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# VP-35

## Document Camera



# USER MANUAL

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

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## PRECAUTIONS



### NOTICES: PLEASE READ CAREFULLY BEFORE USE

- ⌚ Use the document camera under the rated electric conditions.
- ⌚ Do not place the document camera on any unstable surface. It may fall and cause injuries or damages.
- ⌚ Do not place this device directly under sunlight or near heaters.
- ⌚ Do not place this device near water.
- ⌚ Keep the camera away from acid or alkali gas.
- ⌚ Do not place this document camera in humid, dusty, windy or vibrant locations.
- ⌚ The recommended operating environment is:
  - Temperature: 0°C--45°C(32°F-113°F)
  - Humidity: less than 75%
- ⌚ Always unplug BEFORE cleaning the device. Use a damp soft-cloth for cleaning. Do not use volatile solvent.
- ⌚ When this equipment functions abnormally, such as smoke, smell, noise, immediately unplug and call for professional assistance.
- ⌚ Unplug the document camera or shut off the power when not in use.

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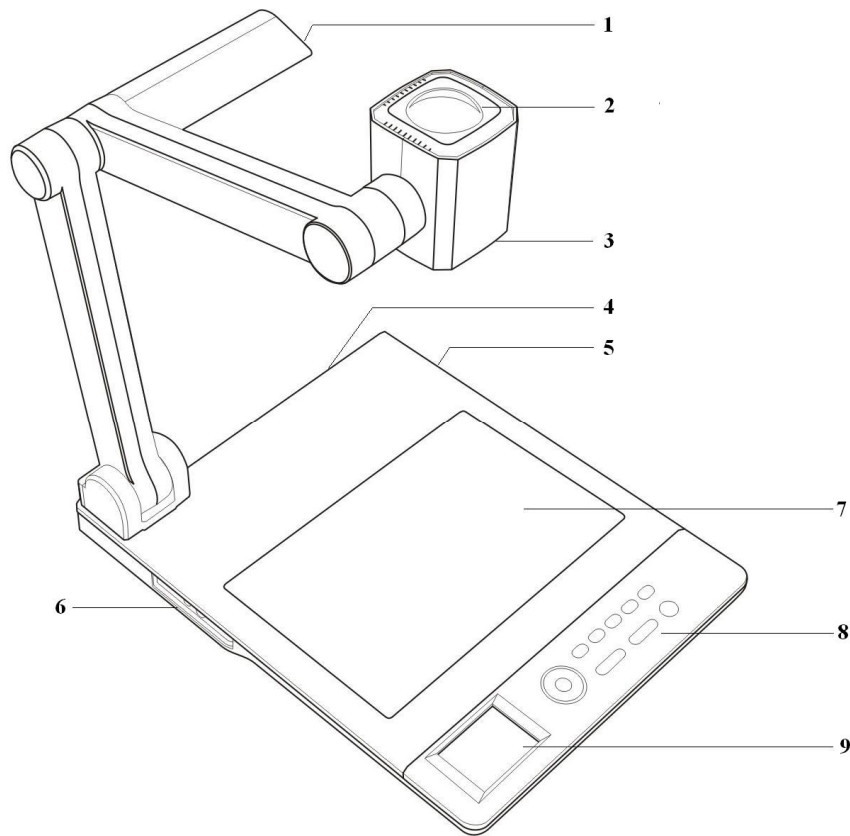
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# 1. PARTS IDENTIFICATION




1. **LED light box**
2. **Remote control IR receiver**
3. **Camera**
4. **Rear panel**
5. **Side panel-1**
6. **Side panel-2**
7. **Base light**
8. **Control panel**
9. **LCD screen**

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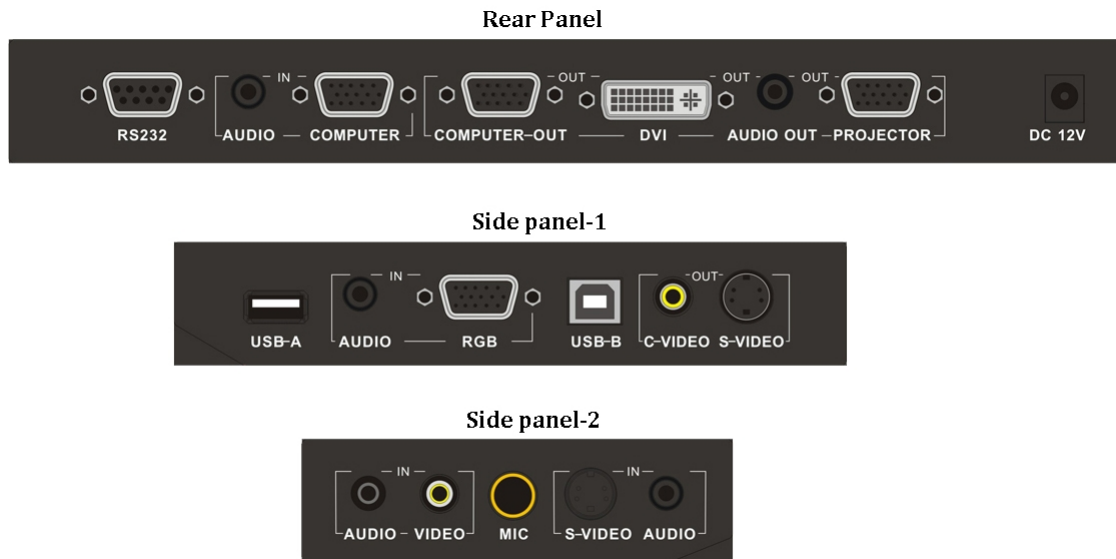
## 2. CONTROL PANEL



1.  : Turn on/off the power.
2. **MENU ENTER**: Enter the control Menu.
3. **HOME**: Output the images that from the camera.
4. **PC**: Output the signal that from VGA input.
5. **VIDEO**: Output the signal that from the Video/S-Video input.
6. **LAMP**: Turn on/off the LED light.
7. **AUTO**: Carry out auto focus, color adjustment and white balance.
8. **FOCUS**: Adjust focus manually, focus far and focus near.
9. **ZOOM**: Image zoom in and zoom out control.

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## 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. **COMPUTER & AUDIO IN:** Computer signal(and audio signal) input.
4. **COMPUTER OUT:** Output the signal that from the COMPUTER IN connector.
5. **DVI OUT:** DVI signal output.
6. **AUDIO OUT:** Audio output.
7. **PROJECTOR OUT:** Output the signal to projector or other display.
8. **USB-A:** Communicate with USB device, USB mouse, memory stick.
9. **RGB & AUDIO IN:** RGB signal(and audio signal) input(15 pin D-SUB).
10. **USB-B:** Capture image into a connected computer via provided software.  
Download the saved image to computer.
11. **C-VIDEO OUT:** Composite video output.
12. **S-VIDEO OUT:** S-Video output.
13. **VIDEO & AUDIO IN:** Composite signal(and audio signal) input.
14. **MIC:** Microphone signal input.
15. **S-VIDEO & AUDIO IN:** S-Video signal(and audio signal) input.

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## 4. REMOTE CONTROL



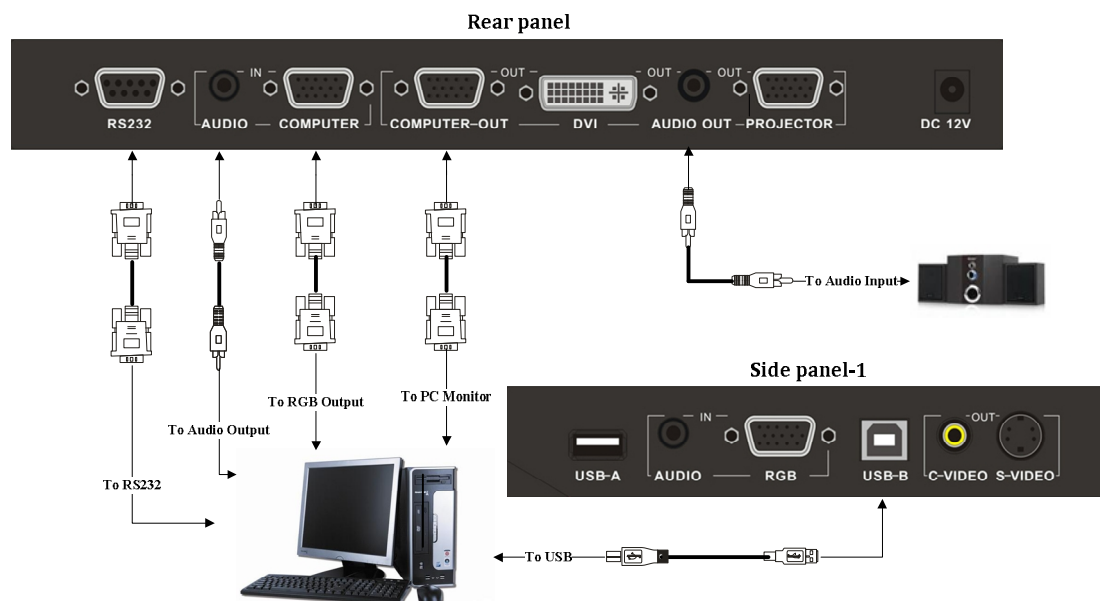
1. **Save:** Capture the image in display.
2. **Recall:** a. Image recall mode enabled, display the saved images.  
b. When a memory stick was connected, press Recall to show the content that in the memory stick  
c. Back to upper lever in image recall mode.
3. **Title:** Enable the title function(title freezing).
4. **Split:** Split screen, enable the comparison between the frozen image and live image.
5. **Neg:** Switch the image mode between positive and negative.
6. **Rotate:** Rotate the image by 90°, 180°, 270°.
7. **Freeze:** Freeze/unfreeze the image.
8. **PIP:** Active the Picture in Picture function.
  - 1>. Press Recall button, then use arrow button to select a saved image, press PIP to choose it for PIP image.
  - 2>. Press Recall to exit the image recall mode, press PIP again, then there will be a small window on the lower right screen, showing the selected saved image.
9. **Page +/-:** Page up and page down in image recall mode.
10. **Home:** Output the images that from the camera.
11. **Red+/-:** Image chroma control (red).



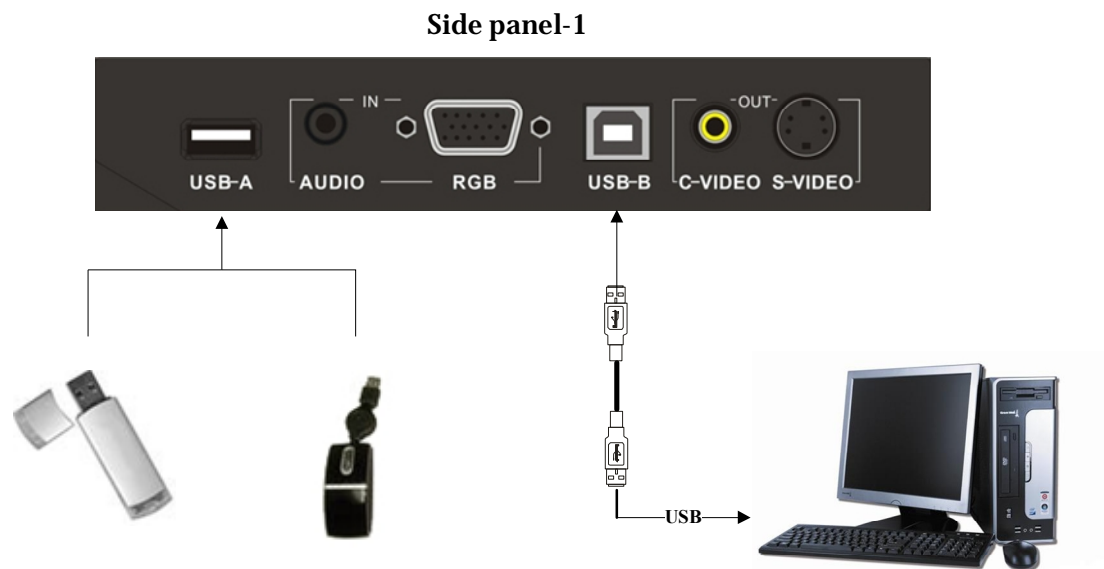
12. **SXGA/XGA**: Switch the output signal between SXGA and XGA.
13. **Blue+/-**: Image chroma control (blue).
14. **PC 1/2**: Switch the input between PC1 and PC2.
15. **Video 1/2**: Switch the input between Video1 and Video2.
16. **Menu Enter**: a. Active the on screen menu.  
b. Display the selected image in image recall mode.
17. **Arrow buttons**: move the cursor when the menu is activated.
18. **USB**: Switch the USB function between USB camera(capture the image that from camera to PC and USB storage(download image from visualizer to PC)).
19. **Zoom+/-**: Image zoom in and zoom out control.
20. **Auto**: Carry out auto focus, color adjustment and white balance.
21. **Focus+/-**: Adjust focus manually, focus far and focus near.
22. **Bright+/-**: Image brightness control.

## 5. CONNECTIONS

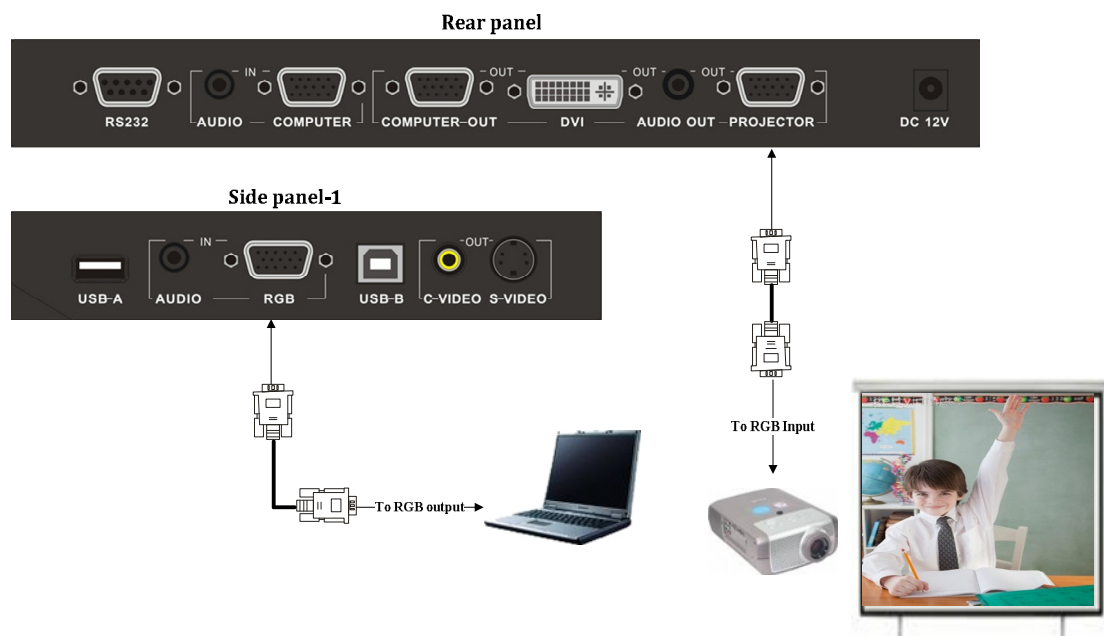
### 5.1. COMPUTER CONNECTION



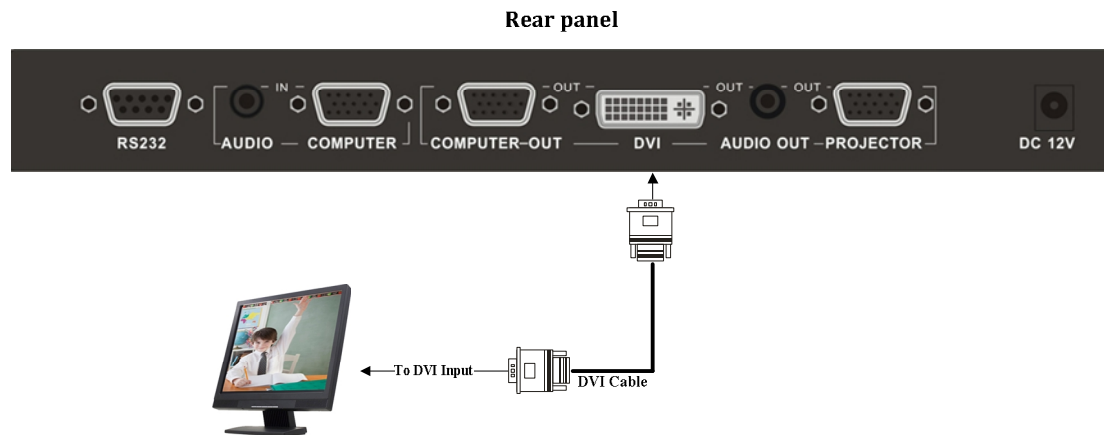
## 5.2. USB CONNECTION



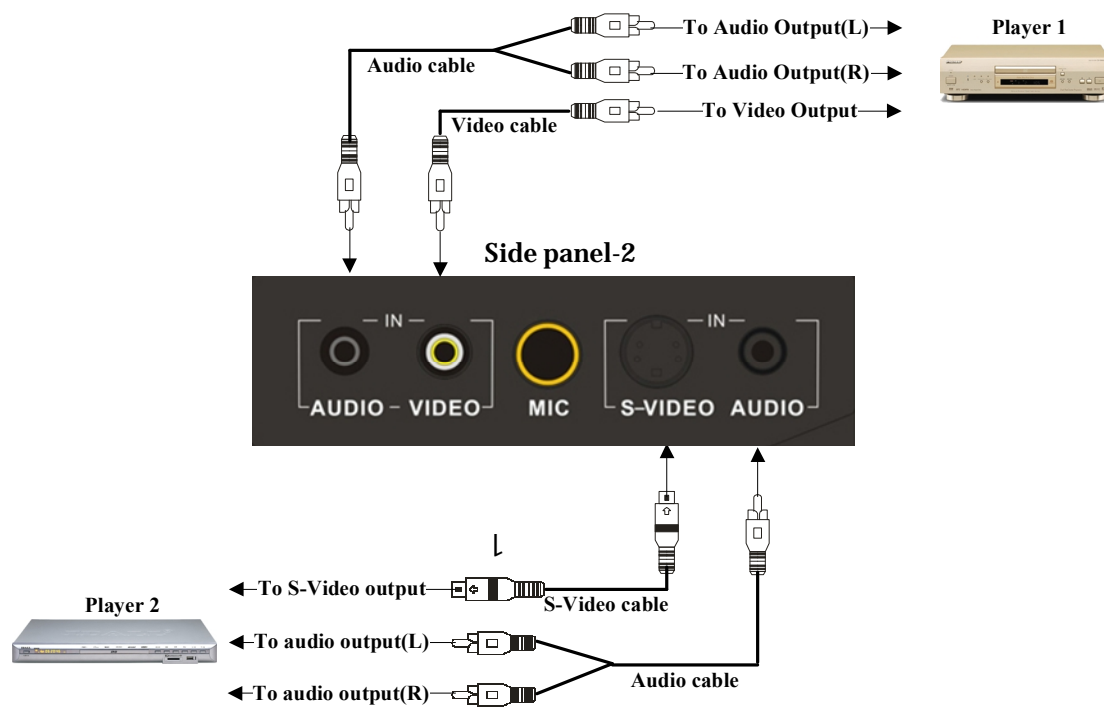
## 5.3. RGB INPUT AND OUTPUT



## 5.4 DVI OUTPUT

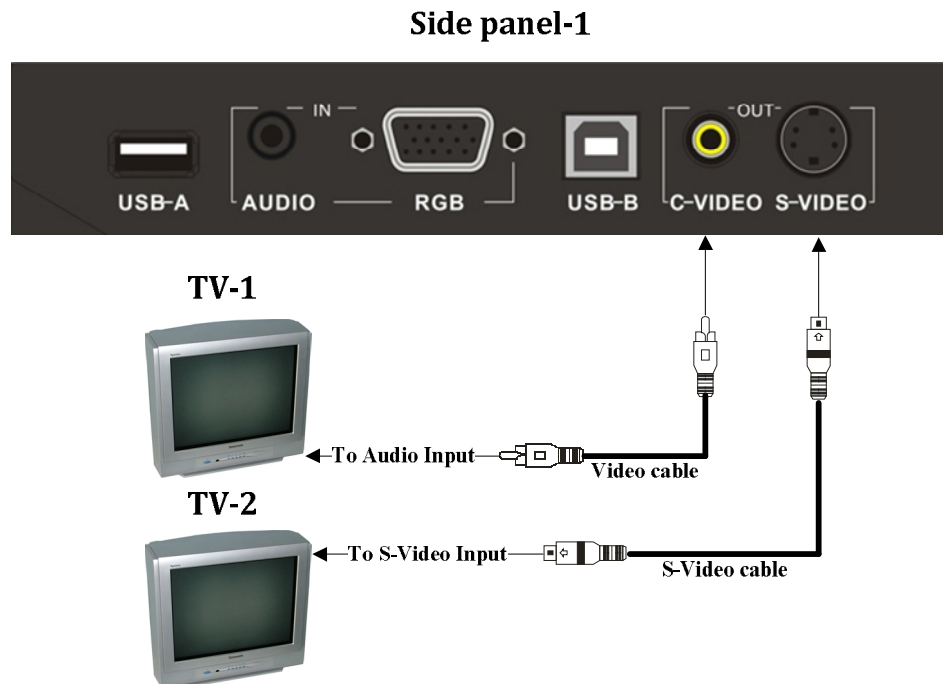


## 5.5. C-VIDEO & S-VIDEO INPUT



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## 5.6. C-VIDEO & S-VIDEO OUTPUT



## 6. RS232 SOFTWARE

### 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

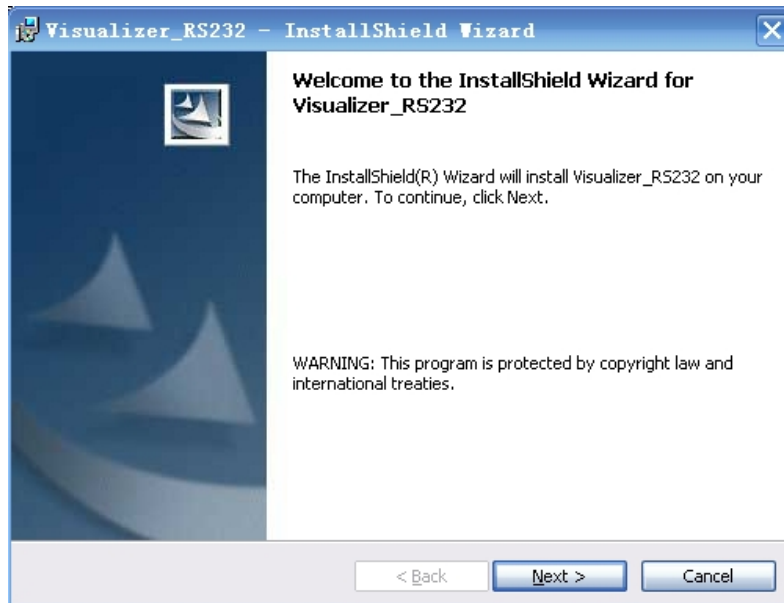
Physical memory: 512M

Video memory: 64M

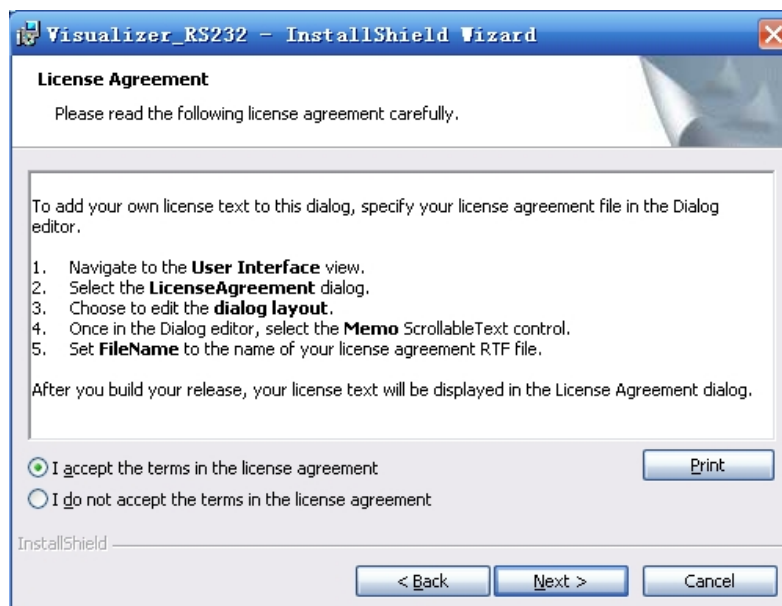
### 6.2. SOFTWARE INSTALLATION

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

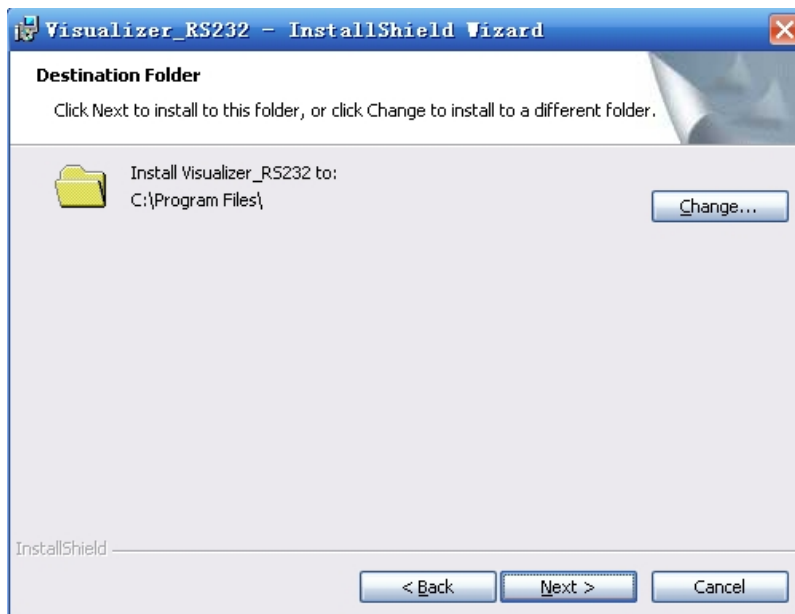
Then you will see the software setup window:



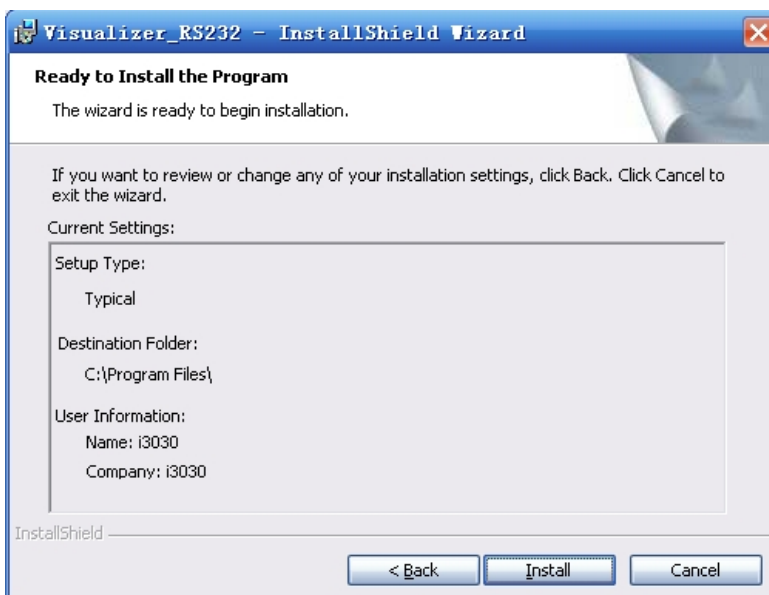
Read terms, select *"I accept the terms in the license agreement"* Click *Next*:



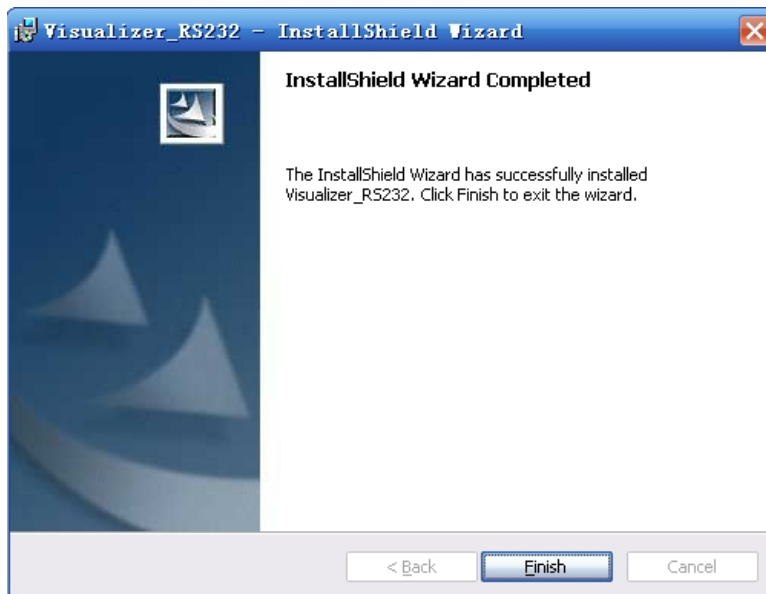
Click *Change* to change the installation directory if needed, then click *Next*:



Click *Install* to install the software to the computer:




Click *Finish*, the software installation is complete:



## 6.3 SOFTWARE START AND SETTING

Connect the computer and the VP-35 with a RS232 cable, turn on the power of VP-35, then double

click  or click *start->All Programs->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:



: Zoom+


: Zoom-

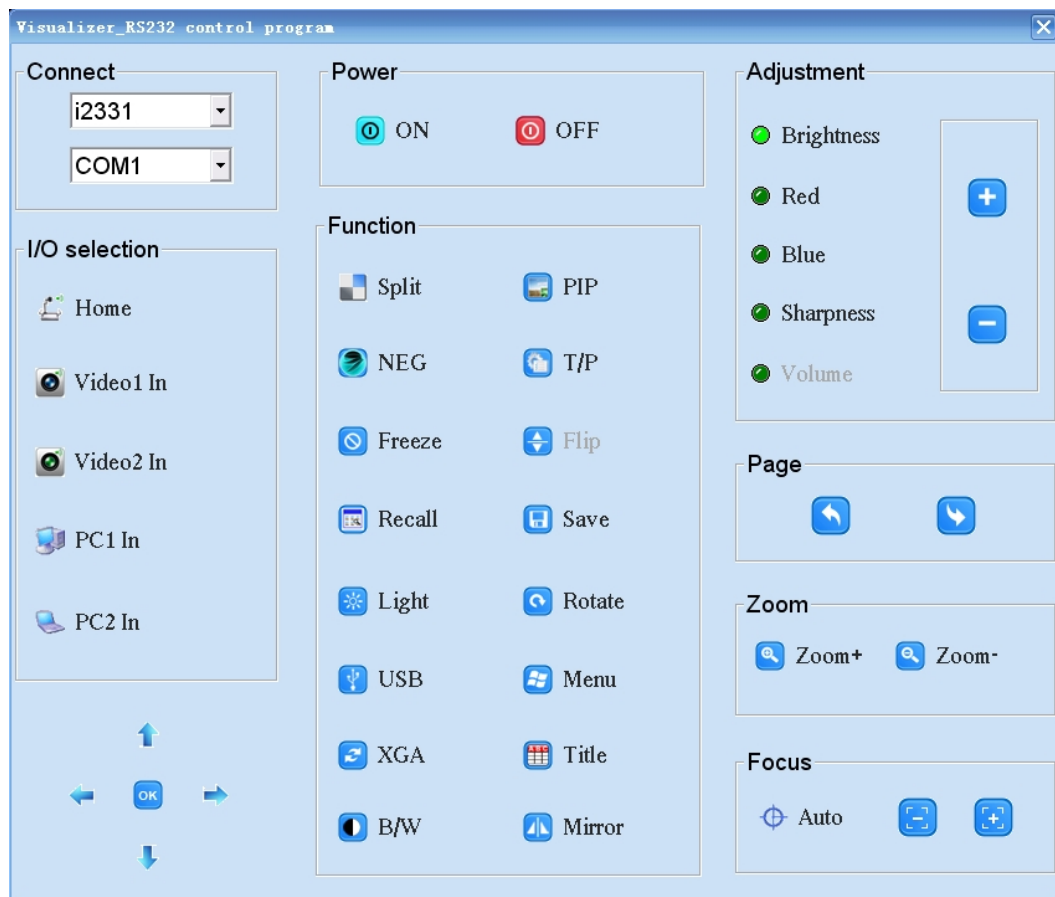
: Auto

: Display all functions

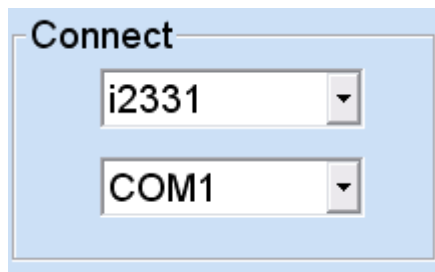
: Minimize

: Close

Click , you will see the following control panel.



Set the software properly:



**i2331** : Select corresponding model number.

**COM1** : Select the right COM port.

*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.*



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## 6.4. BUTTON INSTRUCTION

Button	Function
 Power On	Power the unit on
 Power Off	Stand by
 Home	Visualizer output mode
 Video1 In	Video 1 input
 Video2 In	Video 2 input
 PC1 In	PC1 input
 PC2 In	PC2 input
 Freeze	Image freeze
 Light	Toggle between arm light, backlight and light off modes
 Brightness+	Increase the brightness
 Brightness-	Decrease the brightness
 Focus+	Focus far
 Focus-	Focus near
 Zoom+	Zoom in
 Zoom-	Zoom out
 Page+	Page up
 Page-	Page down
 Red+	Increase the red hue
 Red-	Decrease the red hue

 Blue+	Increase the blue hue
 Blue-	Decrease the blue hue
 Sharpness+	Increase the sharpness
 Sharpness-	Decrease the sharpness
 Auto	Auto focus, brightness and color
 Save	Save image
 Recall	Recall saved images
 NEG	Switch between negative and positive modes
 B/W	Switch between black/white and color modes
 Split	Split screen
 Mirror	Mirror image
 T/P	Switch between text and image modes
 Rotate	Rotation
 PIP	Picture in picture
 XGA	Switch between SXGA, XGA, and WXGA output modes
 Enter	Enter
 Up	Up
 Down	Down
 Left	Left
 Right	Right
 USB	USB function selection
 Title	Title freeze



Menu

Menu

## 7. USB FUNCTION

### 7.1 USB-A

USB-A connector can be used to communicate with USB mouse and USB memory stick or other USB slave device.

#### 1. USB mouse

The USB mouse will be automatically activated when plug into the USB-A connector of VP-35, you can use it to make note or mark on the image.

#### 2. Memory stick

- \* Connect the memory stick with VP-35, then press Recall button to access the memory stick.
- \* Use the left and right arrow to exit/enter a folder.
- \* Use the up and down arrow button to select an image.
- \* Press Menu Enter to display the selected image.
- \* Press Recall button to exit.

### 7.2 USB-B

#### 7.2.1 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

#### 7.2.2 SOFTWARE INSTALLATION

*Notes:*

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*To install and uninstall, please login in as system administrator, otherwise, the install/uninstall will fail.*

*Please connect the unit to the PC before starting installation.*

*Please select the right software to install:*

*Visualizer\_USB(x32): Windows XP, 32bit.*

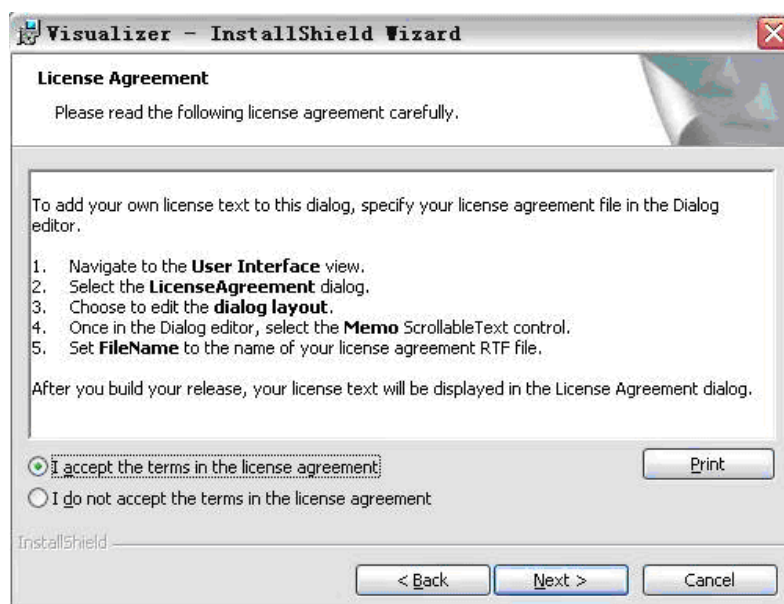
*Visualizer\_USB(Windows7 x64): Windows 7, 64bit.*

*Visualizer\_USB(Vista x64): Windows Vista, 64bit.*

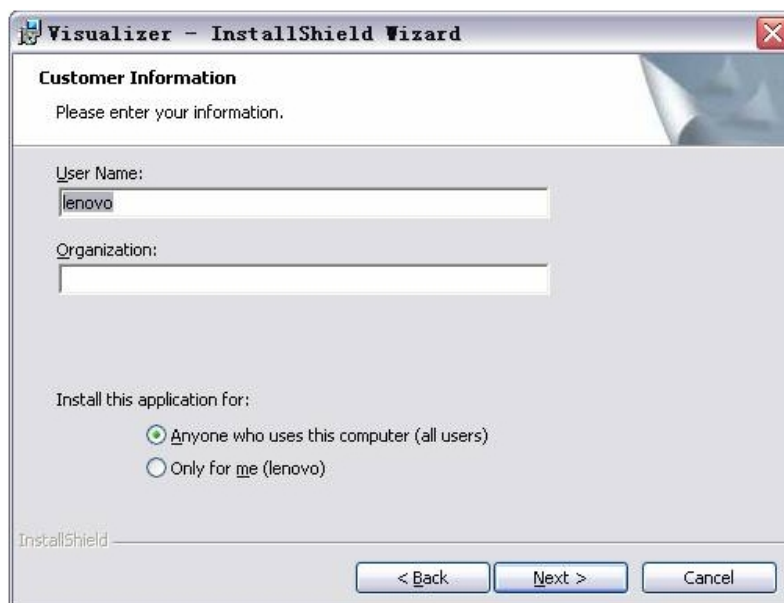
Click to run the software installation package, the following dialogue appears, click "Next":



Read the terms, Select "I accept the terms in the license agreement." Click "Next", as the following figure.



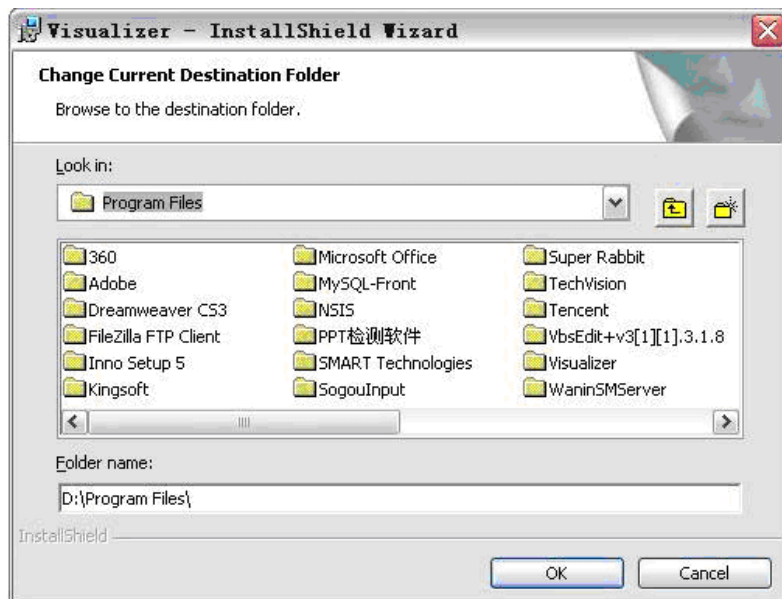
The following dialogue box appears, click "Next":



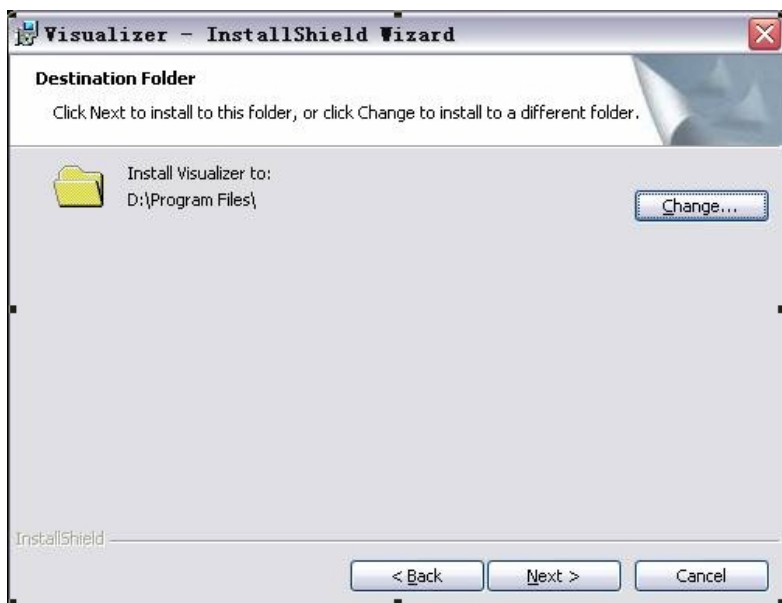
The default installation directory is Program Files, C: \ Program Files \, you can select a different installation directory, as shown:



Click "Change" to change the directory, as shown:



Click "OK", the following figure appears. Click "Next".



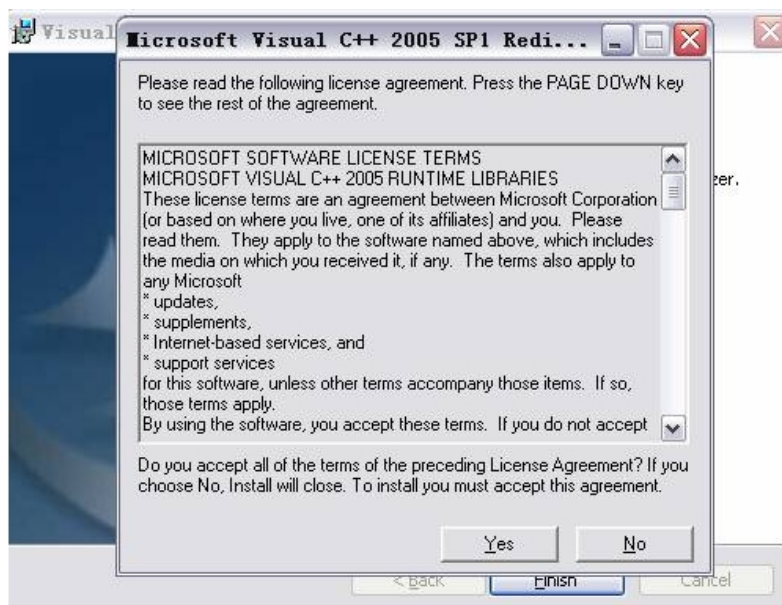
Click "Install" to complete installation, as shown:



Click "Finish" to complete the installation, as shown:



Then you will see the following interface, which is an installation package for 2005 environment. If your PC already has this installed, click "No" to exit, otherwise, click "Yes" to install it.



## 7.2.3 SOFTWARE START


*Note: To use the software, the document camera's USB mode has to be set to USB Video mode.*

*Please follow the instruction below:*

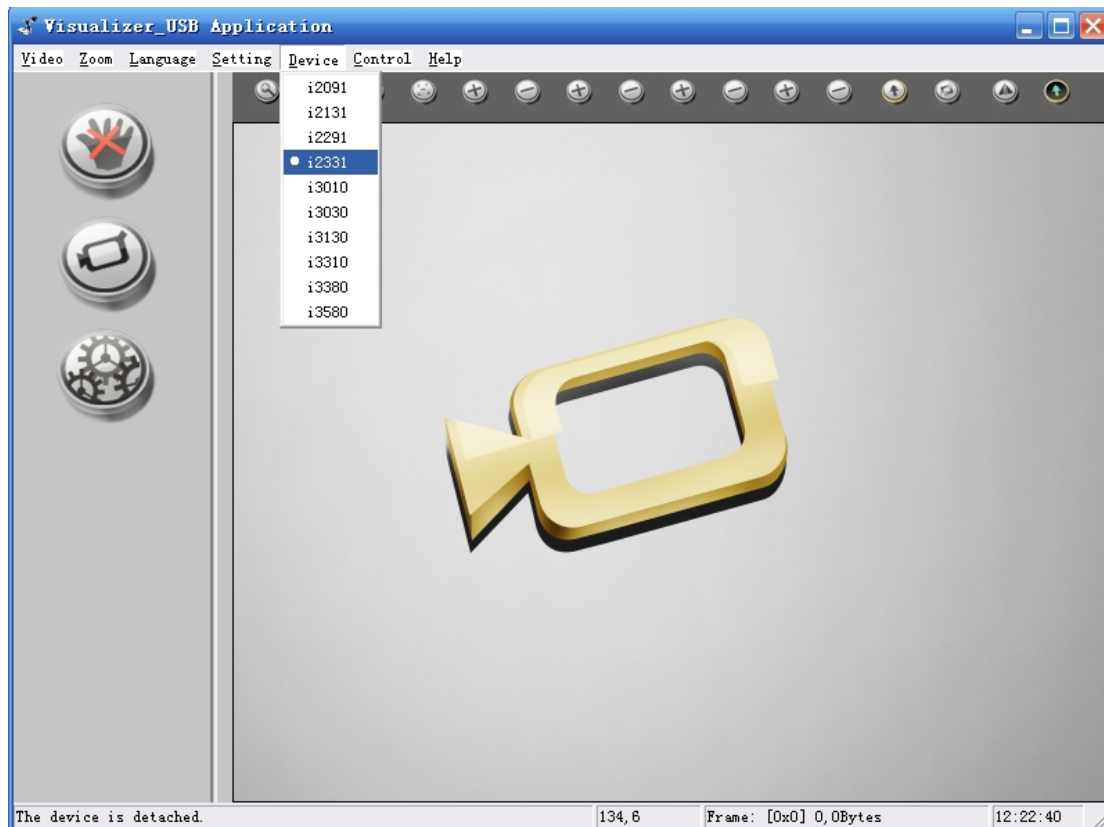
- A. Make sure the USB cable is disconnected from the unit.*
- B. Press the USB button on the remote, a dialog box appears on the screen, under which you will see USB disk or USB video, use the arrow keys on the remote or front panel to select the USB video mode.*

*The remote and the front panel are inactive while the software is in use.*



Double click the short cut  on the desktop, then click *Device*, select the right model number, see below:





Then you will see the image from the camera.

## 7.2.4 IMAGE CONTROL



**Zoom In (Ctrl+I)** : Left-click the Zoom In command button to enlarge the image. Keep holding the button until it reaches the maximum zooming point.



**Zoom Out (Ctrl+O)** : Left-click the Zoom Out command button to shrink the image. Keep holding the button until it goes back to its original size.



**Focus Far (Ctrl+R)** : Left click the Focus Far command button to focus far. Keep holding the button until it focuses to the farthest point.



**Focus Near (Ctrl+N)** : Left click the Focus Near command button focus near. Keep holding the button until it focuses to the nearest point.



**Bright More (Ctrl+B)** : Left click the Bright More button to increase the brightness.



**Bright Less (Ctrl+L)** : Left click the Bright Less button to reduce the brightness.



**Sharp More**: Left click the Sharp More button to increase the sharpness.



Sharp Less: Left click the Sharp Less button to reduce the sharpness.



Auto (Ctrl+U) : Left click the Auto button to auto adjust the focus.



Mirror (Ctrl+M) : Left click the Mirror button to adjust image to normal mirror, horizontal mirror, vertical mirror, and horizontal /vertical mirror.



Red More: Left click the Red More button to increase the red hue.



Red Less: Left click the Red Less button to reduce the red hue.



Blue More: Left click the Blue More button to increase the blue hue.



Blue Less: Left click the Blue Less button to reduce the blue hue.



Mono/Color (Ctrl+K) : Left click the Mono/color button to toggle between the black-white and color modes.

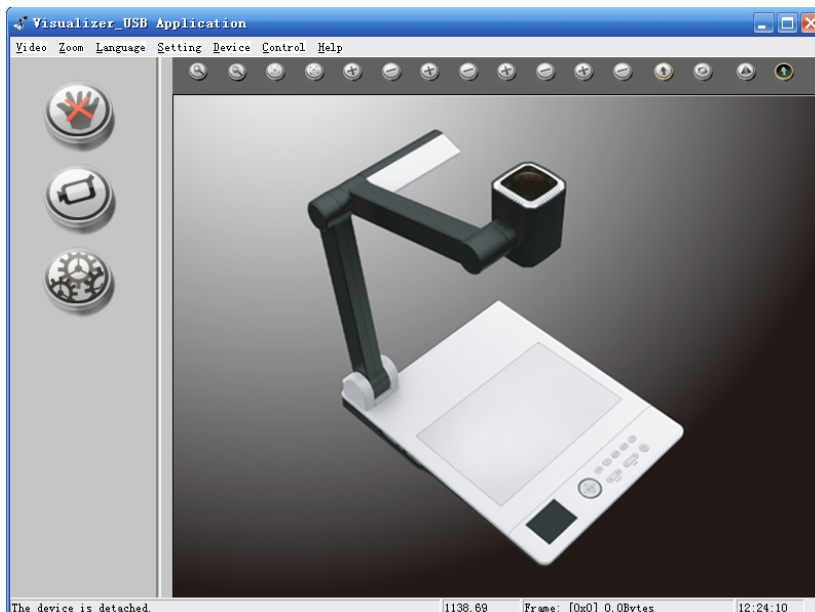


Neg (Ctrl+G) : Left click the Neg button to toggle between the positive and negative modes.



## 7.2.5 IMAGE CAPTURE AND VIDEO RECORDING



Left click to capture images. The captured images will be automatically saved into the default destination folder. The path and file name are displayed in software status bar on the bottom of the window. Shown below:






Left click  to start recording. The button changes to the green color  and the detailed information is displayed on the software status bar in the bottom of the window. The video is automatically saved in the default folder or pre-set folder.



## 7.2.6 SETTING

The captured images and recorded videos will be saved into the folders of Images and Videos respectively, which are created by the system automatically. To set a different path to which the



image/video is to be saved, click  on the left side of the window, a pop up dialog box appears below.

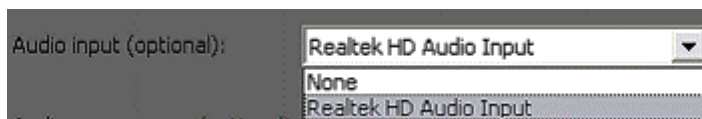


*Save the captured images into a different folder*

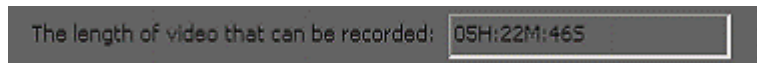
Click the button next to the "select a folder to save picture files" text box to set the path for captured images.

*Save the recorded video into a different folder and set up parameters for videos*

Click the button next to the "Select a folder to save video files:"text box to set the path for videos. You can also change the video settings. The Audio input (optional) drop down box offers the options of recording video with or without sound. Shown below:



The length of video that can be recorded box displays the longest recording time for videos to be saved in the preset path. Shown below:



Click save to complete setting.

## 8. FEATURES

### LIGHT

Press “**LAMP**” to toggle arm light, back light & no light.

### ZOOM IN AND ZOOM OUT

Press "**ZOOM+**" or "**ZOOM-**"

### POSITIVE/NEGATIVE CONVERSION

The VP-35 is automatically set to display normal materials on the screen when the power is on. To display negatives, simply laying any film negative on the platform and press the Neg button on remote control, the negative image is converted to a positive picture instantly.

### FOCUS ADJUSTMENT

When the VP-35 is turned on the focus automatically adjusts to the stage, it is not necessary to re-adjust 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 to focus manually.

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## 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.

## 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.

## IMAGE FREEZE

The freeze function allows you to discretely prepare the next image without interrupting current presentation. Press “**Freeze**” on remote control to freeze and unfreeze the image.

## IMAGE ROTATE

Press “**Rotate**” on remote control to rotate the image by 90°, 180°, 270°.

## SPLIT SCREEN

Press “**SPLIT**” to compare two images or compare two different views of one object side by side.

## TITLE FUNCTION

Press “**TITLE**” to enable the title function.

## PICTURE IN PICTURE FUNCTION

Press “**PIP**” on remote control to active the picture in picture function.

## IMAGE SAVE

The VP-35 offers the opportunity of storing 400 images on board. You can recall them by just

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pressing one of the numerical buttons on the front panel or remote control. Press **"SAVE"** to capture the current displaying image.

## **IMAGE RECALL**

By pressing **"RECALL"**, all saved images are displayed in the thumbnail index mode for easy selection.

## **RGB INPUT SWITCH**

Press the **"PC 1/2"** to toggle between the two VGA input signals.

## **OUTPUT SWITCH**

Use **"Video 1/2"** to switch between Composite video & S-Video signals.

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

The USB port can be used to capture still images from the VP-35 into a computer. In this way, the VP-35 can be used as a 3-D scanner for your computer.

## **USB 2.0 PORT**

The USB port can be used to capture still images from the VP-35 into a computer. In this way, the VP-35 can be used as a 3-D scanner for your computer.

Connect the VP-35 to your computer with the supplied USB cable. The capture software is available on the supplied CD-ROM.

## **RS232 CONTROL**

The RS232 terminal allows you to integrate the VP-35 into any sophisticated central control system. RS232 also enable you to control the VP-35 via computer.

## 9. SPECIFICATION

Model	i2331
Sensor	1/3" CMOS
Pixels	3 Megapixel
Zoom	9x optical, 12x digital
Frame rate	24
Shooting area	Max: 13.5" x 10.6" /34.3 cm x 26.9 cm Min: 0.1" x 0.1"/0.3 cm x 0.3 cm
Focus	Auto/manual
Output resolution	XGA, SXGA, WXGA
Resolution(Horizontal)	≥750 TV lines
White balance	Auto/manual
Color adjustment	Yes
Brightness adjustment	Yes
Negative&Positive conversion	Yes
Image capture	Yes,1000 NON-volatile images
Video recording	Yes(via USB)
Image rotation	90, 180, 270 (frozen)
Image split	Yes
Image freeze	Yes
Picture in picture	Yes
Title	Yes
OSD	Yes
Menu	Yes
Inputs	VGA ×2, AUDIO ×1, C-VIDEO ×1, S-VIDEO ×1, MIC×1
Outputs	VGA ×2, C-VIDEO ×1, S-VIDEO ×1, AUDIO ×1, DVI ×1
USB2.0	Slave×1(USB camera), Host×1
RS232	x1(computer controllable)
Remote control	Yes(360°controllable)
Light source	Top Arm light×1 (LED), A4 size lightbox (LED)
Kensington lock	Yes
Operating temperature	32°F ~113°F
Dimensions	Folded:19.48"×14.56"×5", Setup: 21.25"×14.56"×21.25"
Power supply	12V DC power adapter
Weight(net)	11lbs/5kg

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## 10. TROUBLE-SHOOTING:

Symptoms	Possible causes/counter-measures
No image	<ol style="list-style-type: none"><li>1. Power cord is not properly connected.</li><li>2. Cables are not properly connected.</li><li>3. Power switch is not turned on.</li><li>4. The built-in fuse is broken: Change fuse.</li><li>5. Change the output resolution.</li></ol>
Image bending	<ol style="list-style-type: none"><li>1. Camera not in right position, adjust the camera.</li><li>2. Distortion of LCD display, press the “Auto adjust” of the LCD.</li></ol>
Out of focus or blurring image	<ol style="list-style-type: none"><li>1. The object is too close to the lens.</li><li>2. Focus is on the top point of zoom, press ZOOM-.</li><li>3. Auto-focus is not on: press AUTO again.</li><li>4. Fog on the lens in damp climate. It will disappear gradually when the equipment warms up.</li></ol>

## 11. PACKING LIST

Item	Quantity
Power cord	1
Power adaptor(12V/2A)	1
VGA cable	1
S-Video cable	1
Video cable with RCA	1
RCA to mini adapter	1
Mini jack audio cable	1
USB cable(2.0)	1
RS232 cable	1
Remote control	1
User manual(CD)	1