

VZ-1 HD VGA/USB Document Camera User Manual

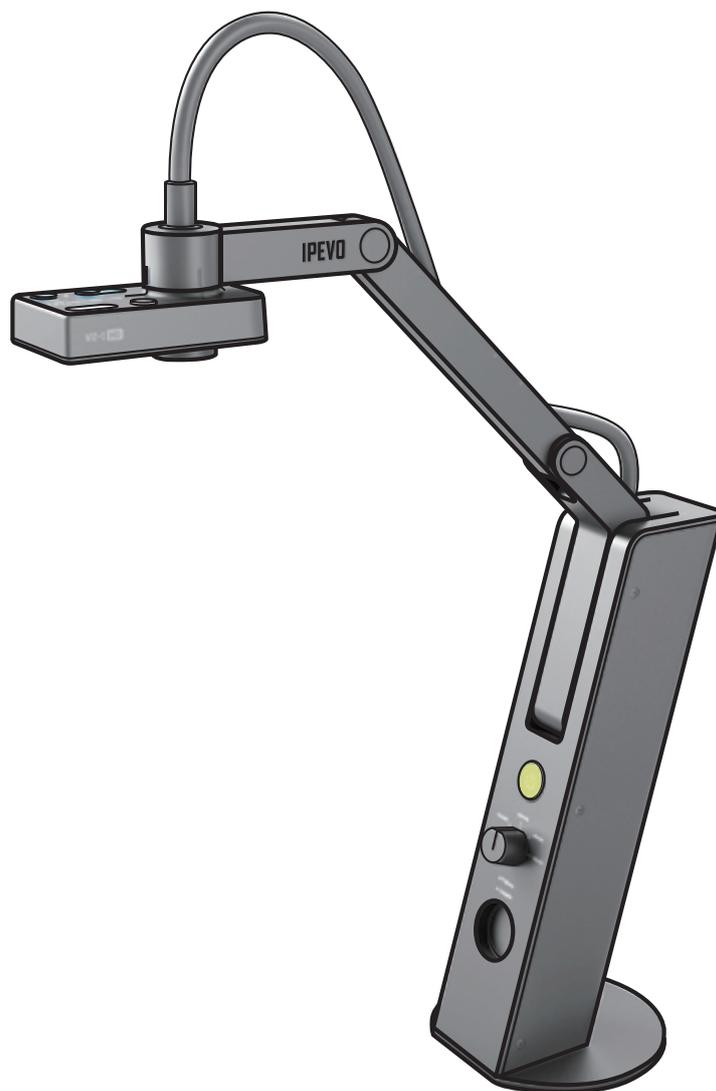


TABLE OF CONTENTS

Introduction	4
What Makes VZ-1 HD Different?	4
Two Modes	
Versatility	
High-Definition Capture	
Effortless Autofocus	
Feature-Rich Presenter Software	
Contents	5
About the Packaging	5
Getting Help	6
Version Information	7
System Requirements	8
Highest Resolutions Requirements	
Installation	9-10
PC or Mac Installation	
Projector or Monitor Installation	
Getting to Know VZ-1 HD (Key Features)	11-12
IPEVO Presenter Software Introduction	13
Switching between software modes	
Basics of the Presenter Software	14
Camera mode	
Full Screen mode	
Basics of the Presenter Software (cont'd)	15
Review mode	
Getting a Great Image – Five Considerations	16
Image Size	17
Changing Image Size	
Image Size (cont'd)	18
Zoom function	
Capturing a Standard Sheet of Paper	
Image Orientation	19
Landscape versus Portrait	
Camera lens orientation	
Changing Orientation	20
Swivel head	
Mirroring function	
Exposure	21
Exposure Value (EXP) toggle	
Exposure tab	
Light button	
Exposure (cont'd)	22
Auto exposure	
Stop-motion animation	

TABLE OF CONTENTS

Focus	23
Autofocus switch	
Continuous and Single focus modes	
Focus button	
Resolution	24
Changing PC or Mac resolution	
High-definition versus standard-definition	
VGA Resolution	25
Automatic Resolution	
Resolution and Frame Rate	26
Snapshots	27
Snapshots (PC or Mac only)	
Taking a snapshot	
Timer function	
Projecting Your Image	28
Full Screen mode	
Preparing for Projection (PC or Mac)	29
Mirroring your desktop	
Advanced Settings	30
Instant Preview	
Changing sound effects	
Photo library location	
Photo name format	
Keep camera mode settings	
Advanced Settings (cont'd)	31
Image adjustment customizations	
About VZ-1 HD	
Setting a language	
Starting Presenter when computer starts	
Closing and Exiting the Presenter Software	32
Keyboard Shortcuts	
Troubleshooting and FAQ	33-34
Safety Information	35
Acknowledgments	

INTRODUCTION

Thank you for your purchase of the VZ-1 HD VGA/USB Document Camera. The VZ-1 HD is a dual-mode document camera that can be used with either PC or Mac (Computer mode), or connected directly to a monitor or projector via VGA (Projector mode). VZ-1 HD provides real-time video capture in stunning high-definition clarity for documents as well as devices with digital screens such as smartphones and Apple's iPad. In addition to its effortless document alignment, VZ-1 HD offers features and functionality similar to document cameras costing hundreds or even thousands more, all in a compact and easy-to-use device.

WHAT MAKES VZ-1 HD DIFFERENT?

Two Modes – VZ-1 HD has both USB and VGA connections. Use the USB port with PC or Mac (Computer mode), or use the VGA port to connect directly to a projector or monitor (Projector mode). It's your choice.

Versatility – VZ-1 HD's unique multi-jointed stand and swiveling head give you the freedom to place the camera in a wide variety of positions without the hassle of tightening knobs or otherwise locking the stand. At all positions, VZ-1 HD will remain secure and stable because of its weighted base, offering you on-the-fly customization of your image.

High-Definition Capture – VZ-1 HD features a 5 Megapixel camera and can achieve a resolution of up to 2592 x 1944 pixels. This high-definition video capture provides an exceptionally crisp and brilliant image. Additionally, VZ-1 HD features a powerful zoom (up to 6x magnification) as well as a Macro mode which allows for sharp focus on very close subjects up to 2 inches (5 cm) away. For these reasons, VZ-1 HD is ideal for capturing fine details of documents and pictures.

Effortless Autofocus – VZ-1 HD has a smart focusing system that gives you manual control when you need it and convenient automatic control when you don't. VZ-1 HD can be set to either of two focus settings:

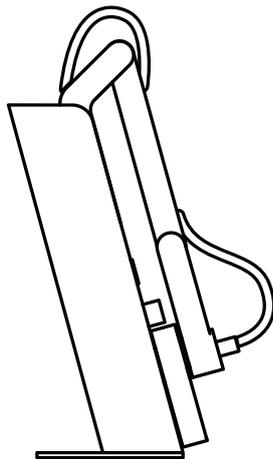
- **Continuous Focus** – in which VZ-1 HD automatically and constantly determines the best focus. In this mode, you are free to move the subject around, and the focus will continue to stay sharp.
- **Single Focus** – in which you set focus once, with VZ-1 HD staying with that focus setting. This mode is best for a subject that will remain at the same distance from the camera, such as a static sheet of paper. This mode is also ideal for VZ-1 HD's higher resolutions.

Feature-Rich Presenter Software – Included software for PC or Mac provides a number of functions and customizations to get the most out of your VZ-1 HD experience.

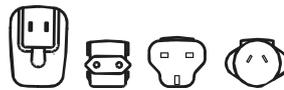
CONTENTS

Your package should contain the following:

- VZ-1 HD Document Camera, including multi-jointed stand
- USB A-to-B cable
- USB power adapter
- CD-ROM with IPEVO Presenter software and user manual (in .pdf format)
- Quick Start Guide



VZ-1 HD Document Camera



USB Power Adapter and Plugs



USB A-to-B Cable



Quick Start Guide and CD-ROM

ABOUT THE PACKAGING

IPEVO has a longstanding commitment to green business practices, and this extends to our product packaging. We like our products to do the talking, not fancy packaging! Your VZ-1 HD has been shipped with a minimum of packaging materials, particularly a minimum of plastic. The plain craft paper box (which does not contain high-resolution graphics or wasteful multi-color printing) is recyclable, as are the cardboard cut-outs keeping the VZ-1 HD in place.

GETTING HELP

We want to help you enjoy your VZ-1 HD, and we are always available to answer any questions or offer technical and troubleshooting assistance. Consider using one or more of these resources:

- **IPEVO.com** – The latest versions of the VZ-1 HD software, user manual, FAQ, and other downloads are available at this link: <http://support.ipevo.com/>
- **Email** – Send us an email at cs@ipevo.com with your question or concern. For the best and most prompt service, include the version of your operating system with any inquiry, as well as a detailed explanation of the issue you are experiencing.
- **Live Chat** – Live Chat is available through our website, www.ipevo.com. A link in the top middle section of the main page will take you to an Instant Messaging session in which you can correspond with a customer service representative directly. This feature is available during the same hours and days as our telephone support.
- **Help Link** – Help, within the Presenter software, will bring you to IPEVO's website for the latest version of the software and other support and information. To access Help:

Windows – Click on Help (the question mark icon) in the upper right-hand corner of the software.

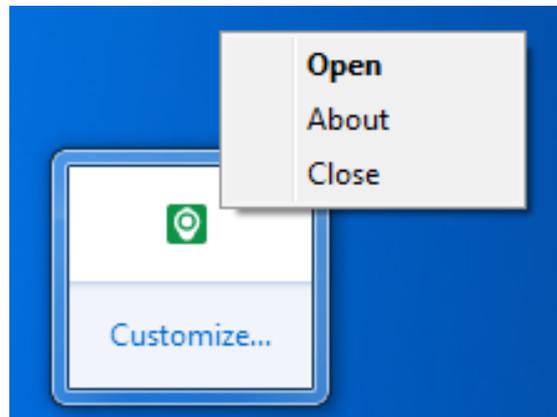


Macintosh – Select Help > VZ-1 HD Help.

VIEWING YOUR SOFTWARE'S VERSION

We recommend periodically checking IPEVO.com for the latest version of the Presenter software. To determine the software version you are currently running, do one of the following:

Windows – Right-click the VZ-1 HD icon in the system taskbar, and click About.



Macintosh – Select About > About VZ-1 HD.

You can also view the version information from the Advanced Settings window:

Windows – Click Settings (the wrench icon) in the upper right-hand corner of the software screen, and select the System tab.



Macintosh – Select VZ-1 HD > Preferences, and select the System tab.

SYSTEM REQUIREMENTS

When using VZ-1 HD with a PC or Mac, the following minimum specifications are required:

PC

- Microsoft Windows 8, 7 or Vista
- 1.4Ghz CPU or higher (2.4Ghz recommended)
- 512MB RAM (1GB recommended)
- 200MB free hard disk space
- 64MB of dedicated video memory

Mac

- Mac OS X 10.6 or higher
- 1.4Ghz CPU or higher (2.4Ghz recommended)
- 512MB RAM (1GB recommended)
- 200MB free hard disk space
- 256MB of dedicated video memory

HIGHEST RESOLUTIONS REQUIREMENTS (PC OR MAC)

To operate VZ-1 HD at the two highest resolutions, there are additional system requirements. To operate at 2048x1536 (3 Megapixel) resolution, a minimum video RAM (associated with your graphics card) of 144MB is required. To operate at 2592x1944 (5 Megapixel) resolution, a minimum video RAM of 256MB is required. Operating at these resolutions without the required minimum video RAM will result in a black screen instead of an image.

INSTALLATION

Your VZ-1 HD document camera has two modes and can be connected to a computer (PC or Mac) via USB or directly to a projector or monitor via VGA.

PC or Mac Installation

1. Insert the CD-ROM into your computer's drive. Follow the prompts to complete the installation of the IPEVO Presenter software.*
2. Connect the USB cable (B-Type) to the port marked "DC 5V" on the back of VZ-1 HD.
3. Connect the other end of the USB cable (A-Type) to any open USB port on your computer.
4. Power on VZ-1 HD by pressing the power button in the front center of the unit.
5. Launch the IPEVO Presenter software. A window containing a live video image from your VZ-1 HD should appear. VZ-1 HD is now ready to use.

*If the installation program does not automatically appear:

PC

- navigate to the CD-ROM drive through Windows Explorer (often the D drive), open the VZ-1 HD CD-ROM, and double-click "setup.exe" to run the installation.

Mac

- navigate to the CD-ROM drive and click the "****.dmg" file to run the installation.

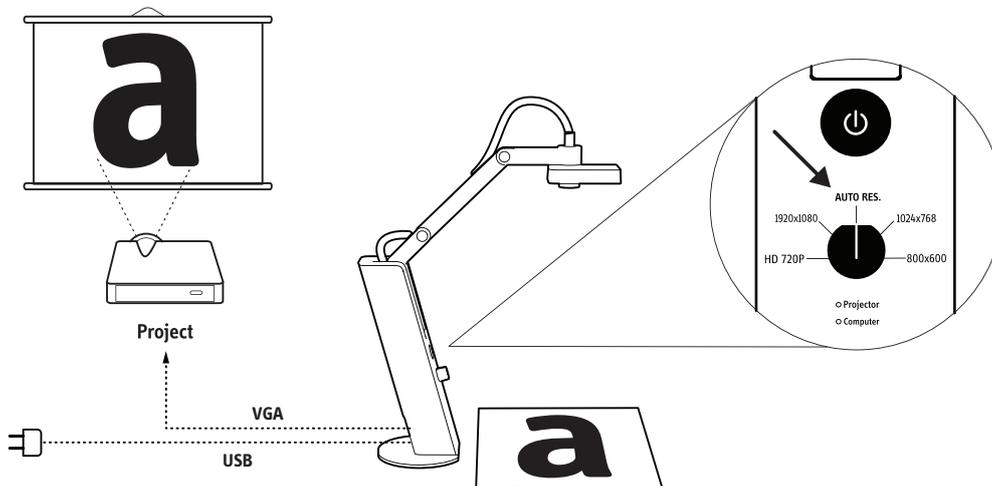
Note to Point 2 View and Ziggi owners: If you have previously purchased IPEVO's Point 2 View or Ziggi/Ziggi-HD USB Document Camera, you may have the P2V software installed on your system. You will need to uninstall this software prior to successful installation of the latest version of the Presenter software.

MONITOR OR PROJECTOR INSTALLATION

VZ-1 HD can also be connected directly to a monitor or projector for large-screen projection.

1. Connect the USB power adapter to the port marked "DC 5V" on the back of VZ-1 HD. Plug the adapter into the wall.
2. Connect a VGA cable (not included) to the VGA port on the back of VZ-1 HD.
3. Connect the other end of the VGA cable into your monitor or projector's VGA port.
4. Power on the VZ-1 HD by pressing the power button in the front center of the unit.
5. Turn the resolution selector below the power button to "Auto Res." if it is not already there. VZ-1 HD will determine the best resolution for your monitor or projector. See Page 25 for more about VGA resolution.
6. The live video image will appear. VZ-1 HD is now ready to use.

**Note: If an image does not appear while on "Auto Res.," please turn the selector to other resolutions and try again.*



GETTING TO KNOW VZ-1 HD

Take some time to familiarize yourself with the key features of VZ-1 HD:

A – Stand

VZ-1 HD's stand has three points of articulation with generous degrees of freedom, allowing you to place the camera by hand in any position, depending on subject and desired image size. Collapse the stand for compact portability.

B – Base

The weighted base provides a sturdy foundation for placing the camera in any position.

C – USB port

Use this port USB Type-B when connecting to PC or Mac via USB cable (included).

D – VGA port

Use this port when connecting directly to a VGA-compatible monitor or projector (VGA cable not included).

E – Power

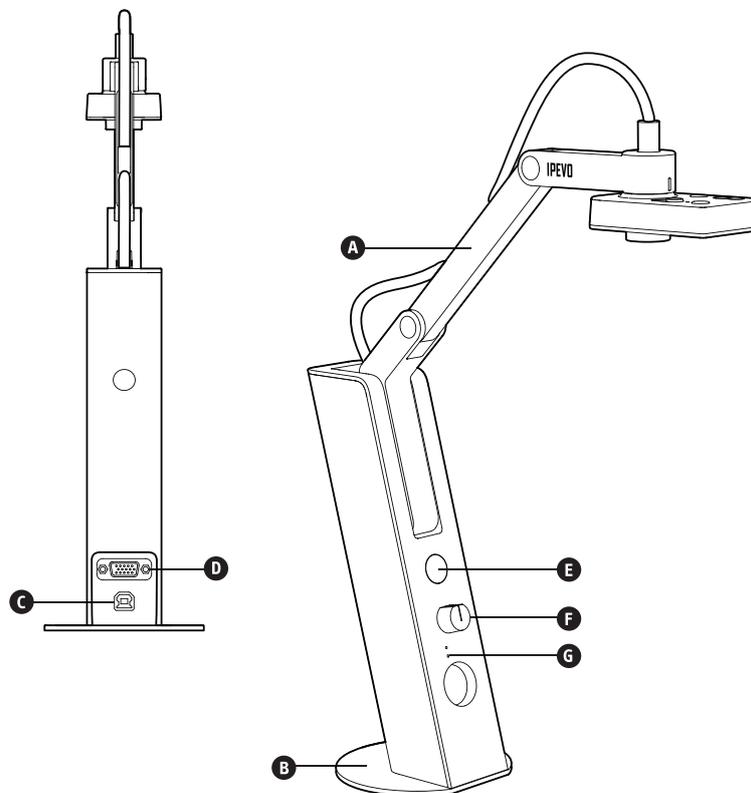
This button powers VZ-1 HD. Press once when beginning to use VZ-1 HD, and press again to turn the unit off.

F – Resolution selector

This allows you to select a resolution when connecting directly to a monitor or projector via VGA. See Page 25 for more about VGA resolution.

G – LED indicators

Indicates whether the device VZ-1 HD is connected to (computer or monitor/projector) is on.



GETTING TO KNOW VZ-1 HD

H – Camera lens

VZ-1 HD features a 5.0 Megapixel lens for detailed and vibrant images, allowing for a maximum resolution of 2592 x 1944 (PC or Mac only). VZ-1 HD has an automatic Macro mode for maintaining sharp focus on objects as close as 2 inches (5 cm) away.

I – Swivel head

In addition to the joints of the stand, you can further customize your image by swiveling the camera. 270° of swivel is possible – 180° clockwise and 90° counterclockwise. See Pages 19 and 20 for more on orientation.

J – EXP +/- (Exposure Value)

This toggle allows you to increase or decrease artificial exposure of the image, making it brighter (+) or darker (-). See Pages 21 and 22 for more on exposure.

K – Autofocus (AF) switch

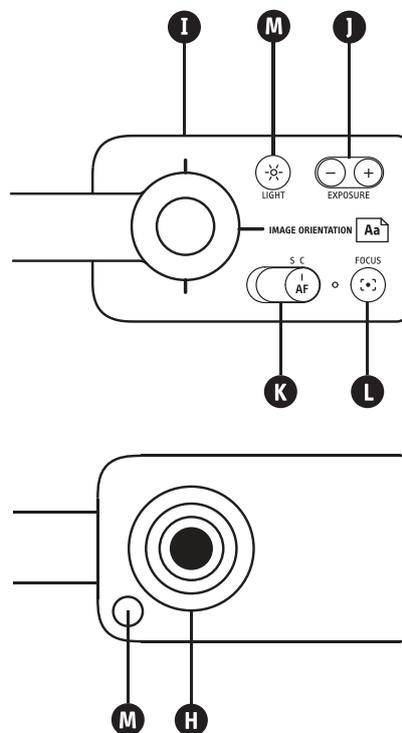
Set your focus to one of two modes. Continuous (C) causes VZ-1 HD to constantly determine the best focus for your image. Single (S) causes VZ-1 HD to stay at a single focus. See Page 23 for more on focus.

L – Focus button

In Single focus mode, press this button for sharp focus of your subject. It takes a few seconds for VZ-1 HD to determine and set proper focus.

M – Light

This button operates a strong white LED light on the underside of the camera body. Consider using the light to illuminate your subject if necessary.



IPEVO PRESENTER SOFTWARE

Specially-designed IPEVO Presenter software is included on your CD-ROM and provides a rich suite of features to maximize your VZ-1 HD use. Note that Presenter is only available on PC or Mac.

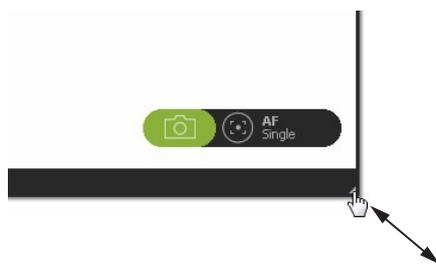
VZ-1 HD operates in one of four modes:

- **Camera mode** – This is the default mode upon software startup. This mode shows the current video capture coming from the VZ-1 HD camera. In this mode, you are also able to change aspects of the image such as exposure, mirroring, and resolution. See Page 16 to get started with capturing your image.
- **Review mode** – This mode gives you an easy way to review snapshots taken with your VZ-1 HD. Snapshots are presented as thumbnail images in a row at the bottom of the screen. See Page 27 for more on taking snapshots.
- **Full Screen mode** – In this mode, the image fills up the entire computer screen. Full screen is particularly useful when you need to project the VZ-1 HD's video for presentations. See Pages 30 and 31 for more on projecting your image.

To switch between modes, click on the Mode Tab on the left-hand side of the capture window.



The size of the window for Camera, Review modes can be changed by clicking and dragging on the edges of the window.



BASICS OF THE PRESENTER SOFTWARE

Please review the basic elements of the four modes of the Presenter software:

A – Mode Tab

One of four modes can be selected by clicking on the appropriate button in the Mode Tab.

B – Camera Menu Tab

Several camera functions can be changed using the pulldown menus. These include: Zoom, Timer, Mirroring Mode, Resolution, and Exposure. This tab will also communicate the current settings of these functions.

C – Snapshot Button

Click the green camera icon to take a snapshot. See Page 27 for more on taking snapshots.

D – Focus Button

Click the rectangular crosshairs icon to focus the image. To the right of this icon, the software will tell you whether you are in Single or Continuous focus mode.

E – Operations (Windows only)

Here, you can access Advanced Settings (the Wrench icon), get Help (the Question Mark icon), minimize the capture window, or exit the capture window.

F – ESC Button

In Full Screen mode, hit “Esc” or click the ESC Button to exit Full Screen mode and return to Camera mode.

Camera mode



Full Screen mode



BASICS OF THE PRESENTER SOFTWARE (CONT'D)

To review snapshots you've taken (see Page 27), enter Review mode by clicking on the “review” tab on the left-hand side of the software.

A – Image Pane

This shows the currently selected snapshot.

B – Menu

This gives you some basic tools to manipulate the selected snapshot.

Zoom – Digitally zoom the image from 100% (normal, or 1x zoom) to 600% (or 6x) zoom in 100% increments.

Rotate – Rotate the image left or right.

Delete – Delete the selected image from your hard drive. The system will prompt you to ensure you want to delete the image.

C – Folder Icon

Clicking on the folder icon will take you to the location on your computer where your snapshots are stored.

D – Image Information

Provides information about the image, including file name, date taken, resolution taken at, and file size (in kilobytes).

E – Thumbnail Timeline

The snapshots you've taken are presented in a horizontal timeline of thumbnails. You can click on a thumbnail to select that snapshot, or you can use the arrow buttons to cycle through the snapshots. By right-clicking on a thumbnail, you can choose to Copy or Delete that snapshot, or open the folder it is contained in.

Review mode



GETTING A GREAT IMAGE – FIVE CONSIDERATIONS

When configuring the camera for your desired image, you will be chiefly concerned with the following five elements:

- **Image size** - How large or small the subject appears in the frame (the window or screen). When dealing with text, it is essential the text appears large enough for its intended audience to read. *See Pages 17 and 18.*
- **Orientation** - How the image is oriented relative to the frame. Naturally, it is necessary to present text in an upright, readable orientation. *See Pages 19 and 20.*
- **Exposure** - Exposure is a measure of how much light is allowed to affect the image. Normally, you are seeking a medium exposure in which all the important details in the image can be viewed. Too little light will render a dark image that loses crucial details. On the other hand, too much light will result in a “blown-out” image that also loses detail. *See Pages 21 and 22.*
- **Focus** - You will normally want your image to be sharp as opposed to blurry, which concerns focus. *See Page 23.*
- **Resolution** - Resolution describes the amount of detail (information) an image holds. Higher resolutions communicate more detail, and are often necessary for large-screen projections. *See Pages 24 through 26.*

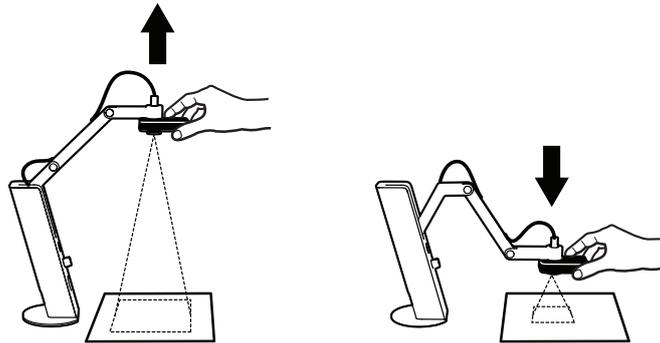
We will examine each of these five elements in turn.

IMAGE SIZE

For documents, your video capture is a balance between capturing as much of the document as possible, and making the text large enough on screen for your intended audience to read. Text size needs to be particularly large when the image is projected onto a screen for a group.

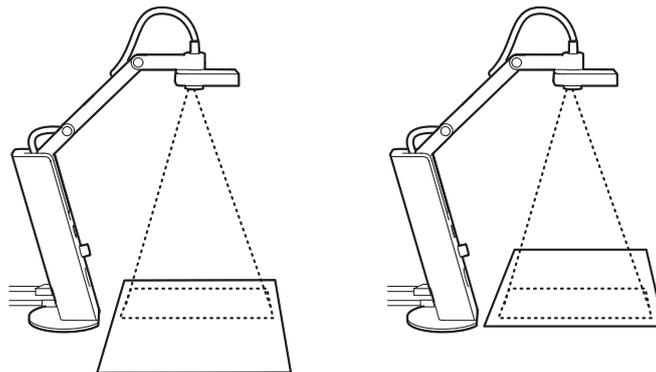
There are a few ways to change the image size:

- **Change the position of the camera** - VZ-1 HD's multi-jointed stand gives you a high degree of flexibility in camera placement. Alter any or all of the stand's three points of articulation in order to optimally position the camera.



Stand's articulations presented in a couple positions

- **Change the position of the subject** - When capturing a document, you will likely position it on the tabletop, on the same plane as your VZ-1 HD base. When capturing close-up details or text passages from a document, you may find it handy to shift the document as you move from detail to detail, essentially scrolling through the text as necessary.



Text document in one position under VZ-1 HD with camera lens capturing top half of document, then moved "up" so that the camera lens is capturing the bottom half of document

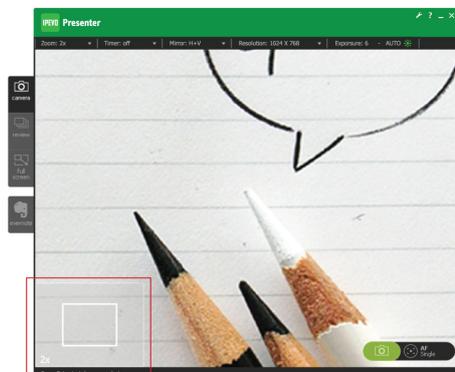
IMAGE SIZE (CONT'D)

- **Zoom** – In the Camera mode of the Presenter software, the Zoom tab allows you to digitally “zoom in” to your subject to make it appear bigger, anywhere from 1x (default, or no zoom) to 6x (or 6 times normal) in whole number increments.



- **Zoom Box** – When zoomed in, a gray box appears in the lower-left of the capture window with a smaller box inside it. The large box represents the original field of vision (the 1x zoom), while the smaller box represents the zoomed-in area you are currently viewing. You can click and drag the smaller box to selectively zoom to different portions within the original field of vision.

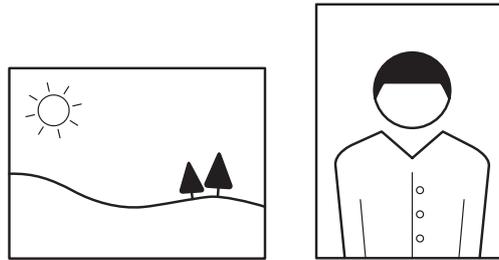
Note: Focusing while zoomed in will focus according to the center of the original full image, and not the partial zoomed-in area.



- **Capturing a Standard Sheet of Paper** – At full extension, VZ-1 HD is designed to be high enough to capture an entire standard (A4) sheet of paper. However, you might elect to bring the camera closer to capture details from a particular document. Note that while the VZ-1 HD has ample resolution to capture larger A3-sized documents, VZ-1 HD would need to be placed on something (such as a stack of books) to make the camera high enough to completely capture an A3 document.

IMAGE ORIENTATION

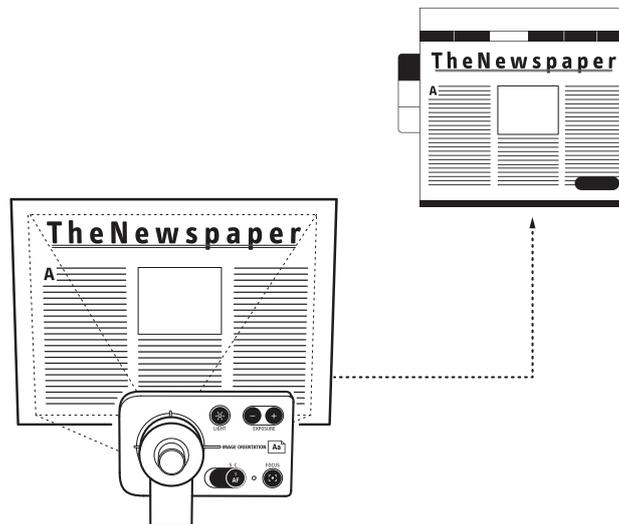
Two ways to describe page orientation come from the tradition of painting. Landscape refers to an image oriented so that its width is greater than its height, such as a classic landscape painting. Portrait orientation, on the other hand, features a height greater than its width, such as would be appropriate for a portrait painting. When deciding upon orientation, keep in mind whether the document to be captured is in landscape or portrait. You will need to control the orientation of your subject relative to the computer screen so that the text is presented in a readable fashion.



Landscape versus Portrait

CAMERA LENS ORIENTATION

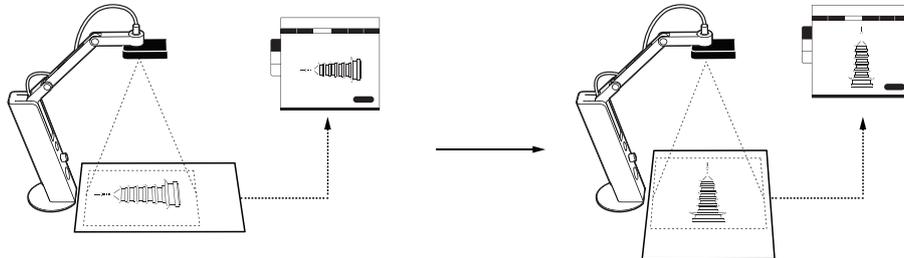
The top of the VZ-1 HD camera lens is located 90° counterclockwise from the square top of the camera body. With the camera head in its fully-extended position, documents will need to be placed perpendicular to the camera stand (as opposed to parallel) for text to be rendered “right side up” and readable on screen.



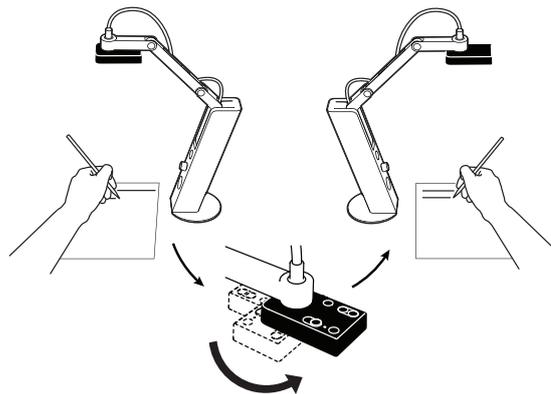
CHANGING ORIENTATION

There are several ways to change the orientation of your image:

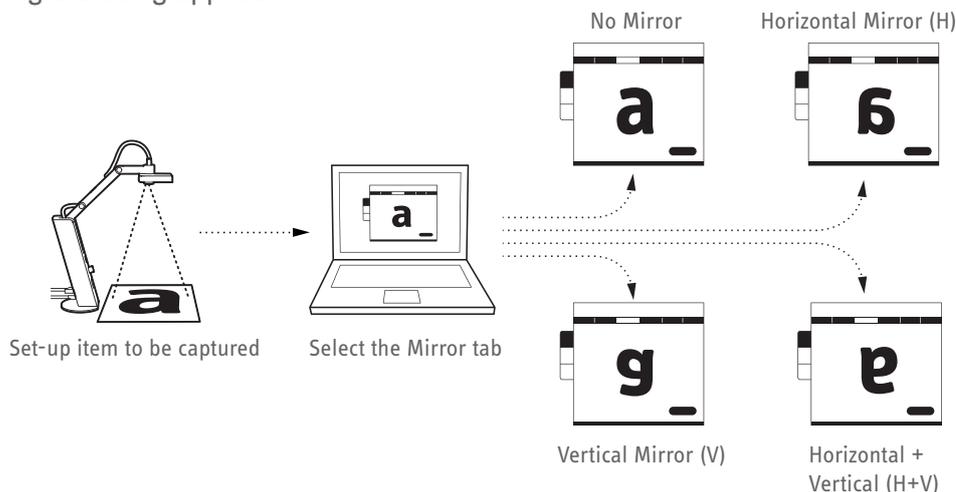
- **Change the orientation of the document/subject** – You may find it easiest to simply change the orientation of the subject you are capturing: 90° in either direction or turning 180° “upside down.”



- **Use the Swivel Head** – VZ-1 HD's camera head is expressly designed to give you an easy way to alter orientation. From its fully-extended position, VZ-1 HD can be swiveled 180° clockwise and 90° counterclockwise. Find the position that works best for yourself and your subject. For example, if you are giving a presentation and need access to the subject for a hands-on demonstration or to frequently change its position, you might consider moving the stand to one side of the subject—and changing orientation through the swivel head accordingly—so that the stand does not get in your way.



- **Mirroring** –in the Camera mode, the Mirror tab allows you to flip the image horizontally, vertically, or both. Mirroring defaults to Off (no mirroring). “Horizontal” flips the image on a vertical axis going through the center of the image, while “Vertical” flips the image on a horizontal axis going through the center of the image. The tab will indicate H (Horizontal), V (Vertical), or H + V if both types of mirroring are being applied.



EXPOSURE

Exposure refers to the amount of light allowed to hit the photographic medium—in this case, the sensor of the camera lens. In most circumstances, you will require a medium exposure allowing for the maximum amount of detail.

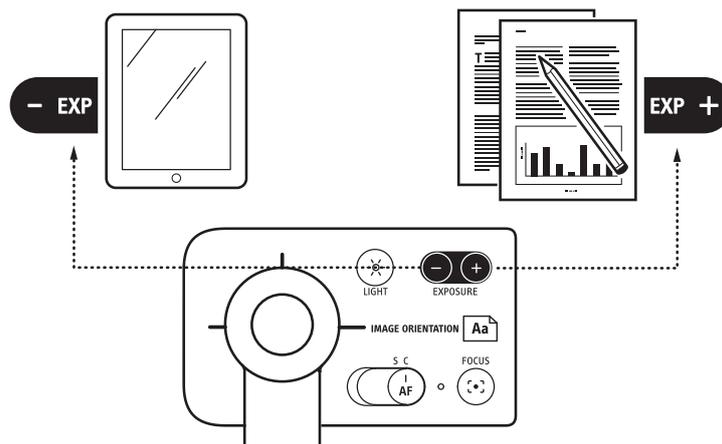
Consider the following methods to achieve optimal exposure for your image:

- **Change the exposure in the room:** This could include using a desk lamp near the VZ-1 HD to shine additional light on the subject, turning on room lights, opening or closing curtains, etc.
- **Change the EXP (Exposure Value):** VZ-1 HD is able to artificially alter exposure on a fifteen-point scale, with 1 being the lowest (darkest) exposure value, and 15 being the highest (brightest) exposure value. 8 is the default value. If your image is too dark, consider increasing the EXP. Or, if your image is too bright, decrease the EXP. The EXP may be changed on either the camera body itself or via the software.

Camera body: Use the EXP +/- toggle for on-the-fly exposure adjustments. The software will briefly indicate the change with an EXP number at the bottom of the image capture window, and your exposure will instantly change.

Software (PC or Mac only): Click on the Exposure tab. You may either click on areas within the grayscale bar to change EXP, or drag the pointer to a value. Hitting “Default” will bring the exposure back to the default value of 8.

- **Press the Light button:** An LED on the underside of the camera will cast light onto your subject. Press the button again to turn off the light



EXPOSURE (CONT'D)

- **Use Auto Exposure:** As the name implies, auto exposure automatically changes exposure in order to maintain a medium, optimum exposure in which the maximum amount of details are shown. If lighting conditions in the room or on the subject are changing, or if the subject emits its own varying amount of light (as with an LCD screen), you might consider auto exposure.

Automatic exposure adjustment depends upon two things: the EXP (Exposure Value, from 1 to 15), and the actual brightness/darkness of the subject.

Exposure Value – Auto exposure with an EXP setting of 10 will always be brighter than auto exposure with an EXP setting of 4, for one example.

Actual brightness/darkness – Auto exposure will react to changes in actual brightness/darkness. With auto exposure on, if you are capturing a bright iPad screen and it dims, the VZ-1 HD will adjust exposure to brighten the image. If the screen brightens again, VZ-1 HD will adjust exposure to darken the image.

- **To Turn on Auto Exposure:** Click the Auto tab in the Presenter software, and select “On.” The sun icon next to Auto will turn green. VZ-1 HD will now constantly determine the optimal exposure for your image, and may adjust exposure at any time.

Note: Auto exposure should be turned to “Off” for stop-motion animation projects, which rely upon uniform, consistent exposure.

Focus

Focus refers to the convergence of light in your image. If your subject is “in focus,” light is properly converged at the right point. If your subject is “out of focus,” light has not properly converged at the right point. In most circumstances, you want your image to be sharp and in focus.

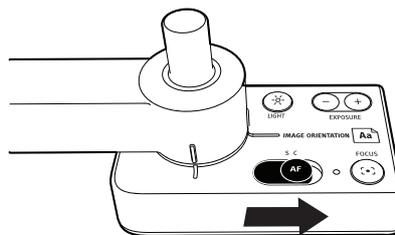
VZ-1 HD gives you a few tools to achieve proper focus, including the ability to automate focus for convenience.

- **Focus modes:** VZ-1 HD can be set to one of two focus modes using the Autofocus (AF) switch on the camera body. When using PC or Mac, the software will indicate which focus mode you are in with either “Single” or “Continuous” under “AF” in the lower right-hand corner of the screen.

Continuous (C) mode: In Continuous mode, VZ-1 HD will constantly determine the best focus for your image and change its focal length accordingly. This is ideal for “set it and forget it” convenience, and also if the distance between the camera and the subject will be changing. For example, if you are showing the parts of a phone and are flipping the phone around in a hands-on demonstration, setting the VZ-1 HD in Continuous mode will ensure your image is always in sharp focus.

Single (S) mode: In Single mode, VZ-1 HD will stay at a single focal length, and will not try to constantly adjust itself. This mode is ideal for manual control of focus. If you are capturing a text document laid on the table which is not moving, single mode will be sufficient for sharp focus. This mode is also best for the highest resolutions when frame rate drops significantly. See Page 26.

- **Focus button:** While the focus button is best for Single mode manual focus control, it will also work in Continuous mode. There are two focus buttons: the physical button on the camera body, and the four-cornered “crosshair” icon in the lower right-hand corner of the software. In either case, VZ-1 HD will find the optimum focus.



FOCUSING

When focusing, four corners of a red box will appear in the center of the screen and a beep will sound, letting you know VZ-1 HD is attempting to focus. The image may appear to slightly zoom in and out. When VZ-1 HD is done focusing, the red corners will change to green corners, and there will be two quick beeps. For disabling the beep sound effects, see Page 30, Advanced Settings.



RESOLUTION

Resolution describes the amount of detail (information) an image holds. High resolutions relay more information (and therefore more detail), and also consume more computing power. Low resolutions communicate less detail but are also less demanding of computer resources. Resolution is measured in pixels, the smallest part of a picture element. VZ-1 HD is capable of several high-definition resolutions.

CHANGING RESOLUTION (PC OR MAC)

To change resolution, click on the Resolution tab in Camera mode. There are eight different resolutions to choose from, ranging from 2592 x 1944 pixels (the highest resolution) to 640x480 pixels (the lowest resolution). As 1280 x 720 resolution (and above) is commonly accepted to be “high-definition” (HD), the top five resolutions are HD resolutions, while the three lower resolutions are standard-definition (SD) resolutions.



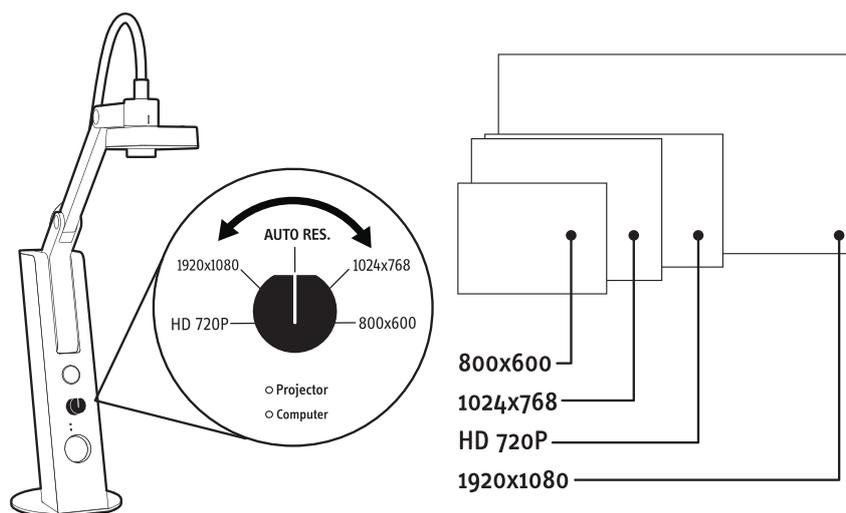
VGA RESOLUTION

When connecting directly to a monitor or projector via VGA, use the resolution selector on the front of the stand to change resolution. Please note that VZ-1 HD supports fewer resolutions in Projector mode than it does in Computer mode.

Auto. Res. (recommended): When Automatic Resolution is selected, VZ-1 HD will find the best resolution for your device, cycling from 1920x1080 pixels down to 640 x 480 pixels. If a resolution is not determined, VZ-1 HD will default to 1024 x 768 pixels.*

You may also manually select a resolution. 16:9 aspect ratio resolutions (1920 x 1080 and 720p) are on the left-hand side of the selector, while 4:3 aspect ratio resolutions (1024 x 768 and 800 x 600) are on the right.

**Note: If 1024 x 768 pixels resolution is not supported by your device (which would be unusual), the screen will appear black. In this case, turn the resolution selector to alternate resolutions.*



RESOLUTION AND FRAME RATE

Generally, as resolution increases, frame rate decreases. Frame rate is a measure of how many distinct images are captured in a single second to make up the full-motion video perceived.

Because the top resolutions contain an extraordinary amount of information, frame rate will significantly drop with these resolutions. You may experience a “stuttering,” “blurring,” or “strobing” of moving subjects, such as with a hands-on demonstration. As such, the top three resolutions are best reserved for static objects (such as a stationary piece of paper or LCD screen).

If you find the amount of strobing to be unacceptable on your current resolution, consider lowering the resolution, which will increase frame rate and reduce or eliminate strobing.

Focus Note: For the higher resolutions, Single Focus mode (rather than Continuous) is highly recommended.

Note on Highest Resolutions: See Page 8 for minimum system requirements for the two highest resolutions.

SNAPSHOTS (PC OR MAC ONLY)

VZ-1 HD has the ability to take snapshots, still images extracted from the current video capture. VZ-1 HD saves these snapshots in .jpg format onto your computer's hard drive.

Taking a snapshot is simple, and can be done in one of two ways:

1. Hit the “Enter” (Windows) or “Return” (Macintosh) key while using the Presenter software in Camera mode.
2. Click the green camera icon in the lower right-hand corner of Camera mode.



TAKING A SNAPSHOT

Once you take a snapshot, the screen will briefly go black, accompanied by a classic shutter sound effect, and then your snapshot will appear on screen in an Instant Preview. After another brief period of black, the video capture function will resume. *For changing or disabling Instant Preview, and for disabling the shutter sound effect, see Page 3, Advanced Settings.*

USING THE TIMER FUNCTION

The Timer provides a delay (in seconds) between the time you press the Snapshot button and the time when VZ-1 HD actually takes the snapshot. You might find this delay necessary to avoid any shake in the camera body that could result in a blurry image. Using the Timer eliminates this possibility.

When using the timer, a countdown will appear on screen, with beeps for each second.

The Timer, located in the Camera mode tab, can be set to either 3 seconds or 10 seconds. By default, the Timer is set to Off.



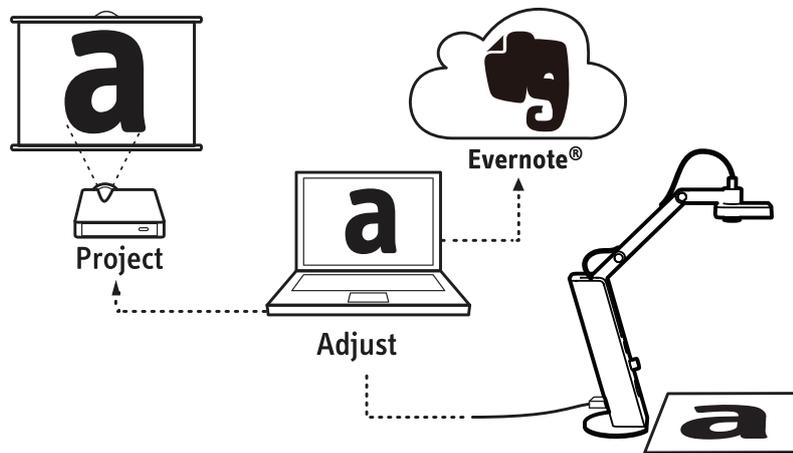
To review snapshots, enter Review mode. See Page 15.

PROJECTING YOUR IMAGE (PC OR MAC)

VZ-1 HD's image quality and high resolution are perfect for large-screen projections in the classroom or conference room. You may connect VZ-1 HD directly to a projector or monitor for this purpose as previously described (See Page 10).

For projection when using PC or Mac, a separate projector device (not included, sold separately) is required.

In most cases, Full Screen mode is preferred for projection. To enter Full Screen mode, click on the “full screen” tab on the left-hand side of the software. Full Screen mode will give you the same functions available in Camera mode. To exit Full Screen mode, press the Esc key, or click the “Esc” button in the upper right-hand section of the screen.



PREPARING FOR PROJECTION (PC OR MAC)

You'll need to mirror the content on your desktop (that is, the full screen of VZ-1 HD's video capture) and redirect it to your projector device. Please refer to your projector documentation for information specific to your projector.

The process of mirroring depends upon your operating system. Here are general guidelines for how to accomplish desktop mirroring in each operating system:

Mac OS

1. Open "System Preferences."
2. Click "Display." Set both displays to the same resolution.
3. Click the "Arrangement" tab to click mirroring mode on or off.
4. On MacBooks and some other Macs, mirroring mode can be toggled simply with the F7 key.

Windows XP

1. Right-click the desktop, and click "Properties."
2. In the dialog box, click the "Settings" tab.
3. Click the "Display" list, and you should see the Projector model listed as an alternate display option.
4. Select the projector, then click the option to "Extend my Windows desktop onto this monitor."

Windows Vista

Windows Vista will often automatically detect the projector and default into mirroring mode. If Windows can't identify the monitor, you can use Windows Mobility Center (available on mobile PCs) to connect the display:

1. Click the "Start" button.
2. Click "Control Panel."
3. Click "Mobile PC," and then click "Windows Mobility Center."
4. On the "External Display" tile, you can click "Connect display." There will be a "New Display Detected" dialog box. Press "OK" to connect the display.

Windows 7

1. Windows 7 will pop up a display dialog box when you plug in the projector, with the title "Change the appearance of your displays."
2. The second set of options from the bottom is called "Multiple displays." Select "Duplicate these displays" to make the projector show your desktop.

Note: Many classrooms and conference rooms have dedicated consoles for facilitating projection. Please refer to your IT department for specific instructions.

ADVANCED SETTINGS (PC OR MAC ONLY)

There are a number of advanced settings available to you to further customize the VZ-1 HD experience.

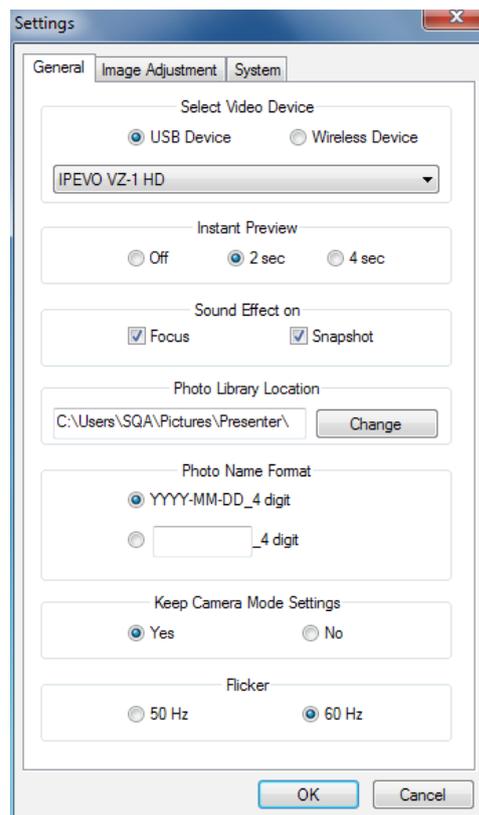
PC: In the upper right-hand corner of the Presenter software screen, along with the usual minimize and exit functions, there is a Help link (the question mark), which leads to the IPEVO.com website, and a settings link (the wrench), which leads to advanced settings.



Mac: Select VZ-1 HD > Preferences.

GENERAL TAB

- **Select Video Device** – This should be set to “IPEVO VZ-1 HD.”
- **Instant Preview** – This sets the preview for snapshots taken. The default value is 2 seconds – that is, after taking a snapshot, the software shows the snapshot you have taken for 2 seconds before reverting back to video. You can set this value to 4 seconds, 2 seconds, or Off.
- **Sound Effect on** – By default, there are beep sounds associated with focusing VZ-1 HD, and shutter sounds associated with taking snapshots. To disable either or both of these sounds, uncheck the boxes.
- **Photo Library Location** – This controls where your snapshots are stored on your hard drive. Click “Change” to locate a new location where you’d like to store your snapshots.
- **Photo Name Format** – By default, your snapshots are saved in a “YYYY-MM-DD_4-digit” format: year, month, day, and then a unique four-digit number. You can change the prefix before the unique four digits by clicking the second option and entering in your desired prefix.
- **Keep Camera Mode Settings** – Each time the Presenter software starts up, it will use the default configuration. To disable this, click “Yes.” The Presenter software will now keep your custom settings between uses.



Note: Regardless of the selections in “Keep Camera Mode Settings,” the Presenter software will memorize all advanced settings.

IMAGE ADJUSTMENT TAB

The image adjustment tab provides a number of customizations relating to video image quality.

Brightness (0 to 255) – controls lightness or darkness

Contrast (0 to 31) – controls difference in color and brightness between different parts of the image

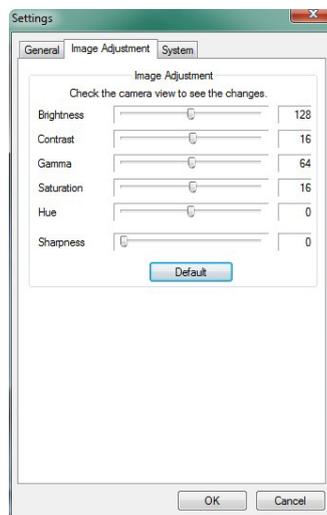
Gamma (0 to 127) – Gamma correction, affects gray levels and how the image is reproduced on the screen

Saturation (0 to 31) – controls the color saturation. Setting this value to 0 will result in a black and white image, while a value of 31 will result in very saturated, rich colors

Hue (-180 to 180) – affects reproduction of color information

Sharpness (0 to 15) – controls perceived sharpness/blurriness

The Default button changes the above customizations to their default values.



Note: Image qualities of snapshots cannot be altered (at least not in the Presenter software). You must change these settings prior to taking snapshots.

SYSTEM TAB

- **About IPEVO Presenter** – This section displays the software version currently in use. A “Check for updates” link is available, which will take you to the IPEVO website in order to check for the latest version.
- **Language** – Switch between English, Traditional Chinese, Japanese, French .
- **Start Presenter when computer starts** – If you click “Yes,” the Presenter software will start upon system startup. If “No,” you will need to manually start the software.



CLOSING AND EXITING THE PRESENTER SOFTWARE

To close the Presenter software:

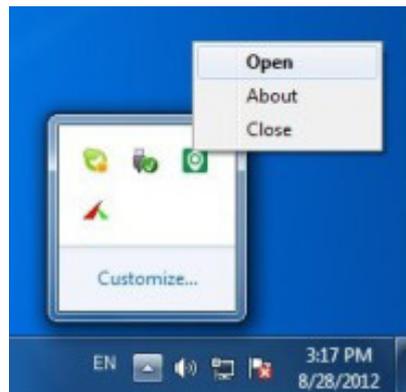
Windows – Click the Close button at the top right-hand corner of the window, or press Alt + F4 while the software is active.

Macintosh – Click the Close button at the top left-hand corner of the window, or press Command + W.

Closing the software does not exit it entirely. To exit the Presenter application:

Windows – Right-click the VZ-1 HD taskbar icon, and select Close.

Macintosh – Select VZ-1 HD > Quit VZ-1 HD, or press the Command + Q quit shortcut.



KEYBOARD SHORTCUTS

Here is a list of keyboard shortcuts which may facilitate your use of VZ-1 HD:

Function	Mode	Windows	Mac
Take snapshot	All	Enter	Return
Close window	Camera/Review	Alt + F4	Command+ W
Close application	All	----	Command+ Q
Cancel Full Screen mode	Full Screen	Esc	Esc
Zoom in	Review	+ / forward scroll	+ / forward scroll
Zoom out	Review	- / backward scroll	- / backward scroll
Copy photo	Review	Ctrl + C	Command + C
Delete photo	Review	Del	Del / Command + Del
Switch to previous photo	Review	←	←
Switch to next photo	Review	→	→
Select all photos	Review	Ctrl + A	Command + A

TROUBLESHOOTING AND FAQ

VZ-1 HD will not turn on (PC or Mac).

- Ensure VZ-1 HD is plugged in to your computer with the USB cord.
- Ensure the Presenter software from the CD-ROM is installed and running.
- Ensure you have pressed the power button on the front of the stand.
- Unplug the camera, exit the software, restart the software, and replug in the camera. Press the power button.

VZ-1 HD will not turn on (VGA monitor or projector).

- Ensure VZ-1 HD is plugged in to your device with a VGA cable (not included).
- Ensure the USB power adapter is connected and plugged into the wall.
- Ensure you have pressed the power button on the front of the stand.
- Unplug and replug in the camera. Press the power button.

No image shows up/the screen is dark (VGA monitor or projector).

- Ensure VZ-1 HD is plugged in to your device with a VGA cable (not included).
- Ensure the USB power adapter is connected and plugged into the wall.
- Ensure you have pressed the power button on the front of the stand.
- Select "Auto. Res." with the resolution selector on the front of the stand.
- If still no image, select other choices with the resolution selector.
- Unplug and replug in the camera. Press the power button.

There is a setting change I don't want that I can't get rid of.

- Access the Advanced Settings, and click No on "Keep Camera Mode Settings." Then, exit and restart the application.

The image is too dark/too bright.

- Adjust the exposure. See *Pages 21 and 22* for techniques.

The image is out of focus or pixelated.

- Press the focus button to bring the subject into sharp focus. See *Page 23* for focus techniques.
- Increase resolution for an image with more picture information. See *Page 24*.

The brightness of the image constantly seems to fluctuate.

Automatic exposure might be on, in which VZ-1 HD constantly adjusts for optimum brightness level. Disable Automatic exposure. See *Page 22*.

Anything that moves on screen is very blurry and choppy.

Decrease resolution so that frame rate increases for smoother movement. See *Page 24*.

Can I record video with VZ-1 HD?

VZ-1 HD does not have the capability to record video. There are several third-party applications that may be used in conjunction with VZ-1 HD to record video. IPEVO cannot offer technical assistance for these third-party applications.

Does VZ-1 HD capture audio?

No, VZ-1 HD does not have a microphone.

All my snapshots come out blurry.

Enable Continuous mode to ensure the image is in sharp focus.

Hit the Focus button to achieve sharp focus.

Turn the Timer on so that camera shake does not contribute to a blurry image. See *Page 27*.

The focus beeps are annoying!

Disable sound effects in Advanced Settings under "Sound Effect on." See *Page 30*.

Ziggi-HD can't focus or is slow to focus when in HD resolutions(2048x1536 / 2592x1944).

Center the object or text in the central "crosshair" to help Ziggi-HD find a better focus.

SAFETY INFORMATION

For your safety and for the best performance of your VZ-1 HD USB/VGA Document Camera:

- Keep VZ-1 HD from coming into contact with heat sources such as radiators, stoves, and hot laptops.
- Do not immerse VZ-1 HD in liquids, and protect it from moisture.
- Supervise children using VZ-1 HD.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

ACKNOWLEDGMENTS

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