

MONOPRICE

**HDMI® 1080p to 4K Upscaler
with Digital Optical Audio Splitter**

Model 14599

User's Guide

SAFETY WARNINGS AND GUIDELINES

- This device is intended for indoor use only.
- Do not expose this device to water or moisture of any kind. Do not place drinks or other containers with moisture on or near the device. If moisture does get in or on the device, immediately unplug it from the power outlet and allow it to fully dry before reapplying power.
- Do not expose this device to excessively high temperatures. Do not place it in, on, or near heat sources, such as a fireplace, stove, radiator, etc. Do not leave it in direct sunlight.
- Unplug this device from the power source when not in use.
- Prior to operation, check the unit and power cord for physical damage. Do not use if physical damage has occurred.
- Before plugging the unit into a power outlet, ensure that the outlet provides the same type and level of power required by the device.
- Do not allow the power cord to be crimped, pinched, stepped on, etc. Ensure that the power cord does not present a tripping hazard.
- Never unplug the unit by pulling on the power cord. Always grasp the connector head or adapter body.
- Clean using a soft, dry cloth only. Do not use chemical cleaners, solvents, or detergents. For stubborn deposits, moisten the cloth with warm water.
- This device has no user serviceable parts. Do not attempt to open, service, or modify this device.
- In the event of serious operating problem, stop using the unit immediately.
- Keep out of reach of children.
- Keep away from corrosive materials.

INTRODUCTION

Thank you for purchasing this HDMI® Scaler!

This device accepts a High Speed HDMI signal at up to 1080p resolution (1920x1080p) and upscales it to 4K @ 24/30Hz (3840x2160p) for display on 4K monitors or UHD televisions. The output is switchable between a pass-through signal, which outputs the original video without modification, unscaled with different audio options, or scaled. The HDMI input is MHL™ compatible, so you can connect it directly to your MHL-equipped phone or tablet. It supports high-definition multichannel audio signals and provides a dedicated S/PDIF digital optical audio output for connection to an AV receiver.

FEATURES

- Upscales 1080p input to 4K resolution
- Supports 3D video
- Switchable pass-through or upscaled output
- HDMI input port is compliant with the MHL 2.0 specification
- Extracts the audio signal and outputs S/PDIF digital optical audio for use with a standalone AV receiver
- Supports Deep Color up to 12-bits per channel (36-bits total) at 1080p@30Hz resolution
- Supports compressed and uncompressed multichannel audio, including PCM, Dolby Digital™, and DTS Digital Surround™
- Supports HDCP and CEC pass-through
- Can reliably transmit 4K@30Hz video to 15 meters or 4K@24Hz to 20 meters

CUSTOMER SERVICE

The Monoprice Customer Service department is dedicated to ensuring that your ordering, purchasing, and delivery experience is second to none. If you have any problem with your order, please give us an opportunity to make it right. You can contact a Monoprice Customer Service representative through the Live Chat link on our website www.monoprice.com during normal business hours (Mon-Fri: 5am-7pm PT, Sat-Sun: 9am-6pm PT) or via email at support@monoprice.com

PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.

1x HDMI® scaler

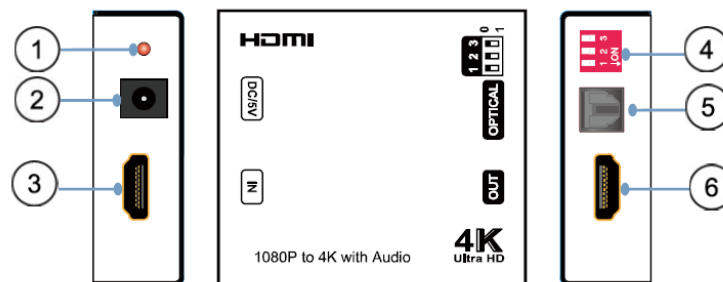
2x Mounting ears

1x AC power adapter

4x Mounting screws

1x User's manual

PRODUCT OVERVIEW



1. HDMI output LED indicator

4. EDID DIP switches

2. DC input power jack

5. S/PDIF digital optical audio output

3. HDMI input

6. HDMI output

EDID DIP SWITCH SETUP

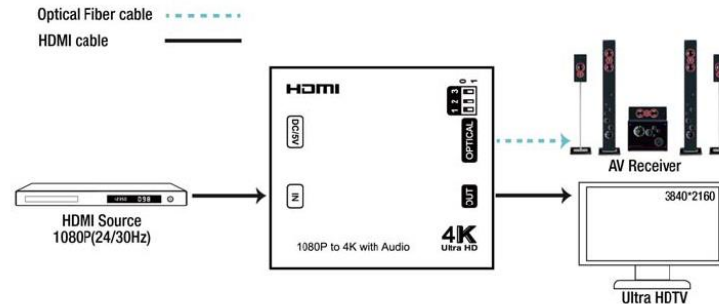
The DIP switches on the side are used to set the Extended Display Identification Data, which is used to inform the source device of the display capabilities of the output device. This scaler uses DIP switches to manually set the EDID value. Before making any changes to the DIP switch settings, unplug the scaler from its power source.

Refer to the diagram on top of the scaler and the label on the DIP switches to identify which position is the ON (1) position and which is OFF (0). Set the DIP switches according to the following table.

DIP Switches			Video and Audio Settings
1	2	3	
0	0	0	1080p 3D pass-through
0	0	1	1080p 3D with 2.0-channel PCM
0	1	0	1080p 3D with 5.1-channel AC3/DTS audio output
0	1	1	Reserved
1	0	0	Reserved
1	0	1	Reserved
1	1	0	Reserved
1	1	1	Upscale 1080p@24/30Hz to 4K@24/30Hz

CONNECTION

Connection Diagram



1. Ensure that all devices that will be connected are powered off and unplugged from their power sources.
2. Refer to the *EDID DIP SWITCH SETUP* section above and set the DIP switches for the desired output.
3. Using a High Speed HDMI® Cable (not included), plug one end into the HDMI input on your 4K monitor or UHD television. Plug the other end into the **HDMI OUT** port on the scaler.
4. Using a High Speed HDMI Cable (not included), plug one end into the **HDMI IN** port on the scaler. Plug the other end into the HDMI output of your video source device.
5. (Optional) Using an S/PDIF Digital Optical Audio Cable (not included), plug one end into the optical audio input on your AV receiver/amplifier. Plug the other end into the **OPTICAL** output on the scaler.
6. Plug the DC barrel connector on the included AC adapter into the **DC5V** port on the scaler, then plug the adapter into a nearby AC power outlet. The LED indicator next to the **DC5V** port should flash once then go out.
7. Plug in and power on all connected equipment. Start your video source and verify the outputs are correct.

Note: The HDMI output LED indicator illuminates whenever an HDMI signal with HDCP is detected. If the HDMI signal does not contain HDCP, the indicator will remain off.

TROUBLESHOOTING

Q1: No video output.

A1: Perform the following checks:

- Verify that the AC power adapter is plugged into a live AC outlet by plugging a different device into the power outlet (e.g., a lamp).
- Verify that the video source device is powered on and that video content is being played.
- Ensure that the display is powered on and set to the correct video input.
- If using the Optical audio output, check to see if audio exists to indicate whether a valid input signal is present.
- If you have set the DIP switches to anything other than the default (000, all off), try setting them to 000.
- Try swapping out the HDMI output cable for a known good one.
- Try swapping out the HDMI input cable for a known good one.

Q2: Video is present, but no audio can be heard.

A2: If you have set the DIP switches to anything other than the default (000, all off), try setting them to 000.

TECHNICAL SUPPORT

Monoprice is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website www.monoprice.com during regular business hours, 7 days a week. You can also get assistance through email by sending a message to tech@monoprice.com

SPECIFICATIONS

Inputs	1x High Speed HDMI®
Outputs	1x High Speed HDMI 1x S/PDIF digital optical audio
Maximum Input Resolution	1920x1080p@30Hz
Pass-Through Output Resolution	1920x1080p@30Hz
Maximum Scaled Output Resolution	3840x2160p@24/30Hz
Bandwidth	10.2Gbps
Maximum Transmission Distance	20 meters using 26AWG passive HDMI cable
Input Power	5 VDC, 1A
AC Adapter Input Power	100 ~ 240 VAC, 50/60Hz, 0.2A
Power Consumption	up to 1.5 watts
Operating Temperature	+23 ~ +95°F (-5 ~ +35°C)
Operating Humidity	5 ~ 90% RH, noncondensing
Dimensions	2.8" x 2.6" x 0.8" (72 x 65 x 22 mm)
Weight	5.1 oz. (145g)

REGULATORY COMPLIANCE

Notice for FCC



This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Modifying the equipment without Monoprice's authorization may result in the equipment no longer complying with FCC requirements for Class B digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notice for Industry Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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