DIGITUS®

4K HDMI® Matrix Switch, 4x4, 19"

User Manual
DS-43308

Dear Customer

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

Contents

Important safety notice

Please read below safety instructions carefully before installation and operation:

- Please pay attention to all the warnings and hints on this device.
- Do not expose this unit to rain, moisture and liquid.
- Do not put any stuff into the device.
- Do not repair the device or open the enclosure without professional person guidance to avoid electronic shock.
- Make sure good ventilation openings to avoid product overheating damage.
- Turn off power and make sure environment is safe before installation.
- Do not plug-in/out the connection cables when it is in using to avoid cables damage.
- Use DC12V/2A power adapter only. Make sure the specification matched if using 3rd party DC adapters

Package contents

- 1x Matrix Switch unit
- 1x DC12V2A power adapter
- 1x Remote Controller
- 2x Wall-mount kit
- 1x User manual

Introduction

This product is a 4×4 HDMI2.0 HD Matrix Switch, with 4 HDMI inputs and 4 HDMI outputs. 4 HDMI inputs accommodate the simultaneous connection up to 4 high definition video sources, such as satellite systems and Blu-ray players. 4 HDMI outputs send the high definition audio/video signals to 4 HDTV displays. This Matrix Switch supports IR remote control and button control for switching inputs and outputs. This product is perfect for security system, digital monitoring system, school education system, exhibition center, multimedia conference, command system etc.

Features

1. Support 4 HDMI signal input and 4 HDMI signal output.
2. Support up to ultra HD resolution 4Kx2K@60Hz.
3. Transmission data rate up to 18Gbps.
4. Support IR remote control.
5. Support RS232 control.
6. Support button control for switching inputs/outputs.
7. Pure hardware design, plug and play.
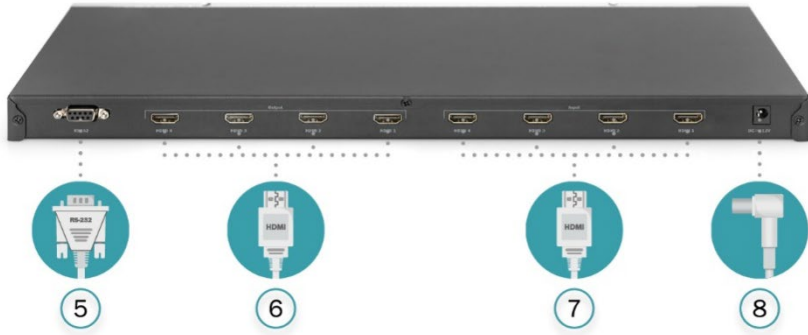8. Support 3D, CEC.
9. Support YUV4:4:4.

Panel Description

Front Panel

1	IR receiver window	Receive IR signal
2	Power indicator	LED indicator turn on when power on
3	Output select indicator	Display corresponding input channel
4	Output button	To choose input channel

Back Panel

5	RS232	RS232 control
6	HDMI output	Connect with HDMI display device
7	HDMI input	Connect with HDMI source device
8	Power input	Connect with DC12V/2A power adapter

Remote Controller

This remote controller is just used for inputs or outputs switched/selected.

RS232 Serial command

For correct communication, set the RS232 parameters to the following setting:
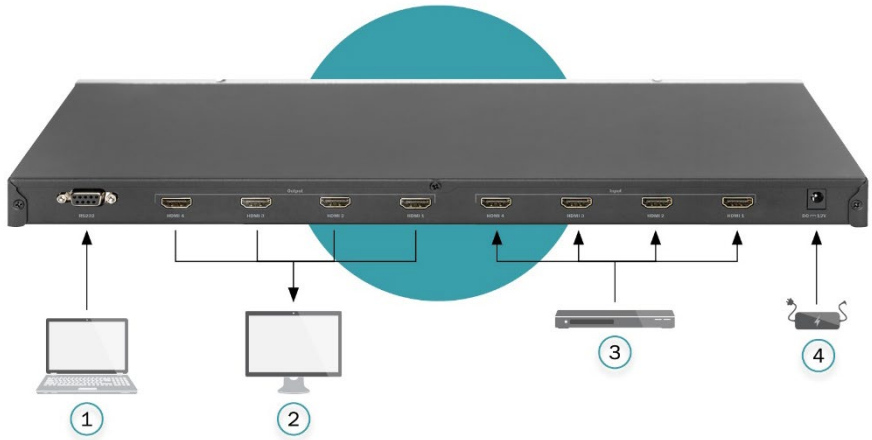
Baudrate: 9600   Parity: None
Data Bits: 8   Stop Bits: 1

RS232 control

1) It supports RS232 control to select the input and output channel, the baud rate is 9600, and the connector is a 9-pin port.
2) Use the serial port software, please set COM firstly, and then correspond to the following figure in the various channel commands.

Instruction list			
HDMI output	HDMI input 1	HDMI input 2	HDMI input 3	HDMI input 4
HDMI output1	PS11R	PS12R	PS13R	PS14R
HDMI output2	PS21R	PS22R	PS23R	PS24R
HDMI output3	PS31R	PS32R	PS33R	PS34R
HDMI output4	PS41R	PS42R	PS43R	PS44R
HDMI output1 HDMI output2 HDMI output3 HDMI output4	PA1R	PA2R	PA3R	PA4R
Change all output/input states	PAP1P2P3P4R, Output 1 selects signal source P1 Output 2 selects signal source P2 Output 3 selects signal source P3 Output 4 selects signal source P4			
Gets the current output / input state	PA?R			
Command return	All of the above commands, if they were sent successfully, the output status will be returned accordingly For example, send command "PA? R" Return OK+ 　1　　2　　2　　4 　　　　　　　　　　　output 4 selects input 4 　　　　　　　　　　　output 3 selects input 2 　　　　　　　　　　　output 2 selects input 2 　　　　　　　　　　　output 1 selects input 1 If the command is wrong, return "err"			

Connection Diagram

1	RS-232 Control Signals
2	4x HDMI Display (Output)
3	4x HDMI Source (Input)
4	Power Adapter

1. Connect all your HDMI source devices to this product's inputs via HDMI cables.
2. Connect up to the HD display devices on the HDMI outputs via HDMI cables.
3. Power on all source device, this Matrix Switch and display device, then it works.
4. Select/switch inputs and outputs via IR remote, buttons or RS232 command.

FAQ

Q: No video/audio signal output on the displays?

A: 1) Please check and make sure the Matrix Switch is connected well and powered.

2) Please check and make sure all HDMI cables are connected well

3) Please check and make sure the input channel of displays are correct.

Q: Picture quality is not fluent and stable?

A: 1) Please check and make sure all HDMI cables are connected well.

2) Try to connect the source device to display device directly, or change to another source device for a try to see the picture quality.

3) Please use high quality HDMI 2.0 standard cable when HDMI 4Kx2K signal input.

Specification

Items	Specification
HDMI Signal	HDMI 2.0, Full compatible with HDCP 2.2
Inputs	4 HDMI
Outputs	4 HDMI
Transmission rate	18Gbps
Support resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz; 1080p@50/60Hz, 3840x2160@25/30/60Hz
Support audio format	DTS-HD/Dolby-true HD/LPCM7.1/DTS/Dolby-AC3/DSD
YUV	4:4:4
Video signal	0.5~1.5Vp-p(TM DS)
DDC signal	5Vp-p(TTL)
Video bandwidth	600MHz
HDMI port	Type A 19 pin, female
RS232	9 Pin serial port seat
Working temperature	0° ~ 60°C
Power supply	DC12V/2A
Power consumption	20W (Max)
Product dimension	429.8 (L) x 170.7 (W) x28 (H) mm
Weight	1.65 Kg
Color	Black

Power Adapter information

Information published	Value and precision	Unit
Manufacturer's name or trade mark, commercial registration number and address	Mass Power Electronic Ltd No.365, South Dongkeng Road, Dongkeng Town, Dongguan City, 523443, P. R. China	-
Model identifier	NBS24J120200HE	-
Input voltage	12	V
Input AC frequency	100-240Vac/ 50/60	Hz
Output voltage	12V	V
Output current	2A	A
Output power	24W	W
Average active efficiency	86.2	%
Efficiency at low load (10 %)	76.8	%
No-load power consumption	0.1	W

Disclaimer

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