

# 1x4 4K HDMI® SPLITTER

with UTP POE Ports and HDMI Pass Through



**1x4 4K HDMI®  
Splitter with UTP PoE  
Ports and HDMI Pass  
Through**

**Part Number:  
EV4K1014**

**EVOLUTION**  
BY   
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 EV4K1014 is an HDMI splitter that allows one HDMI input to be split and sent to up to five displays simultaneously. With four outputs over UTP, and one output over HDMI, the EV4K1014 allows for a local display connected, or to daisy chain additional units to gain more outputs. The EV4K1014 includes four receivers (EV4K1014-RX) as a kit, which are PoE, requiring no power supplies at the display end. Extends 4K@60Hz 4:4:4 or 4K@30Hz 4:2:0 with HDR10 and control up to 98ft/30m or 1080p up to 164ft/50m over a single Cat5e/6 cable. IR accessories are included to allow IR pass through for controlling the source at each UTP display location. For splitting and distributing one single source to multiple displays, while extending over Cat5e/6, the EV4K1014 is a great solution for any application with the ability to expand.

## 1x4 HDMI® Splitter with HDMI Pass Through

### Part # EV4K1014

- Allows a single source to be split and extended to multiple displays
- Transmission Range: Extends 4K@60Hz, 4:4:4 Chroma or 4K@30Hz, 4:2:0 and HDR10 up to 98ft/30m, 4K@24/30Hz, 4:4:4 Chroma up to 164ft/50m, and 1080P@60Hz up to 197ft/60m over a single Cat5e/6 cable
- Features Power over Ethernet (PoE) Technology which transmits power over Cat5e/6, allowing the receivers to be powered without connecting a power supply
- IR accessories included allowing for source control from each UTP display location
- Features Auto EDID for plug and play installation
- HDR10 Compatible
- HDCP 1.4/2.2 compliant
- Slim and compact design
- Pure uncompressed 7.1ch digital audio
- Supports DTS-HD and Dolby TrueHD high bit rate audio
- Dimensions: 8.25" W x 4" H x 1.25" D

## PACKAGE CONTENTS

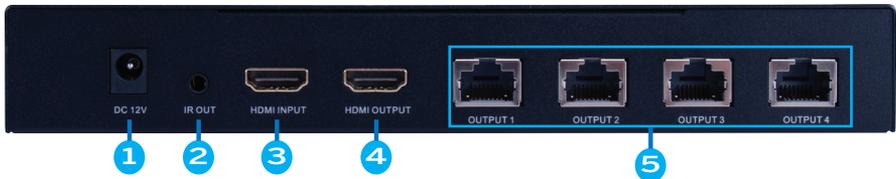
- EV4K1014 4K HDMI 1x4 Splitter
- (4) EV4K1014-RX Receivers
- IR Blaster
- (4) IR Receivers
- 12V/3A Power Supply
- Product Manual

## SPECIFICATIONS

Power Supply .....	12V, 3A
Audio Formats .....	PCM, Dolby True HD and DTS Master
HDMI Interface Standard .....	HDMI 2.0b, HDCP 1.4/2.2
Remote IR .....	20-60kHz wide frequency carrier
ESD Protection .....	Human Body model: +/- 4kv (contact discharge)
Dimensions .....	8.25" W x 4" H x 1.25" D
Weight .....	1.3 lbs
Temperature Range .....	32-140°F/ 0-60°C (while in operation), -4~158°F/ -20~70°C (standby)
Compliance .....	FCC, CE, RoHS

## PANEL DESCRIPTIONS

### Splitter



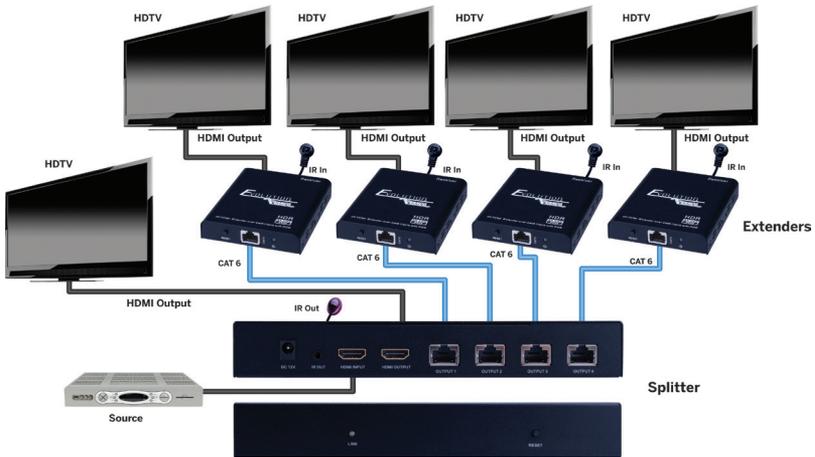
1. Power Supply Port : Connect the provided 12V, 3A power supply
2. IR OUT: Use the provided IR Blaster to be able to control the source remotely from each display location over UTP
3. HDMI INPUT: Connect an HDMI source
4. HDMI OUTPUT: Connect to a local display or an additional splitter to daisy-chain to create more outputs
5. Cat6 OUTPUT: Connect to the provided EV4K1014-RX Receivers over a single Cat5e/6, homerun recommended with no coupling, punch down, or patch panels for best performance; receivers require no power supply as the main splitter and receivers feature PoE

# Receiver



1. Reset Button: Resets connection without having to disconnect cabling or power cycling
2. Cat6 Input: Connect Cat5e/6 to the EV4K1014 Splitter, homerun recommended with no coupling, punch down, or patch panels for best performance; receivers require no power supply as the main splitter and receivers feature PoE
3. Power LED Indicator, indicates there is proper power via PoE from EV4K1014 Splitter
4. Power Supply Port: Optional for redundant power, however no power supplies are required as the main splitter and receivers feature PoE
5. HDMI OUTPUT: Connect an HDMI display
6. IR IN: Use the provided IR Receivers to connect and control the source from the display location(s)

## CONNECTION DIAGRAM



1. Without powering the splitter, connect the HDMI from your source to the HDMI input port
2. Connect the Cat5e/6 cable(s) to the RJ45 Output Ports of the splitter and the HDMI output using an HDMI cable. (We recommend terminating the Cat5e/6 cable(s) using the T568B standard.)
3. Connect the included power supply to power the EV4K1014 main splitter unit
4. Turn on and ensure the displays are receiving the proper source signal

## DYNAMIC EDID MODE

The EV4K1014 Splitter works on dynamic EDID. It will generate a mixture EDID from all of the displays to ensure HDMI source's video format can be displayed on all display devices. Keep in mind, the lowest common resolution will be used if a mixture of different resolution displays are connected.

When a new display is connected to the splitter, the dynamic EDID function will generate a new EDID that will be different than the last EDID information. The HDMI source will output a new format video according to the new EDID information.

## TROUBLE-SHOOTING

<b>Problems</b>	<b>Causes</b>	<b>Solutions</b>
No audio/video signal	The connecting cables may not be connected correctly or it may be broken.	Check whether the cables are connected correctly and in working condition. Swap out cables to rule out bad cabling.
	The display is not compatible with the present output resolution.	Make sure the resolution of the display(s) is compatible with the present resolution; PC or computer sources use VESA resolutions which may cause an issue. test with a standard video resolution source such as Blu-ray player
No HDMI signal output while local HDMI input is in normal working state	The connecting cables may not be connected correctly or it may be broken.	Check whether the cables are connected correctly and in working condition. Swap out cables to rule out bad cabling.
Splash screen in output devices	Poor quality of the connecting cable	Change for another cable of good quality.
Static becomes stronger when connecting the video connectors	Bad grounding	Check the grounding and make sure it is connected well or try re-terminating Cat5e/Cat6 cables. It is recommended to use pre-terminated Cat5e/Cat6 cables when testing.

### SAFETY AND NOTICE

This splitter has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, these splitters 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.

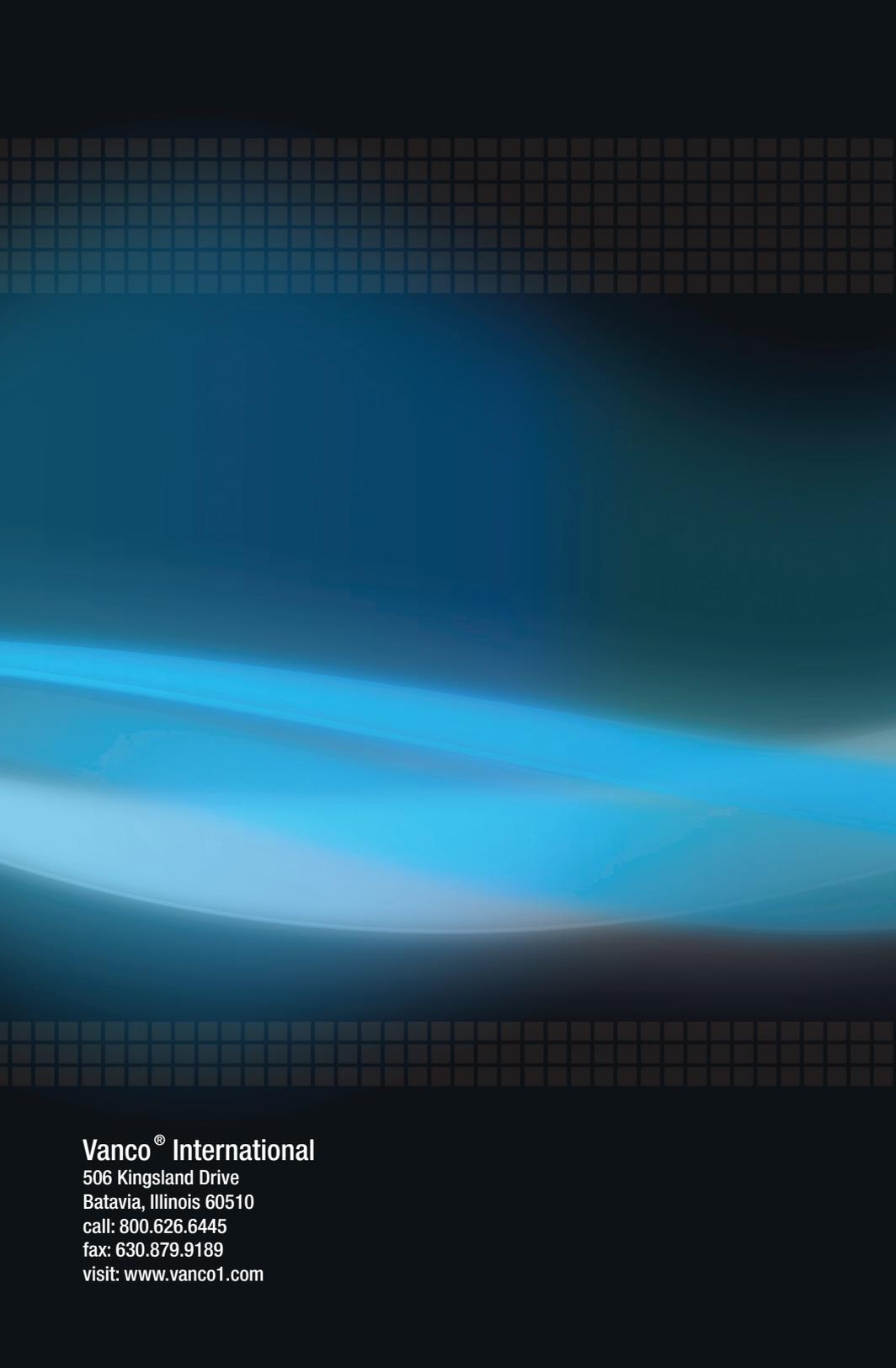
All active electronic products are 100% inspected and tested to insure highest product quality and trouble-free installation and operation. The testing process utilizes the types of high-definition sources and displays typically installed for entertainment and home theater applications.

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.



**Vanco<sup>®</sup> International**

506 Kingsland Drive  
Batavia, Illinois 60510  
call: 800.626.6445  
fax: 630.879.9189  
visit: [www.vanco1.com](http://www.vanco1.com)