

User Guide

DVI + Digital Audio to HDMI Converter
DVI-3150a

HDMI to DVI + Digital Audio Converter
DVI-3510a



Table of Contents

Section	Page
1.0 Introduction.....	1
2.0 Specifications.....	2
3.0 Checking Package Contents.....	3
4.0 Connecting the Hardware.....	3
5.0 Operating The Unit.....	4
6.0 Troubleshooting.....	5
7.0 Limited Warranty.....	5
8.0 Regulatory Compliance.....	5



1.0 INTRODUCTION

Thank you for purchasing this Format Converter from DVI Gear. The model **DVI-3150a** accepts DVI and S/PDIF digital audio input signals and converts them into a single HDMI output signal. This product is ideal for applications that require a DVI + digital audio signal to be displayed on HDMI compliant displays. The **DVI-3510a** converts a single HDMI signal to a DVI output signal with a separate S/PDIF digital audio. This unit is a perfect solution for applications where an HDMI input signal must be connected to a display that only accepts DVI + digital audio. Both products are fully HDCP compliant and require that the display is also HDCP compliant. Our professional video conversion products have been serving the industry for several years. DVI Gear offers a full line of high quality Video Scalers, Scan Converters, Analog-Digital Converters and DVI/HDMI Converters, as well as Signal Switchers and Distribution Amplifiers.

1.1 Liability Statement

Every effort has been made to ensure that this product is free of errors. DVI Gear 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 of the hardware to check that it is suitable for his/her 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.

DVI Gear 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. All third party trademarks and copyrights are recognised. The DVI Gear logo is a registered trademark of DVI Gear, Inc. All other trademarks are the property of their respective holders.

1.2 Features

The DVI-3150a and DVI-3510a offer several unique features and benefits:

- Allows seamless routing of DVI, HDMI and digital audio signals
- Supports digital RGB or YPbPr formats
- Supports popular S/PDIF digital audio format
- Plug and Play for easy installation
- Supports single-link bit-rates up to 1.65 GBit/sec., clock rates up to 165 MHz
- Supports HDTV resolution up to 1080p (with 8-bit color)



2.0 SPECIFICATIONS

Input / Output Connections	
HDMI	1x HDMI female connector
DVI	1x DVI-I female connector
S/PDIF Digital Audio	1x RCA female connector
Digital Interface	
HDMI Compliance	HDMI 1.2a
DVI Compliance	DVI Rev 1.0
Digital Audio	S/PDIF (IEC 61937)
Supported Clock Rate / Bit-Rates	
Analog Pixel Clock Rates	up to 165 MHz
Digital Bit-Rates	up to 1.65 GBit/sec. (single-link operation only)
HDTV Resolutions	
Interlaced (50 & 60 Hz)	480i, 576i, 1080i
Progressive (50 & 60 Hz)	480p, 576p, 720p, 1080p
Special (24 to 30Hz)	1080p@24, 1080p@25, 1080p@30
PC Resolutions	
VGA	60Hz, 72Hz, 75Hz, 85Hz
SVGA	60Hz, 72Hz, 75Hz, 85Hz
XGA	60Hz, 72Hz, 75Hz, 85Hz, 87Hz
SXGA	60Hz, 75Hz, 85Hz
UXGA	60Hz, 1152@70Hz, 75Hz, 85 Hz
Mechanical	
Size (H x W x D)	1.2" x 3.0" x 4.0" (31 x 77 x 102 mm)
Weight (Net)	6.7 oz (192 g.)
Environmental	
Operating Temperature	+32° to +118° F (0° to +48° C)
Storage Temperature	+14° to +158° F (-10° to +70° C)
Operating / Storage Humidity	10% to 85%, non-condensing
Power Requirements	
External AC Power Adaptor	Input: 100-240VAC @50/60Hz Output: 5VDC @2A
Regulatory Approvals	
Converter Unit	FCC, CE
Power Adaptor	UL, CE, CSA
Model Numbers	
DVI-3150a	Converter DVI + Digital Audio to HDMI
DVI-3510a	Converter HDMI to DVI + Digital Audio
Accessories Included	
1x External AC Power Adaptor	USA type plug, UK or Euro type plug is optional
1x User Guide	

3.0 CHECKING PACKAGE CONTENTS

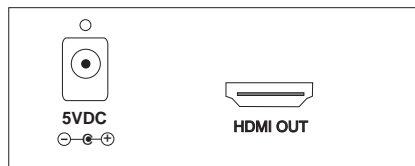
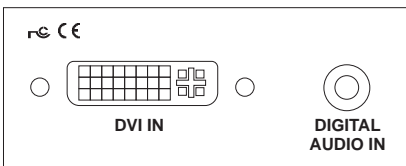
Before attempting to use this unit, please check the packaging and make certain the following items are contained in the shipping carton:

- 1x DVI-3150a DVI + Digital Audio to HDMI Converter, or
1x DVI-3510a HDMI to DVI + Digital Audio Converter
- 1x External AC Power Adapter
- 1x User Guide

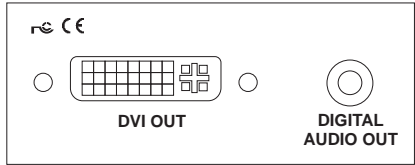
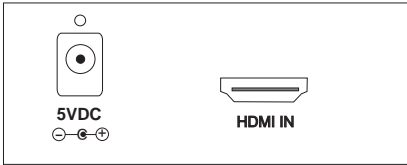
Note: Please retain the original packing material should the need ever arise to return the unit. If you find any items are missing, contact your reseller or DVIGear immediately. Please have the Model Number, Serial Number and Invoice Number available for reference when you call.

4.0 CONNECTING THE HARDWARE

The first step is to connect a video source to the input of the format converter and to connect its output to a display device. Below you'll find drawings of the unit showing the locations of the input, output and power connectors.



DVI-3150a Converter DVI + Digital Audio to HDMI



DVI-3510a Converter HDMI to DVI + Digital Audio

To begin, connect the External AC Power Adapter to the Format Converter's power input. Next connect the appropriate cables to the source device and then the Format Converter. Finally, connect the output cables to the Format Converter and to the destination device.

Once the cables have been connected, apply power to the source and destination devices and then plug the External AC Power Adapter into an AC power source. The Format Converter will begin to function as soon as it has power and an image should be immediately visible.

5.0 OPERATING THE UNIT

Neither the DVI-3510a nor the DVI-3150a has any controls that require adjustment. Simply connect the cables and power as explained above and the device will convert whatever signal that is present on its input to the complementary signal on its output.



6.0 TROUBLESHOOTING

Other than problems with power or cabling, there is little in the way of troubleshooting required for either of these products. If neither the cabling nor the power is at fault and you still have faulty operation, make certain that both the source and destination devices are working properly.

After trying the above suggestions should the problem still persist, contact your dealer for additional suggestions. Should the dealer's technical personnel be unable to assist you, please contact DVI Gear via telephone at (888) 463-9927 (United States and Canada); international callers may dial +1 (770) 421-6699, or use e-mail at support@dvigear.com.

7.0 LIMITED WARRANTY

LIMITED WARRANTY – With the exceptions noted in the next paragraph, DVI Gear, Inc. warrants the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a period of one year from the date of purchase. Should this product, in DVI Gear's opinion, prove defective within this warranty period, DVI Gear, at its option, will repair or replace this product without charge. Any defective parts replaced become the property of DVI Gear. 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.

If repairs are necessary under this warranty policy, the original purchaser must obtain a Return Authorization Number from DVI Gear and return the product freight prepaid to a location designated by DVI Gear. After repairs are complete, the product will be returned, freight prepaid.

LIMITATIONS – All products sold are "as is" and the above Limited Warranty is in lieu of all other warranties for this product, expressed or implied, and is strictly limited to two years from the date of purchase. DVI Gear assumes no liability to distributors, resellers or end-users or any third parties for any loss of use, revenue or profit.

DVI Gear makes no other representation of warranty as to fitness for the purpose or merchantability or otherwise in respect of any of the products sold. The liability of DVI Gear with respect to any defective products will be limited to the repair or replacement of such products. In no event shall DVI Gear be responsible or liable for any damage arising from the use of such defective products whether such damages be direct, indirect, consequential or otherwise, and whether such damages are incurred by the reseller, end-user or any third party

8.0 REGULATORY COMPLIANCE

This product has been tested for compliance with: FCC Class B and CE. The External AC Power Adapter has been tested for compliance with: UL, CSA and CE. This product is RoHS compliant.



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