

LED PROJECTOR User manual

Introduction

Thanks for using our LED mini-projector!

Our mini-projector is designed for home, entertainment, business or other environmental. In addition to playing the most basic of video images, the ability to play TV (optional) / MP3/MP4/DVB-T (optional) / VGA/Componet, etc., a variety of sources, it is convenience your work and leisure activities.

Item features

The projector integrates high-performance sequential color LED driver and the color sequence LCOS projector engine technology. And friendly user interface to provide you with high reliability and ease of use.

- RGB LED light source and more vivid colors, And color gamut up to 120%
- For data / video display can be adjusted to provide the color balance control
- Highlight the choice of model to adapt to different use of the environment
- Off-axis design let you to be more convenient installation
- Instant off & on, no need waiting for complete cooling
- HDMI input
- Electric Keystone

Important Safety Instructions

1. Please read this user manual before using projector and please keep it for future reference.
2. Do not look directly at the lens during use, strong beam may damage the eyes.
3. Projection failure only by professional service.
4. When the Projector on the working, do not block the lens with any object in order to avoid thermal deformation of the object, damage, or even fire.
5. Do not place the projector unstable car, shelf or table, the projector may fall, causing as serious damage
6. Do not disassemble the projector, the projector is the only place for maintenance of the machine to the right side of the dust cover, remove dust, people can be use a soft brush cleaning
7. When the projector on the work, the heat and odor from the discharge outlet, which is normal is not a product defect.
8. Do not place the projector in any of the following environment
9. Poorly ventilated or confined spaces But please ensure that air circulation around.
10. Excessive heat place , such as the closed car.The place as Humid and dusty smoke ,

to avoid contamination of optical devices.

11. Do not plug the outlet and do not place the projector in a blanket or other soft surface,

12. Do not leave flammable materials near the projector and do not cover with a cloth or other materials projector.

13. Do not trample the projector or the projector placed under any object. It is possible damage the projector and could lead to accidents or personal injury.

14. Do not place liquid on the projector or near by the projector. If the spilled liquid inside of the projector may cause the projector does not work. If the projector has been splashed wet, please turn off the power, then call our service center authorized by the projector to have repair requests.

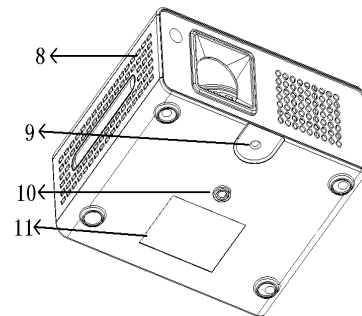
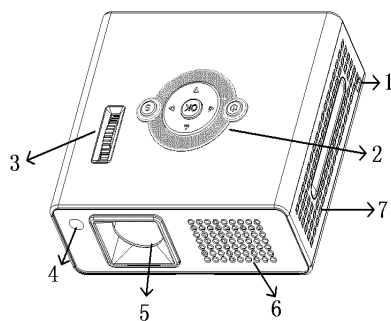
15. This product can be installed on the roof for lifting projection.

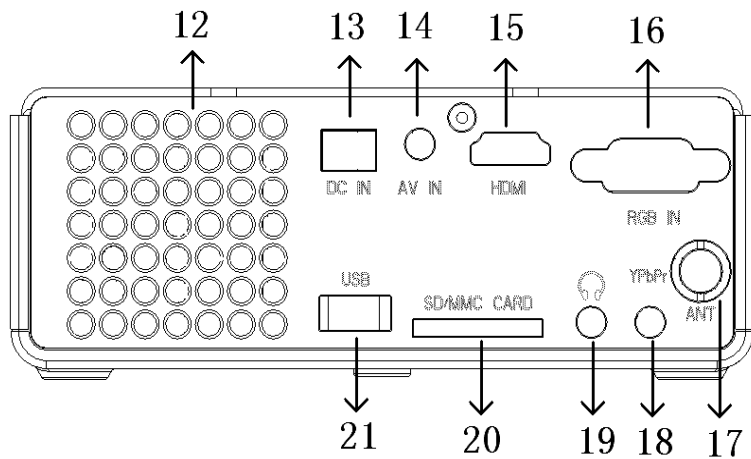
⚠ Warning

Please use the appropriate installation package to install hanging ceiling projector and make sure the projector is installed securely. Do not moving the projector when the projector in using. To extend the life of the projector, we recommended continuous use less than 4 hours.

When you Installation of equipment in the fixed wiring to add ready-made power plant, or equipment, the power plug to the socket near the ease of use; If the device fails during operation, Pls off the power or unplug it.

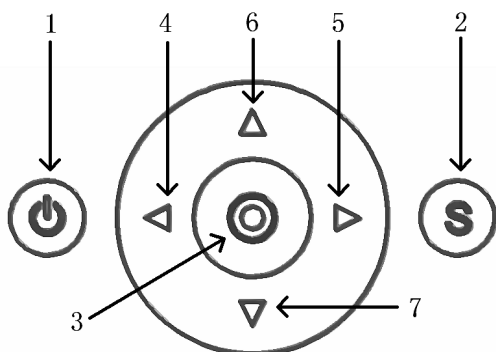
Projector exterior view





1: Safety lock	2: Panel Botton
3: Focus	4: Infrared receive window
5: Lens	6: Air Outlet
7: Speaker	8: Speaker
9: Projector Leg	10: Installation Hole
11: Name Plate	12: Air Input
13: DC IN	14: Audio Input
15: HDMI Input	16: VGA Input
17: ANT(TV) Input	18: Componet Input
19: Headphone	20: SDCard Reader
21: USB	

Panel Instructions



1: Power; 2: Source; 3: Multi-function Key----If it is no-multimedia, the middlekey is MENU, the left/right key is V+/V-, the UP/DOWN is P+/P-, SOURCE is source switch key (If enter the MENU, the SOURCE is exit menu); If it is multimedia, press and hold on the MENU key is enter menu, press and hold on the left/right key is V+/V-, the UP/DOWN is P+/P- (If enter the MENU, the SOURCE is exit menu), shout press the

middle key is OK key, short press the UP/DOWN/Left/Right key is move and select key, short press the SOURCE key is paust; 4-7: Four Direction Key

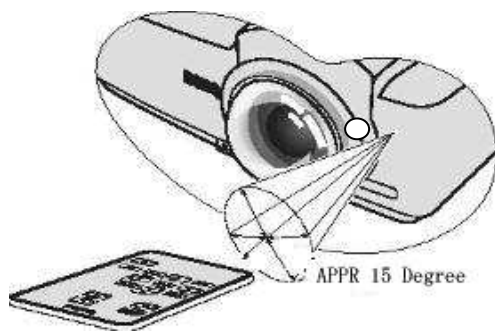
Remote Instructions



	Mute		UP
	Power		DOWN
	Photo Broad Cast		Left
	Video Broad Cast		Right
	Audio Broad Cast	0-10	TV0-9
Source	Source Select	-/--	Tv digit Swtich
MENU	Menu		Previous
F1	Projection Mode Select		Pause
F2	16:9/4:3		Stop
EXIT	Exit	VOL+	
OK	OK	VOL-	

Infrared remote control sensor is located in front projectors. When you Hold the remote control, you must be with the projector's infrared remote sensor to maintain the vertical angle of 30 degrees or less to normal function; Remote control and the distance between the sensor must not exceed 8 meters (26 feet). Remote control and infrared sensor on the projector can be made between any obstructions will block the infrared beam.

It shoube no block between the remote and infrared recive window.



Insert the battery to the Remote

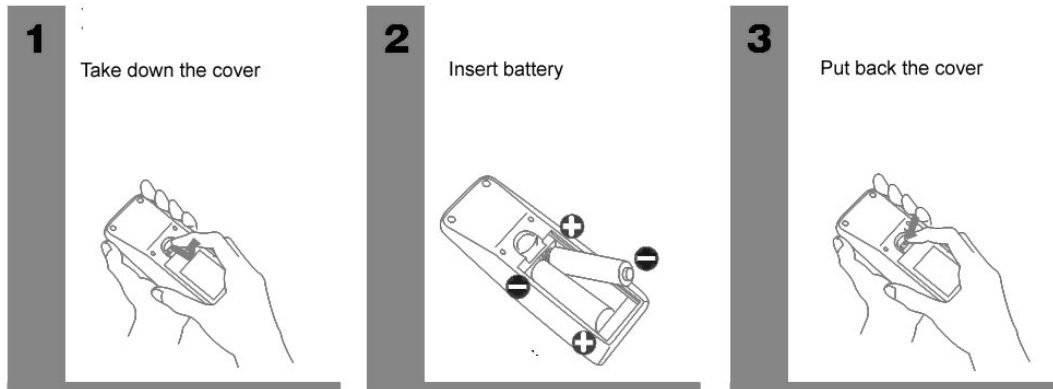
You should insert two seven batteries before using the remote.

- Please use the alkaline battery only.

How to insert the battery to the remote

1. Take down the battery cover from the remote back.
 - If there is old battery, please take it out.
2. Put the battery in, be sure that the positive pole and negative pole is correct.
3. Put the battery cover back.

Please refer to below pictures:



Select location for projector install

You can decide which installation configuration as your room layout or personal preference. To consider screen size and position, the right location of electrical outlets, as well as the location and distance between projectors and other equipment etc factors. Projector can be expressed in the following four types of installation configuration for installation

1.Front Project on Table

Select this position, the projector is located in front of the screen. This is the most common place way of the projector, install quickly and have the mobility

2.Hanging Front Project

Select the location, the projector hanging upside down on the ceiling in front of the screen. Please buy projector ceiling mounting kit from reseller to hang the projector installed in the ceiling. Open the projector, select the F1 and F2 combination of remote control operation to achieve the normal screen

3.Back Project on Table

Select this location , the projector is located behind the screen.

Please note, when back projector, you need a dedicated projection screen.

Open the projector, select the F1 and F2 combination of remote control operation to achieve the normal screen.

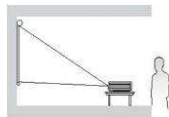
4.Hanging Back project

Select this position, the projector hanging upside down on the ceiling behind the screen.

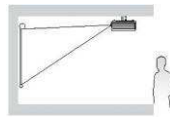
Please note that this installation position requires a dedicated projection screen and projector ceiling mount kit suspension

Open the projector, select the F1 and F2 combination of remote control operation to

achieve the normal screen



Hanging Front Project



Hanging Front Project

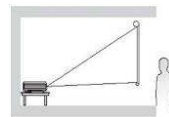
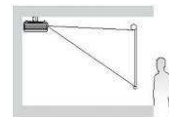


Table Front Project



Hanging back Project

Get the size of projected image

Projector lens to screen distance, zoom setting (if any) and video formats will affect the projected image size.

4:3 is a natural aspect ratio of the projector. In order to complete projection 16:9 (wide screen) aspect ratio images, the projector can re-set the size and wide-screen image to adjust to the optimum width ratio of the projector. This causes the image scaled down to the best projection height of the projector 75%

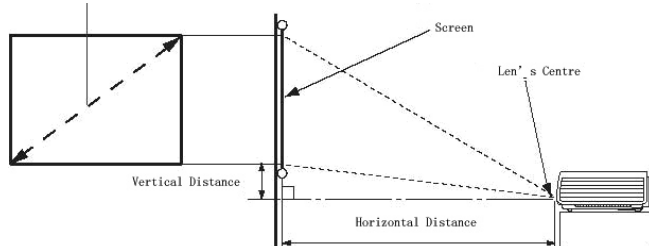


When the projector farther away from the screen, projected image is larger, the vertical offset will also increase accordingly.

In determining the location of the screen and projector, you need to take into account the projected image size and the size of the vertical offset, which is proportional to the distance projection.

Here to provide you with a 4:3 aspect ratio screen size tables to help you determine the ideal position of the projector. There are two dimensions to consider, one is horizontal and the vertical distance from center of the screen (projection distance), the other is the level of the projector and the screen height of the edge of the vertical offset (shift).

4:3 Diagonal screen size



As the optical components of the differences, in these figures in tolerance. Recommended, if you want to fixed installation projector in a place, first to use this projector for the actual test, to confirm the size and distance of projection and with reference to their optical properties to do installation. This will help you find the most suitable installation location.

4:3Screen size (Unit: inch)	Projection distance (unit: m)
20	0.81±0.05

30	1.24±0.05
40	1.65±0.05
50	2.08±0.05
60	2.49±0.05
70	2.89±0.05
80	3.29±0.05
100	4.14±0.05
120	4.94±0.05

The figures are for information purposes only, please measure shall prevail in kind

Connections

When connecting the signal source to the projector, please confirm:

1. To shut down all equipment before making any connections.
2. To each signal source to use the correct signal cables.
3. To ensure the cable is firmly inserted.

Connection shown in the following, some cables may not be included in this projector package, Please refer to part ("lists"). Electrical store you can buy the cable you need.

Connect computer

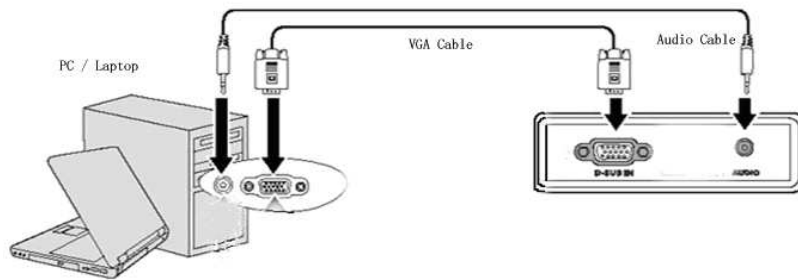
Projector has a VGA input jack for connecting IBM ® compatible or Macintosh ® computer.

Connect the projector to the laptop or desktop computer:

1. Using the included VGA cable, the 15-pin male end connect to the computer D-Sub output jacks.
2. The other end of the VGA cable to connect to the projector's VGA input jack.
3. If you want to use the projector during the presentation (mono) speaker, the appropriate audio cable to connect to the device's audio output jack, the other end connected to the projector AV IN jack.

When Connection is completed, use the (OSD) menu to control the audio. For details, see "Operating Instructions."

The final connection path should be as shown below:



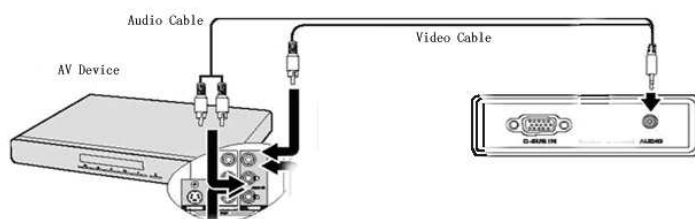
Many laptop connected to the projector does not turn on their external video port. Typically, according to the key combination [FN] + [F3] or CRT / LCD button to turn on / off external monitor. Found on the notebook labeled CRT / LCD display with function keys or function key symbol. Then while pressing [FN] and labeled function keys. Please refer to the notebook computer's documentation to find the combination of key features. Please set the resolution of the computer to 1024*768 to get best performance.

Connect AV equipment

Connect the projector to a composite video signal source equipment:

1. One end of the video cable to connect to the video signal source equipment, composite video output jack.
2. The other end of the video cable to connect to the VIDEO jack on the projector.
3. If you want the demo to use the projector (mixed mono) speaker, set the appropriate audio cable to connect to the device's audio output jack, the other end connected to the projector's AUDIO jack. When connection is completed, use the (OSD) menu to control the audio. For more information, see "Operating Instructions."

The final connection path should be as shown below:



- This projector can only play mixed mono audio, stereo audio input signal even if the connection is also true. For details, see "Connecting the audio."
- After the projector open and select the correct video source, if the selected video image does not appear, please check video source device is turned on and correctly. Needs to check the signal cable is properly connected.

Connect TV

The TV signal using a standard RF cable to connect to this machine ANT input. For more information, see "Operating Instructions.

Instructions

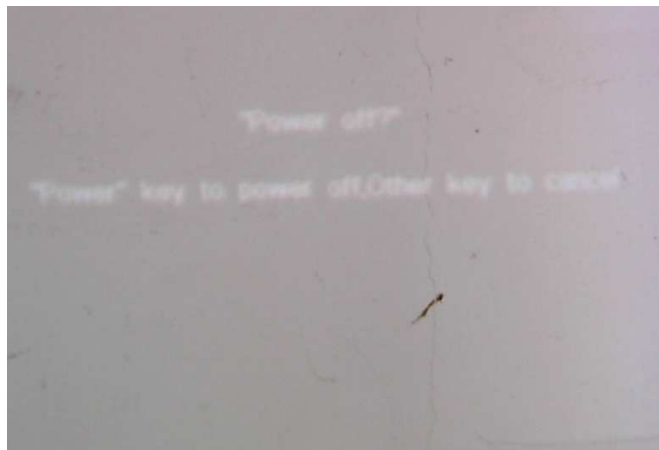
1. Turn on the projector

The projector comes with a power adapter required to connect to the DC IN socket on the projector, then indicator will be flashed quickly;

- ① Press the [⏻] on the remote or projector to turn on the projector.
- ② Press the [Source] on the projector or remote to select the signal source (move the direction keys to select TV/AV/Componet/Multimedia/VGA/HDMI you need).
- ③ Adjust the screen clear by use the focus knob.

2. Turn off the projector

Press the [⏻] on the projector or remote one time, displays like below:



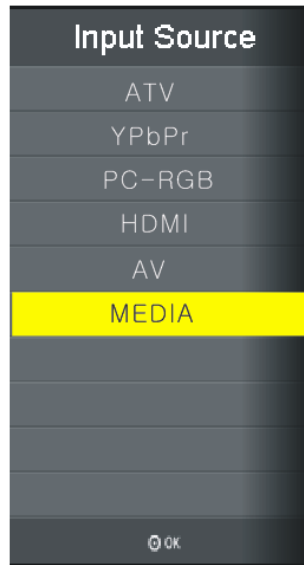
Press the [⏻] again to turn off the projector, press any other key or press no key, return to previous state.

3. Remote menu operation

⚠ If the cursor move to one option(the option is grey), it indicates that the option can notbe adjusted!

1. Input Source Select

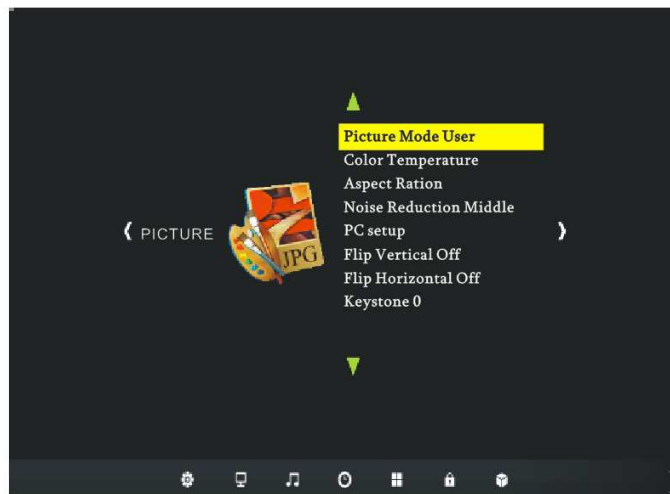
A: Press 【Source】, display like below:



B: Move **【▲】【▼】** to the source you need, press **【OK】** to confirm.

2. Picture

A: Press **【MENU】**, display like below:



B: Move the **【▲】【▼】** to the sub-menu, press **【OK】** to enter. By using the **【▲】【▼】** **【◀】【▶】** to adjust.

a:Picture Moce This option included: User (you can adjust the contrast ratio, brightness, RGB, sharpness, tone is valid when the input singlar is NTSC), dynamic, standard, Mild.

b:Color Temperature This option included: User (You can adjust the RGB figure under this state), cool , medium, warm.

c:Aspect Ratio This option included: auto, 4:3, 16:9, zoom 1-5.

d:Noise Reduction This option included: OFF, low, middle, high.

e:PC Setup This option included (the option is valid when the input singlar is VGA): auto Adjust, Vertical Pos., Horizontal Pos., size, phase.

f:Flip Vertical This option included: ON, OFF.

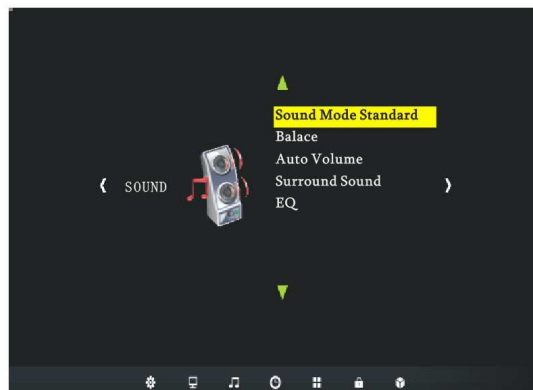
g:Flip Horizontal This option included: ON, OFF.

h:Keystone The range of the keystone is from-30⁰ to +30⁰.

C:Under Sub-menu state, press **【MENU】**, return to up menu; press **【EXIT】** to exit.

3. Sound

A:Press **【MENU】**, then press **【▶】** one time, display like below:



B: Move the **【▲】【▼】** to the sub-menu, press **【OK】** to enter。 By using the **【▲】【▼】** **【◀】【▶】** to adjust。

a:Sound Mode This option included: user (you can adjust the high or low pitch under this state), standard, music, movie, sports。

b:Balance The range of this option is from -50° to 50° 。

c:Auto Volume This option include ON, OFF。

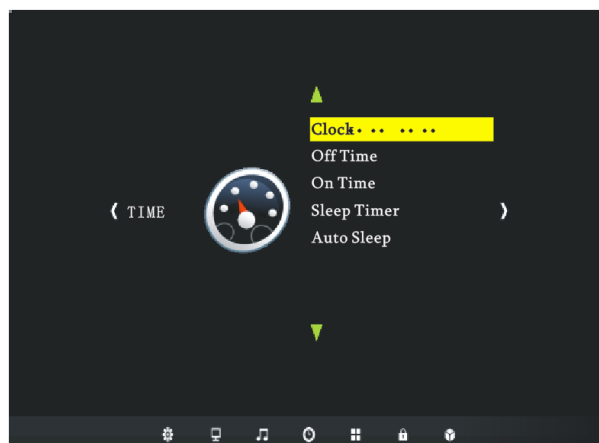
d:Surround Sound This option included ON, OFF。

e:EQ This option included: 120HZ, 500HZ, 1.5KHZ, 5KHZ, 10KHZ

C: Under Sub-menu state, press **【MENU】**, return to up menu; press **【EXIT】** to exit.

4.Time

A:Press the MENU, then press **【▶】** twice, display like below:



B: Move the **【▲】【▼】** to the sub-menu, press **【OK】** to enter。 By using the **【▲】【▼】** **【◀】【▶】** to adjust。

a:Clock You can set the system clock, setting included: day, month, year, hour, minute。

b:Off Time When the option ON, you can set the off time every day/Monday to Friday/Monday to Saturday/Sunday。 When the option is OFF, there is no off time setting。

c:On Time When the option ON, you can set the off time every day/Monday to Friday/Monday to Saturday/Sunday。 When the option is OFF, there is no off time setting。

d:Sleep Timer When the option is ON you can set power off the projector auto, you can set: 10minutes, 20 minutes, 30 minutes, 60 minutes, 90 minutes, 120 minutes, 180

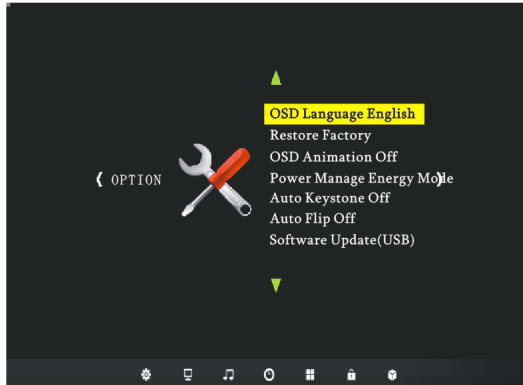
minutes, 240 minutes. When the option is OFF, there is no time task.

e:Auto Sleep This option included ON, OFF.

C: Under Sub-menu state, press **【MENU】**, return to up menu; press **【EXIT】** to exit.

5. Setting

A:Press **【MENU】** 键, press **【▶】** three times, display like below:



B: Move the **【▲】【▼】** to the sub-menu, press **【OK】** to enter. By using the **【▲】【▼】** **【◀】【▶】** to adjust.

a:OSD Language This option included: Chinese_Sim, Slovak, Croatian, Serbian, Bulgarian, Romanian, Russian, Czech, Slovene, Hungarian, Polish, Finnish, Norwegian, Greek, Danish, Swedish, Dutch, Portuguese, Italian, Spanish, German, French, English.

b:Restore Factory Default: You can use the factory reset when your set is improper or the procedure run wrong.

c:OSD Animation: This option included the modes of the menu display .

d:Power Manage: This option included: standard mode, KTV mode, Demo mode, Cinema mode, Energy mode, user mode.

e:Auto Keystone This option included ON, OFF.

f:Auto Flip This option included ON, OFF.

g:Software Update (USB)) This option can update the software by USB(You can update the software by USB).

C: Under Sub-menu state, press **【MENU】**, return to up menu; press **【EXIT】** to exit.

四. Shourcut Key Instructions

1. Mute Press the to close the volume, press the to resume.
2. Photo Broad Cast Press the , set the input source to multimedia and read the picture of the USB, and play them by film slide.
3. Video Broad Cast Press the , set the input source to multimedia and read the picture of the USB, and play the first video file.
4. Audio Broad Cast Press the , set the input source to multimedia and read the picture of the USB, and play the first audio file.
5. play/puase/stop is valid when play multimedia under multimedia input.
6. F1 Projection Mode Selection, it has four projection mode:



- Mode 1 —Applied to front projection
- Mode 2 —Applied to ceiling front projection
- Mode 3 —Applied to ceiling back projection
- Mode 4 —Applied to back projection

五. Multimedia

Supported Formats:

MPEG-2 Video MP@HL (1080i、720p、SDTV)

MPEG-4 ASP Video decoding (1080P@30fps)

RM/RMVB(支持 RV8,RV9,RV10,RA8-LBR 和 HE-AAC,Max1080P@30fps)

MPG . MPEG .DAT . AVI . MOV . MP4 .VOB

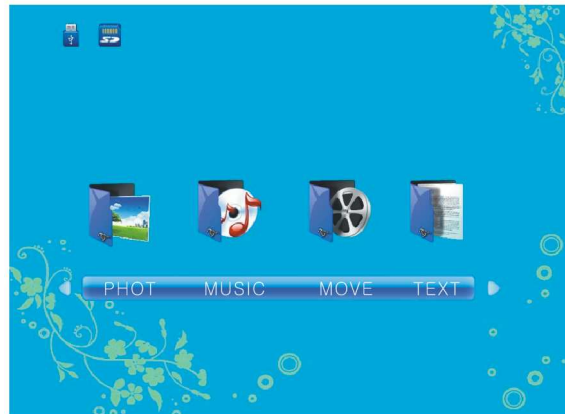
Supported Photo Formats: JPG .BMP .PNG .GIF .TIFF

Supported Video Formats: MPEG-1. MPEG-2(Layer I / II).MP3. AAC-LC .WMA

Supported Text Formats: TXT

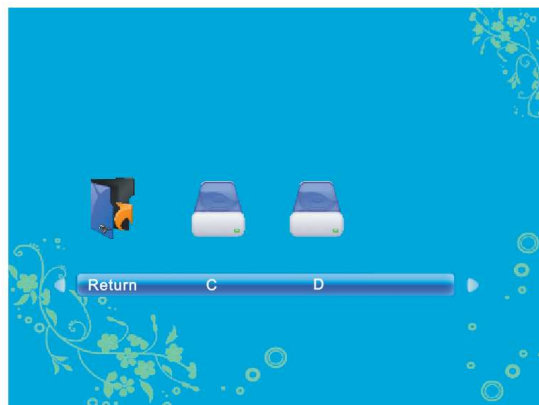
Supported Card Formats: SD . MMC

Power on the projector, switch to multimedia input, display like below:



Insert the flash memory or SD/MMC card to the according interfaces.

Press 【◀】 or 【▶】 to move, select the file, press 【OK】 to confirm, display like below:



Press 【◀】 or 【▶】 to move, select the file, press 【OK】 to confirm, display like below



Press **▲****▼****◀****▶** to move cursor, select the file, press **OK** to confirm (single selection/multiple selection, selected file marked ✓), press **▶||** to play.press **■** to stop. Under Multimedia, press **OK** display options, total two layers, press **◀****▶** to select:

the indications are under below:

	playlist;		file info;		slow play;
	pause;		frame by frame play;		optional time play;
	zoom in;		zoom out;		picture scale;
	picture move;		channel se;		
	fast backward ;		fast forward;		previous;
	next;		stop;		
	section set play;				

Under Sub-menu state, press **MENU**, return to up menu; press **EXIT** to exit.

DVB-T program playing(Optional)

In DVB-T, **MENU** is the menu, **search** is the search, other operations refer to TV operations.

Information in this document is subject to change without notice.

Maintenance

The projector need maintain. You should do maintenance regular to keep the lens clean.Do not disassemble any part of the projector(expect the detachable plate)

Lens Clean

You can clean the lens when you find dust or dirty on the lens.

- Use the compressed air tank to clean the dust.
- If there is dust or dirty on the clean, use the special lens paper or wet soft cloth with cleanser to wipe the lens gently.

Projector Box Clean

Be sure that the power is off before cleaning the box.

- Please use the soft, lint free cloth to clean the box.
- Please use the water or neutral cleanser to clear the cloth
- Do not use paraffin, alcohol, diluent or other chemical cleanser to clean the box.

Projector Storage

If you want to store the projector long term, please refer to below instructions:

- Be sure that the temperature and humidity is under the range of the recommended range. Withdraw the machine leg.
- Remove the battery of the remote.
- Use the initial or equivalent package to pack the projector.

Projector Transportation

Use the initial or equivalent package to transport the projector.

Troubleshootings

Projector can not power on

Reason	Solutions
Power cable without electrical loading	Insert one side of the cable to the adaptor, the other side to the socket. Be sure the switch of the socket is on.
Projector without electrical loading	Insert the DC port of the adaptor to the DC-IN of the projector

No image

Reason	Solutions
Video sources does not power on or connect wrong	Power on the video sources and inspect the connection.
Projector does not connect with input signals correctly.	Inspect the connection
Select wrong input signal	Press the M on the projector or SOURCE on the remote to select the input signal.

Image Blurring

Reason	Solutions
Projector lens does not focus correctly	Use the focus to adjust
Projector does not aim the screen	Adjust the angle and direction, or height if necessary.

Remote failure

Reason	Solutions
Battery runs low	Replace battery
Barrier between remote and	Remove barrier

projector	
Distance too long	The distance do not exceed 8m(26 feet)

Compatibility PC Mode

Resolution	Mode	Refresh Rate (Hz)	H.Frequency(kHz)	Clock(MHz)
640 x 480	VGA_60	59.940	31.469	25.175
	VGA_72	72.809	37.861	31.500
	VGA_75	75.000	37.500	31.500
800 x 600	SVGA_60	60.317	37.879	40.000
	SVGA_72	72.188	48.077	50.000
	SVGA_75	75.000	46.875	49.500
1024 x 768	XGA_60	60.004	48.363	65.000
	XGA_70	70.069	56.476	75.000
	XGA_75	75.029	60.023	78.750

Compatibility Video Mode

Video Mode	H.Frequency(kHz)	V.Frequency(Hz)	Chrominance Subcarrier(MHz)
NTSC	15.73	60	3.58
PAL	15.63	50	4.43
SECAM	15.63	50	4.25 or 4.41
PAL-M	15.73	60	3.58
PAL-N	15.63	50	3.58
PAL-60	15.73	60	4.43
NTSC4.43	15.73	60	4.43

Limited warranty

In normal use and storage conditions, the Company of any of the product defects in material and workmanship warranty.

When asked to provide valid warranty warranty card and valid invoice. Discovered during the warranty period if the product is defective, the sole obligation of the Company and for your exclusive remedy is to replace any defective parts (including labor costs). When you purchase the products should immediately notify the dealer of any defects to obtain warranty service.

Important:

If the customer fails to LED projector written instructions to use the product, the warranty will not apply. Especially the ambient humidity must be between 10% and 90%, and the temperature between 0 °C and 35 °C, between less than 2000 meters above sea level, and to avoid dusty environment in the operation of the projector. This warranty gives you specific legal rights, and you may also have other rights, depending on the area you purchase.