



**VIDEOLABS®**

## **SCAN CONVERTER**

*Computer-to-Video Converter*

### **VIDEOLABS**

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## **1.1 Introduction**

Congratulations on your purchase of the VideoLabs' Scan Converter. The Scan converter accepts graphic data from a PC (VGA) signal and converts them into video format (Composite, S-VHS & analog RGB for SCART use).

Plug & Play is achieved by automatically detecting the scan rate and resolution of the incoming graphic signals without the use of software. No installation other than the connection of cables is needed.

## **1.2 Features**

- True Plug & Play, no software drivers required.
- Compatible with all PCs.
- Scan rates up to 100Hz supported for 640x480 resolution, up to 85Hz for 800x600 resolution, up to 75Hz for 1024x768 resolution and 1152x864 resolution.
- True color quality.
- Simultaneous display both on TV screen and PC monitor.
- Supports NTSC, PAL and SECAM video system. (SECAM system displayed by analog RGB output port)
- OSD (on-screen-display) function.
- Full-screen Overscan/Underscan
- Horizontal/Vertical picture positioning.
- TV brightness control.
- TV sharpness control.
- 8-Level flicker control.
- Freeze function.
- Auto-Save for screen position, brightness, Sharpness.
- Remote control included.

## **1.3 Specifications**

- Input signal: VGA
- Horizontal frequency: 25KHz – 58.464KHz
- Vertical frequency: 50Hz – 100Hz
- Output signal: Composite video, S-video, analog RGB video.  
Computer monitor pass-thru
- Power supply: 9VDC power adapter
- Dimension: Base unit: 165mm x 105mm x 26mm

- Remote unit: 86mm x 45mm x 7mm
- Weight: Base unit: 230g (0.51 lbs)
- Warranty: Limited one-year
- Compliance: CE and FCC class B

#### **1.4 Package Contents**

- Scan converter unit
- Remote Control
- Owner's manual
- 15-pin HD extension cable
- AV cable
- S-VHS cable
- Power adapter
- Mini-Din to SCART cable (PAL system only)

#### **1.5 System Requirement**

- IBM PC or compatible
- TV set or Video input device with Composite video, S-VHS or SCART connector

#### **1.6 Warranty**

##### **Warranty Information on Hardware\***

One (1) year limited warranty on all parts

VideoLabs, Inc. warrants this product against defects in materials and workmanship for a period of one (1) year from the date of purchase. If VideoLabs, Inc. receives notice of such defects during the warranty period, VideoLabs, Inc. will either, at its option, repair or replace products which prove to be defective.

*\*VideoLabs, Inc. manufactures its hardware products from parts and components that are new or equivalent to new in accordance with industry-standard practices.*

##### **Exclusions**

The above warranty shall not apply to defects resulting from: improper or inadequate maintenance by customer, customer-supplied software or interfacing; unauthorized modifications or misuse; operation outside of the environment specifications for the product; or improper site operation and maintenance.

##### **Obtaining Warranty Service**

To obtain warranty service, products must be returned to a service facility designated by

VideoLabs, Inc.. Customer shall prepay shipping charges for products returned to VideoLabs Inc. for warranty service and VideoLabs Inc. shall pay for return of the products to customer. However, customer shall pay all shipping charges, duties and taxes for products returned to VideoLabs, Inc. from another country.

### **VideoLabs Customer Service**

If the camera is still under warranty, VideoLabs will test, repair or replace the product without charge. If the camera is out-of-warranty, VideoLabs will test, then repair the product for the cost of parts and labor. Charges will be estimated and confirmed by the customer prior to repair by a VideoLabs' technician.

Repair time for all cameras is a maximum of 2 business days from receiving to outbound shipping. VideoLabs, Inc. will not accept responsibility for shipment after the camera has left our premises.

### **VideoLabs Technical Support**

VideoLabs' technicians will determine and discuss with the customer the criteria for repair costs and/or replacement. Contact VideoLabs' Technical Support through one of these sources: phone: 800-467-7157 (U.S. only) or 612-542-0061, e-mail: support @videolabs.com or web site: [www.videolabs.com](http://www.videolabs.com)

### **RMA (Return Merchandise Authorization) Number**

Before returning a camera for repair or replacement, request an RMA number from VideoLabs Technical Support.

Provide the technician with a return phone number or email and a shipping address. Describe the product, the reason for repair or return, and the date of purchase.

Include your RMA number on all correspondence with VideoLabs. Write your RMA number on the outside of the box when you return the camera.

### **Voided Warranty**

This warranty does not apply if the VideoLabs serial number has been removed or if the product has been disassembled or damaged through misuse, accident, modifications, or unauthorized repair.

### **Shipping and Handling**

VideoLabs will not pay for inbound shipping, transportation, or insurance charges, or accept any responsibility for loss and/or damage from inbound transit. VideoLabs requires that all overseas

returns are shipped via UPS.

VideoLabs will pay for outbound shipping, transportation, and insurance charges but will not assume responsibility for loss and/or damage by the outbound freight carrier.

### **Products Not Under Warranty**

Payment arrangements are required before outbound shipping for all products that are out-of-warranty.

### **1.7 Federal Communications Commission**

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

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 radiated radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no grantee 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 tuning 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.

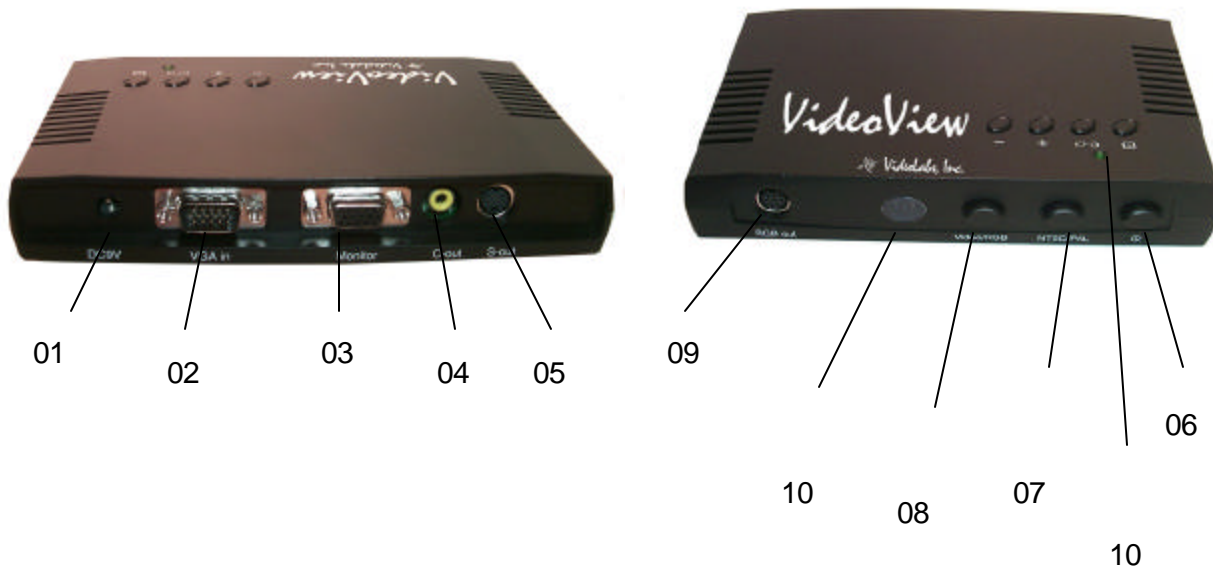
Notice: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **CE DECLARATION**

This device complies with CE

- EN50081-1: EN55022 (Class B)  
EN61000-3-2
- EN50082-1: IEC801-2  
IEC801-3  
IEC801-4

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## 2.1 Input Port

- 01 DC 9V: DC in
- 02 VGA in: 15-pin HD connect to VGA display card

## 2.2 Output Port

- 03 Monitor: connect to PC monitor
- 04 C-out: composite video out, connect to TV
- 05 S-out: S-VHS video out, connect to TV
- 09 RGB out: RGB video out for SCART, connect to TV

**Note:** Not all video output ports are to be used at once; use the one that



## 2.3 Adjustment

- 06 Power switch
- 07 NTSC/PAL: TV system select
- 08 Video/RGB: Y/C, Composite or RGB output select

## 2.4 Others

- 10: IR receiver for remote control
- 11: Power LED


## **Chapter 3.        *HARDWARE INSTALLATION***

Please complete the following steps properly

1. Make sure the Scan Converter, PC and TV are all powered off.
2. Properly connect the 15-pin HD extension cable between VGA card & “VGA in” on the input port.
3. Connect the PC monitor cable to the “Monitor” output port on the scan converter.
4. Connect AV(C-out), S-VHS(S-out) cable or SCART(RGB out) cable from the scan converter to the TV or monitor.
5. Switch the “NTSC/PAL” button to match TV video system.
6. Switch the “Video/RGB” button to match the video out.
7. Connect the DC 9V power adapter from a wall outlet to the jack labeled “DC 9V”.
8. Power on the PC and TV/monitor.
9. Verify the correct channel is selected on the TV set.
10. Press the power button on the scan converter.
11. The output from the PC should simultaneously be displayed both on the PC monitor and TV screen.

## **Chapter 4.        *OSD FUNCTION DESCRIPTION***

The scan converter provides four push buttons for user-friendly on screen operation:



[  ], [ \*m ], [ + ] and [ - ].

There are eight functions available in the OSD menu:

- Sharpness
- Zoom
- Panning
- Over/UnderScan
- Screen display positioning
- Brightness adjustment
- Color Bar
- Reset

## 5.1 Sharpness Control


### **Control steps:**

- 5.1.1. Press [  ] to display the main menu.
  - 5.1.2. Use [ + ] or [ - ] to locate sharpness control icon.
  - 5.1.3. Press [ \*m ] to enter sharpness level.
- To exit, press [  ]

## 5.2 Zoom

The Genie performs 2X zoom in both horizontal and vertical direction. This is used with the panning function to so the complete display can be shown even when zoomed in. When the Genie is in zoom mode the Overscan/Underscan function is disabled.

### **Control steps:**

- 5.2.1. Press [  ] to display the main menu.
- 5.2.2. Use [ + ] or [ - ] to locate zoom control icon.
- 5.2.3. Press [ \*m ] to enter zoom control mode.
- 5.2.4. Press [ \*m ] to switch between zoom and normal viewing mode.
- 5.2.5. Press [ + ] or [ - ] to select the desired zoom mode.

There are four quadrant zoom modes supported when it is enabled:


- zoom mode 1: top - left of VGA screen
- zoom mode 2: top - right of VGA screen
- zoom mode 3: bottom - right of VGA screen
- zoom mode 4: bottom - left of VGA screen

To exit Zoom control, press [  ]

### 5.3 PANNING

The scan converter supports two pan modes (vertical and horizontal) in pan control.

#### **Control steps:**

- 5.3.1. Press [  ] to display the main menu.
- 5.3.2. Use [ + ] or [ - ] to locate pan control icon.
- 5.3.3. Press [ \* m ] to enter pan control mode.
- 5.3.4. Press [ \* m ] to toggle the pan mode (vertical and horizontal).
- 5.3.5. Press [ + ] or [ - ] to pan VGA windows screen up/down or right/left.


To exit Pan control, press [  ]

### 5.4 Overscan/Underscan

By default, the TV picture is in overscan, meaning the border of the picture is outside the visible area of the TV screen. The scan converter supports overscan / underscan mode that linearly scales the input picture into the visible part of a TV's screen.

**Note:** In zoom mode, the overscan/underscan mode is not supported. Whenever zoom mode is enabled, the

#### **Control steps:**


- 5.4.1. Press [  ] to display the main menu.
- 5.4.2. Use [ + ] or [ - ] to locate overscan/underscan control icon.
- 5.4.3. Press [ \* m ] to enter overscan/underscan control mode.
- 5.4.4. Press [ + ] or [ - ] to toggle the overscan/underscan mode.

To exit Overscan/Underscan control, press [  ]

### 5.5 Positioning

The scan converter supports two modes (vertical and horizontal) in position control. Position control is for moving the image viewed on the TV screen if needed.

#### **Control steps:**

- 5.5.1. Press [  ] to display the main menu.
- 5.5.2. Use [ + ] or [ - ] to locate position control icon.

5.5.3. Press [ \* m ] to enter position control mode.

5.5.4. Press [ \* m ] to toggle the position mode (vertical and horizontal).


5.5.5. Press [ + ] or [ - ] to move TV screen up/down or right/left.

To exit Position control, press [  ]

## 5.6 Brightness

There are four steps available for adjusting the brightness level.

### **Control steps:**

5.6.1. Press [  ] to display the main menu.

5.6.2. Use [ + ] or [ - ] to locate brightness control icon.


5.6.3. Press [ \* m ] to enter the brightness control mode.

5.6.4. Press [ + ] or [ - ] to select the desired level.

To exit brightness control, press [  ]

## 5.7. Color Bar

### **Control Steps:**

5.7.1. Press [  ] to display the main menu.

5.7.2. Use [ + ] or [ - ] to locate color bar control icon.


5.7.3. Press [ \* m ] to enter color bar control mode.

5.7.4. Press [ + ] or [ - ] to turn on/off the color bar.

To exit Color Bar control, press [  ] again

## 5.8. Reset

### **Control Steps:**

5.8.1. Press [  ] to display the main menu.

5.8.2. Use [ + ] or [ - ] to locate Reset control icon.

5.8.3. Press [ \* m ] to reset the Genie to its default settings.

To exit Reset control, press [  ]

## Chapter 5. *REMOTE CONTROL*

Almost all the remote control functions are the same as OSD functions, with the addition of the Freeze function and some general operation tips.

1. Pressing the “Freeze” button toggles between the freeze and full-motion mode. In freeze mode, the TV display will be frozen, but the PC monitor still active. When in freeze mode, the power LED will flash.
2. In freeze mode, all OSD functions are inactive.
3. Home is the default of screen position only
4. Reset is the default for brightness, sharpness and overscan.

**Note:** While in freeze mode, do **not** change the PC display resolution! This will cause the system to crash, since the