# Video Converter

BNC To VGA Converter





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# LIMITED WARRANTY

Rose Electronics warrants the BNC to VGA Video Converter to be in good working order for one year from the date of purchase from Rose Electronics or an authorized dealer. Should this product fail to be in good working order at any time during this one-year warranty period, Rose Electronics will, at its option, repair or replace the Unit as set forth below. Repair parts and replacement units will be either reconditioned or new. All replaced parts become the property of Rose Electronics. This limited warranty does not include service to repair damage to the Unit resulting from accident, disaster, abuse, or unauthorized modification of the Unit, including static discharge and power surges.

Limited Warranty service may be obtained by delivering this unit during the one-year warranty period to Rose Electronics or an authorized repair center providing a proof of purchase date. If this Unit is delivered by mail, you agree to insure the Unit or assume the risk of loss or damage in transit, to prepay shipping charges to the warranty service location, and to use the original shipping container or its equivalent. You must call for a return authorization number first. Under no circumstances will a unit be accepted without a return authorization number. Contact an authorized repair center or Rose Electronics for further information.

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# **INTRODUCTION**

### **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, circuitry of the product, and manual content at any time 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. (See limited warranty)

### Introduction

Thank you for choosing Rose Electronics BNC to VGA Video Converter (Part Number CNV-BNCVGA). This Video Converter provides the means to convert Composite Video and S-Video to VGA, thereby enabling CCTV cameras, DVD, DVR and other equipment that generate these video signals to be displayed on a VGA PC monitor or LCD.

The Video Converter supports various input signal types and converts them to VGA output. The output signal can be displayed in four common VGA resolutions.

Video characteristics like brightness, contrast, hue and color can be adjusted. These settings are saved so that they are not lost if power is removed from the converter.

The converter also provides a mechanism to freeze the output display at any point, and unfreeze it when the need is over.

# About This Manual

This manual covers the installation and operation of the BNC to VGA Video Converter. The Installation section describes how the Video Converter is connected to the inputs and the output monitor. The Operations section describes how to use the buttons on the unit to display the best possible output video.

### Features

- Converts Composite Video through the BNC port and S-Video through the S-Video port to VGA
- Can work as an extender to extend VGA input to a VGA monitor.
- Supports four common resolutions: 800x600@60Hz, 800x600@75Hz, 1024x768@60Hz and 1280x1024@60Hz
- Auto-detects NTSC and PAL formats
- Provides ability to freeze the incoming video
- Can handle mixed input signals including::
  - Composite Video
  - o S-Video
  - o VGA
- Provides ability to adjust brightness, contrast, saturation and hue.
- Video settings are saved so they are available across power cycles.
- Video settings adjusted through OSD (On-Screen Display)
- Small unit with dimensions of
  - Length: 4.1" (105 mm)
    - Width: 2.6" (65 mm)
    - Height: 1.1" (27 mm)

# Compatibility

Video Input	Composite Video, S-Video, VGA
Video Output	VGA with resolutions of 800x600@60Hz, 800x600@75Hz, 1024x768@60Hz and
	1280x1024@60Hz

### Package contents

- BNC to VGA Video Converter
- S-Video cable
- 5V 1Amp Power Supply
- Manual

# **Product registration**

Register your product for future updates at: www.rose.com/htm/online-registrationform.htm

# MODELS

# **Model Description**

The following figure shows the buttons and connectors on the Video Converter.

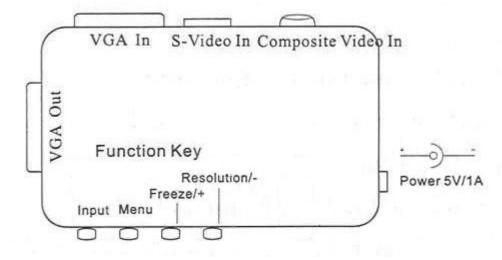


Figure 1. Video Converter buttons and connectors

# **INSTALLATION**

# Installation

The installation section of this manual describes how to connect the Video Converter to the input devices and output monitor.

*Note:* When installing the unit, take care that the pinholes on the top and bottom of the unit are not covered or obstructed. If they are, they may cause the unit to overheat and malfunction.

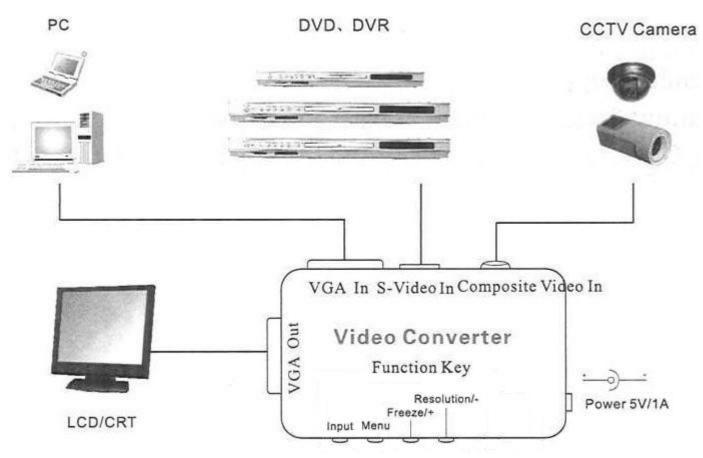


Figure 2. Video Converter Installation Diagram

Make the connections as displayed.

- Connect the PC CRT or LCD monitor on which the image is to be displayed to VGA Out.
- Connect Composite Video devices like CCTV Cameras to Composite Video In.
- Connect S-Video devices like DVDs and DVRs to S-Video In.
- Connect a PC host to VGA In
- Connect a 5V 1 Amp power supply to the power connector.

# **OPERATION**

# Operation

This section describes the operation of the Function Keys. The function keys are used to adjust and freeze the incoming image for optimum display on the output monitor. These settings are saved to the video converter so that they are retained even after the power has been removed from the unit.

To operate, press and hold the desired key for at least 75 milliseconds. When it is necessary to use a combination of the function keys as described below, press and hold both keys for at least 75 milliseconds.

The function keys and the limits for the input and output signals are described below.

#### Input function key

The Input function key is used to determine which video source is to be used. It cycles between the options as follows:

Composite Video >> S-Video >> VGA

#### Menu function key

The Menu function key is used to adjust the brightness, contrast, saturation and hue of the output video.

Press and hold the Menu function key until the OSD is displayed. Press the menu function again to reach the next video option. If there is no current video input, the OSD will display Invalid.

#### Bright Menu

Press Freeze/+ to increase the brightness of the image. Press Resolution/- to decrease the brightness of the image.

#### **Contrast Menu**

Press Freeze/+ to increase the contrast of the image. Press Resolution/- to decrease the contrast of the image.

#### **Color Menu**

Press Freeze/+ to increase the saturation of the image. Press Resolution/- to decrease the saturation of the image.

#### Hue Menu

Press Freeze/+ to increase the hue of the image. Press Resolution/- to decrease the hue of the image.

#### Freeze/+ function key

In the OSD, the Freeze/+ function increases the value of the setting that is being adjusted as described above. When not in the OSD, the Freeze/+ function key freezes and unfreezes the image on the display.

It should be noted that when the video is frozen, it is only frozen at the output monitor. The video will continue to play at the input source.

### **Resolution/-**

In the OSD, the Resolution/- function decreases the value of the setting that is being adjusted as described above. When not in the OSD, the Resolution/- function key allows the selection of the output resolution.

The following output resolutions are available:

- 800x600@60Hz
- 800x600@75Hz
- 1024x768@60Hz
- 1280x1024@60Hz

### **Function key combinations**

Press and hold the Input and Resolution/- function keys at the same time to return the video converter to its default setting. The default settings are as follows.

- Input: Composite Video
- Output Resolution: 1024x768@60Hz
- Brightness: 45
- Contrast: 50
- Saturation: 28
- Hue: 0

### Input and Output video signal limits

The input and output video signal limits when the input video source is Composite or S-Video are as follows.

#### Input video signal

Composite Video may be NTSC or PAL. The video converter will auto-detect the incoming signal format.

- Max Signal: 1.0 Vpp
- Impedance: 75 Ω

### Output video signal

The output video is always VGA, and is to be routed to a PC CRT or LCD monitor.

- R, G, B Max Signal: 0.7 Vpp, Impedance 75 Ω
- Vertical Sync Max Signal: 3 Vpp, Impedance 75 Ω
- Horizontal Sync Max Signal: 3 Vpp, Impedance 75 Ω

# SERVICE AND TECHNICAL SUPPORT

# **Service Information**

### **Maintenance and Repair**

This Unit does not contain any internal user-serviceable parts. In the event a Unit needs repair or maintenance, you must first obtain a Return Authorization (RA) number from Rose Electronics or an authorized repair center. This Return Authorization number must appear on the outside of the shipping container.

See Limited Warranty for more information.

When returning a Unit, it should be double-packed in the original container or equivalent, insured and shipped to:

Rose Electronics Attn: RA\_\_\_\_\_\_ 10707 Stancliff Road Houston, Texas 77099 USA

### **Technical Support**

If you are experiencing problems, or need assistance in setting up or operating your BNC to VGA Video Converter, consult the appropriate sections of this manual. If, however, you require additional information or assistance, please contact the Rose Electronics Technical Support Department at:

Phone: (281) 933-7673 E-Mail: <u>TechSupport@rose.com</u> Web: <u>www.rose.com</u>

Technical Support hours are from: 8:00 am to 6:00 pm CST (USA), Monday through Friday.

Please report any malfunctions in the operation of this Unit or any discrepancies in this manual to the Rose Electronics Technical Support Department.

# SAFETY

The CNV-BNCVGA has been tested for conformance to safety regulations and requirements, and has been certified for international use. Like all electronic equipment, the Video Converter should be used with care. To protect yourself from possible injury and to minimize the risk of damage to the Unit, read and follow these safety instructions.

Follow all instructions and warnings marked on this Unit.

Except where explained in this manual, do not attempt to service this unit yourself.

Do not use this unit near water.

Assure that the placement of this unit is on a stable surface or rack mounted.

Provide proper ventilation and air circulation.

Keep power cord and connection cables clear of obstructions that might cause damage to them.

Use only power cords, power adapter and connection cables designed for this Unit.

Use only a grounded (three-wire) electrical outlet.

Use only the power adapter provided with the unit.

Keep objects that might damage this Unit and liquids that may spill, clear from this Unit. Liquids and foreign objects might come in contact with voltage points that could create a risk of fire or electrical shock.

Operate this Unit only when the cover is in place.

Do not use liquid or aerosol cleaners to clean this Unit. Always unplug this Unit from its electrical outlet before cleaning.

Unplug this Unit from the electrical outlet and refer servicing to a qualified service center if any of the following conditions occur:

- The power cord or connection cables are damaged or frayed.
- The Unit has been exposed to any liquids.
- The Unit does not operate normally when all operating instructions have been followed.
- The Unit has been dropped or the case has been damaged.
- The Unit exhibits a distinct change in performance, indicating a need for service.

#### Safety and EMC Regulatory Statements

Safety information

Documentation reference symbol. If the product is marked with this symbol, refer to the product documentation to get more information about the product.

**WARNING** A WARNING in the manual denotes a hazard that can cause injury or death.

**CAUTION** A CAUTION in the manual denotes a hazard that can damage equipment.

Do not proceed beyond a WARNING or CAUTION notice until you have understood the hazardous conditions and have taken appropriate steps.

#### Grounding

There must be an un-interruptible safety earth ground from the main power source to the product's input wiring terminals, power cord, or supplied power cord set. Whenever it is likely that the protection has been impaired, disconnect the power cord until the ground has been restored.

#### Servicing

There are no user-serviceable parts inside these products. Only service-trained personnel must perform any servicing, maintenance, or repair.

The user may adjust only items mentioned in this manual.

# TROUBLESHOOTING

# Troubleshooting

This section deals with troubleshooting possible problems when operating the CNV-BNCVGA.

### No output

Please ensure that the power supply is in good condition and the LEDs are lit.

### Output is a blue screen

Press and hold the Input key to select the input mode where the video source is connected.

