

# 4x1 HDMI® Switch with Quad-View and KVM USB Control



**Vanco Part Number  
EVSW41KVM**

**4x1 HDMI® Switch  
with Quad-View and  
KVM USB Control**

**EVOLUTION**  
BY  **VANCO**  
ADVANCING DIGITAL CONNECTIVITY

**www.vanco1.com • 800.626.6445**

## DEAR CUSTOMER

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.

This product is 100% inspected and tested in the United States to verify  
HDMI performance parameters.

## WARNING

1. Do not expose this unit to water, moisture, or excessive humidity.
2. Do not install or place this unit in a built-in cabinet, or other confined space without adequate ventilation.
3. To prevent risk of electrical shock or fire hazard, due to overheating do not obstruct unit's ventilation openings.
4. Do not install near any source of heat, including other units that may produce heat.
5. Do not place unit near flames.
6. Only clean unit with a dry cloth.
7. Unplug unit during lightening storms or when not used for an extended period of time. A surge protector is strongly recommended.
8. Protect the power cord from being walked on or pinched, particularly at the plugs.
9. Use unit only with accessories specified by the manufacturer.
10. Refer all servicing to qualified personnel.

## CAUTION

HDMI is a very complex technology requiring continuous authentication of the signal and the same video resolution and audio settings on all electronic equipment in the system. When there are multiple sources and displays, the video resolution and audio setting on all connected units must be adjusted to correspond with that of the display having the lowest video and audio capability.

# INTRODUCTION

The Evolution by Vanco EVSW41KVM HDMI switcher allows four HDMI inputs to be viewed one at a time, or simultaneously on one display. Also features a built in USB switcher, which allows one keyboard and/or mouse to be switched to any of the USB outputs which are paired with the HDMI inputs. In addition, the EVSW41KVM features multi-view, with a quadrant view that displays all four sources in each corner. This allows for four sources with USB control on the same screen without switching sources! Two additional USB 2.0 sharing ports allow additional USB peripherals such as a printer, hard drive, webcam, etc. to be shared amongst all the sources. Supports high definition resolutions up to 1080p/60Hz. Fully compatible with a wide variety of Windows and Mac OS operating systems. A perfect solution to connect multiple computers or security NVRs, and control with just one keyboard and/or mouse.

## 4x1 HDMI® Switch with Quad-View and KVM USB Control

### Part # EVSW41KVM

- 4x1 HDMI switcher with Quad-View and USB control
- Supports four HDMI inputs which can be viewed one at a time, or simultaneously in a Quad-View in each corner
- Supports high definition resolutions up to 1080p@60Hz
- Includes built-in USB switcher that pairs with HDMI inputs to control sources with USB control
- Able to control four sources with just one keyboard and/or mouse
- Features two additional USB 2.0 ports to be shared amongst all four sources
- Dimensions: 8.25" W x 6.25" H x 1.75" D

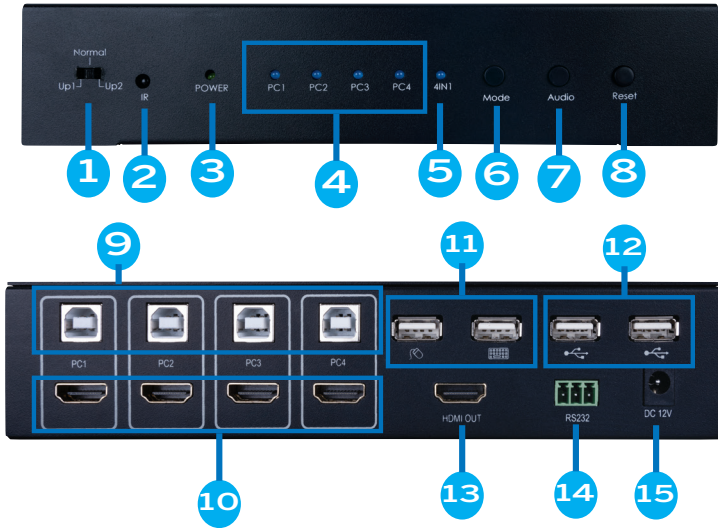
# PACKAGE CONTENTS

- EVSW41KVM 4x1 HDMI Switch
- IR Remote Control
- (2) L-shaped feet
- (6) Installation screws for feet
- Phoenix connector for RS-232 connection
- 12V DC Power Supply
- Product Manual

## SPECIFICATIONS

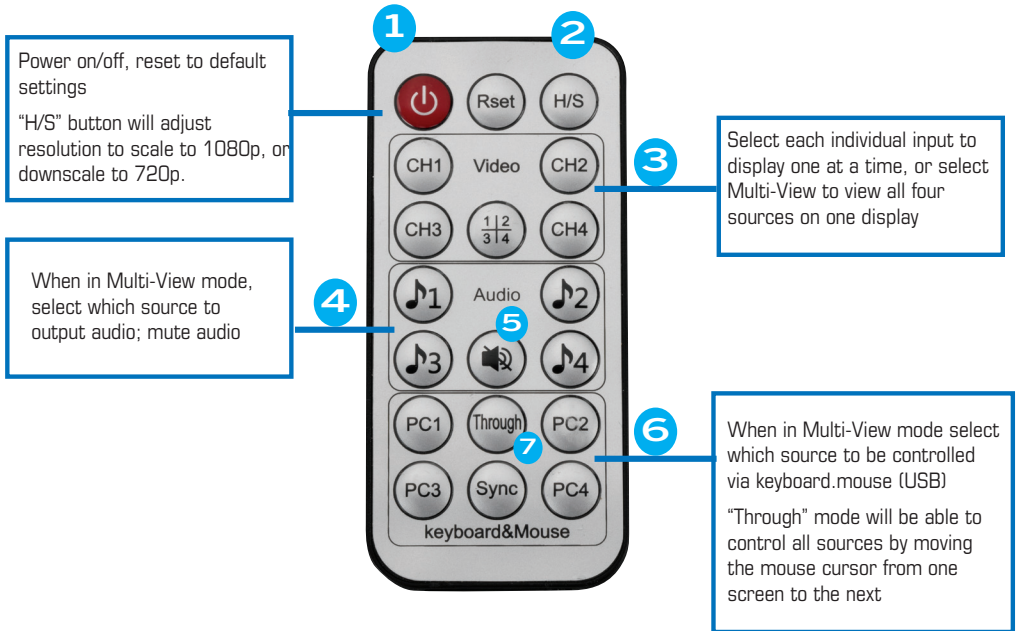
Signal Inputs/Output.....	HDMI 1.3a and USB 2.0
Maximum Single Link Range .....	1920x1080/60Hz
HDMI Input/Output Connector .....	Type A 19 pin
Vertical Frequency Range.....	50/60Hz
Video Amplifier Bandwidth .....	2.25 Gbps
Input Resolution.....	480i60Hz,480p60Hz,576i50Hz,576p50Hz,720p50/ 60Hz,1080i50/60Hz,1080p24/25/30/50/60Hz
Output Resolution .....	720p,1080p
Dimensions .....	8.25" W x 6.25" H x 1.75" D
Weight .....	2.5 lbs
Chassis Material.....	Metal
Color .....	Black
Operating Temperature.....	0- +70 degrees Celsius
Operating Humidity .....	10% to 85 % RH (no condensation)
Storage Temperature .....	-10 - +80 degrees Celsius
Storage Humidity .....	5% to 90 % RH (no condensation)
External Power Supply .....	12V DC@2A
Power Consumption(max) .....	24 W
Main Unit.....	FCC,CE
Power Supply .....	UL,CE,FC C, REACH, ROHS

# PANEL DESCRIPTIONS



1. Update function select switch – reserved for firmware updates  
Normal : Default setting and normal operation mode  
Up\_1 : Upgrade data for MCU\_1 via RS232  
Up\_2 : Upgrade data for MCU\_2 via RS232
2. IR sensor – used to receive IR commands from included remote control
3. POWER LED: Illuminates when unit is powered on
4. Input LED: Indicates which source is selected
5. Multi-View Mode LED: Illuminates when the Quad-View mode is active
6. Mode Button: Press to select source (sequential order)
7. Audio Button: When in Quad-View mode, push to select which audio source to pass-through to display
8. Reset Button: Reset to default settings
9. USB Type B outputs: Connect to each HDMI source (paired up with HDMI port)
10. HDMI inputs: Connect sources such as a PC or security NVR
11. Connect a keyboard and/or mouse
12. Additional USB 2.0 ports to connect additional USB peripherals such as a printer, hard drive, webcam, etc.
13. HDMI output: Connect an HDMI display
14. RS232: Reserved for firmware updates (any available firmware updates will be located under the "Downloads" tab on the product page on [www.vanco1.com](http://www.vanco1.com))
15. DC 12V: Connect the included power supply

## IR REMOTE



1. Power On/Off: Reset to default setting
2. H/S: Adjust the resolution to scale to 1080p or downscale to 720p
3. Select each individual input to display one at a time, or select Multi-View to view all four sources on one display
4. When in Multi-View mode select which source to output audio
5. Mute audio
6. When in Multi-View Mode select which source will be controlled via keyboard/mouse (USB)
7. Through: Control all sources by moving the mouse cursor from one screen to the next

Sync Mode (Through button): With this mode activated, all sources with USB connection can be controlled simply by moving the mouse cursor to the respective screen the source is displaying on. With the mouse cursor on that screen, USB control for keyboard and/or mouse will be active for that source.



# HOT KEY FUNCTIONS AND CONTROL

The "HOTKEY" commands and functions are shortcuts for an easy way to control the functions of the EVSW41KVM directly on the connected keyboard!

<b>Commands and Functions</b>	
<b>Command</b>	<b>Function</b>
<b>Mouse HOTKEY</b>	
[wheel key] + [wheel key]	1.At 4IN1 mode,switch to full screen mode 2.At full screen mode,Switch to 4IN1 mode
<b>Keyboard HOTKEY*</b>	
[*]+[1]	Switch to PC1
[*]+[2]	Switch to PC2
[*]+[3]	Switch to PC3
[*]+[4]	Switch to PC4
[*]+[5]	Switch to 4IN1 Mode
[*]+[0]	At 4IN1 Mode,Keyboard&Mouse switch to Sync Mode***
[*]+[S]	At 4IN1 Mode,Keyboard&Mouse switch to Through Mode
[*]+[F1]	At 4IN1 Mode,Keyboard&Mouse and USB2.0 switch to PC1
[*]+[F2]	At 4IN1 Mode,Keyboard&Mouse and USB2.0 switch to PC2
[*]+[F3]	At 4IN1 Mode,Keyboard&Mouse and USB2.0 switch to PC3
[*]+[F4]	At 4IN1 Mode,Keyboard&Mouse and USB2.0 switch to PC4
[*]+[Page Up]	At 4IN1 Mode,switch the audio from the input sources
[*]+[Page Down]	Switch to next PC



# CONNECTION DIAGRAM



## CONNECT AND OPERATE

1. Connect HDMI source(s) such as a computer or security NVR
2. Connect USB 2.0 Type B cables to the switcher, and then connect to the corresponding sources
3. Connect an HDMI display to the HDMI output on the switcher
4. Connect a keyboard and mouse to the USB 2.0 ports (pictures of each displayed for each USB port)
5. Connect additional USB peripherals such as a printer, hard drive, webcam, etc.
6. Connect the provided power supply, and power on all other components including source(s), display, and USB peripherals
7. Switch between the sources and modes

## TROUBLE-SHOOTING

1. Best results are usually achieved when the source and display resolutions are the same. If resolutions differ, the extenders will try to adjust the signal to match the resolution of the HDTV with the lowest resolution. This will result in a picture with a lower resolution on the other HDTV sets.
2. If you do not get audio and video, access the "setup" menu on the TV to adjust the audio and video settings. If the HDMI control circuit cannot establish a handshake, then there usually will be no audio or video in addition to a blue or black screen with a statement similar to "this protocol not supported" or "weak signal."
3. If the above mentioned messages display, reset the receiver by disconnecting the power supply. You can also disconnect all of the HDMI and power cables, wait 15 minutes for any voltages to decay and then reconnect all of the cables.
4. If you are still encountering issues, attempt the "hot-plug" concept. With all of the HDMI cables disconnected, turn on the source and plug in the HDMI cable into its output, then power up the Vanco unit and plug the HDMI cable into its input, finally turn on the display and plug the HDMI cable from the receiver into it. This activates all of the devices in corresponding order and results in a signal being plugged into a device that is on and will attempt to connect the signal.
5. Most of the major source and display manufacturers employ a proprietary control channel to communicate between devices from the same manufacturer (CEC). Sometimes this can interfere with the HDMI control circuit or the authentication of the signal. Call the manufacturer if you experience this issue. Sometimes a player, an audio/video receiver, or a cable/satellite box may not have the latest software update, usually this can be downloaded from the manufacturer's website.
6. If you have problems with the IR control circuit, make sure that the IR RX pigtail is plugged into extender receiver and pointed at the display, and the IR TX pigtail is attached to the extender sender and pointed at the source.

### SAFETY AND NOTICE

The EVSW41KVM has been tested for conformance to safety regulations and requirements, and has been certified for EVSW41KVM should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit
- Do not attempt to service this unit yourself, except where explained in this manual
- Provide proper ventilation and air circulation and do not use near water
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface
- Use only the power adapter and power cords and connection cables designed for this unit
- Do not use liquid or aerosol cleaners to clean this unit
- Always unplug the power to the device before cleaning

## LIMITED WARRANTY

With the exceptions noted in the next paragraph, Vanco warrants to the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a period of two years from the date of purchase. Should this product, in Vanco's opinion, prove defective within this warranty period, Vanco, at its option, will repair or replace this product without charge. Any defective parts replaced become the property of Vanco. This warranty does not apply to those products which have been damaged due to accident, unauthorized alterations, improper repair, modifications, inadequate maintenance and care, or use in any manner for which the product was not originally intended.

Items integrated into Vanco products that are made by other manufacturers, notably computer hard drives and liquid crystal display panels, are limited to the term of the warranty offered by the respective manufacturers. Such specific warranties are available upon request to Vanco. A surge protector, power conditioner unit, or an uninterruptible power supply must be installed in the electrical circuit to protect against power surges.

If repairs are needed during the warranty period the purchaser will be required to provide a sales receipt/sales invoice or other acceptable proof of purchase to the seller of this equipment. The seller will then contact Vanco regarding warranty repair or replacement.

## TECHNICAL SUPPORT

In case of problems, please contact Vanco Technical Support by dialing 1-800-626-6445. You can also email technical support issues to [techsupport@vanco1.com](mailto:techsupport@vanco1.com).

When calling, please have the Model Number, Serial Number (affixed to the bottom of the unit) and Invoice available for reference during the call.

Please read this Instruction Manual prior to calling or installing this unit, since it will familiarize you with the capabilities of this product and its proper installation.

All active electronic products are 100% inspected and tested to insure highest product quality and trouble-free installation and operation. The testing process utilizes the types of high-definition sources and displays typically installed for entertainment and home theater applications.

For additional information, such as helpful installation videos, etc. please visit [www.vanco1.com](http://www.vanco1.com)

## LIABILITY STATEMENT

Every effort has been made to ensure that this product is free of defects. The manufacturer of this product cannot be held liable for the use of this hardware or any direct or indirect consequential damages arising from its use. It is the responsibility of the user and installer of the hardware to check that it is suitable for their requirements and that it is installed correctly. All rights are reserved. No parts of this manual may be reproduced or transmitted by any form or means electronic or mechanical, including photocopying, recording or by any information storage or retrieval system without the written consent of the publisher.

Manufacturer reserves the right to revise any of its hardware and software following its policy to modify and/or improve its products where necessary or desirable. This statement does not affect the legal rights of the user in any way.



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