

USER MANUAL- VISUALIZER



Please read this manual carefully before use.

CONTENTS

1 WARNING	- 1 -
2 FEATURES	- 2 -
3 ACCESSORIES	- 3 -
4 STRUCTURES	- 4 -
4.1 STRUCTURES	- 4 -
4.2 BACK PORTS	- 5 -
4.3 SIDE PORTS	- 5 -
4.4 CONTROL PANEL / REMOTE CONTROL	- 6 -
5 CONNECTION	- 8 -
5.1 SIDE PANEL CONNECTION	- 8 -
5.2 BACK PANEL CONNECTION	- 8 -
5.3 SETUP THE VISUALIZER.....	- 9 -
6 OPERATION	- 10 -
6.1 SET UP	- 10 -
6.2 STAND BY.....	- 12 -
6.3 HOW TO START UP SYSTEM.....	- 12 -
6.4 HOW TO SHUT DOWN SYSTEM.....	- 12 -
6.5 HOW TO SELECT LIGHT	- 12 -
6.6 VIDEO SIGNAL INPUT/OUTPUT	- 13 -
6.6.1 【VGA】	- 13 -
6.6.2 【MONITOR】	- 13 -
6.6.3 【PROJECTOR】	- 14 -
6.6.4 【CVBS】	- 15 -
6.7 AUDIO INPUT/OUTPUT	- 16 -
6.7.1 MICROPHONE	- 16 -
6.7.2 AUDIO OUTPUT	- 16 -
6.8 ZOOM IN / OUT.....	- 17 -
6.9 FOCUS	- 17 -

6.9.1	【AUTO FOCUS】	.....	- 17 -
6.9.2	MANUAL FOCUS	.....	- 17 -
6.10	MODE	.....	- 18 -
7	IMAGE FUNCTION	.....	- 19 -
7.1	【SAVE】	.....	- 19 -
7.2	【DELETE】	.....	- 19 -
7.3	【PLAY】	.....	- 19 -
7.4	【CONTRAST】	.....	- 20 -
7.5	BRIGHTNESS/ CONTRAST/ SATURATION/ SHARPNESS	...	- 21 -
7.6	COLOR	.....	- 21 -
7.7	IMAGE EFFECT	.....	- 22 -
7.7.1	【FREEZE】	.....	- 22 -
7.7.2	【NEGATIVE】	.....	- 22 -
7.7.3	【MONOCHROME】	.....	- 22 -
7.7.4	【TEXT】	.....	- 23 -
7.7.5	【MIRROR】	.....	- 23 -
8	SET UP 2	.....	- 23 -
8.1	AUTO EXPO (ON/OFF)	.....	- 23 -
8.2	AUTO WB (ON/OFF)	.....	- 23 -
8.3	VGA OUTPUT	.....	- 24 -
8.4	PAL / NTSC	.....	- 24 -
8.5	FACTORY	.....	- 24 -
9	EXPAND CENTER CONTROL SYSTEM	.....	- 24 -
10	RS-232	.....	- 25 -
11	USB SOFTWARE	.....	- 25 -
12	DAILY MAINTENANCE	.....	- 25 -
13	Q&A	.....	- 26 -
14	SOLUTION OF BLACK SCREEN (IN 1080P FORMAT)	.....	- 27 -

15 EZPREVIEW-USB SOFTWARE.....	- 28 -
15.1 INSTALLATION	- 28 -
15.2 SOLUTION OF EZPREVIEW INSTALLATION ABNORMITY	- 35 -
16 RS232 SOFTWARE INSTALLATION	- 42 -
16.1 INSTALLATION	- 42 -
16.2 RS232 OPERATION.....	- 45 -

1 WARNING

TO AVOID FIRE OR LEAKAGE OF ELECTRICITY, PLEASE KEEP THIS VISUALIZER DRY. REFER SERVICING TO QUALIFIED PERSONNEL. DO NOT TRY TO FIX IT BY YOURSELF.

1. Check the voltage and frequency before any operation. Please make sure that the supply power is dynatron. 0-wire, live wire, and ground wire must be fine connected.
2. To avoid static high-volt strike, please connect ground wires correctly. Do not move cables without shutting off the electricity.
3. Do not try to change the structure. Do not operate with shell open.
4. 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 surroundings.
5. 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.
6. Cut off electricity before cleaning. Please clean it with dry cloth. Do not use thinner, volatile gas, or insecticide.
7. Release the power plug when it is left unused.
8. Keep children away from this instrument.
9. Cut off electricity when abnormal signal occurs such as noise or smoke, plug needs to be removed too.

2 FEATURES

1. LED lamps are used in both upper lights and base lights.
2. When connected, computer signals can be achieved without turn on the visualizer.
3. With 1/3" line-by-line scan Image Sensor. 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.
4. Image process: Freeze, Black/White, Negative, Mirror, Text, Brightness, Contrast, Color saturation, Sharpness, RGB adjustment, Save, Delete, Play, Split.
5. Several input/output ports make it easily to get fine demonstration by connected with other multimedia.
6. Unique MODE SAVE/MODE RECALL function makes the demonstration more efficient.
7. Signal switch can be carried out separately or combined.
8. The camera can be rotated 350° horizontally and vertically.
9. Operation: Control panel; Remote control, RS-232, USB.
10. Adjustable Volume with wire or wireless microphone.

3 ACCESSORIES



Adapter



Remote control



VGA cable



Software



USB cable
(Only for USB)



RS232 cable
(Optional)



USB to RS232 cable
(Optional)



Video cable
(Optional)



3.5mm audio cable
(Optional)



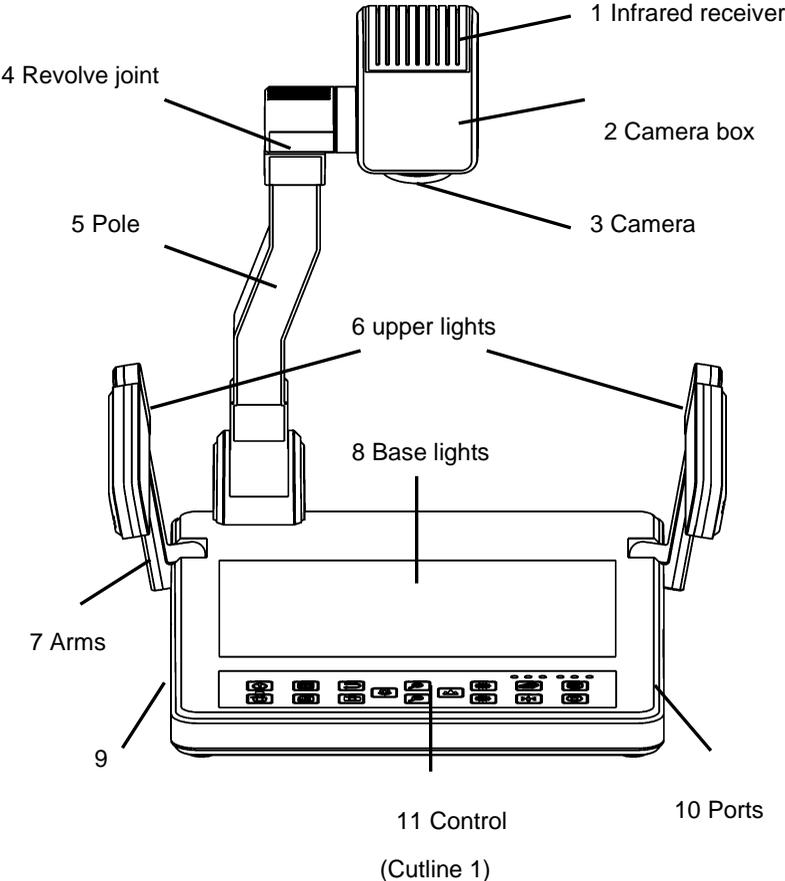
3.5mm-RCA
Audio cable (Optional)



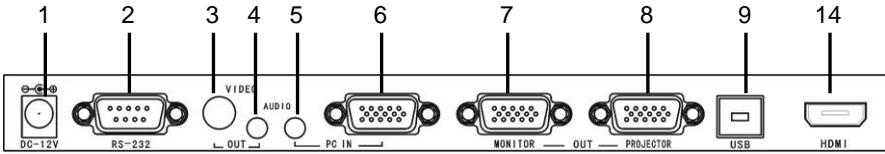
Center control
(Optional)

4 STRUCTURES

4.1 STRUCTURES

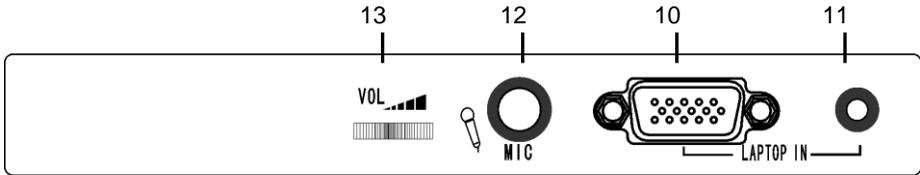


4.2 BACK PORTS



(Cutline 2)

4.3 SIDE PORTS



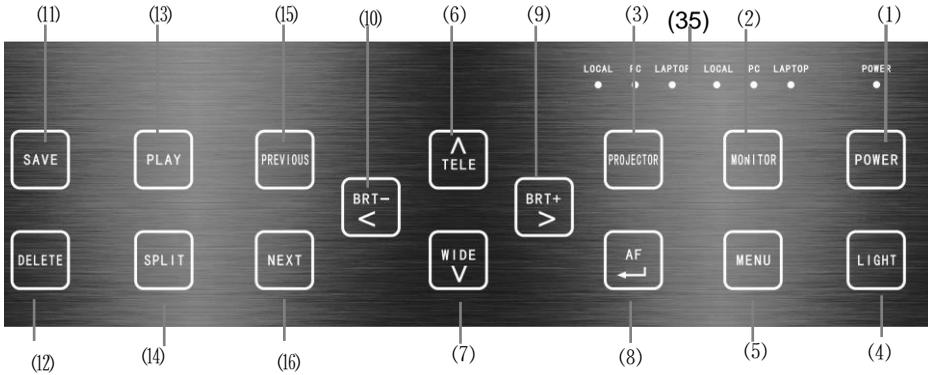
(Cutline 3)

Description of Image2 and Image3

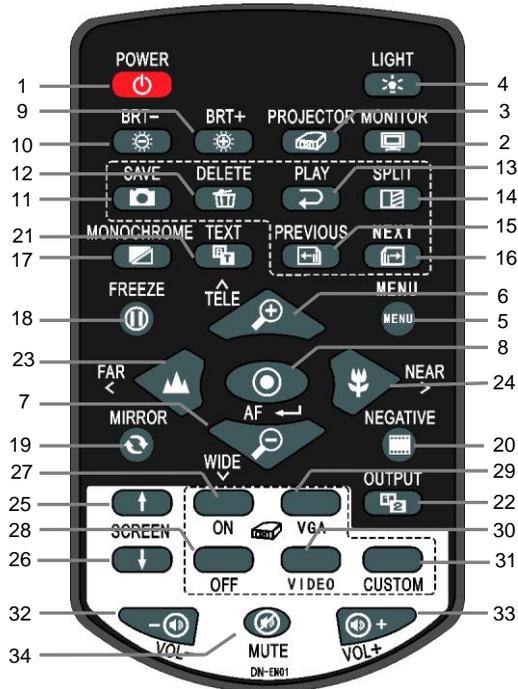
NO.	PORTS	DESCRIPTION
1	DC-12V	Power input
2	RS-232	For connection with computer
3	VIDEO OUT	Output image signal to monitor
4	AUDIO OUT	Output audio signal
5	PC AUDIO IN	For connection with PC Audio
6	PC VGA IN	For connection with PC VGA
7	MONITOR VGA OUT	For connection with PC monitor
8	PROJECTOR VGA OUT	For connection with projector
9	USB	For connection with PC USB port
10	LAPTOP VGA IN	For connection with laptop VGA
11	LAPTOP AUDIO IN	For connection with laptop audio
12	MIC IN	For connection with microphone
13	MIC VOL	Microphone volume
14	HDMI OUT	For connection with HDMI Display(Only For HDMI Model)

4.4 CONTROL PANEL / REMOTE CONTROL

(Cutline 4)



(Cutline 5)



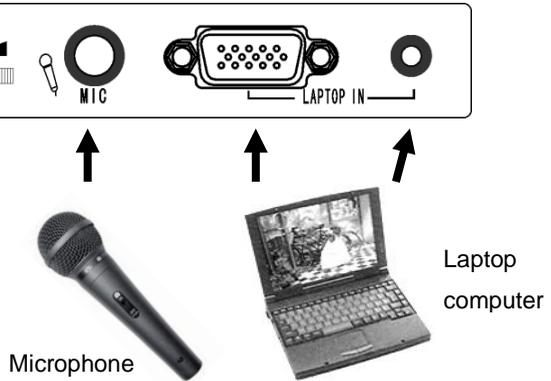
NO.	ICON	DESCRIPTION
1(1)	【POWER】	Power on/off
2(2)	【MONITOR】	Computer signal
3(3)	【PROJECTOR】	Projector signal
4(4)	【LIGHT】	Light on/off
5(5)	【MENU】	Call out MENU
6(6)/7(7)	【ZOOM IN/OUT】	①Image zoom in/out ②Menu select
8(8)	【FOCUS】	①Auto focus ②Menu confirmation
9(9)/10(10)	【BRIGHTNESS+/-】	①Brightness control ② Menu select
11(11)	【SAVE】	Save image
12(12)	【DELETE】	Delete image
13(13)	【PLAY】	Review image
14(14)	【SPLIT】	Contrast image
15(15)/16(16)	【PRE/NEXT】	Chose saved image
17	【BW】	Black/White
18	【FREEZE】	Freeze effect
19	【MIRROR】	Mirror effect
20	【NEGATIVE】	Negative effect
21	【TEXT】	Text effect
22	【VGA/CVBS OUTPUT】	VGA/CVBS output switch
23,24	【WIDE/FAR】	①Manual focus②Menu select
25,26	【SCREEN↑/↓】	Screen open/shut*
27	【SCREEN ON】	Turn on projector*
28	【SCREEN OFF】	Turn off projector*
29	【VGA】	Projector VGA signal input*
30	【VIDEO】	Projector VIDEO signal input*
31	【CUSTOM】	Projecor custom function*
32,33	【VOLUME-/+】	Volume adjustment*
34	【MUTE】	Audio on/off*
35(35)	INDICATOR LIGHTS	Front control panel indicator lights on/off

Items with “*” mean Expand Center Control System is needed to realize the function.

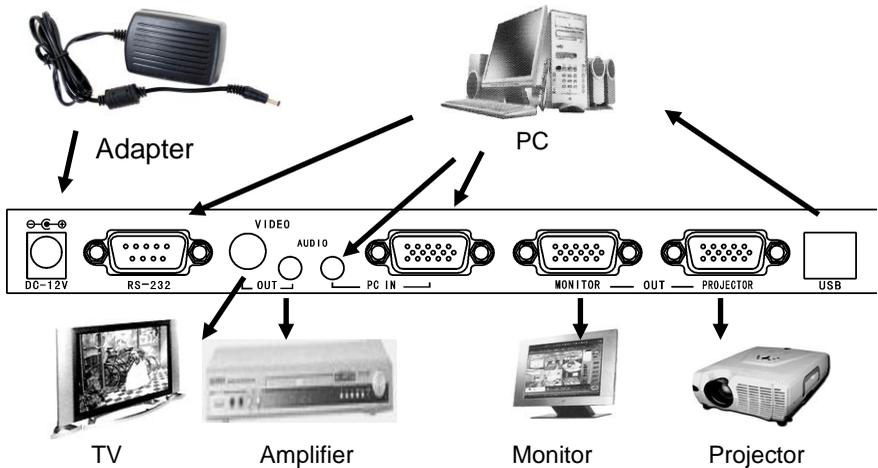
5 CONNECTION

Note: Make sure the system is fine connected before turn the power on.

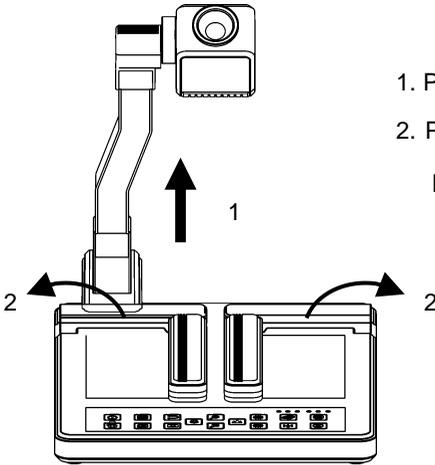
5.1 Side panel connection



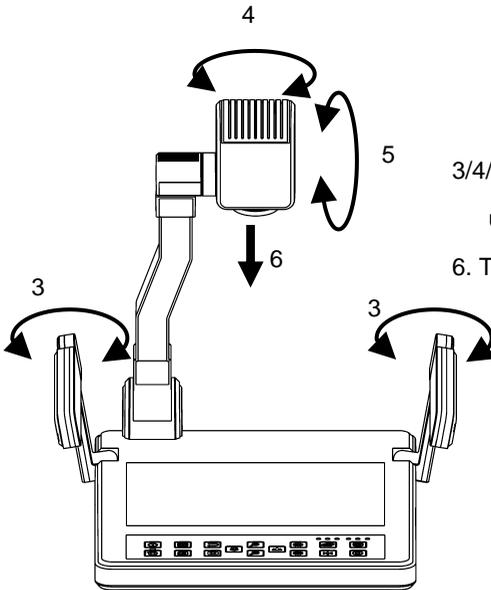
5.2 Back panel connection



5.3 Setup the visualizer



1. Pull up the main pole;
2. Pull up the upper lights to the proper position



- 3/4/5. Adjust the camera head and upper lights
6. Take off the camera cover

6 OPERATION

This visualizer can be operated by:

1. Front control panel
2. Infrared remote control
3. Computer (by RS232)
4. USB

Those methods can be carried out separately or combined.

Note: The following instructions are only about operation with front control panel and remote control. For RS-232 and USB operation, please refer to corresponding instructions.

6.1 SET UP

1. Press **【MENU】** to call out Menu list.
2. Use **【ZOOM IN】** , **【ZOOM OUT】** , **【FAR】** / **【BRT-】**
Or **【NEAR】** / **【BRT+】** to select item.
3. Press **【FOCUS】** to confirm your selection.
4. Press **【MENU】** to quit Menu.

Note: ① Press **【MENU】** button to quit Menu.

② Gray means the function is unchangeable.

MENU

	<i>ITEM</i>	<i>INFO</i>
EFFECT	FREEZE	ON / OFF
	NEGATIVE	NEGATIVE ON/NEGATIVE OFF
	MONOCHROME	ON / OFF
	MIRROR	ON / OFF
	TEXT	ON / OFF
IMAGE	Play	01~20
	Contrast	Empty / 01~20
	Save to	Empty / 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 computer, projector and monitor are fine connected. You will find out the visualizer power indicator light is in half brightness, computer signal is outputting to the monitor and projector, also the indicator lights of monitor and projector are still off.

6.3 HOW TO START UP system

Press “POWER” button to start up the visualizer. The monitor will turn into blue, and then camera signal will be projected out. This means the visualizer is ready for work.

After all the indicator lights flicker to still, the visualizer power indicator light is on its normal brightness. This means the system is ready to carry on further operation.

6.4 HOW TO SHUT DOWN system

Holding on the “POWER” button for 1 second will shut down the system and turn it in to “STANDY BY” mode.

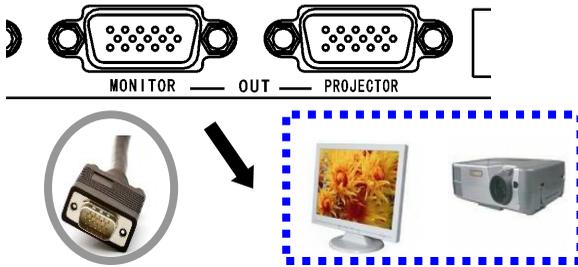
6.5 HOW TO SELECT LIGHT

Press “LIGHT” button to select upper light and base light or just turn off the lights.

6.6 VIDEO SIGNAL INPUT/OUTPUT

6.6.1 【VGA】

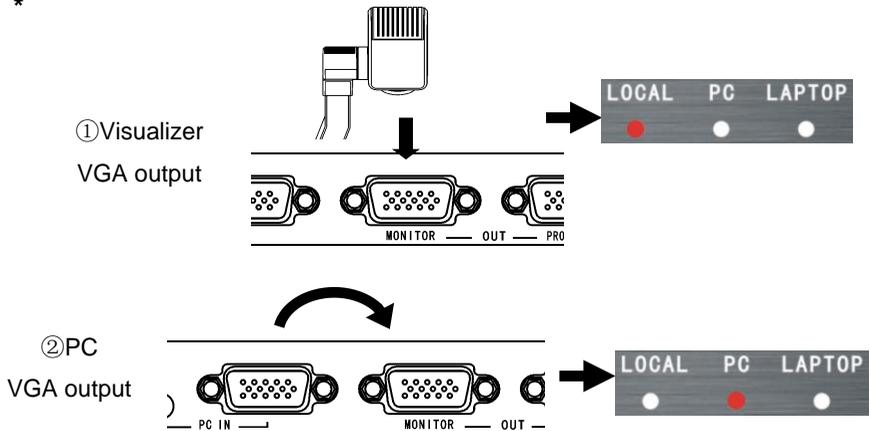
Connect the system correctly with attached VGA cable.

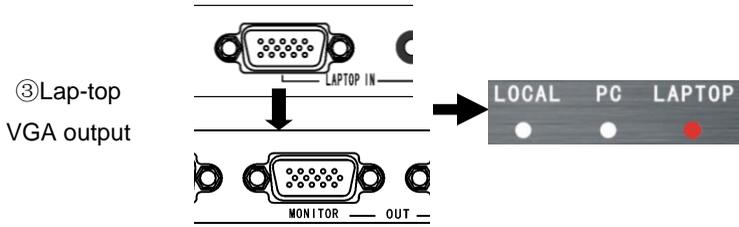


6.6.2 【MONITOR】

By repeatedly press the 【MONITOR】 button, VGA output signal will be switched between visualizer, PC and Laptop, and corresponding indicator light will be on.

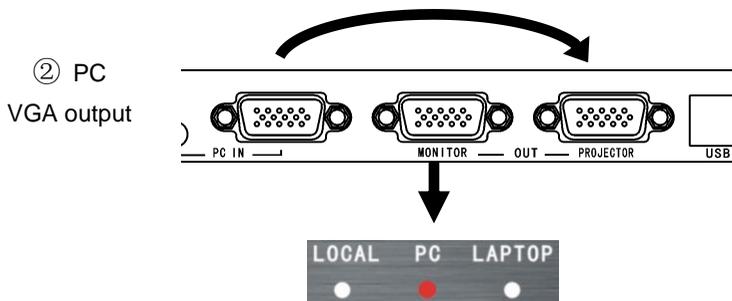
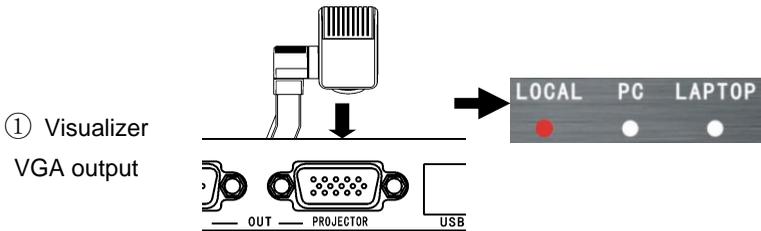
*

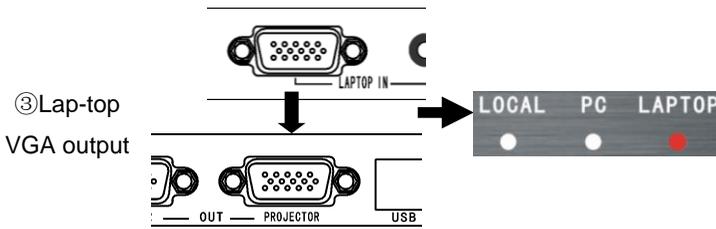




6.6.3 【PROJECTOR】

By pressing the 【PROJECTOR】 button, VGA output signal will be switched between visualizer, PC and Laptop. And corresponding indicator light will turn on.

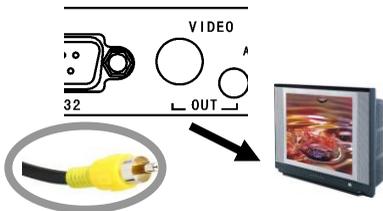




Note:

- (1) Monitor output and projector output are separately independent.
- (2) In STAND-BY state, signal output default is PC VGA.
- (3) When it is outputting CVBS, only PC signal and Laptop signal can be output.

6.6.4 【CVBS】



CVBS can be output through RCA cable which is connected with monitor such as TV.

Under VGA output mode: Press the “OUTPUT” button on the remote control to start VGA output, and then the monitor and projector will output the PC signal.

Under CVBS output mode: Press the “OUTPUT” button on the remote control to shut off VGA output, and then the monitor and projector will output the visualizer signal.

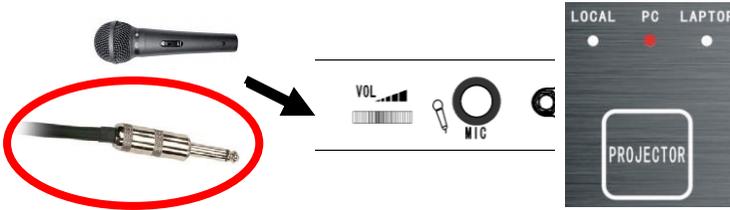
Note: ① Setting of CVBS can be carried out through “MENU”.

- ② Default is in VGA output mode if system restarted.

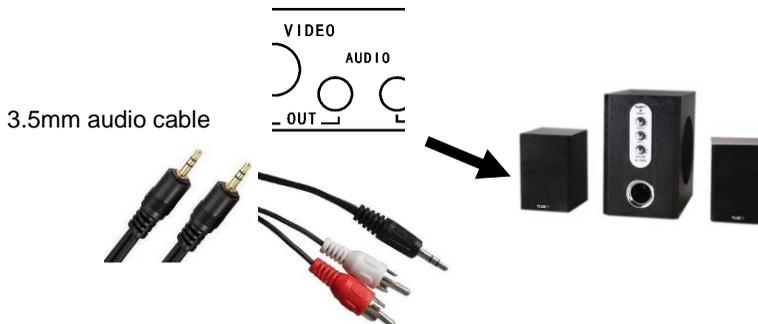
6.7 AUDIO INPUT/OUTPUT

6.7.1 MICROPHONE

Microphone can only be used when projecting visualizer signal.



6.7.2 AUDIO OUTPUT



By pressing the **【PROJECTOR】** button, Audio output signal will be switched between Microphone, PC and Laptop, and corresponding indicator light will turn on.

6.8 ZOOM IN / OUT

This function helps to zoom in / out the image for better study.



6.9 FOCUS

6.9.1 【AUTO FOCUS】

【AUTO FOCUS】 button helps to focus automatically when the image is fuzzy.



Note: In dark condition or the outline of captured item is not clear, use “MANUAL FOCUS” to get fine effect.

6.9.2 MANUAL FOCUS

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

6.10 MODE

Save current mode for future usage which is much helpful. Parameters include “MONOCHROME”, “NEGATIVE”, “MIRROR”, “TEXT”, “AUTO EXPOSURE”, “AUTO WHITE BALANCE”, Zoom ratio and focus distance. There are 11 storage modes provided. It will be in MODE “default” in later operation.

Example: Suppose we are demonstrating a negative, the mode is “Negative”, “Text”, “Auto exposure”, “Zoom in ratio 3X”, and the image is clear. We are now saving this mode to MODE “05”. Then next time when we need to demonstrate a negative, just 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

Buttons: **【SAVE】**/**【DELETE】**/**【PLAY】**/**【CONTRAST】**/**【PRE】**
/ **【NEXT】** . They also can be carried out through software.

7.1 **【SAVE】**

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

Notes:

- ① If position No.1 and No.2 are stored, new image will be stored in position No.2, and then position No.4.
- ② If memory capacity is full, new image will cover No.1 image, and then No.2 etc.
- ③ Images will be lost when restart system.

7.2 **【DELETE】**

Under “Play” or “Contrast” mode, press **【DELETE】** button, you will read “Delete?” on the screen. Then repress **【DELETE】** button to confirm the deletion. Or you can chose a image first by **【PRE】** 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 **【PRE】** / **【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 switch to contrast mode.

7.4 **【CONTRAST】**

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

Press **【CONTRAST】** button, NO.1 image will be chosen to contrast with the current screen. You can chose any one stored image to contrast by **【PRE】** / **【NEXT】** button. Or you can chose 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 directly.

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

7.5 BRIGHTNESS/ CONTRAST/ SATURATION/ SHARPNESS

		∧
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” mode.

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

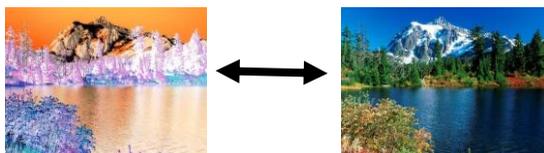
7.7 IMAGE EFFECT

7.7.1 【FREEZE】

Press 【FREEZE】 button to freeze the image, re-press it to un-freeze it. Usage: when presentation material needs to be changed.

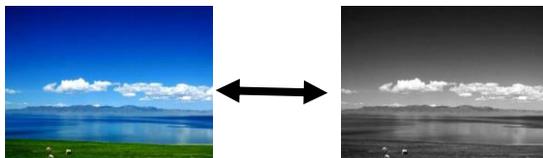
7.7.2 【NEGATIVE】

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



7.7.3 【MONOCHROME】

MONOCHROME mode is recommended when present monochrome material.



7.7.4 【TEXT】

TEXT mode is strongly recommended when present text material

he size of images output by M
cludes a decimator module. W
ming images (shrinks them to
ig the field of view and without
derscoring, because the terms
ize reduction by deleting colu
nology, no such deletions tal
el binning" — divides each inp
ividual pixels of the desired out



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cludes a decimator module. W
ming images (shrinks them to
ig the field of view and without
derscoring, because the terms
ize reduction by deleting colu
nology, no such deletions tal
el binning" — divides each inp
ividual pixels of the desired out

7.7.5 【MIRROR】

This function helps to get enantiomorphism effect.



8 SET UP 2

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.

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 area same 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

Restore factory settings and all images will be lost.

9 Expand center control system

This expand center control system must work with our visualizer, it can not carry out function by itself. With the expand center control system, you can carry out the following actions:

- a.** Turn on/off the visualizer, projector and screen simultaneously. It also can turn on or turn off the projector separately during the presentation.
- b.** Projector hang-shut. Before shut down the projector, it turns the projector into standby mode first, and then shut it down.
- c.** CS-100 is a mini amplifier, it can be connected with speaker directly.
- d.** It controls the projector signal switch separately during the presentation.
- e.** It controls the screen separately during the presentation.

10 RS-232

RS-232 software needs to be installed which are in the attached disk. Please refer to the HELP for details.

11 USB SOFTWARE

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

12 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.
5. Neither revolve the arms horizontally;
6. Be careful when lie down the light arms.
7. Keep it dry. Clean it with special made cloth.
8. Please release the power cable when unused, and cover it with cloth.
9. The validity period is 8 years. Please get it re-examined at the service counter if you want to continue to use.

13 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.

14 Solution of black screen (in 1080p format)

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

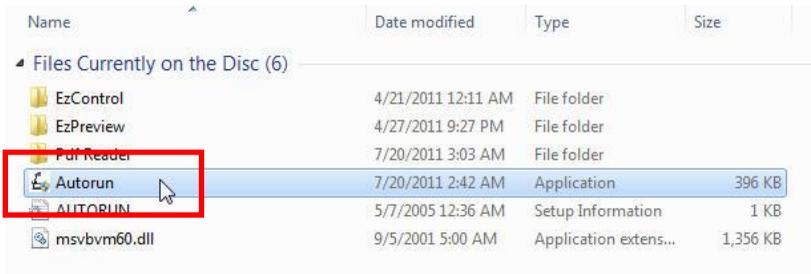
1. Release the visualizer power plug.
2. Hold on the POWER button, and then plug in the power cable.
3. Now you can carry on further operation.

15 Ezpreview-USB software

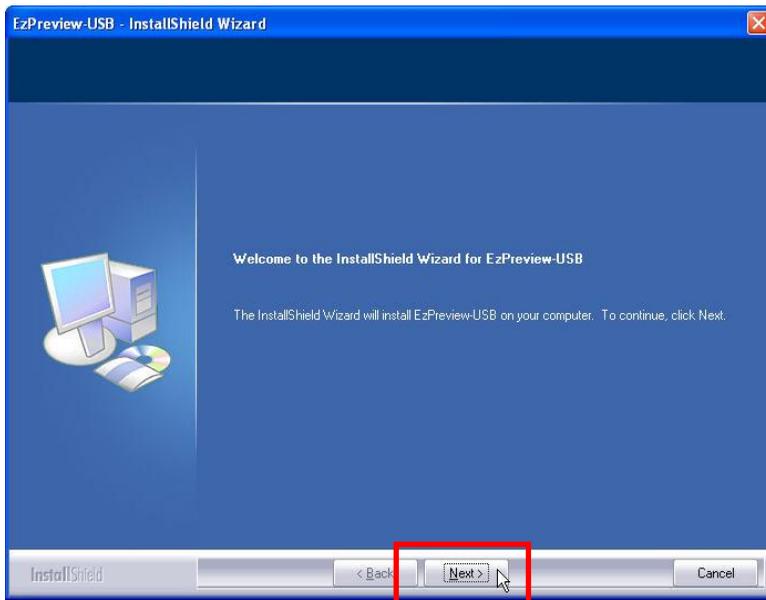
15.1 INSTALLATION

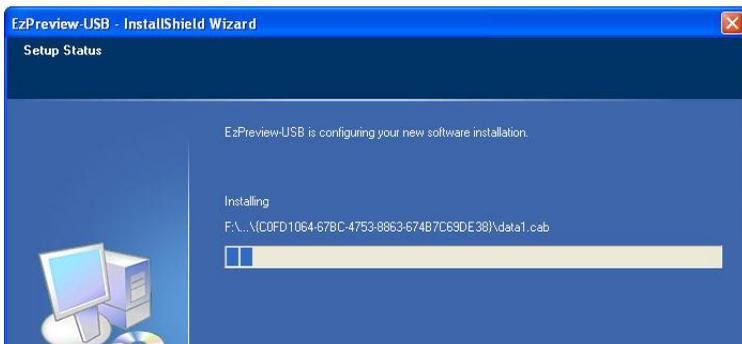
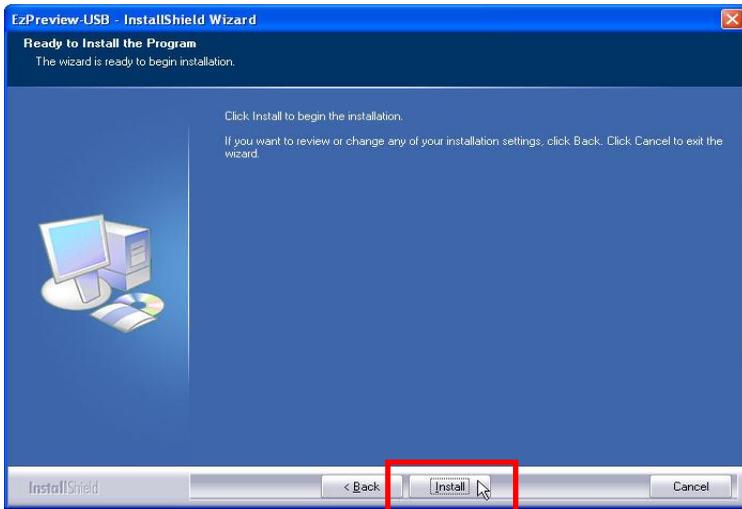
1. Insert the disk into the computer drive, then open the disk files,

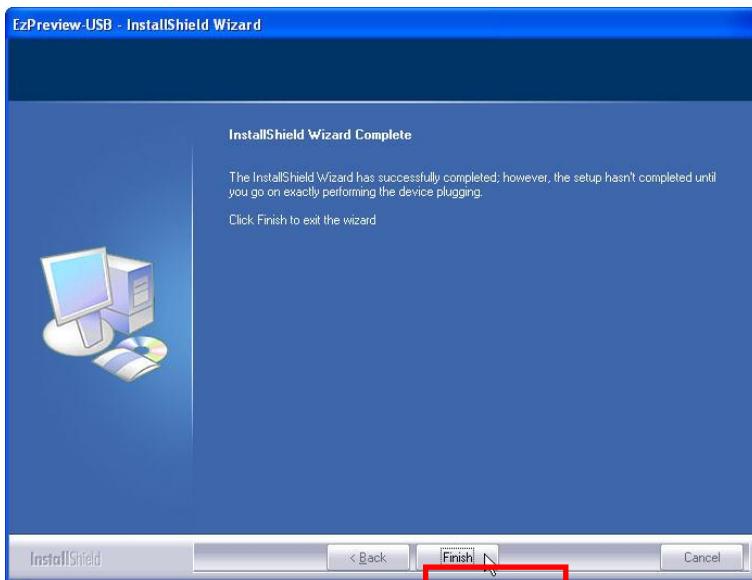
and run “AutoRun.exe”.



2. Click on “EzPreview-USB”, and then do the following instructions.



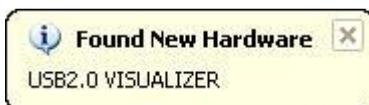




3. After all above steps, you will find a shortcut on the desktop.



4. To carry on further operation, you need to insert the USB plug and turn on the visualizer. Then you will read “Found New hardware” at the right-bottom, followed with “Hardware Update Wizard” interface. Do the following instructions:





Hardware Update Wizard

Please wait while the wizard installs the software...



USB2.0 VISUALIZER



Setting a system restore point and backing up old files in case your system needs to be restored in the future.

< Back

Next >

Cancel

Hardware Update Wizard



Completing the Hardware Update Wizard

The wizard has finished installing the software for:



USB2.0 VISUALIZER

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



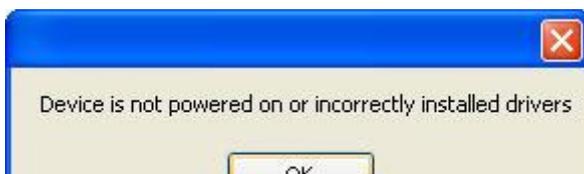
Till now the EzPreview-USB is fine installed.



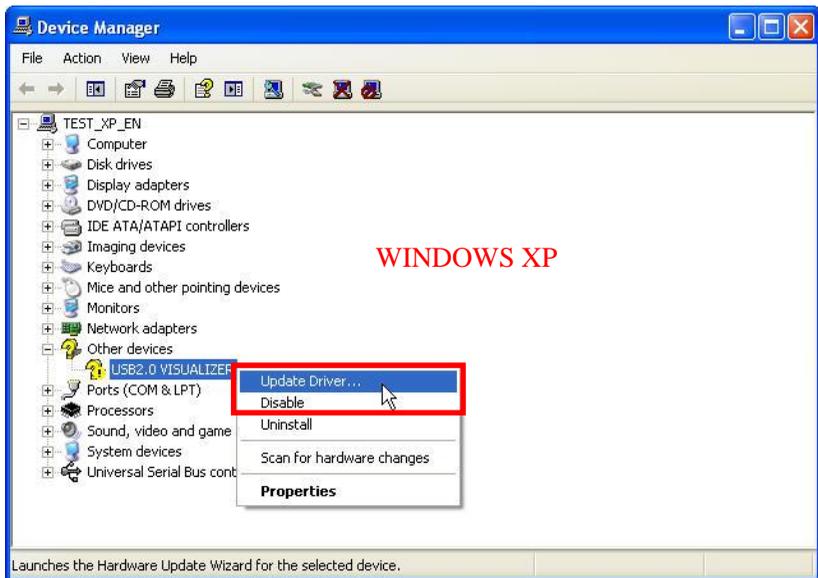
This interface means every step is right followed and the software is ok to run.

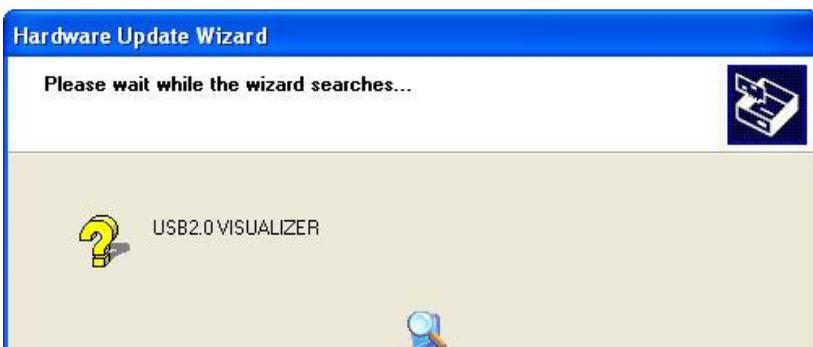
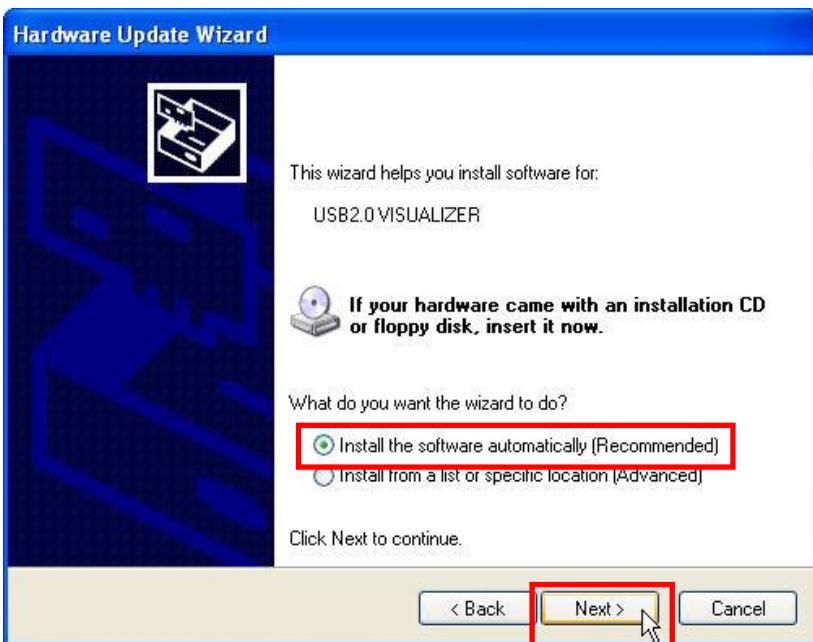
15.2 Solution of EzPreview installation abnormity

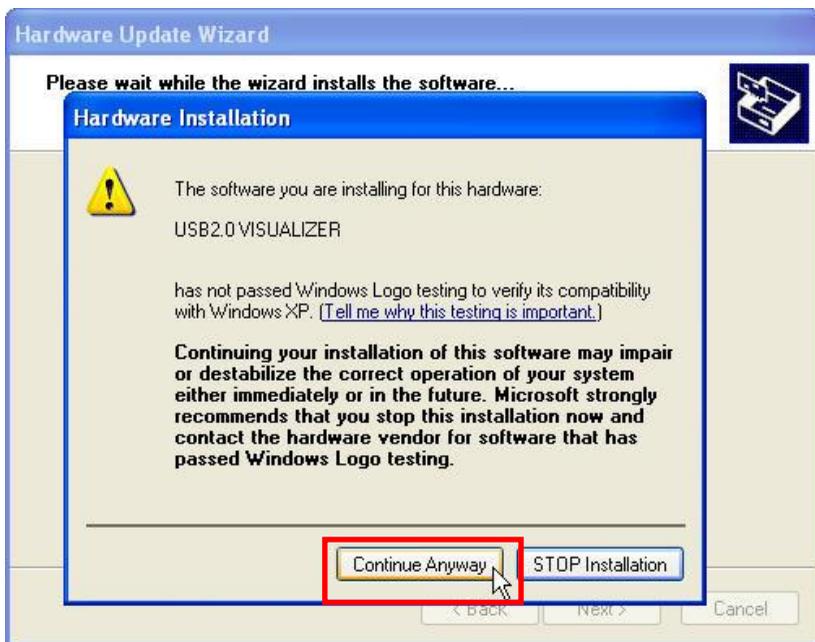
When run the shortcut after the software is installed, the following notice occurs:



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):

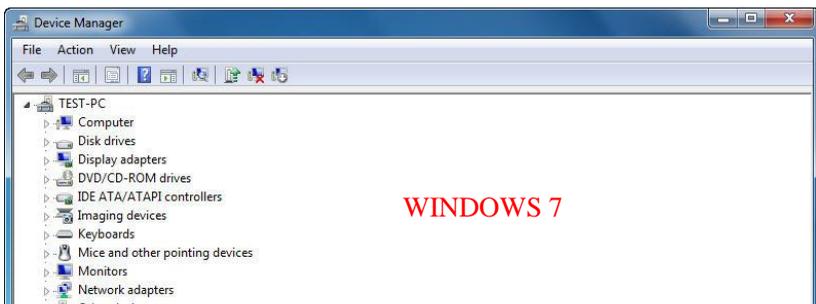


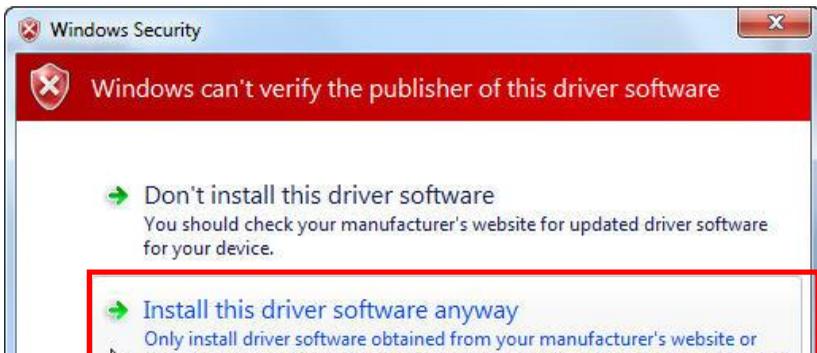
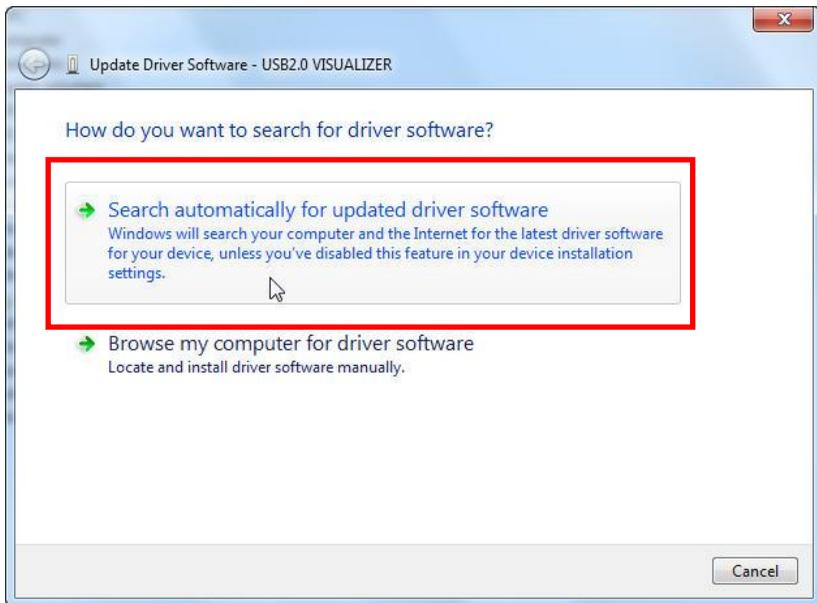






To WINDOWS 7 OS, do the following steps:





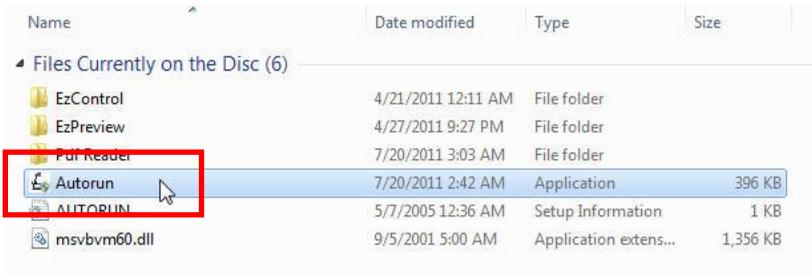


Done!

16 RS232 software installation

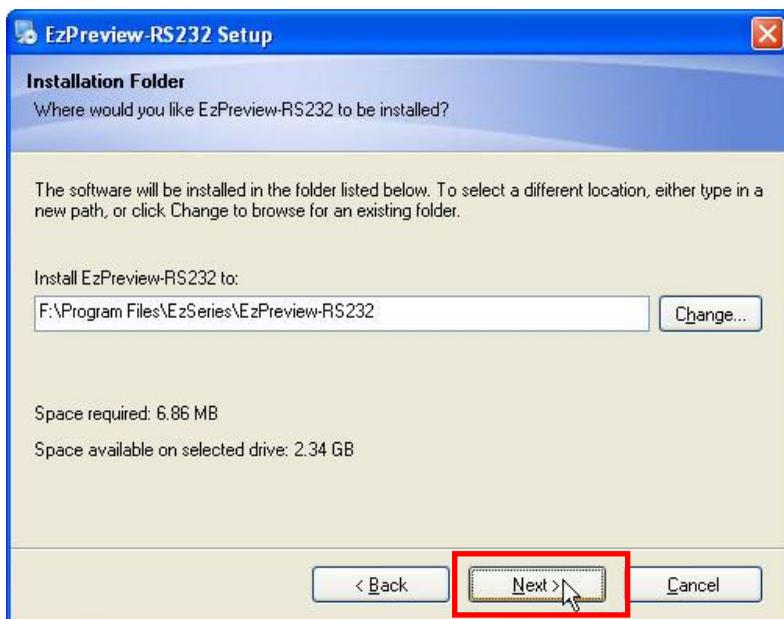
16.1 INSTALLATION

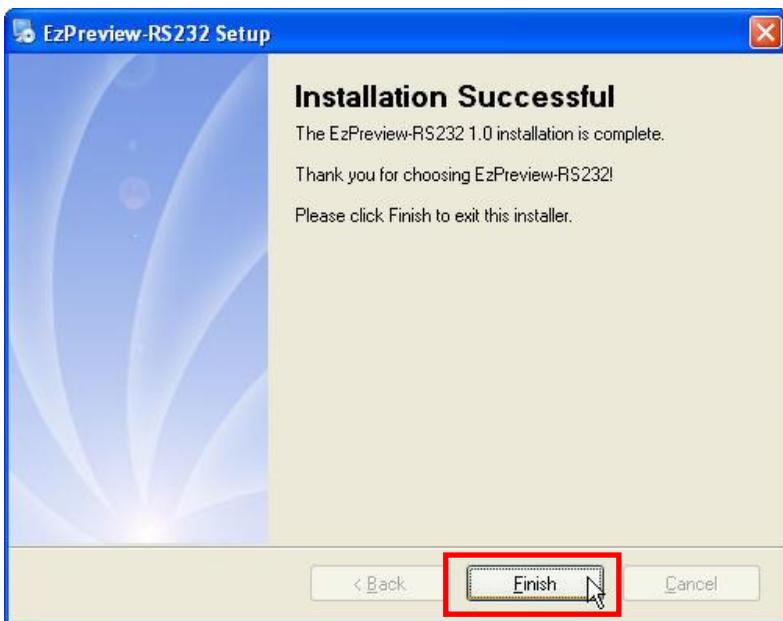
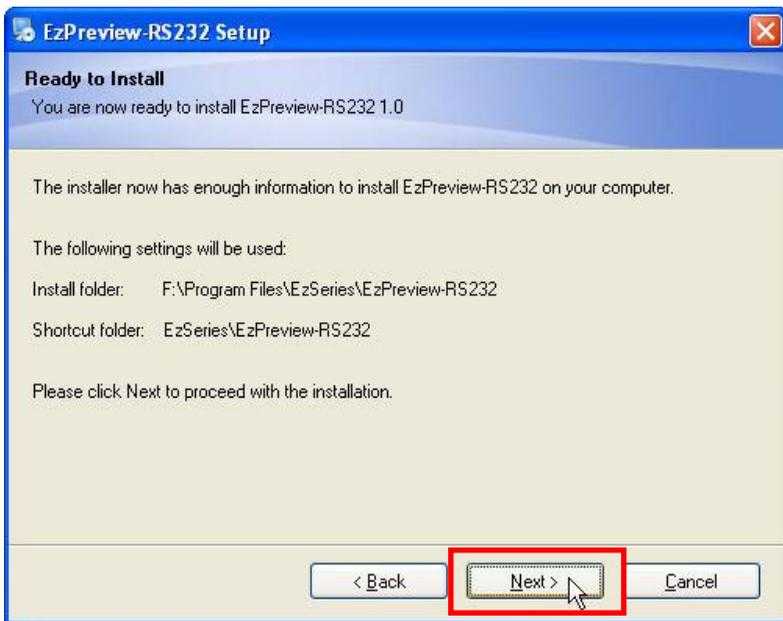
1. Insert the disk into the computer drive, then open the disk files, and run “AutoRun.exe”.



2. You will see the following interface. Click on “EzPreview-RS232”, and do the following instructions.







When the installation is successfully done, you will find a shortcut on the desktop.



16.2 RS232 operation

Run the shortcut you will find the following interface:

Connect the visualizer with the computer by RS232 cable, select the right port No. and carry on further operation.

