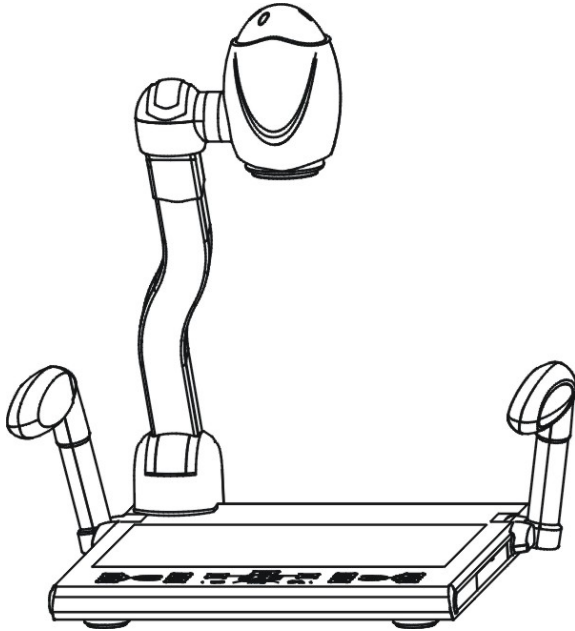


# DIGITAL VISUALIZER




## User Manual



Pls read carefully before installation and keep reservation.

## ☆ Safety Notice:

 **Warning: Pls don't let it in rain or put it into wet environment in order to prevent from fire breaking or leak of electricity. The visual presenter includes high voltage accessories and is dangerous, so the installation and repair spareparts are prohibited, just the professional can do these.**

1. Before using, pls see power voltage and frequency are the same or not. To keep safe, users must be conscious that power socket should be three poles: L-line, N-line, G-line, and connect them in the right way.
2. User must get G-line of all equipment's input and output ports through before turning power on, in order to avoid the unexpected damage caused by mute/high-voltage. Don't insert or pull out cables with electricity.
3. Pls don't rebuild visual presenter or use it without outer shell.
4. Pls don't drop something easy-fire, liquid or metal into, otherwise, it will easily break the visual presenter or make troubles for it. Pls don't put any easy-fire or liquid on the table.
5. Don't take it in the environment of high temperature, wetness, corrodible gas like acid oralkali, more-dust, and shakiness. Put it on special-steady desk , and don't put the visual presenter on unsteady tabletop or don't put 1KG things on the baselight table.
6. Pls clean it by dry cloth, and cut down electricity before cleaning, users also cannot use liquid dilution, volatilisid gasoline, insecticide or other chemistry solvent.
7. Pls pull power-plug out if long time no use.
8. Don't let children play visual presenter to prevent them from electric-shock..
9. Pls turn off power immediately if there are some abnormal appearance (noise or smoking) and pull power-plug out.

## ☆Feature Instruction:

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**Welcome to using visual presenter. Pls read “Manual Operation Booklet” attentively before usage. We sincerely hope this booklet will bring convinience and skilled method to you.**

- ☑ Japan and Korea Fashionable Outer Design with smooth line, combined with fashion and creation;
- ☑ Special sensitive touch-key design, prevents dust and water, may use for long (patent);
- ☑ Special drawer function, human-being design, may store remote controller, pick-up pens, pick-up stick and others into;
- ☑ All joints are featured with no press damping design, easily operate;
- ☑ Intelligent preview/shooting, featured with human controlling: users can preview and edit before shooting to projector(s);
- ☑ No need to turn visual presenter on to get through: when PC signal comes to visual presenter, continually connect with monitor, and no need to turn visual presenter on;
- ☑ VGA bandwidth is 440MHz with long cable, image brightness and comparison can be improved up to 1/3, making image more beautiful and clear;
- ☑ Put digital volume adjustment inner, make volume adjustment easier(more correct), can output original voice;
- ☑ Specially provide with ESD protection, won't break inner spareparts when pulling out plug into with electricity;
- ☑ Total zoom $\geq$ 128, make the smallest letters and number bigger and clear to show;
- ☑ Digital(B type): image proceeded by professional video device, can output up to 800,000 high resolution (1024 $\times$ 768) 's image signal with high clarity, shows in digital unit, image is extremely clear, no shining, no shaking, image steady, color elements deoxidized well, when capturing small and tiny B/W characters,

there is no white edge, shaking, shinning and other problems, can connect with projector directly, rear projector TV, or monitor's RGB port, specially suitable for school's demonstration or B/W characters teaching;

It includes multi-functioned intelligent central controller system, one button controls on/off, projector can be delayed to turn off, projector and screen can be controlled combinatively, infrared decoding and others (selected) ;

Easy to install and maintain: adopt serial port to control projector, avoid of hard infrared decoding or easily interfering and other problems. There are hundreds of projector's code totally 10 kinds of famous brand, easily to set, and can update for free .(selected) ;

Infrared decode secretly, without any decoding device, simply use, store image more reliable; (selected) ;

Powerful image proceeded, freeze, color/B/W, positive/negative, mirror, brightness adjusted, mage/text, comparison, image storage of nine pictures;

Multi-input, multi-output, combine intelligently, switch multi-media to demonstrate;

CCD camera can turn 350° vertically and horizontally;

Methods of control: control panel, remote controller, RS-232, USB (selected) ;

Microphone socket which can adjust volume, can connect with cable or eternal microphone.

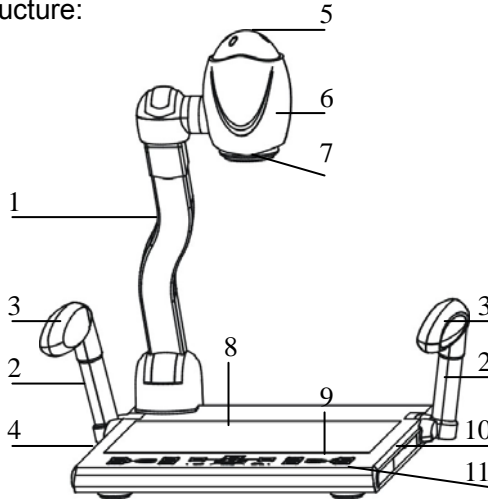
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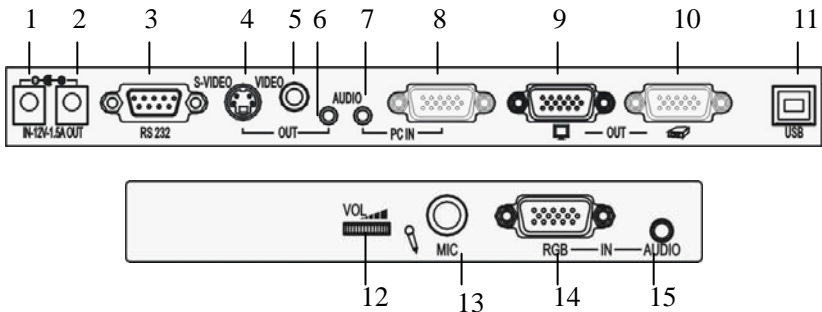
## ☆ Struction & components:

### ●whole structure:



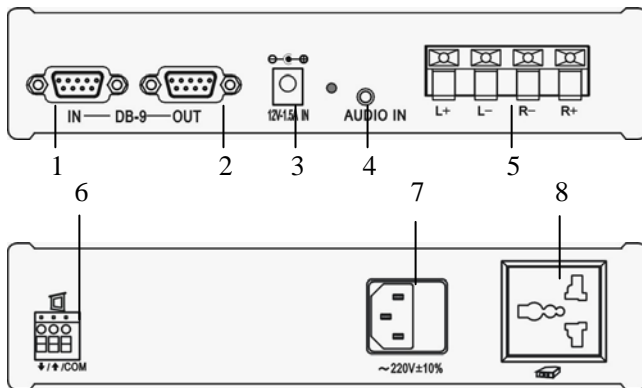
1. Main pole; 2. Assistant lamp Arms; 3. assistant lamps; 4. drawer(once push to rebound, twice push to recover. Attention: don't pull it out of the position with heavy strength); 5. Infrared Receiver Window; 6. CCD outshell; 7. CCD Cover; 8. Baselight; 9. Back Connections; 10. Side connections; 11. Control Panel.

### ●back/side connections:



1. DC12V power input; 2. DC12V power output; 3. RS-232 controlling port, RS-232 multi-functioned cable connected to PC' s COM port (If select central controller' s spareparts, this port is used for RS-232 F/M cable); 4. S-VIDEO output port (selected) ; 5. Video Output port (selected) ; 6. Stereo Output; 7. PC stereo Input Port; 8. PC RGB input port; 9. Output Port to Monitor; 10. Output port to Projector(or rear projector TV); 11.USB Port; 12. Microphone Volume Adjustment; 13. Microphone Plug; 14. RGB Input Port; 15. RGB Stereo Input.

●Connected to central controller: (selected)

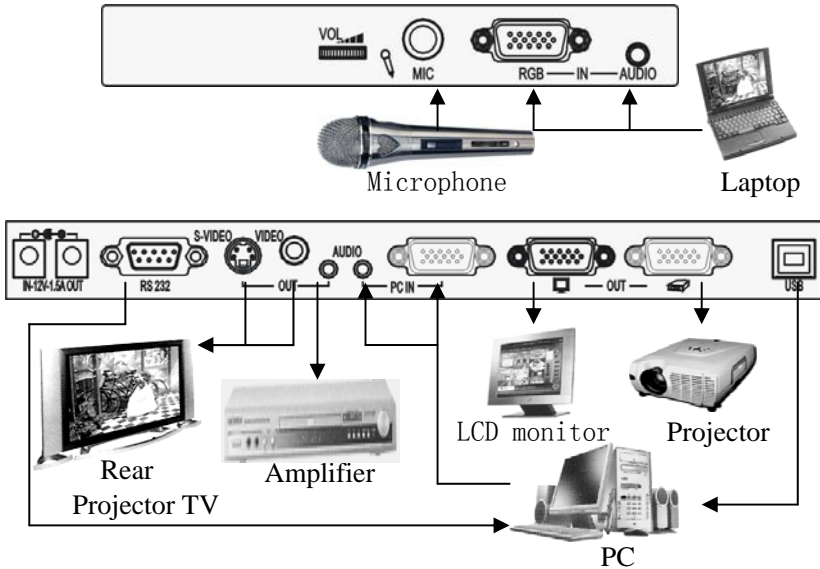


1. Visual presenter's RS-232 port; 2. RS-232 multi-functioned port to PC's COM port; 3. DC12V power input, to connect DV 12V power output; 4. Stereo input, connect to visual presenter' stereo audio output; 5. Amplifier output; 6. Screen power to control up/down; 7. AC 110~220V; 8. projector's socket.

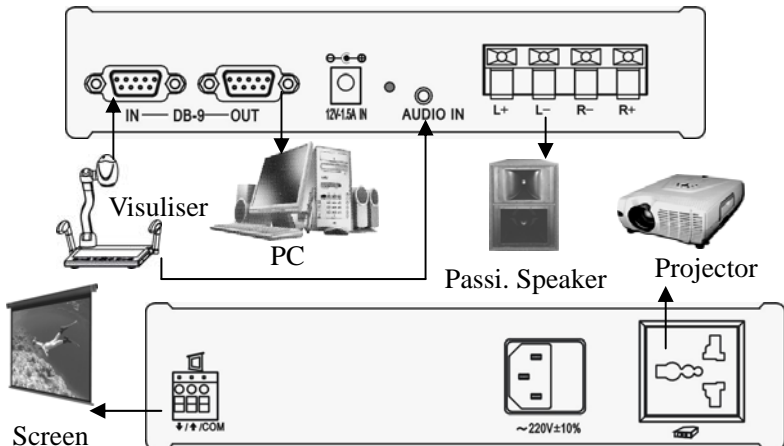
Note: pls check exact goods for the standard.

## ☆Connection Surroundings:

### ●Whole Connections:



### ●Connections to Central Controller: (selected spareparts)

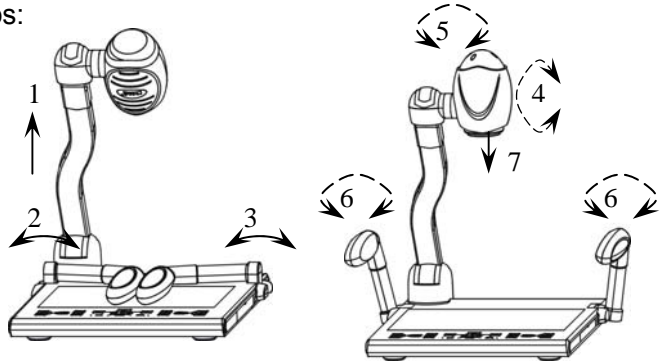


Note: pls cut down Surrounding equipment's power before starting operation.



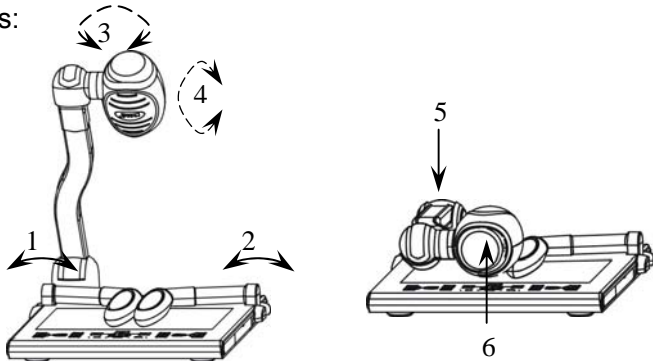
## ☆ Basic Operation:

### ●Unfold Steps:



1. Lift the pole; 2. Lift assistant lamp to the left; 3. Lift assistant lamp to the right; 4. adjust CCD's angle vertically; 5. adjust CCD's angle horizontally; 6. adjust assistant lamps' angle properly; 7. take CCD's cover off (Note:Pls rotate it to the right, don't pull with heavy strength).

### ●Fold Steps:

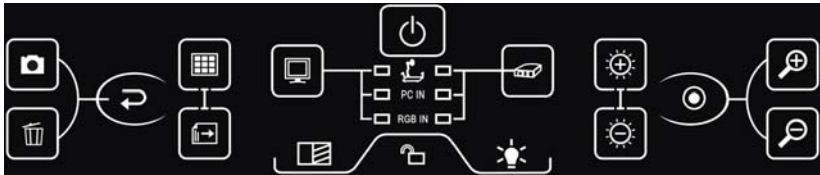


1. Press left assistant lamp arm down; 2. press the right lamp arm down; 3. adjust CCD outershell horizontally to parallel with the pole; 4. adjust CCD outershell vertically to parallel with the pole; 5. put the pole down; 6. put CCD cover on (Note: don't rotate, cover it directly).


## ☆ Methods of usage:

There are three methods of operation: 1. control panel 2. remote controller 3. control it through RS-232 Port supported by Computer's Window System. Three methods can be executed individually, and can be fixed up.


1. Control Panel: (Note:pls check exact goods for the standard.)






### ●**System acquiesces the following:**

It is into awaiting state when visualiser's power on ,and “  ” light will be on, meanwhile it acquiesces PC output to monitor and projector, thus PC's monitor and projector's light will be on. Light of “volume+” and “volume-” will be on, at this time user can adjust volume. This visualiser adopts sensitive touch key, just touch it with finger to operate, don't strike with heavy metal or heavy strength to prevent it from the nick.

### ●Turn on:


After connection, press  and it turns from red shinning to red, which means the visual presenter's power is on. When heard of “Bee” twice, users can start operation. Please try again to open projector when user found that projector's power was off.

●Turn off:

When turn off, press  for 2 seconds, after heard of a voice of “Bee”, this indicator will become from red shining to red, which means getting into state of waiting, and visual presenter has been turned off. If visual presenter has central controller function, when turn visual presenter off, press this button  for 2 seconds, after a voice of “Bee”, power indicator shines fastly, meanwhile visual presenter can not be controlled by any button. When power indicator gets into shining slowly, press  again to turn off projector. After 2 minutes of “Bee”, it is into state of waiting, at the same time projector’s power has been cut down (delayed to turn off).


When it is into state of turning off, visual presenter will switch “PC IN” (PC’s signal) into monitor automatically. (It gets through without signal of turning on) .

●Lamp Selection:

Press  button, users can turn on/off assitant lamps or baselight.

●Preview/shooting:





 Signal output to monitor (preview) : Press this button repeatedly to select visual presenter’s signal, PC signal, and RGB signal’s input. When selectng visual presenter’s signal, the indicator will become red (other two indicators will be off) , when

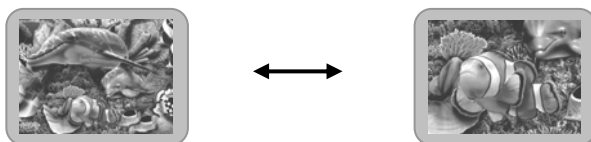
select PC signal input, the indicator will be on red (other two indicators will be off) , when select RGB signal input, the indicator will be red (other two previewing indicators will be off) .





Signal output to projector(shooting): Press this button repeatedly to select visual presenter's signal, PC signal, and RGB signal's output. When it is into asynchronous state, please select visual presenter first, when PC and RGB signal output to monitor, press this button again, image will output to projector, meanwhile audio will output as followed, the indicator will change from shining red to red.

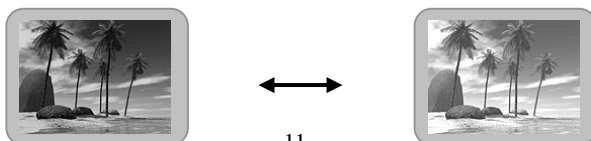
●Focus adjustment:

Adjusting focus button can change the range of CCD camera, touching or pressing on  or  button, can magnify image or deflate image gradually or continually.




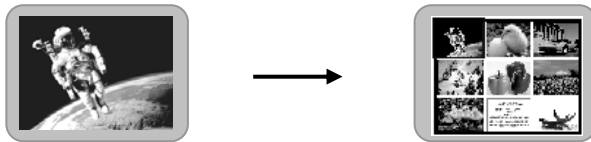
●Brightness adjustment:

Adjusting brightness can change the output brightness from CCD camera, touching or pressing on  or  button can change the bightness, leting it go by hand will stop adjusting of brightness.




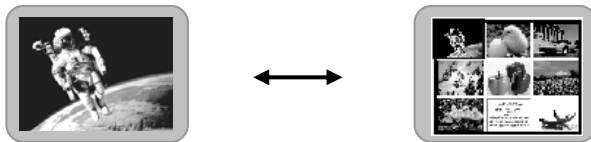
- Storage:

Pressing  button can store present image. (Note: when it fulfills with images, indicator will be off, if users want to store more, please delete previous storage for 1 set and can store 1 set again)




- Splitted Screen:


Pressing  button can show storage of image in full screen or splitted screen.




- Select image:

When it is in the state of splitted screen, pressing  button can recycle or delete images. Press one second for next image

- Recycle:



Pressing  button can recycle selected images.

- Delete image:


When it is in the state of splitted screen, pressing  button can delete selected images. Press one second for

deleting stored images.


- Division:

Pressing  button can display the right part of the saved image on the splitted screen; pressing  button can change to another right part of the saved image.

- Auto Focus:

Pressing  button, the focus will adjusts itself automatically.





















- Lock and unlock:

Pressing  button for “1” second to unlock.













Visual presenter acquiesces that it will unlock after 20 seconds automatically without any touching, at this time users can only operate indicated buttons, others should be unlocked before operation.

Note: visual presenter adopts indicator to guide operation and this human-nature design makes operation more vividly.

## 2.Remote Controller:

Image	Function	Description
	POWER	Turn on/ Turn off, or decode projector's on
	LAMP	On/Off of light and baselight, or decode projector's off
	MONITOR	Output Signal to Monitor
	PROJECTOR	Output Signal to projector or TV
	ZOOM	Enlarge image
	ZOOM	Contract image
	VOLUME	Increase volume
	VOLUME	Reduce volume
	DIVISION	Freeze the left part of image, move and compare with right part of image
	B.W.	W/B & Color of image
	ROTATE	Rotate image for angle of 90 or 180
	NEGATIVE	Show image in positive/negative form
	FREEZE	Freeze the shooting image
	TEXT	Display picture in text/image form
	CAPTURE	Store the current image
	PREVIEW	Display images in splitted form
	NEXT	Choose next picture to recycle or delete
	PLAYBACK	Display stored image fulfilled screen
	DELETE	Delete choosed picture in splitted state
	SIGNAL	Choose signal 1 or 2(selected)

### DVD and Projector reference (selected)

Symbol	Function	Description
	MENU	DVD's manu
	UP	DVD's up
	DOWN	DVD's down
	LEFT	DVD's left
	RIGHT	DVD's right
	ENTER	DVD's enter
	RETuRN	DVD's escape or return
	STOP	DVD's stop
	play or pause	DVD's play or pause
	function 1	Projector's function 1
	function 2	Projector's function 2
	function 3	Projector's function 3

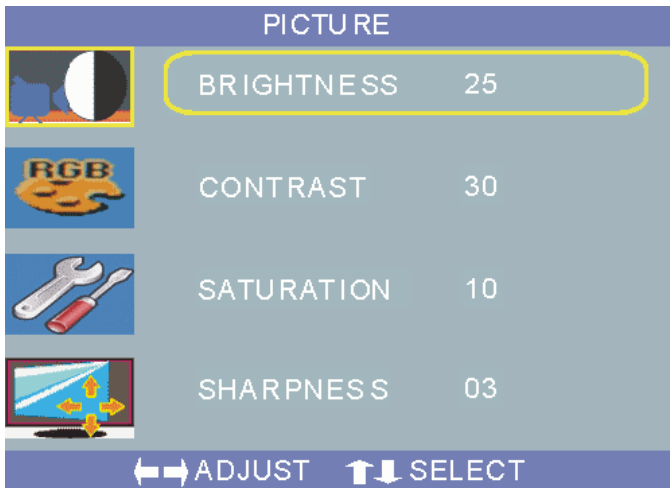




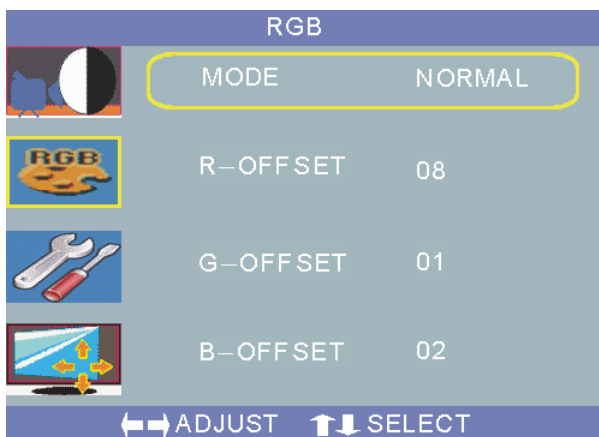
## 2. OSD Controller:

OSD menu operation: PICTURE, RGB, RESOLUTION and SYSTEM. Operate as shown below:

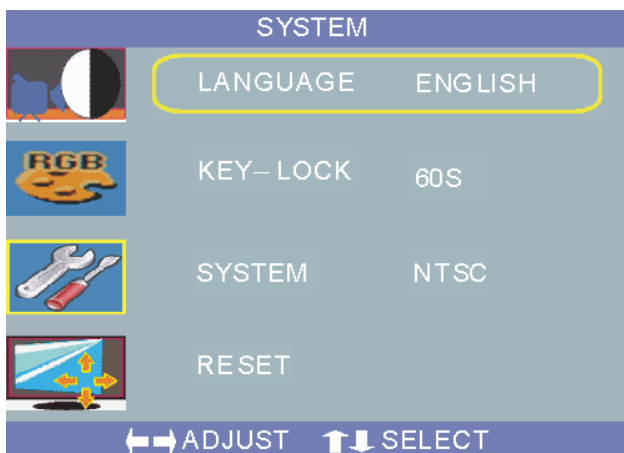
In the normal state, press *FOCUS* for 3 seconds to enter into the main menu, and then press *WIDW* or *TELE* button to enter into PICTURE, RGB, RESOLUTION or SYSTEM setup. After entering into the menu, press *WIDW* or *TELE* to select the option to be set up, and then press *Far* or *Near* to set up the detailed specification under each option.



Pressing "Tele" "Wide" to come to the image setting selection, pressing "Focus" to come to operation, pressing "Tele" "Wide" to select operation items needed, pressing "Far" "Near" to setup the selected items. After entering the image setting, which could setup the brightness, contrast, saturation and acutance.



After entering the color selection item, which could select the mode of beforehand default color, or select the user-defined mode, then come to the adjust of R-OFFSET, G-OFFEST and B-OFFEST



After entering to the system setting item, which could select the language, Pal, NTSC and default setting could be choosed offering by TV mode .



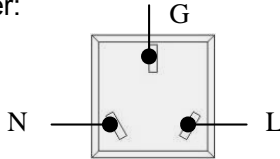
After entering into the RESOLUTION page, you can set up the resolution.

4.PC RS-232:(It functions the same as remote controller, pls check attached disc).

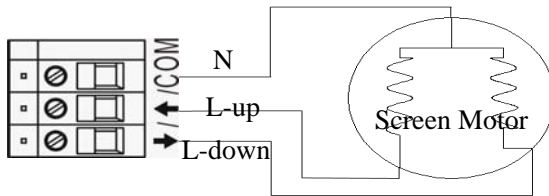
☆ **Methods of connecting with Central controller: (selected)**

Users connect visual presenter to central controller through RS-232 F/M cable to let visual presenter control projector and screen, also provide with a 16w amplifier to connect passive speaker.

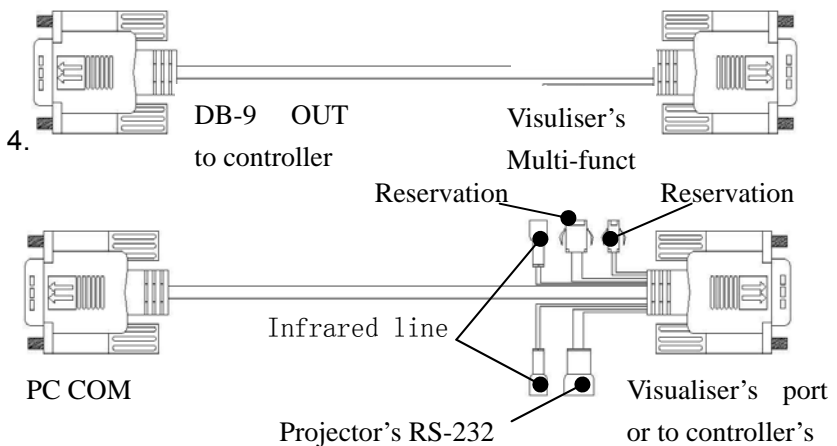
1. Projector's power:



2. Connection of Screen Power:






3. Multi-functioned Ports:



## ☆ Infrared decoding and usage:

---

### ● Infrared decoding:

1. Press  button for five times when visual presenter is in the state of waiting, then press  buttons for four times, and press  button into state of infrared decoding. At this time, users will hear a voice of “Bee”, all indicators will be on.

2. Put DVD’s remote controller opposite to visual presenter’s infrared receiver window, press the button, after a voice of “Bee” shortly, at the same time indicators will be off, waiting for infrared code.

3. Put DVD’s remote controller opposite to visual presenter’s infrared receiver window, press the button, after a short voice of “Bee”, indicators will be on, which means this button has been infrared decoded. If decode other buttons, please repeat step 3, until it is finished.


4. After decoding, turn off visual presenter, infrared decoding has been finished successfully.



5. Projector’s decode: method is the same as step 3, visual presenter can provide with 3 buttons to decode projector, can decode projector **ON**, projector **OFF**, **RGB**’s switch.


6. If there is mistake, please repeat step 3 and step 4, visual presenter will cover previous operation.

### **For example:**

### **the steps of decoding DVD’s “MENU” are as followed:**

1. Press  button for five times when visual presenter is

in the state of waiting, continually press  buttons for four times, and press  button into state of infrared decoding. At this time, users will hear a voice of “Bee”, all indicators will be on to start operation;




2. Put visual presenter’s remote controller opposite to receiver window, press  button on remote controller, hear of a voice of “Bee” shortly, and indicators will be off;


3. Put DVD’s remote controller opposite to visual presenter’s infrared receiver window, press “**MENU**” button, will hear of a voice of “Bee” shortly, indicators will be on

4. after decoding, turn off power, infrared decoding has been finished successfully.

### **Another example:**


**the steps of decoding projector’s “Remote Controller” are as followed:**




1. Press  button for five times when visual presenter is in the state of waiting, then press  buttons for four times, and press  button into state of infrared decoding. At this time, users will hear a voice of “Bee”, all indicators will be on to start operation;

2. Put visual presenter’s remote controller opposite to remote receiver window, press  button on remote controller, will hear of a voice of “Bee” shortly, and indicators will be off;

3. Put projector’s remote controller opposite to visual presenter’s infrared receiver window, press “**Power**” button, and

will hear of a short voice “Bee” (if some projectors need 2 seconds to turn on, users need to press remote controller more than 2 seconds to decode.),and indicator will be on;

4. Decode projector’s off: Put projector’s remote controller oppoiste to visual presenter’s infrared receiver window, press  button, and will hear of a short voice “Bee”, indicator will be off. Put projector’s remote controller opposite to infrared receiver window, press “Off”, and will hear of a short “Bee”, indicator will be on;

5.Decode projector’s other functions, visual presenter provides with 3 functions,namely    detailed operations are the same as step 2, step3;


6. After operation, turn off power, infrared decoding has been finished sucessfully.

**Warmly Suggest:**To prevent from interference, please try the best to use RS-232 controlling projector, don’t use infrared remote controller, to make precEDURE more steady.

●Infrared Decoding Usage:

Note: Please put infrared shooting head close to receiver’s window.

●Digital DVD and other equipments with RGB output ‘s control:

When DVD’s RGB connects with visual presenter’s “RGB-IN”, press  button repeatedly into state of “RGB-IN”, can press the button to control DVD (Detailed operation please

refer to DVD's manual) .

## ☆Daily Maintenance and attention:

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1. Pls don't turn on/off power frequently, in order not to shorten using time of CCD Camera.

2. Lamps should not get on/off frequently and suddenly, in order to lengthen their lifetime.

3. Don't make CCD opposite to strong light, such as sunlight or sun.

4. Pls turn off power when users intend to move it, and pull plug out , let the pole down to move, and don't lift the pole or assistant lamp arms to move.

5. Pls don't rotate assistant lamps horizontally.

6. Press left/right lamps down without heavy strength.

7. Attention to get out of wetness when it is in wet condition, if user has found that it can not focus clearly, don't touch CCD by hand, use special paper to clean. If necessary, pls turn down CCD 's short-sighted lens to make clearance.

8. Pls pull out power plug when long time unused, and cover with cloth or plastic things.

9. The valid time is 8 years, if for lasting time, pls send visual presenter to after-sale service or repaired center for checking.



## ☆Problems and Solutions:

Problems	Analysis and solution
No image no sound	Check power cable, connect again
	Press power in to electricity
	Audio cable or RGB cable connected in wrong way, pls connect again.
	Input/output connect correctly or not.
	CCD cover has not been taken off.
Image is not clear	Distance between things and CCD is too close, so can not focus normally, to adjust and make it more than 330mm.
	Surface of things are too brilliant or reflects, adjust light to darker
	CCD is dirty. Pls clean CCD or short-sighted lens underside
Noise-wave is exist	There is noise-wave when enlarging image in extremely dark environment. Pls turn on assistant lamps
Image is too dark	Pls turn on assistant lamps
	Pls adjust brightness, increase brightness
Buttons on panel are invalid	Press two buttons synchronically or press too slowly, visualiser will be no reply. One time one button, make interval time longer when pressing two buttons
Remote controller no response	Confirm there is no other things between visualiser and remote controller to effect
	Confirm distance between visual presenter and remote controller is within 30M
	Pls check battery fine and in correct connection or used out yet
Micropho ne no sound	Check audio cable is good and correct or not
	Check microphone work well or not
	Check volume of microphone is the lowest or not

## ☆Technique Specification:

Optical	CCD	F1.6(W)~F3.7(T),f=3.9~85.8mm
	Shooting Area	357×280 mm
	zoom	≥16 Optical、 ≥8 Digital
	Focus	Auto/manual
	Aperture	Auto
	Pick-ups	1/3"130W Pixels Color CCD
	TV system	PAL/NTSC color system
	Horrorizontal clarity	≥600TV lines (VGA)
	Signal Noise	≥52dB
	White balance	Auto white balance, manual white balance(red/blue)
	Images	C/W/B, negative/positive, Brightness, mirror image, text, freeze, image stored, comparison, rotate (*), 9 pictures storage
Lightening	Assitant lamp	LED lamp×2
	Baselight	LED lamp
Input selection	RGB switch	visualiser/PC/RGB
Input ports	RGB	D-SUB15 Pin socket
	Audio (stereo)	∅ 3.5 socket (-10dB 10KΩabove)
	Microphone	∅ 6.35 socket (-60dB 600Ω)
	RS-232	D-SUB 9pin socket(multi-functioned)

Output ports	RGB	D-SUB 15 holes socket	
	Compound video	RCA socket (1V±0.2Vp-p 75Ω) (*)	
	audio (stereo)	∅ 3.5 socket (-10dB 10KΩ above)	
	S-Video	Micro DIN 4 socket (*)	
	USB	USB square socket (*)	
	Projector 232	D-SUB 9pin socket	
	Infrared control	D-SUB 9pin socket	
	PC ON/OFF	D-SUB 9pin socket	
	Power output	Projector power(central control function)(*)	
		Screen power(central control function)(*)	
Control modes	Control panel, remote controller, RS-232 control software, USB*		
Environment	Power	12V DC 1.5A	
	Consuming	≤15W	
	Temperature	0℃ ~ 40℃	
Outer size	W×D×H	UNFOLD:550×430×550 mm	
		FOLD:570×430×150 mm	
For selection	<input type="radio"/> USB function		
	<input type="radio"/> central controlling function		
	<input type="radio"/> U Dish		

Note:1.With“\*”symbolize for basic, “○”symbolize for selection.

2.Design and specifications are subjected to change without prior notice.

☆ Attached list:

B95E

	Name	Unit	Quantity
●	Manual booklet	pc	1
●	Control software (disc)	pc	1
●	Remote controller	pc	1
●	Adapter	pc	1
●	Power cable	pc	1
●	VGA cable	pc	1
●	RS-232 multi-functioned cable	pc	1
●	∅ 3.5Audio cable	pc	1
●	Infrared shooting cable	pc	2
●	Projector RS-232 cable	pc	1
●	DB-9 (to projector's RS232 port)	set	1
●	USB cable	pc	1
○	AV cable	pc	1
○	S-port cable	pc	1
○	∅ 3.5-RCA Audio cable	pc	1
○	mouse	pc	1
○	Central control box	pc	1
○	∅ 3.5-∅ 3.5 Audio cable (with central control box)	pc	1
○	RS-232 F/M cable (with central control box)	pc	1
○	DC cable (with central control box)	pc	1

Note: “●”for basic spareparts, “○”for selected spareparts.