



## HDMI® 4x1 Selector Switch

Vanco Part Number:  
280562

**Technical Support**

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## 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

The Vanco 280562 HDMI 4x1 Switcher allows 4 HDMI sources to be distributed to 1 display, with the ability of controlling each source connected and input switching from the display remotely via IR. Have multiple sources switched to a single display, flexibility by creating additional HDMI inputs. The 280562 is capable of up to 1080p High Definition resolution with simple control using the front panel or remotely via an IR Receiver at the display location. Also features EDID management for audio, which allows selection of preferred audio channel. Equipped with ARC (Audio Return Channel) functionality, which allows the connected ARC equipped display to send audio data "upstream" to an ARC equipped A/V receiver or surround audio controller, as well as an audio breakout via toslink or stereo output for expanded audio distribution. In addition, the 280562 features "smart switching" technology, which automatically switches to a new HDMI signal connected. The result is a great solution for HDMI switching which offers multiple features, the 280562 4x1 Switcher is a great choice for any application.

### **HDMI® 4x1 Selector Switch**

#### **Part # 280562**

- Allows 4 HDMI sources to be switched to 1 display
- Smart Switching technology, which automatically switches to a new HDMI signal connected
- Supports High Definition Resolutions 1080p
- Supports HDMI Deep Color and 3D
- Features wideband IR system for source switching and input switching remotely and at display (IR Transmitters, IR Receiver and IR Remote Control Included)
- HDCP Compliant
- Features Audio EDID management which allows selection of preferred audio channel
- Supports 7.1, 5.1, and 2.0 channel digital audio and multiple formats such as DTS-HD/Dolby-True HD/LPCM7.1/AC3/DTS/DSD
- Audio Return Channel (ARC) compatible
- Audio breakout via toslink or stereo output
- Compact design for easy installation, rack mounting ear set included
- Power Supply: DC 5V
- Dimensions: 7.6" W x 1" H x 3.25" D

## SPECIFICATIONS

HDCP Compliance.....	Yes
Video Bandwidth .....	Single-link 300 Mhz [10.2 Gbps]
Video Support .....	480i/480p/720p/1080i/1080p @60
Audio Support .....	Surround Sound (up to 7.1 ch) or stereo digital audio and L-PCM at up to 192kHz, compressed audio (IEC 61937), DSD, DST, DTS and HBR
ESD Protection .....	+/- 8 kV (air-gap discharge) & +/- 4 kV (contact discharge)
Input .....	4x HDMI / 1x IR socket for IR receiver
Output.....	1x HDMI / 1x Optical / 4x IR socket for IR transmitters
HDMI connector .....	Type A 19 pin female
3.5mm connector .....	[System IR] Receives IR commands from remote control

### MECHANICAL SPECS

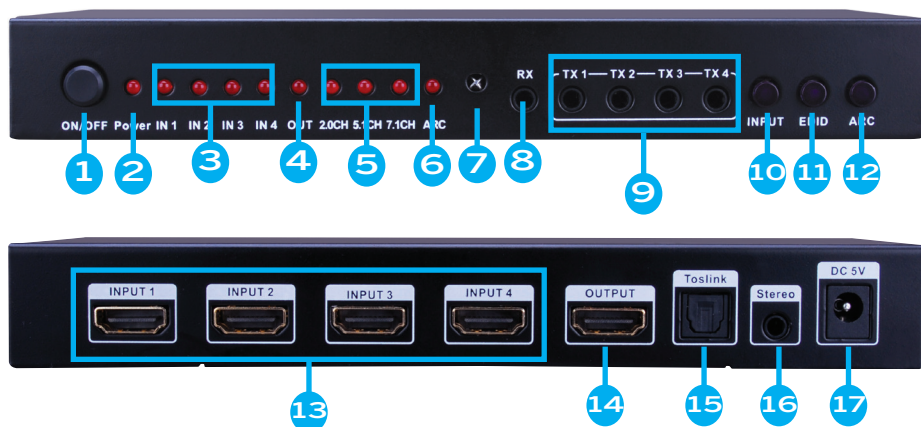
Housing .....	Metal enclosure
Power Supply .....	5V1A DC
Power consumption.....	1.5 watts (max)
Operation temperature.....	32~104 °F
Storage temperature.....	-4 ~140 °F
Relative humidity .....	20~90 % RH (no condensation)

## PACKAGE CONTENTS

Before attempting to use this unit, please check the packaging and make sure the following items are contained in the shipping carton:

- (1) 280562 HDMI 4x1 Switcher
- (1) IR Receiver (RX)
- (4) IR Blaster (TX)
- (1) DC 5V, 1A power supply
- (1) Rack-mounting ear set
- (1) IR remote control
- (1) User Manual

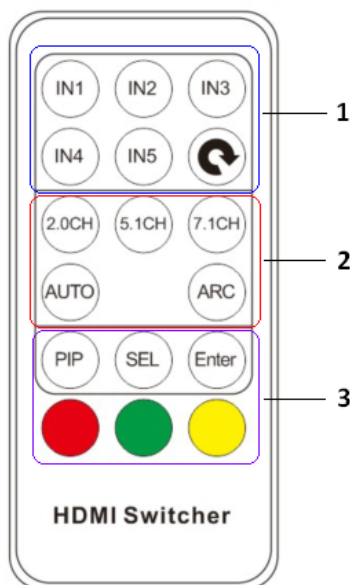
# PANEL DESCRIPTIONS



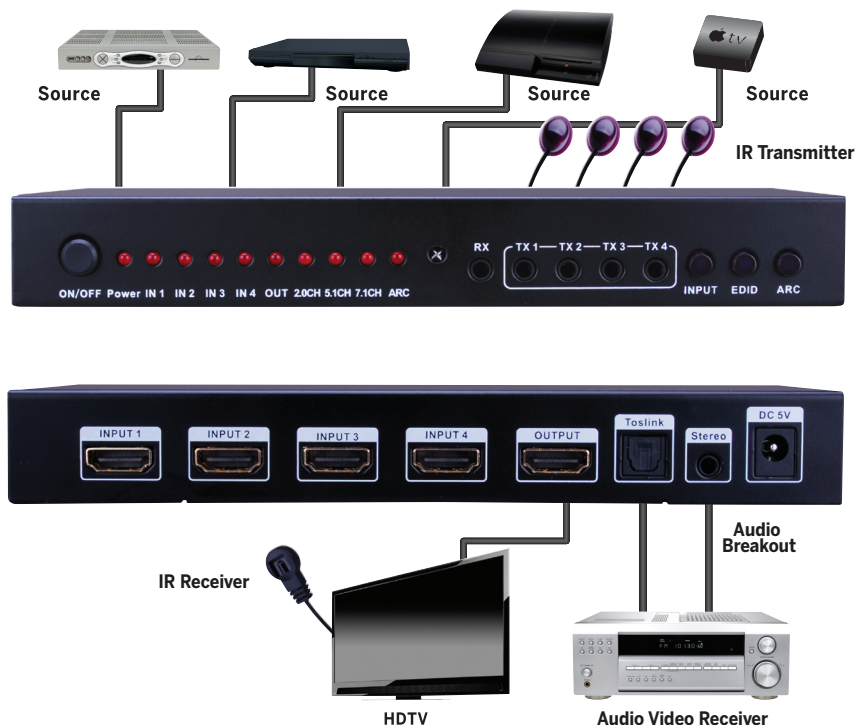
1. ON/OFF: Power ON/OFF switch.
2. POWER LED: Illuminates when the device is powered on
3. IN 1/IN 2/IN 3/IN 4 LED: illuminates to indicate which input is selected for output
4. OUT LED: Illuminates when a display is connected
5. 2.0, 5.1, 7.1 LED: Illuminates to indicate which audio EDID is selected for output
6. ARC LED: Illuminates when the ARC function is active
7. IR: IR receiver eye for included IR Remote functions
8. RX : Connect included IR RX receiver to control switching and source control at the display
9. TX 1, TX 2, TX 3, TX 4: Connect included IR TX blasters and assign to corresponding sources for source control
10. INPUT BUTTON: Utilized to select between inputs
11. EDID BUTTON: Utilized to select the 2.0CH, 5.1CH, 7.1CH, and auto audio EDID mode.
12. ARC BUTTON: Utilized to activate or deactivate ARC function. Pressing this button for 5 seconds will reset the switcher to factory state (INPUT1, Auto EDID MODE, ARC FUNCTION deactivated)
13. INPUTS: Connect up to 4 sources via HDMI into the switcher
14. OUTPUT: Connect one display via HDMI into the switcher
15. Toslink OUT: Utilized to break out audio using toslink/optical cable
16. Stereo OUT: Utilized to break out audio using stereo cable
17. DC 5V: Plug the included 5V DC power supply into the unit and connect the adaptor to AC wall outlet for power

## OPERATION CONTROL - IR REMOTE CONTROL

1. INPUT SELECTION: Select input desired
2. AUDIO EDID: Select audio format desired, the panel LED will indicate the selected EDID status:  
  
2.0CH: the switcher will modify the HDMI audio EDID to support 2.0CH to the source.  
5.1CH: the switcher will modify the HDMI audio EDID to support 5.1CH to the source.  
7.1CH: the switcher will modify the HDMI audio EDID to support 7.1CH to the source.  
AUTO: the switcher will copy the sink EDID (from the display) to the source.  
ARC: activates/deactivates the ARC function.
3. No function, reserved for future updates.



# CONNECT AND OPERATE



1. Connect up to 4 sources such as a Blu-Ray Player, game console, A/V Receiver, Cable or Satellite Receiver, etc. to the HDMI inputs on the unit.
2. Connect an HDMI display to the output HDMI port, using a high-definition display such as an HDTV or HD projector that has HDMI inputs. Note that high-speed HDMI cables are recommended for the distances that are required for each connection.
3. For power, plug in the source first, followed by the 4x1 Switcher (power supply included), followed by the output connected.
4. Power on each device in the same sequence.

At this point each display connected should display the assigned source (input 1 at default when powered on initially), scroll through each of the sources on each display to ensure everything is in working order. Use included IR remote at each display receiver to test switching function between sources and IR function itself. 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. 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 4x1 Switcher unit.

## IR

### IR RECEIVER



### IR BLASTER

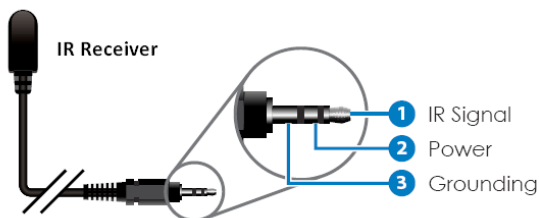
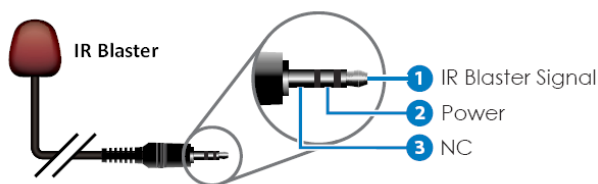


### IR BLASTER

Plug IR Blaster into IR TX port of switcher unit (280562); place blaster in front of the IR eye of the corresponding source(s).

### IR RECEIVER

Plug IR Receiver into IR RX port of switcher unit (280562); place receiver at or near corresponding display.





## NOTICE

1. Vanco High Speed HDMI cables are strongly recommended for use with this product to ensure best results.
2. Incorrect placement of IR Blaster and Receiver may result in the failure of the unit. Please check carefully before plugging in the IR accessories into the respective IR sockets.
3. If your HDMI display has multiple HDMI inputs, it is found that the first HDMI input (HDMI input #1) generally can produce better transmission performance among all HDMI inputs.

## 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.
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 280562 has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the 280562 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.

## 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.

## 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, glossary of terms, etc. please visit [vanco1.com](http://vanco1.com)

## Vanco® International

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