PRJAND805

Android 4.0, 3D, Multimedia Stereo Mini Projector with Wi-Fi

User's Manual

Please read this manual carefully before operating your projector

Catalog

Licences 1

Safety Instructions 2

Preparations 7

Accessories 7
Opitional Extras 8
Parts and Components 9
Installation 10
- Installation Precautions 10
- Projection Distance per Screen Size 11
- How to Install the Projector Using a Tripod 12

Remote control 13

Using the projector 15

Watching projector 15
- Turning on the projector 15
- Focus and Position of the Screen Image 15
- Watching projector 15

Using Additional Options 16
- Adjusting Aspect Ratio 16
- Using the Keystone Function 17
- Using the Input List 17

ENTERTAINMENT 18

MEDIA 18
- Connecting USB Storage Devices 18
- Movie list 20
- Photo list 24
- Music list 25
- File list 26

3D FUNCTION 28

Before Watching 3D 28
- While Watching 3D 28

Requirements for Watching 3D Images 29
- To Use DLP-LINK (DLP-Ready) Type Glasses 30

Watching 3D Images 32

Customizing Settings 33

'' SET UP'' Menu 33
Picture settings 34
Sound Settings 36
Time Settings 37
Opitions settings 39

Making Connections 40

Connecting to an HD Receiver, DVD, or VCR Player 41
- HDMI Connection 41

Connecting to a PC 41
- RGB connection 41

Connecting to the AV input 42
- Component Connection 43

Connecting to headphone 43

Andriod 44

Andriod specifications 44
How to use Andriod 44
- Entering WIFI Home Page 44
- Select or flip 44
- My Application 44
- Wi-Fi Settings 45
- Installation and removal procedure 45
- Languages and Inputs 45

Maintenence 46

Cleaning the projector 46
- Cleaning the projector lens 46
- Cleaning the projector Case 46

Specifications 47

Licences

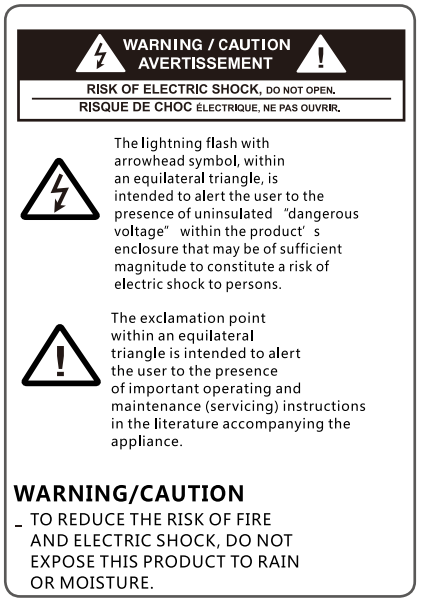
As an A-class product, the projector may cause radio interference
Users shall take effective measures to deal with it.

CAUTION

- Image shown may differ from your projector.
- Your projector’ s OSD (On Screen Display) may differ slightly from that shown in this manual.

SAFETY INSTRUCTIONS

Please take note of the safety instructions to prevent any potential accident or misuse of the projector.



Read these instructions.
Keep these instructions.
Heed all warnings.
Follow all instructions

Indoor installation

⚠ CAUTION

- Do not place the projector in direct sunlight or near heat sources such as radiators, fires, stoves, etc.
  - This may cause a fire.
- Do not place flammable materials such as aerosols near the projector.
  - This may cause a fire.
- Do not allow your children to cling to or climb up to the projector.
  - The projector may fall down and cause personal injury or death.
- Do not place the projector directly on a carpet, rug or place where ventilation is restricted such as a book shelf or closet.
  - This may cause the projector's internal temperature to rise and cause a fire.
- Do not place the projector close to sources of steam or oil such as a humidifier or kitchen counter.
  - This may cause a fire hazard or an electric shock.
- Do not place the projector where it might be exposed to excessive dust.
  - This may cause a fire.

- Do not use the projector in a damp place such as a bathroom where it is likely to get wet.
  - This may cause a fire or an electric shock.
- Do not allow a tablecloth or curtain to block the vents.
  - This may cause the internal temperature of the projector to rise andcause a fire.

  The distance between the projector and the wall should be more than 30 cm for ventilation purposes.
  - Otherwise, this may cause the internal temperature of the projector to rise and cause a fire.

⚠Caution

- When installing the projector on a table, be careful not to place it near the edge.Make sure that you use a stand suitable for the size of projector.
- Turn off the projector, disconnect the power supply and remove all connections before moving the projector.
  - A damaged cord may cause a fire or an electric shock.
- Do not install the projector on an unstable or vibrating surface such as a vibrating shelf or tilted surface.
  - It may fall and cause injury.
  Be careful not to tip the projector over
- When connecting external devices to the projector.
  - This may cause injury to persons or damage to the projector.

Power

⚠ Caution

- The earth wire should be connected.
  - Inappropriate earth grounding may cause damage to the projector or an electric shock when there is an electrical surge.If the projector must be installed at a place where earth grounding is not possible, purchase a circuit breaker and connect the projector to its wall outlet.Do not ground the projector to the gas pipe, water pipe, lightning rod, or telephone line, etc.
  The power plug should be fully inserted into the wall outlet.- Unstable connection may cause a fire.
- Do not place heavy objects on the power cord or place the cord underneath the projector.- This may cause a fire or an electric shock.
- Never touch the power plug with a wet hand.- This may cause an electric shock.
- Do not connect too many devices to the same power extension.
  - Overheating may cause a fire.
- Remove dust or contaminants around power plug pins or wall outlets.
  - This may cause a fire.
- To turn off the main power, remove the power plug, which should be positioned so it is easy to access for operation.

Supported Monitor Display

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640*350	31.468	70.09
720*400	31.469	70.08
640*480	31.469	59.94
800*600	37.879	60.31
1024*768	48.363	60.00 119.99
1152*864	54.348	60.053
1280*800	49.68	60
1360*768	47.712	60.015
1280*1024	63.981	60.020
1400*1050	65.317	59.979
1680*1050	65.3	60

- If an invalid signal is input into the projector, it will not be displayed properly on the screen or a message such as "No Signal" or "Invalid Mode" will be displayed.
- The projector supports the DDC1/2B type as the Plug & Play function (Auto-recognition of PC monitor).
- PC synchronization signal types supported: Separate type synchronization.
  yyIn PC mode, 1280 x 800 is recommended for the best picture quality.

HDMI/DVI-DTV supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720*480	31.469 31.5	59.94 60
720*576	31.25	50
1280*720	37.5 44.96 45	50 59.94 60
1920*1080	33.72 33.75 28.125 26.97 27 33.716 33.75 56.25 67.43 67.5	59.94 60 50 23.97 24 29.976 30.00 50 59.94 60

Component port connecting information

Signal	Component
480i / 576i	o
480p / 576p	o
720p / 1080i	o

SPECIFICATIONS

Resolution (pixel)	1280 (Horizontal) x 800 (Vertical)	
Aspect Ratio	16:10 (Horizontal:Vertical)	
Panel size	0.45 inch	
Projection Distance (video size)	9.5 inch to 10 feet	
Ratio of Upward Projection	100%	
Working Range of Remote	10 feet	
Video Input	NTSC M/PAL-B, D, G, H, I /PAL N/PAL 60/SECAM	
AC-DC Adapter	19 V - - -, 3.7A	
Audio Output	1W + 1W	
Height	1.45 inch (without foot) to 1.57 inch (with foot)	
Width	6.4 inch	
Depth	4.4 inch	
Weight	15.6 oz.	
USB Device	5 V, 0.5 A (Max.)	
Operation Environment	Temperature	
	Operation	32℉-104℉
	Storage	-4℉-140℉
	Relative Humidity	
	Operation	0 % - 80 %
	Storage	0 % - 85 %

⚠ CAUTION

- Hold the plug firmly when unplugging.
  - A broken wire in the cord may cause a fire.
- Ensure the power cord or plug is not damaged, modified, severely bent, twisted, pulled, sandwiched or heated. Do not use a loose wall outlet.
  - This may cause a fire or an electric shock.
- Keep the power cord away from any heating devices.
  - The cord coating may melt and cause an electric shock.
- Place the projector where people will not trip over or tread on the power cord or plug to protect the power cord and plug from any damage.
  - This may cause a fire hazard or an electric shock.
- Do not turn the projector on or off by plugging in the power plug or unplugging it from the wall outlet. (Do not use the power plug as a switch.)
  - This may cause an electric shock or damage to the projector.
- Do not insert a conductor into the other side of the wall outlet while the power plug is inserted into the wall outlet. In addition, do not touch the power plug immediately after it is disconnected from the wall outlet.
  - This may cause an electric shock.
- Use only the official power cord.
  - Otherwise it may cause a fire or an electric shock.

When in Use

⚠ CAUTION

- Do not place anything containing liquid, such as a vase, flowerpot, cup, cosmetics, chemicals, decorations or candles, etc., on top of the projector.
  - Possible fire, electric shock, or falling may cause physical injury.
- In the event that there is a big impact to the projector or the cabinet is damaged, switch it off, unplug it from the wall outlet and contact an authorized service center.
  - Otherwise, this may cause a fire or an electric shock.
- Do not insert pieces of metal such as coins, hairpins or metal debris, nor flammable materials such as paper or matches into the projector.
  - This may cause a fire or an electric shock.
- In the event that liquid or a foreign object falls into the projector, please switch it off and unplug it from the wall outlet and contact an HTP Service Center. Otherwise, this may cause a fire or an electric shock.
- When replacing a battery of the remote control, make sure a child does not swallow the battery. Keep the battery out of reach of children.
  - In the case of a battery being swallowed by a child, please consult adoctor immediately.
- Do not remove any covers except for the lens cap. There is a high risk of electric shock.
- Do not look directly into the lens when the projector is in use. The strong light may damage your eyes.
- When the lamp is on or has just been turned off, avoid touching the air vent or lamp because these will be very hot.
- If there is a gas leak, do not touch the wall outlet. Open the window for ventilation. - A spark may cause a fire or burn.
- Never touch the projector or power cord during thunder or lightning.
  - This may cause an electric shock.
- Do not use the projector near an electronic device which generates a strong magnetic field.
- Store the vinyl envelope used to pack the projector in a safe place away from children.
  - It could cause suffocation if used improperly

- Do not use 3D glasses if you do not watch 3D.
- Do not keep your hand on the projector for a long time when it is running. When you play a game by connecting a game console to a projector, it is recommended that you maintain a distance of more than four times the diagonal length of the screen.
- Make sure that the length of connecting cable is long enough.
- Otherwise, the product may fall causing personal injury or damage to the product.

⚠ CAUTION

- Do not place a heavy object on the projector.
  - It may fall down and cause physical injury.
- Be careful to prevent the lens from heavy impact during transportation.
- Do not touch the lens.
  The lens may be damaged.
- Do not use any sharp tools on the projector such as a knife or hammer, because this may damage the casing.
- In the event that no image appears on the screen, switch the projector off, unplug it from the wall outlet and contact an authorized service center.
  - Otherwise, this may cause a fire or an electric shock.
- Do not drop an object onto the projector or apply heavy pressure to it.
  - This may cause injury to persons or damage to the projector.
- The distance between your eyes and the screen must be around 5 - 7 times the diagonal length of the screen.
  - If you watch the screen at a close distance for a long time, your eye sight may become worse.

CLEAN

⚠ WARNING

Do not spray the projector with water when cleaning. Do not allow water to go into the projector or do not allow it to get wet.
- This may cause a fire or an electric shock.

When there is smoke or a strange smell coming out from the projector or a foreign object falls into the projector, please switch it off and unplug it from the power outlet and contact HTP.
- If not, this may cause a fire or an electric shock.

Use an air spray or soft cloth or cotton swab moistened with a lens cleaning chemical or alcohol to remove dust or stains on the front projection lens.

⚠ CAUTION

Contact your seller or the Service Center once a year to clean the internal parts of the projector.
- If you do not clean the contaminated interior of the projector for a long time, there may be a fire or damage to the projector.

When cleaning plastic parts such as the projector case, unplug the power first and wipe with a soft cloth. Do not spray with water or wipe with a wet cloth. When cleaning the plastic parts, such as the projector case, do not use cleanser, automobile or industrial shiner, abrasive or wax, benzene, alcohol, etc., which can damage the product.
- This can cause fire, electric shock or product damage (deformation, corrosion and damage).

MAINTENANCE

Clean your projector to keep it in optimum condition.

Cleaning the Projector

Cleaning the Lens

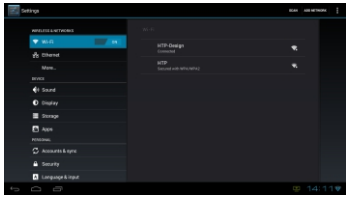
- If there is any dust or staining on the lens surface, you must clean the lens. Use an air spray or a cleaning cloth to clean the lens.
- To remove dust or stains, use an air spray or apply a small amount of cleaning agent onto a swab or soft cloth to lightly rub the lens.
- Please be aware that liquid may flow onto the lens if the product is sprayed directly onto the lens.

Cleaning the Projector Case

- To clean the projector case, first unplug the power cord.
  To remove dust or stains, use only a dry, lint-free, nonabrasive cloth to polish the lens.
- Do not use alcohol, benzene, thinners or other chemicals, which may damage the case.

4 Wi-Fi setting

PRESS SETTING BUTTON TO ENTER INTO WIFI



5 Installation and removal procedure

* setting unknown source

Please use the GOOGLE MARKET program,
If you install none GOOGLE MARKET recognition program, please set the installation of the unknown source at "Settings" - "security":

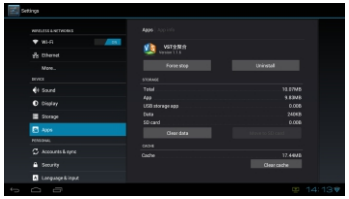
*The installation program

Please download the different application software from the Internet, must use the APK program, download a good program, directly Click Install, you can also from other storage The device Android program (online; Download the program will be displayed in the status bar, or Enter the toolbar Clickto download software, click Install)

*Remove program

Enter the settings - "application", will set up.

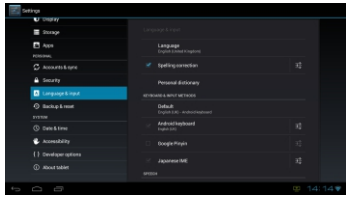
* Click need to delete the software icon, it will delete dialogue interface.



Click on the "uninstall", you can delete the software.

6 Language and Input

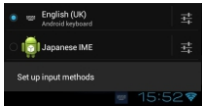
Select the language and common input methodPlease use the "set" - " language and input"



Different users from different countries and regions, select and install his local input method software, and do related settings.

*** Switch the input method**

When you click on any of the input box, you can set your expected input method click on the bottom right of the desktop.State bar of the keyboard label, will immediately appear a variety ofinstalled input methods for your you choice.



OTHERS

⚠ WARNING

- Only a qualified technician can disassemble or modify the projector. For inspection, adjustment, or repair, contact your seller or the Service Center.
  - Otherwise, this may cause a fire or an electric shock.
- Dispose of the used battery properly.
  - Otherwise, this may result in explosion or fire.
- The correct method of disposal may vary depending on your country or region. Dispose of the battery pack according to the appropriate instructions.
- Do not throw or disassemble the battery.
  - Otherwise, this may result in fire or explosion due to damage to the battery.
- Always use batteries approved and certified by LG Electronics.
  - Otherwise, this may result in fire or explosion.
- Store the battery away from metallic objects, such as keys and paper clips.
- Excess current may cause a rapid increase in temperature, resulting in fire or burns.
- Do not store the battery near any heat source, such as a heater.
  - This may result in fire or damage the product.
- Do not store it at temperatures higher than 60 °C or in high humidity.
- Keep the battery out of reach of children.
  - This may result in personal injury or damage to the product.
- Make sure that the battery is installed correctly.
  -Incorrect battery replacement may cause fire.

⚠ CAUTION

Unplug the power cord if the projector is not used for a long period.
- Accumulated dust may cause overheating, an electric shock from corroded insulation and a fire from an electrical surge.

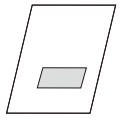
Only use the specified type of battery.
- Otherwise, this may cause an electric shock caused by overheating and leakage.

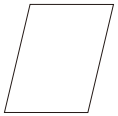
PREPARATION

Accessories

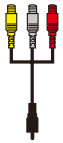
Check enclosed accessories.
The picture may be different from an actual product.

Remote Control


User's Manual


Guaranty Card

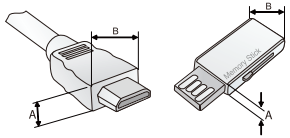
HDMI CABLE


Composite Gender

AC-DC Adaptor

Power cord

When connecting a cable to the HDMI or USB port,
it may not be connected properly if the size of jack to
the USB/HDMI port is too big.
Use a standard sized jack.



A≦10 mm, B≦22 mm

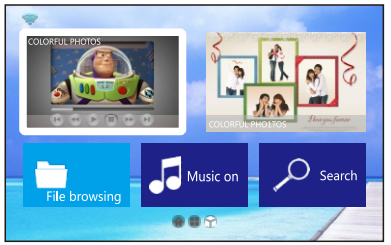
*Only DLP-300W、DLP-600W WITH ANDROID FUNCTION

ANDROID SPECIFICATIONS

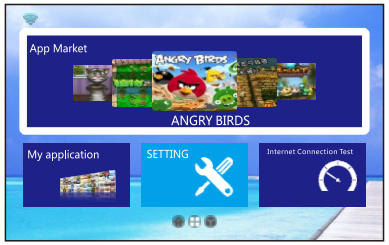
ITEM	DESCRIPTION
CPU	1. 2Ghz
DRAM	512M DDR3
NAND Flash	4G
WIFI	SUPPORT 802. 11 b/g/n
USB	1 piece
USB OTG	1piece
CPU SYSTEM	Android 4. 0
Support video	MPEG4、AVI、RM、RMVB、FLV、WMV、3PG、MP4、TS、DAT、WKV、MOV
Support audio	MP3、WMA、WAV、APE、FLAC、AAC、OGG
Support picture	JPEG、BMP、GIF、PNG
Support Text	PDF、WORD、EXECEL、PPT、TXT
Language	Chinese、English and other more language...

USING ANDROID

1 Using the Android, the signal source, press the S button.
Switch to Android, Android system into the main interface.



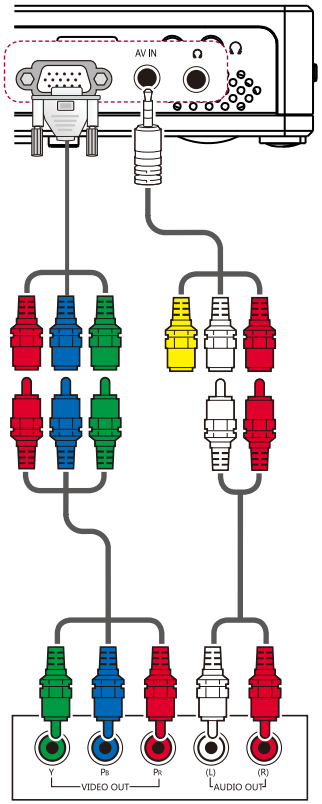
2 Use ◀ or ▶ buttons to select items or flip



3 Click on the "my application", will appear
all the procedure tool icons.

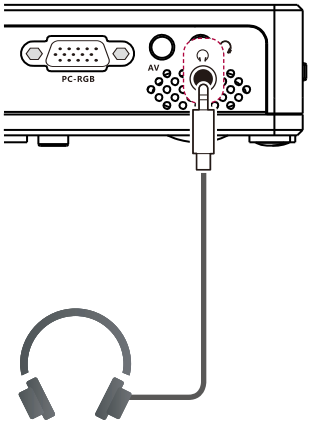
Component Connection

You can enjoy vivid images when you connect an external device with a RGB IN port to the component port of the projector. Press the S button on the remote control to select YPbPr.



Connecting to the Headphones

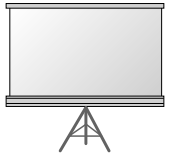
You can listen to the audio through a headphone



OPITIONAL EXTRAS

To purchase optional extras, visit an electronics store or online shopping site or contact the retail store where you purchased the product.

Without prior notice, optional extras are subject to change in order to improve the performance of the product, and new accessories may be added.


Projector screen

Tripod

VGA Cable

Video Cable

Audio CABLE

3D glasses (DLP-LINK or DLPReady Type)

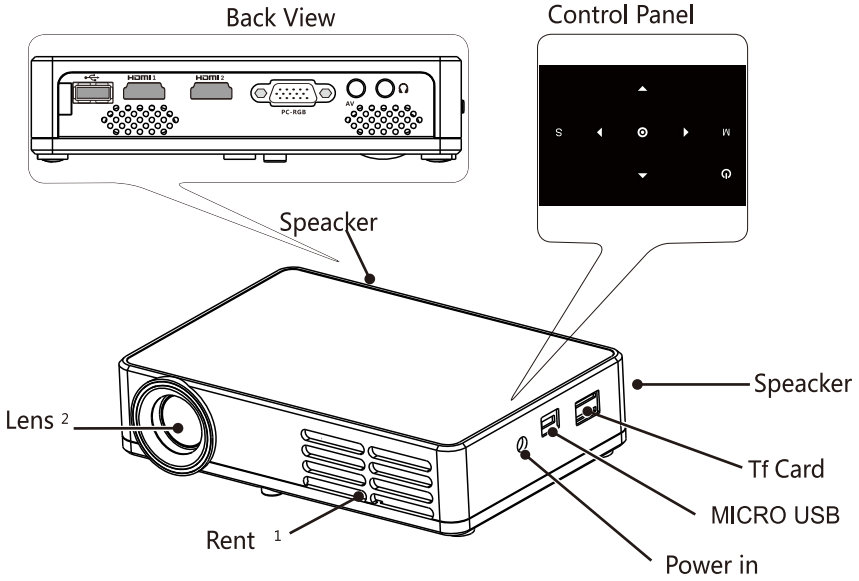
RGB to Component cable

Component Cable

Parts and Components

* The projector is manufactured using high-precision technology. You may, however, see tiny black dots and/or bright colored dots (red, blue or green) that continuously appear on the projector screen. This is a normal result of the manufacturing process and does not indicate a malfunction. When powered on, the LED of the control panel turns on.

* Power system initialization for about 10 seconds, press the red indicator light at the power button to let the power on.



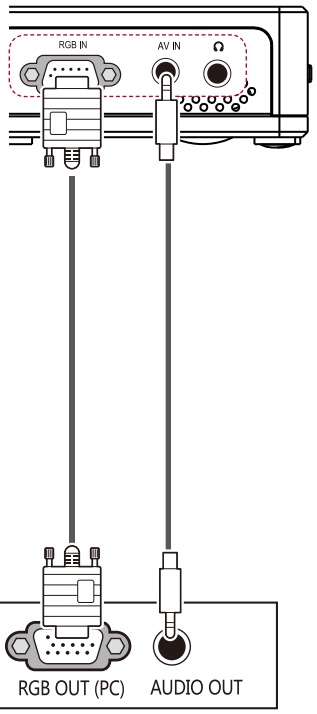
Button	Description
⏻ (Lamp)	Turns the projector on or off.
M (Menu)	Selects or closes menus.
^, v, <, >	Sets the function or moves the cursor
⊙ (OK)	Checks present mode and saves function changes

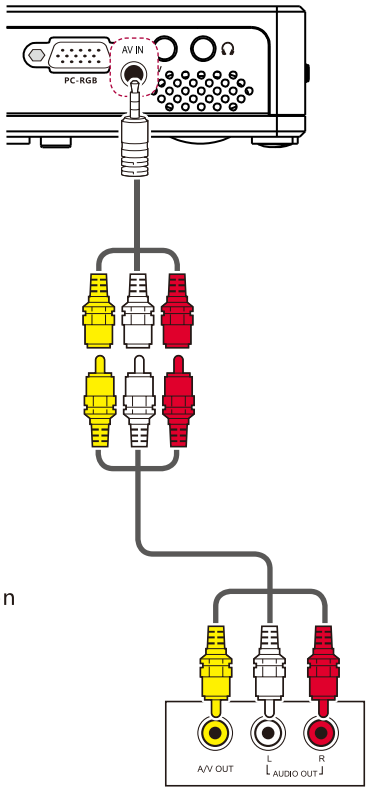
◦

1. Due to the high temperature air coming out of the vents, do not get close to the vents.
2. Do not touch the lens when using the projector. The lens may be damaged.

Connecting to the AV

Connect the output ports of an external device and the AV INPUT port of the projector. Press the **INPUT** button to select **AV**.





You can connect the audio cable without using a gender as shown in the illustration above.

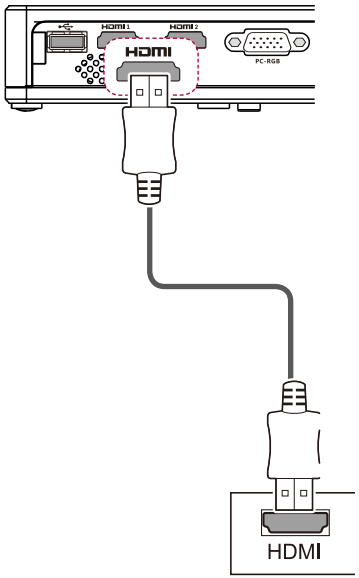
Connecting to an HD Receiver, DVD, or VCR Player

Connect an HD receiver, DVD, or VCR player to the projector and select an appropriate input mode

.

HDMI Connection

With an HDMI cable, you can enjoy high quality picture and sound. Press the INPUT button on the remote control to select HDMI.

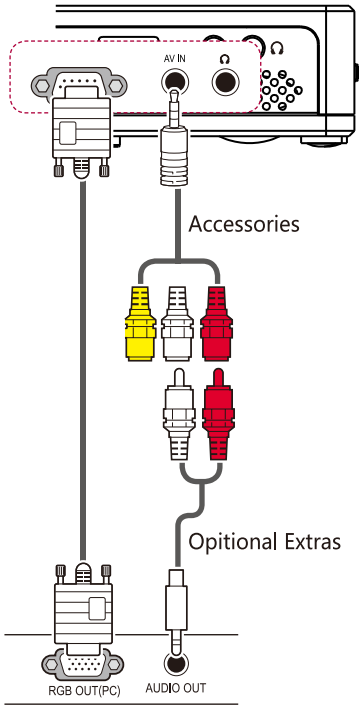


Connecting to a PC

The projector supports Plug & Play.
A PC will automatically recognize the projector and requires no driver to be installed.

RGB Connection

Connect the PC output and the PC video input port of the projector with the RGB cable.
For audio signal, connect the PC and the projector with an optional audio cable.



Installation

Installation Precautions

- Place the projector in a well-ventilated environment.

–To prevent internal heat from building up, install the projector in a wellventilated place.
Do not place anything near the projector as this may block its air vents.
If the air vents are blocked, the internal temperature will increase.
-

–Do not place the projector on a carpet or rug. If a projector model has its inlet vent on its bottom, do not block the vent and use the projector on a leveled solid surface.

– Be sure to prevent foreign objects such as paper debris from entering the projector.

– Leave an adequate distance (30 cm or more) around the projector.

- Do not place the projector in a hot or humid environment.
  - Do not place the projector in a hot, cold, or humid environment. (See56Page regarding operating temperature and humidity.)
- Do not place the projector in a place where it will easily attract dust.
  - This may cause a fire.
- Do not remove any covers except for the lens cap. There is a high risk of electric shock.
- The projector is manufactured using high-precision technology. You may, however, see tiny black dots and/ or bright colored dots (red, blue or green) that continuously appear on the projector screen. This is a normal result of the manufacturing process and does not indicate a malfunction.
- The remote control may not work in an environment where a lamp equipped with electronic ballasts or a three-wavelength fluorescent lamp is installed. Replace the lamp with an internationally standardized lamp for the remote control to work normally.

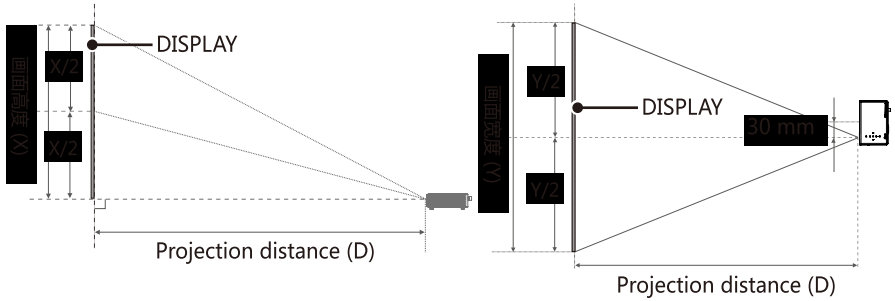
Projection Distance per Screen Size

1 Place the projector on a sturdy, level surface, together with the PC or audio/video source.

2 Place the projector at an appropriate distance from the screen. The distance between the projector and the screen determines the actual size of the image.

3 Position the projector so that the lens is set at a right angle to the screen. If the projector is not set at a right angle, the image on the screen will be tilted and the image quality will be poor. If the screen image is crooked, use the Keystone function. (see page52)

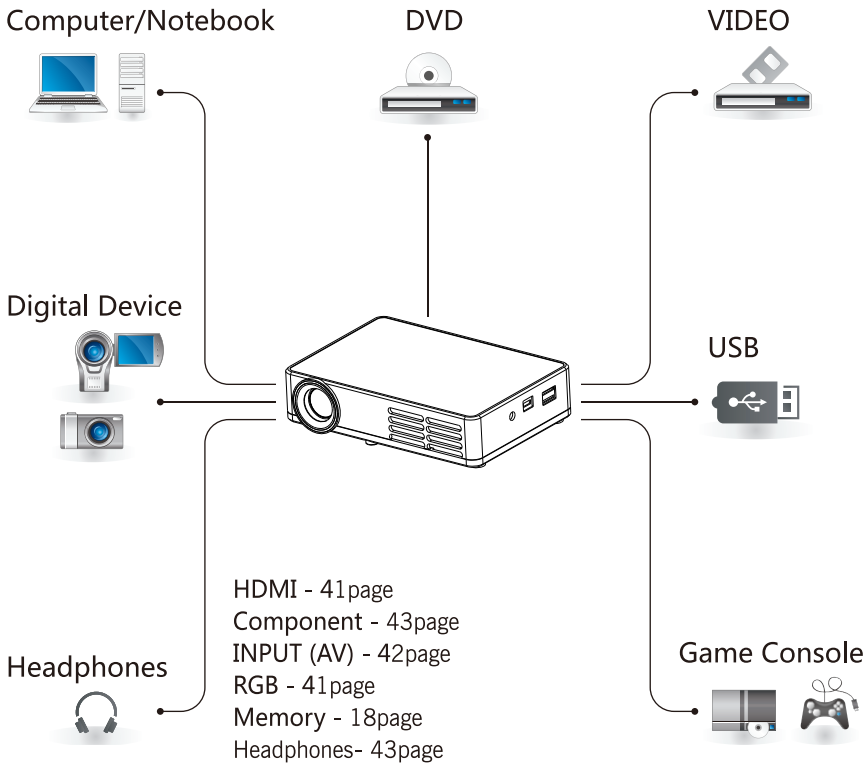
4 Connect the power cords of the projector and the connected devices to the wall outlet.



16:10 Screen			
Screen Size (mm)	Screen Width (Y) (mm)	Screen Height (X) (mm)	Projection Distance (D) (mm)
635/25	538	337	645
762/30	646	404	775
889/35	754	471	904
1016/40	861	539	1033
1143/45	969	606	1132
1270/50	1077	673	1292
1397/55	1185	741	1422
1524/60	1292	808	1550
1651/65	1400	875	1680
1778/70	1508	943	1809
1905/75	1615	1010	1938
2032/80	1723	1077	2067
2159/85	1831	1145	2197
2286/90	1938	1212	2325
2413/95	2046	1279	2476
2540/100	2154	1347	2584

MAKING CONNECTIONS

You can connect various external devices to the ports on the projector.



SETUP Menu

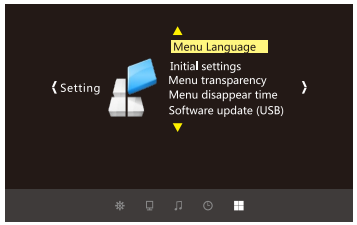
1 Press the Setting button.

2 Use the ◀ or ▶ button to select PICTURE and press the OK button.

3 Use the ▲ or ▼ button to set up a desired item and press the OK button.
-To return to the previous menu, press the MENU button.

4 Use the ◀ or ▶ button to adjust the settings.

5 When you are fi nished, press EXIT.



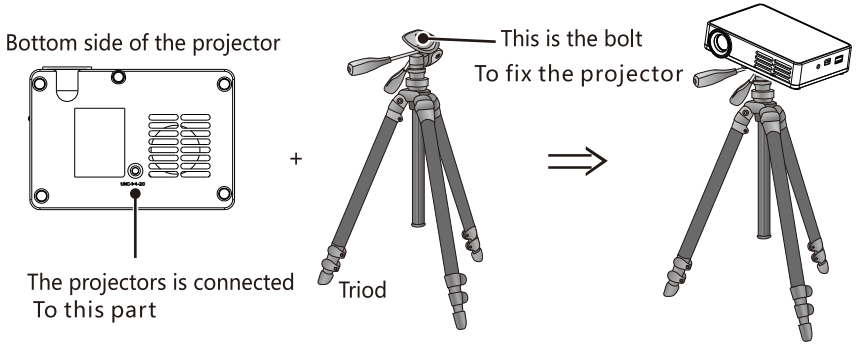
The available option settings are described as follows.

Setting	Description
Language	Selects a desired Menu Language.
Initial settings	Resets all the projector settings to the factory default.
Menu Transparency	Selects menu transparency
Menu disappear time	Selects menu disappear time
Software update(USB)	Projector software update (USB)

How to Install the Projector Using a Tripod

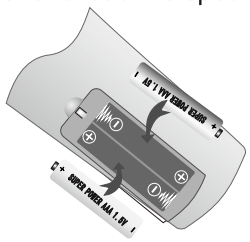
- You can install this projector using a camera tripod.
  As shown below, you can mount the projector instead of a camera on the tripod.

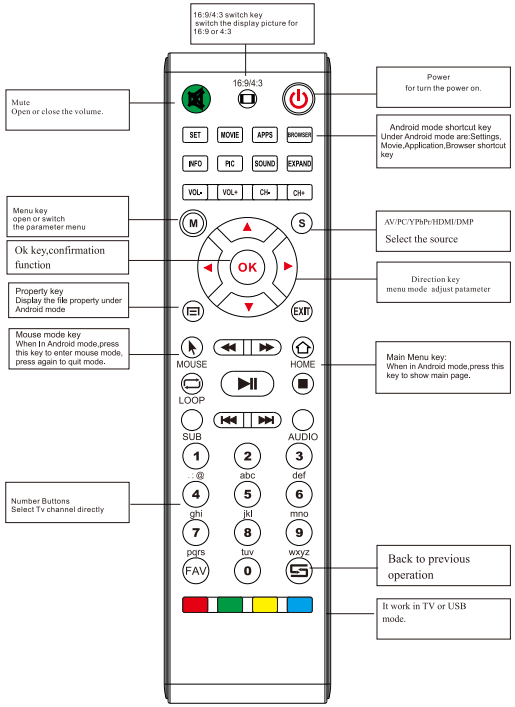
- When stabilizing the tripod, we recommend using the locking bolt of standard size 4.5 mm or less. The maximum size allowed for the locking bolt is 5.5 mm. (If it is longer than the maximum allowed size, it may damage the projector.)



REMOTE CONTROL

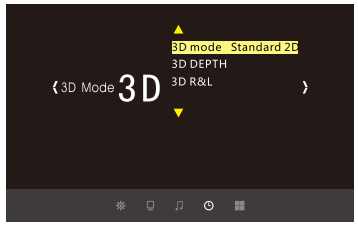
Open the remote control on the back of the battery compartment cover and follow the instructions to load the specified battery ⊕⊖





3D Mode SETTING

1. Press the Setting button.
2. Use the ◀ or ▶ button to select 3D mode
3. Use the ▲ or ▼ button to set up a desired item and press the OK button.
-To return to the previous menu, press the MENU button.
4. Use the ◀or ▶ button to adjust all the settings.
5. When you are fi nished, press EXIT.

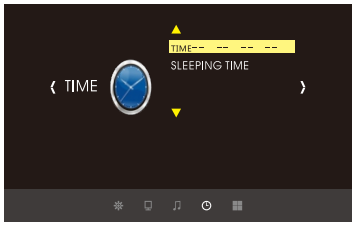


The available settings are described as follows.

Setting	Description	
3D mode	OPITION	
	STANDARD 2D	
	2D to 3D	
	L/R MODE 3D	
	U/D MODE 3D	
3D depth	ADJUST 3D DEPTH -3D DEPTH IS AVAILABLE ONLY WHEN 2D CONVERTING TO 3D	
3D L/R	OPITION	

TIME Settings

1 Press the SETTINGS button.
2 Use the◀ or ▶ button to select TIME
3 Use the ▲ or ▼ button to set up a desired item and press the OK button.
- To return to the previous menu, press the MENU button.
4 Use the◀ or▶ button to adjust the settings.
5 When you are fi nished, press EXIT.



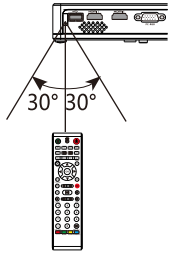
The available time settings are described as follows.

Setting	Description
TIME	ITEM
	DATE
	MONTH
	YEAR
	HOUR
	MINUTE
SLEEP TIMER	The projector is turned off at the preset time.

	Multimedia Mode	Manual channel search	Channel Edit
Red	【Sub Menu】→【Delete】	Save	Delete
Green			Rename
Yellow	【Confirm】Delete		Move
Blue			skip

CAUTION

- When using the remote control, the optimal remote range is less than 3 meters (left/right) and within a 30 degree arc of the IR receiver.
- For seamless operation, do not block the IR receiver.
- When you carry the remote control in the portable bag, make sure that the buttons on the remote control are not pressed by the projector, cables, documents or any other accessories in the bag. Otherwise, it may significantly reduce the battery life.



Using the PROJECTOR

Watching Projector

Turning on the Projector

1 Connect the power cord correctly.

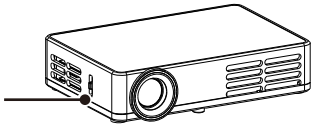
2 After waiting for a moment, press the POWER button on the remote control or the control panel.
(The light on the control panel will be turned on.)

3 In the Language Selection screen, select a language.

4 Select an input signal by using the INPUT button on the remote control.

Focus and Position of the Screen Image

When an image appears on the screen, check if it is in focus and fits the screen properly.



? To adjust the focus of the image, rotate the focus ring.

Watching Projector

1 In Standby mode, press the POWER button to turn the projector on.

2 Press the INPUT button and select the input signal you want.

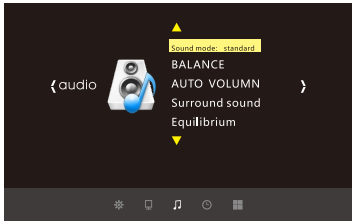
3 Control the projector using the following buttons while watching projector.

Button	Description
VOL -, +	Adjusts the volume leve.
Mute	Mutes all sounds
Munu	Accesses the quick menu. (see page33)
16:9/4:3	Resizes an image.
Keystone	Adjusts Keystone. (see page17)

4 To turn the projector off, press the POWER button.

AUDIO Settings

1 Press the menu button.
2 Use the ◀ or ▶ button to select AUDIO
3 Use the ▲ or ▼ button to set up a desired item and press the OK button.
- To return to the previous menu, press the MENU button.
4. Use the ◀ or ▶ button to adjust the settings.
4 When you are fi nished, press EXIT.



The available audio settings are described as follows.

SETTING	DESCRIPTION	
Sound Mode	Adjusts sound.	
	Option	
	Standard	Select when you want standard-quality sound.
	Music	Select when you listen to music.
	Movie	Select when you watch movies.
	Sports	Select when you watch sports events.
	Customzing	Adjust as per person prefer.
Balance	Adjusts the balance of the left and right speakers.	
Auto Volume	Automatically adjusts the volume level.	
Surround sound	provides 5.1 channel stereo sound from two speakers.	
Equilibrium	Makes the voice from the projector crisp and clear.	
Equilibrium	Option	
	120Hz	120 Hz Frequency regulation
	500Hz	500 Hz Frequency regulation
	1. 5KHz	1.5 KHz Frequency regulation
	5KHz	5 Khz Frequency regulation
	10KHz	10 Khz Frequency regulation

Setting	Description	
Image Noise	Reduce the image noise	
Flip Horizontal	mirror image flip horizontal * It is not available when using auto keystone	
Flip Vertical	mirror image flip vertical * It is not available when using auto keystone	
Keystone Correction	In order to prevent the screen image is in the shape of a trapezoid, width at the top of the projector is not set at the correct angle screen when the trapezoidal correction will adjust the image and the bottom * It is not available when using auto keystone	
Energy Saving	Adjusts brightness	
Auto Keystone	When because the projector tilt and trapezoidal screen image, automatic trapezoidal correction can automatically adjust when because the projector tilt and trapezoidal screen image, automatic trapezoidal correction by automatic adjustment	
	OPTION	
	Open	Automatically adjust the proportion of trapezoidal correction.
	Close	The manual adjustment of trapezoidal correction ratio.
Computer SETTING	AUTO ADJUST	Through the automatic calibration between the projector and a plurality of PC image signal is set inside the disharmony caused by the horizontal width of not matching and image dithering, which provides the best picture quality.
	Line position	L/R button to move image
	Field position	U/D button to move image
	Phase	Do some adjustments with this function

Using Additional Options

Adjusting Aspect Ratio

Resize an image to view at its optional size by pressing RATIO button while you are using the projector.

CAUTION

- Some options may not be available depending on input signals.
- You can also change the image size by pressing MENU→VIDEO →ZOOM MODE

- FULL : Changes to the full screen regardless of the aspect ratio.

- 16:9: Resizes images to fit the screen width.

- 4:3: Resizes images to the 4:3 aspect ratio.

- ZOOM : Enlarges an image to fit the screen width. The top and bottom of the image may be truncated.

CAUTION

- If you enlarge or reduce an image, the image may be distorted.

Using the Keystone Function

To prevent the screen image from becoming trapezoidal, Keystone adjusts the top and bottom width of the image if the projector is not set at a right angle to the screen.

Because the Keystone function may cause inferior screen image quality, use this function only when it is not possible to set up the projector at an optimal angle.

1 Press the Key's ▲ or Key's ▼button to adjust the screen.

-Keystone can be adjusted from -40 to 40.

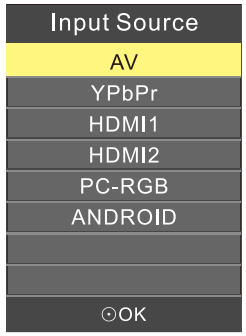
2 Press the **MENU** or **EXIT** button after adjustment

Using the Input List

Using the Input List

1 Press the INPUT or S button to access the input sources.

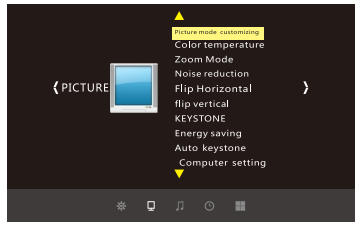
- The connected input mode appears first.



2 Select an input signal using the INPUT OR S button and the projector is switched only to the connected input mode. You can use the OK button to switch into connected input modes.

PICTURE SETTING

1. Press the MENU button.
2. Use the ◄ or ► button to select Picture
3. Use the ▲ or▼ button to set up a desired item and press the OK button.
-To return to the previous menu, press the button.
4. When you are fi nished, press EXIT.



The available picture settings are described as follows.

Setting	Description		
Picture mode	Selects one of the preset images or customizes options in each mode for the best screen performance. You are also able to customize advanced options of each mode.		
	Picture mode		
	Vivid	Maximizes the visual effect of video. Displays a crystal clear picture by enhancing contrast, brightness, and sharpness ●	
	Standard	Has the contrast, brightness and sharpness at normal levels.	
	Soft	Optimizes the image for movie.	
	Expert	Adjusts the detailed image settings.	
		CONTRAST	Increases or decreases the gradient of the video signal.
		BRIGHTNESS	Adjusts the base level of the video signal to make the image brighter or darker.
		COLOR	Adjusts the intensity of all colors.
		Sharpness	Adjusts the level of sharpness in the edge between the light and dark areas of the picture. The lower the level is, the softer the image looks.
		Tint	Adjusts the balance between red and green levels.
Color Tem-Perature	COOL COLOR		
	STANDARD		
	WARM COLOR		
	EXERT	Adjusts the detailed image settings.	
		Red	Adjust the intensity of the red
		Green	Adjust the intensity of the green
		Blue	Adjust the intensity of the blue
Zoom mode	Adjust image' s size (see page 18 about Adjusting Aspect Ratio)		

CUSTOMIZING SETTINGS

SETUP Menu

1 Press the menu button.
2 Use the ◄ or► button to select MENU
3 Use the ▲ or▼ button to set up a desired item and press the OK button.
4. Use the ◄ or► button to adjust the settings.
5. When you are fi nished, press EXIT.

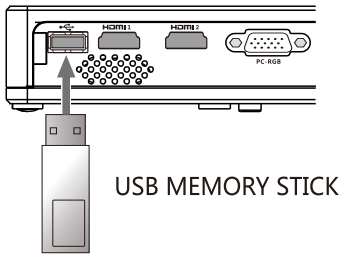
MENU		DESCRIPTION
	PICTURE	Adjusts the image quality for optimal viewing.
	AUDIO	Adjusts the sound quality and volume level.
	TIME	Time-related features.
3D	3D MODE	3D MODEL SETTINGS
	SETTING	Customizes the advanced settings.

ENTERTAINMENT

MEDIA

Connecting USB Storage Devices

Connect a USB memory stick as shown below.
When a USB storage device is connected, the USB adjustment screen appears.
You cannot write or delete data on the USB storage device.



USB MEMORY STICK

To disconnect the USB storage device,

1 Press EXIT OR ■ button to stop playing.

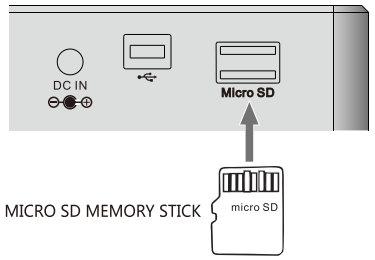
2 Remove the USB device.

CAUTION

- After the USB storage device is disconnected, it cannot be read. Remove the USB storage device and connect it again.
ENTERTAINMENT

Connecting to Micro SD storage device

In the following ways to connect to the Micro SD memory stick.
Connect the USB storage device, there will be a USB adjusting screen.
You cannot write to or delete the USB data on a storage device.



The gold contacts for Micro SD card inserted.
The above Micro SD card for multimedia and the Android share.
The following Micro SD card is specially for Android.

Tips for Using USB Devices

- Only a USB storage device is recognizable.
- USB hubs are not supported.
- A USB storage device which uses its own driver may not be recognized.
- The recognition speed of a USB storage device will depend on each device.
- If a normal USB device does not work, disconnect and reconnect it. Please do not turn off the projector or unplug the USB device when the connected USB device is working. The USB device or stored files may be damaged.
- Please do not connect the USB storage device that has been manipulated on the PC. The projector may not operate properly or fail to play files. Use a USB storage device which contains normal music, photo, video, or document files.
- Please only use a USB storage device formatted as a FAT16, FAT32, or NTFS file system provided by Windows. In case a storage device formatted as a different utility program is not supported by Windows, it may not be recognized.
- Please connect power to a USB storage device which requires an external power supply. If not, the device may not be recognized.
- Please connect a USB storage device with a cable provided by the USB manufacturer. When you use a cable that is not provided by a USB manufacturer or an excessively long cable, the device may not be recognized.
- Some USB devices may not be supported or will not work properly.
- If the length of a folder or file is too long, the folder or file may not be recognized properly.
- The files in a USB storage device are sorted in the same way as Windows XP. Up to 100 English characters for a file name are allowed.
- The data of a USB device may be damaged, so it is recommended to backup any important files. Because a user is responsible for data management, the manufacturer is not responsible.
- It is recommended to use a USB memory stick which is 32 GB or less and a USB hard disk which is 1 TB or less. Any device with more than the recommended capacity may not work properly.
- If a USB storage device is not working properly, disconnect it and connect it again.
- If a USB external hard disk with the power saving function does not work, turn the hard disk off and on again to make it work properly.
- USB storage devices below USB 2.0 are supported as well. However, they may not work properly in the movie list.

3D Image Playing Method

1. Select the 3D image file name, press the OK button.
2. Before watching 3D of RGB-PC, must button the auto adjust key on the remote control.
3. 3D setting is on page 38.
4. To watch 3D image by projectors, press the button on the glasses.
5. Adjust 3D image settings.

• To return to the general image, press 3D three-dimensional image button.

SUPPORTED 2D TO 3D FORMAT

	signal	Horizontal frequency (Khz)	Field frequency (Hz)	Play video form
HDMI-DTV	1080p	27.00	24	2D to 3D,S/S,T&B,C/B
		28.12	25	
		33.75	30	
		56.25	50	2D to 3D,S/S,T&B,C/B,F/S,R/I, C/I
	1080i	28.12		2D to 3D,S/S,T&B
	720p	37.50		2D to 3D,S/S,T&B,F/S
	OTHER	-	-	2D to 3D
HDMI-PC	1024x768	48.36	60	2D to 3D,S/S,T&B
	1920x1080	67.50		2D to 3D,S/S,T&B,C/B,F/S,R/I, C/I
	OTHER	-	-	2D to 3D
RGB-PC	1024x768	48.36	60	2D to 3D,S/S,T&B
	OTHER	-	-	2D to 3D
Component	1080p	27.00	24	2D to 3D,S/S,T&B
		28.12	25	
		33.75	30	
		56.25	50	
	1080i	28.12		
	720p	37.50		
	OTHER	-	-	2D to 3D
USB	1080p	33.75	30	2D to 3D,S/S,T&B,C/B,F/S,R/I, C/I (Photo:S/S,T&B)

S/S:SidebySide,T&B:To p&Bottom,F/P:FramePacking,F/A:FieldAlternative
L/A:LineAlternative,S/SFull:SidebySideFull,C/B:CheckerBoard
R/I:RowInterleaving,C/I:ColumnInterleaving,F/S:SingleFrameSequential

MOVIE LIST

In the Movie List, you can watch movies stored on the connected USB device.

Tips for Playing Video Files

- Some subtitles created by a user may not work.
- Some special characters are not supported in subtitles.
- HTML tags are not supported in subtitles.
- Time information in a subtitle file should be arranged in ascending order to play the subtitle properly.
- Changing font and color in subtitles is not supported.
- A language which is not specified in the subtitle languages is not supported. (see page30)
- Subtitle files of 1 MB or larger are not supported.
- The screen may suffer temporary interruptions (image stoppage, faster playback, etc.) when the audio language is changed.
- A damaged video file may not be played properly, or some functions may not be available.
- Video files created with some encoders may not be played properly.
  yyEither audio or video may only be supported depending on the video or audio packet structure of a video file.
- Video files with higher resolution than the maximum supported for each frame may not be played properly.
- Video files in formats other than the ones specified above may not be played properly.
- Streaming files which include GMC (Global Motion Compensation) or Qpel (Quarterpel Motion Estimation) is not supported.
- Up to 10,000 sync blocks are supported in the subtitle file.
- Seamless playback is not guaranteed for files encoded level 4.1 or higher in H.264/AVC.
- DTS audio codec is not supported.
- Video files larger than 30 GB (Gigabytes) are not supported.
- Playing a video via a USB connection that does not support high speed may not work properly.
- A video file and its subtitle file must be located in the same folder. A video file name and its subtitle file name must be identical in order to display the subtitle properly.
- While watching a video using the movie list function, you cannot adjust the picture mode.
- Trick Mode does not support other functions than if video files do not have index information.
- Video file names that contain special characters may not be playable.

Supported Video Formats

File Extensions	Audio/ Video	Codec	Profile/Level Support
.asf .wmv	Video	VC-1 Advanced Profile	Advanced Profile @ Level 3 (e.g.720p60, 1080i60, 1080p30) Only streams compliant to SMPTE 421M VC-1 standard are supported.
		VC-1 Simple and Main Profiles	Simple Profile @ Medium Level (e.g.CIF,QVGA) Main Profile @ High Level (e.g.1080p30) Only streams compliant to SMPTE 421M VC-1 standard are supported.
	Audio	WMA Standard	
		WMA 9 Professional	
.divx .avi	Video	Divx3.11	
		Divx4 Divx5 Divx6	Advanced Simple Profile(720p/ 1080i)
		XViD	Advanced Simple Profile(720p/ 1080i)
	Audio	MPEG-1 Layer I,II	
		MPEG-1 Layer III (Mp3)	
		WMA Standard	
		WMA 9 Professional	
.mp4 .m4v	Video	H.264 /AVC	Main Profile @Level 4.1 High Profile @Level 4.1 (e.g.720p60, 1080i60, 1080p30)
		MPEG-4 Part 2	Advanced Simple Profile(720p/ 1080i)
	Audio	HE-AAC	HE-AAC-LC & HE-AAC
.mkv	Video	H.264 /AVC	Main Profile @Level 4.1 High Profile @Level 4.1 (e.g.720p60, 1080i60, 1080p30)
	Audio	HE-AAC	HE-AAC-LC & HE-AAC
.ts .trp .tp	Video	H.264 /AVC	Main Profile @Level 4.1 High Profile @Level 4.1 (e.g.720p60, 1080i60, 1080p30)
		MPEG-2	Main Profile @High Level (e.g.720p60, 1080i60)
	Audio	MPEG-1 Layer I,II	
		MPEG-1 Layer III (MP3)	
		HE-AAC	HE-AAC-LC & HE-AAC
.vob	Video	MPEG-1	
		MPEG-2	Main Profile @High Level (e.g.720p60, 1080i60)
	Audio	LPCM	
		MPEG-1 LAYER I、II	
.mpg .mpeg .mpe	Video	MPEG-1	
	Audio	MPEG-1 LAYER I、II	Only streams compliant configured properly for TS, PS or ES

To Use DLP-LINK (DLP-Ready) Type Glasses

1 While watching 3D images from the projector, press buttons on the glasses.

2 When you press the button, the glasses flicker to be synchronized with the 3D images. (The flickering is a unique operation method of DLP-LINK type glasses. It may be different depending on the glasses type.)

3 If the glasses flicker or problems occur while watching 3D, first turn the lights off to make the room darker. Contact your projector seller for queries about the glasses.

Supported 3D input formats

Supported 3D formats

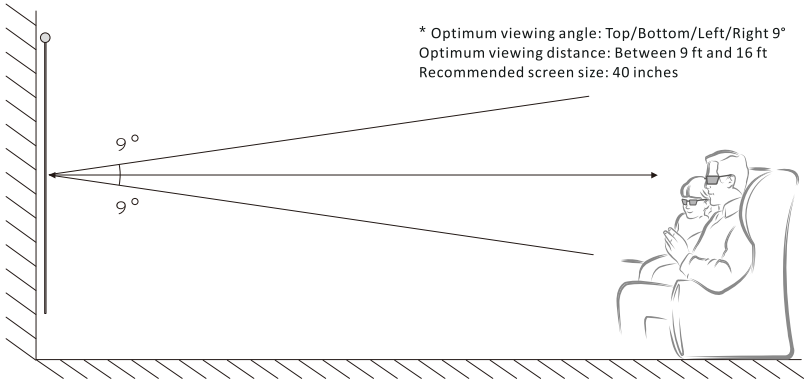
	Signal	horizontal frequency (Khz)	Vertical Frequency (Hz)	Play the stereo image form
HDMI	1080p	54.00	24	F/P,L/A
		56.25	25	
		67.50	30	
		27.00	24	S/S,T&B,S/SFull
		28.125	25	
		33.75	30	
		56.25	50	S/S,T&B
	1080i	56.25	50	F/P,F/A
		28.125		S/S,T&B,S/SFull
	720p	75.00		F/P,L/A
		37.50		S/S,T&B,S/SFull
	576p	62.50		F/P,L/A
		31.25		T/B,S/S,S/SFull
USB	1080p	33.75	30	S/S,T&B,C/B,MPO(Photo)

S/S:SidebySide,T&B:To p&Bottom,F/P:FramePacking,F/A:FieldAlternative
L/A:LineAlternative,S/SFull:SidebySideFull,C/B:CheckerBoard
R/I:RowInterleaving,C/I:ColumnInterleaving,F/S:SingleFrameSequential

Please check the following when using 3D glasses

- Do not use 3D glasses as ordinary glasses, sunglasses or protective goggles. - If you do so, this may cause injury.
- Do not store 3D glasses in very hot or very cold conditions. If you do, this may cause them to become distorted.Do not use distorted glasses.
- Do not drop 3D glasses or allow them to come into contact with other objects. - This can result in damage to the product.
- The lenses of 3D glasses are easily scratched. Use a soft clean cloth when cleaning them. - Foreign particles on the cloth may cause scratches.
- Do not scratch the surface of the 3D glasses' lenses with sharp objects or wipe them with chemicals. - If the lenses get scratched, images may not look normal when viewing3D.

Requirements for Watching 3D Images



* Basically, Watching 3D videos should be done in dark room environments only.
* For 3D watching, set the energy saving mode to Minimum.

CAUTION

- The pairing with the DLP-LINK glasses is affected by the intensity of light reflected from the screen. Therefore, the pairing with DLP-LINK glasses may not work properly if the light reflected from the screen is not bright enough, such as when the surrounding area is bright, the screen is big, or the maximum energy saving mode is enabled.
- Some menus may not work while playing a 3D video.
- You can only watch a 3D video properly when the 3D video format option has been selected on the projector.

Supported Audio Files

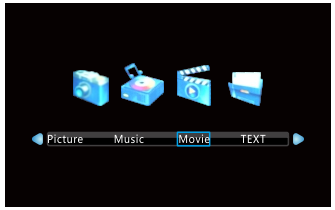
No.	Audio Codec	Bit rate	Sampling rate	Remark
1	MP3	32 kbps - 320 kbps	32 kHz - 48 kHz	
2	MPEG	32 kbps - 448 kbps	32 kHz - 48 kHz	
3	AAC, HEAAC	24 kbps - 3844 kbps	8 kHz - 96 kHz	
4	CDDA	1.44 kbps	44.1 kHz	
5	LPCM	1.41 Mbps - 9.6 Mbps	Multi-channel : 44.1 kHz, 88.2 kHz / 48 kHz, 96 kHz Stereo : 176.4 kHz, 192 kHz	

Browsing Movie List

Play a video file stored in the connected device.

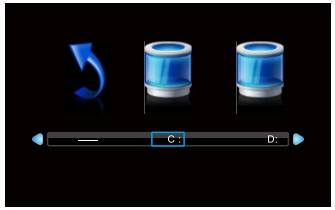
1 Connect a USB storage device.

2 Use the ◀ or ▶ button to select Movie List and press the OK button.

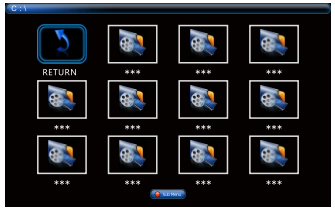


3 Use the ◀ , ▶, ▲ or ▼ button to select STORAGE DEVICE and press the OK button.

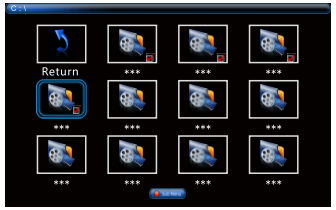
4 Use the ◀ or ▶ button to select HARDWARE DEVICE and press the OK button.



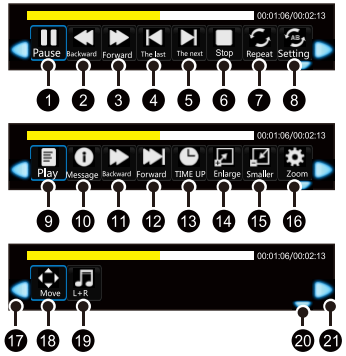
5 Use ▶II button to play the video in the root directory Piece.



6 Use ◀ 、 ▶、▲ or ▼ button to move the cursor to play the file, press the OK key to select, Then press ▶II button to play the selected file.



7 Press the OK key when playing can popup control panel.



	DESCRIPTION
❶	Play、pause
❷	Backward
❸	Forward
❹	The last movie
❺	The next movie
❻	Stop
❼	Repeat
❽	Setting
❾	Play list
❿	Movie message
⓫	Backward
⓬	Forward
⓭	Time up
⓮	Enlarge
⓯	Smaller

3D FUNCTION

3D technology uses different video frames for each eye to add depth to the video.

Before Watching 3D

⚠CAUTION

- If you view 3D images too closely for a long period of time, it may cause blurred vision.
- If you watch the projector or game screen for a long time with 3D glasses on, you may experience dizziness or eye fatigue.
- If you are pregnant, a senior citizen, intoxicated, have heart problems, or easily feel motion sickness, we recommend that you do not watch 3D images.
- Because 3D images can be recognized as real, some viewers may get surprised or overexcited.
- Do not watch 3D images near fragile objects or any objects that can be knocked over easily.
- Take care not to injure yourself as you may subconsciously try to move away from the life-like 3D images.
- Prevent children of 5 years or younger from watching a 3D video. It may impair the development of their eyes.

Warning about photosensitivity seizures

- Some users may experience a seizure or other abnormal symptoms when they are exposed to a flashing light or particular pattern from a video game or movie. If anyone in your family has a history of epilepsy or has ever experienced any kind of seizure, please consult your doctor before viewing 3D images.If you experience one of the followingsymptoms while watching a 3Dvideo, stop watching the 3D video immediately and take a rest.

- Dizziness, twitching of the eye or facial muscles, involuntary movements,cramp, loss of consciousness,confusion, loss of sense of direction,or nausea. If the symptom does not disappear, please consult your doctor.

You can reduce the risk of photosensitive seizures by taking the followingpreventive measures.

- Take a rest of 5 - 15 mins. for every 1 hour of viewing.
- If vision varies between each eye, correct the variation before beginning to watch a 3D video.
- Ensure that the 3D video is directly in front of you, at eye level.

- You should stop watching if you experience a headache, fatigue or dizziness.

- Do not view 3D images when you are tired or ill.

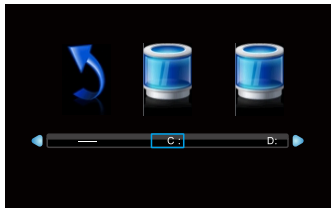
⚠CAUTION

Extra special care is required for children watching a 3D video.

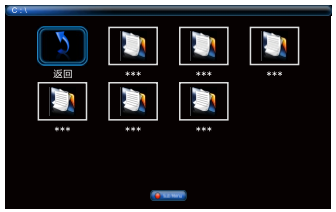
When Watching 3D Video

- Watch 3D images within the optimum viewing angle and distance.
- If you are outside the viewing angle or distance, you may not be able to watch 3D images. You cannot view 3D images when you lie down.
- You may see left and right images overlapped during projector initialization after it is powered on. It may take some time for optimization.
- I t may take some time for the 3D image look normal after you turn your eyes away from the screen and look back at the 3D image.
- I t may flicker slightly while watching 3D images under a 3 wavelength lamp fluorescent light (50 Hz - 60 Hz) or near windows. If so, it is recommended to block the sun light with a curtain and to dim the lights.
- The 3D glasses must be DLP-LINK (DLP Ready) type.
- You may not be able to watch 3D properly if there is an obstacle between the projector and 3D glasses. yyInstall the 3D projector as far as possible from other devices.

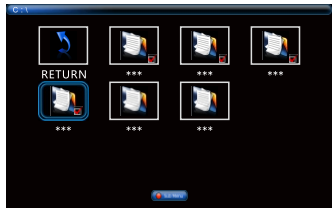
4 Use the ◀ or ▶ button to select HARDWARE DEVICE and press the OK button.



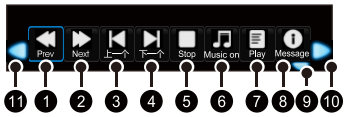
5 Use ▶II button to play the video in the root directory Piece.



6 Use◀ , ▶, ▲or▼ button to move the cursor to play the file, press the OK key to select, Then press ▶II button to play the selected file.



7 Press the OK key when playing can popup control panel.



	DESCRIPTION
1	Backward to the last page
2	Forward to the next page
3	The last text
4	The next text
5	Stop
6	Background Music
7	Play list
8	Text message
9	forward to another page of the control panel
10	Hidden control panel
11	forward to another page of the control panel

* When the audio file and the text is put in the same directory , the background music will be on.

MOVIE LIST

	Description
16	Adjust the screen ratio
17	forward to another page of the control panel
18	Moving picture to enlarge screen position.
19	Track selection
20	forward to another page of the control panel
21	Close control panel

PHOTO LIST

You can see the photos stored on a connected device.

Supported Photo Files

PHOTO (*.JPEG)
Baseline: 64-pixel (width) x 64-pixel (height) - 15360-pixel (width) x 8640-pixel (height)
Progressive: 64-pixel (width) x 64-pixel (height) - 1920-pixel (width) x 1440-pixel (height)

Only JPEG files are supported.

Non-supported files are displayed in the form of an icon.

An error message is displayed for corrupted files or file formats that cannot be played.

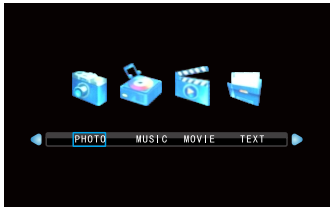
Corrupted files may not be displayed properly.

It may take some time to view highresolution images in full screen.

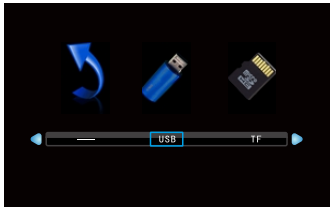
Browsing Photo List

You can see the photos stored on a connected device.

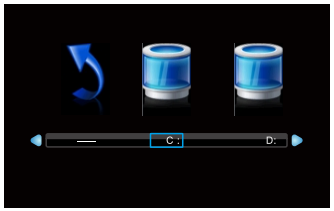
1. Connect a USB storage device.
2. Use the ◀ or ▶ button to select Photo and press the OK button.



3 Use the ◀ , ▶ , ▲ or ▼ button to select STORAGE DEVICE and press the OK button.



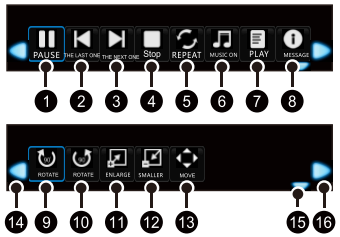
4 Use the ◀ or ▶ button to select HARDWARE DEVICE and press the OK button.



5 Use ▶II button to play the video in the root directory Piece.

6 Use ◀ , ▶ , ▲ or ▼ button to move the cursor to play the file, press the OK key to select, Then press ▶II button to play the selected file.

7 Press the OK key when playing can popup control panel.



	DESCRIPTION
1	PALY, PAUSE
2	THE LAST PICTURE
3	THE NEXT PICTURE
4	STOP PLAYING
5	REPEAT PLAYING
6	BACKGROUND MUSIC
7	PLAY LIST
8	PICTURE MESSAGE
9	Clockwise rotation of 90 degrees
10	Counterclockwise rotation of 90 degrees
11	ENLARGE THE PICTURE
12	SMALLER THE PICTURE
13	Adjust the map position when enlarging the picture
14	FORWARD TO ANOTHER PAGE OF CONTROL PANEL
15	HIDDEN CONTROL PANEL
16	FORWARD TO ANOTHER PAGE OF CONTROL PANEL

* When the audio file and the pictures is put in the same directory , the background music will be on.

MUSIC LIST

You can play audio fi les stored on the connected device.

Supported Music Files

*.MP3
Bit rate range 32 Kbps - 320 Kbps

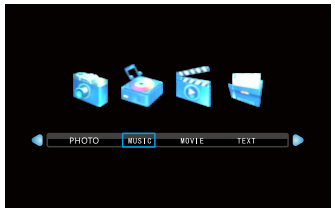
Sampling rate MPEG1 Layer 3:
32 kHz, 44.1 kHz, 48 kHz

Sampling rate MPEG2 Layer 3:
16 kHz, 22.05 kHz, 24 kHz

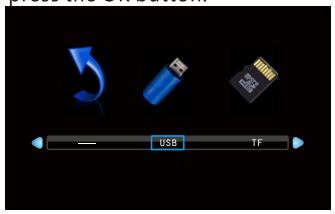
Browsing Music List

1 Connect a USB storage device.

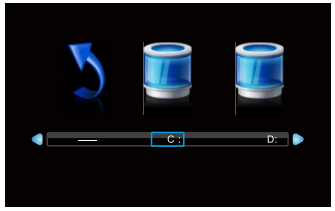
2 Usethe ◄ or ► button to select Music List and press the OK button.



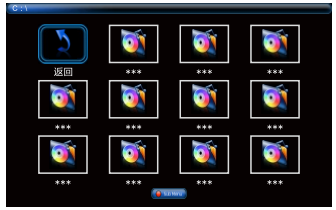
3 Use the◄, ►, ▲or▼ button to select the Removable DEVICE you want and press the OK button.



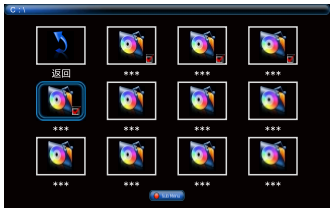
4 Use the◄ or ►button to select the HARD DEVICE you want and press the OK button.



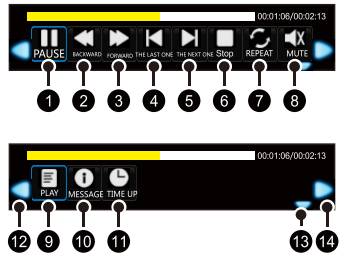
5 Use ▶II button to play the video in the root directory Piece.



6 Use or button to move the cursor to play the file, press the OK key to select, Then press ▶II button to play the selected file.



7 Press the OK key when playing can popup control panel.



	DESCRIPTION
1	PLAY、PAUSE
2	BACKWARD
3	FORWARD
4	THE LAST MUSIC
5	THE NEXT MUSIC
6	STOP PLAYING
7	REPEAT PLAYING
8	MUTE
9	PALY LIST

	DESCRIPTION
10	MUSIC MESSAGE
11	START PALYING TIME
12	FORWARD TO ANOTHER PAGE OF CONTROL PANEL
13	HIDDEN CONTROL PANEL
14	FORWARD TO ANOTHER PAGE OF CONTROL PANEL

FILE LIST

You can see document fi les stored on a connected device.

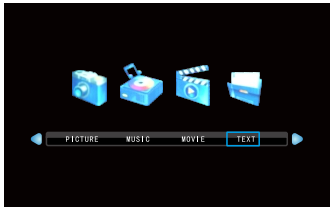
Supported File Formats

File Viewer realigns a document, so it may look different from what is displayed on a PC.
For documents that include images, the resolution may look lower during the realigning process.
If the document volume is big or it has many pages, it may take longer to load the document.
Unsupported fonts may be replaced by other fonts.

BROWSING FILE LIST

1 Connect a USB storage device.

2 Use the◄ or ► button to select File List and press the OK button.



3 Use the ◄ , ► , ▲ or ▼ button to select the storage device you want and press the OK button.