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VP-429H2 Quick Start Guide
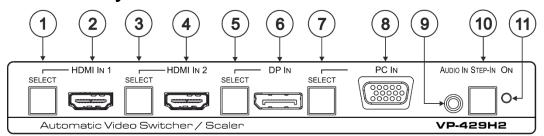
This guide helps you install and use your **VP-429H2** for the first time.

Go to www.kramerav.com/downloads/VP-429H2 to download the latest user manual and check if firmware upgrades are available.

Step 1: Check what's in the box

☑ **VP-429H2** Automatic Video Switcher/Scaler   ☑ 1 Bracket set   ☑ 1 Quick start guide

☑ 1 Power adapter and cord   ☑ 4 Rubber feet

Step 2: Get to know your VP-429H2

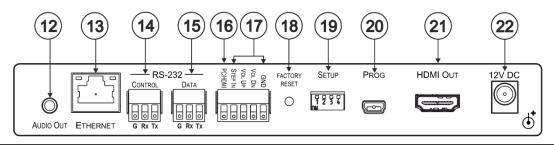| #	Feature	Function
1	HDMI™ IN 1 SELECT Button	Press to select the HDMI IN 1 input. When HDMI IN 1 is selected, the button lights and indicates the selected audio: Red – External audio from the analog Audio IN is selected. Green – Embedded audio from HDMI IN 1 is selected.
2	HDMI™ IN 1 Connector	Connect to an HDMI source.
3	HDMI™ IN 2 SELECT Button	Press to select the HDMI IN 2 input. When HDMI IN 2 is selected, the button lights and indicates the selected audio: Red – External audio from the analog Audio IN is selected. Green – Embedded audio from HDMI IN 2 is selected.
4	HDMI™ IN 2 Connector	Connect to an HDMI source.
ⓘ	Press and hold HDMI IN 1 and HDMI IN 2 SELECT buttons simultaneously for a few seconds to reset the output resolution to 1080p.	
5	DP IN SELECT Button	Press to select the DP input. When DP is selected, the button lights and indicates the selected audio: Red – External audio from the analog Audio IN is selected. Green – Embedded audio from DP IN is selected.
6	DP IN DisplayPort Connector	Connect to a DisplayPort source.
7	PC IN SELECT Button	Press to select the PC IN input. When PC IN is selected, the button lights red. Press and hold PC IN SELECT button for a few seconds to auto-adjust the VGA signal.
8	PC IN 15-pin HD Connector	Connect to the VGA source.
9	AUDIO IN 3.5mm Mini Jack	Connects to an unbalanced stereo audio source.
10	STEP-IN Button	Press to take control of the input that this device is connected to on a compatible switcher.
11	ON LED	Lights green when the device is powered on.

The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

#	Feature	Function
12	AUDIO OUT 3.5mm Mini Jack	Connect to the unbalanced stereo audio acceptor (for example, active speakers).
13	ETHERNET RJ-45 Connector	Connect to the LAN via a PC controller.
14	RS-232 CONTROL 3-pin Terminal Block	Connect to a serial controller or PC to control the device.
15	RS-232 DATA 3-pin Terminal Block	Connect to the RS-232 port of the acceptor (for example, a projector). The **VP-429H2** sends a predefined command (for example, ON or OFF) to the acceptor when triggered to do so. The triggers and specific commands are configured via the Control Settings web page.
16	PC/HDMI Remote Switch Terminal Block	Connect to a remote switch to cycle through the inputs. Each press cycles through the inputs HDMI IN 1 → HDMI IN 2 → DP IN → PC IN or according to the cycle specified in the Video & Audio Settings web page.
17	Remote Contact-closure 4-pin Terminal Block	Connect to remote momentary switches to control step-in and audio volume.
18	FACTORY RESET Recessed Button	Short press to reboot, long press to reset the device to factory default parameters.
19	SETUP 4-way DIP-switch	Switches for setting the video and audio input behavior.
20	PROG Mini USB Connector	For firmware upgrade.
21	HDMI OUT Connector	Connect to an HDMI acceptor.
22	12V DC Connector	12V DC connector for powering the unit.

Step 3: Mount VP-429H2

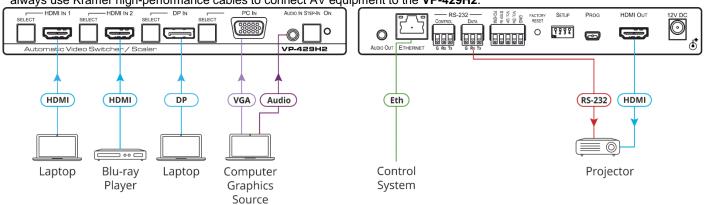Install **VP-429H2** using one of the following methods:

- Attach the rubber feet and place the unit on a flat surface.
- Fasten a bracket (included) on each side of the unit and attach it to a flat surface (see www.kramerav.com/downloads/VP-429H2).
- Mount the unit in a rack using the recommended rack adapter (see www.kramerav.com/product/VP-429H2).

- Ensure that the environment (e.g., maximum ambient temperature & air flow) is compatible for the device.
- Avoid uneven mechanical loading.
- Appropriate consideration of equipment nameplate ratings should be used for avoiding overloading of the circuits.
- Reliable earthing of rack-mounted equipment should be maintained.

Step 4: Connect the inputs and outputs

Always switch OFF the power on each device before connecting it to your **VP-429H2**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the **VP-429H2**.

DIP-Switch Settings

DIP-switches 1 to 4 are set to OFF (up) by default.

SETUP

DIP 1	DIP 2	Video Input Selection Method
OFF	OFF	Last connected switching mode: The last physically-connected input has priority.
OFF	ON	Priority switching mode: When the input sync signal is lost, the input with a live signal and next in priority is selected automatically (as set in the Video & Audio Settings web page)
ON	OFF	Manual input selection
ON	ON	Manual input selection

DIP 3	DIP 4	Audio Input Selection Method (for HDMI and DP)
OFF	OFF	Automatic audio selection: If embedded audio is detected, use it as the audio source. If embedded audio is not detected, use the analog audio input as the audio source.
OFF	ON	N/A
ON	OFF	Use the embedded audio as the audio source
ON	ON	Use the analog audio input as the audio source

For optimum range and performance use the recommended Kramer cables available at www.kramerav.com/product/VP-429H2.

Step 5: Connect the power

Connect the 12V DC power adapter to the **VP-429H2** and plug the adapter into the mains.

Safety Instructions (See www.kramerav.com for updated safety information)
Caution:
- For products with relay terminals and GPI\O ports, please refer to the permitted rating for an external connection, located next to the terminal or in the User Manual.
- There are no operator serviceable parts inside the unit.

Warning:
- Use only the power cord that is supplied with the unit.
- Disconnect the power and unplug the unit from the wall before installing.

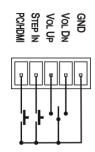# Step 6: Operate the VP-429H2

Operate **VP-429H2** via:

- Front panel buttons
- Remote control switches
- Embedded web pages via the Ethernet
- Remotely, by RS-232 serial commands transmitted by a touch screen system, PC, or other serial controller

RS-232 Control / Protocol 3000			
Baud Rate:	115,200	Parity:	None
Data Bits:	8	Command Format:	ASCII
Stop Bits:	1		
Example: (Mute the Video on the HDMI output): #VMUTE 1,0<CR>			
Default Ethernet Parameters			
IP Address:	192.168.1.39	Gateway Address:	192.168.1.1
Subnet mask:	255.255.0.0	TCP Port #:	5000
Reset			
Output Resolution (Front Panel Buttons):	Press and hold HDMI IN 1 and HDMI IN 2 SELECT buttons simultaneously for a few seconds to reset the output resolution to 1080p.		
Factory Reset (Rear Panel Button):	Short press to reboot, long press to reset the device to factory default parameters.		
Authentication			
User/Password:	Admin/Admin		

Use the Remote Control Switches to remotely select an input and activate an input via STEP-IN button

Momentarily connect the desired pin to the GND pin to perform the following functions:

Pin Name	Function
PC/HDMI	Press to cycle through the inputs.
STEP IN	Activate the step-in.
VOL UP	Increase the volume.
VOL DN	Decrease the volume.
GND	Connect to the common side of the switches.

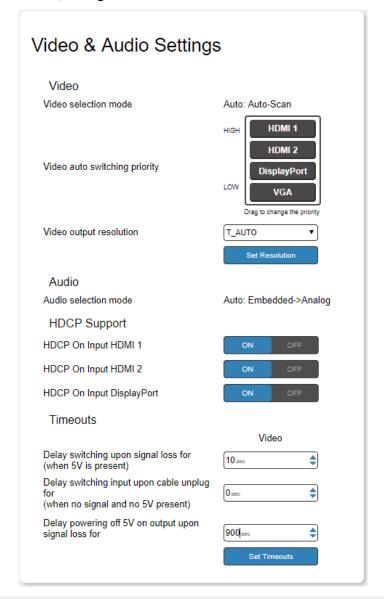Use the embedded web pages to set the device patrameters, manage the EDID and:

Define video switching priorities

On the SETUP DIP-switches, set video selection mode to Priority (Auto-Scan):

- Set DIP-switch 1 to OFF
- Set DIP-switch 2 to ON.

In the Video & Audio Settings web page:

- Drag and drop input buttons to set to the desired order.

Video & Audio Settings

Video

Video selection mode	Auto: Auto-Scan
Video auto switching priority	HIGH: HDMI 1 / HDMI 2 / DisplayPort / LOW: VGA

Drag to change the priority

Video output resolution	T_AUTO ▼

Set Resolution

Audio

Audio selection mode	Auto: Embedded->Analog

HDCP Support

HDCP On Input HDMI 1	ON / OFF
HDCP On Input HDMI 2	ON / OFF
HDCP On Input DisplayPort	ON / OFF

Timeouts

	Video
Delay switching upon signal loss for (when 5V is present)	10 sec
Delay switching input upon cable unplug for (when no signal and no 5V present)	0 sec
Delay powering off 5V on output upon signal loss for	900 sec

Set Timeouts

Set DATA port triggers and ON/OFF commands:

- Set DATA port RS-232 configuration.
- Define the triggers.
- Type the ON/OFF commands (taken from the projector commands protocol, for example).
- Check the Enable boxes.

DATA Port Settings

RS-232 configuration:

Parity	None ▼
Data Bits	8 ▼
Flow Control	OFF ▼
Baud Rate	9600 ▼
Stop Bits	1 ▼

Apply

Trigger(ON/OFF) Definitions:

HDMI	● 5V	○ Clock	○ Both
DP	● 5V	○ Clock	○ Both
VGA	● 5V	○ Syncs	○ Both

Command list:

Enable	Trigger	Delay(sec)	Command	FF HEX CR	Description	Save	Delete	Test
☐	ON	0						
☐	OFF	0						