼 Projector List 🛛 🔿 🗙	IP Address Name Model Name	Serial Number Status Error	Light Hours 1 Light Hours 2 Filter Hours	Signal	Power On Dower Off
▼ Group1 1 2 192.168.0.100 Titan 4100	192.168.0.100 Titan 41000 4 Titan 41000 4	W320ZPUCY0001 Imaging	65	3840×2160@59.99Hz	
rouna					
		Advanced Align			
		Please activate the product regis	stration code.		
		Go to License	e Manager		
<					
🗄 Layout 🔿 🗙					
Group1					
	😨 Group1			+	
Align Align Editor	Enable Scheduled Task Tim	e Freq. / Every Start Date	Content Last Ru	n Edit / Del	
Row1 Column1					
Container					

Fig 4.1.1 Activate license

Step 2. You can choose the Free 30-days Trial and activate product code..

License Manager	×
Product Code Status Un-Activat	ed
Free 30-days Trial	ivate Product Code Close

Fig 4.1.2 Activate Trial license

Step 3. You should confirm to make the license as trial versions. Then click ok to activate as a trial version. PJ-Ctrl will restart to be a trial version.



Fig 4.1.3-1 Confirm



Fig 4.1.3-2 Ok

Step 4. After restart, you should go to licence manager page to check the versions, also you can purchase a license from the vendor and activate the license there.

Icense Manager Product Code Status Remaining Day 30 Activate Product Code Close			
Product Code Status Trial version Remaining Day 30	License Manager		×
Product Code Status Trial version Remaining Day 30 Activate Product Code Close			
Remaining Day 30 Activate Product Code Close	Product Code Status	Trial version	
Activate Product Code Close	Remaining Day	30	
Activate Product Code Close			
Activate Product Code Close			
Activate Product Code Close			
Activate Product Code Close			
Activate Product Code Close			
Activate Product Code Close			
Activate Product Code Close			
Activate Product Code Close			
		Activate Product Code Close	

Fig 4.1.4 Check license status

Step 5. Vendor will give you a key code to activate the license.

I Product Code Activ	ation	×
Activate		
Device ID	HP_89C0_PPWRC028JI506B	
Key code 🛛 🕐		
	Activate Cancel	

Fig 4.1.5 Product code activation

Step 6. After activating the license, you should restart the program again.



Fig 4.1.6 Ok

Step 7. You can check the license status from the license manager after license activation.

License Manager		×
Product Code Status	Activated	
	Projectors Activation Close	

Fig 4.1.7 Check license status
Part 2. Projectors Activation from license manager

 $\mathsf{Help} \to \mathsf{License} \; \mathsf{Manager}$

Click [Projectors Activation] to activate projector

Step 1. The list will show projectors with a status of Running and not yet activated, please press [Un-Activated], enter the keycode to activate the projector.

1	Projectors Activation X									
_										
	IP	Name	Projectors Activation Status							
	192.168.0.100	Titan 41000 4K-UHD	Un-Activated							
			Close							

Fig 4.2.1-1 Projectors Activation Status

Projectors Activation	1	×
Activate		
Device ID	DP_MRSNFC5L_W320ZPUCY0001	
Key code 📀		
Activation Status	Unactivated	
	Activate Cancel	

Fig 4.2.1-2 Projectors Activation

Step 2. Computer must keep in connect with the internet to make sure can be connected

to the license server to activate the license.



Fig 4.2.2 Connect to license server

Step 3. Activate Successful



Fig 4.2.3 Activate successful



IP	Name	Projectors Activation Status			
192.168.0.100	Titan 41000 4K-UHD	Activate			

Fig 4.2.4 Check the license status

Part 3. Layout Editor

Step 1. Main window → Layout Editor

A Management Ta	isk Con	fig View	Help			Unt	itled.pjc_P	rojector Cor	ntroller			Loc	al IP Interface : 192.168.0	- @ X 0.220 🌐 🚺 🗛
E D	Save 1	Save as												
Projector List	σ×	IP Address	Name	Model Name	Serial Number	5	Status	Error	Light Hours	1 Light Hours 2	Filter Hours	Signal	Power On	Power Off
✓ Group1		192.168.0.100	Titan 41000 4	Titan 41000 4	W320ZPUCY0001	۰	Imaging		_66			3840×2160@59.99Hz		
192.168.0.100	Titan 41000	192.168.0.120	M-Vision 270			٠	Offline							
2 192.168.0.120 2 192.168.0.140	M-Vision 27	192.168.0.140	M-Vision 270			۰	Offline							
K Layout Group1 Smart Align Advanced Align	Ø ×	Croup1 Enable	Scheduled T	ask Tim	e Freq. / Every	St	art Date		Content		Last Run	Edit / Del		
Row:1 Colum	n:2													

Fig 4.3.1 Layout editor

Step 2. Change the Column value to 2 and use mouse to drag the projector in the left list to the space in the right.

🌣 Layout Editor			
Group1		Row 1 Column	2 🖨
IP Address Name 192.168.0.100 Titan 41000 4K-UHD 192.168.0.120 M-Vision 27000 WU 192.168.0.140 M-Vision 27000 WU	۵		
		Save & Close	Cancel

Fig 4.3.2 Drag IP to add IP Address in the right space

Step 3. Make first projector to the target space.

🌣 Layout Editor			ο×
Group1		Row 1 Column 2 🗘	
IP Address Name 192.168.0.100 Titan 41000 4K-UHD 192.168.0.140 M-Vision 27000 WU	۲	⊗ 192.168.0.120 M-Vision 27000 WU	
		Save & Close Can	cel

Fig 4.3.3 Drag the first IP to target location

Step 4. Make second projector to the right space.

🌣 Layout Editor				
Group1		Row 1	Column	2 🛟
IP Address Name 192.168.0.100 Titan 41000 4K-UHD	۲	⊗ 192.168.0.120 M-Vision 27000 WU	192.168.0.140 M-Vision 27000	⊗ ว พบ
			Save & Close	Cancel

Fig 4.3.4 Finish the layout editor

Part 4. Advanced Align

Step 1. Main window \rightarrow Advanced Align

Management Task Confi	g View	Help			Unt	titled.pjc_Pr	rojector Cor	ntroller			Loc	al IP Interface : 192,168.	- 0 × 0.220 🕀 🔳 🗛
Rew Open Save Sa	Sve as												
Projector List Ø X	IP Address	Name	Model Name	Serial Number		Status	Error	Light Hours	Light Hours 2	Filter Hours	Signal	De Power On	Power Off
- Group1	192.168.0.100	Titan 41000 4	Titan 41000 4	W320ZPUCY0001	۰	Imaging		65			3840×2160@59.99Hz		
🎾 192.168.0.100 Titan 41000	192.168.0.120	M-Vision 270				Offline							
192.168.0.120 M-Vision 27 9 192.168.0.140 M-Vision 27	192.168.0.140	M-Vision 270			۰	Offline							
< ☐ Layout ♂ × Group1 Group1 Group1 Group1 Control Layout Adyanced Layout Layout Control Layout	😧 Group1										+		
	Enable	Scheduled Ta	isk Tim	e Freq. / Every	St	art Date		Content		Last Run	Edit / Del		
Row:1 Column:2													

Fig 4.4.1 Select Advanced Align

Step 2. Advanced Align will show the remaining day for the trial version.



Fig 4.4.2 Remaining day

Step 3. Use your mouse in the Display list on the left, press and hold the Display you want to configure, and drag it to the space on the right.

O Advanced Align		
Group1 Display X Y Width Heigh	t	
DISPLAY1 0 0 1920 1200		
	Image: Non-Section 1 Add Display	92.168.0.140 Add Display
	Run	Cancel

Fig 4.4.3 Drag display to the IP Layout

Step 4. Finish the display settings and click [Run]





12.5 Advanced Align Procedure

Step 1. Open the network connection to change the connection IPV4



Fig 5.1 Open the start menu

Step 2. Right click the Ethernet. Here the example is Ethernet 3.



Fig 5.2 Connection Setting

Step 3. Change the IP Address by router and projectors.

- → ∨ ↑ 🔄 > Control Panel > Network and	Internet > Network Connections ~ C	Search Network Connections
Irganize Disable this network device Diagnose th	is connection Rename this connection View status of this connection	onnection Change settings of this connection 🗄 🔹 🔲
Bluetooth Network Connection Not connected Bluetooth Device (Personal Area	arnet 3 dentified network (R) Ethernet Connection (17) L. Ethernet A PANGP Virtual Ethernet A	Mi-Fi 2 Not connected Inte(R) Wi-Fi 6E AX211 160MHz
	Ethernet 3 Properties	×
	Networking Sharing	Internet Protocol Version 4 (TCP/IPv4) Properties
	Connect using:	
	control cong.	General
	Intel(R) Ethemet Connection (17) I219-LM	General You can get IP settings assigned automatically if your network suppr
	Intel(R) Ethemet Connection (17) I219-LM Configure This connection uses the following items: Image: Ggabit Ethemet uEye Internet Protocol Version 4 (TCP/IPv4) Memorit Human K factors M Manager Internet	General You can get IP settings assigned automatically if your network support this capability. Otherwise, you need to ask your network administrat for the appropriate IP settings. Obtain an IP address automatically O Use the following IP address:
		General You can get IP settings assigned automatically if your network support this capability. Otherwise, you need to ask your network administrat for the appropriate IP settings. Obtain an IP address automatically Ouse the following IP address: IP address: I92 . 168 . 0 . 12
		General You can get IP settings assigned automatically if your network suppr this capability. Otherwise, you need to ask your network administrat for the appropriate IP settings. Obtain an IP address automatically Use the following IP address: IP address: Subnet mask: 192 . 168 . 0 . 12
		General You can get IP settings assigned automatically if your network support this capability. Otherwise, you need to ask your network administrat for the appropriate IP settings. Obtain an IP address automatically Obtain an IP address: IP address: IP address: IP address: Subnet mask: 255.255.255.0 Default gateway:
		General You can get IP settings assigned automatically if your network support this capability. Otherwise, your need to ask your network administrat for the appropriate IP settings. Obtain an IP address: IP address: IP address: IP address: IP address: IP address: ISubnet mask: ISSubnet mask
rms 1 litem selected	Intell,R) Ethemet Connection (17) [219-LM Configure This connection uses the following items:	General Vou can get IP settings assigned automatically if your network support from the appropriate IP settings. Obtain an IP address automatically Obtain an IP address: IP address: IP address: IP address: IP address: Default gateway: IP address: Obtain DNS server addresses: Preferred DNS server: Alternate DNS server: IP address: IP address

Fig 5.3 Set up IP of PC

Step 4. (1) The projectors should be in the same group. (2) Check the network settings, Port and Local IP Interface are correct.

	Untitled.pjc_Projector Controller Premium	- 🗆 X
Management Task Config View He	ntp L	.ocal IP Interface : 192.168.0.12 🌐 📘 🗛
E D D E E E		
Projector List O X IP Address	Name Model Name Serial Number Status Error Light Hours 1 Light Hours 2 Filter Hours	(b) Power On (b) Power Off
 ✓ Group1 192.168.0.140 M·Vision 22 192.168.0.120 M·Vision 22 192.168.0.120 M·Vision 22 192.168.0.100 Titan 47K 192.168.0.100 Titan 47K 	Vision 270 M-Vision 270 M-Vision 270 Imaging 115 1120 n 47000 Titan 47000 W3032PUCY0009 Imaging 284 1120	Input Selection
	Kotwork Config Local IP Interface 192.168.0.12 TCP Port 7000 UDP Port RX 307/7 UDP Port TX Save & Close Cancel	
🗄 Layout 🧭 🗙		Console OX
Croup1	2	<pre><<cop strokt<="" td=""></cop></pre>
W When 2 2000 WU Work to 2000 WU Work to 2000 W With the 2 20000 W WITH the 2 2000 W WITH the 2 2000 W	Crheduled Task Time Freq. / Every Start Date Content Last Run Edit / Del	<192.168.0.120 <<<<0P ACT.SOURCE = HDMI 2 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Row:1 Column:2		>op laser.cbc.state ? <<192.168.0.120 <<<0P LASER.CBC.STATE = 0

Fig 5.4 Set up projectors IP and Port

Step 5. (1) Jump to help page, (2) and click the license manager

H	Or Many Hale	Untitled.pjc_P	Projector Controller Premium		×
Instruction License Contact Us	About				
Projector List O X	IP Address Name	Model Name Serial Number	Status Error	Light Hours 1 Light Hours 2 Filter Hours	
▼ Group1	192.168.0.140 M-Vision 270		Offline		Over On Over Off
192.168.0.140 M-Vision 27	192.168.0.120 M-Vision 270	M-Vision 270	Imaging	115	1920 Input Selection v
192.168.0.120 M-Vision 27	192.168.0.100 Titan 47000.	Titan 47000 W303ZPUCY0009	Imaging	204	Image Blanking On v
Karamana A					
Groun1					<< <op serial="</td"></op>
Advanced Layout Editor	<				>op errode ? >op substant ? >op substant ? >op substant ? >op state hours ? < <tbody><<tbody>><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody>
	Group1				+ <192.168.0.120 <<<0P ACT.SOURCE = HDMI 2
M-Vision 27000 WU 1920 x 1200 Titan 47% 1920 x 1200	Enable Scheduled	Task Time Freq. / Every	Start Date Conten	t Last Run Edit / [Del >op signal ? <<192.168.0.120 << <op signal="1920×1200@59.95Hz</td"></op>
Row:1 Column:2					>oplaser.minutes ? <<192.168.0.120 <<<0P LASER.MINUTES = 6370 >oplaser.cbc.state ? <<10P LASER.CBC.STATE = 0

Fig 5.5 Set the license

Step 6. Click projector activation

22				Untitled.pjc_Pro	ojector Control	ler Premium				- 🗆 ×
▲ Management Task Conf	ig View Hel								L	ocal IP Interface : 192.168.0.12 🌐 🔲 🗛
Instruction License Contact Us	(i) About									
🗊 Projector List 🛛 🗙	IP Address	Name Model M	Name Ser	ial Number	Status	Error	Light Hours 1 Lig	ht Hours 2 Filter Hours		
	192.168.0.140 M-Vi	lision 270			Offline					Power On Off
192.168.0.140 M-Vision 27	192.168.0.120 M-Vi	ision 270 M-Vision	270		Imaging		115		1920	Input Selection
192.168.0.120 M-Vision 27 192.168.0.100 Titan 47K	192.168.0.100 Titan	n 47000 Titan 🦰	C License N	Manager	-				1920	Test Pattern Off V
×∎≫ ∰ Layout ♂ X Group1					() Project	or Activation	Close			Console 0 × <<<0 > € console 2 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 ×
Advanced Layout Editor	< Group1								, +	>cop status ? <<<0P ERRCDDE = 0000 >cop state hours ? <<102.188.0.100 <<<0P STATUS - 2 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 <<102.188.0.100 102.188.0.100<br 102.188.0.100<br 103.188.0.100<br 103.1</td
M-Vision 27000 WU 1920 x 1200	Enable So	cheduled Task	Time	Freq. / Every	Start Date	Content	Last	Run Edit / D	el	>cp signal ? <<192,168.0.120 <<<0P SIGNAL = 1920×1200@59.95Hz >cp laser.mmutes ? <<192.168.0.120 <<0P Listen MINITES = 6370
Row:1 Column:2										>op iser cbc.state 7 <<192.168.0.120 <<<0P LASER.CBC.STATE = 0

Fig 5.6 Activate

Step 7. Click activate.

Management Task Cor	nfig View Help		Untitled.pjc_Projector Controller P	remium	Le	- 🗆 🗙
Instruction License Contact Us	G About					
Projector List O X Croup1 Image: 201460.1060 M-Vesion 2 Image: 201460.1060 M-Vesion 2 Image: 201460.1060 M-Vesion 2 Image: 201460.1020 M-Vesion 2 Image: 201460.1060 M-Vesion 2 Image: 201460.1060 M-Vesion 2 Image: 201460.1060 M-Vesion 2 Image: 201460.1060 M-Vesion 2 Image: 201460.1060 M-Vesion 2 Image: 201460.1060 M-Vesion 2 Image: 201460.1060 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 Image: 201460 M-Vesion 2 <td>IP Address N. 192.168.0.140 M-Visid 192.168.0.120 M-Visid 192.168.0.100 Titan 4</td> <td>iame Model Name S ion 270 M-Vision 270 77000 Titen ♥ Project: 102.168.0.1</td> <td>vrial Number Status Offine Offine Imaging or Activation IP Name 00 Titan 47K 20 M-Vision 27000 WU</td> <td>Error Light Hours 1 Light Hours 2</td> <td>Filter Hours 1920</td> <td>Orwer Off Input Selection Image Blanking Test Pattern</td>	IP Address N. 192.168.0.140 M-Visid 192.168.0.120 M-Visid 192.168.0.100 Titan 4	iame Model Name S ion 270 M-Vision 270 77000 Titen ♥ Project: 102.168.0.1	vrial Number Status Offine Offine Imaging or Activation IP Name 00 Titan 47K 20 M-Vision 27000 WU	Error Light Hours 1 Light Hours 2	Filter Hours 1920	Orwer Off Input Selection Image Blanking Test Pattern
K Layout O X Group1 Smart Advanced Align Layout Layout				Close		Console O × <<<
Webse 2 2000 W Webse 1 2000 W Row:1 Column:2	C Group1 Enable Sch	neduled Task Time	Freq. / Every Start Date	Content Last Run	Edit / Del	



Step 8. Activate the projector

-		Untitled.pjc_Projector Controller Premium	- 🗆 X
▲ Management Task Con	fig View Help		Local IP Interface : 192.168.0.12 🌐 🚺 剧
Instruction License Contact Us	About		
Projector List Ø X	IP Address Name	Model Name Serial Number Status Error Light Hours 1 Light Hours 2 Filter Hours	
▼ Group1	192.168.0.140 M-Vision 270	Offline	O Power On O Power Off
192.168.0.140 M-Vision 27	192.168.0.120 M-Vision 270	M-Vision 270 Imaging 115	1920 Input Selection V
2 192.168.0.120 M-Vision 27	192.168.0.100 Titan 47000	Titan	Image Blanking On v
8 		Activate Cancel	
🗄 Layout 🛛 🗸			E Console O X
Group1			>>>>>>>>>>>>>>>>>>>>>>>>>>>>
M Heles 2700 WU 1920 + 1000 Row:1 Column:2	s Group1 Enable Scheduled	ask Time Freq. / Every Start Date Content. Last Run Edit / Del	<pre><</pre> <pre></pre>

Fig 5.8 Enter the key code and activate

Step 9. (1) Click layout editor. (2) Drag IP to box..

Management Task Conf	Untitled.pjc_Projector Controller Premium	-
Instruction License Contact Use	The second sec	
Projector List O X Group1 1922468.0.140 M-Vision 22 1922468.0.120 M-Vision 27 192168.0.100 Titan 47K	IP Address Name Model Name Serial Number Status Error Light Hours 1 Light Hours 2 Filter Hours 1 192:166 192:166 192:168 192:168.0.100 M-Vision 27000 WU 192:168.0.100 Titan 47K Provide Status Error Light Hours 1 Light Hours 2 Filter Hours 1 Provide Status Error Light Hours 2 Provide Status Error Light Hours 2	Power On OPower Off Input Selection Image Blanking Test Pattern
Croup1	It Editor Brag & drop projector to grid. Save & Close Cancel	Console O X DP_MRSNUD2L_W3032PUCY0009 > > >00 percessing >
Row:1 Column:2	C Group1 4 Enable Scheduled Task Time Freq. / Every Start Date Content Last Run Edit / Del	<pre>>cdp status # <<192.186.0.170 <<<0P STATUS = 2 <<192.186.0.170 <<192.186.0.170 <<192.9.171US = 2 <<192.186.0.170 <<192.186.0.170 <<192.186.0.170 <<192.186.0.170 <<192.186.0.170 <<192.186.0.170 status = 1 <<100 ACT/vos/ATUS = 1</pre>

Fig 5.9 Set up IP Layout

Step 10. (1) Click advanced align. (2) Drag display into Layout Editor Box.(3).Run the program

	Untitled.pjc_Projector Controller Premium	- 🗆 ×
▲ Management Task Config	g View Help La	ocal IP Interface : 192.168.0.12 🌐 🔲 🗛
Instruction License Contact Us	About	
🗊 Projector List 🛛 🔿 🗙	IP Address Name Model Name Serial Number Status Error Light Hours 1 Light Hours 2 Filter Hours	🕐 Power On 👘 Power Off
Croup1 P 102:080.0140 M-Vision 2 P 102:080.0120 M-Vision 2 P 102:080.0120 M-Vision 2 P 102:060.0100 Titan 47K Found	192.168 192.168 Group1 Display X V With Height Display 2 0 0 1920 1200 Display 2 0 0 0 1920 1200	Input Selection
	Alian	🖸 Console 🛛 🗗 🗙
Group: Advanced	Run Cancel 3 Run	<102.188.0.100 <c><c><c><c><c><c><c><c><c><c><c><c><c></c></c></c></c></c></c></c></c></c></c></c></c></c>
Tome VY Types too	Group1 +	

Fig 5.10 Set up Display

Step 11. Get into VIOSO Program

Eile Options Extras View Help	
Control You are in Project Mode Switch to Free Mode Image: Show blank image Show warping grid Live input Show blank image Target Image Adjustments Turn blending off Adjust projectors Stretch to full screen Adjust projectors Surface color correction Force data copy to clients	

Fig 5.11 Click Design

Step 12. Check the topology of calibration projector if ok, finish.

1		🔿 🧰 Computer	DESKTOP-850PPGN
			Master Class
			Fix Device Parameter
		Network Adapter	
		P Address	192.166.0.12
		Desktop Configuration	10.147.102.240
	Titan 47K M-Vision 27000 WU Logilach Webcam C930e		
		•	
		Configure	
	Surface		
	<u> </u>		
	Digital Projection Export Parameter		
	Γ^{γ_1}		
000	V Triab		

Fig 5.12 Check the design

Step 13. Activate the projectors.

ł	jile (Options	Extras)	<u>V</u> iew <u>H</u> elp	
ſ	Contro	Design		You are in Project Mode	Switch to Free Mode
l		Congin		Player	Show test image
	4	Activate	▶	Live input	Show warping grid Show blank image
	1	Act	ivate	- Target	
	5%				
	٢			Adjustments	
	\odot			Color & Blending	Turn blending off
				Adjust projectors	Surface color correction Force data copy to clients
				,	

Fig 5.13 Activate the projectors

Step 14. Start to Calibrate

Elle Options Extras	Yiew Help	
Control	You are in Project Mode Switch to Free Mode	
	Blayer Show test image	
🗄 Activate 🔽	Live input Show blank image	
🕂 Calibrate 🕨	Target	
Calibrat	e	
Export Ø	C Adjustments	
🕙 Deactivate ⊘	Color & Blending	
Recalibrate Ø	Adjust projectors Surface color correction Force data copy to clients	

Fig 5.14 Calibrate

Step 15. Select the method and next

Select display(Select display(s) and camera					
Select display	y(s) to calibrate:					
1: Titan 47K *	2000 WIL *			display split		
				select all		
				deselect all		
Titan 47K				<u>R</u> ename		
Select metho	d:					
- HE	A H	ъ 🥨	1	\rightarrow		
flat screen	curved screen/ dome	any surface	manual setup	preceeding calibration		
•	•	•	•	•		
Select Came Camera 1: Log	ra: gitech Webcam C9)30e	Select the	e method		
Set compound name (optional):						
screen0 Set						
		<u>C</u> ancel		Next		

Fig 5.15 Select the method

Step 16. Set display arrangement and next

Additional	Additional options					
Display a	rrangement:					
	^{شی} شم شم	Grid/ Arbitrary				
	ලිකු ලිකු	Horizontal strip				
	₽ P P	Vertical strip				
set display calibration max Set display arrangement force new geometric scan						
Extended Options						
<u>B</u> ack	<u>C</u> ancel	N	ext			

Fig 5.16 Set display arrangement





Fig 5.17 Adjust camera

Step 18. Set up the brightness of display to be suitable for calibration



Fig 5.18 Adjust Brightness for display

Step 19. Perform new scan

Select geometric co	orrection data source for d	isplay 1/ 2		
	Perform new scan		Use a prior calibration	
	Use the last scan		Load a saved geometry scan	
<u>B</u> ack		<u>C</u> ancel		

Fig 5.19 Perform new scan

Step 20. Adjust size of scan pattern for display. You can change the size and margin to be suitable value. Then click next to calibrate.



Fig 5.20 Adjust size of scan pattern for display

Step 21. Calibrating

Information for display 1/ 2		
Automatic calibration is runn	ing scanning surface structure P	lease be sure not to
disturb the record	ling.(e.g. by moving the camera or p	rojector)
Back	Cancel	Next
		How

Fig 5.21 Calibrating

Step 22. Check the parameters and use different method to make feature collection better.

Geomtry scan adjustment			Camera: "Logitech Webcam C930e"	toggle view
Detection of possibly invalid points: Extrapolation method: Extrapolation distance: Surface curvature:	Tolerant Full Polynomial Image: state of the stat	Recalculate Show Info Expert		
Crop-Mask:		Browse Reset	Output: "M-Vision 27000 WU"	toggle view
- Options		Browse Reset		
Back	Cancel	Next		

Fig 5.22 Adjust the computing parametric

Step 23. Inspect calibration for display.

Inspect Calibration for display 1/ 2
Click next if result is ok or go back to repeat the scanning.
proceed without interaction
Back <u>Cancel N</u> ext

Fig 5.23 Inspect the calibration result for display

Step 24. Redo the step 18~23 steps to other projectors.

Step 25. Click Edit

F	ile <u>O</u> ptions	<u>E</u> xtras	<u>V</u> iew <u>H</u> elp	
	control		You are in Project Mod	e Switch to Free Mode
	Design		Player	Show test image
	🗄 Activate	_	Live input	Show warping grid
[A Calibrate	, V	- Target	<u>~</u>
	🛱 Edit	Þ		
	Export	0	Adjustments	
	🕤 Deactiva	nte Ø	Color & <u>B</u> lending	Turn blending off Stretch to full screen
		ate ⊘	Adjust projectors	Surface color correction Force data copy to clients

Fig 5.24 Click Edit

Step 26. Edit the calibration result

<u>F</u> ile <u>O</u> ptions <u>E</u> xtras	<u>V</u> iew <u>H</u> elp				
Control	You are in Project Mode	Switch to Free Mode	5		53
Design	<u>Player</u>	Show test image			
👌 Activate 🔽	Live input	Show warping grid Show blank image	TT BB		
A Calibrate	screen0		0a, 0a	9 9	
Edit 💿	Finish				
Export Ø	CAdjustments				
🕑 Deactivate 🥥	Color & <u>B</u> lending ✓ S	urn blending off stretch to full screen			
Recalibrate Ø	Adjust projectors	Surface color correction Force data copy to clients			
			73.113	37.736 🗸	

Fig 5.25 Click Design

Step 27. Export calibration result

<u>F</u> ile <u>O</u> ptions <u>E</u> xtras	<u>∕</u> iew <u>H</u> elp		
Control	You are in Project Mode	Switch to Free Mode	53
Design	Player She	how test image	
Activate 🗸	Live input	how blank image	
🔺 Calibrate 🗸	screen0		
Edit 🗸			
Export	Adjustments-		
🕙 Deactivate 🖉	Color & Blending	urn blending off tretch to full screen	
Recalibrate Ø	Adjust projectors	urface color correction or contract of the second sec	
		50.000 49.999 🗸	

Fig 5.26 Export





Fig 5.27 Deactivate

13. Smart Align

13.1 System Requirements

Part 1. Computer System

The software runs on Windows 10 and Windows 11

- Use NVIDIA Quadro based system whenever possible. This results in the greatest flexibility in number of projectors and supports all use cases. All current Quadro GPUs (from P series) have the capability to run warp & blend.
- Windows 10 and 11 recommended

Part 2. NVIDIA Card

For Desktop Hooking (Professional NVIDIA GPU, Support Mosaic Function).

2021 Release Information NVIDIA (Quadro / NVIDIA RTX Products).

NVIDIA RTX 6000 Ada Generation, NVIDIA RTX A6000, NVIDIA RTX A5500, NVIDIA RTX A5000, NVIDIA RTX A4500, NVIDIA RTX A4000, NVIDIA RTX A2000 | A2000 12GB, NVIDIA T1000 | T1000 8GB, NVIDIA T600, NVIDIA T400 | T400 4GB, Quadro RTX 8000, Quadro RTX 6000, Quadro RTX 5000, Quadro RTX 4000, Quadro GV100, Quadro GP100, Quadro P6000, Quadro P5000, Quadro P4000, Quadro P2000, Quadro P1000, Quadro P600, Quadro P400, Quadro M6000 24GB, Quadro M6000, Quadro M5000, Quadro M4000, Quadro M2000, Quadro K6000, Quadro K5200, Quadro K5000, Quadro K4000, Quadro K4200, Quadro K2200, Quadro K2000, Quadro K2000D, Quadro K1200, Quadro K620, Quadro K600, Quadro K420, Quadro 410

2023 Release information from NVIDIA (Quadro / NVIDIA RTX Products).

- NVIDIA RTX 6000 Ada Generation, NVIDIA RTX A6000, NVIDIA RTX A5500, NVIDIA RTX A5000, NVIDIA RTX A4500, NVIDIA RTX A4000, NVIDIA RTX A2000 | A2000 12GB, NVIDIA T1000 | T1000 8GB, NVIDIA T600, NVIDIA T400 | T400 4GB, Quadro RTX 8000, Quadro RTX 6000, Quadro RTX 5000, Quadro RTX 4000
- The version we already test.
- NVIDIA A2000 with driver Version.537.13
- NVIDIA K5000 with driver Versions. ---.--
- Consider very special driver and system configuration requirements.

Part 3 Nvidia Card Operating Procedures

Step1 Go to the website where we can download the driver of NVIDIA. Recommend download the driver from the official website

nvidia.com/download/index.aspx		
🕺 NVIDIA. Products Solutions Industries For You	Shop Drivers Support	Q (2)
Download Drivers		
NVIDIA > Download Drivers		
GeForce RTX 40 NVIDIA Driver Downloads		
Select from the dropdown list below to identify the appropriate driver for your 1 Product Type: [NUDIA RTX / Quadro Product Series: [NUDIA RTX / Quadro Product Series: [NUDIA RTX A2000 126B Product [NUDIA RTX A200 126B Product [NUDIA RTX A200 126B Product [NUDIA RTX A200 12	WIDIA product. Help	
Image: Solution of the solution	D vApps or Quadro vDWS), can log formation about how to access	

Fig 1.3.1 Nvidia driver search page – Web URL

Step 2 Select the version of NVIDIA and search the driver

NU 📀	DIA. Products Solutions Industries For You		Shop Drivers Support	Q (2)
	Download Drivers VIDIA > Download Drivers GeForce RTX 40 Series GPUs Image: Series GPUs Product Type: InviDia RTX Product Series: InviDia RTX Product Series: InviDia RTX Product Series: InviDia RTX Operating System: Windows IC Download Type: Production Language: English (US) Search	nloads w to identify the appropriate driver for your NVID / Quadro v Series v A2000 12GB v 164-bit v Branch/Studio v ?	IA product. Help	
	NVIDIA Virtual GPU Customers Enterprise customers with a c into the enterprise software d your purchased licenses visit t RTX. Login	urrent vGPU software license (GRID vPC, GRID vA ownload portal by clicking below. For more inform he vGPU Software Downloads page.	pps or Quadro vDWS), can log lation about how to access	

Fig 1.3.2 Nvidia driver search page – select option

Step3 Check the versions of NVIDIA Card must up U5 Versions and download it.



[Blackmagic][DaVinci Resolve]: performance regression between driver versions R525 and R535

Fig 1.3.3 Nvidia driver download page

13.2 System Preparation

Part 1 NVidia graphics card setup

Before start the calibration, we should follow the procedure as below. Check the NVDIA Driver and Install the driver.

Step 1. Check the NVIDIA driver is in a stable version, Higher than U5, you can follow the section 1.

圖示 元麦			
系統資訊 DirectX 執行階段版本: 12.0)		
圖形卡資訊			
項目 NVIDIA RTX A2000 12GB	詳細資料 驅動程式版本: 驅動程式版本: 動在式版型: Diret3D功能層級: CUDA核心: 可調整大小的基底位 圖形提升時紙: 記憶體介面: 記憶體介面: 記憶體介面: 記憶體資寬: 可用圖形記憶體總計: 專用視訊記憶體: 本在世界的基礎,	514.08 DCH 12_1 200 MHz 1200 MHz 1200 Gbps 192-位元 288.05 GBA 20326MB 12282 MB GD	ear al
		関約方	१(A)

Fig 3.1.1 System information

Step 2. If not, recommend to uninstall current versions before you release the MOSAIC status, then install the stable versions.

There is some situation we encountered that you should reinstall NVIDIA Driver

- GPUs are missing in NVIDIA system topology.
- Connected displays not showing up in Windows, but listed in NVIDIA system topology (check adapters and signal cables first).
- NVIDIA control panel works very slowly.
- NVIDIA control panel nearly empty or not showing the usual set of features.
- Blue screen when operating with NVIDIA features (e.g. setting up Mosaic).
- Other anomalies.

Part 2. EDID Minding Setup

We have the following steps to setup the EDID.

Step 1. Right click on your desktop and click 'NVIDIA Control Panel'.

	View Sort by Refresh	>
	Paste	
	Paste shortcut Undo Move	Ctrl+Z
	Intel® Graphics Settings	
0	NVIDIA Control Panel	
	New	>
.	Display settings Personalize	

Fig 3.2.1 Right click on desktop and click NVIDIA Control Panel.

Step 2. Click on "View System Topology" and locate the display you want to modify and export EDID data. Click on 'EDID' (it should be marked as "Monitor").

Select a Task				
E 3D Settings	÷ Exp	and all 🕐 <u>R</u> efresh		
Adjust image settings with preview Manage 3D settings	Moraic	isolaus		
- Display	System	topology	Status	Settings
		Moraic Dimlaw	50003	second
-Rotate display		Configuration		1 x 2 Topology
-View HDCP status	F	Resolution, refresh rate		2560 × 800 pixels. 59.81 Hz
Set up Digital Audio Set up multiple displays	Displays	and Graphics Cards		
E-Video	System topology		Status	Settings
Adjust video colour settings Adjust video image settings	🗉 System			
Workstation	Driver version			391.25
	Vertical sync		0	3D Application controlled
-Manage GPU Utilisation	3	3D Stereo		Disabled
	8	Quadro P600		
		DVI		Connected: Optoma WXGA (2 of 2) EDID (Monitor), Multi-Display Cloning (Disabled)
		DVI		Connected: Optoma WXGA (1 of 2) <u>EDID</u> (Monitor), <u>Multi-Display Cloning</u> (Disabled)
		DisplayPort (2)		Not connected EDID (Monitor), <u>Multi-Display Cloning</u> (Disabled)
		DisplayPort (1)		Not connected EDID (Monitor), <u>Multi-Display Cloning</u> (Disabled)
		Usage Mode		WDDM
		Total memory		6088 MB
		Memory free		1882 MB

Fig 3.2.2 Click NVIDIA system topology

Step 3. On the "EDID management window", select the "Export" tab. Export the EDID data from the selected projector and save it onto the disk as a file.

Manage EDID				×
Export Loa	d Unload			
Select Conr	nector to Export EDID:			
Connecto	r Display	Status	Video signal	
Quadro	P600(1)			
DisplayPo	rt (1)	Not Connect	ed VGA (Analogue)	
DisplayPo	rt (2)	Not Connect	ed VGA (Analogue)	
DVI	Optoma WXGA	(1 of 2) Monitor	DisplayPort (Digital)	
DVI	Optoma WXGA	(2 of 2) Monitor	DisplayPort (Digital)	
		_		
			Export EDID	Cancel

Fig 3.2.3 Manage EDID – Export EDID

Step 4. Load tab, browse, select the output and press load EDID.

C:\U	sers\VIOSO\Docum	ients\EDID\EDID	MA1.txt Bro	wse	
Select	Connector to forc	e EDID:			
	Connector	Display	Status	Video signal	Comments*
Qu	adro P600(1)				
	DisplayPort (1)		Not Connected	VGA (Analogue)	
	DisplayPort (2)		Not Connected	VGA (Analogue)	
	DVI	Optoma W	Monitor	DisplayPort (Digi 🗸	There is a checksum mis
\checkmark	DVI	Optoma W	Monitor	DisplayPort (Dig	There is a checksum mis
		C:\Users\VIOSO\Docum Select Connector to forco Quadro P600(1) DisplayPort (1) DisplayPort (2) VI DVI	C: Users WIOSO Vpocuments EDID /EDID Select Connector to force EDID: Connector Display Quadro P600(1) DisplayPort (1) DisplayPort (2) VI Optoma W DVI Optoma W	C:\Users\VIOSO\Documents\EDID\EDID MA1.txl Brownets Select Connector to force EDID:	C: {Users}/VIOSO \Documents \EDID\EDID M1.txl Browse Select Connector to force EDID:

Fig 3.2.3 Manage EDID – Load EDID

Step 5. Check the result.

Edit Desktop Workstation Help				
Back 🔹 🜍 🚮				
ct a Task				^
3D Settings Adjust image settings with preview Manage 3D settings	 Expand al Befresh Mosaic Displays 			
Display Change resolution	System topology	Status	Settings	
Adjust desktop colour settings	🗄 🧱 Mosaic Displays			
-Rotate display	Configuration		1 x 2 Topology	
View HUCP status Set Up Digital Audio	Resolution, refresh rate		2560 × 800 pixels, 59.81 Hz	
Set up multiple displays	Displays and Graphics Cards			_
Adjust using colors settings	System topology	Status	Settings	
-Adjust video image settings	E System			
Workstation	Driver version		391.25	
View system topology Set up Moraic	Vertical sync	S	3D Application controlled	
-Manage GPU Utilisation	3D Stereo		Disabled	
	🖂 🛲 Quadro P600			
	DVI		Connectedy Optoma WXGA (2 of 2) EDID (File), Multi-Display Cloning (Disabled)	
	DVI		Connected Optoma WXIGA (1 of 2) EDID (File), Multi-Display Cloning (Disabled)	
	DisplayPort (2)		Not connected EDID (Monitor), <u>Multi-Display Cloning</u> (Disabled)	
	DisplayPort (1)		Not connected EDID (Monitor), <u>Multi-Display Cloning</u> (Disabled)	
	Usage Mode		WDDM	
	Total memory		6088 MB	
	Memory free		1882 MB	
	Optoma WXGA (1 of 2)		Mosaic Display (1 x 2 topology)	
Custom Information	Resolution, refresh rate, colo	our depth	2560 × 800 pixels, 59.81 Hz, 32 bpp	~

Fig 3.2.4 Check the result

13.3 System Activation & Projector Activation

Part 1 License activation from Advanced Align

The Status of PJ-Ctrl default is inactivated when finish the installation. If you want to have advanced function as Smart Align or Advanced Align please activate the license first.

Step 1. You can directly click advanced align and smart align. There will have a reminder to ask you to go to the activation page.

2							Untitled.pjc_Pr	rojector Cor	ntroller					- 0 ×
A Manage	ement Ta	sk Con	fig View	Help								Local IP Inte	erface : 192.168.0.22	• 🌐 🗖 🕰
E+ New	Dpen	Save 1	Save as											
Group1	r List 2.168.0.100	J X	IP Address 192.168.0.100	Name Titan 41000 4	Model Name Titan 41000 4	Serial Number W320ZPUCY000	Status 1 • Imaging	Error	Light Hours 1	Light Hours 2	Filter Hours 38	Signal 140×2160@59.99Hz	C Power On	Power Off
<		a ×					Advanced Align Please activate the	product re Go to Lice	X gistration code. nse Manager					
Group1														
Situat Align	Advanced Align	Layout Editor	Group1 Enable	Scheduled T	ask Tim	e Freq. / Eve	ry Start Date		Content		Last Run	+ Edit / Del		
Row	:1 Colum	n:1	5											

Fig 4.1.1 Activate license

Step 2. You can choose the Free 30-days Trial and activate product code..

license Manager		×
Product Code Status	Un-Activated	
Free 30-days	Trial Activate Product Code	Close

Fig 4.1.2 Activate Trial license

Step 3. You should confirm to make the license as trial versions. Then click ok to activate as a trial version. PJ-Ctrl will restart to be a trial version.



Fig 4.1.3-1 Confirm



Fig 4.1.3-2 Ok

Step 4. After restart, you should go to licence manager page to check the versions, also you can purchase a license from the vendor and activate the license there.

license Manager		×
Product Code Status Remaining Day	Trial version 30	
	Activate Product Code Close	

Fig 4.1.4 Check license status

Step 5. Vendor will give you a key code to activate the license.

③ Product Code Activation	ation	×
Activate		
Device ID	HP_89C0_PPWRC028JI506B	
Key code 🕜		
	Activate Cancel	

Fig 4.1.5 Product code activation

Step 6. After activating the license, you should restart the program again.



Fig 4.1.6 Ok

Step 7. You can check the license status from the license manager after license activation.

License Manager		×
Product Code Status	Activated	
	Projectors Activation Close	

Fig 4.1.7 Check license status

Part 2. Projectors Activation from license manager

 $\mathsf{Help} \to \mathsf{License} \; \mathsf{Manager}$

Click [Projectors Activation] to activate projector

Step 1. The list will show projectors with a status of Running and not yet activated, please press [Un-Activated], enter the keycode to activate the projector.

Projectors Activation						
IP	Name	Projectors Activation Status				
192.168.0.100	Titan 41000 4K-UHD	Un-Activated				
		Close				

Fig 4.2.1-1 Projectors Activation Status

Projectors Activation	1	×
Activate		
Device ID	DP_MRSNFC5L_W320ZPUCY0001	
Key code 🛛 🕐		
Activation Status	Unactivated	
	Activate Cancel	

Fig 4.2.1-2 Projectors Activation

Step 2. Computer must keep in connect with the internet to make sure can be connected

to the license server to activate the license.



Fig 4.2.2 Connect to license server

Step 3. Activate Successful



Fig 4.2.3 Activate successful



IP	Name	Projectors Activation Status
192.168.0.100	Titan 41000 4K-UHD	Activate

Fig 4.2.4 Check the license status
Part 3. Layout Editor

Step 1. Main window → Layout Editor

Management Ta	ask Cont	fig View	Help			Unt	itled.pjc_Pr	rojector Con	troller			Loca	al IP Interface : 192.168.	- 0.220 🕀 🔲	- 0 ×
New Open	Save s	Save as Monte													
Projector List	ø ×	IP Address	Name	Model Name	Serial Number	1	Status	Error	Light Hours	1 Light Hours 2	Filter Hours	Signal	Dever On	D Power	Off
✓ Group1		192.168.0.100	Titan 41000 4	Titan 41000 4	W320ZPUCY0001	۰	Imaging		- 66			3840×2160@59.99Hz			
192.168.0.100	Titan 41000	192.168.0.120	M-Vision 270				Offline								
¥ 192.168.0.120	M-Vision 27	192.168.0.140	M-Vision 270				Offline								
Si Layout Group1 Sinut Adan	Ø × Layout Editor	Group1 Enable	Scheduled 1	fask Tim	ie Freq. / Every	St	art Date		Content		Last Run	+ Edit / Del			
Row:1 Colum	m:2				a Hegreroy				Contain		LOST KAT				

Fig 4.3.1 Layout editor

Step 2. Change the Column value to 2 and use mouse to drag the projector in the left list to the space in the right.

🛱 Lavout Editor			
Group1		Row 1	Column 2
IP Address Name 192.168.0.100 Titan 41000 4K-UHD 192.168.0.120 M-Vision 27000 WU 192.168.0.140 M-Vision 27000 WU	۵		
			Save & Close Cancel

Fig 4.3.2 Drag IP to add IP Address in the right space

Step 3. Make first projector to the target space.

🌣 Layout Editor			ο×
Group1		Row 1 Column 2 🗘	
IP Address Name 192.168.0.100 Titan 41000 4K-UHD 192.168.0.140 M-Vision 27000 WU	۲	⊗ 192.168.0.120 M-Vision 27000 WU	
		Save & Close Can	cel

Fig 4.3.3 Drag the first IP to target location

Ston	Λ	Maka	cocond	nro	iactor	to	tho	right	cn2c0
Step	4.	INIAKE	Second	pro	Jector	ιυ	uie	nynt	space

🌣 Layout Editor				
Group1		Row 1	Column	2 🛟
IP Address Name 192.168.0.100 Titan 41000 4K-UHD	۲	⊗ 192.168.0.120 M-Vision 27000 WU	192.168.0.140 M-Vision 27000	⊗ ว พบ
			Save & Close	Cancel

Fig 4.3.4 Finish the layout editor

Part 4. Advanced Align

Step 1. Main window \rightarrow Advanced Align

Management Task Confi	g View	Help			Unt	titled.pjc_Pr	rojector Cor	ntroller			Loc	al IP Interface : 192,168.	- 0 × 0.220 🕀 🔳 🗛
Rew Open Save Sa	Sve as												
Projector List Ø X	IP Address	Name	Model Name	Serial Number		Status	Error	Light Hours	Light Hours 2	Filter Hours	Signal	De Power On	Power Off
- Group1	192.168.0.100	Titan 41000 4	Titan 41000 4	W320ZPUCY0001	۰	Imaging		65			3840×2160@59.99Hz		
🎾 192.168.0.100 Titan 41000	192.168.0.120	M-Vision 270				Offline							
192.168.0.120 M-Vision 27 9 192.168.0.140 M-Vision 27	192.168.0.140	M-Vision 270			۰	Offline							
< ☐ Layout ♂ × Group1 Group1 Group1 Group1 Control Layout Adyanced Layout Layout Control Layout	😧 Group1										+		
	Enable	Scheduled Ta	isk Tim	e Freq. / Every	St	art Date		Content		Last Run	Edit / Del		
Row:1 Column:2													

Fig 4.4.1 Select Advanced Align

Step 2. Advanced Align will show the remaining day for the trial version.



Fig 4.4.2 Remaining day

Step 3. Use your mouse in the Display list on the left, press and hold the Display you want to configure, and drag it to the space on the right.

O Advanced Align		o x
Group1 Display X Y Width Height		
DISPLAY1 0 0 1920 1200		
DISPLAY2 1920 0 1920 1200	Display	8 192.168.0.140 Add Display
	Run	Cancel

Fig 4.4.3 Drag display to the IP Layout

Step 4. Finish the display settings and click [Run]

🧰 Sma	rt Align-Group2					 -	٥	×
Initial	Lens Control	Filtering		Fine T	une			
Camera	None	•	•					
Method	Please select the function							

Fig 4.4.4 Smart Align

13.4 Smart Align Procedure

Part 1. PJ-Ctrl Settings

Step 1. Open the network connection to change the connection IPV4

(b) Chat All Apps Documents	Web	Settings Folders Photos • … 🜔
Best match		
View network connections Control panel		<u></u>
Settings		View network connections
View network computers and devices	>	Control parter
Firewall & network protection	>	[2] Open
VPN settings	>	
🛜 Wi-Fi settings	>	
D Proxy settings	>	
(ণৃ) Mobile hotspot	>	
Search the web		
Ø network - See more search results	>	
Apps (2)		

Fig 5.1 Open the start menu

Step 2. Right click the Ethernet. Here the example is Ethernet 3.



Fig 5.2 Connection Setting

Step 3. Change the IP Address by router and projectors.

- → ∨ ↑ 🔄 > Control Panel > Network and	Internet > Network Connections ~ C	Search Network Connections
Irganize Disable this network device Diagnose th	is connection Rename this connection View status of this connection	onnection Change settings of this connection 🗄 🔹 🔲
Bluetooth Network Connection Not connected Bluetooth Device (Personal Area	arnet 3 dentified network (R) Ethernet Connection (17) L. Ethernet A PANGP Virtual Ethernet A	Mi-Fi 2 Not connected Inte(R) Wi-Fi 6E AX211 160MHz
	Ethernet 3 Properties	×
	Networking Sharing	Internet Protocol Version 4 (TCP/IPv4) Properties
	Connect using:	
	control cong.	General
	Intel(R) Ethemet Connection (17) I219-LM	General You can get IP settings assigned automatically if your network suppr
	Intel(R) Ethemet Connection (17) I219-LM Configure This connection uses the following items: Image: Ggabit Ethemet uEye Internet Protocol Version 4 (TCP/IPv4) Memorit Human K factors M Manage Technol	General You can geb IP settings assigned automatically if your network suppo this cappability. Otherwise, you need to ask your network administrat for the appropriate IP settings. Obtain an IP address automatically O Use the following IP address:
		General You can get IP settings assigned automatically if your network support this capability. Otherwise, you need to ask your network administrat for the appropriate IP settings. Obtain an IP address automatically Ouse the following IP address: IP address: I92 . 168 . 0 . 12
		General You can get IP settings assigned automatically if your network suppr this capability. Otherwise, you need to ask your network administrat for the appropriate IP settings. Obtain an IP address automatically Use the following IP address: IP address: Subnet mask: 192 . 168 . 0 . 12
	Intel (R) Ethemet Connection (17) I219-LM Configure This connection uses the following items: Grapbit Ethemet UEye Internet Protocol Version 4 (TCP/IPV4) Microsoft Hubbyeck Adapter Multiplexor Protocol Microsoft LLDP Protocol Driver Internet Protocol Version 6 (TCP/IPV6) Interlever Topology Discovery Responder Interlever Topology Discovery Mapper I/O Driver	General You can get IP settings assigned automatically if your network support this capability. Otherwise, you need to ask your network administrat for the appropriate IP settings. Obtain an IP address automatically Obtain an IP address: IP address: IP address: IP address: Subnet mask: 255.255.255.0 Default gateway:
		General You can get IP settings assigned automatically if your network support this capability. Otherwise, your need to ask your network administrat for the appropriate IP settings. Obtain an IP address: IP address: IP address: IP address: IP address: IP address: Default gateway: Obtain DNS server address automatically Use the following DNS server addresses:
rms 1 litem selected	Intell,R) Ethemet Connection (17) [219-LM Configure This connection uses the following items:	General Vou can get IP settings assigned automatically if your network support from the appropriate IP settings. Obtain an IP address automatically Use the following IP address: IP address: IP address: IP address: Default gateway: IP address: IP efail gateway: IP address: IP efail gateway: IP address: IP efail gateway: IP address: IP eferred DNS server: IP address: IP eferred DNS server: IP address: IP efail gateway:

Fig 5.3 Set up IP of PC

Step 4. (1) The projectors should be in the same group. (2) Check the network settings, Port and Local IP Interface are correct.

	Untitled.pjc_Projector Controller Premium	- 🗆 ×					
Management Task Config View Help		Local IP Interface : 192.168.0.12 🌐 🚺 🗛					
Image: Provide state Image: Provide state Image: Provide state New Open Save Save as Monitor							
Projector List O X IP Address Name	Model Name Serial Number Status Error Light Hours 1 Ligh	t Hours 2 Filter Hours (U Power On Over Off					
 Group1 192168.0.140 M-Vision 270 192168.0.120 M-Vision 271 192168.0.120 192168.0.100 Titan 47K 192168.0.100 Titan 47K 	M-Vision 270 Model Imaging ···· 115 Titan 47000 W3032PUCY0009 Imaging ···· 284	1920 1920 Input Selection v Image Blanking On v 1920 Test Pattern Vfr v					
x ∎ ⊥ayout σ x	Local IP Interface 192.188.0.12 CCP Port 7000 UDP Port RX 30777 UDP Port TX 30778 Save & Close Cancel	S Console Ø X					
Group1 Smart Angen Astenored Angen Editor	2	<pre><<00 SERUL +</pre>					
Row:1 Column:2	ask Time Freq. / Every Start Date Content Last F	< <td><<td><<td><<td><<td><<t< td=""></t<></td></td></td></td></td>	< <td><<td><<td><<td><<t< td=""></t<></td></td></td></td>	< <td><<td><<td><<t< td=""></t<></td></td></td>	< <td><<td><<t< td=""></t<></td></td>	< <td><<t< td=""></t<></td>	< <t< td=""></t<>

Fig 5.4 Set up projectors IP and Port

Step 5. (1) Jump to help page, (2) and click the license manager

H	Or Many Hale	Untitled.pjc_P	Projector Controller Premium		×
Instruction License Contact Us	About				
Projector List O X	IP Address Name	Model Name Serial Number	Status Error	Light Hours 1 Light Hours 2 Filter Hours	
▼ Group1	192.168.0.140 M-Vision 270		Offline		Over On Over Off
192.168.0.140 M-Vision 27	192.168.0.120 M-Vision 270	M-Vision 270	Imaging	115	1920 Input Selection v
192.168.0.120 M-Vision 27	192.168.0.100 Titan 47000 .	Titan 47000 W303ZPUCY0009	Imaging	204	Image Blanking On v
Karamana A					
Groun1					<< <op serial="</td"></op>
Advanced Layout Editor	<				>op errode ? >op substant ? >op substant ? >op substant ? >op state hours ? < <tbody><<tbody>><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody><<tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody></tbody>
	Group1				+ <192.168.0.120 <<<0P ACT.SOURCE = HDMI 2
M-Vision 27000 WU 1920 x 1200 Titan 47% 1920 x 1200	Enable Scheduled	Task Time Freq. / Every	Start Date Conten	t Last Run Edit / [Del >op signal ? <<192.168.0.120 << <op signal="1920×1200@59.95Hz</td"></op>
Row:1 Column:2					>oplaser.minutes ? <<192.168.0.120 <<<0P LASER.MINUTES = 6370 >oplaser.cbc.state ? <<10P LASER.CBC.STATE = 0 <<<0P LASER.CBC.STATE = 0

Fig 5.5 Set the license

Step 6. Click projector activation

				Untitled.pjc_	Projecto	Controlle	er Premium					- 🗆 ×
▲ Management Task Conf	ig View	Help									Lo	ocal IP Interface : 192.168.0.12
Instruction License Contact Us	(i) About											
🕞 Projector List 🛛 🗙	IP Address	Name	Model Name	Serial Number	Sta	atus	Error	Light Hours	1 Light Hours 2	Filter Hours		
	192.168.0.140	M-Vision 270				Offline						O Power On Over Off
2 192.168.0.140 M-Vision 27	192.168.0.120	M-Vision 270	A-Vision 270			Imaging		115			1920	Input Selection
192.168.0.120 M-Vision 27 102.168.0.100 Titles 47K	192.168.0.100	litan 47000	litan / D Liev	aca Managar		-			~		1920	Image Blanking On *
			License	p	remium							
× → ⊞ Layout Ø X Group1						Projecto	r Activation	Close				Console Ø X
Smart Advanced Align Carton	<											- App and a set of the
Mrdision 27000 WU 1920 x 1200	Group1 Enable	Scheduled Ta	k Tim	e Freq. / Every	/ Star	t Date	Content		Last Run	Edit / De	+ 8	<192.168.0.120 << <op 2<br="" act.source="HDMI">>op signal 7 <<102.168.0.120 <<<op signal="1920+1200@59.95Hz<br">>op issex minutes ? <<<op laser.minutes="6370</td"></op></op></op>
Row:1 Column:2												<<192.168.0.120 << <op laser.cbc.state="0</td"></op>

Fig 5.6 Activate

Step 7. Click activate.

Management Task Con	fig View Help	Untitled.pjc.Projector Controller Premium	– □ × Local IP Interface : 192.168.0.12 ⊕ Ⅰ A.	
Instruction License Contact Us	() About			
Projector List O × Croup1 2 2 1922186.0.120 M-Vision 22 2 1922186.0.120 M-Vision 22 2 1922186.0.100 Titan 47K	IP Address Name 192168.0.140 M-Vision 270. 192168.0.120 M-Vision 270. 192168.0.100 Tran 47000	Model Name Serial Number Status Error Light Hours 1 Light Hours 2 Filter Hours M-Vision 270 Imaging 115 Imaging Imagin	Power On Power Off Pow	
s Layout O X Group1 Smart Advanced Layout Advanced Layout Layout		Ciose	Console O X <<<0P SEMAL =	<
Webee 2000 W BSD & 1000 Row:1 Column:2	Group1 Enable Scheduled	ask Time Freq. / Every Start Date Content Last Run Edit / Del	Control (Control (Contro) (Control (Contro) (Control (Contro) (Contro) (Contro) (Contro	



Step 8. Activate the projector

-		Untitled.pjc_Projector Controller Premium	- O X
▲ Management Task Con	fig View Help		Local IP Interface : 192.168.0.12 🌐 🔳 🗛
Instruction License Contact Us	About		
Projector List Ø X	IP Address Name	Model Name Serial Number Status Error Light Hours 1 Light Hours 2 Filter Hours	
▼ Group1	192.168.0.140 M-Vision 270	Offline	O Power On O Power Off
192.168.0.140 M-Vision 27	192.168.0.120 M-Vision 270	M-Vision 270 Imaging 115	1920 Input Selection V
2 192.168.0.120 M-Vision 27	192.168.0.100 Titan 47000	Titan	Image Blanking On v
192368.0.100 Titan 47K		Activate Cancel	
🗄 Layout 🛛 🗸			E Console O X
Group1			>>>>>>>>>>>>>>>>>>>>>>>>>>>>
M Vales 27000 WU 1920 × 1000	s Group1 Enable Scheduled	ask Time Freq. / Every Start Date Content. Last Run Edit / Del	<pre><</pre> <pre></pre>

Fig 5.8 Enter the key code and activate

Step 9. (1) Click layout editor. (2) Drag IP to box..

A Management Task Conf	Untitled pjc_Projector Controller Premium	- 🗆 X
Instruction License Contact Us	1 About	
Projector List O X Group1 Projector List O X Group1 Projector List O V Vision 27 Projector List O V Projector List O V Vision 27 Projector List O V Projector List O V Vision 27 Projector List O V	P Address Name Model Name Serial Number Status Error Light Hours 1 Light Hours 2 Filter Hours 1 192.168 Group1 192.168.0.100 M-Vision 27000 WU 192.168.0.100 Titan 47K Column 2 ‡ Prove 11 ‡ Column 2 ‡	Power On Power Off Input Selection Image Blanking Test Pattern
K Croupt Cro	It Editor Save & Close Cancel	Console O X DP_MRSNUD2L_W2032PUCY0009 X Console C
Row:1 Column:2	Group1 Enable Scheduled Task Time Freq. / Every Start Date Content Last Run Edit / Del	<pre>2 > 20 + 20 + 20 + 20 + 20 + 20 + 20 +</pre>

Fig 5.9 Set up IP Layout

Step 10. (1) Click advanced align. (2) Drag display into Layout Editor Box.(3).Run the program

Projector Controller-Untitled.pjc	: ig View He	elp								Local I	Pinterface : 192.168.0.20	- 0 ×
E D D	Save as											
🗊 Projector List 🛛 🔿 🗙	IP Address	Name N	lodel Name	Serial Number	Status	Error Light Ho	urs 1 Light Hours 2	Filter Hours		Signal	🕘 Power On	O Power Off
▼ Group1	192.168.0.140	M-Vision 27000 M-	Vision 27000							00@119.90Hz	Input Selection	IDMI-1
192.168.0.140 M-Vision 2700	192.168.0.120	M Smart Alig	n							00@119.90Hz	Image Blanking	
192.168.0.120 M-Vision 2700 Enund	192.168.0.42	E Oroun1								00@60Hz RB	Test Pattern	
192.168.0.42 E-Vision Laser		Group1										
		Display		Width Height								
		DISPLAY1	0 0	1920 1080								
		DISPLAT2 DISPLAY3	5760 0	1920 1200								
		DISPLAY4	1920 0	1920 1080								
					•							
						192.168.0.120 DISPLAY2		192.168.0.140 DISPLAY3				
K Contraction of the second se	N .						-					
🗄 Layout 🗗 🗙												
Group1												
												ax
Smart Advanced Layout							Run	Cancel				
	Crown1									-	OP MODEL = M-Vision 27	
	Fachte							l ant D		Edit (Del	OP SERIAL = OP ERRCODE = 0000	
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M-Vision 27000 WU M-Vision 27000 WU											OP MODEL = M-Vision 27	
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											OP ACT.SOURCE = HDMI	
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Part 2. Screen Alignment



Step1 – Choose Method

Step2 – Add Camera

Add Camera	×
PC IP Address 乙太網路 3=169.254.198.135	•
Mobile IP Address 169 ♦ . 254 ♦ . 198 ♦ .	21 🗘
Fast Compute 🔒 🔜	
OK Cance	



Step3 – Lens shift







Step5 – Retrieve Feature

Step6 – Filter – 2





Step7 - Finish

Part 3. Image Matching



Step1 – Choose Method

Step2 – Add Camera

Add Camera	×
PC IP Address 乙太網路 3=169.254.198.135	•
Mobile IP Address 169 ♦ . 254 ♦ . 198 ♦	21 🗘
Fast Compute 🔒 🔜	
OK Cance	



Step3 – Lens shift

Step4 – Filter





Step5 – Colour Detection

Step6 – Adjust Color



Part 4. Stacking



Step1 – Choose Method

Step2 – Add Camera

Add Camera	×
PC IP Address 乙太網路 3=169.254.198.135	•
Mobile IP Address 169 ♦ . 254 ♦ . 198 ♦ .	21 🗘
Fast Compute 🔒 🔜	
OK Cance	el



Step3 – Lens shift

Step4 – Set ROI





Step5 – Set ROI Region

Step6 – Filter -1



Step7 – Filter -2



