

1x7 HDMI® Splitter

over Single Cat5e/6 Cable



**Vanco Part Number:
EVSP1017**

**1X7 HDMI® Splitter
over Single Cat5e/6
Cable**

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 Evolution by Vanco EVSP1017 1x7 HDMI Splitter over Cat5e/6 with IR and PoE capability, splits a single HDMI signal to seven outputs over Cat5e/6, with a loop-out HDMI port, which can be used for a local display, or to cascade to create additional outputs. Compatible with the EVRX2006 receiver (sold separately), which requires no power supply as the EVSP1017 provides PoE (Power over Ethernet). Extends high definition video and audio signals, IR, and power at a distance of up to 164ft/50m over a single Cat5e/6 cable. Includes dynamic EDID management, which can be adjusted to overcome compatibility issues, and has auto-EQ as the unit automatically adjusts for compatibility and gain. Take any source and split the signal to multiple displays that are too far away for an HDMI cable to reach, along with control via IR to control the lone source, creating a perfect and seamless solution for residential or commercial applications.

Note: The compatible receivers (part # EVRX2006, EVWP2006RX) are sold separately, and include an IR RX pigtail for IR for control over UTP.

1x7 HDMI Splitter over Single Cat5e/6 Cable

Part # EVSP1017

- Allows 1 HDMI source to be displayed on up to 7 HDMI displays over a single Cat5e or Cat6 cable
- Transmission Range: Extends 1080p resolutions up to 164ft/50m to receiver units (EVRX2006 or EVWP2006RX sold separately)
- Features Power over Ethernet (PoE) Technology which transmits power over Cat5e/Cat6, allowing the receiver unit (EVRX2006) to be powered from the EVSP1017; requiring no power supply to be connected
- Dynamic or manual EDID management; ability to manually select the best compatible EDID or automatically blend EDID of the 8 connected HDMI sinks
- Additional HDMI output for local display or to connect an additional EVSP1017 to cascade for an expanded distribution system
- Supports HDMI Deep Color and 3D
- Supports multiple audio formats including Dolby True HD, DTS-master, etc.
- Wide band IR system allowing for control of the single source from any of the displays connected
- Wideband IR signal from 20KHz to 60KHz
- HDCP Compliant
- Dimensions: 10.6" W x 1" H x 4.4" D

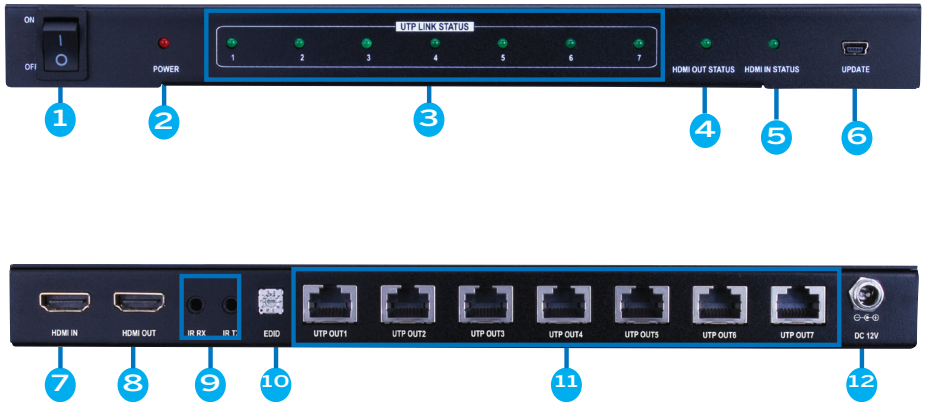
SPECIFICATIONS

Power	Maximum 18W (includes PoE)
Net Weight	1.675 lb.
Video Bandwidth	Maximum TMDS clock frequency 148.5MHZ, 4.95Gbps
Resolution and distance.....	164ft/50m Cat5e/6 @ 1080p 60 24bits
Audio formats	8 channel Support, Supports Dolby Tru HD and DTS master formats
TMDS input signal.....	1.2 volts
DDC input signal.....	5 volts
Indicators	Power-Red, Signal-Green, Link status-Green
HDMI interface standard	HDMI 1.3 standard and HDMI 1.4 3D, HDCP 1.4, EDID
Remote IR.....	20~60KHz wide frequency carrier
Maximum HDMI input cable length.....	≤15m AWG26 cable at maximum video resolution 1080p60
Maximum HDMI output cable length	≤15m AWG26 cable at maximum video resolution 1080p60
ESD level	HBM +/- 4kv (contact discharge)
Temperature Range	0-40 degrees C (Operating mode), -20-60 degrees C (Unit turned off)
Compliance	FCC; CE; RoHS

PACKAGE CONTENTS

- EVSP1017 Splitter
- IR Blaster (TX)
- IR Receiver (RX)
- DC 12V 2A Power Supply
- Product Manual

PANEL DESCRIPTIONS



1. POWER SWITCH: Toggle switch that turns the splitter unit ON or OFF
2. POWER LED: Illuminates when the splitter is connected to power
3. UTP LINK STATUS: Illuminates when the UTP outputs are connected to the EVRX2006 or EVWP2006RX receiver units (sold separately)
4. HDMI OUT STATUS: Illuminates when a display is connected to "HDMI OUT" port and is powered on
5. HDMI IN STATUS: Illuminates when the source is connected and is powered on
6. UPDATE: Firmware update port (available f/w updates will be available on the product page on www.vanco1.com, under the "downloads" tab)
7. HDMI IN: Connect a source such as a Set Top Box, Game Console, or media player/streamer
8. HDMI OUT: Connect an HDMI display such as an HDTV or Projector; this port can also be used to cascade or daisy-chain to another splitter, to create additional outputs
9. IR RX/IR TX: Connect the included IR accessories to the correct IR ports; see IR section for setup and explanation
10. EDID: Adjustment dial for EDID management, see EDID section for setup and explanation
11. UTP OUTPUT PORTS 1-7: Connect a single Cat5e/6 home run cable to the EVRX2006 or EVWP2006RX receiver; connect the EVRX2006 or EVWP2006RX receiver to an HDMI display such as an HDTV or Projector
12. DC 12V IN: Connect the included power supply to power the unit

EDID MANAGEMENT

Extended Display Identification Data (EDID) is a data structure provided by a digital display to describe its capabilities to a video source (e.g. graphics card or set-top box). In a nutshell, the display provides its EDID info to the source to send the proper signal format; this is essential for a proper handshake to occur.



When making any adjustments to EDID, turn off every component (splitter, source, and all displays), then turn on splitter first, followed by the source, then the main display (HDMI Output 1). Finally, turn on all other displays after ensuring the correct video signal is displaying on the main display.

The EVSP1017 is equipped with EDID management. There are two modes for EDID:

MANUAL EDID MODE

Simply select the desired EDID selection from below. The best EDID selection is the resolution, color bit, and audio combination that works with all displays connected.

0 - EDID Full-HD (1080p@60)(1080p@30)(1080p@24)(1080i@60)(720p@60) - 24bit 2D video & 7.1ch audio

1 - EDID Full-HD (1080p@60) - 24bit 2D video & 2ch audio

2 - EDID Full-HD (1080p@60) - 24bit 3D video & 7.1ch audio

3 - EDID Full-HD (1080p@60) - 24bit 3D video & 2ch audio

4 - EDID HD (1080p@30)(1080i@60)(720p@60) - 24bit 2D video & 7.1ch audio

5 - EDID HD (1080p@30)(1080i@60)(720@60) - 24bit 2D video & 2ch audio

6 - EDID Full-HD (1080p@60) - 24bit 2D video & 7.1ch audio

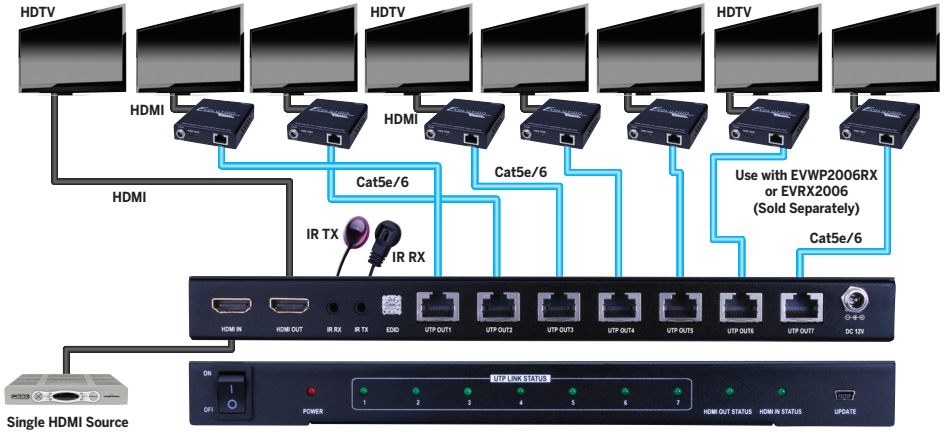
*EDID 0 is the default selection and has been tested to ensure compatibility with most source and display combinations.

DYNAMIC EDID MODE

In this mode, the EVSP1017 will automatically generate an EDID based on the connected displays to ensure the connected source's audio/video format can be handled on all outputs. If any displays are connected after the Dynamic EDID Mode is selected, all displays will blink out once to adjust the automatic EDID setting. Keep in mind if a lower resolution display is connected, it will affect the resolution of the other displays. The EVSP1017 can only output one common resolution, a resolution that all displays are able to handle.

To enable Dynamic EDID Mode, adjust EDID dial to 7, 8, 9.

CONNECTION DIAGRAM



CONNECT AND OPERATE

1. Connect a source such as a Blu-Ray Player, game console, A/V Receiver, Cable or Satellite Receiver, etc. to the HDMI input
2. Connect the Cat5e/6 runs (home run cabling recommended) to the UTP output(s); connect to the EVRX2006 or EVWP2006RX receiver (sold separately)
3. Connect displays such as an HDTV or HD Projector to the HDMI output of the EVRX2006 or EVWP2006RX receiver
4. (Optional) Connect a display such as an HDTV or HD Projector to the HDMI output of the EVSP1017; or connect an additional EVSP1017 or other splitter to cascade to create additional outputs
5. For power, connect the provided power supply

At this point the display connected should display the source signal connected to the extender set. If no signal is being displayed, connect a shorter Cat5e/6 cable (jumper or patch cable). If a display is having difficulty receiving a signal, access the display's menu and adjust the resolution (lowest to highest until signal is displayed). A 24 Hz vertical refresh rate may work better than 60 Hz or higher. Use the source remote at the receiver emitter to test IR functionality. If the IR remote function is not responding, check the emitters to ensure they are placed correctly and are plugged into the correct IR jacks on the Extender set receiving and transmitting units.

IR

IR PASS-THROUGH

The bi-directional IR system allows you to control the source that is connected to the extender unit, from the display; or the display from the source, not simultaneously. There are two important things to note when setting up the IR system:

1. The IR Receiver (IR RX) is always what you point your remote at to send an IR signal. This pigtail is placed at the display for controlling the source; or at the source for controlling the display.
2. The IR Blaster (IR TX) is what sends the IR signal to what you are intending to control, whether it's the source or the display. This pigtail is placed at the source; either pointed at the source, or placed on the front panel of the source, see below for placement tips. Or placed at the display to control the display from the source.

IR RECEIVER



IR BLASTER



IR BLASTER (TX)

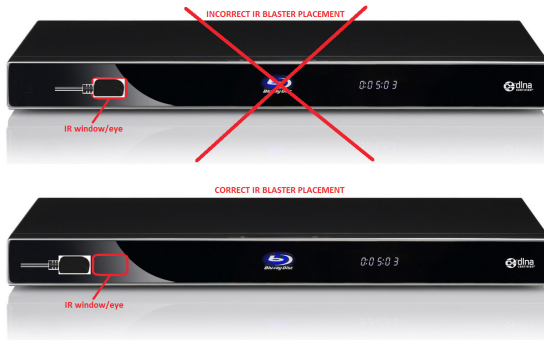
To control the source: Plug IR Blaster into IR TX port of transmitter unit; place blaster in front of the IR eye of the source.

To control the display: Plug IR Blaster into IR TX port of receiver unit; place blaster in front of the IR eye of the display.

Note: Placement of the IR Blaster is important and can result in the IR system not working if improperly placed.

- First, locate the IR eye or window on the source
- If placing the IR blaster right on the front panel of the source, do not stick right on top of the IR eye or IR window. The IR signal cannot travel through the double-sided tape on the Blaster. Instead place the blaster on either side, or on the top or bottom of the IR eye or window, with the tip of the blaster facing the IR eye or window. See below for illustration of where IR signal shoots from on IR Blaster:





IR RECEIVER (RX)

- To control the source: Plug IR Receiver into IR RX port of receiver unit; place receiver at or near display.
- To control the display: Plug IR Receiver into IR RX port of transmitter unit; place receiver in position where it is able to receive remote signals.

To Control the Source:

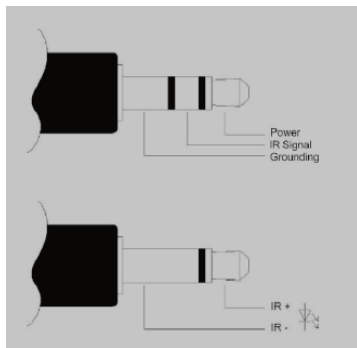
1. Plug the IR Blaster into the IR TX Port on the Splitter



The IR RX port allows for IR control for the lone HDMI output port; simply connect the included IR Receiver and lead to the local display location

2. Plug the IR Receiver into the IR RX Port on the EVRX2006 receiver





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 it's output, then power up the Vanco unit and plug the HDMI cable into it's 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. 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.

SAFETY AND NOTICE

The EVSP1017 has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, the EVSP1017 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.

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

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[®] International

506 Kingsland Drive
Batavia, Illinois 60510
call: 800.626.6445
fax: 630.879.9189
visit: www.vanco1.com