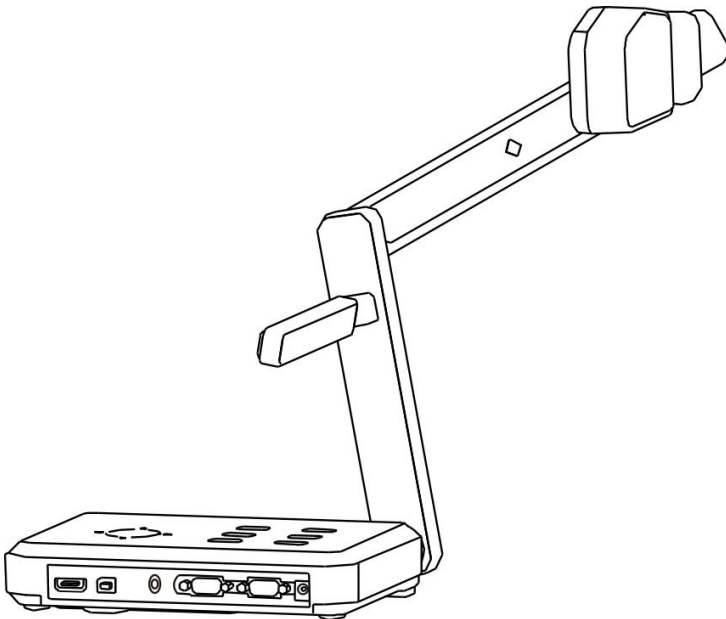
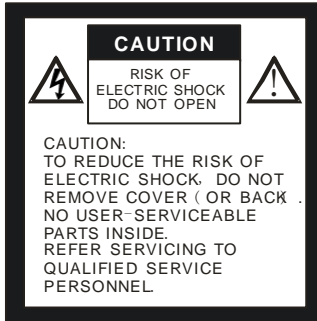


Portable Visualizer

**Please read this manual carefully
before use the product and
keep it for future reference.**



**This is a general manual which includes all functions and
features of our full range of products. Please note that
different model has different specifications.**



WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

- Check the voltage and frequency before any operation. Make sure that the supply power is dynatron. 0-wire, live wire, and ground wire must be fine connected. To avoid static high-volt strike, please connect ground wires correctly. Do not move cables without shutting off the electricity.
- Do not operate with shell open.

- Keep it away from tinderbox, liquid, or metal. Do not capture image when it is facing to the sun. It is recommended to operate in gloomy surrounding.
- Keep this instrument away from bad situation like high temperature, wet, caustic gases, dusty, or shaky. Place it on a STABLE desk.
- Object weight should be less than 1kg.
- Cut off electricity before cleaning. Clean it with dry cloth. Do not use thinner, volatile gas, or insecticide.
- Release the power plug when it is left unused.
- Keep children away from this instrument.
- Cut off electricity when abnormal signal occurs such as noise or smoke, plug needs to be removed too.

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1 FEATURES

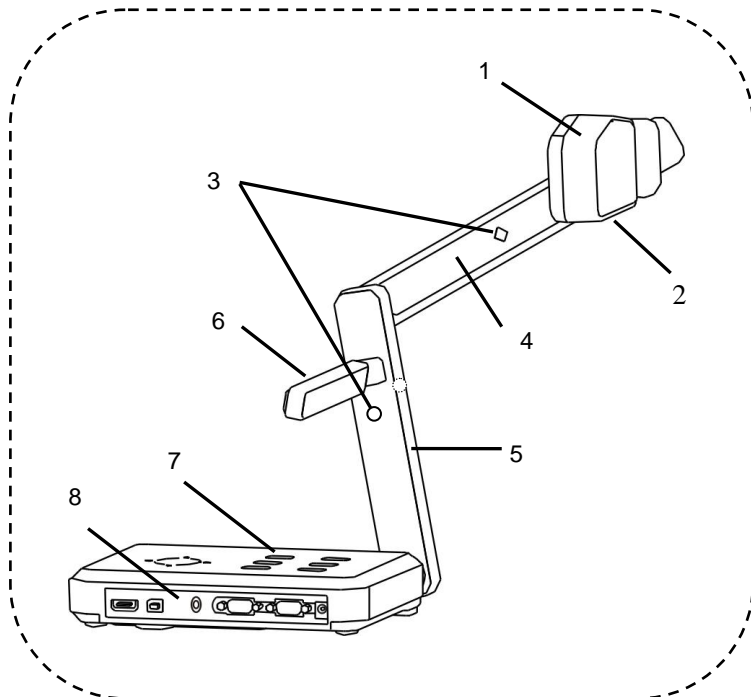
- LED lamps are used in both upperlights and baselights.
- Magnetic joint between the upperlight part and the visualizer which is effectively protect them both from damage. (Patent right)
- Portable and decent, easy to carry.
- When connected, computer signals can be displayed in the monitor without turning on the visualizer.
- With 1/3" CMOS 5.0M pixels line-by-line scan CCD, it output signals in high resolution. No flicker or shaking problems when display small characters. It can be connected straightly with projector or other display device, which makes it especially suitable for teaching and presentation.
- Image process: Freeze, Black/White, Negative, Mirror, Text, Brightness, Contrast, Color saturation, Sharpness, RGB adjustment, Save, Delete, Play, Split.
- Several input/output ports make it easily to get fine demonstration effect when connecting with other devices.
- Unique MODE SAVE/MODE RECALL function makes the demonstration more efficient.
- Signal switch can be carried out separately or combined.
- The camera head can be rotated 350° horizontally and vertically.
- Control mode: front Control panel; Remote control, RS-232, USB, HDMI

2 ACCESSORIES

		
Power cable	IR Remote control	VGA cable
		
Software disk	USB cable	Adapter
		
Magnetic-joint Upperlight (Optional)	Baselight board (Optional)	Video cable (Optional)
"Optional" items need to be ordered separately.		

3 PART NAMES AND FUNCTIONS

3.1 Part Names

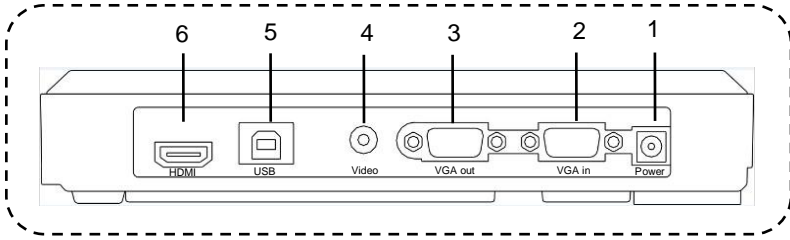


Number	Name	Number	Name
1	Camera head	5	Folded pole
2	Camera	6	Upper light
3	IR receiver	7	Control panel
4	Folded pole	8	Side ports

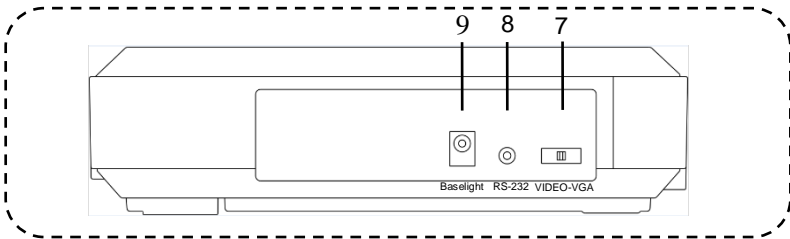




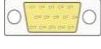






Note: Do not lift it by the pole.

3.2 Back Port

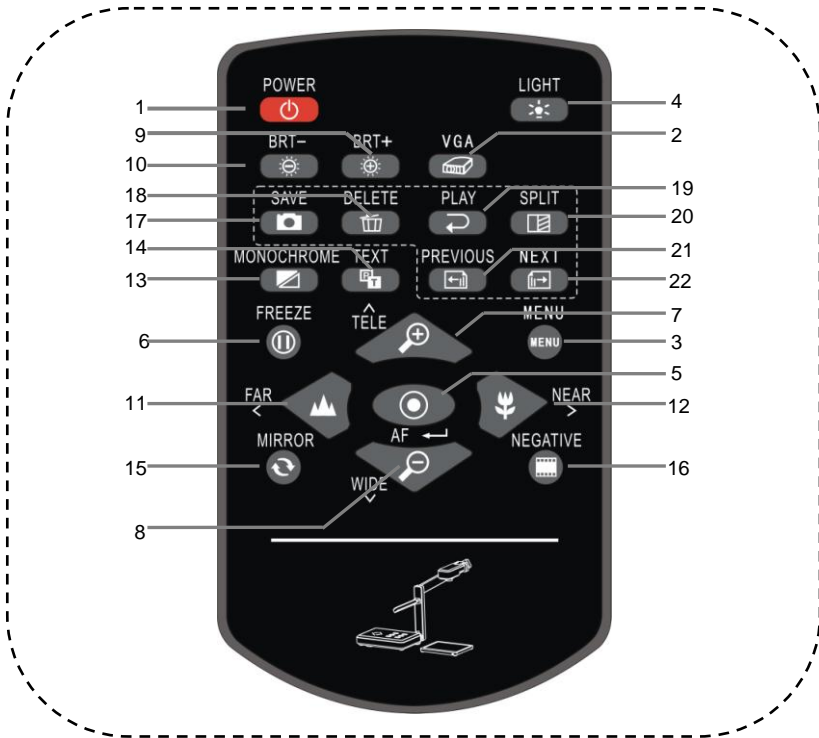
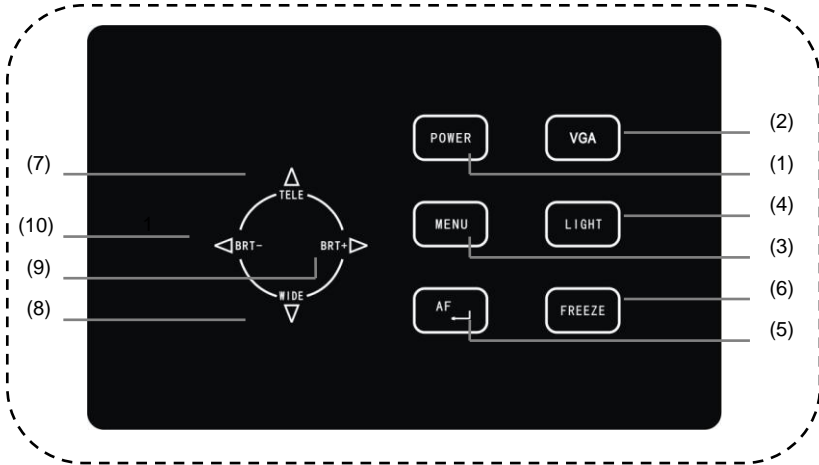


3.3 Side Port



NO.	NAME	FUNCTION
1	 (DC-12V)	Power input
2	 (VGA-IN)	For connection with PC VGA
3	 (VGA-OUT)	For PC monitor/projector connection
4	 (VIDEO)	Output image signal to monitor
5	 (USB)	For connection with PC USB port
6	 (HDMI)	For HDMI connection
7	 (VGA / VIDEO)	VGA / VIDEO switcher
8	 (BASELIGHT power)	DC for Baselight (optional)
9	 (Security lock)	Security lock

3.4 Control Panel and Remote Control



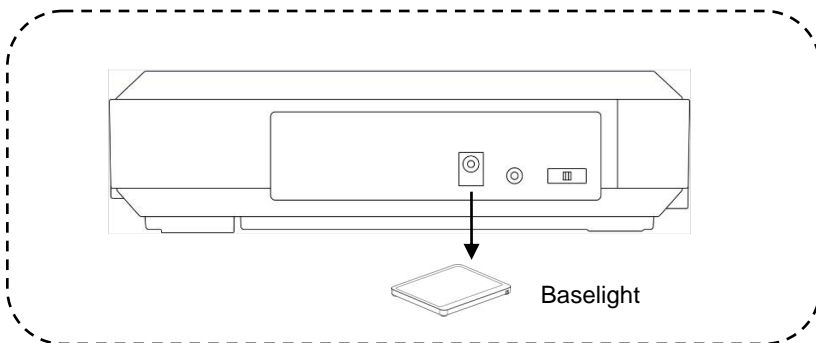
FUNCTIONS:

NUMBER	NAME	FUNCTION
1	【POWER】	Power on/off
2	【VGA】	VGA signal output
3	【MENU】	Call / Quit MENU
4	【LIGHT】	Camera light on/off
5	【FOCUS】	①Auto focus ②Confirm Menu selection
6	【FREEZE】	Image freeze
7/8	【ZOOM IN / OUT】	①Zoom in/out ②Menu selection
9/10	【BRIGHTNESS +/-】	①Brightness +/- ② Menu selection
11/12	【FAR / NEAR】	①Manual focus ②Menu selection
13	【MONOCHROME】	Monochrome/Color
14	【TEXT】	Text effect
15	【MIRROR】	Mirror effect
16	【NEGATIVE】	Negative effect
17	【SAVE】	Save image
18	【DELETE】	Image delete
19	【PLAY】	Review image
20	【CONTRAST】	Image contrast
21/22	【PREVIOUS / NEXT】	Choose saved image

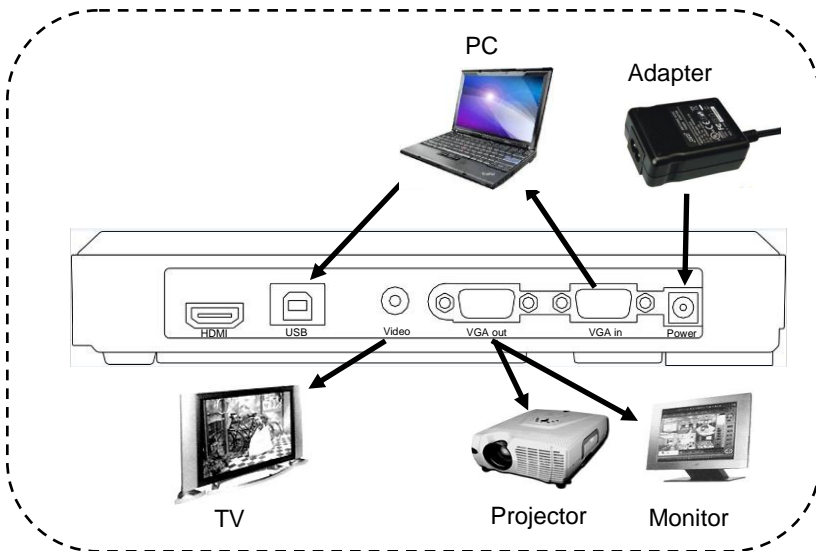
4 CONNECTIONS

·Make sure each part is right connected before turn on the power.

4.1 Side Port Connection

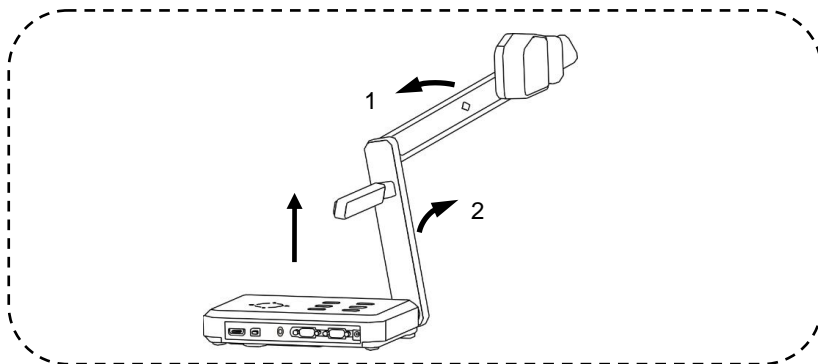


4.2 Back Port Connection

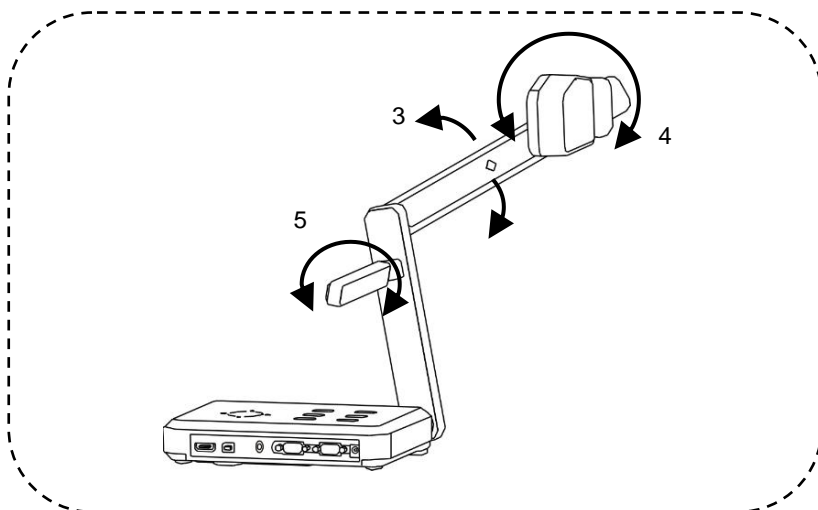


5 SETTING UP

- 1 Raise the camera column according to the arrow direction.



- 2 Adjust the camera head, column and light stick to a suitable position.



6 OPERATION PROCEDURE

This visualizer can be operated by:

1. The control panel
2. IR remote control
3. Computer (through USB cable)

The above methods can be carried out separately or combined.



Note: The following operation instructions are only about operation with the control panel and the IR remote control. For operation through USB cable, please refer to corresponding instructions.

6.1 MENU Setting

1. Press **【MENU】** to call out the Menu list.
2. Use **【ZOOM IN】** **【ZOOM OUT】** **【FAR】** **【NEAR】** to select function.
3. Press **【FOCUS】** to confirm the selection.
4. Press **【MENU】** to quit MENU.



Note:

- ① Press **【MENU】** to quit Menu at any time.
- ② Gray block means the function is unchangeable.

MENU LIST

	<i>NAME</i>	<i>FUNCTION</i>
EFFECT	FREEZE	ON / OFF
	NEGATIVE	ON / OFF
	MONOCHROME	ON / OFF
	MIRROR	ON / OFF
	TEXT	ON / OFF
IMAGE	PLAY	Empty / 01~20
	CONTRAST	Empty / 01~20
	SAVE	Auto / 01~20
	DELETE	Empty / ALL / 01~20
SETUP1	BRIGHTNESS	00~63 (30)
	CONTRAST	00~63 (30)
	SATURATION	00~31 (15)
	SHARPNESS	00~15 (03)
	COLOR	Normal / Cold tune / warm tune / Custom
	RED	00~15
	GREEN	00~15
	BLUE	00~15
SETUP2	MODE RECALL	Default / 0~10
	MODE SAVE	Default / 0~10
	AUTO EXPO	ON / OFF
	AUTO WB	ON / OFF
	OUTPUT	VGA / CVBS
	RESOLUTION	1280X1024@60/ 1024X768@60/ 1360X768@60/ 1080P
	TV SYSTEM	PAL/NTSC
	FACTORY	Yes/No

6.2 Stand-by

Plug in the visualizer power cable after the computer, projector and monitor are fine connected. You will find out the visualizer power indicator light is in the half-brightness. This means the visualizer is now in stand-by mode.

At this time VGA signal is outputting to the monitor and projector without the corresponding indicator light on. (We call this function as “Signal Highway”).

6.3 Start Up

Press “POWER” button to start up the visualizer, you will see blue screen on the monitor and projection screen first. Then the blue screen disappears and camera image appears. This means the visualizer is ready.

During this process, indicator light of the monitor and projector will be on, and the visualizer indicator light turns into its normal brightness. This means the system is ready to carry on further operation.

6.4 Shut Down

Holding on the POWER button for 1 second the visualizer will turn into “STANDY BY” mode.

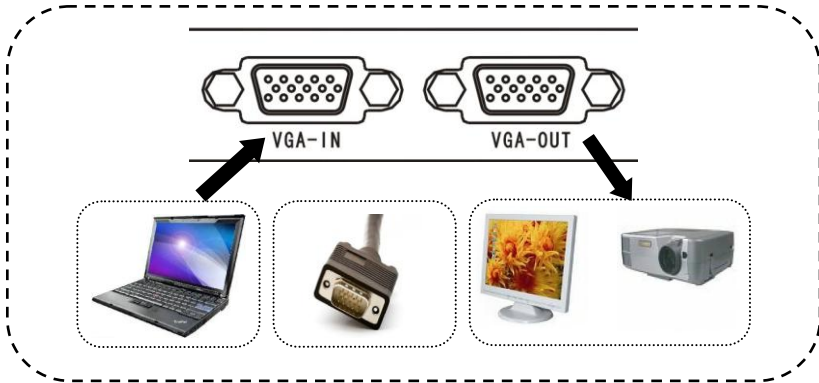
6.5 Light

Use this button to turn on the upperlight / baselight.

6.6 Signal Input / Output

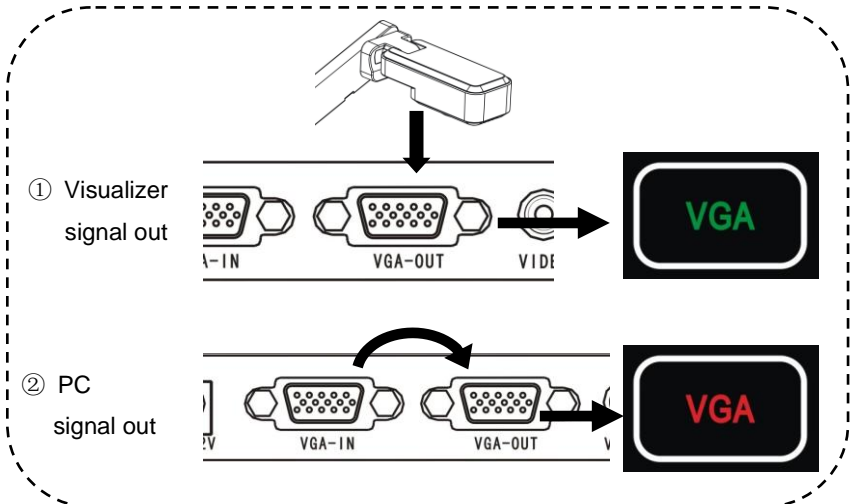
6.6.1 VGA connection

Connect the system correctly with attached VGA cable.

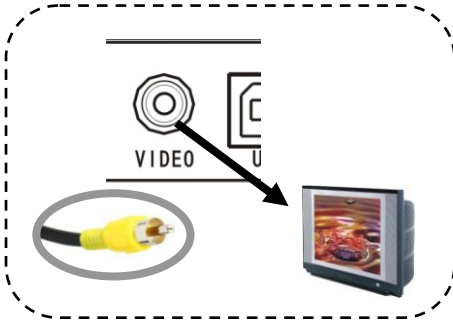


6.6.2 VGA Function

By re-pressing the **【VGA】** button, visualizer signal or PC signal will be output in turn. And corresponding indicator light will turn on.



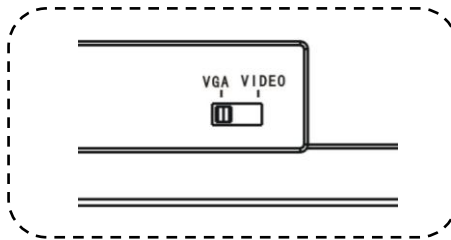
6.6.4 CVBS



CVBS signal can be output to the monitor through VIDEO cable.

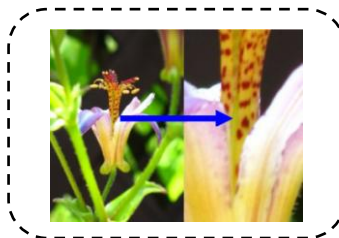
6.6.5 VGA output and VIDEO output

VGA output and VIDEO output can be selected by the following switch.



6.7 Zoom In / Out

Optical zoom in and zoom out.



6.8 Focus

6.8.1 Auto Focus

【AUTO FOCUS】 button helps to focus automatically when the

image is fuzzy.



Note: In dark condition use “MANUAL FOCUS” to get fine effect.

6.8.2 Manual Focus

Use **【FAR】** or **【NEAR】** to carry out manual focusing.

6.9 Mode Save / Mode Recall

This function helps to save current mode for future usage, which is very convenient and helpful to the teachers. You can save “MONOCHROME”, “NEGATIVE”, “MIRROR”, “TEXT”, “AUTO EXPOSURE”, “AUTO WHITE BALANCE”, “ZOOM” and “FOCUS” in 11 modes (DEFAULT and 01-10) totally. Start with “DEFAULT”.

Example: Suppose we are demonstrating a negative, the mode is “Negative”, “Text”, “Auto exposure”, “Zoom in 3X”, and the image is clear. We are now saving this mode to MODE “05”. Next time when we need to demonstrate a negative again, use “MODE RECALL” to call out MODE 05 directly and demonstrate it. If the MODE are saved in MODE “DEFAULT”, then next time when start the system, we can go to demonstrate the negative straightly.

Note: MODE RECALL and MODE SAVE can only be carried out through software; the path is “MENU”→”SETUP 2”→MODE

RECALL/ MODE SAVE.

Sketch map

		^
EFFECT	< MODE RECALL >	< DEFAULT ↓
	MODE SAVE	∨
IMAGE	AUTO EXPO.	ON
	AUTO WB	ON
SETUP 1	OUTPUT	VGA
	RESOLUTION	1280X1024@60
SETUP 2	TV SYSTEM	PAL
	FACTORY	NO

7 IMAGE FUNCTION

【SAVE】/【DELETE】/【PLAY】/【CONTRAST】/【PREVIOUS】/【NEXT】. These functions can be carried out through software also.

7.1 【SAVE】

Memory capacity is 20 images. Press 【SAVE】 button to capture current image. Images are stored orderly. To replace a image, you need to select it first, then press 【SAVE】, the old image will be replaced.

Notes:

- ① When position “01” and “02” are taken, the new image will be stored in position “02”, and then position “04”.
- ② When memory capacity is full, 01 image will be replaced by new image, and then 02.
- ③ Images will be lost when restart the system.

7.2 【DELETE】

-When you press **【DELETE】** button under “Play” or “Contrast” mode, you will read “Delete?” on the screen. Repress **【DELETE】** button to confirm the deletion.

-Or you can choose a image first by **【PREVIOUS】** or **【NEXT】** button, then delete it.

-Delete all: You can delete all images through software.

7.3 【PLAY】

Press **【PLAY】** button to play all stored images orderly. You can review all images back and forth by **【PREVIOUS】/【NEXT】**. Or you can choose an image first, and then play it.

Repress **【PLAY】** button to quit play mode.

Note:

- ① You will read “No images” on the screen when you press the **【Play】** button if there is no stored image.
- ② You can press **【CONTRAST】** to contrast mode.

7.4 【CONTRAST】

This function helps to contrast the left-half of stored image with the left-half of current screen.

Press **【CONTRAST】** button, position 01 image will be chosen to contrast with the current screen. You can choose any stored image to be contrasted by **【PREVIOUS】/【NEXT】** button. Or you can choose one image first, then press **【CONTRAST】** to contrast.

Repress the **【CONTRAST】** button to quit contrast mode.

Note: ① You will read “No images” on the screen when you press the **【CONTRAST】** button if there is no stored image.

② You can press **【PLAY】** to switch to Play mode.

EFFECT	< PLAY >	NO
	SPLIT	NO
IMAGE >	SAVE TO	AUTO
	DELETE	NO
SETUP 1		
SETUP 2		

7.5 BRIGHTNESS/CONTRAST/SATURATION/

		∧
EFFECT	BRIGHTNESS	< 30 ↓
	CONTRAST	∨
IMAGE	SATURATION	15
	SHARPNESS	03
SETUP 1	COLOUR	NORMAL
	R-OFFSET	00
SETUP 2	G-OFFSET	00
	B-OFFSET	00

7.6 Color

Color can be adjusted between Nature, Warm tone, Cold tone and Custom. “Red”, “Green”, “Blue” can only be adjusted in “Custom”

EFFECT	BRIGHTNESS	30
	CONTRAST	30
IMAGE	SATURATION	15
	SHARPNESS	03
SETUP 1	< COLOUR >	USER
	R-OFFSET	00
SETUP 2	G-OFFSET	00
	B-OFFSET	00

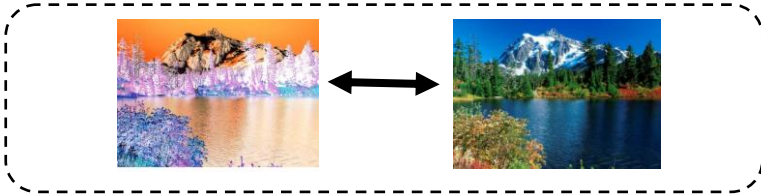
7.7 Image Effect

7.7.1 【FREEZE】

Press 【FREEZE】 button to freeze the image, re-press it to un-freeze it.

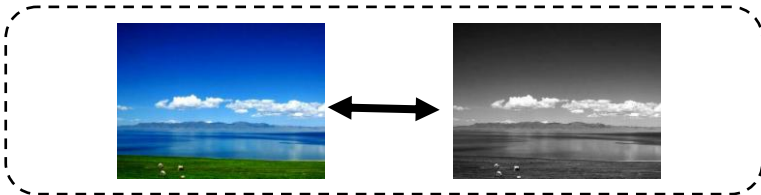
7.7.2 【NEGATIVE】

This function is used when present negative to get nature image. Make sure the base light has been turned on.



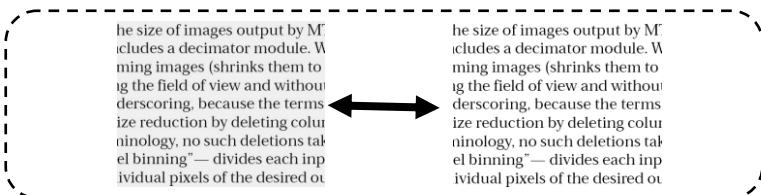
7.7.3 【MONOCHROME】

This mode is recommended when present monochrome material.



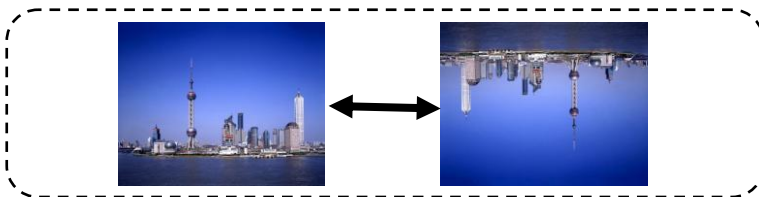
7.7.4 【TEXT】

TEXT mode is recommended when present text material



7.7.5 【MIRROR】

This function helps to get enantiomorphism effect.



8 SET UP

8.1 Auto Expo (ON/OFF)

This function helps to adjust the image brightness automatically according to the surrounding condition.

Note: This function may affect the image effect in a dark room.

8.2 AUTO WB (ON/OFF)

This function helps to adjust the color effect automatically.

Note: Turn off Auto White Balance when the captured item is with large single color to avoid color confusion.

8.3 VGA output

Optional 1024X768@60, 1280X1024@60, 1360X768@60,1080P. It is functional only when the output signal is on VGA.

8.4 PAL / NTSC

This option is functional only when the output signal is on CVBS.

8.5 Factory Settings

Restore factory settings and all images will be lost.

9 USB SOFTWARE

USB software needs to be installed which is in the attached disk. Please refer to the HELP file for details.

10 DAILY MAINTENANCE

1. To protect the camera, do not switch the supply power frequently.
2. Do not switch the upper light and base light too frequently.
3. Do not face the camera to strong light source.
4. Disable the power supply when remove it. Do not lift the main pole or light arm. Neither revolve the arms horizontally; Be careful when lie down the light arms.
5. Keep it dry. Clean it with special made cloth.
6. Please release the power cable when unused, and cover it with cloth.
7. The validity period is 8 years. Please get it re-examined at the service counter if you want to continue to use.

11 Q&A

Question	Answer
No image, No sound	Check if the power supply cables are fine connected.
	Make sure to turn on the Power.
	Check if the audio cable or RGB cable is fine connected.
	Check if the input/output connection is correct
	Press SIGNAL button on the remote control to switch to VGA mode
Check if the camera cover has been taken off.	
Image unclear	Make sure the distance between camera and object is over 330mm
	The object maybe too shiny or with strong reflective surface. Please adjust the surrounding brightness.
	The camera maybe too dirty, please clean it.
Fuzzy wave	Try turning on the upper light.
Image too dark	Turn on the upper light to increase brightness.
	Or add Brightness
Control panel unworkable	Do not switch the buttons too speedily. Take a stop before press the next button.
Remote control unworkable	Clear the barrier between remote control and visualizer.
	Keep the distance within 10m.
	Check if it is out of battery.
Microphone soundless	Check the cable if it is fine connected.
	Check if microphone is workable
	Check the volume adjuster if it is right set.

12 SOLUTION OF BLACK SCREEN

(in 1080P format)

This problem may be occurred sometimes when the output signal is in 1080p format, and even restarting the visualizer can't fix it. It's because some displaying device don't support 1080P format. To solve this problem, you need to follow these instructions:

1. Switch to VIDEO status as shown below.

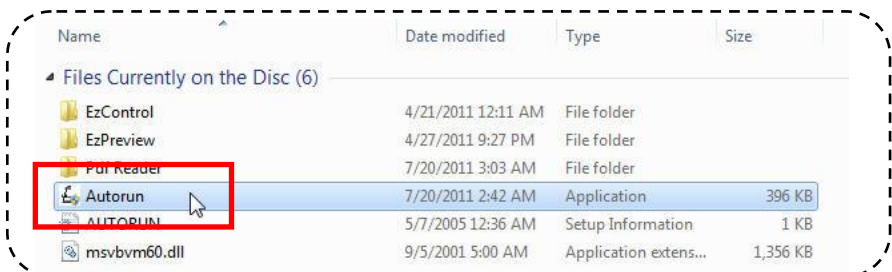


2. Turn the visualizer power on till it's restarted.
3. Then hold on the POWER button for about 15 seconds.

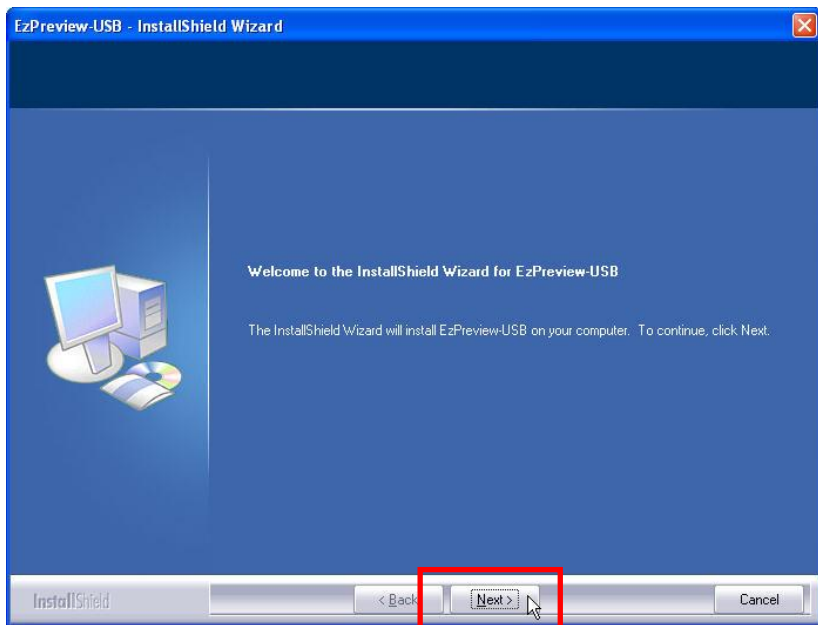
13 Ezpreview-USB software

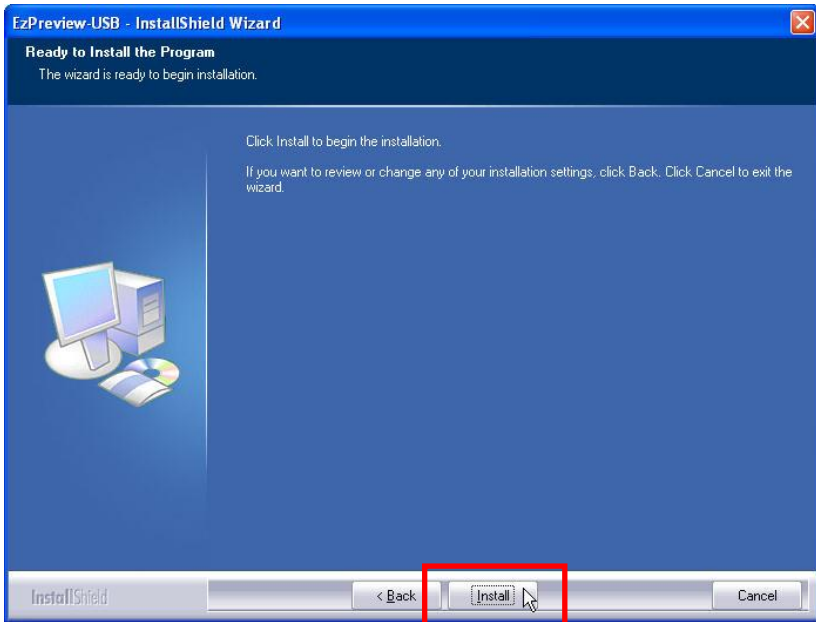
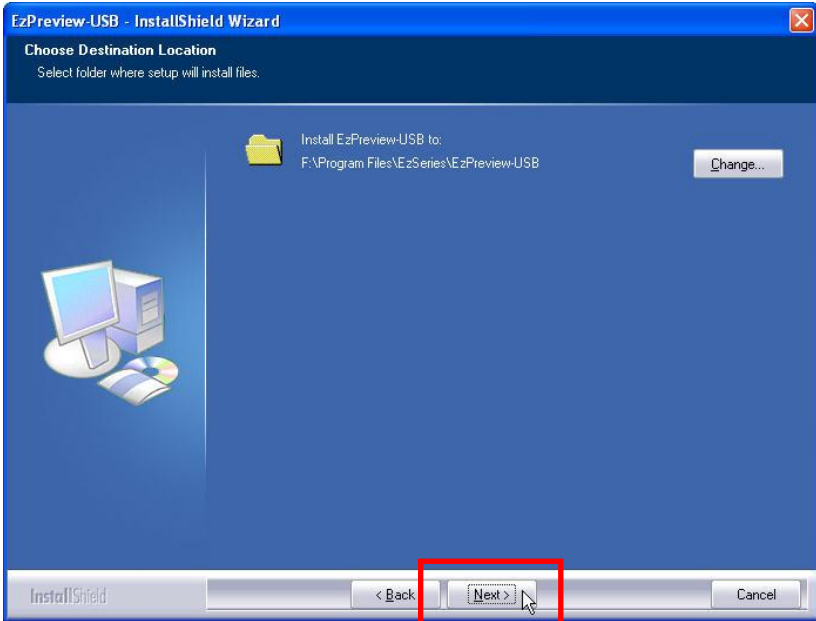
13.1 INSTALLATION

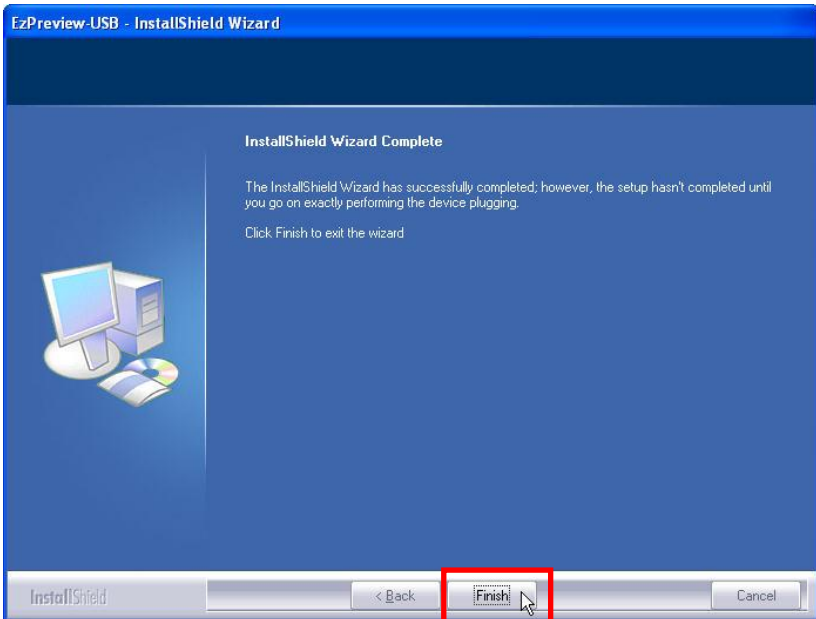
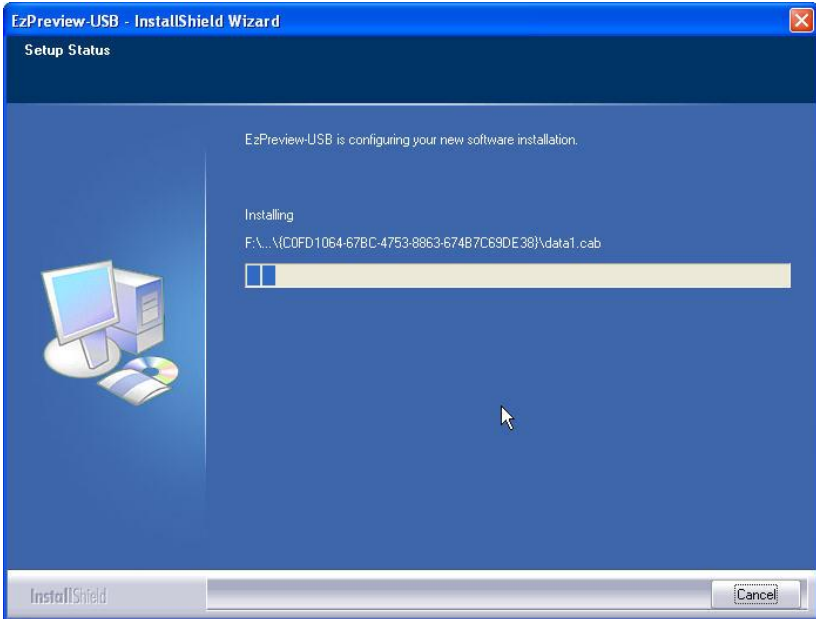
1. Insert the disk into the computer drive, then open the disk files, and run "AutoRun.exe".



2. You will see the following interface. Click on “EzPreview-USB”, and do the following instructions. You will see the following interface.



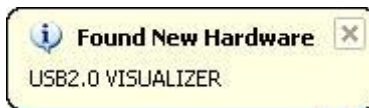




3. After all above steps, you will find a shortcut on the desktop.



4. To carry on further operation, you need to insert the USB plug and turn the visualizer power on. Then you will read “Found New hardware”, and then “Hardware Update Wizard” shows up. Follow the following instructions:



Hardware Update Wizard



This wizard helps you install software for:

USB2.0 VISUALIZER



If your hardware came with an installation CD or floppy disk, insert it now.

What do you want the wizard to do?

- Install the software automatically (Recommended)
 Install from a list or specific location (Advanced)

Click Next to continue.

< Back

Next >

Cancel

Hardware Update Wizard

Please wait while the wizard searches...



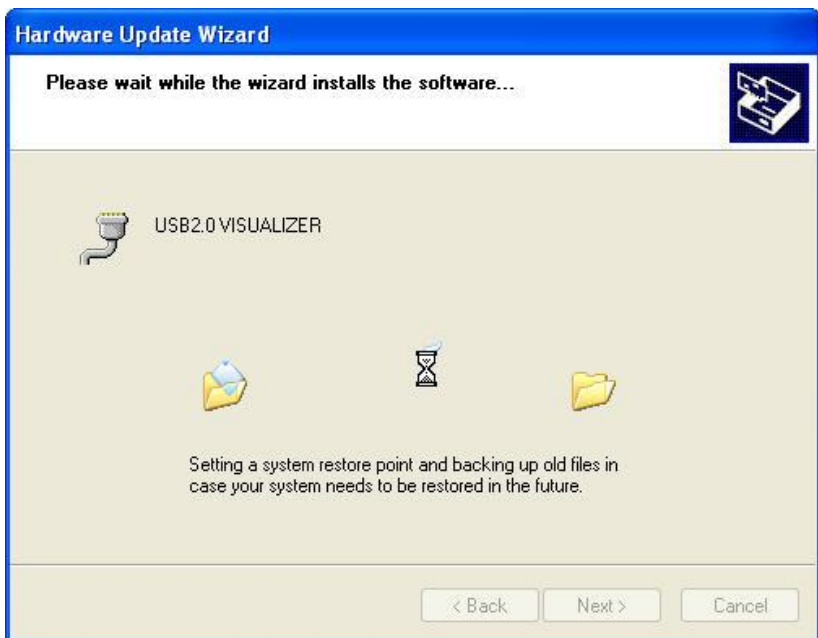
USB2.0 VISUALIZER



< Back

Next >

Cancel





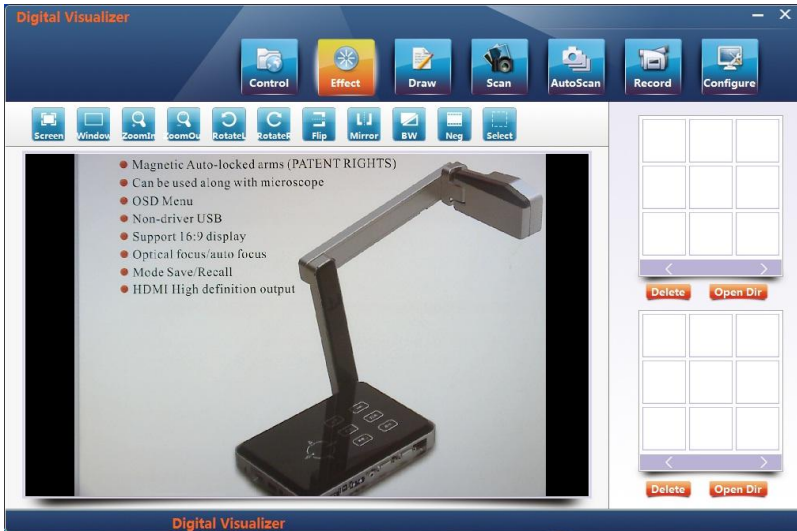
After click on “Finish” button, you will read another WINDOWS notice:



Now EzPreview-USB is fine installed with an icon on the desktop.

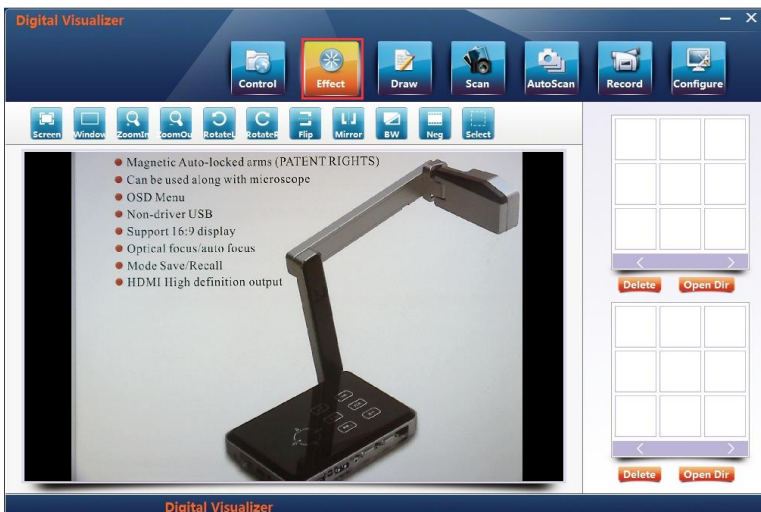


This interface means every step is right followed and the software is ok to run.

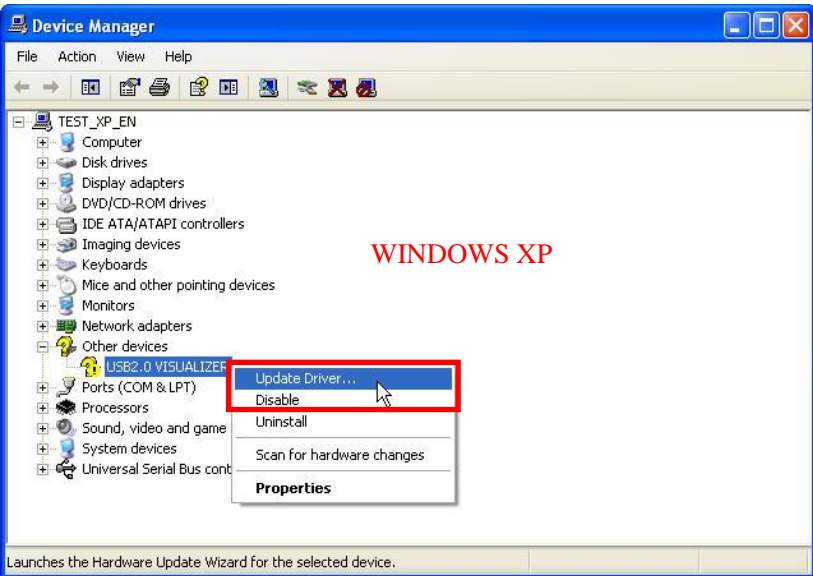


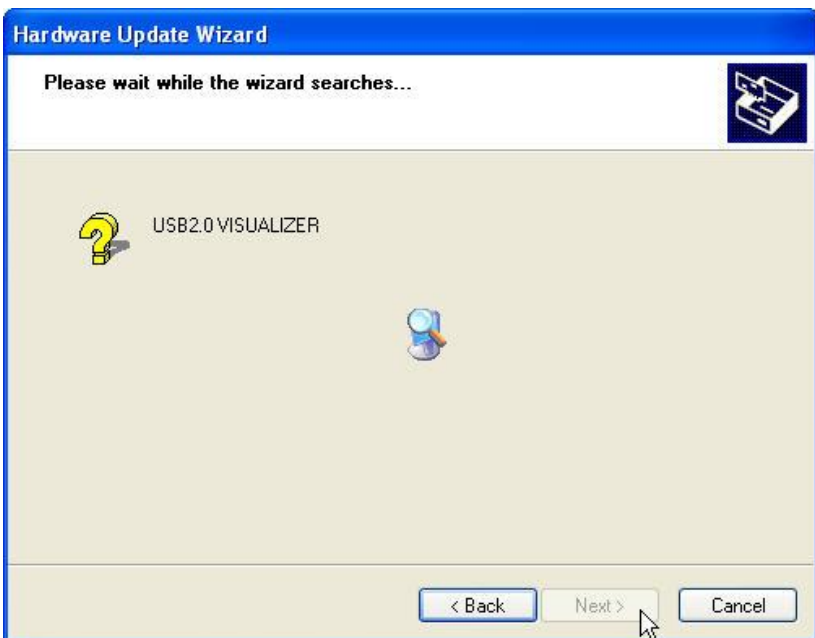
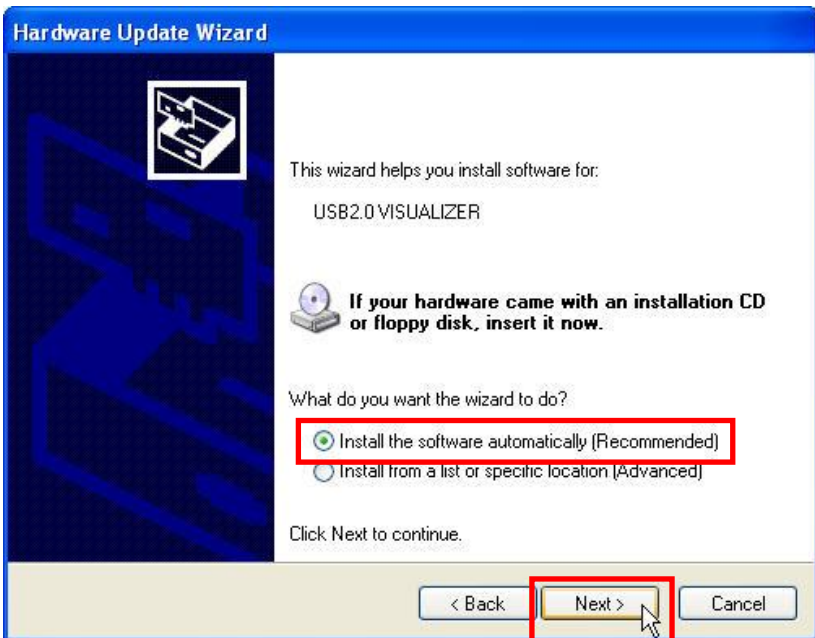
13.2 Solution of EzPreview installation abnormality

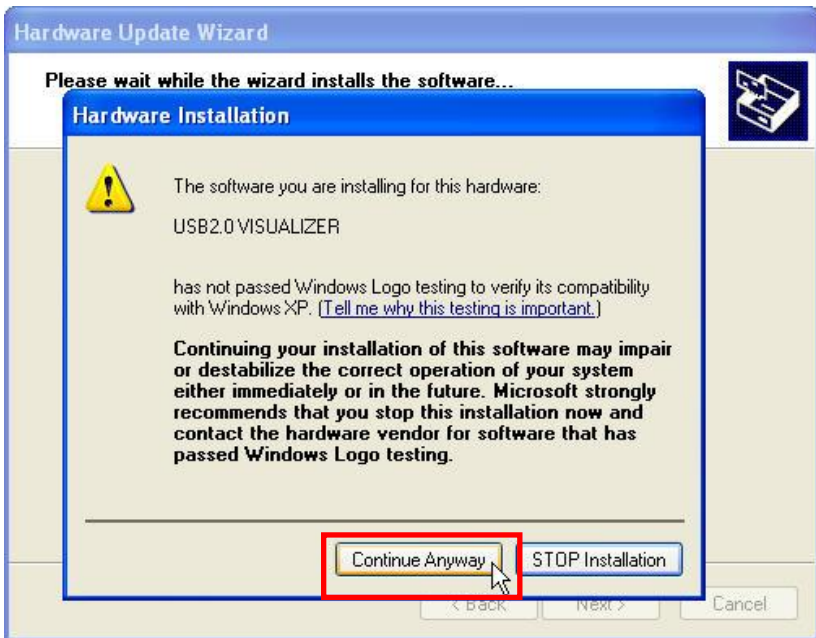
When run the shortcut after the software is installed, the button not display:



This time you need to check if the visualizer is power on or check whether the driver is installed right. Please do the following steps (WINDOWS XP):









In WINDOWS 7 OS system, please do the following steps:

