# Table of Contents

Hardware Installation ......................................................................................................... 3
System Block Diagram........................................................................................................ 4
Software Installation .......................................................................................................... 5
  Installing the Application ................................................................................................. 5
  Driver Installation ............................................................................................................ 6
  Launching the Application ............................................................................................... 7
  Connecting to the Hardware ............................................................................................ 7
  Taking a Snapshot .......................................................................................................... 7
  Saving and Zooming ....................................................................................................... 8
  Device Configuration ...................................................................................................... 8
    Image Resize .................................................................................................................. 8
    Time Stamps ................................................................................................................ 8
  Applications Preferences .............................................................................................. 9
Troubleshooting .................................................................................................................. 10
Specifications .................................................................................................................... 10
Warranty ........................................................................................................................... 11
Hardware Installation

Please refer to the picture below and the System Block Diagram on the next page.

- Plug the free end of the HDMI cable into the VisionZ HDMI port.
- Plug one end of the HDMI cable into the VisionZ Capture Device.
- Plug the USB cable into a free USB port on your PC.
- Power up the VisionZ hardware.

Note: If the HDMI cables are plugged in the 'wrong way', (i.e. the VisionZ unit is plugged into the socket on the VisionZ Capture device and the HDMI plug is connected to the TV/Monitor), an image will still appear on the screen but the capture function will not work.
System Block Diagram

The following diagram shows how to set up the capture cable.
Software Installation

Installing the Application

Insert the CD that came with the VisionZ Capture Control unit into your PC. Ensure that the capture device is not connected to the USB port on your PC. The software will automatically begin the installation process. If not then navigate to your CD drive and double click on the VisionZCaptureSetup application. Follow the on screen instructions.

Click Next to continue.

Select the destination folder where you want the software to be installed.

Click on the close button. The installation is now complete.

Please note that the VisionZ Capture Control software requires Microsoft .NET 3.5 Framework or later to operate correctly. Most PCs will have this software pre-installed as part of the operating system. In the event that this software is not installed it can be manually downloaded at the Microsoft website: www.microsoft.com/download
Driver Installation

The capture device driver should be installed automatically during the above install process. You may be asked to install the driver after the capture control device is plugged into the USB port.

Select the ‘Install the software automatically’ option and follow the on screen instructions.

Click finish to complete the driver installation.
Using VisionZ Capture Control

Launching the Application

Click on the start button and select the VisionZCaptureControl icon to launch the application (the icon will be present in your start menu if you enabled this option during the installation process). Alternatively you can access the program by clicking on the start button and navigating to programs/VisionZCaptureControl/VisionZCaptureControl.

You will see the following screen appear:

![VisionZ Capture Control Window]

Connecting to the Hardware

To connect to the VisionZ Capture Control hardware click the connect icon or select Connect to Device under the Device menu.

The software will check the available COM ports to see if a VisionZ Capture Device is present. The bottom left of the screen displays the connection status.

Device found on port: COM8

Taking a Snapshot

When connected the Capture icon with the blue arrow will now become available. Click on the icon to take a snapshot of the current frame displayed on the screen. When the image is taken it will appear in the main view area. The name of the file will appear in the left hand side under local images as shown below. Here you can select which image you would like to view. You can also navigate through the images using the green arrow icons.
Saving and Zooming

When an image is captured the rest of the icons will now become available. The image can be saved using the disk icon. The other functions are zoom in, zoom out, zoom to fit, zoom to actual pixels and zoom rectangle.

Device Configuration

The Device Configuration menu can be found in the Device pull down menu.

Image Resize

The image resize function allows the image to be captured a various different sizes. The available options are 75%, 67%, 50%, 33% and 25%.

Time Stamps

Enabling this option will add the current date and time directly onto the image. The date and time is taken from the PC clock. It can also be set manually by clicking on the Clock Settings button where 12 hour or 24 hour option is also available. To update the hardware device with new settings click on Write to Device button.
Applications Preferences

The Applications Preferences are available under the file menu.

Here you can select where on the PC hard drive the images are to be stored. You can also append the port name onto the image store locations. This is useful if you have multiple units connected to the PC on different ports.

Sounds and progress bar information can also be turned on or off.

Configuration data such as date and time can be selected to synchronize with the hardware at start-up.
Troubleshooting

No video signal at the monitor or TV
Please check the following:

1. Is the VisionZ Capture Control hardware connected firmly to the VisionZ?
2. Is the monitor/TV connected firmly to the VisionZ Capture Control hardware?
3. Is the USB cable connected?

Can’t connect to the VisionZ Capture Control hardware over USB
Please check the following:

1. Is the USB cable connected securely?
2. Try a different USB port or re-insert into the same port.
3. Try the following (Windows XP example):
   a. Navigate to device manager using ‘start / settings / control panel / system’.
   b. On the dialog box click the ‘Hardware’ tab.
   c. Click on ‘Device Manager’.
   d. Right click on your PC icon and select ‘Scan for hardware changes’.
   e. Now try and connect to the VisionZ Capture Control hardware.

Cannot locate stored images
Check the folder where the images are stored in the Application Preferences under the File menu.

Image on TV/monitor but cannot capture images
Check that the HDMI cables are not plugged in the ‘wrong way’, (i.e. the VisionZ unit is plugged into the socket on the VisionZ Capture device and the HDMI plug is connected to the TV/monitor), an image will still appear on the screen but the capture function will not work. Plug the Monitor/TV HDMI cable into the VisionZ Capture device socket and the HDMI cable plug into the VisionZ unit. Retry capturing an image.

Speckles on Image
For optimal image quality ensure that the USB connector on the VisionZ Capture Cable is plugged into the USB port of the PC. In the event that you are not using the PC for capturing an image then remove the VisionZ Capture Cable from your system and connect the VisionZ unit directly to the Monitor/TV.

Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>44mm x 40mm x 10mm</td>
</tr>
<tr>
<td>Cable length</td>
<td>USB: 1.5m, HDMI: 1.5m</td>
</tr>
<tr>
<td>Voltage</td>
<td>4.5V-5.5V</td>
</tr>
<tr>
<td>Max Power</td>
<td>1.3 Watts</td>
</tr>
<tr>
<td>Weight</td>
<td>140g</td>
</tr>
<tr>
<td>Interface support</td>
<td>DVI/HDMI compatible video source, USB 1.1 or 2.0</td>
</tr>
<tr>
<td>Max. video bandwidth</td>
<td>160MHz</td>
</tr>
<tr>
<td>Max. Video Resolution</td>
<td>1920 x 1200</td>
</tr>
<tr>
<td>Operating System</td>
<td>Windows XP, Windows Vista, Windows 7</td>
</tr>
<tr>
<td>Temperature</td>
<td>Storage: -10°C to +60°C. Operating: +5°C to +40°C</td>
</tr>
</tbody>
</table>

Specifications subject to change without notice.
Warranty

This product is warranted to be free from defects in material and workmanship for a period of one year from the date of invoice to the original purchaser.

If during the warranty period the product is found to be defective, it will be repaired or replaced at facilities of Vision Engineering or elsewhere, all at the option of Vision Engineering. However, Vision Engineering reserves the right to refund the purchase price if it is unable to provide replacement, and repair is not commercially practicable or cannot be timely made. Parts not of Vision Engineering manufacture carry only the warranty of their manufacturer. Expendable components such as fuses carry no warranty.

This warranty does not cover damage in transit, damage caused by misuse, neglect, or carelessness, or damage resulting from either improper servicing or modification by other than Vision Engineering approved service personnel. Further, this warranty does not cover any routine maintenance work on the product described in the user guide or any minor maintenance work which is reasonably expected to be performed by the purchaser.

No responsibility is assumed for unsatisfactory operating performance due to environmental conditions such as humidity, dust, corrosive chemicals, deposition of oil or other foreign matter, spillage, or other conditions beyond the control of Vision Engineering.

Except as stated herein, Vision Engineering makes no other warranties, express or implied by law, whether for resale, fitness for a particular purpose or otherwise. Further, Vision Engineering shall not under any circumstances be liable for incidental, consequential or other damages.