# **VP-25**

### **Document** Camera



# **USER MANUAL**

Please read this manual carefully before operating the document camera and keep it for reference

#### PRECAUTIONS



#### NOTICES: PLEASE READ CAREFULLY BEFORE USE

- **U** Use the document camera under the rated electric conditions.
- **u** Do not place the document camera on any unstable surface. It may fall and cause injures or damages.
- **U** Do not place this device directly under sunlight or near heaters.
- **U** Do not place this device near water.
- **U** Keep the camera away from acid or alkali gas.
- **U** Do not place this document camera in humid, dusty, windy or vibrant locations.
- **U** The recommended operating environment is:

Temperature: 0°C--45°C(32°F-113°F) Humidity: less than 75%

- **u** Always unplug BEFORE cleaning the device. Use a damp soft-cloth for cleaning. Do not use volatile solvent.
- **u** When this equipment functions abnormally, such as smoke, smell, noise, immediately unplug and call for professional assistance.
- **U** Unplug the document camera or shut off the power when not in use.

#### **CONTENTS:**

| 1. PARTS IDENTIFICATION               | 4  |
|---------------------------------------|----|
| 2. CONTROL PANEL                      | 5  |
| 3. INPUTS AND OUTPUTS                 | 6  |
| 4. REMOTE CONTROL                     | 7  |
| 5. CONNECTIONS                        | 8  |
| 5.1. COMPUTER CONNECTION              | 8  |
| 5.2. VGA OUTPUT CONNECTION            | 9  |
| 5.3. C-VIDEO OUTPUT CONNECTION        | 9  |
| 5.4. S-VIDEO OUTPUT CONNECTION        |    |
| 6. COMMUNICATE WITH COMPUTER          | 10 |
| 6.1 COMPUTER REQUIREMENTS             |    |
| 6.2. CONTROL VIA RS232                |    |
| 6.2 USB CAMERA                        |    |
| 7. FEATURES                           | 21 |
| LIGHT                                 | 21 |
| ZOOM IN AND ZOOM OUT                  | 21 |
| FOCUS ADJUSTMENT                      |    |
| BRIGHTNESS ADJUSTMENT                 |    |
| WHITE BALANCE ADJUSTMENT              |    |
| TEXT/PICTURE MODE                     |    |
| IMAGE FREEZE                          |    |
| IMAGE MIRROR                          |    |
| SPLIT SCREEN                          |    |
| IMAGE SAVE                            |    |
| IMAGE RECALL                          |    |
| USB 2 0 PORT                          |    |
| USB IMAGE CAPTURE AND VIDEO RECORDING |    |
| RS232 CONTROL                         |    |
| 8 SDECIFICATION                       | 24 |
|                                       |    |
| 9. TROUBLE-SHOOTING:                  | 25 |
| 10. PACKING LIST                      | 25 |

### **1. PARTS IDENTIFICATION**



- 1. Remote control IR receiver
- 2. Camera
- 3. LED light box
- 4. Upper mechanical arm
- 5. Main mechanical arm
- 6. Side panel
- 7. Back panel
- 8. Base unit
- 9. Control panel

### 2. CONTROL PANEL



- 1. **POWER**: Turn on/off the power.
- 2. HOME: Activate VGA output terminal, providing the image from camera.
- 3. LAMP: Turn on/off the LED light.
- 4. **FREEZE**: Freeze/unfreeze the image.
- 5.T/P: Switch the output image between text mode and picture mode.
- 6. SPLIT: Split screen, enable the comparison between the frozen image and live image.
- 7. COMPUTER: Activate the VGA input.
- 8. VIDEO: Activate the C-VIDEO&S-VIDEO output, providing the image from camera.
- 9. BRIGHT+/-: Image brightness control.
- 10.PAGE DOWN: Saved image page down when image recall mode is enabled.
- 11. AUTO: Carry out auto focus, color adjustment and white balance.
- 12. SAVE: Capture and save the current image.
- 13. RECAL: Image recall mode enabled, display the saved images.
- 14. FOCUS+/-: Adjust focus manually, focus far and focus near.
- 15. **ZOOM**+/-: Image zoom in and zoom out control.
  - In image recall mode:
    - 1: Display the first image.
    - **2**: Display the second image.
    - **3**: Display the third image.
    - 4: Display the fourth image.

## **3. INPUTS AND OUTPUTS**



- 1. DC 12V: Power input.
- 2. RS 232: Serial port, to control the document camera by computer via this port.
- 3. AUDIO OUT: Audio output.
- 4. VGA OUT: VGA(RGB) signal output(15 pin D-SUB).
- 5. C-VIDEO: Composite video output.
- 6. S-VIDEO: S-Video output.
- 7. VGA IN: VGA(RGB) signal input(15 pin D-SUB).
- 8. AUDIO IN: Audio input.
- 9. USB: Capture image into a connected computer via provided software

### **4. REMOTE CONTROL**



- 1. Save: Capture the image in display.
- 2. Recall: Image recall mode enabled, display the saved images.
- 3. Lamp: Toggle arm light, back light & no light.
- 4. Split: Split screen, enable the comparison between the frozen image and live image.
- 5. Page down: Saved image page down when image recall mode is enabled.
- 6. Mirror: Output right-and-left, up-and-down mirror image.
- 7. Freeze: Freeze/unfreeze the image.
- 8. T/P: Switch the output image between text mode and picture mode.
- 9. **Red**+/-: Image chroma control (red).
- 10. **Blue**+/-: Image chroma control (blue).
- 11. **SXGA/XGA**: Switch the output signal between XGA and SXGA. (available for the model i3130).
- 12. Home: Activate VGA output terminal, providing the image from camera.
- 13. **Sharp**+/-: Image sharpness control.

- 14. Auto: Carry out auto focus, color adjustment and white balance.
- 15. Computer: Activate the VGA input.
- 16. Video: Activate the VIDEO&S-VIDEO output, providing the image from camera.
- 17. **Zoom**+/-: Image zoom in and zoom out control.
- 18. Focus+/-: Adjust focus manually, focus far and focus near.
- 19. **Bright**+/-: Image brightness control.

In image recall mode:

- 1: Display the first image.
- **2**: Display the second image.
- **3**: Display the third image.
- 4: Display the fourth image.

### **5. CONNECTIONS**

#### **5.1. COMPUTER CONNECTION**



### **5.2. VGA OUTPUT CONNECTION**



#### **5.3. C-VIDEO OUTPUT CONNECTION**



### **5.4. S-VIDEO OUTPUT CONNECTION**



### **6. COMMUNICATE WITH COMPUTER**

#### **6.1 COMPUTER REQUIREMENTS**

The PC's hardware and software configurations shall not be less than the following requirements:

Operating system: Windows XP

CPU: PIV1.8G

Physical memory: 512M

Video memory: 64M

#### 6.2. CONTROL VIA RS232

VP-25 can be controlled from a computer via RS232.

1. Double click the RS232 software that in provided CD to run the install shield wizard.

Then you will see the software setup window:

| 🛃 Visualizer_RS232 - | InstallShield Wizard  |  |  |
|----------------------|---|--|--|
|                      | Welcome to the InstallShield Wizard for<br>Visualizer_RS232   |  |  |
|                      | The InstallShield(R) Wizard will install Visualizer_R5232 on your<br>computer. To continue, click Next. |  |  |
|                      | WARNING: This program is protected by copyright law and international treaties.                         |  |  |
| < Back Next > Cancel |   |  |  |

Read terms, select "I accept the terms in the license agreement" Click Next:

| 😽 Visualizer_RS232 - InstallShield Vizard   | × |
|---|---|
| License Agreement Please read the following license agreement carefully.  |   |
| To add your own license text to this dialog, specify your license agreement file in the Dialog editor.  | - |
| <ol> <li>Navigate to the User Interface view.</li> <li>Select the LicenseAgreement dialog.</li> <li>Choose to edit the dialog layout.</li> <li>Once in the Dialog editor, select the Memo ScrollableText control.</li> <li>Set FileName to the name of your license agreement RTF file.</li> </ol> After you build your release, your license text will be displayed in the License Agreement dialog. |   |
| I <u>a</u> ccept the terms in the license agreement     I <u>d</u> o not accept the terms in the license agreement  | ) |
| InstallShield < <u>B</u> ack <u>N</u> ext > Cancel  |   |

Click *Change* to change the installation directory if needed, then click *Next*:

| 🛃 Visual               | lizer_RS232 - Inst  | allShield W    | lizard | X              |  |
|------------------------|---|----------------|--------|----------------|--|
| Destinati<br>Click Ne: | Destination Folder<br>Click Next to install to this folder, or click Change to install to a different folder. |                |        |                |  |
|                        | Install Visualizer_RS232 to:<br>C:\Program Files\   |                |        | <u>C</u> hange |  |
| InstallShield -        |   | < <u>B</u> ack | Next > | Cancel         |  |

Click Install to install the software to the computer:

| 😽 Visualizer_RS232 - InstallShield Vizard  | × |
|--|---|
| Ready to Install the Program The wizard is ready to begin installation.  |   |
| If you want to review or change any of your installation settings, click Back. Click Cancel to<br>exit the wizard. |   |
| Current Settings:  |   |
| Setup Type:  |   |
| Typical  |   |
| Destination Folder:  |   |
| C:\Program Files\  |   |
| User Information:  |   |
| Name: i3030  |   |
| Company: i3030   |   |
| J<br>InstallShield   |   |
| < Back Install Cancel  |   |

Click Finish, the software installation is complete:

| 🛃 Visualizer_RS232 - Inst | allShield Vizard 🛛 🔀  |
|---------------------------|---|
| Inst                      | tallShield Wizard Completed   |
| The Visual                | InstallShield Wizard has successfully installed<br>alizer_R5232. Click Finish to exit the wizard. |
|                           | < Back Einish Cancel  |

- 2. Connect the computer and the VP-25 with a RS232 cable, turn on the power of VP-25.
- 3. Double click Visualizer\_RS232-> Visualizer\_RS232-> Visualizer\_RS232.exe

to run the RS232 software, You will see the Icon on the task bar and the control interface on the top right of the screen:



4. Click *s*, you will see the following control panel.

| Visualizer_RS232 control pro | Power         |        | Adjustment            |
|------------------------------|---------------|--------|-----------------------|
| i3030 -<br>COM1 -            | 0 ON          | 0 OFF  | Brightness            |
| I/O selection                | Function      |        | Red                   |
| 💪 Home                       | <b></b> Split | 属 PIP  | Sharpness             |
| O Video Out                  | 🕖 NEG         | 💽 T/P  | Volume                |
| O Video2 In                  | S Freeze      | 😝 Flip | Page                  |
| 🗊 PC In                      | 🔣 Recall      | 日 Save |                       |
| NC2 In                       | 🛞 Light       | Rotate | Zoom<br>Zoom+ Q Zoom- |
| 0                            | USB           | 🔁 Menu |                       |
| 4 📧 2                        | Z XGA         | Title  | Focus                 |
| 3                            | U B/W         | Mirror |                       |

5. Properly set the software.



Note:

- \* If the selected model does not have certain functions, the corresponding buttons in the software interface are displayed in light gray and are not clickable.
- \* All models require 15 seconds start-up time to start the software.

#### 6. Button instruction

| Button         | Function                              |
|----------------|---------------------------------------|
| OPower On      | Power on the unit                     |
| Power Off      | Standby                               |
| Home           | Switch to visualize mode              |
| Video Out      | Switch to Video/S-Video output        |
| <b>PC</b> In   | Active PC input                       |
| Freeze         | Image freeze                          |
| Light          | Toggle between arm light and no light |
| •Brightness+   | Increase the brightness               |
| Brightness-    | Decrease the brightness               |
| EFocus+        | Focus far                             |
| EFocus-        | Focus near                            |
| Szoom+         | Zoom in                               |
| Szoom-         | Zoom out                              |
| SPage+         | Page up                               |
| SPage-         | Page down                             |
| •Red+          | Increase the red hue                  |
| ERed-          | Decrease the red hue                  |
| <b>E</b> Blue+ | Increase the blue hue                 |
| Blue-          | Decrease the blue hue                 |
| • Sharpness+   | Increase the sharpness                |

| ESharpness-   | Decrease the sharpness                   |
|---------------|--|
| Auto          | Auto focus, brightness, and color        |
| <b>E</b> Save | Save image                               |
| Recall        | Recall saved images                      |
| Split         | Split screen                             |
| Mirror        | Mirror image                             |
| <b>Т/Р</b>    | Switch between text and image modes      |
| ZGA           | Switch between SXGA and XGA output modes |
| <b>1</b>      | Display Image #1(in image recall mode)   |
| 22            | Display Image #2(in image recall mode)   |
| 3             | Display Image #3(in image recall mode)   |
| 4             | Display Image #4(in image recall mode)   |

#### 6.2 USB CAMERA

You can capture images and videos on the VP-25 from a computer via USB.

- 1. Connect the computer and the VP-25 with a USB cable, turn on the power of VP-25.
- 2. Open *My Computer*, you will see a USB Video Device:



3. Double click USB Video Device, you will see the following image capture window:



To capture the video, please see the following steps:

- 1. Copy the USB software that in the provided CD into the folder VP-25.
- 2. Open the USB folder, double click to run the USB capture application:



You will see the following window:



2. Please make sure the software is in properly setting.

Make sure ticking Devices->USB video device and Options->Preview.



| 🗃 AMCAP        |                      |  |
|----------------|----------------------|--|
| File Devices 🤇 | ptions Capture Help  |  |
|                | Preview              |  |
|                | RGB565               |  |
|                | MPEG2                |  |
|                | Video Capture Filter |  |
|                | Video Capture Pin    |  |
|                |                      |  |
|                |                      |  |

3. Click *File->Set Capture File*, to set the capture file.

| 🚔 АМСАР  |  |
|--|--|
| File Devices Options Capture Help                              |  |
| Set Capture File<br>Allocate File Space<br>Save Captured Video |  |
| Exit   |  |

A. Set the saved location and file name.

| Set Capture Fil                   | e   | ? 🗙            |
|-----------------------------------|---|----------------|
| Look in:                          | 🔁 USB 🖉 🗢 🔁 📸 -   |                |
| My Recent<br>Documents<br>Desktop | File location   |                |
| My Documents                      |   |                |
| My Computer                       | File name   |                |
| My Network<br>Places              | File name:     i3030       Files of type:     Microsoft AVI | Open<br>Cancel |

B. Set the file size.

| Set File Size   | X |  |
|---|---|--|
| Enter the amount of disk space to set<br>aside for the capture file. Existing video<br>data in the file will be lost. |   |  |
| Free disk space: 17156 MBytes   |   |  |
| Capture file size: 1024 MBytes  |   |  |
| OK Cancel   |   |  |

4. Click OK to finish the setup, then click *Capture->Start capture* to capture video.



4. You will see the following window, Click OK to start capture.



6. Click Capture->Stop Capture to stop



### 7. FEATURES

#### LIGHT

The VP-25 is the environmentally friendly product, it is RoHS compliant, which means it meets the rigorous European Union's requirements for restriction of the use of certain hazardous substances in electrical and electronic equipment. The lighting box of VP-25 adopts eco-friendly, low power consumption and long lasting LED lamps, which is cool to the touch and mercury content free.

#### ZOOM IN AND ZOOM OUT

9x optical zoom combined with 8x seamless digital zoom, the VP-25 enables you to view the finest details of any objects that are impossible to see with your naked eyes. The VP-25's advanced optical system features high speed auto focus capability that ensures instant auto focus when you quickly zoom in and out of any object. You can also manually adjust focus to satisfy any special viewing needs by pressing "ZOOM+"or "ZOOM—".

#### FOCUS ADJUSTMENT

When the Visualizer is turned on the focus automatically adjusts to the stage, it is not necessary to readjust the focus if you are only working with flat materials (text, photos, etc.). Only 3D objects require a focus adjustment. Press the "AUTO" button to auto focus. Press the "FOCUS+", or "FOCUS-"button once to focus manually.

#### **BRIGHTNESS ADJUSTMENT**

If the image effect is not satisfactory, you can adjust the brightness to get a better image effect. Use the "BRIGHT +" or "BRIGHT -" button to adjust the brightness. To increase the brightness, press the "BRIGHT +" button. To decrease it, press the "BRIGHT -" button.

#### WHITE BALANCE ADJUSTMENT

Each time the lighting condition changes, the user should adjust the white balance of the CMOS. Press the "AUTO" button to adjust the white balance automatically.

#### **TEXT/PICTURE MODE**

The Text enhancement feature provides the option to improve the readability of the text by improve the contrast of the text image via pressing the "T/P" button.

#### **IMAGE FREEZE**

The freeze function allows you to discretely prepare the next image without interrupting current presentation. Use "FREEZE" to freeze and unfreeze the image.

#### **IMAGE MIRROR**

The mirror function gives you a different perspective of an object.

#### **SPLIT SCREEN**

The split screen offers the capability of comparing two images or comparing two different views of one object side by side.

#### **IMAGE SAVE**

The VP-25 offers the opportunity of storing 12 images on board. You can recall them by just pressing one of the numerical buttons on the front panel or remote control.

#### **IMAGE RECALL**

By pressing the "Recall" button, all saved images is displayed in the thumbnail index mode for easy selection.

#### **MULTIPLE INPUTS AND OUTPUTS**

The VGA input allows a computer to be connected, inputting the computer signal. VP-25 also implements C-Video and S-Video connector, which can output the CMOS image.

#### **USB 2.0 PORT**

The USB port can be used to store still images from the visualizer in a computer. No additional computer hardware is required. In this way, the visualizer can be used as a 3-D scanner for your computer. Connect the Visualizer to your computer with the supplied USB cable. The Visualizer Software is available on the supplied CD-ROM.

#### **USB IMAGE CAPTURE AND VIDEO RECORDING**

The VP-25 is the document camera equipped with a USB 2.0 image capture and video recording system. Simply connect the VP-25 to a computer, with the software and driver we provided, you can easily preview, capture and save any images on your PC and Mac.

#### **RS232 CONTROL**

The RS232 terminal allows you to integrate the VP-25 into any sophisticated central control system. RS232 also enable you to control the VP-25 via computer.

## 8. SPECIFICATION

| Model                  | VP-25  |
|------------------------|--|
| Sensor                 | 1/3" CMOS                                      |
| Pixels                 | 2 Megapixel                                    |
| Zoom                   | 9x optical, 8x digital                         |
| Frame rate             | 15   |
| Shooting area          | Max: 13.5"x10.6", Min: 0.1"x0.1"               |
| Focus                  | Auto/manual                                    |
| Output resolution      | XGA  |
| Resolution(Horizontal) | ≥650 TV lines                                  |
| White balance          | Auto/manual                                    |
| Color adjustment       | Yes  |
| Brightness adjustment  | Yes  |
| Image capture          | Yes,12images                                   |
| Video recording        | Yes(via USB)                                   |
| Image mirror           | Yes  |
| Image split            | Yes  |
| Image freeze           | Yes  |
| Text mode              | Yes  |
| OSD                    | Yes  |
| Inputs                 | VGA ×1, AUDIO ×1                               |
| Outputs                | VGA ×1, C-VIDEO ×1, S-VIDEO ×1, AUDIO ×1       |
| USB2.0                 | Slave×1(USB camera)                            |
| RS232                  | x1(computer controllable)                      |
| Remote control         | Yes(360°controllable)                          |
| Light source           | LED light box                                  |
| Kensington lock        | Yes  |
| Operating temperature  | 32°F ~113°F                                    |
| Dimensions             | Folded:12.6"×6.6"×3.7", Setup:19.7"×6.6"×19.3" |
| Power supply           | 12V DC power adapter                           |
| Weight(net)            | 5.5lbs/2.5kg                                   |

### 9. TROUBLE-SHOOTING:

| Symptoms                 | Possible causes/counter-measures                             |  |
|--------------------------|--|--|
| No image                 | 1. Power cord is not properly connected.                     |  |
|                          | 2. Cables are not properly connected.                        |  |
|                          | 3. Power switch is not turned on.                            |  |
|                          | 4. The built-in fuse is broken: Change fuse.                 |  |
|                          | 5. Change the output resolution.                             |  |
| Image bending            | 1. Camera not in right position, adjust the camera.          |  |
|                          | 2. Distortion of LCD display, press the "Auto adjust" of the |  |
|                          | LCD.   |  |
| Out of focus or blurring | 1. The object is too close to the lens.                      |  |
| image                    | 2. Focus is on the top point of zoom, press ZOOM             |  |
|                          | 3. Auto-focus is not on: press AUTO again.                   |  |
|                          | 4. Fog on the lens in damp climate. It will disappear        |  |
|                          | gradually when the equipment warms up.                       |  |

If the problem still remains after checking the above, consult your dealer or authorized service personally.

### **10. PACKING LIST**

| Item                      | Quantity |
|---------------------------|----------|
| Power cord                | 1        |
| Power adaptor(12V/2A)     | 1        |
| VGA cable                 | 1        |
| Switch cable(RCA to mini) | 1        |
| USB cable(2.0)            | 1        |
| Remote control            | 1        |
| User manual(CD)           | 1        |