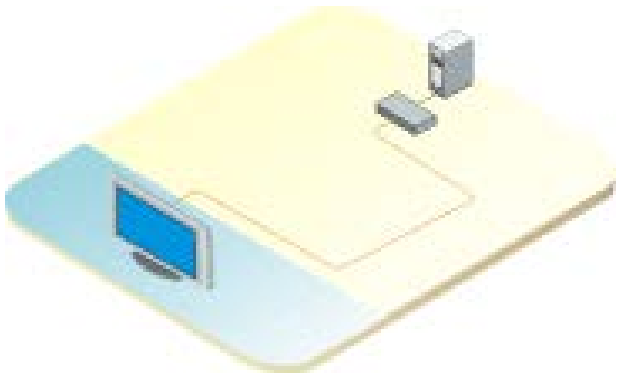


VGA to DVI Converter / Scaler

ROSE.COM

Installation and Operations Manual



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Disclaimer

While every precaution has been taken in the preparation of this manual, the manufacturer assumes no responsibility for errors or omissions. Neither does the manufacturer assume any liability for damages resulting from the use of the information contained herein. The manufacturer reserves the right to change the specifications, functions, or circuitry of the product without notice.

The manufacturer cannot accept liability for damages due to misuse of the product or other circumstances outside the manufacturer's control. The manufacturer will not be responsible for any loss, damage, or injury arising directly or indirectly from the use of this product.

System introduction

Thank you for choosing the Rose Electronics® VGA to DVI converter. The converter is the result of Rose Electronics commitment to providing state-of-the-art solutions for today's demanding workplace.

The VGA to DVI converter is designed to connect analog graphic cards to DVI compliant digital monitors. Computers, laptops, or other VGA sources with HD15 video connectors can be connect to a DVI video display using our VGA to DVI converter.

Rose Electronics web site

Visit our web site at www.rose.com for additional information on the VGA to DVI Converter and other products offered by Rose Electronics that are designed for data center applications, classroom environments, digital wall / signage display systems, industrial and military systems, and many other access, switching, and extending applications.

Product Registration

Register your Rose Electronics products online at: www.rose.com/htm/online-registrationform.htm and take advantage of the following:

- Rose Electronics standard warranty *Plus*
- Free lifetime firmware updates
- Free lifetime technical support
- 30 day money back guarantee
- Priority "First-In-Line" status for technical support

Features

- Supports RGBHV, YPbPr or YCbCr analog PC or HDTV signal input formats .
- The output is digital + analog PC or HDTV signal in the format of digital RGBHV bit stream plus analog RGBHV, known as DVI-I (Integrated digital and analog).
- Automatically detects the input resolution
- Output resolution and refresh rate can be selected through OSD menu and front panel push buttons.
- 48 MB frame memory for frame rate conversion.
- Output picture adjustment on brightness, contrast, color, RGB level and H-V position.
- DVI output enables an all digital rendering of video without the losses associated with an analog interface and is ideal for use with digital display such as LCD, Plasma and DLP projectors.
- Converts / scales analog RGB inputs to DVI-I (digital or analog) outputs
- Select output resolution using the OSD (On Screen Display)
- Supports input/output computer resolutions up to 1920x1200 / 2048 x 1080 (2K) at 60Hz
- Supports HDTV resolution up to 1080p as input and output.
- Supports DDWG standard for DVI compliant monitors
- Aspect ratio control for native and full view modes

Package Contents

- VGA to DVI Converter
- 5VDC Power adapter
- Documentation CD

PANEL DESCRIPTION

Front Panel

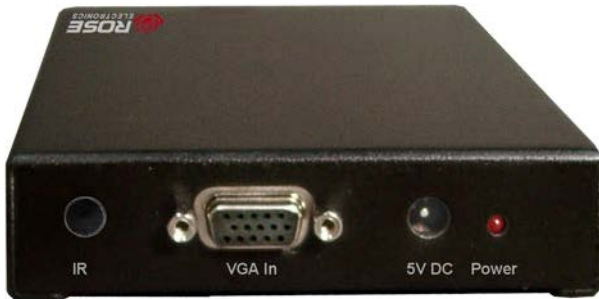


Connector – DVI-I

Selector buttons

Menu	Displays / Hides the Menu system
+ / -	Changes the value within the Menu System, such as brightness, color, output resolutions, etc. These buttons are also used to navigate the Menu System.

Rear Panel



IR	Not Used
VGA In	VGA cable from HD15F input to the VGA source
5V DC	5VDC power adapter connection
Power	LED indicator (Red when power is applied)

Installing the VGA to DVI converter / scaler

Installation of the VGA to DVI converter/scaler is a very easy process.

1. Connect a VGA cable from the VGA source to the VGA In connector.
2. Connect a DVI cable between the DVI Out connector and the DVI display.
3. Connect the 5V DC power adapter to the VGA to DVI converter / scaler, then connect the AC power cord from the power supply to an available electrical outlet. The power LED will turn red indicating that the unit is powered.
4. Power-on both the VGA source and the DVI display.



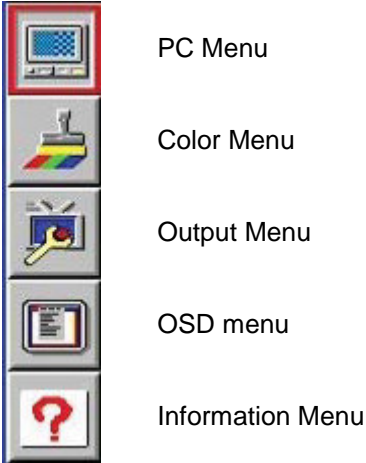
Figure 1. Connectivity Diagram

NOTE: The VGA to DVI Converter / Scaler provides an auto-adjust (auto-sync) feature each time the VGA source is connected to the unit. The VGA to DVI Converter / Scaler will also perform an auto-adjust during a hot-plug event, a power-cycle event, or if the VGA source resolution is changed.

OSD-Main menu

To access the main menu, press the “Menu” button on the front panel. The main menu will display as shown below. Use the + or – key to highlight the needed menu and press the “Menu” button to access that menu.

The 5 ICONS on the left of the OSD display are for selecting the different menus.



PC Menu

To access the PC Menu, press the Menu button on the front panel. Use the + or - buttons to highlight the PC Menu icon. Press the Menu button to enter the PC Menu. Use the + or - buttons to scroll through each of the parameters. After selecting the desired parameter, press the Menu button to make changes. Use the + or - buttons to increase or decrease the values. When the desired values have been set, press the Menu button to accept the settings.



Figure 2. OSD "PC" Menu

Contrast - Adjusts the Contrast by increments of 1. Min. value: 1, Max.value: 100.

Brightness - Adjusts the Brightness by increments of 1. Min. value: 1, Max. value: 100.

H-Pos - Specifies the horizontal position of the input signal.

V-Pos - Specifies the vertical position of the input signal.

Clock - Adjusts the video input clock to bring the picture into focus.

Phase - Adjusts the phase to bring the picture into focus.

Scale - Sets the scaling adjustment. Options are: Full, Overscan, Underscan, Letterbox U.S. (Underscan), PanScan U.S. (Underscan), Letterbox Full, and PanScan Full.

Exit - Returns control to the Menu System.

Color Menu

To access the Color Menu, press the Menu button on the front panel. Use the + or - buttons to highlight the Color Menu icon. Press the Menu button to enter the Color Menu. Use the + or - buttons to scroll through each of the parameters. After selecting the desired parameter, press the Menu button to make changes. Use the + or - buttons to increase or decrease the values. Press the Menu button to accept the settings.



Figure 3. OSD “Color” Menu

Color Temp.

- Normal - Use for general content.
- Warm - Red-shifts RGB values for a warmer video color.
- Cool - Blue-shifts RGB values for a cooler video color.
- User Allows individual adjustment of Red, Green, and Blue color components.

Red - Adjusts the Red value by increments of 1. Minimum value: 1, Maximum value: 100.

Green - Adjusts the Green value by increments of 1. Minimum value: 1, Maximum value: 100.

Blue - Adjusts the Blue value by increments of 1. Minimum value: 1, Maximum value: 100.

Exit - Exits the Color Menu and returns control to the Main Menu.

Output Menu

To access the Output Menu, press the Menu button on the front panel. Use the + or - buttons to highlight the Output Menu icon. Press the Menu button to enter the Output Menu. Use the + or - buttons to select an output resolution. Press the Menu button to set the new output resolution.



Figure 4. OSD "Output" Menu

The Native option will select the native resolution of the connected display based on the EDID from the display.

NOTE : If a resolution that is not supported by the display is selected, then the output signal will no longer be visible. If this occurs, reset the unit by removing power from the unit, press and hold the "Menu" and the "-" button and reconnect the power. This will reset the unit and allow you to re-select the output video resolution.

Exit – Exits the "Output" menu and returns to the main menu.

OSD MENU

Use the + or - buttons to highlight the OSD Menu icon. Press the Menu button to enter the OSD Menu. Use the + or - buttons to highlight the desired parameter. Press the Menu button to make changes. Use the + or - buttons to change the values. Press the Menu button to accept the changes.



Figure 5. OSD "OSD" Menu

H-Position (Horizontal Position) - Adjusts the horizontal position on the Menu System on the screen. Minimum value: 1, Maximum value: 100.

V-Position (Vertical Position) - Adjusts the vertical position of the Menu System on the screen. Minimum value: 1, Maximum value: 100.

TimeOut - Adjusts the amount of time (in seconds) before the OSD automatically closes. Minimum value: 1, Maximum value: 100.

Background - Sets the transparency level of the OSD background. Minimum value: 0, Maximum value: 8.

Remote Channel – Future addition

Exit - Exits the OSD Menu and returns control to the Main Menu.

Information Menu

To access the Information Menu, press the Menu button on the front panel. Use the + or - buttons to highlight the Information Menu icon.



Figure 6. OSD “Information” Menu

Resetting the Unit

To reset the VGA to DVI unit:

1. Remove power from the unit
2. Press and hold the Menu button and the minus (-) button and reconnect the power
3. When power has been applied, release both buttons

This procedure will reset the output resolution to the native resolution of the display.

APPENDICES

Appendix A - Specifications

Input Resolution	Up to 1920 x1200 @ 60 Hz
Output Resolution	Up to 2048 x 1080 (2k) @ 60 Hz
HDTV Resolution (In / Out)	Up to 1080p
Max. video bandwidth	350 MHz
Max Pixel Clock	165 MHz
Input DDC Signal	5 V p-p (TTL)
Connectors Input Output	VGA HD15M DVI-I 29 pin F
Power	5VDC (10 Watts max)
Dimensions W x D x H	5.8 x 4.1 x 1.0 in (14.7 x 10.4 x 2.5 cm)
Shipping Weight	3.0 lbs (1.36 Kg)

Appendix B – Part Numbers

CNV-VGADVI-I	Unit only
CNV-VGADVI-K	Unit + 5' HD15MM Cable CAB-DVIMM005
CNV-VGADVI-K1	Unit + 6' DVIMM Cable CAB-DVIMM006
CNV-VGADVI-K2	Unit + 5' HD15MM Cable CAB-DVIMM005 And 6' DVIMM Cable CAB-DVIMM006



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