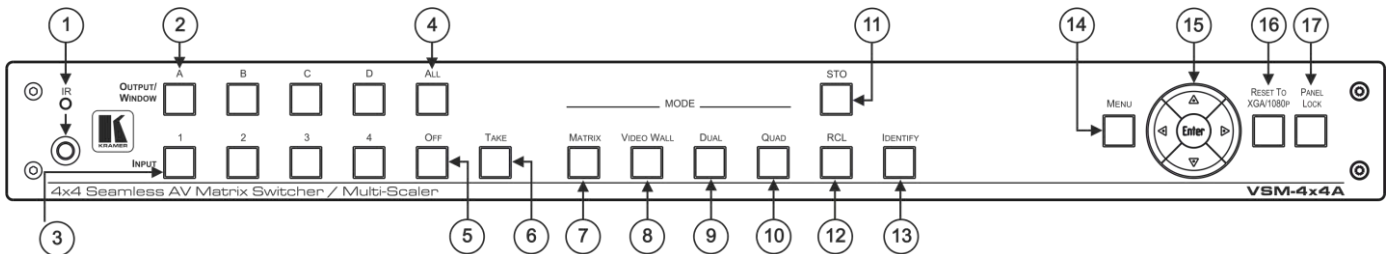# KRAMER

VSM-4x4A Quick Start Guide

This guide helps you install and use your **VSM-4x4A** for the first time.

Go to www.kramerav.com/downloads/VSM-4x4A to download the latest user manual and check if firmware upgrades are available.

## Step 1: Check what's in the box

☑ **VSM-4x4A** 4x4 Seamless AV Matrix Switcher/Multi-Scaler

☑ IR remote control transmitter with batteries

☑ 1 Set of rack ears

☑ 1 Power cord

☑ 4 Rubber feet

☑ 1 Quick start guide

Step 2: Get to know your VSM-4x4A

| #	Feature		Function
1	IR LED		Lights when the unit accepts IR remote commands
	IR Receiver		Receives signals from the remote control transmitter
2	OUTPUT/WINDOW Selector Buttons		MATRIX mode: select the output to which the input is switched (A, B, C or D) VIDEO WALL mode: not used DUAL mode: select one of the two DUAL windows: A or B for DUAL A; C or D for DUAL B QUAD mode: not used
3	INPUT Selector Buttons		Press to select an HDMI input (from 1 to 4) to switch to the output
4	ALL Button		Press ALL followed by an INPUT button to connect that input to all the outputs (not available for the video wall mode)
5	OFF Button		Press after pressing an output button to disconnect the selected output from the inputs. To disconnect all the outputs, press ALL followed by OFF
6	TAKE Button		Press to toggle between the Confirm mode (when in the Confirm mode, the TAKE button lights) and the At Once mode. When in TAKE mode, front panel buttons actions are implemented after pressing the TAKE button
7	MODE Buttons	MATRIX	Press to operate the system as a matrix switcher
8		VIDEO WALL	Press to operate as a 2x2 or 1x4 video wall
9		DUAL	Press to operate as a 4x2 switcher with PIP capabilities
10		QUAD	Press to display all four inputs on each of the outputs
11	STO Button		Press to store a configuration
12	RCL Button		Press to recall a configuration
13	IDENTIFY Button		Press to indicate on each output, which input is displayed on the output. The display time is set via the OSD menu
14	MENU		Press to access the OSD menu, exit the OSD menu and, when in the OSD menu, move to the previous level in the OSD screen

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#	Feature		Function
15	Navigation Buttons	ENTER	Press to access sub-menu items and select from several settings
		◄	Press to decrease numerical values or select from several definitions
		▲	Press to move up the menu list values
		►	Press to increase numerical values or select from several definitions
		▼	Press to move down the menu list
16	RESET TO XGA/1080p Button		Press and hold for about 4 seconds to toggle resetting the video resolution to XGA or 1080p
17	PANEL LOCK Button		Press and hold for about 2 seconds to lock/unlock the front panel buttons
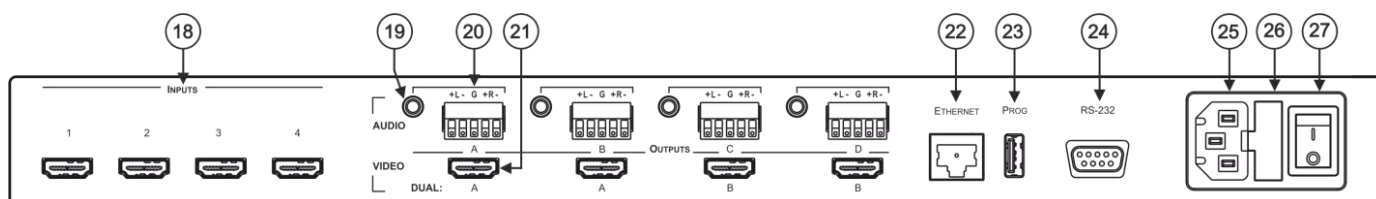
#	Feature	Function
18	INPUT HDMI Connectors	Connect to the HDMI sources (from 1 to 4)
19	AUDIO OUTPUT A 3.5mm Mini Jack	Connect to an unbalanced audio acceptor (from A to D)
20	AUDIO OUTPUT 5-pin Terminal Block Connector	Connect to a balanced audio acceptor (from A to D)
21	OUTPUT HDMI Connectors	Connect to the HDMI acceptors (from A to D); DUAL: when in the dual operation mode, A, A and B, B
22	ETHERNET Connector	Connects to the PC or other Serial Controller through computer networking
23	PROG USB Connector	Connect to upgrade the unit
24	RS-232 9-pin D-sub Port	Connect to the PC or a remote controller
25	Mains Socket	Connect the mains power cord
26	Mains Fuse Holder	Fuse for protecting the device
27	Power Switch	Switch for turning the unit ON or OFF

Step 3: Install the VSM-4x4A

To rack mount the machine attach both ear brackets to the machine (by removing the three screws from each side of the machine and replacing those screws through the ear brackets) or place the machine on a table.
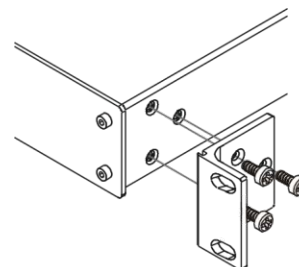

Step 4: Connect one of the four operation modes

Always switch OFF the power on each device before connecting it to your **VSM-4x4A**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the **VSM-4x4A**.

The **VSM-4x4A** is a four-in-one-box device and can operate as a matrix switcher, video wall, dual switcher or quad switcher.

Each of these modes includes several setup options as follows.

| Mode	Optional Setups
MATRIX	**Seamless Matrix** – 4x4 matrix switcher. The same output resolution is set for all the outputs and video switching transitions are seamless (zero-time video cuts). **Independent Matrix** – 4x4 matrix switcher. Each output resolution is set independently and video switching transitions are done via a clean, fade-through-black mechanism.
VIDEO WALL	**2x2** – The output is displayed on a set of 4 monitors tiled in a 2x2 setting to form a large display. Each output shows one quarter of the image. **1x4** – The output is displayed on a set of 4 monitors tiled in a 1x4 (1 column x 4 rows). The image can be cropped and positioned as desired.
DUAL	4x2 switcher that outputs 2 identical A outputs and 2 identical B outputs. **POP** (side-by-side) – Each A and B type outputs shows 2 images side-by-side (left and right). **PiP** (picture-in-picture) – Each A and B type outputs shows 2 images one over the other (main and pip).
QUAD	Any four inputs on one screen for each of the four outputs. Each quarter of a screen shows a selected input.

MATRIX Mode

VIDEO WALL Mode

A: top left   B: top right
C: bottom left   D: bottom right
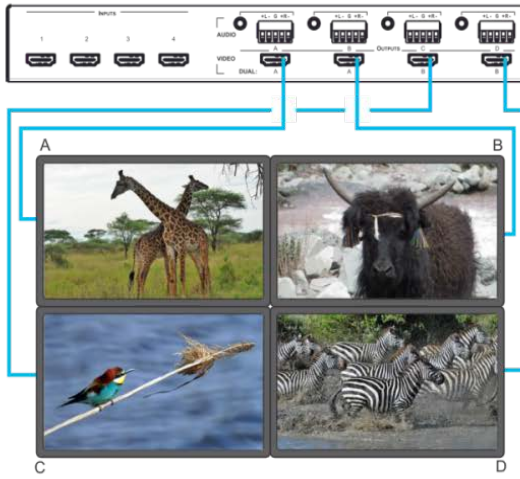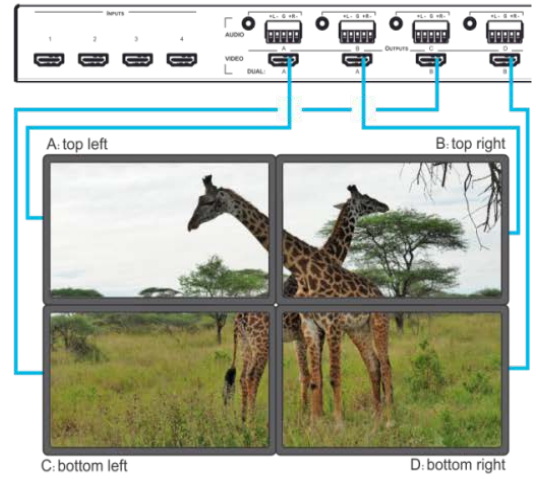
DUAL Mode
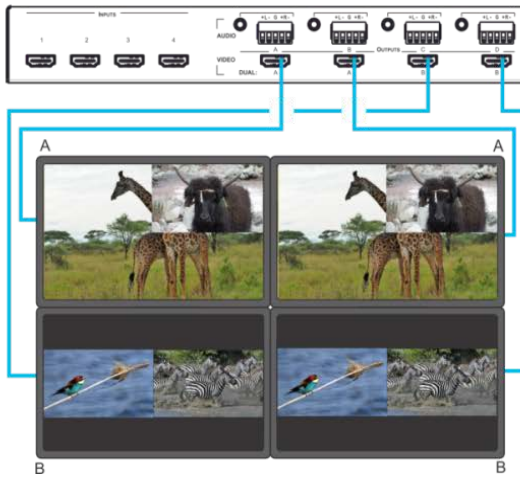
QUAD Mode
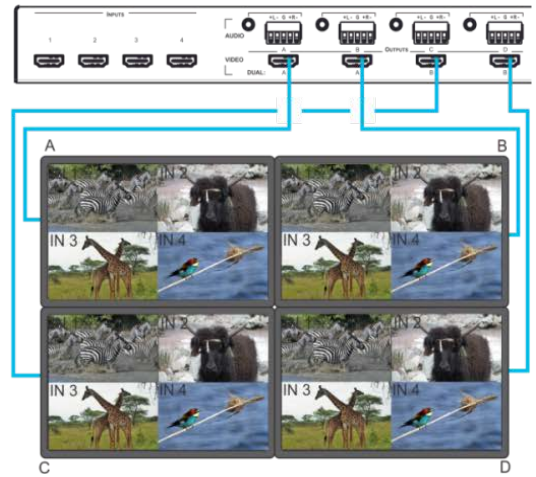
RJ-45 Pinout:

For the Ethernet and HDBaseT connectors, see the proper wiring diagram below
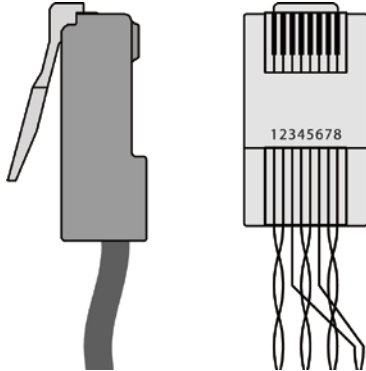
PIN EIA /TIA 568B	
PIN	
1	Orange / White
2	Orange
3	Green / White
4	Blue
5	Blue / White
6	Green
7	Brown / White
8	Brown

Connect the audio output:

To a balanced stereo audio acceptor

+L - G +R-
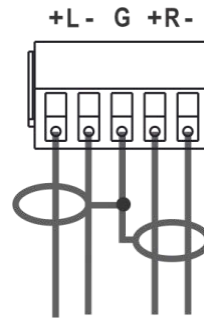
To an unbalanced stereo audio acceptor

+L - G +R-
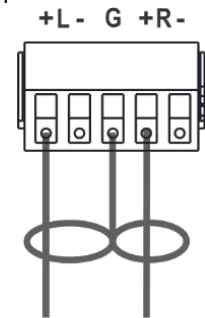
Step 5: Connect the power

Connect AC power to the rear of the **VSM-4x4A**, switch on its power and then switch on the power on each device.

Step 6: Set operation parameters via OSD menu

Enter the OSD menu via the MENU button on the front panel or the IR remote control transmitter. Select a menu item and set parameters as required. By default, the output resolution is set to Native, the **VSM-4x4A** is triggered to read the EDID of OUTPUT A and change the output resolution value according to the native resolution of the display.

If you cannot see any images, verify that the display, TV, or projector is in good working order and is connected to the **VSM-4x4A**. If you still do not see an image, press and hold the RESET TO XGA/1080p button for about 4 seconds to reset the outputs to XGA or 1080p resolution.

Menu	Function
Mode	**Set the operation mode**: matrix switcher (seamless or independent), video wall (2x2 or 1x4), Dual (POP or PIP) or Quad mode.
Picture	**Set the picture parameters per operation mode (contrast, brightness saturation and hue)**: matrix mode (same for all outputs), video wall (separate for each output), DUAL (separate for left (main) and right (PIP), QUAD (separate for each QUAD).
Output	**Set the output parameters**: resolution, aspect ratio, border color, input and output labels, bezel correction, and so on.
EDID	**Manage EDID**: per video input as well as audio EDID.
Source	**Set the input source parameters**: matrix mode (any input to any output), video wall (one input to all outputs), DUAL (an input for for left (main) and an input for right (PIP), QUAD (any input for each QUAD).
Recall/ Store	**Store and recall setups**: store/recall up to 4 setups for each operation mode.
HDCP	**Set the HDCP**: for each input and each output.
Other settings: set the power-save mode, the output audio level, the OSD definitions and Ethernet parameters; perform reset to factory default values and view device information.	

Step 7: Operate via the front panel buttons, Web pages and via the:

IR remote controller:

RS-232 and Ethernet:

RS-232			
Protocol 3000			
Baud Rate:	115,200	Stop Bits:	1
Data Bits:	8	Parity:	None
TCP/IP Parameters			
To reset the IP settings to the factory reset values go to : Menu-> Factory-> RESET->Change the option to YES and press Enter			
IP Address:	192.168.1.39	TCP Port #:	Not supported
Subnet mask:	255.255.255.0	Default UDP Port #:	50000
Default gateway:	192.168.1.254	Maximum UDP Ports:	4
Full Factory Reset			
OSD	Go to : Menu-> FACTORY DEFAULT -> Change the option to YES and press Enter		
P3000	Use "FACTORY" command		
Front panel buttons	Press the MENU Button while plugging the power to reset the machine		
RS-232/Ethernet (UDP) Command Protocol			
Command Format:			ASCII
Example (Route the video from the HDMI2 input to the HDMI A output port in the Matrix mode):			#ROUTE 0,1,2<cr>

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