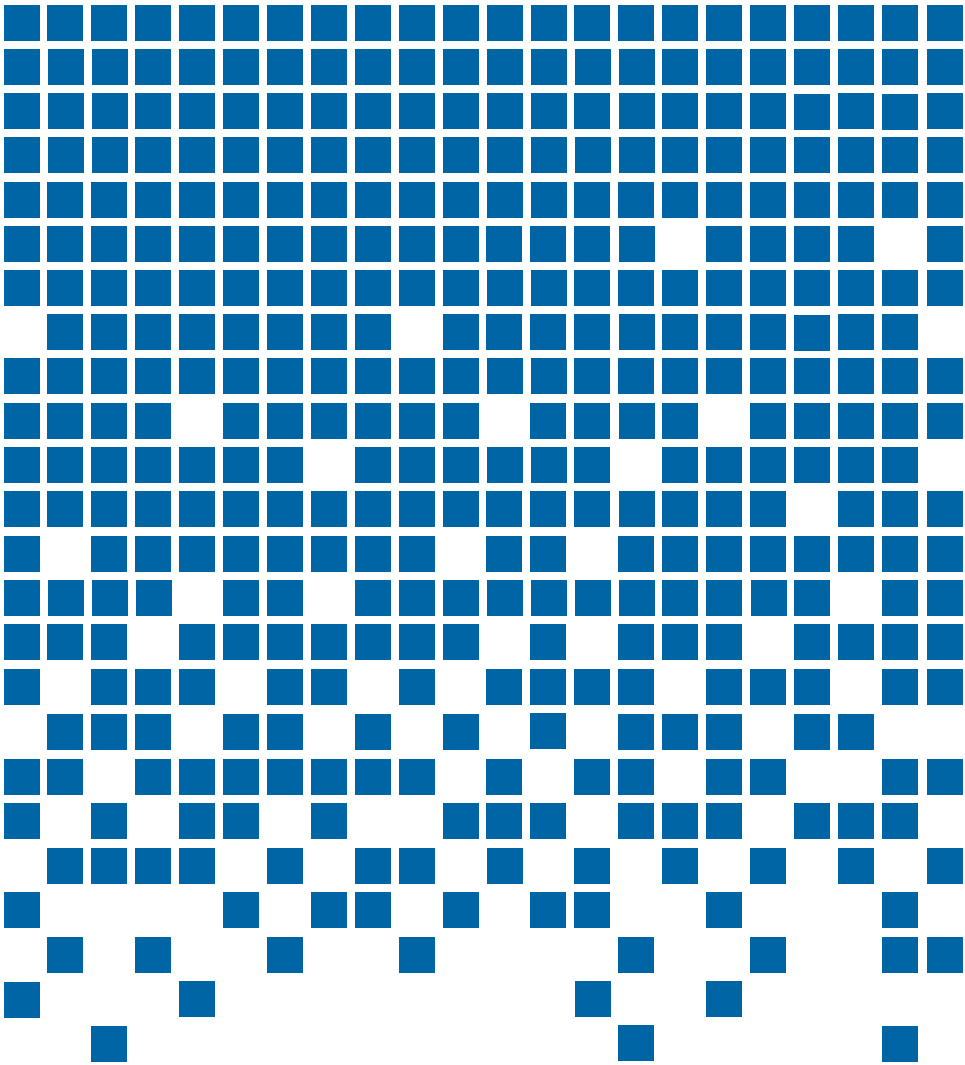


DVIGEAR

User Guide

DVI+HDCP 2x1 Switcher

DVI-4121

DVIGEAR

TABLE OF CONTENTS

I. INTRODUCTION

Thank you for purchasing DVIGear's model DVI-4121 DVI + HDCP 2x1 Switcher. This product has been designed to provide the highest level of performance, signal fidelity and reliability. This device allows two DVI equipped sources to be selectively switched to a single DVI input on a display. The unit is fully HDCP compliant for usage with sources and displays that utilize this technology. To ensure optimum performance, read this manual in its entirety prior to using this product. Please feel free to contact us with any questions or comments you may have regarding this unit.

II. LIABILITY STATEMENT

This unit has been designed and manufactured to DVIGear's strict quality standards. Every effort has been made to ensure that this product is free of defects. It is the responsibility of the user to check that it is suitable for his/her requirements and that it is installed correctly. DVIGear cannot be held liable for any direct or indirect consequential damages arising from the use of this product. This statement does not affect the legal rights of the user in any way.

DVIGear reserves the right to revise any of its products when it is deemed necessary or desirable.

III. WARRANTY

DVIGear warrants the equipment it manufactures to be free from defects in material and workmanship. If equipment fails because of such defects and DVIGear is notified within 3 years from the date of shipment, DVIGear will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications. Equipment 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 the repair. Such repairs are warranted for ninety days from the day of re-shipment to the buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed. The information in this manual has been carefully checked and is believed to be accurate. However, DVIGear assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will DVIGear be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding the product features and specifications is subject to change without notice.

IV. PACKAGE CONTENTS

- Model DVI-4121 DVI + HDCP 2x1 Switcher
- Infrared Remote Control Unit
- AC Power Adapter (9 VDC)
- User Manual

V. PRODUCT DESCRIPTION

The model DVI-4121 is a high-performance, remote controllable, HDCP compliant DVI Switcher that delivers superior performance and reliability for a broad range of PC and HDTV applications. Designed to meet the most demanding installation requirements, these units are housed in a rugged, yet compact enclosure. This unit is compatible with the full spectrum of single-link DVI signals with pixel rates up to 165 MHz (1.65 GBit/sec.). This unit performs well with HDTV signals with resolutions up to 1080p and PC resolutions up to 1920x1200 / 60Hz.

VI. FEATURES

- High performance unit in a compact, rugged enclosure
- Allows two DVI input signals to be switched to a single DVI display
- Supports DVI-I (analog and digital) inputs and outputs
- Fully HDCP compliant, supports signals with or without HDCP
- Supports HDTV resolutions up to 1080p and PC resolutions up to 1920x1200 / 60Hz
- Provides EDID emulation of the display connected on Output #1 to all other outputs

VII. GETTING THE BEST RESULTS

Many factors can adversely affect the quality of a digital video signal in a distribution chain. When additional interconnects are added to the system, the possibility for signal degradation increases. The following points should be observed in order to ensure optimal performance:

- Output source device - the quality of the output signal will depend largely upon the type and quality of input (source) device used. For instance, some DVD players perform better than others.

- Using Native Resolution - It is always best to set the output resolution of the source device to the native resolution and refresh rate of the display device(s). This allows for the two units to work together in the best fashion. Consult the owner's manual for your display for more information.

- Distance between the source and display devices - The length of cable between the source(s) and display(s) should be minimized as much as possible. When using the DVI-4121, the overall cable distance should not exceed 15 meters (49 ft.) without proper signal management (e.g. DVI Repeater, or DVI Extender).

- Connection Cables - For optimum performance, it is strongly suggested to use DVIGear's Super High Resolution™ DVI and HDMI cables.

- Interference from nearby electrical devices - Both electrical appliances and electrical wiring can have an adverse effect on signal quality. Avoid that this product is placed in close proximity to fluorescent light fixtures or appliances, equipment, machinery that requires large amounts of AC Power as they can emit very high electromagnetic fields that could interfere with the performance of this product.

VIII. CONNECTING THE HARDWARE

Prior to connecting the unit, ensure that all devices have been powered off.

1) Connect your DVI display to the switcher's DVI output with a DVIGear Super High Resolution™ cable.

2) Connect 2 DVI sources to the switcher's inputs using a DVIGear Super High Resolution™ DVI cable.

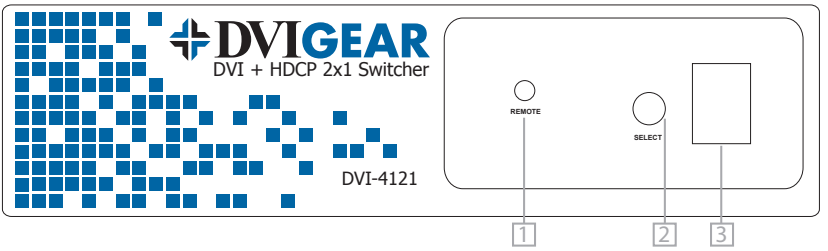
3) Plug the 9VDC power adapter in to the rear of the unit.

4) Plug the power adapter in to an AC socket.

5) Power ON the switcher first, then power ON the display - power ON the sources last.

IX. OPERATION

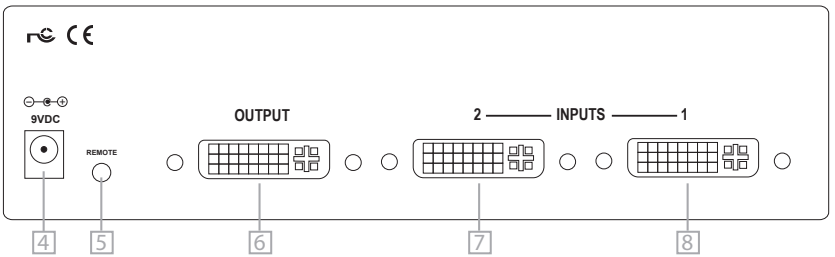
FRONT PANEL



Front Panel:

1. Infrared Receiver for IR Remote
2. Input Selection button
3. Input Selection LED

BACK PANEL



Back Panel:

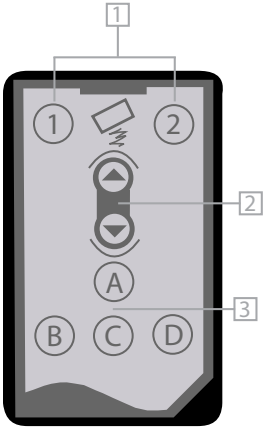
4. DC Power Adapter Input
5. Input for Optional IR Remote Receiver
6. DVI-I Output
7. DVI-I Input 1
8. DVI-I Input 2

IX. OPERATION

It is possible to select the input device you wish to access in two ways: using the front panel input selection button, or via the supplied IR Remote Control Unit.

Front Panel Input Selection: The front panel input selection button [2] can be used to select the desired source to be displayed. Pressing this button during normal operation will cause the input devices to be toggled through sequentially.

IR Remote Control Selection: The desired source may be selected via the supplied IR Remote Control Unit by pressing the appropriate input buttons.



IR Remote Control Unit:

1. Buttons 1 and 2 switch between the two sources connected to Input 1 and Input 2.

2. The up and down buttons toggle between the sources connected to Input 1 and Input 2.

3. If you have a problem with this IR Remote Control Unit conflicting with other devices in the immediate environment, you may reprogram the remote to use a different IR frequency. Four different frequency settings are possible (A, B, C, D). The default setting is A. To change the IR frequency setting, press and hold the desired IR frequency button for 2 seconds. The 7-segment LED display will show the IR code for one second when the new IR code is set.

X. SPECIFICATIONS

Performance	
HDTV Resolutions Supported	480i, 480p; 720p; 1080i; 1080p
Computer Resolutions Supported	Up to 1920x1200 @ 60Hz
Maximum Bandwidth Supported	165 MHz (analog)
Maximum Bitrate Supported	1.65 Gbit/sec
Mechanical	
Dimensions (HxWxD) (mm)	1.65" x 6.38" x 2.83" (42 mm x 162 mm x 72 mm)
Weight (kg)	0.9 lbs (0.41 kg)
Environmental	
Operating Temperature	32° to 104° F (0° to 40° C)
Operating Humidity	10% to 85% non-condensing
Accessories Included	
9VDC AC Power Adapter	AC Power Adapter (9VDC) , User Manual

XI. TROUBLESHOOTING

If the switcher does not appear to be functioning, make certain that all of the DVI connections are securely attached to the unit with all appropriate screws in tight. Secondly, verify the functioning of all DVI devices (sources and displays) by connecting them with a short (6 ft. or less) DVI cable. If the signal is present under those conditions, ensure that the connections are made fully and that the power indicator light is clearly lit. Finally, make sure that the overall cable distance does not exceed 15 meters (49 ft.) without proper signal management (e.g. DVIGear DVI + HDCP Repeater).

If you require further assistance, please contact Email us at support@dvigear.com, or contact us by phone at 888-463-9927. For more information on our products, please visit our website at http://www.dvigear.com.

XII. RELATED PRODUCTS

DVI + HDCP 4x1 Switcher

The model DVI-4141 switcher allows for the connection of up to four (4) DVI sources to a single display. Like the model DVI-4121, this switcher uses state-of-the art digital signal switching technology and come in a compact, rugged enclosure. The DVI-4141 switcher is fully HDCP compliant and comes with a convenient miniature IR Remote Control, which makes it extremely easy to use. Both models are ideal for PC-based and HDTV display applications.

http://www2.dvigear.com/switchers.html

DVI + HDCP 1x2 Splitter and DVI + HDCP 1x4 Splitter

The DVI-5112 and DVI-5114 are high-performance, HDCP compliant DVI Splitters that deliver superior performance and reliability for a broad range of PC and HDTV applications. Designed to meet the most demanding installation requirements, these units are housed in a rugged, yet extremely compact enclosure. Each unit is compatible with the full spectrum of single-link DVI signals with pixel rates up to 165 MHz (1.65 GBit/sec.), which allows them to accept HDTV signals with resolutions up to 1080p and PC resolutions up to 1920x1200 / 60Hz.

http://www2.dvigear.com/diam.html

DVI-D Super High Resolution Copper DVI cables

Use DVIGear's DVI-D Super High Resolution Copper DVI cables with your new DVI Switcher. These next generation Super High Resolution (SHR) DVI-D cables are engineered for superior performance and reliability. Designed for fully transparent operation with single-link bit rates up to 1.65 Gbit/sec., DVIGear's SHR cables set a new benchmark for performance and durability.

http://www2.dvigear.com/cables.html

Your Digital Connectivity Experts

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