EZSplicer Client Software User Manual

Manual Version: V1.00

Disclaimer and Safety Warnings

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Network Security

Please take all necessary measures to enhance network security for your device.

The following are necessary measures for the network security of your device:

• Change default password and set strong password: You are strongly recommended to change the default password after your first login and set a strong password of at least nine characters including all three elements:

digits, letters and special characters.

- Keep firmware up to date: It is recommended that your device is always upgraded to the latest version for the latest functions and better security. Visit Uniview's official website or contact your local dealer for the latest firmware. The following are recommendations for enhancing network security of your device:
- Change password regularly: Change your device password on a regular basis and keep the password safe. Make sure only the authorized user can log in to the device.
- Enable HTTPS/SSL: Use SSL certificate to encrypt HTTP communications and ensure data security.
- Enable IP address filtering: Allow access only from the specified IP addresses.
- Minimum port mapping: Configure your router or firewall to open a minimum set of ports to the WAN and keep only the necessary port mappings. Never set the device as the DMZ host or configure a full cone NAT.
- Disable the automatic login and save password features: If multiple users have access to your computer, it is recommended that you disable these features to prevent unauthorized access.
- Choose username and password discretely: Avoid using the username and password of your social media, bank, email account, etc, as the username and password of your device, in case your social media, bank and email account information is leaked.
- Restrict user permissions: If more than one user needs access to your system, make sure each user is granted only the necessary permissions.
- Disable UPnP: When UPnP is enabled, the router will automatically map internal ports, and the system will automatically forward port data, which results in the risks of data leakage. Therefore, it is recommended to disable UPnP if HTTP and TCP port mapping have been enabled manually on your router.
- SNMP: Disable SNMP if you do not use it. If you do use it, then SNMPv3 is recommended.
- Multicast: Multicast is intended to transmit video to multiple devices. If you do not use this function, it is recommended you disable multicast on your network.
- Check logs: Check your device logs regularly to detect unauthorized access or abnormal operations.
- Physical protection: Keep the device in a locked room or cabinet to prevent unauthorized physical access.
- Isolate video surveillance network: Isolating your video surveillance network with other service networks helps prevent unauthorized access to devices in your security system from other service networks. Learn More

You may also obtain security information under Security Response Center at Uniview's official website.

Safety Warnings

The device must be installed, serviced and maintained by a trained professional with necessary safety knowledge and skills. Before you start using the device, please read through this guide carefully and make sure all applicable requirements are met to avoid danger and loss of property.

Storage, Transportation, and Use

- Store or use the device in a proper environment that meets environmental requirements, including and not limited to, temperature, humidity, dust, corrosive gases, electromagnetic radiation, etc.
- Make sure the device is securely installed or placed on a flat surface to prevent falling.
- Unless otherwise specified, do not stack devices.
- Ensure good ventilation in the operating environment. Do not cover the vents on the device. Allow adequate space for ventilation.
- Protect the device from liquid of any kind.
- Make sure the power supply provides a stable voltage that meets the power requirements of the device. Make sure the power supply's output power exceeds the total maximum power of all the connected devices.
- Verify that the device is properly installed before connecting it to power.
- Do not remove the seal from the device body without consulting Uniview first. Do not attempt to service the product yourself. Contact a trained professional for maintenance.
- Always disconnect the device from power before attempting to move the device.
- Take proper waterproof measures in accordance with requirements before using the device outdoors. **Power Requirements**

- Install and use the device in strict accordance with your local electrical safety regulations.
- Use a UL certified power supply that meets LPS requirements if an adapter is used.
- Use the recommended cordset (power cord) in accordance with the specified ratings.
- Only use the power adapter supplied with your device.
- Use a mains socket outlet with a protective earthing (grounding) connection.
- Ground your device properly if the device is intended to be grounded.

Contents

1 Introduction1
2 Preparation1
3 Login ·····2
4 Main Function & Sidebar
4.1 Settings ······3
4.1.1 Serial 3
4.1.2 Splice Wall5
4.1.3 Matrix5
4.1.4 User7
4.2 Screen Management and Control9
4.2.1 Signal Source Management 9
4.2.2 Matrix Switch 11
4.2.3 Scene Management ······ 11
4.2.4 Screen Control······ 13
5 Picture Settings ····· 14
6 Advanced15
6.1 Seam Compensation
6.2 Fan
6.3 High Temperature Alarm 15
6.4 Settings ······ 16
6.5 System 17
6.6 Action 18
7 Help

Introduction

EZSplicer is a self-developed client management software by Uniview, used to control and manage splicing screens through a computer. The software features powerful functions, easy control, and simple management.

This manual describes how to use the software.

> NOTE!

The user interface, functions, and operations may vary with software versions.

2 Preparation

- Make sure the firewall is off before installing the client software. Turn on the firewall after the client software is installed and starts successfully.
- Microsoft .NET Framework 4.5 shall be installed on the system to ensure normal running of the client software.
- Ensure that the signal input and output are working properly, and that the cables are properly connected.



DB9 Pin No.	DB9 Connector	RJ45 Wiring Order	RJ45 Connector	Description
2	RXD	3	RXD	Receive
3	TXD	6	TXD	Transmit
5	GND	4	GND	Ground

3 Login

1. Double-click **I** to enter the login page.

EZSplie	cer		×
Language :	English	~	
UserName:	_		
Password:	_		
	SavePassword	Login	

2. Enter the username and password (admin/admin by default), and then click Login.

NOTE!

To ensure security, please change the default password after your first login. See <u>Manage User</u> for details. If you forgot the changed password, please uninstall the client software and then reinstall it.



4 Main Function & Sidebar

4.1 Settings



4.1.1 Serial

Correlate the computer serial port with the splicing screen and matrix device it is connected to. The splicing screen is used to display images and splicing windows, while the matrix device is used to configure the signal source for the displayed image.

1. View Serial Port Info

- 1. Enter **Device Manager** on your PC's taskbar, and click **Open** to enter the **Device Manager** page.
- 2. Select a serial port on the **Ports** (**COM&LPT**) menu, and double-click the port to view the details.



2. Set Communication Port

Click to enter the **Communication Settings** page, set communication port and baud rate based on the actual serial port connection, and then select **Open** to enable the settings.

NOTE!

Each splicing screen corresponds to one matrix device, which means that one splicing screen cannot be connected to multiple matrix devices. Also, only one type of matrix can be used at a time.

• If two serial ports of the PC are connected to a splicing screen and a matrix device respectively, you need to enable the splicing screen and the corresponding type of matrix.

Communication Se	ettings				×
Splice screen	COM:	COM1 -	Baud:	9600 💌	🗹 Open
VGAII atrix	COM:	COM1	Baud:	9600 💌	🗌 Open
VIDEO Matrix	COM:	COM1 -	Baud:	9600 +	🗌 Open
DVI Matrix	COM:	COM1 -	Baud:	9600 💌	🗌 Open
HD WI W atrix	COM:	C0M2 -	Baud:	9600 💌	🗹 Open
Cascade servi	ce:	HDMI Matrix	•		🗌 open

• If a serial port of the PC is connected to a matrix device, and the matrix device is connected to a splicing screen, you need to enable the corresponding type of matrix and cascade service.

Splice screen COM: COM1 Baud: 9600 Open VGAHatrix COM: COM1 Baud: 9600 Open VIDEO Hatrix COM: COM1 Baud: 9600 Open DVI Hatrix COM: COM1 Baud: 9600 Open HOHIT Hatrix COM: COM1 Baud: 9600 Open Cascade service: HOHIT Matrix V Open	Communication S	ettings				×
WGAHatrix COM: COM1 Paud: 9600 • Open VIDEOHatrix COM: COM1 Paud: 9600 • Open DVIHatrix COM: COM1 Paud: 9600 • Open DVIHatrix COM: COM1 Paud: 9600 • Open HOHIHATRIX COM: COM1 Paud: 9600 • Open Cascade service: HOMI Matrix • • · · ·	Splice screen	сож:	COM1 -	Baud:	9600 💌	🗌 Open
VIDEO Matrix COM: COM1 • Baud: 9600 • Open DVI Matrix COM: COM1 • Baud: 9600 • Open HDMII Matrix COM: COM1 • Baud: 9600 • Open Cascade service: HDMII Matrix • Øcoo	VGAII atrix	сож:	COM1	Baud:	9600 💌	🗌 Open
DVI Matrix COM: COMI • Baud: 9600 • Open HDMI Matrix COM: COMI • Baud: 9600 • Ø Open Cascade service: HOMI Matrix • Ø open	VIDEO M atrix	com:	COM1 -	Baud:	9600 🔻	🗌 Open
HDMII Matrix COM: COMI - Band: 9600 - Open Cascade service: HOMI Matrix -	DVI Matrix	COM:	COM1 -	Baud:	9600 💌	🗌 Open
Cascade service: HDMI Matrix 🔹 🗹 open	HD WI W atrix	сож:	COM1 -	Baud:	9600 💌	🗹 Open
	Cascade servi	ice:	HDMI Matrix [•		🗹 open

4.1.2 Splice Wall

Click E to enter the **Splice Wall Settings** page, set the window arrangement style based on the actual layout of splicing screens, and then click **OK**.

Splice wall setti	ngs	×		
🗹 Main	2 tolk 2 tow			
🗌 Left	2 🚖 col K 1 🛊 row		0101	0102
🗌 Rigth	2 📥 col K 1 📥 row		0201	0202
	OK Cancel			

If there are left or right screens on the splicing screens, you can select the **Left** or **Right** check box to set the arrangement style.



4.1.3 Matrix

Set matrix parameters and protocols based on the actual connection of matrix devices.

1. Matrix Parameters Settings

Click to enter the **Matrix Settings** page, select the matrix type, set the matrix protocol type and number of input and output channels, and then click **OK** to save settings.

- Input: It is connected to the signal source device and receive the image from the source.
- Output: It is connected to the splicing screen and output the image of signal source to the screen.

Matrix setti	×
VGAT atrix settings	
Matrix protocol type 🔽 🔻	
VGA Matrix Connected	
Input: 5	
DVI Matrix settings	
Matrix protocol type	
DVI Matrix Connected	
Input: 1 🔹 Output: 1 🔹	
HDMII Matrix settings	٦
Matrix protocol type 📃 👻	
🖂 HEMMI Matrix Connected	
Input: 4 🗢 Output: 4 🚖	
Advanced OK Cancel	

2. Matrix Protocol Settings

Click **Advanced** on the **Matrix Settings** page, select a protocol and modify its parameters. You can also add a third-party protocol. Click **Confirm** to save the settings.

Advanced			×
M atrix protocol l	ist		
Add	Edit	Delete	
Protocol Info			
Protocol name:			
Command header:			
Command tail:			
Command separator:			
Command:			
To Many Command:			
To All Command:			
Protocol tyep:			-
		Confirm	

4.1.4 User

Click Sector the User Management page to add or manage users. Existing users can log in

to EZSplicer to manage and control splicing screens.

- Administrator: has all operation permissions.
- User: has only permissions to manage and control screens.

Jser management		>
Vser name	User ty	лре
admin	Adminis	trator
	Add Edit	Delete

1. Add User

Click **Add** to enter the **Add User** page, and enter the username and password. Click **OK**, and then the user is added.



NOTE!

- Up to 7 users can be added.
- If the password is not set, the user cannot log in to EZSplicer.

Add user		×
VserName *		
VserType *	Vser	
Possword		
Confirm		
	OK Cancel	

2. Manage User

Select a user you want to edit or delete, and click Edit or Delete.



NOTE!

The admin username cannot be modified. The admin user cannot be deleted.

Edit user		×
VserName *	user	
UserType *	Vser 💌	
Possword	*****	
Confirm	****	
	OK Cancel	

4.2 Screen Management and Control

4.2.1 Signal Source Management

Configure the correspondence between signal sources and windows, so videos from the signal sources will be displayed on the corresponding screens.



1. Configure Signal Source

• Configure a signal source for one window: For example, select signal source HDMI1 =, drag it to the window 0101, and then the video from HDMI1 will be displayed in window 0101.

HDMII 🔀	0102
0201	0202

Configure a same signal source for all windows: For example, select signal source HDMIB2,

click , and then the video of HDMIB2 will be displayed in all the windows.

HIMI B2	X	HDMI B2	×
HIMIB2	×	HDMIB2	×

2. Adjust Signal Source

- Drag signal source: For example, signal source HMDI1 is playing in window 0101, drag it to window 0201, and then window 0201 will play video from source HMDI1.
- Extend signal source: For example, signal source HDMI2 is playing in window 0202, extend the signal source to the window 0102, then the windows 0102 and 0202 will play video from HDMI2.

0101	HIMI2 🔀
HDMI1 🗙	

3. Switch Signal Source

- Drag to switch: For example, signal source HDMI1 is playing in window 0101, signal source VGA is playing in window 0102, drag source HDMI1 to window 0102, then the window 0102 will play video from HDMI1.
- Right-click to switch: Right-click the signal source HDMI1 in window 0101, choose Switch To from the shortcut menu, and then select HDMI2, then the window 0101 will play video from HDMI2.

HOME 1	0102	_	
0.201	Swicth To 🔸	VGA	
020	Colse	DVI	
		HDMI 🕨	HDMI1
		YPBPR	HDMI2
		USB	HDMI3
			HDMI4

4. Close Signal Source

- Close one signal source:
 - > Close directly: Click \mathbf{X} in the corresponding window.
 - Right-click to close: Right-click the signal source, and then choose Close from the shortcut menu.



Close all: Click to close all signal sources.

4.2.2 Matrix Switch

Select an input signal source from the drop-down list, select the target screen ID from the combo list, and click **Switch**. Video from the signal source will be switched and displayed in the target window.

Matrix switch		
VGA		
		~
Switch	1	*
DVI		
		*
Switch	1	* *
HIMI		
HDMII 1		-
Switch	1	▲ ▼

4.2.3 Scene Management

You can save the current display including window layout and signal source configuration, as a scene. This allows you to quickly switch to different scenes without the need for reconfiguration.

Scene management	<	<u>×</u>	
Scene			
Change	Delete	Save	Open
🔲 Scene change		S	cene

1. Save Scene

Click . A dialog box appears. Enter the scene name, and then click **OK** to save the scene.

Save scene		×
Name	scene	
	OK Cancel	

2. Open Scene

Click T beside to show the scene list. Select a scene to open it.



• Select a scene, click **Change**, and then the window will display the changed image.

Scene	
🖌 scenel	
🗌 scene2	
Change	Delete
Several shares	
🔲 Scene change	

3. Change Scene

1. Select multiple scenes and enable **Scene Change.** The scene change configuration page will appears.

Scene scene1 scene2	
Change	Delete
🗹 Scene change	
interval:	
0 🖨 min	0 🖨 sec
StartCircul	StopCircul

- 2. Set the change interval, click **Start Circulation**, and then the screen will display scene images in a sequence according to the set interval.
- 3. Click **Stop Circulation** to end the scene circulation.

4. Delete Scene

Select the scene(s) that you want to delete, and then click **Delete**.

Scene	
🖌 scenel	
🗌 scene2	
Uhange	Delete
🔲 Scene change	

4.2.4 Screen Control

Manage and control the splicing screen remotely, including turning on/off the screen and controlling the displayed image.

Screen control	1	«		
Power	Signal sour]		
Menu	Information]		
	ok 🕨]		
Static	0 Exit]		
1	2 3			All screep
4	5 6	All screen	boot	off
7	8 9]	Splice wall	

Item	Description	Item	Description
Power	Turn on/off a single screen	Signal Switch the signal source	
Menu	Display the menu bar	Information	Display the information box
Direction key	Select the direction	ОК	Confirm the selection
Static	Pause/play the image	Exit	Return to the previous page
Number key	Select the number	All screen boot/off	Turn on/off all screens

5 Picture Settings

Select a window and adjust image settings for the video displayed on the splicing screen.

Main function	Picture setting advance	Help			
Picture mode	Contrast 0 🔶 Brightness 0 💠 Sharpne Saturetion 0 🜩 Tint	Picture Soreen	Horizontal Vertical Clock Phase Position adjust	Noise Reduction	
	Picture		VGA	Noise reduction	Backlight

Item	Description
Picture mode	Set the picture displayed on the screen. The picture mode includes Standard , Soft , User and Dynamic . If the picture mode is set to User , the contrast and brightness can be customized.
VGA	 Set the picture from the VGA signal source. Horizontal +/-: Move the picture left/right. Vertical +/-: Move the picture up/down. Clock +/-: Adjust the frequency to refresh image displayed. Phase +/-: Adjust the picture phase. Position adjust: Adaptively adjust the display position of the picture.

Item	Description		
Noise reduction	Reduce the noise for a clear and smooth picture.		
Backlight	Adjust the backlight of the splicing screen to improve the picture brightness.		



6.1 Seam Compensation

Select a window and select **Seam Switch**. Set the horizontal and vertical seam values, and then the image position will be shifted to the right or downwards. This will eliminate the misalignment of the image caused by the physical gap between the splicing screens, and improve the overall splicing effect of the images.

ID 0101 -	Hor seam	0
🔲 Seam switch	Ver seam	0
	Seam	

6.2 Fan

Control the fan status to adjust the temperature of the splicing screen.

- Manual control: Click **On/Off** to turn on/off the fan.
- Auto control: Click **Auto** to turn on/off the fan automatically. The fan turns on when the screen temperature is higher than 46°C or turns off when the temperature is lower than 38°C.

NOTE!
This so

This settings is effective when the screen is equipped with a fan.

Fan	opening:	46°C	Off
	1 ' .	000	On
ľ an	closing:	38 C	Auto
	Fan	set	

6.3 High Temperature Alarm

Select a window and set the high temperature alarm for the splicing screen.

- Disable the alarm: Click **No Action** to disable the high temperature alarm.
- Enable the alarm: Click Notice or Notice Off to enable the high temperature alarm, and set the high temperature threshold (60°C to 70°C is recommended). The alarm will be triggered if the temperature of splicing screen exceeds the threshold.
 - > Notice: The screen will display a pop-up alarm window.

Notice off: The screen will display a pop-up alarm window and then turns off after 180 seconds, which can avoid the damage of splicing screen caused by long-term high temperature.

			No Action
Temp	alarm	60 🌲	Notice
			Notice off
	Hi gh	temperature	alarm

6.4 Settings



1. ID Settings

Set splicing screen IDs to correspond windows with screens.

- 1. Go to **Advanced** > **Action**, click , and then a random code will be displayed on the splicing screen.
- 2. Click Sto enter the ID Settings page, select a window, and input the random code of the corresponding screen.

ID settings	¢
0101 0102	
0201 0202	
The random code of the screen Set	

3. Click Set to complete the ID settings.

2. White Balance

Click 🔳 to enter the White Balance Settings page. Select a window and adjust gains and offsets to optimize the image.

White Balance Setting			×
	0101 ■ 0, 0	0102 0 , 0	
	■ 0, 0 ■ 0, 0	■ 0, 0 ■ 0, 0	
	0201	0202	
	■ 0, 0 ■ 0, 0	0, 0 0, 0	
R. GAIN	0 0K	R. OFFSET	ĸ
G. GAIN	0 0K	G. OFFSET	ĸ
B. GAIN	0 0K	B. OFFSET	ĸ

3. ADC Auto Adjustment

Automatically adjust the ADC value (color gain and offset) to improve the picture from the VGA signal source.

6.5 System

Set custom options for testing the image or ageing problems of the splicing screens.



- Image test: Test if there are bad spots on the splicing screens, which refers to bright or dark spots.
 - (1) Set the custom function as **Test Image**, and then press the custom button on the screen you want to test.

(2) Click on the **Action** menu to enter the **Test Picture** page. You can change the picture color displayed on the screen.

Test Pictur	e	-			×
×					
				_	

(3) Click \mathbf{X} to close the test.

- Ageing test: Test if the splicing screens have problems such as discoloration or insufficient brightness after long-term use.
 - (1) Set the custom function as **Ageing**, press the custom button on the screen you want to test, and then the image of the splicing screen turns white.
 - (2) Disconnect the power supply of the splicing screen to end the test.

6.6 Action



1. Test Picture

Select a window, and click is to enter the **Test Picture** page. You can change the color to test the picture displayed on the splice screen.

Test Picture	×

2. Info Box

Click , and then information boxes will be displayed on the splice wall, showing the device model and random code of corresponding screen.

3. Reset

Select a window, and click to restore all parameters of the corresponding splicing screen to the defaults except the ID.

4. Export Log

Click to enter the **Log Export** page. Select a path and click **Save** to export logs of the splicing screen, which is convenient for maintenance.

7 Help

View the EZSplicer's version information and user manual.

