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ATLONA

HDMI™ EDID Recorder-Writer
with Serial Control

Model: AT-HDSync

User's Manual

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INTRODUCTION

Atlona Technologies AT-HDSync HDMI™ EDID Recorder-Writer with Serial Control 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. AT-HDSync allows your HDMI™ source boot directly from AT-HDSync, and users can detach HDMI™ monitor at any time while installing AT-HDSync between HDMI™ source and monitor. It can also read and store the EDID of your HDMI™ display and even let you modify the EDID and upload the modified EDID to displays.

Note: 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 together.

FEATURES

★ HDMI 1.3c, DVI 1.0 and HDCP 1.1 compliant

★ Built-in default EDID

★ Able to read and store the EDID of monitors/projectors

★ Prevent computers from deactivating inactive HDMI ports

★ Able to write EDID into the AT-HDSync or the DVI monitors/projectors
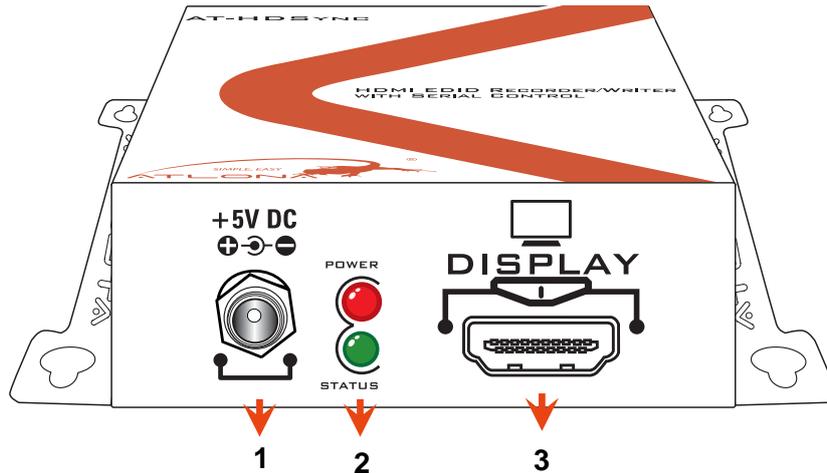
★ Maintain HDMI™ video resolution

PACKAGE CONTENTS

★ 1x AT-HDSync unit

★ 1x 5V DC power supply unit

★ 1x User's manual

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SPECIFICATIONS

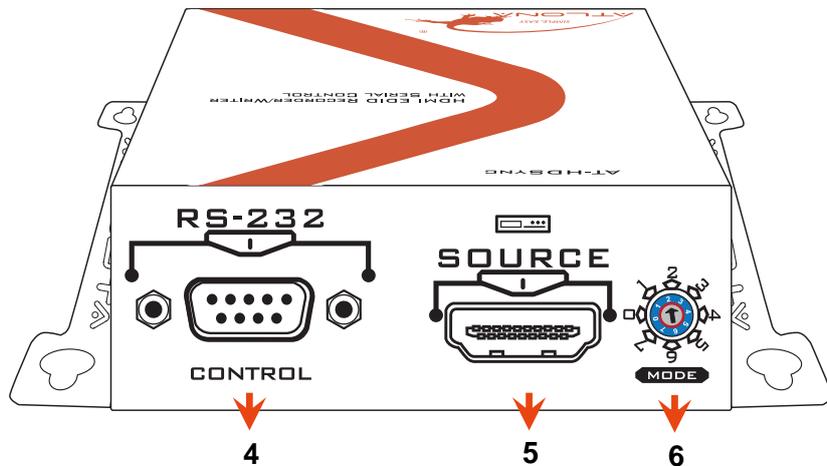| Model Name		AT-HDSync
Technical		
HDMI™ compliance		HDMI™ 1.3c
DVI compliance		DVI 1.0
HDCP compliance		Yes
Video bandwidth		Single-link 225MHz (6.75Gbps)
Video support		Up to 1080p60 & WUXGA (1920x1200@60Hz)
Input		1x HDMI™ + 1x RS-232
Output		1x HDMI™
HDMI™ connector		Type A (19-pin female)
RS-232 connector		DE-9 (9-pin D-sub female)
Flash EEPROM		256 byte (non-volatile)
Mechanical		
Housing		Metal enclosure
Dimensions [L x W x H]	Model	91 x 80 x 27mm (3.6" x 3.1" x 1.1")
	Package	270 x 175 x 80mm (10.6" x 6.9" x 3.2")
Weight	Model	240g (8.5oz)
Fixedness		Wall-mounting case with screws
Power supply		5V DC
Power consumption		4 Watt (max)
Operation temperature		0~40°C (32~104°F)
Storage temperature		-20~60°C (-4~140°F)
Relative humidity		20~90% RH (no condensation)

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PANEL DESCRIPTION

Display Side

1. Connect to a 5V DC power supply unit.

2. Red light indicates the power on/off status. Green light indicates if the AT-HDSync is in the process of reading or writing EDID or sync detection.

3. Connect to a HDMI™ display.

Source and Control Side

4. Connect to a PC for RS-232 serial control to read/write EDIDs from/ to the display

5. Connect to a HDMI™ source device so the AT-HDSync will be the bridge between the HDMI™ source and display

6. Mode 0 = [Video] – supports up to HDMI 1.3 output. [Audio] – supports up to 7.1ch output
   Mode 1 = [Video] – supports up to HDMI 1.3 output. [Audio] – lock to stereo audio output
   Mode 2 = [Video] – locks to HDMI 1.2 output. [Audio] – supports up to 7.1ch output
   Mode 3 = [Video] – locks to HDMI 1.2 output. [Audio] – lock to stereo audio output
   Mode 4 = [Video] – DVI display mode. [Audio] – no audio output
   Mode 5 = [Safe Mode] – uses default EDID with video supported up to 1080p
   Mode 6 = [Recording Mode] – Learning EDID from HDMI output manually
   Mode 7 = [Serial Control Mode] – Control the AT-HDSync by software via RS-232

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INSTALLATION

I. Read the EDID manually from a HDMI™ monitor or projector

1. Connect the HDMI™ display device to the AT-HDSync via the **DISPLAY** port.

2. Plug in the 5V DC power supply unit.

3. Set AT-HDSync to **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** based on your system setting.

    DO NOT let the rotary arrow pass by **Mode 5** which will erase the EDID just learned

    and restore the default EDID.

II. Recall the default universal EDID

1. Set AT-HDSync to **MODE 7**.

2. Connect the HDMI™ display device to the AT-HDSync via the **DISPLAY** port.

3. Plug in the 5V DC power supply unit.

4. Connect the AT-HDSync to the serial port of PC and run the control software.

5. Click on "HDMI Monitor Reader" button to read the EDID information from the HDMI™ display.

6. The EDID reading sequence is done when the green LED lights off.

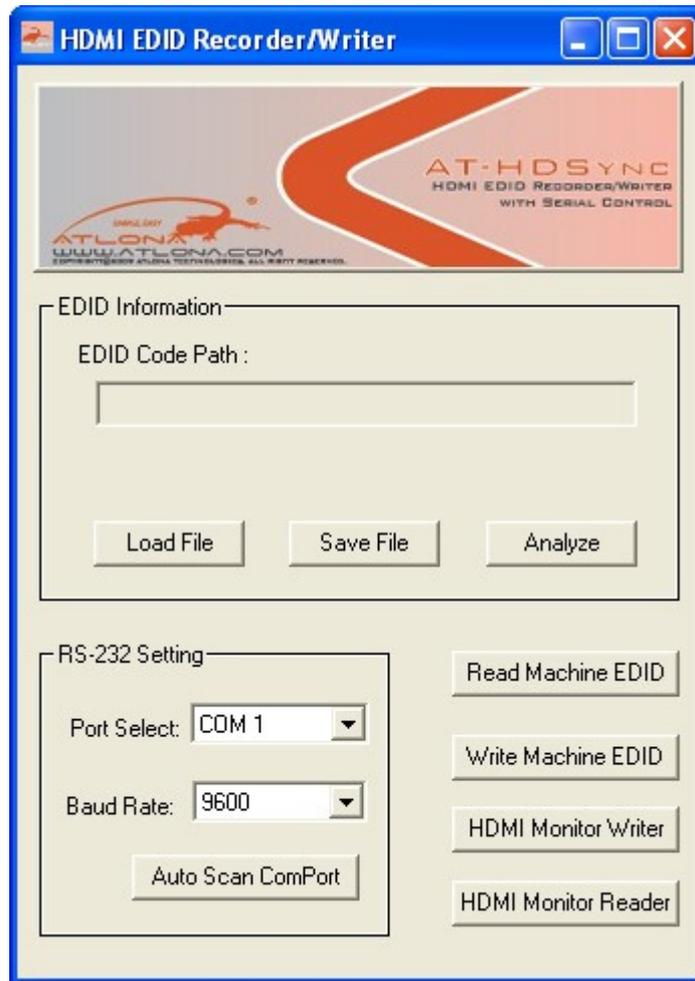## III. Write an EDID to a HDMI™ monitor or projector

1. Set AT-HDSync to **MODE 7**.

2. Connect the HDMI™ display device to the AT-HDSync via the **DISPLAY** port.

3. Plug in the 5V DC power supply unit.

4. Connect the AT-HDSync to the serial port of PC and run the control software.

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.

Note: The AT-HDSync may not work on the monitors with EDID write-protection.
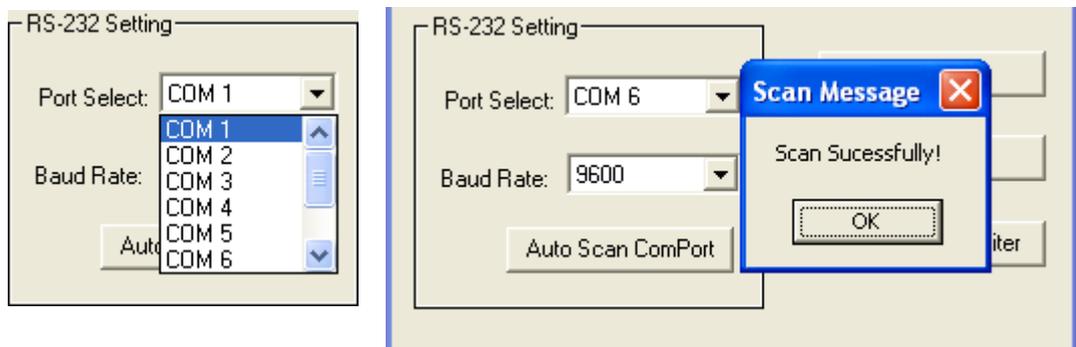
Before running the software, please make sure the rotary switch is set to **MODE 7**.

1) Getting started

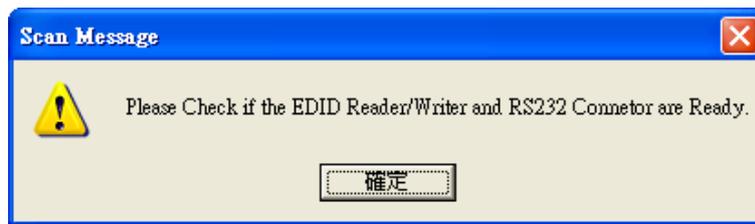

1. Firstly, make sure of the correct setup, and click on Auto Scan ComPort .
   If the installation is done successfully, the following pop-up message window will show up to indicate the RS-232 serial port is automatically detected and successfully connected.
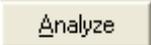

2. If the error message as shown below appears, inappropriate setup has occurred. Check at the power supply and RS-232 serial port connection.

2) Read EDID from AT-HDSync

1. If users would like to read EDID info from the AT-HDSync, simply click "Read Machine EDID." You can see the following message to inform you the correct reading of the EDID has been done.

2. Click [Analyze] and make a quick analysis on the EDID information just read, which users are capable of monitoring or modifying.

3. To save the EDID information for your future reference, please click [Save File]. The pop-up window will guide you to save the EDID information within the PC.

3) Write EDID into AT-HDSync

1. You can modify EDID content in the pop-up window after you click "Analyze". You can also load the previously saved EDID information in the analysis window by clicking "Load File".

2. While you finish editing EDID content, you can click "Write Machine EDID" to write the EDID profile to the AT-HDSync. After the writing action is completed, the following message window will show up.

4) Write EDID into a HDMI™ monitor/projector

Executing "HDMI Monitor Writer" might cause damage to your monitor's EDID. For instance, the sudden power surge or the disconnection of the serial port while updating EDID may result in an incomplete update process. Therefore, it is not recommended to use this function. If users would like to update the monitor's EDID content and acknowledge such risk, please make a backup copy of the original EDID, and make sure there is no damage to your monitor's EDID.

1. Click [Analyze] or click [Load File] to load the pre-saved EDID profile in the analysis window.

2. Click "HDMI Monitor Writer" Click "HDMI Monitor Writer" and wait for the following message window showing up.

3. The AT-HDSync may not work on the monitors with EDID write-protection. At this time , you can see the following error message window showing up .

5) Read EDID from a HDMI™ monitor/projector

1. Click "HDMI Monitor Reader" and wait for the following message window showing up.

2. Click "Analyze" and make a quick analysis on the EDID information just read, which users are capable of monitoring or modifying.

3. To save the EDID information for your future reference, please click [Save File] .

The pop-up window will guide you to save the EDID information within the PC.

Note: The AT-DVISync may not work on the monitors with EDID write-protection.

Safeguards

To reduce the risk of electric shock, do not expose this product to rain or moisture.

If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.

Do not modify the wall plug.
Doing so will void the warranty and safety features.

This equipment should be installed near the socket outlet and the device should be easily accessible in case it requires disconnection.

Precautions

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product or cause fires.

In the event of an electrostatic discharge, this device may automatically turn off. If this occurs, unplug the device, and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins, or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements and swimming pools.

Use only accessories recommended by ATLONA to avoid fire, shock or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning. Do not use cleaning fluid or aerosols, which could enter the unit and cause damage, fire or electrical shock. Some substances may also mar the finish of the product.

Never open or remove unit panels or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-HDSync Opening the product will void the warranty.

Do not attempt to service the unit. Instead disconnect it and contact your Authorized ATLONA reseller or contact ATLONA directly.

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1. LIMITED WARRANTY

Atlona Technologies warrants that (a) its products (the "Product") will perform substantially in accordance with the accompanying written materials for a period of 3 years from the date of receipt and (b) that the Product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to Customer.

2. CUSTOMER REMEDIES

Atlona Technologies and its suppliers' entire liability and Customer's exclusive remedy shall be, at Atlona Technologies' option, either return of the price paid for the Product, or repair or replacement of the Product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of Customer's receipt. This Limited Warranty is void if failure of the Product has resulted from accident, abuse, or misapplication. Any replacement Product will be warranted for the remainder of the original warranty period or 3 year, whichever is longer.

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