# USB VideoLink 2.0

# USB Video Frame Grabber for Microsoft Windows Computers Desktops, laptops, tablets

USB 2.0 VideoLink Model 2c

Gradient Lens Part: VC-USB2

#### System Requirements

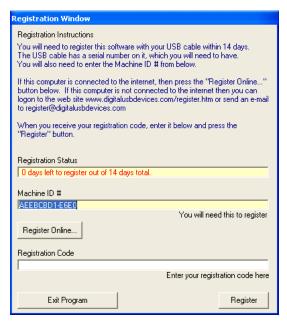
Windows 7/8/10: 1.3+ GHz processor (Core 2 Duo or greater recommended), 1+ GB Memory, DirectX 9 graphics device with WDDM 1.0 or higher, USB 2.0 port.

Windows XP: Pentium IV 1 GHz or faster, Internet Explorer 5.0 (or later) installed, USB 2.0 Port, 512 MB of Free Memory, Video card with 32 MB of video RAM, minimum 800 x 600 resolution at 16-bit color

# **Important Information About Software Registration**

You must register the Video ToolBox software to work with the included USB 2.0 VideoLink cable. To register the software you will need some information including the USB cable serial number (which is located on the cable) and a Hardware ID # which is generated within the software.

When you start an unregistered copy of the Video ToolBox software, you will see a registration window with the following information:



**Registration Instructions:** Follow these instructions to register the software.

**Registration Status:** Shows how many days left before the software will stop working. Once you register the software you will no longer see this window.

**Machine ID#:** You need this number to register the software.

**Register Online** (*button*): If this computer is connected to the internet then press this button to open the registration web site.

**Registration Code:** Enter the registration code (which you will receive by e-mail) into this box and press the Register button.

If your computer is connect to the internet then simply press the "Register Online" button to go directly to the registration web site. The Hardware ID# will be copied to your computer clipboard. This allows you to click on the Hardware ID# field in the form and select *PASTE* to paste the number onto the website form.

If your computer is not connected to the internet, then copy down the following numbers: Machine ID #, and USB cable serial number (located on the USB cable). Next, open a web browser on the computer that is connected to the internet and go to the following web site: <a href="https://www.digitalusbdevices.com/register.htm">www.digitalusbdevices.com/register.htm</a>. Enter the information into the form and press the *Submit* button. You should receive an e-mail reply with the registration number within 2 days (usually faster).

Remember to enter the Registration Code exactly as you receive it; with all capital letters and the dashes. Once the software is registered you will no longer see a registration window.

If you have problems with registration, please contact *Zarbeco Technical Support* by Email: support@zarbeco.com or Phone: 973-933-2043.

#### **Installing Video ToolBox and the USB 2.0 VideoLink Adapter**

The USB 2.0 VideoLink is compatible with the Windows XP/7/8/10 operating systems. For Windows XP you must have Service Pack 3 applied. See the Troubleshooting section to learn how to determine which Service Pack (if any) has been applied.

On some networked computers, it is necessary to be logged in as the administrator or as a user with administrator privileges. If you computer is connected to a corporate network, contact your network administrator to make sure your user account is setup to install driver software. If you are installing the software on your personal computer, then this is not an issue.

#### Instructions

- 1. To install the software download the installer file from <a href="https://www.zarbeco.us/fas/download/usb2gl.exe">www.zarbeco.us/fas/download/usb2gl.exe</a>. Type the web address using all lower case letters; note the link address is .us not .com. The file will be sent to your default download location (usually the special Windows "Downloads" folder).
- 2. Make sure that the USB 2.0 VideoLink capture cable is not connected to your computer. The drivers will not install correctly unless the cable is disconnected during the installation.
- 3. Open the download folder and double-click the usb2gl.exe installer program follow the prompts to complete the installation of the drivers and software.
- 4. If you were instructed to restart your computer by any of the message windows, then restart the computer now. Otherwise, continue to step #5.
- 5. Connect the USB 2.0 VideoLink cable to the computer. A "New Hardware" message may appear. Wait until the message window indicates that the hardware is ready to use.

# **Connecting Video to the USB 2.0 VideoLink Adapter**

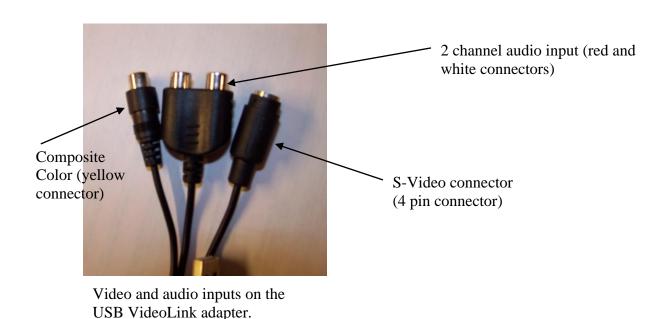
The USB VideoLink adapter has a USB plug on one side and three cables on the opposite side for analog video or audio input.

#### Video Input

The USB VideoLink will accept analog video in NTSC, PAL or S-Video formats. The NTSC or PAL formats are input through the yellow RCA connector. Use the software to select Composite video as the source and select between NTSC and PAL in the software as the format. S-Video is input through the black 4-pin S-Video connector. Use the software to select S-Video as the source. No other selection is required.

#### **Audio Input**

The USB VideoLink also contains two channels of audio input (molded black and red RCA connectors). In order to use these inputs you must select this device as the audio source. Under the START menu find the Settings → Control Panels menu and double-click the Sounds and Audio Devices icon. Find the Audio tab at the top of the window and look for the Default Device menu. Select USB 2861 Audio as the device and audio will now be captured through the USB 2.0 VideoLink.



#### Using Video ToolBox for the First Time with your USB VideoLink 2.0

The first time you use Video ToolBox you will need to configure the program to work with your USB 2.0 VideoLink adapter. After that the program will remember all the settings and will restore them each time the program is used.

## **Starting Video ToolBox**

You can start Video ToolBox by using the Windows Start Menu. Click on the Start menu button at the bottom left of the screen and select Programs  $\rightarrow$  Zarbeco  $\rightarrow$  Video ToolBox to start the program.

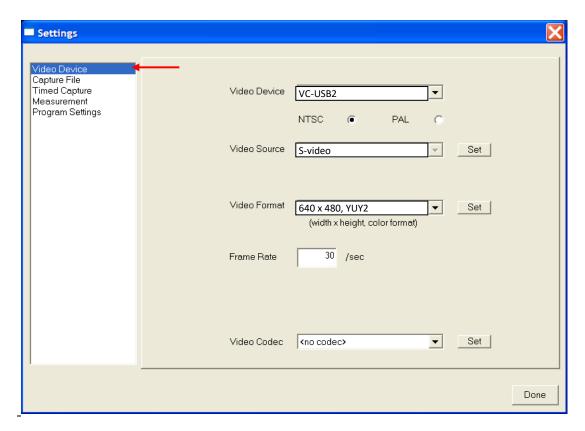
This will open the Video ToolBox main window.



#### **Configuring Video ToolBox Program Settings**

To configure the program press the Settings Button to open the Settings window. The help file will provide a detailed description of each option. For now you will need to select the video device and configure it to display the video image on the screen.

Select Video Device from the list on the left side of the window.



Configure the program to match the window above. The parameters are:

**Video Device (menu):** Identifies the device which is connected to the video source. If you are using a Zarbeco USB VideoLink 2.0 *model 2b* then the device is listed as a "VC-USB2."

**NTSC/PAL:** Video format. NTSC is a U.S. format, PAL is a European format. The video camera should indicate the format being used.

**Video Source:** Source is usually Composite or S-Video for a standard video camera. Composite video is usually connected with a 2-pin round connector. S-video is usually connected with a 4-pin connector. If you are using a digital camera then you will need to press the "Set" button to adjust the source settings. Make sure that the video source is set to match the type that is being sent by your camera.

NOTE: Make sure that the Video Source is set correctly or you will not see a live image.

**Video Format:** Size and type of image. For the Zarbeco USB VideoLink 2.0 the best setting is "640 x 480, YUY2" or "720 x 480, YUY2."

**Frame Rate:** The speed at which the image updates. Rates of 24 -30 frames/second will produce clear images with smooth motion. On older computers it may be necessary to reduce this value to 12 - 15 frames/second.

**Video Codec:** A program which reduces the size of movie files. See the help file (How To Capture A Movie At High Frame Rate) for more information on this parameter. You do not need to change this setting now.

Press the done button to close the Settings Window. You should see a video image on the screen. If not, open the help file (by pressing the Help button) and go to the section on troubleshooting.

#### **Resizing the Image in the Window**

Video ToolBox can resize the image to fill the window or the screen. If the image is taking up a small space in the window (see image below) then you will want to zoom the image to fill a larger portion of the window. Using the Zoom button, change the zoom setting to 2X or larger.



# **Learning More About Video ToolBox**

To learn more about Video ToolBox see the Video ToolBox Help file – accessed through the Help button on the main window.

#### **Solutions to Common Problems**

Video updates very slowly on the screen.

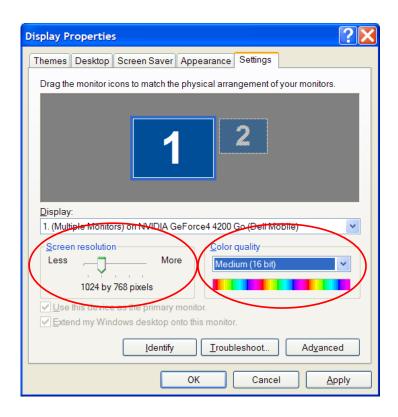
The video speed on the screen is related to the speed of the computer, the speed of the video card, and the amount of video memory. A minimum Pentium III 1 GHz with a 16MB video card is recommended. There are other ways to increase the speed of the video display:

1) Reduce the monitor resolution.

From the Start Menu (lower left corner of the screen) select Settings → Control Panel and then select the Display icon. At the top of the Display Properties window select Settings. Under the option for Color Quality select Medium (16 bit) and press the Apply button.

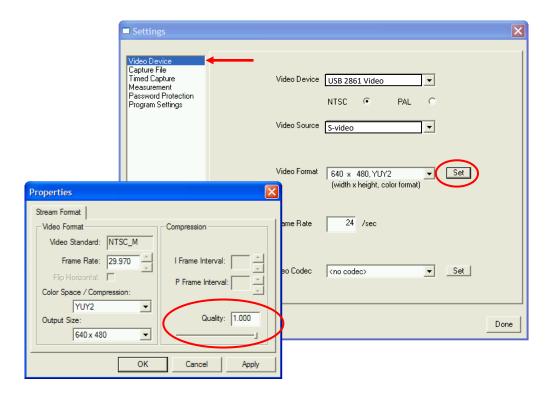
2) Reduce the screen resolution (if step #1 didn't solve the problem).

On the same Display Properties window change the Screen Resolution setting to 1024 x 768 pixels or to 800 x 600 pixels. Press the Apply button to change the screen resolution.



2) Reduce the quality setting for the transferred video image. Press the Settings button and select "Video Device" from the list on the left. Find the Video Format

menu and press the Set button to open the Video Format Properties window. Within the window will be the Quality control. Reduce the quality value to increase the display speed.



I am not getting an image at all and I'm sure I installed everything correctly.

Make sure your computer has a USB 2.0 port. The USB 2.0 VideoLink must be connected to a USB 2.0 port – the older USB 1.1 port will not work. See the next item to determine if your computer has a USB 2.0 port.

If your computer has a USB 2.0 port, it must also be configured properly. Early versions of Windows 2000 and Windows XP did not install the USB 2.0 drivers properly in all cases. Service Packs and HotFixes are the mechanism that Microsoft provides to update the operating system.

For Windows XP, make sure that Service Pack 3 has been applied. Check the Microsoft web site for more information on Service Packs and how to install them.

How do I know if my computer has a USB 2.0 port

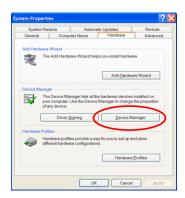
To check if you computer has a USB 2.0 the select Control Panel window.

- On Windows 2000 you will find the Control Panel window under the Start Menu (lower-left corner of the screen), then select Settings, then select Control Panel.
- On Windows XP select the Start menu and then select Control Panel. Next, in the "Select a Category" window click on the "Performance and Maintenance" option.

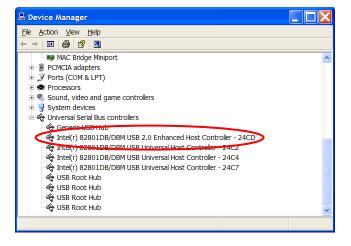
Now locate the "System" icon in the window and doubleclick on it. This will open a window for accessing system parameters. Find the tab across the top labeled Hardware and select it.



On the hardware page find the section labeled "Device Manager" and press the Device Manager button.



This will bring up a list of devices. Scroll to the bottom of the list until you find "Universal Serial Bus Controllers." Press the "+" to reveal the full list of USB controllers. In the list of USB controllers look for an item which says either "USB 2.0" or "Enhanced Host Controller." If you find either in the list then you have a USB 2.0 port. If you do not find an item with this text then your computer has only USB 1.1 ports.



# **Technical Support**

For technical support with Video ToolBox please contact

Zarbeco, LLC 52 Main Street, Office #1 Succasunna, NJ 07876

Phone: 973-933-2043 Fax: 973-933-2336

E-mail: <a href="mailto:support@zarbeco.com">support@zarbeco.com</a>

Please try to have the following information available:

Computer operating system	
Computer memory	
Video memory	
Processor speed	

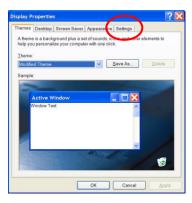
You can find most of this information in the following locations:

Start Menu  $\rightarrow$  Settings  $\rightarrow$  Control Panel, then double-click on the System icon to bring up the following screen:



Additional information on your video card can be found by:

Start Menu → Settings → Control Panel, then double-click on the Display icon to bring up the following display



Select the settings tab to get this next window



Press the advanced button to bring up a new window which will have additional information on your video card. You may need to find a tab labeled Adapter or Hardware to locate the information you will need.

