NEXIS

Model : HWM0404B

18Gbps 4x4 Seamless Matrix



1. Introduction

The 18Gbps 4x4 Seamless Matrix is a perfect solution for video transmission from 4 HDMI sources to 4 HDTV displays. It has video wall and multi-viewer functions with multiple display modes. 4x4 IR matrix, audio embedded and de-embedded are also supported. Video resolution is up to 4K@60Hz 4:4:4. Each of the sources can be individually scaled. And seamless switching ensures a smooth picture transition without frame loss.

This matrix can be controlled via front panel buttons, IR remote, RS-232 and Web GUI.

2. Features

- ☆ HDCP 2.2 compliant
- ☆ Support video resolution up to 4K@60Hz 4:4:4and 18Gbps video bandwidth, as specified in HDMI 2.0
- ☆ Support 12 display categories in multi-viewer mode, and 9 splicing modes in video wall mode
- ☆ HDMI audio format: LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio
- ☆ Support CEC control, and multiple video resolution output
- ☆ Advanced EDID management
- ☆ Control via front panel buttons, IR remote, RS-232, and Web GUI

3. Package Contents

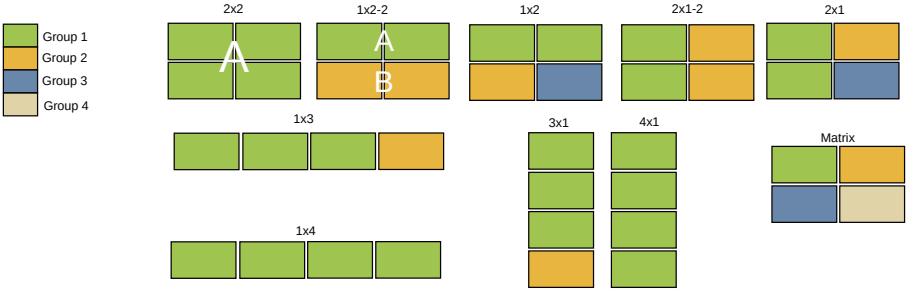
① 1 × 18Gbps 4x4 Seamless Matrix
② 1 × 12V/2.5A Locking Power Adapter
③ 5 × 12V IR Wideband Receiver Cable (1.5m)
④ 4 × IR Blaster Cable (1.5m)
⑤ 1 × RS-232 Serial Cable (1.5m, male to female head)
⑥ 4 × 5pin-3.81mm Phoenix Connector
⑦ 4 × 3pin-3.81mm Phoenix Connector
⑧ 8 × Machine Screw
⑨ 2 × Mounting Ear
⑩ 1 × User Manual

4. Specifications

Technical			
HDMI Compliance	HDMI 2.0		
HDCP Compliance	HDCP 2.2		
Video Bandwidth	594MHz/18Gbps		
Video Resolution	480i ~1080P@50/60Hz, 4K2K@24/30Hz, 4K2K@60Hz		
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0		
Color Depth	8/10/12-bit		
Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio		
IR Level	12Vp-p		
IR Frequency	Wideband 20K-60KHz		
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)		
Connection			
Input ports	4 × HDMI INPUT [Type A, 19-pin female] 4 × L/R AUDIO INPUT [3.81mm, 3pin Phoenix Connector]		
Output ports	4 × HDMI OUTPUT [Type A, 19-pin female] 4 × OPTICAL AUDIO OUT [S/PDIF] 4 × L/R AUDIO OUT [3.81mm, 5pin Phoenix Connector]		
Control ports	1 × TCP/IP [RJ45] 1 × RS-232 [D-Sub 9] 1 × IR EXT [3.5mm, Stereo Mini-jack] 4 × IR INPUT [3.5mm, Stereo Mini-jack] 4 × IR OUTPUT [3.5mm, Stereo Mini-jack]		
Mechanical			
Housing	Metal Enclosure		
Color	Black		
Dimensions	440mm [W] × 203mm [D] × 44.5mm [H]		
Weight	2.55kg		
Power Supply	Input: AC 100-240V 50/60Hz, Output: DC 12V/2.5A (US/EU standard, CE/FCC/UL certified)		
Power Consumption	25W (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**	**4K30**	**1080P60**
HDMI Cable Length (HDMI IN / OUT)	5m/16ft	10m/32ft	15m/50ft
The use of “Premium High Speed HDMI” cable is highly recommended.			

5. Video Wall

The matrix supports 10 categories of display modes as below:



User can select display modes via front panel buttons, Web GUI, and RS-232 commands.

6. Multi-Viewer

The matrix supports multiple display modes:

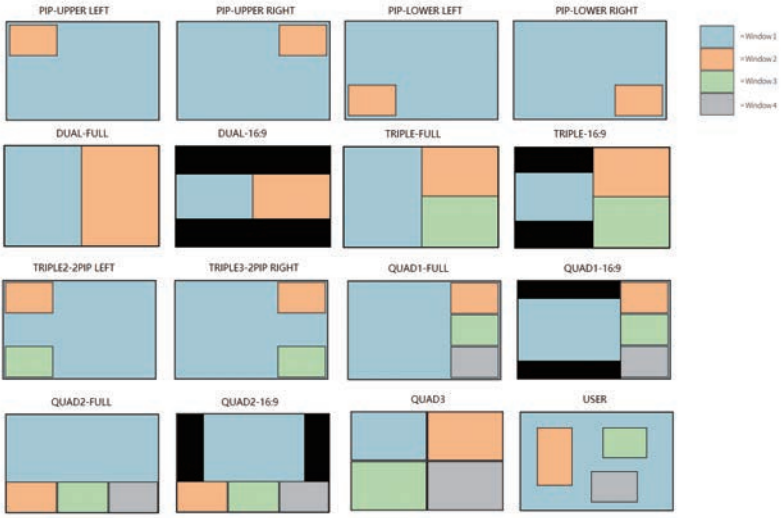
SINGLE, PIP, Dual, Triple 1, Triple 2, Triple 3, Quad 1, Quad 2, Quad 3, User 1, User 2, User 3.

Users can select different operations for different multiview modes as following:

SINGLE: Inputs selection

PIP: Inputs selection, Sub window size and position selection

Dual, Triple 1, Triple 2, Triple 3, Quad 1, Quad 2, Quad 3: Inputs selection, Display mode selection, Display aspect selection



7. Application Example

