

# EL-4KM-VW44

## 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 4 x 4 HDMI/VGA matrix with Video Wall and Multi-viewer options is a multi-purpose high-speed video processing system. The EL-4KM-VW44 can be configured for 3 different output modes. The EL-4KM-VW44 can perform as a 4x4 seamless matrix switcher, as a 2x2, 4x1 or 1x4 video wall solution and as a quad multi-view presentation system.

Inputs can be assigned as either HDMI or VGA with associated L/R analog audio with control of the switcher via the front-panel push buttons, IR remote control, RS-232 interface, TCP/IP and Web GUI interface.

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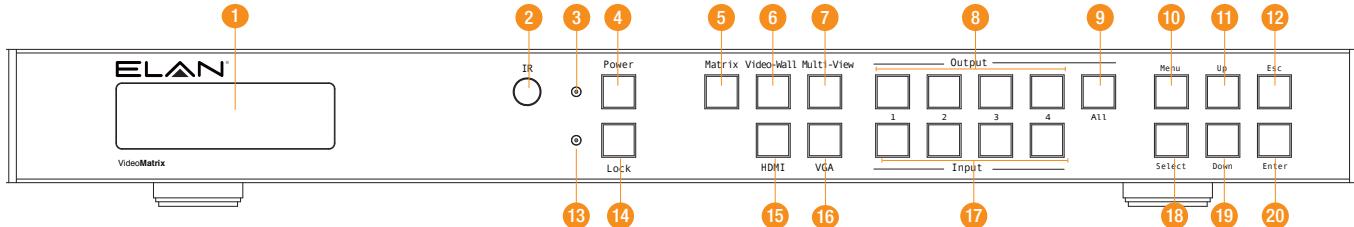
## Features:

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- Features 3 operational modes:
  - 4x4 Matrix (selected HDMI or VGA inputs)
  - Video wall (2x2, 4x1 or 1x4 configuration)
  - Multi-viewer mode
- Features 4x video inputs that can be configured as HDMI video or VGA video with associated L/R analog audio
- Seamless video switching
- Video inputs support all industry standard video resolutions including VGA-WUXGA (up to 1920x1200 @60Hz) and 480i-4K (3840 x 2160 @30Hz 4:4:4, 4096 x 2160 @24Hz 4:4:4)
- HDMI output resolution fixed to 1080p 60Hz
- Maximum PCM 7.1 96 KHz audio input, PCM 2CH 96KHz audio output.
- IR routing
- Supplied with 4x 5v-to-12v IR converter cables (EL-4KACC-IR-CAB)
- Control via front panel, IR, RS-232 and TCP/IP
- Web Interface Module for control and configuration of the Matrix
- Advanced EDID management

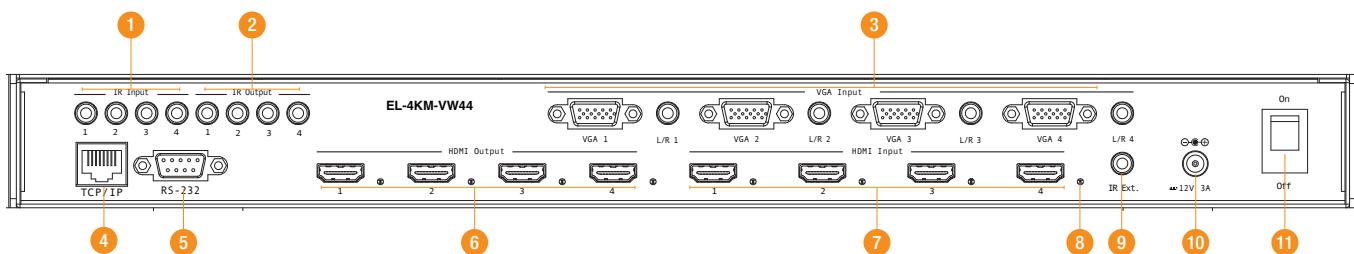
## Panel Descriptions

### Front Panel



- 1 LCD display – Shows the status of input/output selection, EDID etc.
- 2 IR receiver window.
- 3 Power LED indicator.
- 4 Power button – Press to power On/Off the Matrix.
- 5 Matrix mode button - Press to activate Matrix mode.
- 6 Video-Wall mode button - Press to activate Video-Wall mode.
- 7 Multi-View mode button - Press to activate Multi-View mode.
- 8 HDMI output selection button 1 to 4 - To select the output from 1 to 4.
- 9 All button for HDMI outputs – All outputs will work as one (Selects all outputs).
- q Menu button – Press to enter EDID set mode (see page 5).
- w Up selection button - Press to change segment's value.
- e ESC – Press to quit EDID set mode.
- r Lock indicator.
- t Lock button – Press to lock the buttons of the front panel.
- y HDMI input selection button - Press to individually change inputs 1-4 to HDMI.
- u VGA input selection button - Press to individually change inputs 1-4 to VGA.
- i Input selection button 1 to 4 – Press to select the input from 1 to 4.
- o Selection button – Press to select current setting.
- p Down selection button – Press to change segment's value.
- a Enter button – Press to confirm mode selection or set EDID to specified INPUT or copy EDID from specified OUTPUT to specified INPUT.

### Rear Panel

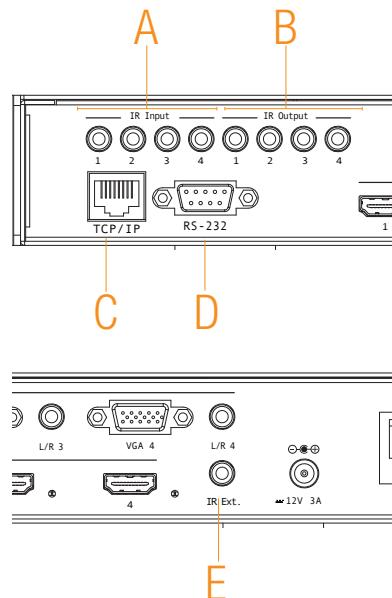


- 1 IR inputs – 3.5mm stereo jack. Routes IR to the current source selected IR output. When using the EL-4KACC-IR-CAB 5v-to-12v IR converter cable ensure cable direction is correct.
- 2 IR outputs – 3.5mm mono jack – Source specific routed IR.
- 3 VGA inputs with associated 3.5mm L/R Analog audio – Connect to VGA sources
- 4 TCP/IP (RJ45) – Connect to LAN for TCP/IP control of Matrix or control by built-in Web-GUI interface.
- 5 RS-232 port – For control of the Matrix switcher from PC or control processor.
- 6 HDMI output – Connect to HDMI displays.
- 7 HDMI inputs – Connect to HDMI sources.
- 8 HDMI active connection LED - Lit when active HDMI connection is connected.
- 9 IR input for matrix control – For hard wired IR connection. Connect to ELAN control processor.
- q Power port – Use supplied 12V 3A DC adaptor to power.
- w Power switch - Turn Matrix On/Off

**NOTE:** Either HDMI **OR** VGA signal type must be assigned per source input. Both video inputs cannot be active at the same time.

## Control Ports

The EL-4KM-VW44 main communication ports are located on the rear panel and includes the following connections:-



### Connections:

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

### TCP/IP

The ELAN EL-4KM-VW44 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-VW44 Matrix features a built-in web browser user interface allowing control and configuration of the matrix. For further details please see page 21 'Web Browser User Interface'.

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

### RS-232 2-Way

The ELAN EL-4KM-VW44 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

## Matrix Front Panel Control

### Turning On/Off HDMI outputs

It is possible to turn off each individual HDMI output using RS-232, TCP/IP or Web GUI interface. This can be helpful when using panels with a 'signal sense' power on/off feature.

Please see page 17 for list of product RS-232 and Telnet commands.

**Note:** There is no indication on the front panel to inform users that the outputs of the Matrix have been turned off. If you are unsure of the status of the zone outputs you can force all outputs back on in one of two ways:

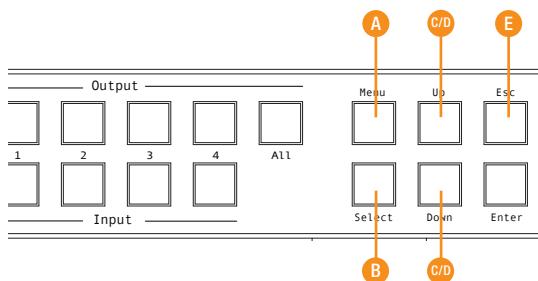
- Powering OFF/ON the matrix. All outputs will be turned on when powered up.
- Zone outputs can be forced back on by pressing and holding 'OUTPUT 1' button on the front panel for 10 seconds. The matrix will reset and all outputs will be turned back on.

### EDID Management - Global or individual input settings

The following characters show adjusting the EDID for 'All' inputs (Global). Current EDID value is DF00 (Default setting 0) which is 1080p @ 60Hz.



To change the EDID value for source inputs using the Matrix front panel buttons press the following:-



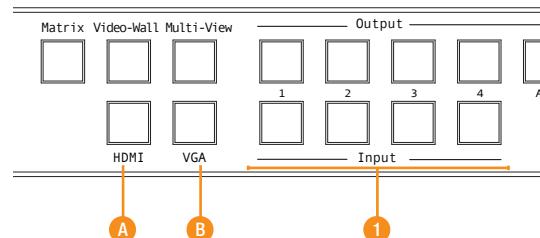
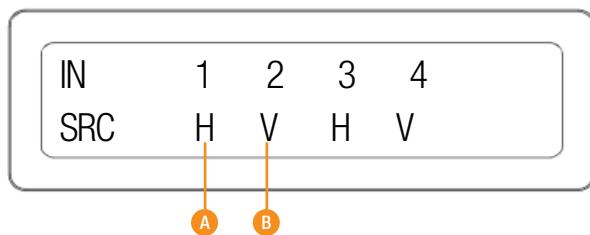
- A. Press **\_MENU** button.
- B. Panel will display 'EDID settings'. Press **SELECT** button
- C. Select the input you wish to fix the EDID on (1-4) or select 'All'. Use **UP/DOWN** buttons to toggle selection and **ENTER** button to confirm.
- D. Select video resolution required (1080p, 1080i, DVI etc). Use **UP/DOWN** buttons to toggle selection and **SELECT** button to confirm. Options are standard EDID settings (DF00-DF04) or 'COPY' EDID from outputs 1-4.
- E. Press the **ESC** button to exit.

# Matrix Front Panel Control

## Video Input Type Selection

The EL-4KM-VW44 allows you to switch between HDMI and VGA+ audio per source input. It is only possible to select either HDMI or VGA per source and it is not possible to view both video types on the same input, I.E- You cannot select HDMI input 1 and VGA input 1 at the same time.

1. To change input video type first press 'INPUT' button (1-4).
2. The chosen input number will start to flash.
3. Press either the 'HDMI' or 'VGA' select button.
  - A. When HDMI is selected the letter 'H' will be displayed under the source input number.
  - B. When VGA is selected the letter 'V' will be displayed under the source input number.



## Matrix Mode

The following shows how to activate 'Matrix' mode and change source inputs.

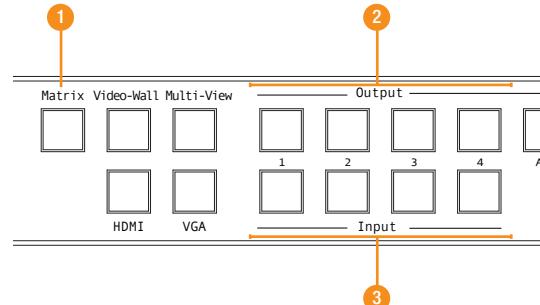
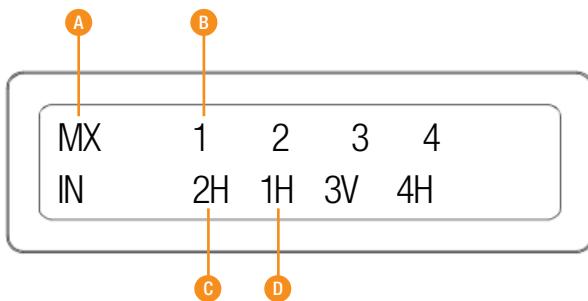
### Matrix Mode Selection

1. To enter 'Matrix' mode first press 'MATRIX' button .  
To confirm selection press the 'ENTER' button.

### Source Selection

2. To change source selection per HDMI output press the desired 'OUTPUT' button (1-4) or 'ALL'.
3. Press desired source 'INPUT' button.

The display will show both the source input selected and if this is HDMI (H) or VGA (V) video type (see above).



Understanding the display:

- A. 'MX' shows that the products is in Matrix mode.
- B. Indicates the output
- C. Indicates the source input selected (1-4)
- D. Indicates the video signal type (H or V). H=HDMI, V=VGA

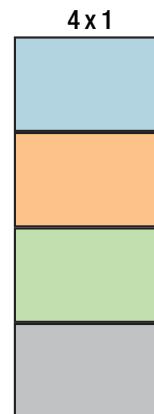
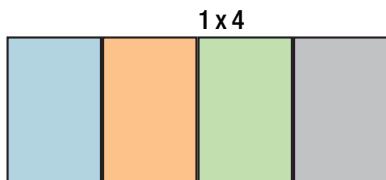
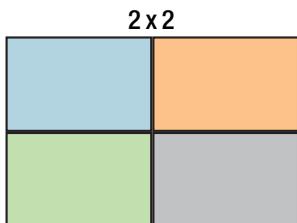
# Matrix Front Panel Control

## Video Wall Mode

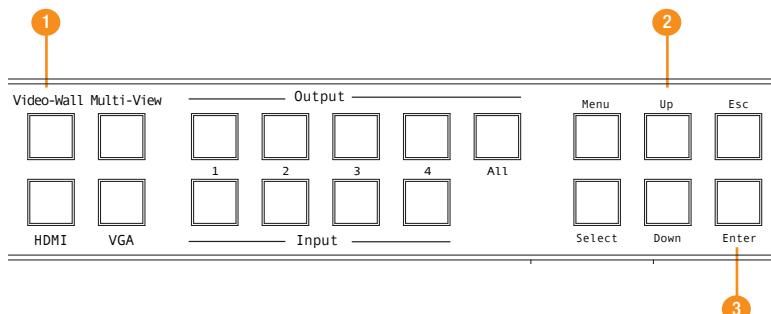
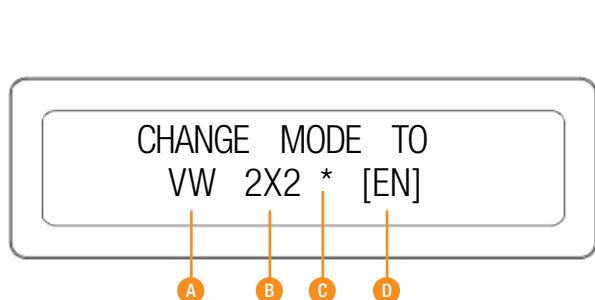
The following shows how to activate the 'Video Wall' mode, change screen layouts and change source inputs

### Selecting Video Wall Mode:

1. To select Video Wall mode first press 'Video Wall' button
2. The display will change and the current screen layout configuration will begin to flash. You must select the required screen configuration using the 'UP' or 'DOWN' buttons. The screen layouts are:



3. Press the 'ENTER' button to finalise the Video Wall configuration.



### Understanding the display:

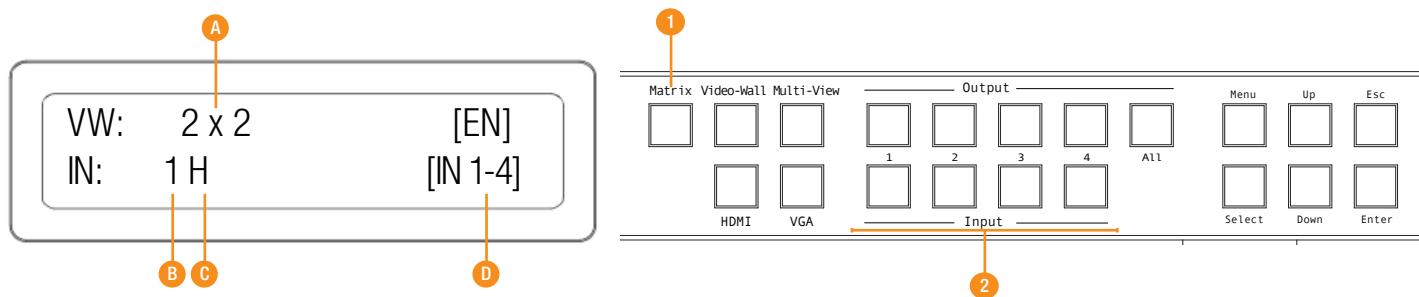
- A. 'VW' shows that the product is in Video Wall mode.
- B. Indicates the screen configuration currently selected.
- C. \* Indicates the current screen configuration shown is active.
- D. [EN] is a reminder to press 'ENTER' button to finalise selection.

# Matrix Front Panel Control

## Video Wall Mode

### Changing Source inputs when in Video Wall mode:

1. To change the source input selection first press 'Video Wall' button  
The display will change showing the current screen layout configuration and input selected.
2. Press desired 'INPUT' button (1-4)



Understanding the display:

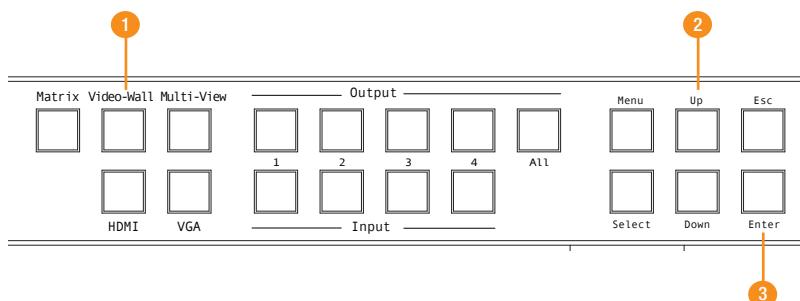
- A. '2 x 2' shows that the current screen configuration selected/to be selected.
- B. Indicates the source input currently selected.
- C. Indicates the video signal type (H or V). H=HDMI, V=VGA
- D. [EN] is a reminder to press 'ENTER' button to finalise the selection.  
[IN 1-4] is a reminder of source inputs available.

### Changing Source input video types between HDMI and VGA when in Video Wall mode:

See page 7 - 'Video input type selection'

### Changing the screen configuration when in Video Wall mode:

1. To change screen configuration first press 'Video Wall' button
2. The display will change and the current screen layout configuration will begin to flash. You must select the required screen configuration using the 'UP' or 'DOWN' buttons.
3. Press the 'ENTER' button to finalise selection.



# Matrix Front Panel Control

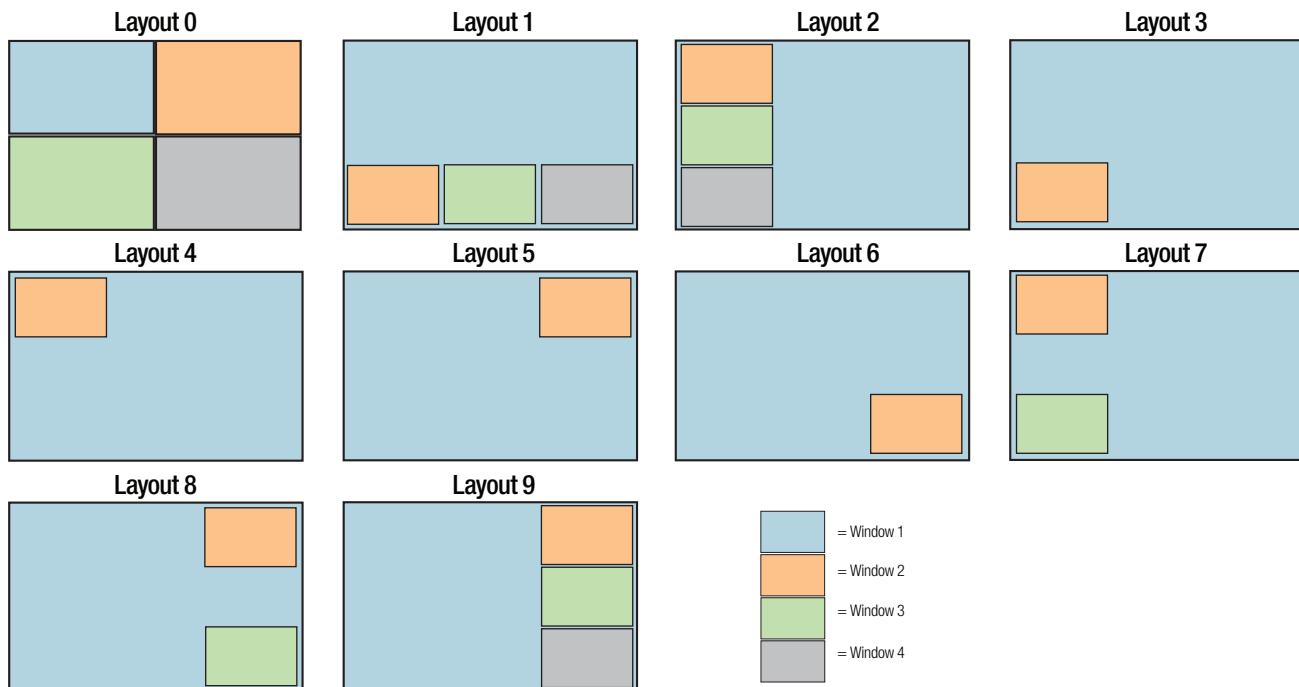
## Multi-View Mode

The following shows how to activate the 'Multi-View' mode, change screen layouts and change source input selection.

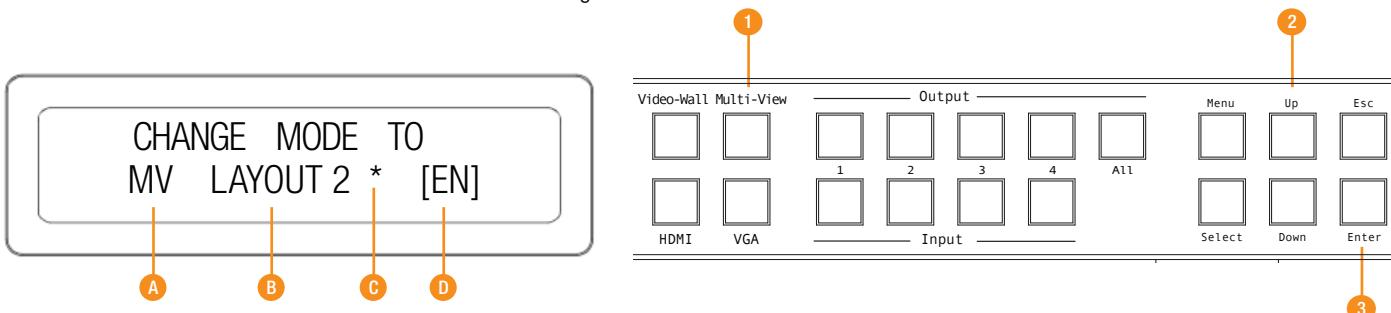
When in Multi-View mode all HDMI outputs will display the same Multi-View selected layout.

### Selecting Multi-View Mode:

1. To select Multi-View mode first press 'Multi-View' button
2. The display will change and the current screen layout configuration will begin to flash. You must select the required Multi-View screen configuration (0-9) using the 'UP' or 'DOWN' buttons. The screen layouts are:



3. Press the 'ENTER' button to finalise the Multi-View configuration.



Understanding the display:

- A. 'MV' shows that the product is in Multi-View mode.
- B. Indicates the screen configuration currently selected.
- C. \* Indicates the current screen configuration shown is active.
- D. [EN] is reminder to press 'ENTER' button to finalise selection.

\* Please note that 'layout 0' is the default configuration

Layout 9 has been designed for use with VGA source inputs that are not standard 16:9 size

# Matrix Front Panel Control

## Multi-View Mode

Changing Source inputs when in Multi-View mode:

The 'OUTPUT' buttons are used to adjust the Window layouts when in Multi-View mode. Output 1 = Window 1, Output 2 = Window 2 etc...

Please see page 10 for Window positions per layout.

To allocate a source input to a particular Window:-

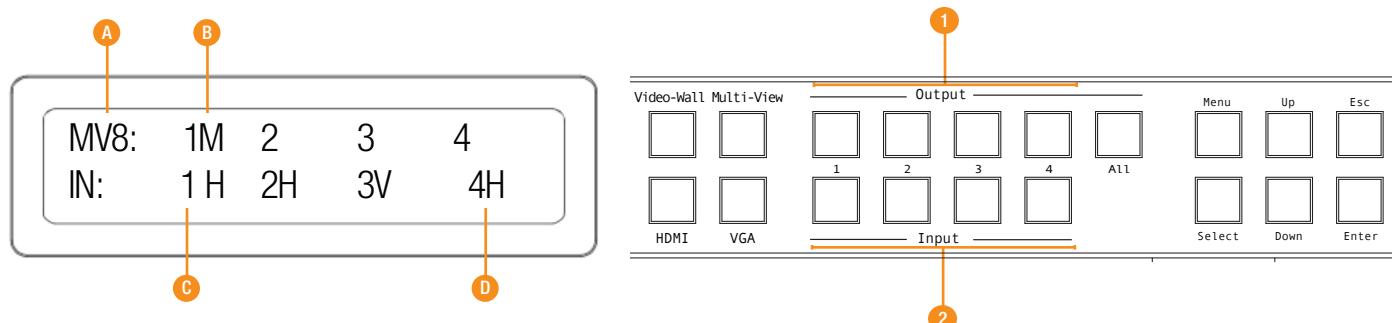
1. Press the desired 'OUTPUT/Window' button (1-4).
2. Press desired source 'INPUT' button .

The display will show both the source input selected and if this is HDMI (H) or VGA (V) video type.

**Note:** The master Window/output is always Window 1. The source allocated for Window 1 cannot be replicated on any other output Window.

The secondary Windows (2-4) can display the same source input as each other should this be required.

Should you try to allocate the same source that is selected for Window 1 to another Window (2-4) an error message will appear.



Understanding the display:

- A. 'MV8' shows that the product is in Multi-View mode and in the above example, layout 8 has been selected.
- B. 'M' indicates that this is the main Window/Output
- C. Indicates the Source input selected
- D. Indicates the video signal type (V or H). H=HDMI, V=VGA

## Changing Source input video types between HDMI and VGA when in Multi-View mode:

See page 7 - 'Video input type selection'

## 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.

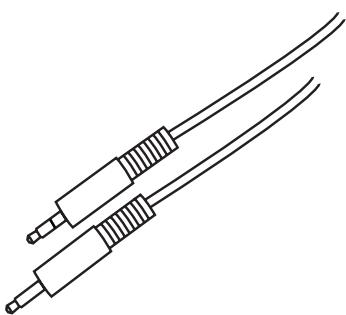
Each ELAN Matrix and HDBaseT receiver is supplied with all necessary IR hardware required and includes:

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

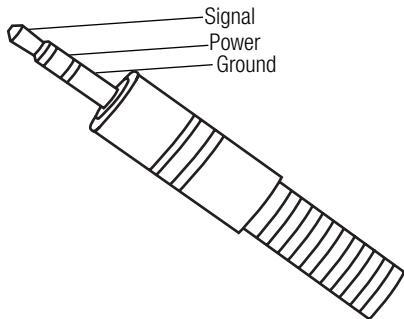
ELAN IR Control cable 3.5mm Mono to 3.5mm Stereo for linking third party IR Receivers to ELAN Platinum, Matrix, and HDBaseT HDMI Series products.

Compatible with 12v IR third party products.

**Note:** Cable is directional as indicated

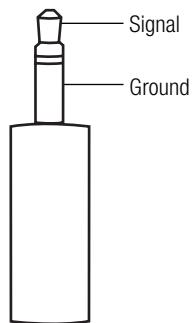


### IR Receiver - Stereo 3.5mm

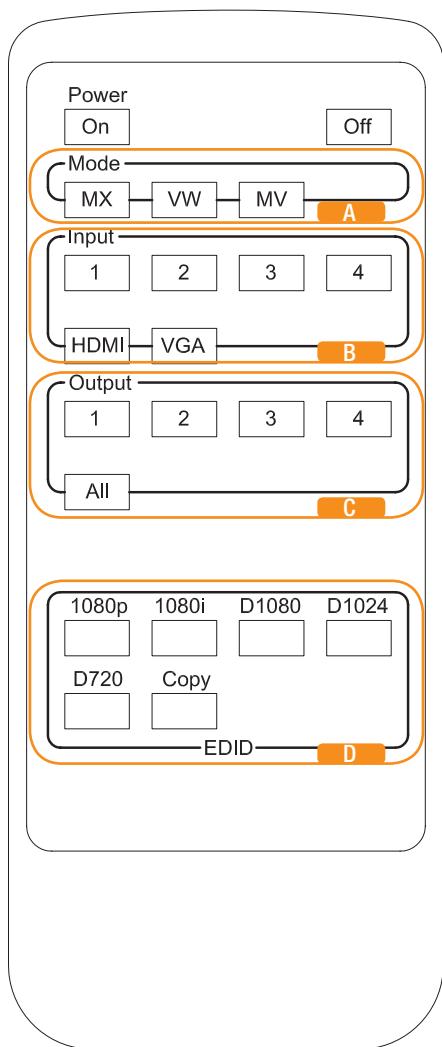


### Infrared 3.5mm Pin-Out

IR Emitter - Mono 3.5mm



# Infrared Remote Control



## MODE SELECTION

- A** Switches between Matrix modes:  
 MX - Matrix mode  
 VW - Video Wall mode  
 MV - Multi-View mode

## HDMI/VGA INPUT TYPE SELECTION

- B** Inputs 1-4 can be assigned as EITHER HDMI or VGA video. This selection can be achieved for each input.  
 HDMI selection - Press an input button followed by the HDMI button.  
 VGA selection - Press an input button followed by the VGA button.

## OUTPUT AND INPUT SELECTION

- C** 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 (C) 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).

## EDID SET UP

The EL-4KM-VW44 provides a comprehensive range of EDID settings. Below are three examples of how to deploy the desired EDID setting when using the supplied remote.

- Fix EDID to an Input or ALL inputs:** Press the desired video resolution button (1080i / 1080p etc), then select the source input you want this EDID information allocated to by pressing the INPUT 1 – 4 or the ALL button.
- 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.
- 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 selecting INPUT 1-4 or the ALL button

## EDID Control

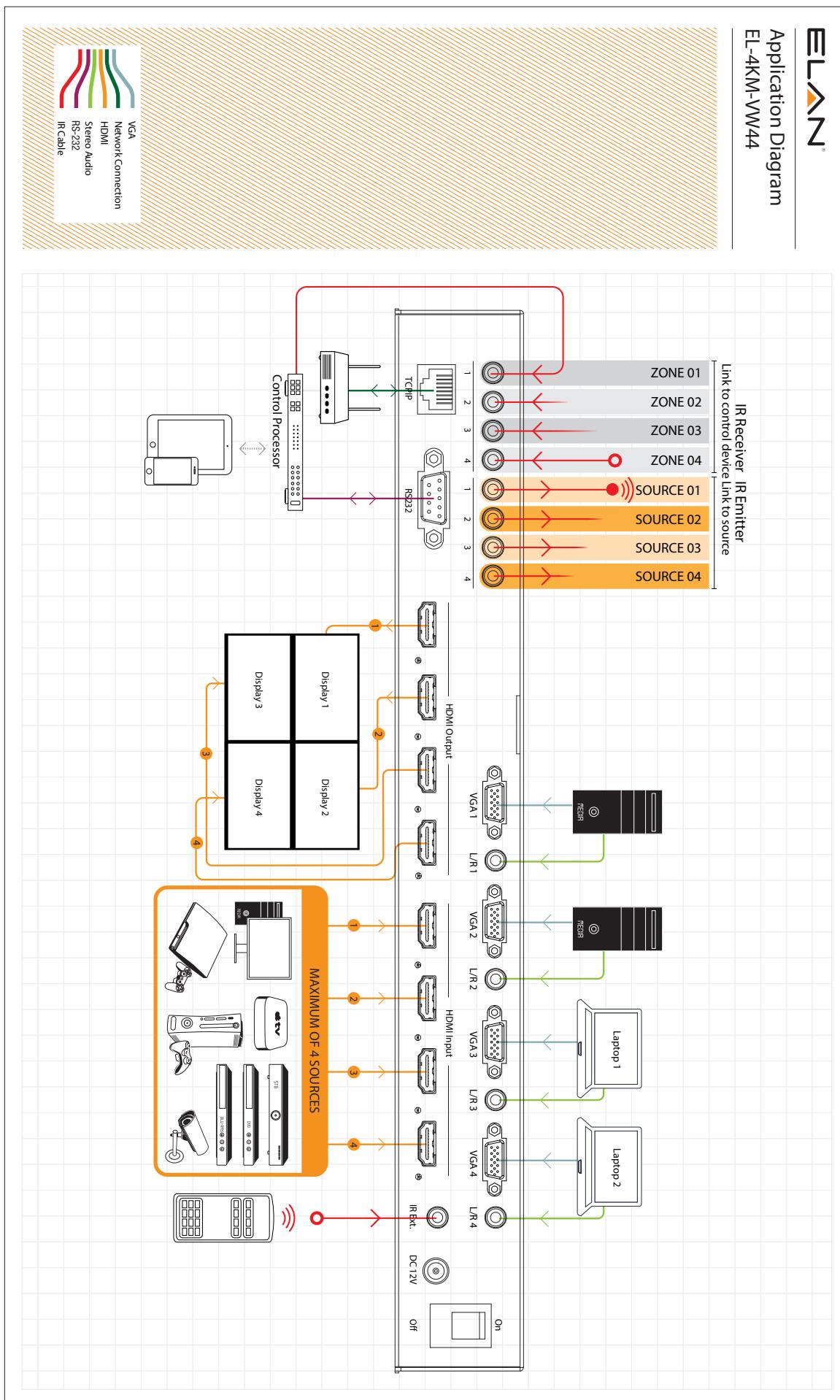
EDID (Extended Display Identification Data) is a data structure that is used between a display and a source. This data is used by the source to find out what audio and video resolutions are supported by the display then from this information the source will discover what the best audio and video resolutions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

- 1 Via the Web GUI
- 2 Using Matrix Front Panel Buttons (For further details see page 6)
- 3 Using Supplied ELAN Matrix IR Remote Control (For further details see page 13)



## Specifications

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

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

**Audio Input Connections:** 4x Analogue audio 3.5mm stereo Jack

**RS-232 serial port:** DB-9, female

**TCP/IP Control:** RJ45, female

**IR Input ports:** 5 x 5v 3.5mm stereo jack

**IR Output ports:** 4 x 5v 3.5mm mono jack

**Mounting kit included**

**Casing Dimensions (W x H x D):** 440mm x 45mm x 180mm

**Dimensions including connections (W x H x D):** 440mm x 44mm x 187mm

**Shipping Weight:** 4.0kg

**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:** 12V/3A DC

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## Package Contents:

- 1x EL-4KM-VW44
  - 1x 12V/3A DC power supply (Type A, C, G & I Adaptors included)
  - 1x Remote control  
Remote Includes CR2025 battery
  - 1x Mounting kit
  - 4 x 5v-to-12v IR converter cables
  - 1 x User manual
- 

## Maintenance

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

## RS-232 and Telnet Commands

The ELAN EL-4KM-VW44 can be controlled via serial and TCP/IP. The following pages list all available serial commands for the EL-4KM-VW44 Matrix. Details of RS-232 pin assignment can be found on page 5.

### Commonly used Serial commands:

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

<b>STATUS</b>	Status will give feedback on Matrix such as zones on, type of connection etc
<b>PON</b>	Power on
<b>POFF</b>	Power off
<b>OUTxxON</b>	(xx is the zone number you wish to turn on) Example:- OUT01ON (This would turn output one back on)
<b>OUTxxFRyy</b>	(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 0D (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

## RS-232 and Telnet Commands (Continued)

RS-232 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
IRON/OFF	Set System IR Control On Or Off
KEYON/OFF	Set System KEY Control On Or Off
DBGON/OFF	Set Debug Mode On Or Off
BEEPON/OFF	Set Onboard Beep On Or Off
RESET RESET ALL	Reset System To Default Setting (Should Type "Yes" To Confirm, "No" To Discard) Reset System And Network To Default Setting
OUTxxON/OFF	Set OUTPUT:xx On Or Off xx=00: Select All OUTPUT Ports xx=[01...04]: Select One OUTPUT Port
OUTxxFRyy	Set OUTPUT:xx From INPUT:yy xx=00: Select All OUTPUT Ports xx=[01...04]: Select One OUTPUT Port yy=[01...04]: Select One INPUT Port
EDIDxxCPyy	Copy EDID from output (yy) to input (xx) Both yy & xx can be set individually (01-08) or as ALL (00)
EDIDxxDFzz	Set Input:xx EDID To Default EDID:zz zz=00: HDMI 1080p@60Hz, Audio 2CH PCM zz=01: HDMI 1080i@60Hz, Audio 2CH PCM zz=02: DVI 1920x1080@60Hz, Audio None zz=03: DVI 1280x1024@60Hz, Audio None zz=04: DVI 1280x720@60Hz, Audio None zz=05: User EDID 1 zz=06: User EDID 2 zz=07: GUI Download EDID
OUTMODEmm	Set Output mode: mm = MX (matrix) mm = MV (multi-view) mm = VW (video wall) mm = MV01, MV02 etc (multi-view layout 1, layout 2 etc) mm = MV01, MV02 etc (multi-view layout 1, layout 2 etc) mm = VW22 (video wall 2x2), VW41 (video wall 4x1), VW14 (video wall 1x4 )
OUTMVFRyy	Set Multi-View Main window (window 1) from input yy=[01...04]: Select One INPUT Port
OUTVWFRyy	Set Video Wall Output from input yy (01-04)
OUTxxVCLbb OUTxxVCRbb OUTxxVCTbb OUTxxVCBbb	Pixel shift when in Video Wall mode xx = Output port (01-04 or 00 for all outputs) VCL = Left border VCR = Right border VCT = Top border VCB = Bottom border bb = Pixel shift (00-100)
INxxFRyy	Set input video type to HDMI or VGA xx = Input port (01-04 or 00 for all inputs) yy = HDMI (from HDMI signal) yy = VGA (from VGA signal)
MVAUDaa	Multi-View audio output from input aa aa = 01-04 (inputs) aa = 00 (audio will follow output/window 1)

## Infrared Commands

4X4 MATRIX PRODUCTS	NEC IR: CUSTOMER CODE 1898	HEX IR
POWER	14	0000 0069 0000 002a 0150 00a8 0015 0015 0015 0015 0015 0015 003f 0015 003f 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 05d3
POWER OFF	46	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0041 0016 0041 0016 0016 0016 0016 0016 0016 0016 0016 0041 0016 0041 0016 0016 0016 0041 0016 0041 0016 0016 0016 0016 0041 0016 0041 0016 0016 0016 0041 0016 0041 0016 0016 0016 0041 0016 0041 0016 0016 0689
MATRIX MODE	09	0000 0069 0000 002a 0150 00a8 0015 0015 0015 0015 0015 0015 003f 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 05d3
VIDEO-WALL MODE	1d	0000 0069 0000 002a 0150 00a8 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 05d3
MULTI-VIEW MODE	1f	0000 0069 0000 002a 0150 00a8 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 05d3
INPUT 1	19	0000 0069 0000 002a 0150 00a8 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 05d3
INPUT 2	1b	0000 0069 0000 002a 0150 00a8 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 05d3
INPUT 3	11	0000 0069 0000 002a 0150 00a8 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 05d3
INPUT 4	15	0000 0069 0000 002a 0150 00a8 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 05d3
HDMI SOURCE SELECTION	17	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 0689
VGA SOURCE SELECTION	12	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0689
OUTPUT 1	50	0000 0069 0000 002a 0150 00a8 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 05d3
OUTPUT 2	55	0000 0069 0000 002a 0150 00a8 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 003f 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 0015 05d3

# Infrared Command

## Web Browser Interface

The ELAN EL-4KM-VW44 matrix unit can be both controlled and configured using the in-built web-server.

The EL-4KM-VW44 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.



**Notes**

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**main:**

1 (800) 472-5555 - US  
1 (707) 283-5900 - International  
1 (707) 283-5901 - Fax

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