



**HOME
THEATER**

✓ **1080p**

FullHD

**3D
READY**

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE



**HDMI® 8x8 Matrix
over UTP Receiver**

Vanco Part Number
280781

Technical Support

www.vanco1.com • info@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.

FEATURES

HDMI® Receiver - Part Number 280781

The Vanco 280781 HDMI Receiver uses 2 UTP cables to transport a HDMI signal from the Vanco 280709 HDMI 8x8 Matrix Selector Switch. This allows the HDMI signal to be transported a maximum distance of 50 meters (164 ft) while using dual Cat-5e or Cat 6 UTP cable as the transmission media.

Benefits of using the Vanco 280781 HDMI Receiver:

1. The length of an HDMI cable is fixed after the connectors are attached at the factory and must be purchased in various standard lengths. This is because the HDMI connector can only be soldered and terminated by trained workers using specialized fixtures and test equipment in a factory. The installer normally can't do an effective job in the field. However, Cat 5e and Cat 6 bulk cables are available and most installers have the proper tools and hand-held testers to fabricate custom lengths with RJ-45 modular plugs in the field.
2. By using dual Cat 5e or Cat 6 UTP cables, a transmission distance for 1080p signals of 50 meters (164 ft) can be achieved. For 1080i distances of 60m (196 ft) can be achieved. In general, HDMI cables are only available in fixed lengths and the signal must be re-generated when these lengths exceed 15 to 20 meters (50 to 66 ft).
3. The Receiver working with the Matrix Switch has the ability of equalizing and amplifying the HDMI signal. It is also possible to use additional Transmitter and Receiver pairs to create a larger distribution area by daisy chaining these together.
4. The IR system can control the sources from the sinks, or can control the sinks from sources. Thus both downstream and upstream controls are available. Supports 30 kHz to 56 kHz IR signals.

HDMI® Receiver

Part # 280781

- For Use with Vanco's HDMI 8x8 Matrix Selector Switch over UTP (Part # 280709)
- Transmission Range: Extends 1080p resolutions up 164 ft over dual Cat 5e or Cat 6 cable
- Reading and saving EDID function from displays
- IR receiver pigtail included
- Dimensions: 1.8" W x .9" H x 3.3" D
- 5V DC Power Supply
- FullHD1080P/ 120Hz
- HDCP compliant
- Auto-Adjustment of feedback, equalization and amplification
- LED indicator lights to show the power and video signals
- ESD Protection inside
- Supports Digital Audio Foramt, DTS-HD/Dolby-True HD/LPCM7.1/AC3/DTS/DSD
- Tested for Compatibility with all leading HD Video brands
- Tested with 7.1 Home Theater Systems
- Mounting Ears included

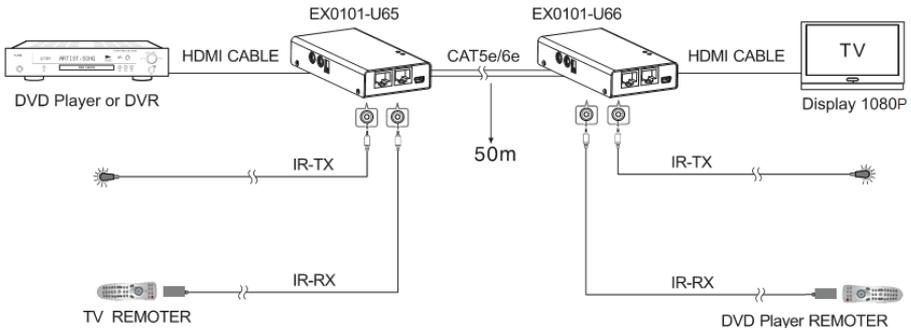
CONNECT AND OPERATE

1. The 280781 Receiver works in conjunction with the 280709 HDMI 8x8 Matrix Selector Switch over UTP.
2. Connect dual Cat 5e or Cat 6 cable assemblies from the UTP outputs on the Matrix switch to the UTP inputs of the 280781 Receiver. Cables should be terminated to TIA T568B and connected respectively to #1 and #2 inputs and outputs.
3. Connect the HDMI sink (such as HD-LCD HD-DLP) to the Receiver.
4. Connect the IR TX UNIT into the Matrix Switch. Then connect the IR RX UNIT into the Receiver.
5. Connect the IR RX UNIT into the Matrix Switch. Then Connect the IR TX UNIT into the receiver. Doing both of these combinations provides for downstream and upstream control.

Note: Please insert and extract cables gently.

Package Contents:

1. 280781 Receiver Unit
2. 5V DC Power Supply
3. IR RX Pigtail
4. Mounting Ears
5. Product Manual



Note: IR receiver cable must use the new model which is wide range mode.

SPECIFICATIONS

Operating Temperature Range.....	-5 to +35°C (41 to +95 °F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal.....	5 volts p-p (TTL)
Video Format Supported.....	DTV/HDTV;1080p/1080i/720P/576P/480P/576i/480i
Output Video	HDMI 1.3+HDCP(repeat the source to the sink)
Output Audio	Support DTS-HD, Dolby-HD (repeat the source to the sink)
Maximum Transmission Distance.....	50 meters (164 ft)
Power Supply	5VDC
Power Consumption	1.5Watts (EX0101-H01) 5Watts (EX0101-H02)
Dimensions	1.8"W×.9"H×3.3"D

Dip Switch

Position 1	Position 2	Functions
0	0	Normal Mode
0	1	Force Signal Output
1	0	Long Cable Mode
1	1	Reserve



TROUBLE-SHOOTING

1. Best results are usually achieved when the source and display resolutions are the same. If resolutions differ, the splitters will try to adjust the signal to match the resolution of the HD TV with the lowest resolution. This will result in a picture with a lower resolution on the other HD TV sets.
2. If you do not get audio and video see if you can use the "set-up" menu on the TV to adjust the audio settings and the video settings. If the HDMI control circuit can't establish a hand-shake, then there usually will be no audio or video and a blue or black screen with a statement like "this protocol not supported" or "weak signal".
3. If you get the above messages, re-set the splitters using the button on the front panel. Alternately, you can disconnect all of the HDMI and power cables, wait 10 or 15 minutes for any voltages to decay and then connect all of the cables from the source, to the splitters and to the display.
4. If you still have trouble, then try the "hot-plug concept. Turn-on the source and plug the HDMI cable to it and then power-up the Matrix Switch and plug the cable into it, then plug the output cable into the receivers and finally turn-on the display and plug the HDMI cable from the receivers into it. This activates all of the devices in order and results into a signal being plugged-in to a device that is on and will try to connect to the signal.
5. Most of the major player 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 problem. Sometimes a player, an audio/video receiver, or a cable/satellite box may not have the latest software update and needs to have this downloaded from the manufacturer's web site.
6. If the above actions do not result in a satisfactory result, focus attention on the Cat 5e or Cat 6 cables used. The HDMI signals run at digital data rates, which are at least ten times faster than for conventional Ethernet. If 8-position modular plugs are attached in the field, the connection may not be able to support the HDMI signal. This is why factory terminated assemblies are strongly recommended. To determine if the field-assembled cables are at fault, move the source close to the display and connect with a 3 ft or 6 ft computer cable assembly.
7. Check the batteries in the remote control that was supplied.

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.

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 one year 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 a 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 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 e-mail at support@Vanco1.com or call 1-800-626-6445 between the hours of 8am and 5pm central US time zone on Monday through Friday.

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, glossary of terms, etc. please visit www.vanco1.com

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