NEXIS

18Gbps 1x4 Video Wall Controller

HW24C



1. Introduction

The 18Gbps 1x4 Video Wall Controller is designed to realize truely capturing, AD converting, routing, and distributing all-format signal to the video wall (LCD displays), while maintaining a true digital signal transmission. It features HDMI and USB-C input with resolution up to 4K@60 4:4:4, and 4 HDMI outputs. It supports multiple video wall modes to be set for video output. Furthermore, optical audio and L/R analog audio de-embedding output are also supported.

It can be controlled via front panel buttons, IR remote and RS-232 commands.

2. Features

- ☆ HDCP 2.2 and DP 1.2a compliant
- ☆ Support video bandwidth up to 18Gbps, as specified in HDMI 2.0
- ☆ Support HDMI input and USB-C input, and the resolution is up to 4K@60Hz 4:4:4
- ☆ Support optical audio and L/R analog audio de-embedding output
- ☆ Support 8 video wall splicing modes: 1x1, 2x1, 3x1, 4x1, 1x2, 1x3, 1x4, 2x2
- ☆ Support image 180° rotation, convenient for ceiling installation
- ☆ Support bezel adjustment for the splicing edge
- ☆ Advanced EDID management
- ☆ Control via front panel buttons, IR remote and RS-232 commands
- ☆ Simple plug and play, no drive and installation setting are required

3. Package Contents

① 1 × 18Gbps 1x4 Video Wall Controller
② 1 × 12V/1A Locking Power Supply
③ 1 × Power Adapter
④ 1 × IR Remote
⑤ 1 × 5V IR Receiver Cable (1.5m)
⑥ 1 × 3pin-3.81mm Phoenix Connector (male)
⑦ 4 × Machine Screw (KM3*4)
⑧ 2 × Mounting Ear
⑨ 1 × User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	Input: up to 4K@60Hz 4:4:4 Output: 720P60Hz, 1080P60Hz, 4K30Hz, 1024x768P60Hz
Color Space	RGB, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0
Color Depth	8/10/12 bit
IR Level	5Vp-p
IR Frequency	38KHz
Audio Formats	**HDMI IN/OUT:** LPCM 2.0/5.1, Dolby Digital/Plus/EX, DTS, DTS-EX, DTS-96/24 **L/R OUT:** PCM 2.0 **SPDIF(OPTICAL):** Dolby Digital/plus, DTS 5.1, PCM 2.0
Audio Latency	No Latency
Video Latency	No Latency

ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)		
Connection			
Input ports	1 × HDMI INPUT [Type A, 19-pin female] 1 × USB-C INPUT [Type C, 24-pin female]		
Output ports	4 × HDMI OUTPUT [Type A, 19-pin female] 1 × OPTICAL AUDIO OUT [S/PDIF] 1 × L/R AUDIO OUT [RCA]		
Control ports	1 × RS-232 [3pin-3.81mm phoenix connector] 1 × IR EXT [3.5mm, Stereo Mini-jack]		
Mechanical			
Housing	Metal Enclosure		
Color	Black		
Dimensions	220mm [W] × 100mm [D] × 30mm [H]		
Weight	590g		
Power Supply	Input: AC 100-240V 50/60Hz, Output: DC 12V/1A (US/EU standard, CE/FCC/UL certified)		
Power Consumption	5.5W (Max)		
Operating Temperature	32 - 104°F / 0 - 40°C		
Storage Temperature	-4 - 140°F / -20 - 60°C		
Relative Humidity	20 - 90% RH (no-condensing)		
Video Resolution	**4K60**	**4K24**	**1080P60**
HDMI Cable Length (HDMI IN / OUT)	8m/26ft	10m/32ft	15m/49ft
The use of “Premium High Speed HDMI” cable is highly recommended.			

5. Application Example

