

EL-4KM-V44-KIT

User Manual



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.

Safety And Performance Notice

The transmission distances of HDMI over UTP cables are measured using TE CONNECTIVITY 1427071-6

EIA/TIA-568-B termination (T568B) of cables is recommended for optimal performance.

To minimize interference of the unshielded twisted pairs in the CAT5e/6 cable do not run the HDBaseT / Cat5e/6/6a cabling with or in close parallel proximity to mains power cables.

Do not substitute or use any other power supply other than the enclosed unit, or a ELAN approved replacement.

Do not disassemble either the Transmitter or Receiver units for any reason. Doing so will void the manufacturer's warranty.

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Introduction

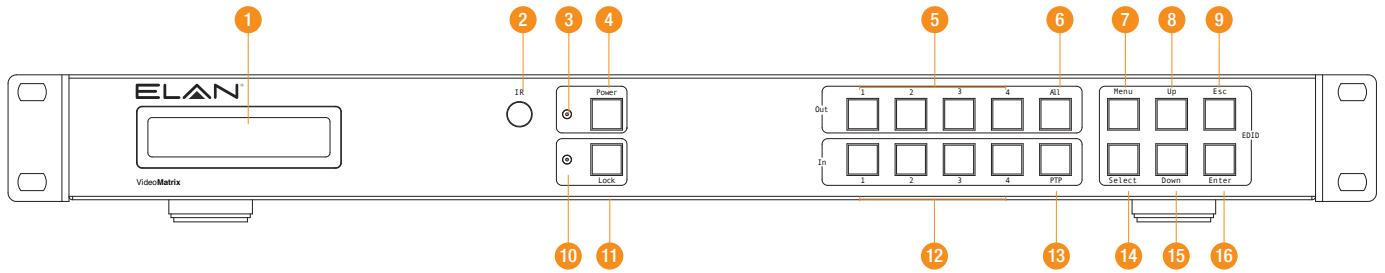
The ELAN 4x4 HDBaseT™ matrix offers unprecedented performance and value for the custom installation market. The EL-4KM-V44 is a 4K 4x4 HDCP 2.2 matrix package, delivering HDMI, bi-directional IR, RS-232, and PoH (PoE) up to lengths of 40m at 4K (70m @1080p) over a single CAT cable. The matrix also provides advanced features including audio breakout with pre-amp variable line-level control, simultaneous HDBaseT™/HDMI outputs, RS-232 pass through to enable 3rd party control of displays and a web browser interface module for control and configuration of the matrix. The EL-4KM-V44 is supplied with 4 x EL-4KHDBT-RX-40-IRS Receivers.

Features:

- Features 4x HDMI inputs which can be independently routed to 4x HDBaseT™/HDMI outputs
- Simultaneous HDBaseT™ and HDMI outputs to allow connection to dual displays per zone
- HDMI audio breakout to associated analog L/R audio outputs with pre-amp line level control
- Extends up to distance of 70m 1080P over single CAT cable
- Supports 4K UHD video up to 40m (3840 x 2160 @30Hz 4:4:4, 4096 x 2160 @24Hz 4:4:4, and 4K @60Hz 4:2:0)
- Web browser interface for control and configuration of Matrix
- Supports 3D signal display
- Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K
- Supports all known HDMI audio formats including Dolby TrueHD, Dolby Atmos, Dolby Digital Plus and DTS-HD Master Audio transmission
- Supports bi-directional IR and RS-232 from all input and HDBaseT output locations
- Supplied with 4x 5v-to-12v IR converter cables (EL-4KACC-IR-CAB)
- Control via front panel, IR, RS-232 and TCP/IP
- HDCP 2.2 compliant
- Supports PoH (Power over HDBaseT™) to power compatible HDBaseT™ receivers
- Advanced EDID management
- Matrix kit is supplied with 4 x EL-4KHDBT-RX-40-IRS HDBaseT™ receivers
- 1U Design for 19" rack mount integration - mounting kit included
- Matrix can be configured using front panel, supplied IR remote, or Web GUI.

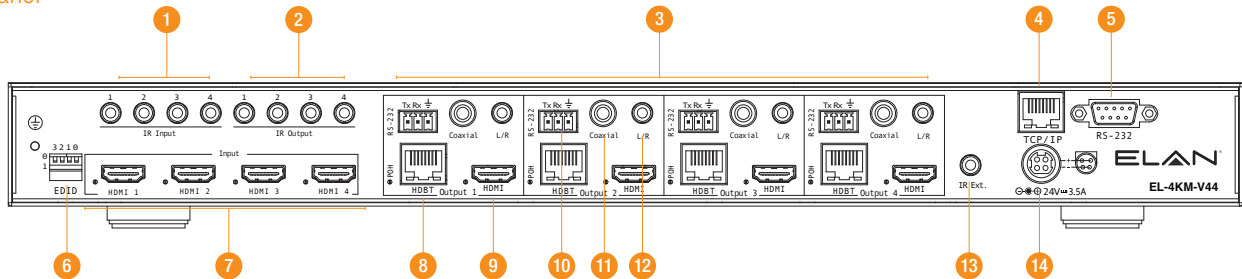
Panel Descriptions

Front Panel



- | | | |
|---|--|---|
| <p>1 LCD display – Shows the status of input/output selection, EDID etc.</p> <p>2 IR receiver window.</p> <p>3 Power LED indicator.</p> <p>4 Power button – Press to power on/off the Matrix.</p> <p>5 HDMI output selection button 1 to 4 – To select the output from 1 to 4.</p> <p>6 All button for HDMI outputs – All outputs will work as one (Selects all outputs).</p> | <p>7 Menu button – Press to enter EDID set mode (see page 5).</p> <p>8 Up selection button - Press to change segment's value.</p> <p>9 ESC – Press to quit EDID set mode.</p> <p>q Lock indicator.</p> <p>w Lock button – Press to lock the buttons of the front panel.</p> <p>e HDMI input selection button 1 to 4 – Press to select the input from 1 to 4.</p> | <p>r PTP button – Press to mirror all inputs and outputs (e.g. output 1, output 2 to input 2).</p> <p>t Selection button – Press to select current setting.</p> <p>y Down selection button – Press to change segment's value.</p> <p>u Enter button – Press to set EDID to specified INPUT or copy EDID from specified OUTPUT to specified INPUT.</p> |
|---|--|---|

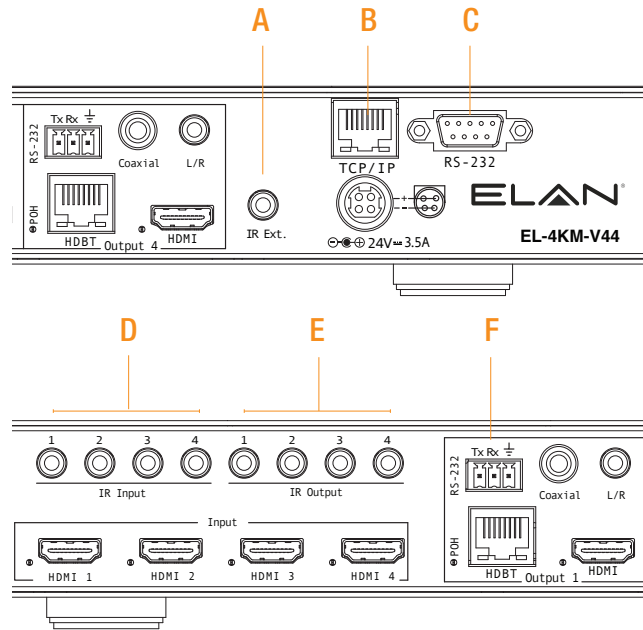
Rear Panel



- | | | |
|--|--|---|
| <p>1 IR inputs – 3.5mm stereo jack. Transmits IR to the zone HDBaseT receiver (displays). When using the IRCAB cable (supplied) ensure cable direction is correct.</p> <p>2 IR outputs – 3.5mm mono jack – Routed IR from HDBaseT extender (zone output).</p> <p>3 Zone outputs 1-4 (please see descriptions 8-12 for further details).</p> <p>4 TCP/IP (RJ45) – Connect to LAN for TCP/IP & web browser interface control of EL-4KM-V44 Matrix.</p> <p>5 RS-232 port – For control of the Matrix switcher from PC or ELAN control processor.</p> | <p>6 EDID DIP switch – Used for global EDID settings.</p> <p>7 HDMI inputs – Connect to HDMI sources.</p> <p>8 HDBT output – Connect to HDBaseT receivers.</p> <p>9 HDMI output – Connect to HDMI display. Works simultaneously with HDBaseT output.</p> <p>q Zone specific bi-directional RS-232 ports – Connect to third party control device to extend RS-232 commands to HDBaseT receivers RS-232 port.</p> | <p>w Coaxial digital audio output – Extracted audio will be concurrent with the corresponding HDMI video output.</p> <p>e L/R pre-amp variable line level analog audio output – 3.5mm stereo jack. Extracted audio will be concurrent with the corresponding HDMI video output. Please note: input must be PCM 2ch audio as Matrix does not down-mix 5.1ch audio signals.</p> <p>r IR input for matrix control – For hard wired IR connection. Connect to ELAN control processor.</p> <p>t Power port – Use supplied 24V 3.5A DC adaptor to power Matrix.</p> |
|--|--|---|

Control Ports

The EL-4KM-V44 main communication ports are located on the rear panel and includes the following connections:-



Connections:

- A. Global IR Input 3.5mm stereo jack - For control of the Matrix
- B. TCP/IP – For control of the Matrix (RJ45 Connector)
- C. RS-232 – For control of the Matrix (9 pin serial connection)
- D. IR Input (3.5mm stereo jack) for IR pass-through to the associated output HDBaseT Receiver
- E. IR Output (3.5mm mono jack) for routed IR control of source equipment
- F. RS-232 (3-pin Phoenix connector) for 2-way RS-232 pass-through to the associated output HDBaseT Receiver

TCP/IP

The ELAN EL-4KM-V44 Matrix can be controlled via TCP/IP.

For the full list of protocols please see 'RS-232 and Telenet commands' located at the rear of this manual.

The EL-4KM-V44 Matrix features a built-in web browser user interface allowing control and configuration of the matrix. For further details please see page 19 'Web Browser Interface'.

A 'Straight-through' RJ45 patch lead should be used

RS-232 2-Way

The ELAN 4KM-V44 can be controlled via a 9-pin serial cable.

For the full list of protocols please see 'RS-232 and Telenet commands' located at the rear of this manual.

Details of RS-232 pin assignment and communication are adjacent. Please note that depending on your control device serial port pin configuration you may require either a 'Straight' RS-232 cable or 'Null-modem' type.

ELAN RS-232		REMOTE CONTROL CONSOLE	
PIN	Assignment	PIN	Assignment
1	NC	1	NC
2	Tx	2	Rx
3	Rx	3	Tx
4	NC	4	NC
5	GND	5	GND
6	NC	6	NC
7	NC	7	NC
8	NC	8	NC
9	NC	9	NC

Baud Rate: 57600 bps

Data Bit: 8-bit

Parity: None

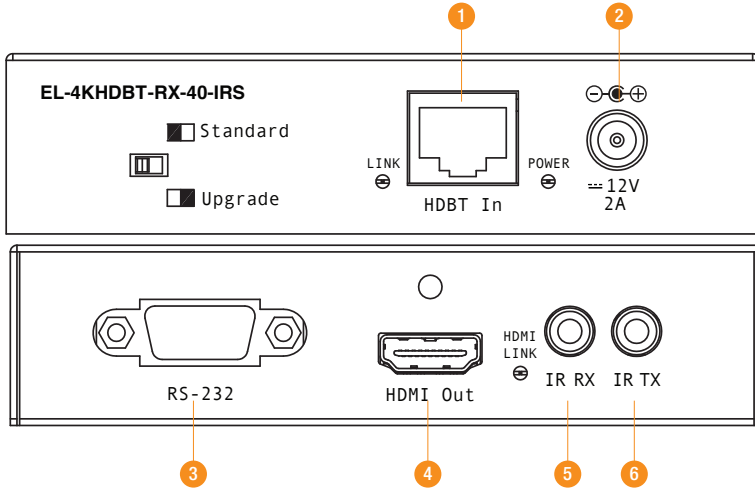
Stop Bit: 1-bit

Flow Control: None

HDBaseT Receiver Options

The EL-4KM-V44 Matrix is supplied with 4x EL-4KHDBT-RX-40-IRS HDBaseT receivers

The EL-4KHDBT-RX-40-IRS Receiver is a Class B HDBaseT Receiver with 2-way IR and bi-directional RS-232 pass-through. The Receiver supports display distances up to 70m @ 1080P and 40m 4K (30Hz 4:4:4 & 60Hz 4:2:0).

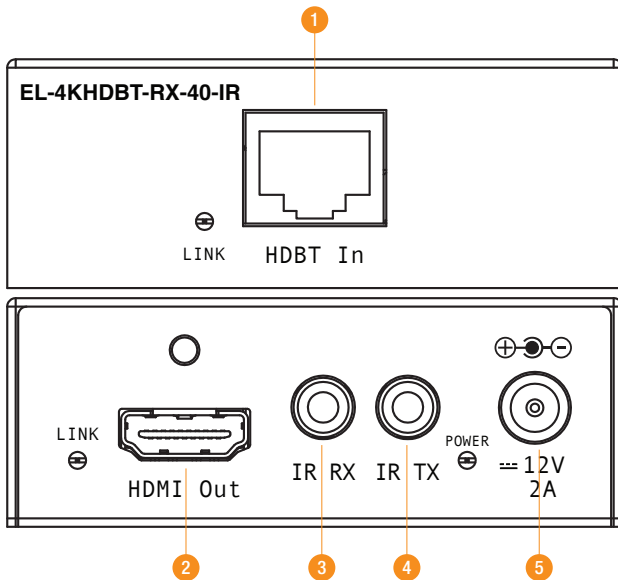


- 1 HDBaseT input
- 2 12V DC power (not required)
- 3 2-way RS232 (9-pin serial)
- 4 HDMI output
- 5 IR Input 3.5mm stereo jack
- 6 IR Output 3.5mm mono jack

The EL-4KM-V44 is also compatible with the EL-4KHDBT-RX-40-IR HDBaseT Receiver. Note: The EL-4KHDBT-RX-40-IR does not support the RS-232 feature on the EL-4KM-V44.

EL-4KHDBT-RX-40-IR

Basic HDBaset Receiver with 2-way IR pass-through. Supports display distances up to 70m @ 1080P and 40m 4K (30Hz 4:4:4 & 60Hz 4:2:0). Compatible with all ELAN Matrix products.



- 1 HDBaseT input
- 2 HDMI Output
- 3 IR Output 3.5mm Mono jack
- 4 IR Input 3.5mm Stereo jack
- 5 12V DC power (not required)

Matrix Front Panel Controls

Front Panel Display - Input/Output selection

The following display shows current source input selection per zone output.

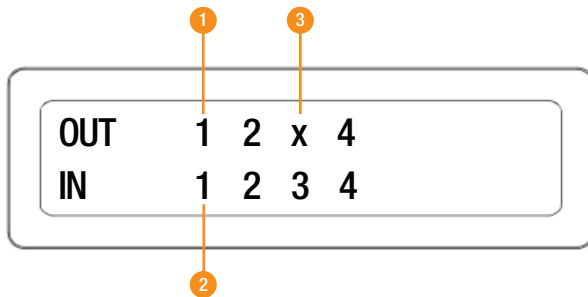
1. To change input selection first press 'OUTPUT' button (1-4)
2. Press desired 'INPUT' button (1-4)
3. An 'X' indicates that the zone output has been turned off.

Zones can be turned on/off using RS-232/TCP/IP commands.

Zone outputs can be forced back on by powering OFF/ON the matrix. All outputs will be turned on when powered up.

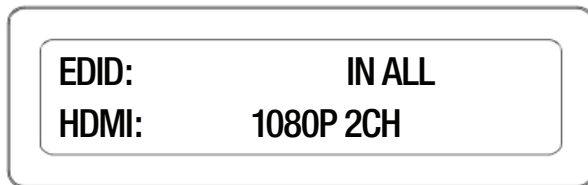
Zone outputs can be forced back on by pressing and holding 'OUTPUT 1' button on the front panel for 10 seconds.

The matrix will reset and all outputs will be turned back on.

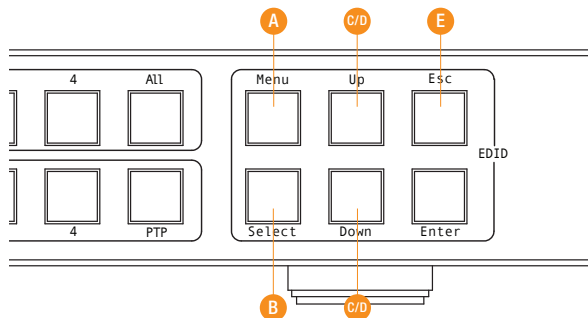


EDID Management - Global or individual input settings

The following characters show adjusting the EDID for 'All' inputs (Global). Current EDID value is set to 1080P & 2ch audio.



To change the input signal type using the Matrix front panel buttons press the following:-



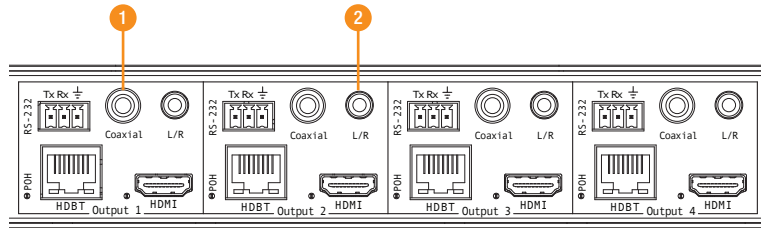
Using Matrix Front Panel Buttons

- Press **MENU** button
- Panel will display 'EDID settings'. Press **SELECT** button
- Select the input you wish to fix the EDID on (1-8) or select 'All'. Use **UP/DOWN** buttons to toggle selection and **SELECT** button to confirm
- Select video resolution required (4K, 1080p, 3D etc). Use **UP/DOWN** buttons to toggle selection and **SELECT** button to confirm
- Select audio resolution required (2CH, 5.1 or 7.1). Use **UP/DOWN** buttons to toggle selection and **SELECT** button to confirm
- Press the **ESC** button to exit

Audio Breakout

The EL-4KM-V44 Matrix includes audio breakout from the selected HDMI input to associated analog L/R audio and coaxial digital outputs. Extracted audio will be concurrent with the corresponding HDMI video output.

The EL-4KM-V44 analog outputs include pre-amp line level control allowing you to connect the ELAN matrix directly into a power amplifier for all your multi-room audio needs.



1. Coaxial digital output - Output 1
2. Analog pre-amp line level output 3.5mm stereo jack - Output 2

Control of the pre-amp line level outputs is via RS-232, TCP/IP or using the in-built web browser interface. Please see 'RS-232 & Telnet Commands' on page 15 for further details.

Note: Volume control is only available on the analog audio outputs. Source input must be PCM 2ch audio for analog audio outputs to work. The EL-4KM-V44 Matrix does not down-mix 5.1ch audio signals.

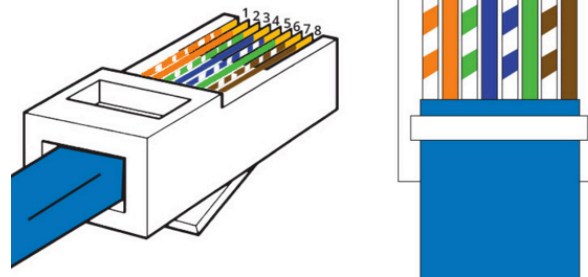
Volume control of audio outputs is not possible via Infrared control.

Terminating HDBaseT CAT cable

It is important that the interconnecting CAT cable between the ELAN HDBaseT products is terminated using the correct RJ45 pin configuration. The link CAT cable **MUST** be a 'straight' (pin-to-pin) CAT cable and it is advised that this is wired to the T568B wiring standard as this format is less prone to EMI (Electro-Magnetic Interference).

When installing CAT cables it is advised that you use the best possible CAT cable quality possible. HDMI distribution products will only work if used with CAT5e standard cable or above. ELAN recommends using a CAT6 cable for your installations, especially when running over longer distances, in areas of high EMI, or with 4K signal distribution.

RJ45 Pin-Out T568B



Understanding the Matrix / Receiver status lights

The ELAN Matrix and HDBaseT extender solutions include status LED indicators on both the Matrix and Receiver products to show all connections are active and to help diagnose possible problems.

Understanding the status lights:-

ELAN Matrix:

- The Yellow HDBaseT status link light will be off when the zone output has been turned off or there is a problem with the specific Matrix output.
- The Yellow HDBaseT status link light will blink when the zone output is on and working
- The Green HDBaseT link light will blink if there is an unstable connection between the ELAN Matrix and HDBaseT Receiver
- The Green HDBaseT link light will be lit when a there is an active HDBaseT Receiver connected to the Matrix
- The Green HDBaseT link light will be off when a there is no connection with a HDBaseT receiver

ELAN HDBaseT Receiver:

- The HDMI link light will be off when there is no connection with a display
- The HDMI link light will be on when there is an active connection with a display (NOTE - Not all HDBaseT RX feature a HDMI status LED)
- The HDBaseT link light will be off when there is no CAT cable/active HDBaseT connection on the RJ45 HDBaseT input
- The HDBaseT link light will blink if there is an unstable connection between the ELAN Matrix and HDBaseT receiver
- The HDBaseT link light will be lit when a CAT cable is connected to the HDBaseT RJ45 output on the Matrix and an active connection is achieved with the ELAN HDBaseT Receiver.

Infrared Distribution

The ELAN range of HDMI matrix products include multiple options for control and routing of IR.

IMPORTANT: The ELAN HDMI Platinum, Matrix, & HDBaseT product lines utilize 5 volts to power an IR Receiver on the IR Input and include an EL-4KACC-IR-CAB, 3.5mm Mono to 3.5mm Stereo 5v to 12v IR converter cable. This cable is required when using 12v IR products from Xantech, Niles, and SpeakerCraft.

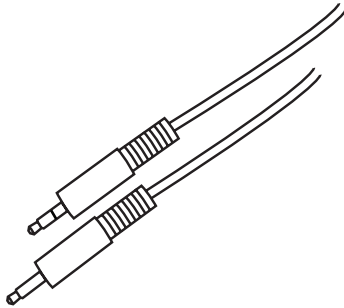
Each ELAN Matrix and HDBaseT receiver is supplied with all necessary IR hardware required and includes:

IR Control Cable - EL-4KACC-IR-CAB

ELAN IR Control cable 3.5mm Mono to 3.5mm Stereo for linking third party IR Receivers to ELAN Platinum, Matrix, and HDBaseT HDMI Series products.

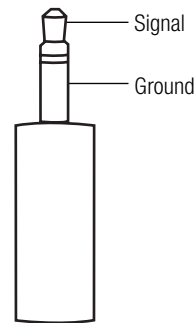
Compatible with 12v IR third party products.

Note: Cable is directional as indicated

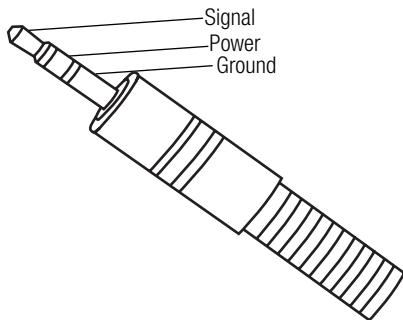


Infrared 3.5mm Pin-Out

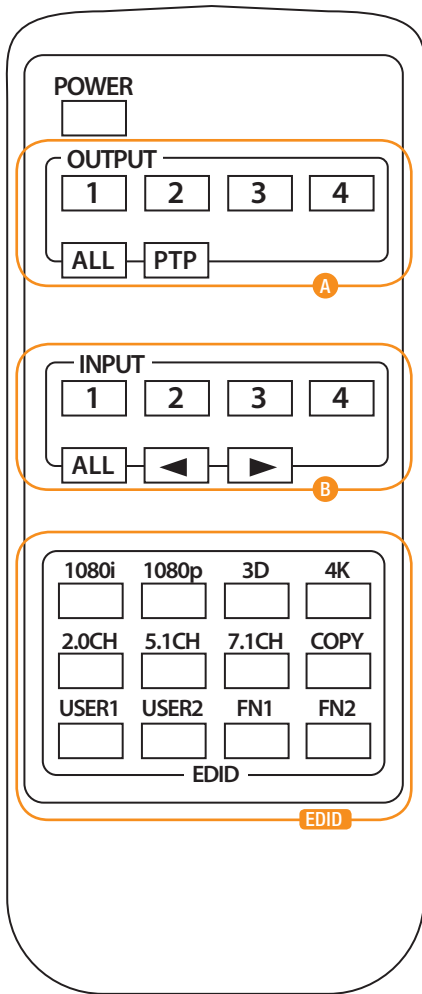
IR Emitter - Mono 3.5mm



IR Receiver - Stereo 3.5mm



Infrared Remote Control



OUTPUT AND INPUT SELECTION

- A. Selects the zone OUTPUT you wish to change the source on (Numbers 1 - 4 correspond to the zone outputs 1 - 4)
- B. Selects the source INPUT you wish to change on the selected zone (Numbers 1 - 4 correspond to the source inputs 1 - 4)

EXAMPLE

To switch source 2 to zone 4 you would press 4 in the output section (A) followed by pressing 2 in the Input section (B).

ALL button: The all button selects all the inputs or outputs in its corresponding box. Example: (The "All" button in the Output box selects all the zones so all zones will change to what source input is selected next)

PTP: This button will align all the zone outputs with the like numbered source inputs. Example: Input 1 to output 1, input 2 to output 2, etc

EDID SET UP

The EL-4KM-V44 provides a comprehensive range of EDID settings. Below are three examples of how to deploy the desired EDID setting when using the supplied remote.

- A. **Fix EDID to an Input or ALL inputs:** Press the desired video resolution button (1080i / 1080P / 3D / 4K), then select the desired audio format (2.0CH / 5.1CH / 7.1CH), then select the source input you want this EDID information allocated to by pressing the INPUT 1 – 4 or the ALL button
- B. **Copy EDID of Output-X to an Input or ALL:** Press the COPY button then select the OUTPUT you wish to copy the EDID information from, then select the source input you want to copy this EDID to by selecting the INPUT 1-4 or the ALL button.
- C. **User defined EDID to an Input or ALL inputs:** Press USER1 / USER2 button then select the source you wish to assign this EDID to by select-ing INPUT 1-4 or the ALL button

NOTE: THE BUTTON PRESS SEQUENCE SHOULD BE FINISHED IN 5 SECONDS, OTHERWISE THE OPERATION IS DISCARDED

EDID Control

EDID (Extended Display Identification Data) is a data structure that is used between a display and a source. This data is used by the source to find out what audio and video resolutions are supported by the display then from this information the source will discover what the best audio and video resolutions need to be outputted.

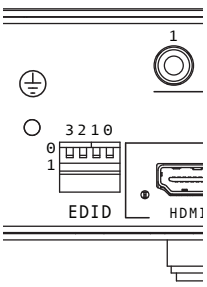
While the objective of EDID is to make connecting a digital display to a source a simple plug and play procedure issues do arise when multiple displays or video matrix switching is introduced because of the increased number of variables.

By pre-determining the video resolution and audio format of the source and display device you can reduce the time need for EDID hand shaking thus making switching quicker and more reliable.

Configuration of the EDID settings can be achieved in one of four ways:

- 1 Via the Web GUI
- 2 Using Matrix Front Panel Buttons (For further details see page 7)
- 3 Using Supplied ELAN Matrix IR Remote Control (For further details see page 10)
- 4 Using dip-switches on the rear panel of the EL-4KM-V44 Matrix. Please see below table for global EDID settings.

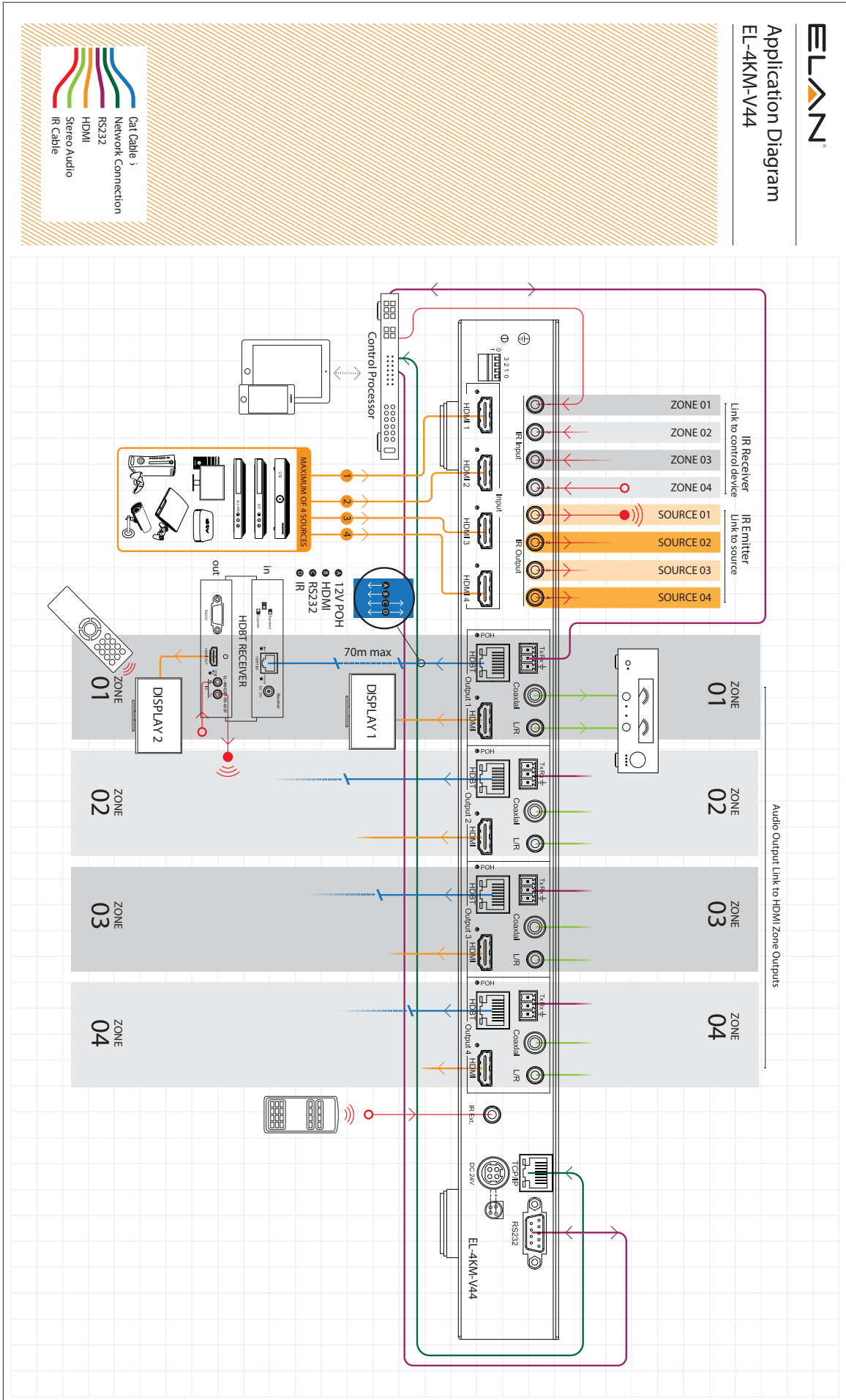
***Note** - Once dip-switch settings have been made the EL-4KM-V44 must be power cycled for settings to be applied.



Global EDID settings

DIP ON /OFF SWITCHING POSITIONS				EDID TYPE
3	2	1	0	
OFF	OFF	OFF	OFF	1080p/2.0CH
OFF	OFF	OFF	ON	1080p/5.1CH
OFF	OFF	ON	OFF	1080p/7.1CH
OFF	OFF	ON	ON	1080i/2.0CH
OFF	ON	OFF	OFF	1080i/5.1CH
OFF	ON	OFF	ON	1080i/7.1CH
OFF	ON	ON	OFF	4K60Hz 4:2:0/2.0CH
OFF	ON	ON	ON	4K60Hz 4:2:0/5.1CH
ON	OFF	OFF	OFF	4K60Hz 4:2:0/7.1CH
ON	OFF	OFF	ON	4K30Hz 4:4:4/2.0CH
ON	OFF	ON	OFF	4K30Hz 4:4:4/5.1CH
ON	OFF	ON	ON	4K30Hz 4:4:4/7.1CH
ON	ON	OFF	OFF	DVI 1280x1024
ON	ON	OFF	ON	DVI 1920x1080
ON	ON	ON	OFF	DVI 1920x1200
ON	ON	ON	ON	Copy Display EDID

Dip-switch position '0' = Off
Dip-switch position '1' = On



Specifications

Video Input Connections: 4x HDMI Type A, 19-pin, female

Video Output Connections: 4x HDMI Type A, 19-pin, female, 4x HDBaseT RJ45 connector

Audio Output Connections: 4x 3.5mm stereo jack

RS-232 serial port: 1x DB-9, female, 4x 3 pin Phoenix

TCP/IP Control: 1x RJ45, female

IR Input ports: 5x5v 3.5mm stereo jack

IR Output ports: 4x5v 3.5mm mono jack

Rack-Mountable: 1U rack height, rack ears included

Casing Dimensions (W x H x D): 440mm x 235mm x 43mm, without feet

Dimensions (W x D x H): 440mm x 241mm x 43mm, with feet

Shipping Weight: 2.7kg

Operating Temperature: 32°F to 104°F (0°C to 40°C)

Storage Temperature: -4°F to 140°F (-20°C to 60°C)

Power Supply: 1x 24V/3.5A DC (POH)

Package Contents:

- 1 x EL-4KM-V44
- 4 x EL-4KHDBT-RX-40-IRS
- 1 x Rack mounting kit
- 4 x Mounting kits
- 1 x 24V/3.5A power supply
- 1 x Remote control
Remote Includes CR2025 battery
- 4 x 5v-to-12v IR converter cables
- 1 x User manual
- 4 x Power cables (Type A, C, G & I)

Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

RS232 and Telnet Commands

The ELAN EL-4KM-V44 can be controlled via serial and TCP/IP. The following pages list all available serial commands for the EL-4KM-V44 Matrix. Details of RS232 pin assignment can be found on page 05.

Commonly used Serial commands:

There are several commands that are commonly used for control and testing:-

STATUS	Status will give feedback on Matrix such as zones on, type of connection etc
PON	Power on
POFF	Power off
OUTxxON	(xx is the zone number you wish to turn on) Example:- OUT01ON (This would turn output one back on)
OUTxxFRyy	(xx is the zone out, yy is the input) Example:- OUT01FR04 (This would switch output 1 to source input 4)

Common Mistakes

- Carriage return – Some programs do not require the carriage return where as other will not work unless sent directly after the string. In the case of some Terminal software the token <CR> is used to execute a carriage return. Depending on the program you are using this token maybe different. Some other examples that other control systems deploy include \r or OD (in hex)
- Spaces – ELAN commands do not require space between commands unless specified. There may be some programs that require spacing in order to work.
 - How the string should look is as follows OUT01ON
 - How the string may look if spaces are required: OUT{Space}01{Space}ON
- Baud rate or other serial protocol settings not correct - please see Page 5 for Matrix settings

RS232 Command	Description
?	Print Help Information
HELP	Print Help Information
STATUS	Print System Status And Port Status
PON	Power On, System Run On Normal State
POFF	Power Off, System Run On Power Save State
IR ON/OFF	Set System IR Control On Or Off
KEYON/OFF	Set System KEY Control On Or Off
DBG ON/OFF	Set Debug Mode On Or Off
BEEP ON/OFF	Set Onboard Beep On Or Off
RESET	Reset System To Default Setting (Should Type "Yes" To Confirm, "No" To Discard)
RESET ALL	Reset System And Network To Default Setting
OUT xxON/OFF	Set OUTPUT:xx On Or Off
POHxxON/OFF	Set POH OUTPUT:xx On Or Off (xx = 01 to 04 or 'ALL' for all outputs)

RS232 and Telnet Commands (Continued)

RS232 Command	Description
OUTxx FR yy	Set OUTPUT:xx From INPUT:yy
EDID xx CP yy	Copy EDID from output (yy) to input (xx) Both yy & xx can be set individually (01-08) or as ALL (00)
EDIDxx DF zz	Set Input:xx EDID To Default EDID:zz xx=00: Select All INPUT Port xx=[01...04]: Select One INPUT Port yy=[01...04]: Select One OUTPUT Port zz=00: HDMI 1080p@60Hz, Audio 2CH PCM zz=01: HDMI 1080p@60Hz, Audio 5.1CH DTS/DOLBY zz=02: HDMI 1080p@60Hz, Audio 7.1CH DTS/DOLBY/HD zz=03: HDMI 1080i@60Hz, Audio 2CH PCM zz=04: HDMI 1080i@60Hz, Audio 5.1CH DTS/DOLBY zz=05: HDMI 1080i@60Hz, Audio 7.1CH DTS/DOLBY/HD zz=06: HDMI 1080p@60Hz/3D, Audio 2CH PCM zz=07: HDMI 1080p@60Hz/3D, Audio 5.1CH DTS/DOLBY zz=08: HDMI 1080p@60Hz/3D, Audio 7.1CH DTS/DOLBY/HD zz=09: HDMI 4K@30Hz 4:4:4, Audio 2CH PCM zz=10: HDMI 4K@30Hz 4:4:4, Audio 5.1CH DTS/DOLBY zz=11: HDMI 4K@30Hz 4:4:4, Audio 7.1CH DTS/DOLBY/HD zz=12: DVI 1280x1024@60Hz, Audio None zz=13: DVI 1920x1080@60Hz, Audio None zz=14: DVI 1920x1200@60Hz, Audio None zz=15: User EDID 1 zz=16: User EDID 2 zz=17: GUI Download EDID zz=18: HDMI 4K@60Hz 4:2:0, Audio 2CH PCM zz=19: HDMI 4K@60Hz 4:2:0, Audio 5.1CH DTS/DOLBY zz=20: HDMI 4K@60Hz 4:2:0, Audio 7.1CH DTS/DOLBY/HD
MUTE mm OUT yy	Turn MUTE (mm = ON or OFF) on OUTPUT (yy = 01 to 04 or 00 for all outputs)
VOLxxOUT yy	Set VOLUME level:xx on OUTPUT:yy xx = 00...30: Set volume levels xx = +: Volume level increases xx = -: Volume level decreases yy = 00: Select ALL output ports xx = 01 to 04: Select single output port
NET DHCP ON/OFF :	Set Auto IP(DHCP) ON Or OFF
NET IP xxx.xxx.xxx.xxx :	Set IP Address
NET GW xxx.xxx.xxx.xxx :	Set Gateway Address
NET SM xxx.xxx.xxx.xxx :	Set Subnet Mask Address
NET RB :	Set Network Reboot and Apply New Config!!!
NET TN xxxx :	Set Telnet Port

Web Browser Interface

The ELAN EL-4KM-V44 matrix unit can be both controlled and configured using the in-built web-server.

The EL-4KM-V44 Matrix must be connected to an active network router/switch and it is advised that the Matrix is given a static IP address. You can configure the network settings of the Matrix using the Web Browser Interface (ELAN Matrix products are shipped with the network set to DHCP)

Certifications

FCC Notice

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. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution - changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Canada, Industry Canada (IC) Notices

This Class B digital apparatus complies with Canadian ICES-003.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Canada, avis d'Industry Canada (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003.

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

Correct Disposal of this product

This marking indicates that this product should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.



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