

4K60 4x2 Multiviewer Seamless UHD Video Matrix Switcher



User Manual

VER 1.0

Thank you for purchasing this product

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

Surge protection device recommended

This product contains sensitive electrical 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.

Table of Contents

1. Introduction.....	1
2. Features.....	1
3. Package Contents.....	2
4. Specifications.....	2
5. Operation Controls and Functions.....	3
5.1 Front Panel.....	3
5.2 Rear Panel.....	5
6. IR Remote.....	6
7. EDID Settings.....	7
8. Video & Audio.....	8
9. Multiview.....	8
10. OSD Menu Navigation.....	9
11. RS-232 Command.....	11
12. Application Example.....	18

1. Introduction

This 4x2 Multiviewer Seamless UHD Video Matrix Switcher was developed for the purpose of supporting higher output resolution (4K@60) for multiple sources on two screens. It can accept 4 HDMI input digital sources and combine four video signals onto two HDMI UHD or HD monitors independently. The user can manage each input, and create combinations of the four inputs on two displays, as well as adjust the position of any input.

This product supports 8 display modes, within the mode range, users can freely switch 4-channel HD input signals. It can realize single screen display and multiview display on a single screen.

This product supports full range of input video resolutions up to 4K@60 (RB) and audio RCA /Optical de-embedding supported for external audio distribution systems.

This Matrix Switcher can be controlled via front panel buttons, IR remote, RS-232 commands.

2. Features

- ☆ HDMI 2.0b, HDCP 2.2 and HDCP 1.x compliant
- ☆ 18Gbps uncompressed Bandwidth, input and output resolution up to 4K2K@60 4:4:4
- ☆ HDMI audio formats support LPCM, DD+, DTS, Dolby TrueHD, DTS HD-master pass-through
- ☆ Seamless switching between input channels
- ☆ Combined multiple images independent layouts to display on two UHD TVs
- ☆ Up to 8 display modes: Single, PIP, PBP(1), PBP(2), Triple(1), Triple(2), Quad(1), Quad(2)
- ☆ Audio de-embedding via analog and optical fiber audio ports
- ☆ Control via front panel buttons, IR remote, RS-232 commands
- ☆ Each output port supports Scaler function
- ☆ Support independent audio selection
- ☆ Advanced EDID management
- ☆ Compact design for easy and flexible installation

3. Package Contents

- ① 1 x 4K60 4x2 Multiviewer Seamless UHD Video Matrix Switcher
- ② 1 x IR Remote
- ③ 1 x 3pin-3.81mm Phoenix Connector (male)
- ④ 1 x 38KHz IR Wideband Receiver Cable (1.5 meters)
- ⑤ 2 x Mounting Ears
- ⑥ 4 x Machine Screws (KM3*4)
- ⑦ 1 x 12V/2.5A Locking Power Adapter
- ⑧ 1 x User Manual

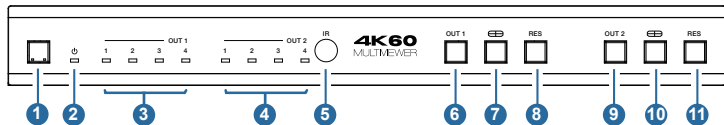
4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2 / 1.x
Video Bandwidth	18Gbps
Video Resolution	Up to 4K2K@60 4:4:4
IR Level	5Vp-p
IR Frequency	38KHz
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8/10/12-bit
Audio Formats	HDMI audio: PCM2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio Analog audio [3.5mm L/R]: PCM2.0 Optical fiber audio: PCM2.0/5.1/7.1CH, Dolby Digital/plus, DTS 5.1
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

Connection	
Input ports	4 x HDMI IN [Type A, 19-pin female]
Output ports	2 x HDMI OUT [Type A, 19-pin female] 2 x L/R OUTPUT [RCA] 2 x OPTICAL OUTPUT [S/PDIF]
Control ports	1 x RS-232 [3pin-3.81mm phoenix connector] 1 x IR EXT [3.5mm Stereo Mini-jack]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	270mm [W] x 130mm [D] x 30mm [H]
Weight	906g
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 12V/2.5A (US/EU standard, CE/FCC/UL certified)
Power Consumption	15.72W (Max)
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no-condensing)

5. Operation Controls and Functions

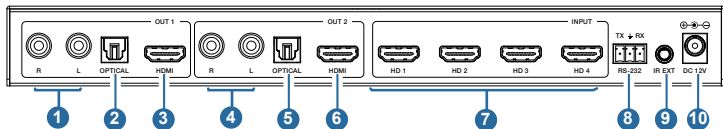
5.1 Front Panel



No.	Name	Function Description
1	Power button	<ul style="list-style-type: none"> Short press this button to power on the device. Long press this button for 1 seconds to enter the standby mode.
2	Power LED	The Power LED will light in green when the product is powered on, and red when the product is on standby.

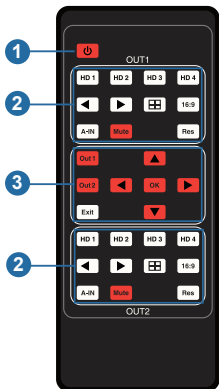
No.	Name	Function Description
3	OUT 1 LEDs	Signal source indicator for the HDMI OUT 1 port. On single screen display mode, when the HDMI OUT 1 port outputs the signal from the HD 1/2/3/4 port, the corresponding green LED will be on. On multiview mode, all OUT 1 LEDs will light in green.
4	OUT 2 LEDs	Signal source indicator for the HDMI OUT 2 port. On single screen display mode, when the HDMI OUT 2 port outputs the signal from the HD 1/2/3/4 port, the corresponding green LED will be on. On multiview mode, all OUT 2 LEDs will light in green.
5	IR Window	IR signal receiving window.
6	OUT 1 button	Input source switching button for the HDMI OUT 1 port , only available on single screen display mode.
7	OUT 1 Multiview button	Multiview display mode switching button for the HDMI OUT 1 port. ▪ Short press this button to circularly select: Single-PIP-PBP(1)-PBP(2)-Triple(1)-Triple(2)-Quad(1)-Quad(2)-single. ▪ Long press this button for 3 seconds to switch the aspect ratio (16:9/Full) for PBP (1) / PBP (2) / Triple (1) / Triple (2) / Quad (1) / Quad (2).
8	OUT 1 RES button	Output resolution switching button for the HDMI OUT 1 port. ▪ Short press the RES button to circularly switch the output resolution of the HDMI OUT 1 port (Please refer to the output resolution list of "8. Video & Audio"). ▪ Long press the RES button for 3 seconds to switch the output resolution to 720P60.
9	OUT 2 button	Input source switching button for the HDMI OUT 2 port, only available on single screen display mode.
10	OUT 2 Multiview button	Multiview display mode switching button for the HDMI OUT 2 port. ▪ Short press this button to circularly select: Single-PIP-PBP(1)-PBP(2)-Triple(1)-Triple(2)-Quad(1)-Quad(2)-single. ▪ Long press this button for 3 seconds to switch the aspect ratio (16:9/Full) for PBP (1) / PBP (2) / Triple (1) / Triple (2) / Quad (1) / Quad (2).
11	OUT 2 RES button	Output resolution switching button for the HDMI OUT 2 port. ▪ Short press the RES button to circularly switch the output resolution of the HDMI OUT 2 port (Please refer to the output resolution list of "8. Video & Audio"). ▪ Long press the RES button for 3 seconds to switch the output resolution to 720P60.

5.2 Rear Panel



No.	Name	Function Description
1	L/R OUT 1	PCM2.0 Analog audio output port.
2	OPTICAL OUT 1	Optical fiber digital audio output port.
3	HDMI OUT 1	HDMI signal output port, connected to HDMI display device such as TV or Monitor with HDMI cable.
4	L/R OUT 2	PCM2.0 Analog audio output port.
5	OPTICAL OUT 2	Optical fiber digital audio output port.
6	HDMI OUT 2	HDMI signal output port, connected to HDMI display device such as TV or Monitor with HDMI cable.
7	HD 1-4 INPUT ports	HDMI signal input ports, connected to HDMI source device such as DVD or Set-top box with HDMI cable.
8	RS-232 port	3-pin phoenix connector, connected to a PC or control system for serial port upgrade or RS-232 command control.
9	IR EXT port	IR signal receiving port, connected with 38KHz IR Receiver cable. If the IR signal receiving window of the unit is blocked or the unit is installed in a closed area out of infrared line of sight, the IR receiver cable can be inserted to the "IR EXT" port to receive the IR remote signal.
10	DC 12V	DC 12V/2.5A power input port.

6. IR Remote



- ① **Power button:** Press this button to power on the switcher or set it to standby mode.
- ② **OUT 1/OUT 2 buttons:**
- HD 1/2/3/4:** Press these buttons to select input source on single screen display mode, and the corresponding input LED on the front panel will light in green.
- ◀ ▶: Press these buttons to circularly select the last or next input source on single screen display mode.
- ⊞: Multiview display mode switching button.
Short press this button to circularly select: SINGLE - PIP - PBP (1) - PBP (2) - Triple (1) - Triple (2) - Quad (1) - Quad (2).
- 16:9:** Press this button to switch the aspect ratio (16:9/Full) for PBP (1) / PBP (2) / Triple (1) / Triple (2) / Quad (1) / Quad (2) display mode.
- A-IN:** Press this button to pop up the audio channel selection OSD, then press the ▲ / ▼ button to select the audio output channel. (The output audio follows the video source by default.)

Mute: Press this button to mute / unmute the audio.

RES: Output resolution switching button.

- Short press the RES button to circularly switch the output resolution of the HDMI OUT 1/2 port (Please refer to the output resolution list of “8. Video & Audio”).
- Long press the RES button for 3 seconds to switch the output resolution to 720P60.

③ **Out 1:** Press this button to enter the OSD menu of the HDMI OUT 1 port, and set the corresponding function by pressing ▲/▼/◀/▶/ **OK** button.

Out 2: Press this button to enter the OSD menu of the HDMI OUT 2 port, and set the corresponding function by pressing ▲/▼/◀/▶/ **OK** button.

Exit: Press this button to exit the OSD settings layer by layer.

7. EDID Settings

User can select following EDID modes via RS-232 command or OSD menu navigation.

No.	EDID Mode	No.	EDID Mode
1	4K2K60_444, Stereo Audio 2.0	11	1680x1050, Stereo Audio 2.0
2	4K2K60_444, Dolby/DTS 5.1	12	1600x1200, Stereo Audio 2.0
3	4K2K60_444, HD Audio 7.1	13	1440x900, Stereo Audio 2.0
4	4K2K30_444, Stereo Audio 2.0	14	1360x768, Stereo Audio 2.0
5	4K2K30_444, Dolby/DTS 5.1	15	1280x1024, Stereo Audio 2.0
6	4K2K30_444, HD Audio 7.1	16	1024x768, Stereo Audio 2.0
7	1080P, Stereo Audio 2.0	17	720p, Stereo Audio 2.0
8	1080P, Dolby/DTS 5.1	18	AUTO
9	1080P, HD Audio 7.1	19	USER1
10	1920x1200, Stereo Audio 2.0		

8. Video & Audio

The switcher supports multiple resolution video input up to 3840x2160@60, and supports multiple audio formats (PCM2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio) pass-through function via HDMI cable.

The switcher supports following video output resolutions via a powerful scaling engine.

No.	Output Resolution	No.	Output Resolution
1	4096x2160p 60Hz	8	1920x1080p 60Hz
2	4096x2160p 50Hz	9	1920x1080p 50Hz
3	3840x2160p 60Hz	10	1360x768p 60Hz
4	3840x2160p 50Hz	11	1280x800p 60Hz
5	3840x2160p 30Hz	12	1280x720p 60Hz
6	3840x2160p 25Hz	13	1280x720p 50Hz
7	1920x1200p 60Hz RB	14	1024x768 60Hz

9. Multiview

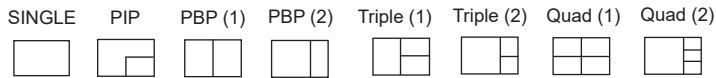
The switcher supports 8 categories of multiview display modes: SINGLE, PIP, PBP (1), PBP (2), Triple (1), Triple (2), Quad (1), Quad (2). Users can select different operations for different Multiview modes as following:

SINGLE: Inputs selection

PIP: Inputs selection, Sub window size and position selection

PBP (1), PBP (2), Triple (1), Triple (2), Quad (1), Quad (2): Inputs selection, Display mode selection, Display aspect selection

Multiview window distributions are as following:



User can select Multiview modes via RS-232 commands or OSD menu navigation.

10. OSD Menu Navigation

(1) A total of eight buttons on the IR Remote are used for OSD menu navigation, including OUT 1, OUT 2, Exit, ▲, ▼, ◀, ▶, OK.

Menu contents are as follows:

Output	Resolution	3840x2160p60	4096x2160p 60Hz/ 4096x2160p 50Hz/ 3840x2160p 60Hz/ 3840x2160p 50Hz/ 3840x2160p 30Hz/ 3840x2160p 25Hz/ 1920x1200p60Hz RB/ 1920x1080p 60Hz/ 1920x1080p 50Hz/ 1360x768p 60Hz/ 1280x800p 60Hz/ 1280x720p 60Hz/ 1280x720p 50Hz/ 1024x768 60Hz
	VKA	BLACKSCREEN	BLACKSCREEN, BLUESCREEN
	ITC	OFF	ON, OFF
Multiview	Single	Input select	HDMI1,HDMI2,HDMI3,HDMI4
	PIP	Win1 Select	HDMI1,HDMI2,HDMI3,HDMI4
		Win2 Select	HDMI1,HDMI2,HDMI3,HDMI4
		PIP Position	RightBottom,Right Top, Left Bottom,Left Top
		PIP Size	Small,Middle,Large
	PBP	Win1 Select	HDMI1,HDMI2,HDMI3,HDMI4
		Win2 Select	HDMI1,HDMI2,HDMI3,HDMI4
		MODE	1, 2
		Aspect	Full, 16:9
	3 x WIN	Win1 Select	HDMI1,HDMI2,HDMI3,HDMI4
		Win2 Select	HDMI1,HDMI2,HDMI3,HDMI4
		Win3 Select	HDMI1,HDMI2,HDMI3,HDMI4
		MODE	1, 2
Aspect		Full, 16:9	

	4 x WIN	Win1 Select	HDMI1,HDMI2,HDMI3,HDMI4
		Win2 Select	HDMI1,HDMI2,HDMI3,HDMI4
		Win3 Select	HDMI1,HDMI2,HDMI3,HDMI4
		Win4 Select	HDMI1,HDMI2,HDMI3,HDMI4
		MODE	1, 2
		Aspect	Full, 16:9
AUDIO	Audio Select	WIN1	WIN1,HDMI1,HDMI2,HDMI3,HDMI4
	AUDIO-MUTE	OFF	ON, OFF
System	Language/语言	English	English, 中文
	EDID	4K60-2.0	4K60-2.0,4K60-5.1CH, 4K60-7.1CH,4K30-2.0CH, 4K30-5.1CH,4K30-7.1CH, 1080P-2.0CH,1080P-5.1CH, 1080P-7.1CH,1920x1200-2.0CH,1680x1050-2.0CH, 1600x1200-2.0CH,1440x900-2.0CH, 1360x768-2.0CH, 1280x1024-2.0CH, 1024x768-2.0CH,720P-2.0CH, AUTO, USER1
	Baud rate	115200	115200,57600,38400, 19200,9600
	Reset	Reset	Reset
	FW Version		Read only

(2) A total of two buttons on the IR Remote are used for audio setting on OSD menu navigation, including A-IN, Mute.

Menu contents are as follows:

A-IN	Audio Input	WIN1	WIN1,HDMI1,HDMI2,HDMI3,HDMI4
Mute	Audio Mute	OFF	ON, OFF

11. RS-232 Command

The product also supports RS-232 command control. Connect the RS-232 port of the product to a PC with a 3-pin phoenix connector cable. Then open a Serial Command tool on PC to send ASCII commands to control the product. The ASCII command list about the product is shown as below.

ASCII Commands			
Serial port protocol: baud rate: 115200(default) Data bits: 8 Stop bits: 1 Check bit: 0			
x - Parameter 1; y - Parameter 2; ! - Delimiter			
Command Code	Function Description	Example	Feedback
System Setting			
help!	List all commands	help!	
r type!	Get device model	r type!	4x2 HDMI Multiviewer
r fw version!	Get Firmware version	r fw version!	MCU FW version x.xx.xx SCALER FW version x.xx.xx
power z!	Power on/off the device,z=0~1 (z=0 power off, z=1 power on)	power 1!	power on System Initializing... Initialization Finished! MCU FW version x.xx.xx SCALER FW version x.xx.xx
r power!	Get current power state	r power!	power on/power off
reboot!	Reboot the device	reboot!	Reboot... System Initializing... Initialization Finished! MCU FW version x.xx.xx SCALER FW version x.xx.xx
reset!	Reset to factory defaults	reset!	Reset to factory defaults System Initializing... Initialization Finished! MCU FW version x.xx.xx SCALER FW version x.xx.xx

Command Code	Function Description	Example	Feedback
Output Setting			
s output y res x!	Set Output y Resolution (y=1~2, x=1~14) y=1. output 1 y=2. output 2 1. 4096x2160p60, 2. 4096x2160p50, 3. 3840x2160p60, 4. 3840x2160p50, 5. 3840x2160p30, 6. 3840x2160p25, 7. 1920x1200p60RB, 8. 1920x1080p60, 9. 1920x1080p50, 10. 1360x768p60, 11. 1280x800p60, 12. 1280x720p60, 13. 1280x720p50, 14. 1024x768p60,	s output 1 res 3!	output 1 resolution: 3840x2160p60
r output y res!	Get output y resolution(y=1~2) 1. output 1 2. output 2	r output res!	output 1 resolution: 3840x2160p60
s output hdcp x!	set output hdcp(y=1~2, x=1~3) y=1. output 1 y=2. output 2 x=1. HDCP 1.4 x=2. HDCP 2.2 x=3. HDCP OFF	s output 1 hdcp 2!	output 1 HDCP: HDCP 1.4
r output y hdcp!	Get output y hdcp status.(y=1~2) 1. output 1 2. output 2	r output 1 hdcp!	output 1 HDCP: HDCP 1.4
s output y vka x!	Set output video keep active pattern.(y=1~2, x=1~2) y=1. output 1 y=2. output 2 x=1. black screen x=2. blue screen	s output 1 vka 1!	output 1 VKA pattern: black screen
r output y vka!	Get output y video keep active pattern.(y=1~2) 1. output 1 2. output 2	r output 1 vka!	output 1 VKA pattern: black screen
s output y itc x!	Set output video mode (y=1~2, x=1~2) y=1. output 1 y=2. output 2 x=1: video mode x=2: pc mode	s output 1 itc 1!	output 1 ITC: video mode
r output y itc!	Get output video mode(y=1~2) 1. output 1 2. output 2	r output 1 itc!	output 1 ITC: video mode

Command Code	Function Description	Example	Feedback
EDID Setting			
s input EDID x!	Set HDMI input EDID mode (x=1~19) 1. 4K2K60_444, Stereo Audio 2.0 2. 4K2K60_444, Dolby/DTS 5.1 3. 4K2K60_444, HD Audio 7.1 4. 4K2K30_444, Stereo Audio 2.0 5. 4K2K30_444, Dolby/DTS 5.1 6. 4K2K30_444, HD Audio 7.1 7. 1080P, Stereo Audio 2.0 8. 1080P, Dolby/DTS 5.1 9. 1080P, HD Audio 7.1 10. 1920x1200, Stereo Audio 2.0 11. 1680x1050, Stereo Audio 2.0 12. 1600x1200, Stereo Audio 2.0 13. 1440x900, Stereo Audio 2.0 14. 1360x768, Stereo Audio 2.0 15. 1280x1024, Stereo Audio 2.0 16. 1024x768, Stereo Audio 2.0 17. 720p, Stereo Audio 2.0 18. AUTO 19. USER1	s input EDID 1!	input EDID:4K2K60_444, Stereo Audio 2.0
r input EDID!	Get input EDID mode	r input EDID!	input EDID:4K2K60_444, Stereo Audio 2.0
s edid user1 00 FF FF ...!	Set user1 EDID data	s edid user1 00 FF FF FF FF ...!	user1 EDID data: 00 FF FF
r edid user1!	Get user1 EDID data	r edid user1!	user1 EDID data: 00 FF FF FF FF FF FF 00
Audio Setting			
s output y audio x!	Set output y audio source (y=1~2, x=0~4) y=1. output 1 y=2. output 2 x=0. follow window 1 selected source x=1. HDMI 1 input audio x=2. HDMI 2 input audio x=3. HDMI 3 input audio x=4. HDMI 4 input audio	s output 1 audio 0!	output 1 audio follow window 1 video source
r output y audio!	Get output y audio source(y=1~2) 1. output 1 2. output 2	r output 1 audio!	output 1 audio follow window 1 video source
s output y audio mute x!	Set output audio mute on/off (x=0~1, y=1~2) y=1. output 1 y=2. output 2 x=0. mute off x=1. mute on	s output 1 audio mute 0!	output 1 audio mute off

Command Code	Function Description	Example	Feedback
r output y audio mute!	Get output y audio mute on/off (y=1~2) 1. output 1 2. output 2	r output 1 audio mute!	output 1 audio mute off
Single Screen Mode Setting			
s output y auto switch x!	Enable/disable auto switch feature(y=1~2,x=0~1) y=1. output 1 y=2. output 2 0. Disable auto switch 1. Enable auto switch	s auto switch 0!	auto switch off
r output y auto switch!	Get output y auto switch feature (y=1~2) 1. output 1 2. output 2	r auto switch!	auto switch off
s output y in source x!	Route input source to output y (y=1~2, x=1~4) y=1. output 1 y=2. output 2 x=1. HDMI 1 x=2. HDMI 2 x=3. HDMI 3 x=4. HDMI 4	s in source 1!	HDMI 1
r output y in source!	Get output y selected input source(y=1~2) 1. output 1 2. output 2	r in source!	HDMI 1
Multi-viewer Mode Setting			
s output y multiview x!	Set output y multi-viewer display mode(y=1~2, x=1~5) y=1. output 1 y=2. output 2 x=1. single screen x=2. PIP x=3. PBP x=4. triple screen x=5. quad screen	s output 1 multiview 1!	output 1 multiview: single screen
r output y multiview!	Get output y multi-viewer display mode(y=1~2) 1. output 1 2. output 2	r output 1 multiview!	output 1 multiview: single screen

Command Code	Function Description	Example	Feedback
s output z window x in y!	Select output z one input for one display window for the current Multiview mode. (z=1~2) 1. output 1 2. output 2 (x=1~4) 1. window 1 2. window 2 3. window 3 4. window 4 (y=1~4) 1. HDMI 1 2. HDMI 2 3. HDMI 3 4. HDMI 4	s output 1 window 1 in 1!	output 1: window 1 select HDMI 1
r output y window x in!	Get output y windows selected input source (y=1~2) 1. output 1 2. output 2 (x=0~4) 0. ALL 1. window 1 2. window 2 3. window 3 4. window 4	r output 1 window 1 in!	oupput 1 window 1 select HDMI 1
s output y PIP position x!	Set output y PIP window position (y=1~2) 1. output 1 2. output 2 (x=1~4) 1. Left Top 2. Left Bottom 3. Right Top 4. Right Bottom	s output 1 PIP position 3!	output 1 PIP on right top
r output y PIP position!	Get ouput y PIP window positon (y=1~2) 1. output 1 2. output 2	r output 1 PIP position!	output 1 PIP on right top
s output y PIP size x!	Get output y PIP window size (y=1~2) 1. output 1 2. output 2 (x=1~3) 1. small 2. middle 3. large	s output 1 PIP size 3!	output 1 PIP size large

Command Code	Function Description	Example	Feedback
r output y PIP size!	Get output y PIP window size (y=1~2) 1. output 1 2. output 2	r output 1 PIP size!	output 1 PIP size large
s output y PBP mode x!	Set output y PBP windows display mode (y=1~2) 1. output 1 2. output 2 (x=1~2) 1. PBP mode 1 2. PBP mode 2	s output 1 PBP mode 1!	output 1 PBP mode 1
r output y PBP mode!	Get output y PBP windows display mode (y=1~2) 1. output 1 2. output 2	r output 1 PBP mode!	output 1 PBP mode 1
s output y PBP aspect x!	Set output y PBP windows display aspect ratio (y=1~2) 1. output 1 2. output 2 (x=1~2) 1. Full screen 2. 16:9	s output 1 PBP aspect 1!	output 1 PBP aspect full screen
r output y PBP aspect!	Get output y PBP windows display aspect ratio (y=1~2) 1. output 1 2. output 2	r output 1 PBP aspect!	output 1 PBP aspect full screen
s output y triple mode x!	Set output y triple windows display mode (y=1~2) 1. output 1 2. output 2 (x=1~2) 1. triple mode 1 2. triple mode 2	s output 1 triple mode 1!	output 1 triple mode 1

Command Code	Function Description	Example	Feedback
r output y triple mode!	Get output y triple windows display mode (y=1~2) 1. output 1 2. output 2	r ouput 1 triple mode!	output 1 triple mode 1
s output y triple aspect x!	Set output y triple windows display aspect ratio (y=1~2) 1. output 1 2. output 2 (x=1~2) 1. Full screen 2. 16:9	s output 1 triple aspect 1!	output 1 triple aspect full screen
r output y triple aspect!	Get output y triple windows display aspect ratio (y=1~2) 1. output 1 2. output 2	r output 1 riple aspect!	output 1 triple aspect full screen
s output y quad mode x!	Set output y quad windows display mode (y=1~2) 1. output 1 2. output 2 (x=1~2) 1. quad mode 1 2. quad mode 2	s output 1 quad mode 1!	output1 quad mode 1
r output y quad mode!	Get output y quad windows display mode (y=1~2) 1. output 1 2. output 2	r output 1 quad mode!	output1 quad mode 1
s output y quad aspect x!	Set output y quad windows display aspect ratio (y=1~2) 1. output 1 2. output 2 (x=1~2) 1. Full screen 2. 16:9	s output 1 quad aspect 1!	output 1 quad aspect full screen
r output y quad aspect!	Get output y quad windows display aspect ratio (y=1~2) 1. output 1 2. output 2	r output 1 quad aspect!	output 1 quad aspect full screen

12. Application Example

