CV-5005H

HDMI EDID Reader/Writer/Re-timer

User Manual













rev: 140321 Made in Taiwan



The CV-5005H HDMI EDID Reader/Writer/Re-timer has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the CV-1001 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.



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INTRODUCTION

SPECIFICATIONS

The CV-5005H HDMI EDID Reader/Writer/Re-timer is a device that can emulate the EDID (Extended Display Identification Data) information. It stores and recalls a default EDID setting in non-volatile memory and supports HDCP handshaking. CV-5005H allows your HDMI/DVI source boot directly from EDID Reader/Writer/Re-timer, and users can detach HDMI equipped monitor at any time while installing CV-5005H between HDMI/DVI source and monitor. It can also read and store the EDID of your HDMI/DVI display and even let you modify the EDID and upload the modified EDID to displays.



Extended Display Identification Data (EDID) is a standard data format that contains basic information about a monitor 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), which sites between the monitor and the PC graphics adapter. The system uses this information for configuration purposes, so the monitor and system can work

FEATURES

- Able to prevent PC from deactivating inactive HDMI/DVI ports
- HDCP 1.1 compliant
- Support HDMI Deep Color & 3D / DVI 1.1 compliant
- Able to read and store the EDID of displays (monitors or projectors)
- Able to overwrite the EDID into the EDID Reader/Writer/Re-timer or the HDMI displays
- Built-in default EDID
- Able to maintain HDMI/DVI video resolution
- Re-synthesizes input HDMI stream and maintains or improves signal integrity.

PACKAGE CONTENTS

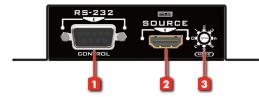
- 1x CV-5005H
- 1x 5V power supply unit
- 1x Installation software CD
- 1x User Manual

Technical DVI compliance		
DVI compliance		
	:	DVI 1.0 / HDMI Deep Color & 3D
HDCP complian	ice	Yes
Video bandwidth	h	Single-link 225MHz [6.75Gbps]
Video support		Up to WUXGA [1920x1200@60Hz] & UXGA [1600x1200@60Hz]
Input		1x HDMII 1x RS-232
Output		1x HDMI
HDMI connector	r	Type A [19-pin female]
RS-232 connect	tor	DE-9 [9-pin D-sub female]
Flash EEPROM	l	256 byte [non-volatile]
Mechanical		
Housing		Metal enclosure
М	1odel	91 x 79 x 21mm [3.6" x 3.1" x 0.8"]
Dimensions [L x W x H]	ackage	40 x 200 x 75mm [5.5" x 7.9" x 3"]
	arton	420 x 400 x 300mm [1'5" x 1'4" x 11.8"]
	1odel	240g[8.5 oz]
Weight P	ackage	500g[1.1 lbs]
Fixedness		Wall-mounting case with screws
Power supply		5V 2A DC
Power consump	otion	4 Watt [max]
Operation temper	erature	0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidit	ty	20~90% RH [no condensation]

PANEL DESCRIPTIONS

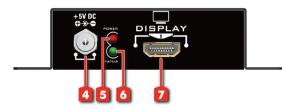
CONNECTION DIAGRAM

Front Panel



- 1. RS-232: Connect to a PC for software operation
- 2. SOURCE: Link to a HDMI source in order to be the bridge between HDMI source and display.
- MODE: Decide which mode CV-5005H is currently working at. 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 CV-5005H only in this mode

Rear Panel



- 4. +5V DC: Connect to a 5V power supply unit
- 5. Red LED: Power on/off indicator
- Green LED: Green light means the EDID Reader/Writer/Re-timer is in the process of reading or writing EDID
- 7. DISPLAY: Connect to a HDMI display

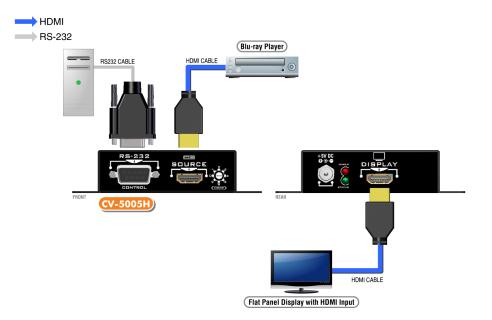


*To avoid initiating undesired errors during switching between modes (e.g. changing from Recording mode to Connection mode might overwrite the EDID of the display in the EDID Reader/Writer by the default EDID), please unplug the power supply unit before changing one of the above modes. Plug in the power supply unit after you have changed the pin position of the DIP switch.

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

CAUTION!

Please don't plug DVI cable into PC-DVI connector when you are changing from one operation mode to another.



HARDWARE INSTALLATION

OPERATION SOFTWARE

1. Read the EDID from a 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 CV-5005H to the mode 6.
- 4. The EDID reading sequence is done when the green LED lights off.
- 5. Switch the rotary switch back to mode 0 ~ 4.

2. Recall the EDID from a HDMI display via software

- 1. Set CV-5005H 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 CV-5005H 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 lights off.

3. Write an EDID to the HDMI displays

- 1.Set CV-5005H 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 CV-5005H 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 lights off.



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

1) Getting Started:

Your Computer's System Requirements:

The software supports Windows XP consistently. Both Windows7 and Windows 8 are supported after manually configuring the compatibility properties.

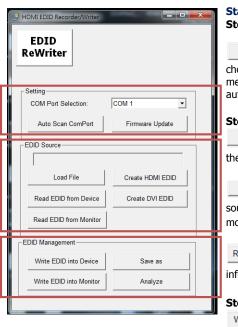
Windows7 and Windows 8: Please configure the compatibility properties manually.

Step1. Right-click the link for the software that you want to configure, and then click Contents.

Step2. On the Compatibility tab, click Run this program in compatibility mode.

Your Hardware Requirements:

Before running the software, please make sure the rotary switch is set to 7.



Start Software:

Step1. Setting

Auto Scan ComPort: Please click on the button to choose COM Port. Following pop-up the "Successful" message which indicates the connection setting is automatically detected and connected.

Step2. EDID Source

Load File: To select EDID source by loading the file you saved.

create HDMI EDID / Create DVI EDID : To create EDID source which users are capable of monitoring or modifying.

Read EDID from Device / Read EDID from Monitor : To read EDID info from the connected device/monitor.

Step3. EDID Management

Write EDID into Device / Write EDID into Monitor : To write

EDID info info the connected device/monitor.

: Make a quick analysis of EDID information you process, which users are capable of monitoring or modifying.

Save as : To save the EDID information on hard disk for your future reference.



*If you want to read EDID from a DVI display, please refer to Hardware Installation section.



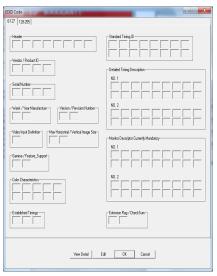
Create EDID from HDMI:

- 1. Click Create HDMI EDID and wait for the following message window, which users are capable of monitoring or modifying.
- 2. Please click "Add" button for your chosen.
- 3. Finally please click "Confirm" button and then you will see successful message.



Create EDID from DVI:

- 1. Click Create DVI EDID and wait for the following message window, which users are capable of monitoring or modifying.
- 2. Please click "Add" button for your chosen.
- 3. Finally please confirm "EDID content" then click "confirm" button. You will see successful message.



Analyze:

- 1. Click analysis on the EDID information you process, which users are capable of monitoring or modifying.
- 2. **VIEW DETAIL:** make a quick analysis on the EDID information.
- 3. **Edit:** users are capable of monitoring or modifying EDID.

LIMITED WARRANTY

The SELLER warrants the **CV-5005H HDMI EDID Reader/Writer/Re-timer** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding the features and specifications of CV-5005H is subject to change without further notice.