



Vanco Part Number EVRC5002

> HDMI® EDID Sync Recorder



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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.
- Do not install or place this unit in a built-in cabinet, or other confined space without adequate ventilation.
- To prevent risk of electrical shock or fire hazard, due to overheating do not obstruct unit's ventilation openings.
- 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.
- 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.

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#### **FEATURES**

### INTRODUCTION

The Evolution by Vanco EVRC5002 HDMI EDID Recorder is an EDID Reader/Writer/Retimer that has the ability to emulate EDID (Extended Display Identification Data) information. For use in applications where EDID issues are occurring. Features the ability to set EDID from the main unit or from a connected computer using the included software. Controllable via USB, the EVRC5002 stores and recalls EDID information from either source or display and supports HDCP. The EVRC5002 saves time from troubleshooting and having to replace equipment. This EDID management allows and encourages source and display "handshake", a perfect solution for compatibility issues.

Extended Display Identification Data (EDID) is a standard data format that contains basic information about the display and its capabilities, including vendor information, maximum image size, color characteristics, factory pre-set timings, frequency range limits, and character strings for the monitor name and serial number.

The information is stored in the display and is used to communicate with the system through a Display Data Channel (DDC). The system uses this information for configuration purposes, so the monitor and system can work together.

### HDMI® EDID Sync Recorder Part # EVRC5002

- · For use in applications where EDID issues are occurring
- Able to read, copy, emulate and pre-set EDID information to encourage the "handshake" between a source and display
- Features the ability to set EDID from the main unit or from a connected computer using the included software
- Saves time from troubleshooting and having to replace equipment
- HDCP 1.1 compliant
- Supports HDMI Deep Color & 3D / DVI 1.1 compliant
- Able to read and store the EDID of displays (monitors or projectors)
- Able to overwrite set EDID into the EDID Reader/Writer/Re-timer or to HDMI displays
- Built-in default EDID
- Maintains HDMI/DVI video resolution
- Prevents PC from deactivating inactive HDMI/DVI ports
- Re-generates EDID content
- Re-synthesizes input HDMI stream and maintains or improves signal integrity
- Controllable by PC/Laptop via USB with included software
- Dimensions: 3.14" (80mm) W x 1.1" (28mm) H x 3.58" (91mm) D



# SPECIFICATIONS

TECHNICAL SPECS	
DVI/HDMI Compliance	DVI 1.1/HDMI Deep Color and 3D
HDCP Compliance	Yes
Video Bandwidth	Single-link 225MHz [6.75Gbps]
Video Support	Up to WUXGA [1920x1200@60Hz] & UXGA
Input	1x HDMI
Input Output	
•	1x HDMI
Output	1x HDMI Type A 19 pin female
Output	1x HDMI Type A 19 pin female mini USB

#### MECHANICAL SPECS

Housing	. Metal enclosure
Fixedness	. Wall-mounting case with screws
Power supply	. 5V 2A DC
Power consumption	. 4 Watts (max)
Operation temperature	. 32-104 degrees F
Storage temperature	4 - 140 degrees F
Relative humidity	. 20-90% RH (no condensation)

# PACKAGE CONTENTS

- EVRC5002
- (1) DC 5V in line power supply
- Rack-mounting ear set
- Installation software CD
- Product Manual

### PANEL DESCRIPTIONS



- 1. Mini-USB port : Connect to a PC for software operation
- 2. HDMI IN : Connects to an HDMI source with an HDMI male-male cable
- 3. EDID MODE : Setting desired EDID mode
  - 0 EDID Full-HD(1080p@60) 24bit 2D video & 7.1ch audio
  - 1 EDID Full-HD(1080p@60) 24bit 2D video & 2ch audio
  - 2 EDID Full-HD(1080p@60) 36bit 2D video & 7.1ch audio
  - 3 EDID Full-HD(1080p@60) 36bit 2D 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)(720p@60) 24bit 2D video & 2ch audio
  - 6 = [Manual Mode] Learning EDID from HDMI output manually
  - 7 = [Serial Command Mode] Software can access EVRC5002 only in this mode
- 4. 5V DC: Connect to 5V power supply unit
- 5. LED INDICATOR: [red]: power indicator LED [green]: signal indicator LED
- 6. HDMI OUT : Connect to an HDMI display with an HDMI male-male cable.

To avoid any errors during switching between modes (i.e. changing from Recording mode to Connection mode might overwrite the EDID of the display in the EDID Reader/Writer/Re-timer by the default EDID), UNPLUG the power supply unit before changing one of the above modes. Plug in the power supply unit after the pin position of the DIP switch has been adjusted.

\*The EDID Reader/Writer/Re-timer may not work on monitors or displays with EDID write-protection.

# Caution! Do not plug HDMI cable into Source-HDMI connector when adjustments are being made from one operation mode to another.



# 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 on the unit.
- 2. Connect a display such as an HDTV or HD Projector to the HDMI output on the unit.
- 3. For power, plug in the unit with the included power supply.

### EDID OPERATION

#### (1) READ THE EDID FROM AN HDMI DISPLAY MANUALLY

- 1. Connect the display device to the EDID Reader/Writer/Re-timer via Monitor-HDMI port.
- 2. Plug in the 5V DC power supply unit.
- 3. Set EVRC5002 to the mode 6.
- 4. The EDID reading sequence is done when the green LED light turns off.
- 5. Switch the rotary switch back to mode  $0 \sim 4$ .

#### (2) READ THE EDID FROM AN HDMI DISPLAY VIA SOFTWARE

- 1. Set EVRC5002 to the mode 7.
- 2. Connect the display device to the EDID Reader/Writer/Re-timer via Monitor-HDMI port.
- 3. Plug in the 5V DC power supply unit.
- 4. Connect the EVRC5002 to the serial port of PC.
- 5. Click on "HDMI Monitor Reader" button to read the EDID information from HDMI display.
- 6. The EDID reading sequence is done when the green LED light turns off.

#### (3) WRITE EDID TO THE HDMI DISPLAY

- 1. Set EVRC5002 to the mode 7.
- 2. Connect the display device to the EDID Reader/Writer/Re-timer via Monitor-HDMI port.
- 3. Plug in the 5V DC power supply unit.
- 4. Connect the EVRC5002 to the serial port of PC.
- 5. Click on "HDMI Monitor Writer" button to write the EDID information to HDMI display.
- 6. The EDID reading sequence is done when the green LED light turns off.

\*The EDID Reader/Writer/Re-timer may not work on the monitors with EDID write-protection.

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### SOFTWARE OPERATION

#### **BEFORE RUNNING THE SOFTWARE, SET THE ROTARY SWITCH TO 7**

1. Getting Started

### 2. Create EDID

• Select EDID mode (HDMI or DVI)

#### HDMI MODE

HDMI	a 🔀
VESA Resolution: 1024/0726 Proguency: 60H2 HDTV	Audo Audo Type: Stereo Content: 44.1Htr Add 100 Support
Resolution: 480i 💌 Aspect: 4:3 💌	Activates 3D           Resolution:         1280x720p.@-23.98/24Ht         ▼         4.35           Formet:         Frame Packing         ▼         4.35
Monitor Name (13 Character)	]
	Save EDID on Computer Save EDID to EVECS002 Clear AI

"Save EDID on Computer" to save the generated EDID as a file "Save EDID to EVRC5002" to copy the generated EDID to EVRC5002



#### **DVI MODE**

DAI	
VESA Resolution: 300x600 - Add	Save EDID on Computer Save EDID to EVRC5002
Monitor Name     (13 Character)	
	2
,	Clear All

"Save EDID on Computer" to save the generated EDID as a file "Save EDID to EVRC5002" to copy the generated EDID to EVRC5002

### 3. View Display's EDID

Reading the EDID from the display for analysis

#### EDID Information Manufacturer ID: MIT2010 ~ Serial Number: 0 Manufacture date: week 4, year 2010 EDID Version Number: 1.3 Signal Type: digital Max Image Size: 520 x 330 mm Display Gamma: 2.20 Feature Supported: display type :RGB color standby suspend active-off/low power standard colour space preferred timing mode Color characteristics: Red-x 0.640 Red-y 0.330 Green-x 0.300 Green-y 0.600 Blue-x 0.150 Blue-y 0.060 White-x 0.313 White-y 0.329 Etablished Timings 720×400@70 Hz 640x480@60 Hz 640x480@67 Hz 640x480@72 Hz 640x480@75 Hz 800×600@56 Hz 800x600@60 Hz 800×600@72 Hz 800x600@75 Hz 832x624@75 Hz ¥ Save EDID to EVRC5002 Save EDID on Computer

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### 5. Firmware Update

- 1. Click "Load BIN" to load firmware file.
- 2. Click "Burn" and reboot EVRC5002.
- 3. Firmware is updated after the progress bar is completed to 100%

Firmware Update				
	Load BIN			
	Burn Stop			
	Close			

# TROUBLE-SHOOTING

#### SAFETY AND NOTICE

VOLUTION

VANGO

The EVRC5002 has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the EVRC5002 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 info@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.

### 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.



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