备注

H23094（ORE01）说明书：0106020147653

材质：100克书纸
尺寸：111x146mm
装订方式：骑马钉

OREI®

4K@60Hz HDMI 3X3 Video Wall Controller

HD-22VW

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OREI®

4K@60Hz HDMI 3X3 Video Wall Controller

USER MANUAL

UHD-19VW

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Table of Contents

Thank you for purchasing this product

For optimum performance and safety, please read these instructions care-fully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Registration page

Introduction

Please Activate your warranty by registering your product through the link below - **www.orei.com/register**

Technical Support
Need Help?
Our experienced Technical Support Team is here for you to answer your questions, give technical advice or help troubleshoot your project to get you installed on time and on budget. Call, email or chat with us now.

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Support Email - info@orei.com |**Support Number** - 877-290-5530

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Send us an instant message now. Our Technical Support Team will respond momentarily. Available during live support hours.

This UHD-19VW is a 1-in-9-out video wall controller, supports one HDMI source input and nine HDMI outputs. Supports 1x2/1x3/1x4/2x2/2x3/3x2/2x4/4x2/3x3 splicing modes, which can be set by RS-232 or dip switch. Equipped with 3.5mm audio output,S/PDIF audio output,180-degree rotation of display image.The product can flexibly adapt to different installation requirements which can be widely used in security monitoring, rail transit, broadcasting. smart cities, home theatre, training and other fields.

Features & Package Contents

1. Supports one 4096x2160@60Hz resolution HDMI signal input and nine 1080P resolution HDMI signal output.
2. Support a variety of splicing modes, such as 1x2/1x3/1x4/2x2/2x3/3x2/2x4/ 4x2/3x3, etc.
3. Support dip switch switching splicing mode.
4. Support RS-232 control instruction to set splicing mode.
5. Support 3.5mm left/right channel audio output.
6. Support S/PDIF audio output.
7. Supports 180-degree rotation of HDMI display image in 2x2/2X3/2X4 mode (when the upper displays installed upside down).
8. Firmware upgrading via micro USB port.
9. Lightning protection, surge protection, ESD protection.
10. Plug and play, no need to install drivers.

Package Contents

1.	UHD-19VW	1 pcs
2.	Mounting Ear	2 pcs
3.	Screw	6 pcs
4.	Grounding Screw	1 pcs
5	RS-232 Terminal Block	1 pcs
6.	Power Adapter 12V/2A	1 pcs
7.	User Manual	1 pcs

Function setting

RS-232 control

Insert the terminal into the controller and connect it to external equipment. The three pins are GND/RXD/TXD, and the splicing mode can be set by RS-232 instruction. The default is as follows:

Baud rate: 9600

Date bits: 8

Stop bits: 1

Parity: None

Control command	Functional description
ES XX On\n ES XX Off\n	'XX' indicates the corresponding HDMI port, which can be turned on or off. From right to left, the HDMI ports are: HDMI: 01, 02, 03, 04, 05, 06, 07, 08, 09 ALL refers to all HDMI ports, OFF indicates turned off, and ON means truned on.
ES XXXX\n	'XXX' means splicing mode 0000——1x2；0001——1X3；0010——1x4；0011——2x2 0100——2x3；0101——3x2；0110——2x4；0111——4x2 1000——3x3
Reset\n	Reset, device restart
Recover\n	Restore the factory setting, when the dialing code is "1111", it will be restored to the dialing code "0000" mode, the default mode of "1001, 1010, 1011, 1100, 1101, 1110" is "0000", and the other dialing code will be read from the current dialing code mode.

Status\n	Status information printing Status: Baud 9600 ES 01 OK ES 02 OK ES 03 FAIL ES 04 FAIL ES 05 OK ES 06 OK ES 07 FAIL ES 08 FAIL ES 09 FAIL ES 0010 OK	
Baud XX\n	'XX' represents the baud rate value 9600(default), 19200, 38400, 57600, 115200	
Example		
Control command 1	**ES 04 On\n**	
Functional details	Open the '04'HDMI port	
Return value	Received successfully	ES 04 On OK
	Received unsuccessful	ES 04 On FAIL
Control command 2	**ES All Off\n**	
Functional details	Close all HDMI ports	
Return value	Received successfully	ES All Off OK
	Received unsuccessful	ES All Off FAIL

Control command 3	**ES 0011\n**	
Functional details	Select 2 x 2 splicing mode	
Return value	Received successfully	ES 0011 OK
	Received unsuccessful	ES 0011 FAIL
Control command 4	**Reset\n**	
Functional details	Reset, device restart	
Return value	Received successfully	Reset OK
	Received unsuccessful	Reset FAIL
Control command 5	**Baud 19200\n**	
Functional details	Baud 19200 OK	
Return value	Received successfully	Baud 19200 OK
	Received unsuccessful	Baud 19200 FAIL

Notes :

1) "\n" means line break.

2) Splice mode can be switched by "RS-232" or "DIP switch". Only when the dip switch is set to "1111", the splice mode can be switched by RS-232 command.

3) 2x2 mode:

①"0011" code mode: input the control command ES 201\n to flip the image by 180˚, and input the control command ES 200\n to restore;

②"1111" code mode: input the control command ES 0011\n, switch to 2x2 mode, then input the control command ES 201\n to realize 180 ˚image rotation, input the control command ES 200\n to restore;

4) 2X3 mode:

①"0100" code mode: input the control command ES 201\n to realize 180˚ image rotation, and input the control command ES 200\n to restore;

②"1111" code mode: input the control command ES 0100\n, switch to 2x3 mode, then input the control command ES 201\n to realize 180 ˚image rotation, input the control command ES 200\n to restore;

5) 2X4 mode:

①"0110" code mode: input control command ES 201\n to realize 180 ˚ image rotation, input control command ES 200\n to restore;

②"1111" code mode: input the control command ES 0110\n, switch to 2x4 mode, then input the control command ES 201\n to realize 180 ˚ image rotation, input the control command ES 200\n to restore;

6) When the dip switch is in mode "1111", the RS-232 mode is prioritized; otherwise, the dip switch is supported. The default mode for the unused mode is "0000", and when the dips witch is "1111", the memory function will display the last set serial command mode.
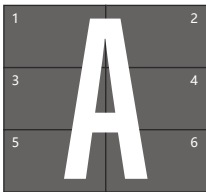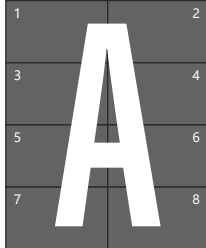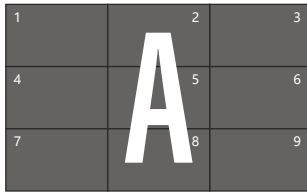
DIP Switch

Built-in 9 splicing mode can be switched by dip switch. dip switch means '1' up, dip switch means '0'down, and the default is '1000'.

Dip switch state				Splicing mode	
1	2	3	4		
0	0	0	0	1x2 horizontally	
0	0	0	1	1x3 horizontally	
0	0	1	0	1x4 horizontally	

0	0	1	1	2x2 horizontally	
0	1	0	0	2x3 horizontally	
0	1	0	1	3x2 vertically	
0	1	1	0	2x4 horizontally	

0	1	1	1	4x2 vertically	
1	0	0	0	3x3 horizontally	
1	**1**	**1**	**1**	**Switch RS-232 splicing mode**	

Specifications

Items		Description
Video signal	HDMI Input	1x HDMI
	HDMI Output	9x HDMI
	Compatibility	HDMI 2.0
		HDCP 1.4 / HDCP 2.2
	Resolutions	**Input**： 4096x2160@24/25/30/50/60Hz， 3840x2160@24/25/30/50/60Hz， 3440x1440@60Hz，2560x1600@60Hz， 2560x1440@60Hz，2560x1080@60Hz， 1920x1200@60Hz **Output**： When the mode is 0000/0001/0010, the maximum output is 1080P@30Hz; other modes have a maximum output of 1080P@60Hz.
		Input： 1080P@24/25/30/50/60Hz Output： 1080P@24/25/30/50/60Hz
Video signal	3.5mm Output	PCM
	S/PDIF Output	PCM
	HDMI Output	PCM
Splice Settings	Mode	1x2/1x3/1x4/2x2/2x3/3x2/2x4/4x2/3x3
	DIP Switch	
	RS-232 (GND/RxD/TxD)	Default baud rate: 9600 Only when the dip switch is set to '1111' can the splicing mode be switched by RS-232 instruction

Power	Power Supply	DC12V/2A
	Power Consumption	＜17W
Operating Environment	Working temperature	-20℃~60℃
	Storage temperature	-30℃~70℃
	Humidity	0~90%RH（No condensation）
Physical Properties	Housing	Iron
	Weight	844g
Physical Properties	Color	Black
	Dimensions	265(L)*105(W)*25(H)mm
Protection	ESD protection 1a Contact discharge level 2 (±4KV) 1b Air discharge level 3 (±8KV) Implementation of the standard: IEC61000-4-2	
	Lightning protection, Surge protection	
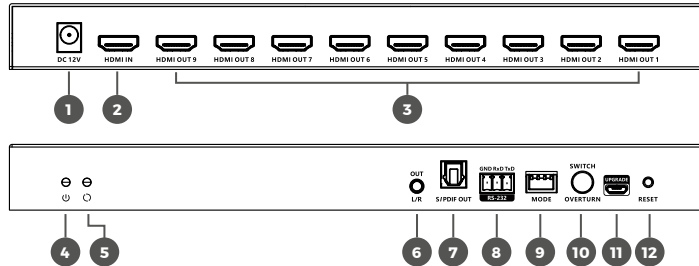
No.	Name	Function
1.	DC12V Power input	Connect with DC 12V/2A power adapter
2.	HDMI signal input	Connect HDMI signal source
3.	HDMI signal output x9	Connect with HDMI splicing display devices
4.	Power indicator	The indicator will turn on when the power is on
5.	Status indicator	1) **Steady on**: The power is on, and stable signal input 2) **Slow flash**: No HDMI signal transmission 3) **Quick flash**: The factory settings have been restored
6.	L/R audio output	Separate output of HDMI signal source audio
7.	S/PDIF audio output	Separate output of HDMI signal source audio
8.	RS-232 port	Connect the computer for command control Baud rate: 9600, Only when the dip switch is set to '1111', the mode can be switched through RS-232. The default mode of "1001, 1010, 1011, 1100, 1101, 1110" is "0000".

No.	Name	Function
9.	Mode switch	Switch splicing mode
10.	Switch/Rotation	Image rotation in 2x2/2x3/2x4 mode. Controlled by a button; press once to flip, then again to restore, control cycling with memory function.
11.	Micro-USB port	Used for device firmware upgrading
12.	Reset	1) Press to restart the video wall controller; 2) Press and hold for 5 seconds to restore factory settings (wait until the status indicator is flashing fast to let go).

Description

Connection Diagrams

- PC
- HDMI Input
- Video wall controller
- Audio output

HDMI output 1
HDMI output 2
HDMI output 3
HDMI output 4
HDMI output 5
HDMI output 6
HDMI output 7
HDMI output 8
HDMI output 9

1	2	3
4	5	6
7	8	9

4K@60Hz HDMI 3X3 Video Wall Controller
UHD-19VW

- RESET
- RS232
- UPGRADE
- SWITCH
- MODE SWITCH
- 3.5mm L/R
- SOURCE

- DC 5V
- HDMI IN
- HDMI OUT