



Handheld 4K  
HDMI® Tester

Vanco Part Number:  
HD4KTEST

**Technical Support**

[www.vanco1.com](http://www.vanco1.com) • [techsupport@vanco1.com](mailto:techsupport@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.

The Adopted Trademarks HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registers trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

## FEATURES

The Vanco HD4KTEST is a handheld HDMI tester to help troubleshoot issues with passive and active HDMI installations in the field. Connect the HDMI Output to a display to act as a signal generator to ensure video signals and HDCP are passed, or connect a source to the HDMI Input to emulate the signal coming out to the sink using the LED lights. A convenient way of testing all components and cabling within an HDMI distribution system. The HD4KTEST is capable of 4K and 1080p resolutions, with 16 combinations to help replicate and resolve common issues in the field. Includes a durable and reusable carrying case, the HD4KTEST is a great tool to bring to any job site resulting in less time troubleshooting issues out in the field.

### *Handheld 4K HDMI® Tester*

#### *Part # HD4KTEST*

- Convenient handheld 4K and 1080p tester for troubleshooting issues with passive and active HDMI installations
- Acts as either the source or display to test cabling and components
- Capable of 16 different testing combinations to help identify and resolve common issues
- Test for HDCP 2.2 and 1.4 Compatibility
- Connect a source to act as a signal emulator or a display to act as a signal generator to test video and HDCP signals
- Includes durable carrying case, allowing you to take the HD4KTEST to every job site
- Dimensions: 3.4" x .87" x .75" (95x22x19 mm)

## PACKAGE CONTENTS

- (1) HD4KTEST Handheld Tester
- (1) Micro USB to USB A Cable for power
- (1) Carrying Case
- Product Manual

## SPECIFICATIONS

Connections .....	(1) HDMI Input, (1) HDMI Output
Video Output .....	4K@60Hz, 4:4:4; 4K@60Hz, 4:2:0; 4K@30Hz, 4:4:4; 1080p@60Hz
Video Input.....	Up to 4K@60hz, 4:4:4
Audio Output .....	PCM/Stereo
Audio Input.....	PCM/Stereo
Dimension (W*H*D).....	3.4" x .87" x .75" (95x22x19 mm)
Weight .....	0.44 lbs (0.2kg)
Power.....	5V, 1A

## PANEL DESCRIPTIONS



1. HDMI OUT (to test display/Signal Generator): Connect an HDMI display, the HD4KTEST unit will generate a test HDMI signal which will be viewable on the display
2. HDMI IN (to test source/Display Emulator): Connect an HDMI source, the HD4KTEST will emulate the source's signal to detect signal status (5v, TMDS) as well as HDCP content (version)
3. SIG (Signal) LED:
  - a. When the HD4KTEST is used as a HDMI signal generator, the LED turns red when there is HDMI signal output
  - b. When the HD4KTEST is used as a display emulator, the LED turns green when only 5V signals is detected, or turns red when the 5V and TMDS signals are detected simultaneously, or off when there is no input or HDMI signal is being sensed
4. HDCP LED:
  - a. When the HD4KTEST is used as a HDMI signal generator, the HDCP content can be selected by using dip switches. The LED turns green when HDCP 2.2 is selected, or red when HDCP 1.4 is selected, or off when no HDCP is present
  - b. When the HD4KTEST is used as a display emulator, the LED turns green when HDCP content of the HDMI source is sending HDCP 2.2, red when it is HDCP 1.4, or off when no HDCP is present
5. POWER: Micro USB port for power, the HD4KTEST must be connected to power when it is used as a signal generator

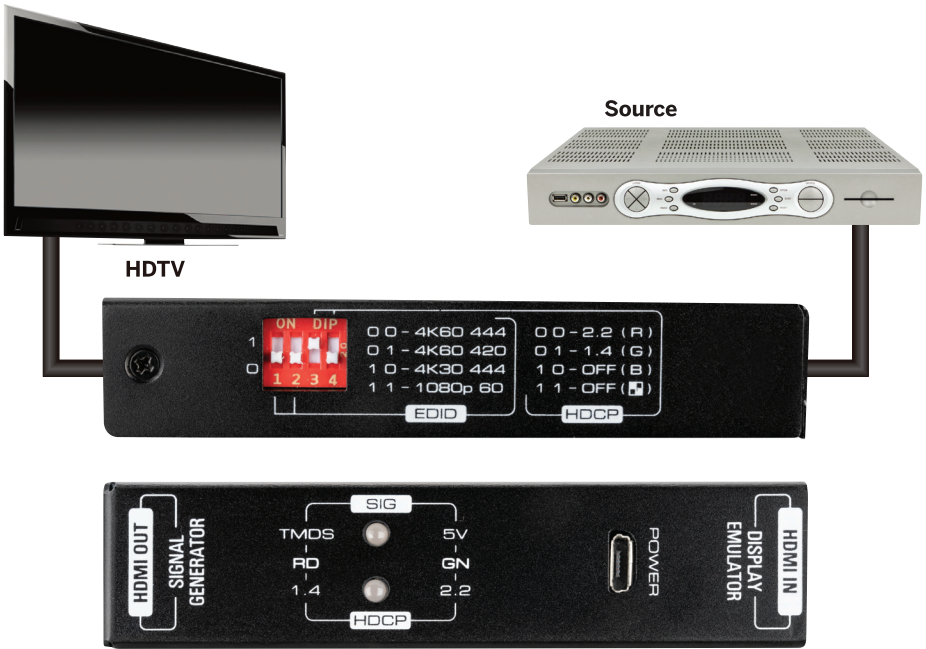
NOTE: When being used as a display emulator, external power is optional but can be helpful when diagnosing cabling issues

6. DIP SWITCHES: When the HD4KTEST is used as a HDMI signal generator, switches 1 & 2 are used for built-in audio/video EDID selection, and switches 3 & 4 are used for HDCP content selection

# CONNECT AND OPERATE

## Signal Generator (to test a display and/or cabling):

The HD4KTEST will output different colors on an HDMI connected display to signify if the signal is passing properly through the cabling and to the display. See the "Dip Switch Table" to identify what the color of the video image on the display means.



1. Connect the HDMI output of the HD4KTEST to an HDMI display
2. Adjust the dip switches on the HD4KTEST to the capabilities of the display or the resolution and settings you wish to test (see Dip Switch Table Settings)
3. NOTE: The example above has all dip switches in the down or "0" position for 4K@60Hz, 4:4:4 and HDCP 2.2
4. Connect the provided micro USB cable to the HD4KTEST for power

NOTE: Depending on the dip switch settings you are using, you will see a different color on the display if the signal is passing correctly. If no color is shown on the display, the signal is not being passed to the display. (see Dip Switch Table Settings)

**Display Emulator (to test a source and/or cabling):**

1. Connect HDMI INPUT of the HD4KTEST to an HDMI source
2. Power on the source
3. Connect the provided micro-USB cable to the HD4KTEST for power (optional)

<b>HD4KTEST LEDs</b>	<b>Signal LED</b>		
	Red	Green	Off
Signal Generator	Signal	n/a	No Signal Detected
Display Emulator	5V and TMDS Detected	5V Detected	No Signal Detected

<b>HD4KTEST LEDs</b>	<b>HDCP LED</b>		
	Red	Green	Off
Signal Generator	1.4	2.2	None
Display Emulator	1.4	2.2	None

<i>Dipswitch Setting</i>	<i>HDCP</i>	<i>Color</i>
0000	HDCP 2.2	Red
0100		
1000		
1100		
0001	HDCP 1.4	Green
0101		
1001		
1101		
0010	OFF	Blue
0110		
1010		
1110		
0011	OFF	Checkered (Black and White)
0111		
1011		
1111		
1 = ON/UP		
0 = OFF/DOWN		



## SAFETY AND NOTICE

The HD4KTEST has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, the HD4KTEST 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

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