# LCD Splicing Display Unit Quick Guide

# **1** Safety Instructions

The device must be installed, serviced and maintained by a trained professional with necessary safety knowledge and skills. Before installation, be sure to carefully read and implement the safety instructions specified in this manual.

- The power supply meets the requirements indicated on the device, and the power voltage is stable. The power supply of the splicing system (such as decoder, video wall controller, matrix, and splicing screen) must use an appropriate UPS or a voltage stabilizer whose normal power is greater than 1.5 times the power used by the splicing system. The splicing system must use a three-phase socket with a protective grounding wire.
- The splicing system shall be powered in phase with the image controller and control PC, but out of phase with high-power equipment such as high-power air conditioner.
- All the grounding devices must be securely grounded, and the grounding wire of all devices must be connected to an equipotential socket to ensure that there is no voltage difference between the devices. The grounding bus shall use multicore copper wires, and cannot be shorted or mixed with the neutral wire of the power grid.
- The operating temperature for the device is 0°C to 40°C. Operation out of this
  range may cause device failure. The operating humidity is 20%RH to 80%RH
  (noncondensing). Use a dehumidifier if necessary.
- To install the device on the ground, make sure that the ground is flat and solid
  with a strong load-bearing capacity first. The rack is generally installed on the
  cement floor. To install it on a floor, reinforce the floor first.
- Wiring troughs for strong and weak currents must be strictly separated. A short
  wiring distance is preferred. The connection of wiring troughs must be smooth
  without burrs and sharp corners. The wiring troughs must be properly grounded
  and shielded.
- Keep the maintenance channel well ventilated. Keep the device at a distance of around 3m from the air conditioning.
- Do not open the cabinet as there are high voltage components inside.
- Handle with care during transportation and installation. Do not knock, squeeze
  or carve the screen with hard objects. User shall assume total responsibility for
  damages caused by improper user operations.
- Leave at least 0.6mm space around the device for heat dissipation.
- Use the device in a clean environment. The dust concentration shall meet the
  office environment requirements.

- Do not leave the device in standby for a long time. When you do not use the device for a long time, disconnect the power.
- Do not switch on and off frequently. The interval between on and off cannot be less than 3 minutes.
- Keep liquid of any kind, sharp objects, metals from entering the vents or contacting the connectors. Otherwise, it may cause electric shock, short circuit or device failure. Keep away from children.

# 2 Packing List

Contact your local dealer if the package is damaged or incomplete. The package contents may vary with device model.

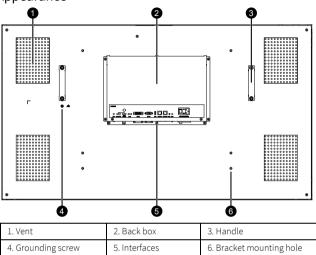
No.	Name	Qty	Unit
1	Splicing screen	1 or 2	PCS
2	RS232 cable	1 or 2	PCS
3	Grounding cable	1 or 2	PCS
4	Power cable	1 or 2	PCS
5	Remote control	1	PCS
6	Infrared receiving cable	1	PCS
7	Product documents	1	Set

**Remarks:** In a package with one splicing screen, the quantity of items 1 to 4 is 1; in a package with two splicing screens, the quantity of items 1 to 4 is 2.

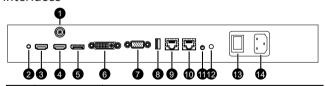
# **3** Product Overview

This guide applies to a variety of products, and the appearance may vary with device model.

# 3.1 Appearance



### 3.2 Interfaces



No.	Interface	Description
1	AVIN	AV input interface, connects the video source device to receive video signals.
2	KEY	Key button, press to start testing the image.

No.	Interface	Description	
3	HDMI LOOP	HDMI loop out interface, connects the HDMI input interface of the next splicing screen to transmit video signals.  NOTE:  Maximum number of HDMI loop connections: 9.	
4	HDMI IN	HDMI input interface  Connects the video source device to receive video signals.  Connects the HDMI loop interface of the previous splicing screen to receive video signals.	
5	DP IN	DP input interface, connects the video source device to receive video signals.	
6	DVI IN	DVI input interface, connects the video source device to receive video signals.	
7	VGA IN	VGA input interface, connects the video source device to receive video signals.	
8	USB	USB 2.0 interface, connects the USB flash driver.  Upgrades the splicing screen.  Plays image and video from the USB flash driver.	
9	RS232 IN	RS232 input interface Connects the RS232 output interface of the external device (for example, decoder) to remotely power on/off the splicing screen.  connects the RS232 output interface of the previous splicing screen to receive control signals.	
10	RS232 OUT	RS232 output interface, connects the RS232 input interface of the next splicing screen to transmit control signals.	
11	IR IN	IR receiving interface, connects the infrared receiving cable to receive control signals from the remote control.	

No.	Interface	Description	
12	RUN	Operation indicator.	
		Steady red: Standby.	
		Steady green: Startup.	
		Steady orange: Overheating.	
13	Power button	Turn on/off the splicing screen after power-on.	
14	AC IN	Power input interface. Connects to the power supply with referrence to the marked voltage range.	

# Remote Control



The buttons not shown in the table below are reserved functions and are currently unavailable.

Button	Description	Diagram
	Turn on/off the device.	
	CAUTION:	
(1)	After you turn off the device using the	
	remote control, the device remains	
	powered on. Please be aware of fire and	
	electric hazards.	
<b>→</b>	Switch signal sources.	
	Play/pause video from the USB flash	
▶/	driver.	
	Set the splicing screen ID.	
	Stop playing video from the USB flash driver and exit the screen.	
СТ	Switch the color temperature of the screen.	

Button	Description	Diagram
~~<>	<ul><li>Choose up/down/left/right.</li><li>Change values.</li></ul>	
ENTER	Confirm the selection.	
MENU	Open the menu screen.      Return to the previous screen.	© 98T
ESC	Exit the menu.	
FRZ	Pause/resume video on the screen  NOTE:  When you pause video on the screen, the video source still plays the video; when you resume video, the screen shows the current video of the video source.	(ENTER) NO
INFO	Show the current video source information.	
0~9	Select the number.	
SEL	Select the splicing screen you want to control.	

# **Cable Connection**



The RS232 interface is an RJ45 connector. It must be connected with a straightthrough network cable instead of a crossover network cable.

If the signal transmission distance exceeds 5m, you need to use high-quality HDMI, DP, etc. cables to ensure the image quality. Poor quality cables may cause image noises or unstable images.

# Troubleshooting

Problem	Solution
Boot failure (power indicator is off)	<ul> <li>Check if the power cord is damaged.</li> <li>Check if the device is connected to the mains.</li> <li>Check if the device is powered on.</li> <li>Check if the power switch is damaged.</li> <li>Check if the fuse is blown.</li> </ul>
No signal displayed	<ul> <li>Check if you have selected the correct signal source.</li> <li>Check if the signal cable is connected correctly.</li> </ul>
Abnormal images	Check if the image resolution is supported by the device.
Abnormal RS232 control	<ul> <li>Check if the RS232 cables are connected correctly.</li> <li>Check if RS232 control is normal on the neighboring splicing screens.</li> </ul>
Blurry images	<ul> <li>Check for loose cables and damaged connector pins.</li> <li>Check the quality of cables.</li> <li>Check if the screen parameters are set correctly.</li> </ul>
Shaky/unstable images	<ul><li>Replug the signal cable.</li><li>Replace the signal cable.</li></ul>
No loop signal	<ul> <li>Check if the signal type is correct.</li> <li>Check if the cables are connected correctly.</li> <li>Check if the interface of the HDMI board is damaged.</li> </ul>

Problem	Solution	
	Check if the signal source and the screen are in a power circuit.	
	Check if the water ripples come from the signal	
	source.	
Water ripples/noises	• Check if the output interface is connected properly.	
	Check if the signal input cable is too long.	
	Check if the input signal cable connector is loose or the gold plating is peeling.	

# 7 Maintenance

In daily use, please perform maintenance operations as follows.

#### 1 Do not open the cabinet yourself

Do not open the cabinet yourself. The high voltage inside will endanger your personal safety.

#### 2 Keep away from fire and water

Do not place the device near candles, water, etc., otherwise the device may be damaged. Such damage is not covered by the warranty.

#### 3 Do not touch the screen

Do not touch the screen, such as poking or pressing the screen with your fingers or sharp objects (e.g., pen tip, tiny hard particles on the cleaning cloth), it may result in a broken screen, liquid crystal leakage, etc. Such damage is not covered by the warranty.

#### 4 Do not assemble the device yourself

Do not service the device yourself in the event of a device failure. Please seek help from the authorized personnel in time, and conduct troubleshooting under their guidance.

Do not hang other LED displays around the device by yourself. Otherwise, we are not responsible for any damage to the device caused by this.

#### 5 Do not insert any object into the vents or ports

Do not insert metallic and sharp objects into the vents or ports, it may cause short circuit, device failure, and electric shock. Be especially careful when children are present.

#### 6 Avoid long-term operation at full capacity

Do not use the device continuously for more than 20 hours. Long time display of a stationary image will cause polarization of the liquid crystal molecules at certain pixels. If continuous operation is required, turn off the device for a ten-minute break every 20 hours, or change the display at different intervals.

#### 7 Do not leave the device in standby for a long time

When you do not use the device for a long time, disconnect the power. Do not switch on and off frequently. The interval between on and off cannot be less than 3 minutes.

#### 8 Precautions on cleaning the device

Be sure to use a soft and non-fiber cloth such as a dust-free cloth or a soft silk cloth. Do not use rough fibrous cloths such as linens and toilet paper, it may leave scratches on the screen.

Be sure to use anhydrous alcohol or special cleaners (please purchase under the guidance of our technical support). Do not spray aqueous solutions and corrosive chemical liquids such as acetone, toluene, chloromethane, disinfectant, sulfuric acid and aqueous alcohol on the screen, it may cause dust accumulation and screen corrosion.

Be sure to clean the screen from the four sides to the center to prevent dirt, dust, and other contaminants from entering the frame.

#### 9 Installation environment requirements

Do not use or store the device in a damp environment for a long time, otherwise the circuit board may be oxidized and corroded, resulting in device failure.

The operating temperature for the device is 0°C to 40°C. Operation out of this range may cause device failure. The operating humidity is 20%RH to 80%RH (noncondensing). Use a dehumidifier if necessary.

The device and the video output devices connected to it must be co-grounded, otherwise static electricity will occur and interfere with the video signal, or even static surges may occur and damage the interfaces. Such damage is not covered by the warranty.

#### 10 Dust regularly

To ensure the device performance, please dust the device regularly and keep the maintenance channel clean. Dust accumulation will cause abnormalities such as unclear images and black screen on the edges. And users shall clean the device regularly to avoid such abnormalities. Such damage is not covered by the warranty.

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- This manual is intended for multiple software versions, and the illustrations and descriptions
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  applicable law in cases involving personal injury) exceed the amount of money that you have
  paid for the product.

#### 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.
- $\bullet\,\,$  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.

#### **Battery Use Caution**

- When battery is used, avoid:
  - > Extremely high or low temperature and air pressure during use, storage and transportation.
  - Battery replacement.
- Use the battery properly. Improper use of the battery such as the following may cause risks of fire, explosion or leakage of flammable liquid or gas.
  - > Replace battery with an incorrect type.
  - $\blacktriangleright \quad \text{Dispose of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery}.$
- Dispose of the used battery according to your local regulations or the battery manufacturer's instructions.

#### Avertissement de l'utilisation de la batterie

- Lorsque utiliser la batterie, évitez:
  - Température et pression d'air extrêmement élevées ou basses pendant l'utilisation, le stockage et le transport.

- Remplacement de la batterie.
- Utilisez la batterie correctement. Mauvaise utilisation de la batterie comme celles mentionnées ici, peut entraîner des risques d'incendie, d'explosion ou de fuite liquide de gaz inflammables.
  - > Remplacer la batterie par un type incorrect.
  - Disposer d'une batterie dans le feu ou un four chaud, écraser mécaniquement ou couper la batterie.
- Disposer la batterie utilisée conformément à vos règlements locaux ou aux instructions du fabricant de la batterie.

#### Regulatory Compliance

#### FCC Statements

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

 $\label{thm:comsum} Visit $$ $http://en.uniview.com/Support/Download\_Center/Product\_Installation/Declaration/ for SDoC. $$$ 

**Caution:** The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### LVD/EMC Directive



This product complies with the European Low Voltage Directive 2014/35/EU and EMC Directive 2014/30/EU.

#### WEEE Directive-2012/19/EU



The product this manual refers to is covered by the Waste Electrical \& Electronic Equipment (WEEE) Directive and must be disposed of in a responsible manner.

#### Battery Regulation- (EU) 2023/1542



Battery in the product complies with the European Battery Regulation (EU) 2023/1542. For proper recycling, return the battery to your supplier or to a designated collection point.