

# 8x8 HDMI 2.0 18G Matrix Switch

English

User Manual



No. 38160

# lindy.com

Fight Tested to Comply with FCC Standards For Home and Office Use!

#### Introduction

Thank you for purchasing the LINDY 8x8 HDMI 2.0 18G Matrix Switch. This product has been designed to provide trouble free, reliable operation. It benefits from both a LINDY 2 year warranty and free lifetime technical support. To ensure correct use, please read this manual carefully and retain it for future reference.

#### Package Contents

- 8x8 HDMI 2.0 18G Matrix Switch
- 12V DC PSU
- IEC mains cable
- IR Extension cable
- Rack mounting brackets
- IR Remote control including CR2025 3V battery
- Quick Install Guide

#### Features

- HDMI 2.0, HDCP 2.2, DVI 1.0 complaint
- Resolutions up to 4096x2160@60Hz 4:4:4 8bit
- Full 18G bandwidth
- Supports 7.1 channel of LPCM, Dolby TrueHD and DTS-HD Master Audio digital audio signals
- RS232, IR remote control & IP control for switching
- Support for switching via cloud app

#### Specification

- Input Ports: 8 x HDMI (Female), RJ45 (Female), RS232 (Female), 3.5mm IR (Female), USB Type A (Female)
- Output Ports: 8 x HDMI (Female)
- Power Supply: DC 12V
- Dimensions: 440x220x44mm (17.32x0.87x1.73in)
- Operating Temperature: 0°C 40°C (32°F 104°F)
- Storage Temperature: -20°C 60°C (-4°F 140°F)
- Relative Humidity: 20 ~ 90% RH (Non-condensing)
- Power Consumption: 60W max

#### Installation

Make sure all devices are switched off before making any connections!

Connect the source devices such as a PC, Blu-ray player or games console to the HDMI matrix input ports. Then connect the high definition displays to the HDMI matrix output ports. When all the connections are made, connect the power supply and switch on.

Once all the connections have been made, switch on the devices in this order: displays, HDMI Matrix, source devices. Please allow a few minutes for the devices to handshake and for the signals to appear.

#### Operation

### **Front Panel**



- 1. Input status LED's
- 2. Output status LED's
- 3. Output push buttons & 7 segment display
- 4. IR sensor port
- 5. Input push buttons and 7 segment display

### **Rear Panel**



- 6. HDMI input ports 1-8
- 7. HDMI output ports 1-8
- 8. USB port (for firmware update only)
- 9. RJ45 port
- 10. IR extension port
- 11. DC power port
- 12. RS232 port
- 13. Power switch

# **Connection Diagram**



# **Front Button Switching**



Use the output + or - to select the desired display

Use the input + or - to select the desired input source

Once the desired ports are selected the display will blink twice to confirm the setting

# **Remote Control Switching**



Operation	Procedure	7-Segment LED
IN/OUT Switch	Output Number (1~8) + Input Number (1~8)	
Example: Input 2	1. Press output number "3" to select Output 3	3 -
To Output 3	2. Press input number "2" to select Input 2	3 2
Button	Function	
OFF	Standby mode	
ON	Power on the matrix switch	
MUTE	Turn off output's video and audio	
STATUS	Preset output status	
SAVE	Save current mapping mode	
PRESET	Preset mapping mode	

English

DEFAULT EDID	Begin default EDID selection		
LEARN EDID	Begin EDID learning from one output		
CLEAR	Clear the previous IR operation procedure		
ТАКЕ	Trigger the previous setting		
F1	Reserved		
F2	Reserved		
Operation	Procedure	7-Segment LED	
Output Status	Status + Output Number (1~8) + Take		
	1.Press "STATUS" button	-	
Example: Output 4 (Input 2)	2.Press output number key "4" to select Output 4	4-	
	3.Press "TAKE" button	4 2	
Save Current Mapping	Save + Output Number (1-8 storage site) + Take		
	1.Press "SAVE" button	d -	
Example: Save current mapping to 5	2.Press output number key "5" to select the storage site 5	d 5	
	3.Press "TAKE" button		
Preset Mapping	Preset + Output Number (1-8 storage site) + Take		
	1.Press "PRESET" button	P -	
Example: Preset saved mapping from 5	2.Press output number key "5" to select the storage site 5	P 5	
	3.Press "TAKE" button		
Learn default EDID	Default EDID + Output Number (1-8 default EDID) + Input Number (input 1~8) + Take *The resolution for 1~8 default EDID (1080P) is same as the software.		
	1.Press "DEFAULT EDID" button	E d	
Example: Default EDID 2	2.Press output number key "2" to select default EDID 2	2 d	
input 5	3.Press input number key "3" to select Input 3	2 3	
	4.Press "TAKE" button	0 (success) F (fail)	
Learn Output EDID	Learn + Output Number (Output 1~8) +Input Number (input 1~8) + Take		
	1.Press "LEARN" button	E L	
Example: Learn Output 4 Input 3	2.Press output number key "4" to select Output 4	4 L	
	3. Press input number key "3" to select Input 3	4	

# English

		3
	4.Press "TAKE" button	0 (success) F(fail)
Mute Output	Mute + Output Number (1~8) + Take	
Example: Mute Output 3	1. Press "MUTE" button	- 0
	2. Press output number key "3" to select Output 3	3 0
	3.Press "TAKE" button	3 0

# **RS-232 Software Switching**

System Requirements:

- MS WinXP/7 OS
- Supported Baud Rate: 9600
- Supported Software Size: 1MB
- Minimum RAM: 256MB



1	Power ON/ Standby mode
2	Control SW via RS-232
3	COM Port Selection
4	I/O Routing Button
5	EDID Button
6	Rename I/O Button
7	Network Setting & Default Reset Button
8	Firmware Update Button

# Using the I/O Routing Button: Mapping

I/O Mapping			Recall Mapping
Output 1	Input2	-	
Output 2	Input3	•	From
Output 3	Input2	•	Recall
Output 4	Input2	-	
Output 5	Input2	-	
Output 6	Input2	-	Save Mapping
Output 7	Input2	•	- []
Output 8	Input2	•	To Mapping 1
All Outputs	None	•	Save

### I/O Mapping

• Change the input for each of the listed outputs

#### **Recall Mapping**

 In the drop down box, select the stored Mapping from 1-16. To recall previously saved Mapping, click the 'Recall' button

#### **Save Mapping**

 In the drop down box, select the Mapping from 1-16. To save the current mapping, click the 'Save' button

## EDID

ATRIX 4K2K	ĸ
COM3 -	
Mapping EDID Rename System Firmware	
Learn EDID	
From Default	
·	
From Display	
To Input1 •	
File Name:	
toad file Apply	
Auto EDID: On Read Off Appy	
View EDID	
Input1 • View	

#### Learn EDID from Default to Input

• In the 'From Default' drop down box, select the Default EDID from 1-17 EDID

- In the 'Input' drop down box, select the desired Input
- To learn from the default EDID, click the 'Apply' button

# Learn EDID from Display to Input

- In the 'From Display' drop down box, select the desired output
- In the 'Input' drop down box, select the desired input
- To learn from the display EDID, click the 'Apply' button

# Loading the EDID File to Input

- To select the EDID file, click the 'Load File' button
- In the 'Input' drop down box, select the desired input
- To load the EDID file, click the 'Apply' button

### Auto EDID

• The best EDID from the connected outputs is generated by Automatic EDID learning from the matrix

# **Read Button**

• Read the auto EDID status from the device

# View EDID

- In the drop down box, select the Input or HDMI Output
- To read and analyse the EDID, click the 'View' button

### Rename

MATRIX 4K2K		and the second se		
0	COM3	•		
Mapping EDID Renam	<sup>ie</sup> System Firmware			_
Rename I/O		Rename Mapping		
Input 1	Output 1	Mapping 1	Mapping 9	
Input 2	Output 2	Mapping 2	Mapping 10	
Input 3	Output 3	Mapping 3	Mapping 11	
Input 4	Output 4	Mapping 4	Mapping 12	
Input 5	Output 5	Mapping 5	Mapping 13	
Input 6	Output 6	Mapping 6	Mapping 14	
Input 7	Output 7	Mapping 7	Mapping 15	
Input 8	Output 8	Mapping 8	Mapping 16	
	Read	we	Read	

#### Rename I/O

- Rename the Inputs
- Rename the Outputs

# **Rename Mapping**

• Rename the mappings

### System

Mapping EDID Renam	ne System Firmware		
NetWork IP Mask Gateway DNS1	DHCP Static  .	System Factory Reset Firmware Version	
DNS2 Cloud setting Association Reset Clour	Code : .	Read Apply	

#### **Network DHCP Mode**

• Click HDCP and then click 'Read' to see the IP address information

#### **Network Static Mode**

• Click Static and then type in the IP, Mask and Gateway information. Once the IP address is set, to save the IP address information, click the 'Save' button

#### **Save Button**

• Saves the manually typed IP address

#### **Read Button**

• Reads the IP address of the device (Default IP address is set by the DHCP server)

#### System: Factory reset

• Factory default resets the device

#### System: Firmware Version

• Shows the F/W version information

#### Cloud Setting: Association Code

• Enters an 'association code' that can be used to pair the device with a cloud server

#### Cloud Setting: Reset Cloud

• Resets the cloud server after pairing with the device

# **Firmware Update**

MATRIX 4K2K	<b></b> X
Сомз -	
Mapping EDID Rename System Firmware	
Firmware Update	
Update from USB : Start Abort	
Update from NET :	
IP	
PORT 5888	
Load File	
Start Abort	

# Update from USB

- Ensure new firmware files are in the root directory of the USB Flash Drive that will be attached. The file suffix should be **.bin**
- Plug the USB Flash Drive into the USB port of the matrix interface
- To start the firmware update, click 'Start'

# Update from NET

- In the matrix's 'IP' address, type the IP of the user which wants to run the firmware update
- In 'Port' type 5888
- To select the new firmware click 'Load File'
- To start the firmware update, click 'Start'

# Ethernet Cloud Control Switching (Eagleyes)

# **Creating an Eagleyes Account**

For new Eagleyes users, please create a new account

In a search engine address bar, type (http://www.eagleyes.io), and then 'Create New Account'

Account	
Enter your account	
Password	
Enter your password	
f G	Login
Create new account	Forgot password

This will open the Registration page where an email and password information is required to create a private account

Please enter your email as account	
example@gmail	
Please enter your password	
1234XXX	
Please enter your password again	
please enter your password again	

# Adding a Device to the Eagleyes Cloud

As a first step, ensure the device is connect to the router via an Ethernet cable. Then under the System tab, click 'Read' to obtain the 'association code'. (The status of the software is connected)

MATRIX 4K2K	
COM3 -	
Mapping EDID Rename System Firmware	
NetWork	System
DHCP Static	
IP · · ·	Factory Reset
Mask · · ·	Firmware Martin
Gateway	
DNS1	Read
DNS2 · · ·	Save
Cloud setting	
Association Code :	Read
Deart Claud .	
Reset Cloud :	Арріу

In a search engine address bar, type (http://www.eagleyes.io), or alternatively download the Eagleyes mobile app, then log in to the Eagleyes account in the top right corner of the page. To add the device for which the association code has been obtained, click 'Add Device'



In 'Installer Email', enter an email for future online support from Eagleyes. In 'Association Code', enter the association code previously obtained to pair the Eagleyes cloud with the device

Add new device	×
Installer Email	
installer@gmail.com	
Association Code	
	Close Apply

Once the device is paired, a list of paired devices will show in the top right corner under 'Matrix'. This button can be clicked to switch control between devices



# **EDID Learning**

If a HDMI output display is not playing audio and video correctly, the EDID learning function is required. As HDMI source devices and displays can have different levels of capability when playing audio or video, the general principle is that the source device will output in the lowest resolutions of audio and video to be accepted amongst all HDMI displays. If this situation occurs, an output of 720p with stereo audio HDMI signal would most likely be the safest choice, however if required, the user can tell the matrix to learn the EDID of the HDMI display with the lowest possible resolution output to ensure that all displays play the HDMI signal successfully.

To use EDID Learning, please follow one of these methods:

- IR Remote Control: Please follow the same method as discussed in **Operation**-Remote Control Switching
- Software Control: Please follow the same method as discussed in **Operation**-RS-232 Software Switching

There are 17 embedded default EDID, which can be found below:

- 1080p@60 24bit 2ch
- 1080p@60 24bit 7.1ch
- 1080p@60 24bit 2ch
- 1080p@60 24bit 7.1ch
- 1080i@60/720p@60 24bit 2ch
- 1080i@60/720p@60 24bit 7.1ch
- 1080p@60 36bit 2ch

- 1080p@60 36bit 5.1/7.1ch
- 1080p@60 24bit 2ch
- 4k2k@30 36bit 2ch
- 4k2k@30 36bit 7.1ch
- 4k2k@30 36bit 3D 2ch
- 4k2k@30 36bit 3D 7.1ch
- 4k2k@60 420 36bit 3D 2ch
- 4k2k@60 420 36bit 3D 7.1ch
- 4k2k@60 36bit 3D 2ch
- 4k2k@60 36bit 3D 7.1ch

# **CE/FCC Statement**

## **CE** Certification

This equipment complies with the requirements relating to Electromagnetic Compatibility Standards. It has been manufactured under the scope of RoHS compliance.

### CE Konformitätserklärung

Dieses Produkt entspricht den einschlägigen EMV Richtlinien der EU für IT-Equipment und darf nur zusammen mit abgeschirmten Kabeln verwendet werden.

Diese Geräte wurden unter Berücksichtigung der RoHS Vorgaben hergestellt.

Die formelle Konformitätserklärung können wir Ihnen auf Anforderung zur Verfügung stellen

#### FCC Certification

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

You are cautioned that changes or modification not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

# LINDY Herstellergarantie – Hinweis für Kunden in Deutschland

LINDY gewährt für dieses Produkt über die gesetzliche Regelung in Deutschland hinaus eine zweijährige Herstellergarantie ab Kaufdatum. Die detaillierten Bedingungen dieser Garantie finden Sie auf der LINDY Website aufgelistet bei den AGBs.

#### Hersteller / Manufacturer (EU):.

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# WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

# Europe, United Kingdom

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away electrical and electronic equipment. Instead, these products must enter the recycling process.

Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products. More details can be obtained from your national WEEE recycling agency.

#### **Battery Remark:**

Do not put empty batteries in your domestic waste bin as they will not be recycled. Empty batteries can be returned for recycling at our trade counter or at your local household recycling centre.

The raw materials enclosed in batteries such as Zinc, Iron and Nickel can be reused to a very large proportion. The recycling of batteries and disused/obsolete electronic equipment is one of the most efficient environment protection actions you can easily take.

#### Germany / Deutschland

### Rücknahme Elektroschrott und Batterie-Entsorgung

Die Europäische Union hat mit der WEEE Direktive Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Das Entsorgen von Elektro- und Elektronikgeräten über die Hausmülltonne ist verboten! Diese Geräte müssen den Sammel- und Rückgabesystemen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernehmen die Gerätehersteller. LINDY bietet deutschen Endverbrauchern ein kostenloses Rücknahmesystem an, beachten Sie bitte, dass Batterien und Akkus den Produkten vor der Rückgabe an das Rücknahmesystem entnommen werden müssen und über die Sammel- und Rückgabesysteme für Batterien separat entsorgt werden müssen. Ausführliche

#### France

En 2006, l'union Européenne a introduit la nouvelle réglementation (DEEE) pour le recyclage de tout équipement électrique et électronique.

Informationen zu diesen Themen finden Sie stets aktuell auf der LINDY Webseite im Fußbereich.

Chaque Etat membre de l'Union Européenne a mis en application la nouvelle réglementation DEEE de manières légèrement différentes. Veuillez suivre le décret d'application correspondant à l'élimination des déchets électriques ou électroniques de votre pays.

#### Remarque sur les piles et batteries

En tant que consommateur final, vous êtes tenus de restituer toutes les piles et batteries usagées. Il est clairement interdit de les jeter avec les ordures ménagères ! Les piles et batteries contenant des substances nocives sont marquées par le symbole ci-dessus. Vous pouvez déposer gratuitement vos piles ou batteries usagées dans les centres de collecte de votre commune, dans nos succursales ou dans tous les points de vente de piles ou batteries. Vous respecterez ainsi la loi et contribuerez à la protection de l'environnement !

#### Italy

Nel 2006 l'unione europea ha introdotto regolamentazioni (WEEE) per la raccolta e il riciclo di apparecchi elettrici ed elettronici. Non è più consentito semplicemente gettare queste apparecchiature, devono essere riciclate. Ogni stato membro dell' EU ha tramutato le direttive WEEE in leggi statali in varie misure. Fare riferimento alle leggi del proprio Stato quando si dispone di un apparecchio elettrico o elettronico.

Per ulteriori dettagli fare riferimento alla direttiva WEEE sul riciclaggio del proprio Stato.

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