

Welcome

Thank you very much for purchasing this product. Before you start, you are recommended to read this manual step by step to obtain the best results with your new Pico projector. We wish you enjoy it.

About the product

This is the latest generation of Pico projector with DLP technology inside. Known for great cinema projectors, the DLP technology provides rich colors and enhances the contrast of the image. Integrated with WLAN, the Pico projector provides cable-free connection from your notebook, tablet, or smartphone to the Pico projector by streaming pictures, videos, websites, and documents wirelessly and projecting the images up to 120" (300 cm) in size. With its powerful wireless functionality, and versatile connection options including HDMI, MHL, Audio -Out, and USB, this Pico projector is the best solution for mobile use in business and entertainment.

Safety Notice

1. Keep the device and packaging materials out of the reach of infants and children.
2. Avoid subjecting the power adapter and other contacts to dripping or splashing water and dry your hands before you use it. Do not place objects filled with liquids such as vases, etc. on or near the device.
3. Make sure that the used power outlet is always readily available and never hidden. In case of emergency, use the power adapter to separate the device from the power network.
4. Keep your device away from all flames such as candles and do not set them up in the vicinity of the device.
5. Keep the unit at least 10 cm away from other objects. Make sure the ventilation is not covered by newspapers, tablecloths, curtains, etc.
6. For your own safety, do not use the projector during thunderstorms or lightning.
7. Relative Humidity is 20% ~ 80%, non-condensing.
8. The battery is integrated with the device. Do not disassemble and modify. The battery should be replaced by an authorized service center only.
9. Ensure that the ambient room temperature is within 5 ~ 35°C.
10. Wait before using if the device has been moved from a cold location into a warm one. Any condensation that has formed may in certain circumstances destroy the device. As soon as the device has reached room temperature it can be used without risk.
11. Handle the product with care. Avoid contact with sharp objects. Keep device away from metallic objects.
12. Place the projector on a flat surface. Any collision or falling to the ground is likely to damage the product.

13. Do not drop or disassemble the product otherwise the warranty voids. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to an authorized service center.
14. Use only the accessories supplied by the manufacturer.
15. Both product and user's manual are subject to further improvement or supplement without further notice.

Care and Safety Information for Pico Projectors

1. Avoid facing directly into the projector's lens.
2. During the operation, this product may heat lightly, which is normal.
3. The device should not be used in a very dusty environment. Dust particles and other foreign objects may damage the unit.
4. Do not expose the device to extreme vibrations. It may damage the internal components.
5. Use the enclosed power adapter (see technical data):
Check whether the mains voltage of the power supply matches the mains voltage available at the setup location. This equipment complies with the voltage type specified on the unit.



Avoid Hearing Damage:

Listening at high volume for a long period of time could cause damage to your ears.



Notice for Long-time Projection

The built-in battery supports approximately 120 mins of projection. For long time projection, you are recommended to use AC adapter.

When the battery is too weak to stay in operation, the low battery capacity icon (🔋) will flash. You need to charge the product while the icon showed.

It's normal that the projector will feel warm with continuous use due to its high performance. If the projector runs for a long time and over-heated, the High-Temperature icon (🔥) will appear on the screen. The system will automatically enter the standby mode.

FCC Compliance Statement:

This device complies with Part 15 of the FCC Rules. Operation is subjected to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



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This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

For product available in the USA/Canada market, only channel 1-11 can be operated. Selection of other channels is not possible.

This device and its antennas(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

All cables used to connect peripherals must be shielded and grounded. Operation with cables connected to peripherals that are not shielded and grounded may result in interference to radio and television reception.

You are cautioned that any change or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate such equipment.



If the time arises to throw away your product, please recycle all the components possible. Batteries and rechargeable batteries are not to be disposed in your domestic waste! Please recycle them at your local recycling point.

Together we can help to protect the environment.

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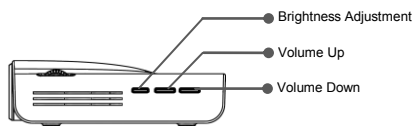
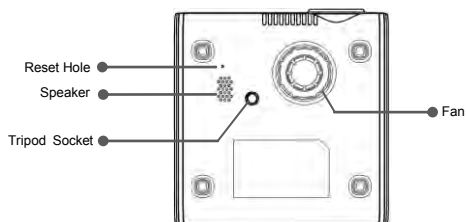
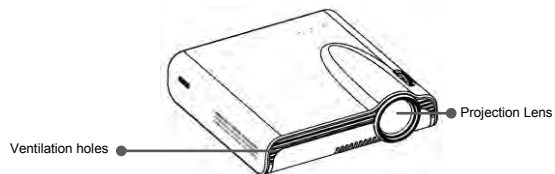
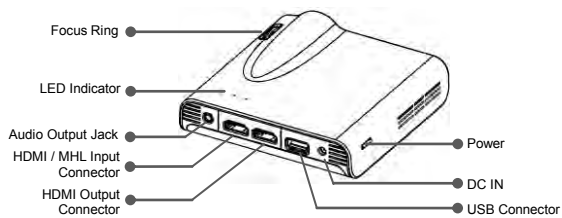
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Package Content

Please check if the following items are located in your packaging:

- Pico Projector
- Power Adapter
- Exchangeable Power Plug
- MHL Cable (HDMI Type A to USB Type D)
- HDMI Cable
- Carry Bag
- User's Manual

Knowing your LED Projector



Getting Started

Charging the product

The projector is built in a Li-Polymer battery for mobile use. Please charge the projector for 8 hours prior to its first use. Repeat charging will take around 4 hours.

The battery will be charged only when the projector is not in use (Power off). Connect one end of the supplied power adapter to DC IN jack and the other end to a power outlet to start charging.

Exchange the plug (EU, US and etc.) of AC adapter that accommodates the type of power outlet in your country if it's different.



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Charging LED Indicator

During charging, the LED indicator lights will flash as marquee. When the battery is fully charged, the LED indicator lights turns to solid blue.

LED indicators

LED Status	Indication
3 blue LEDs stay on	Power capacity is between 80% to 100%
2 blue LEDs stay on	Power capacity is between 45% to 80%
1 blue LED stays on	Power capacity is between 10% to 45%
1 blue LED blinks	Power capacity is below 10%
LED Marquee	Projector is being charged
3 blue LEDs blink	Charging the external mobile device

Power On / Off the Projector

Push the Power button for 2 seconds to turn on the projector.

To power off the projector, push the Power button again for 2 seconds.

Adjusting the Focus according to distance

Place the projector on a flat surface and toward a wall or a projection screen. The projectional distance and projectional size are:

Distance: 50 cm ~ 425 cm (20 " ~ 167 ")
Image size: 36 cm ~ 305 cm (14 " ~ 120 ")



Adjust the focus by turning the focus ring to get a sharp and clear picture.

Note: Use a tripod (not included) to increase the height of the projectional image when necessary. The tripod socket is located under the projector.

Adjusting the brightness of your projector

There is a brightness adjustment button on the right side of the projector. It allows you to change the brightness according to the environment and the power consumption.

- 1) Enhanced: Select this mode when external power supply is available to maximize the brightness performance.
- 2) Standard: The default mode for optimizing the projection performance and battery capacity.
- 3) Eco: This mode is recommended when the projector is operated under battery mode to save power.

Note: The projector is automatically switched to Enhanced mode when It's powered by the power adapter.

Mode	Brightness	Battery Life
Enhanced	Up to 100 lumens	80 mins
Normal	Up to 60 lumens	100 mins
Eco	Up to 40 lumens	120 mins

Projecting from External Video Input Source

The projector has built-in HDMI interface on the rear side. You can connect your external video Input source to the projector or output the projector's screen to a LCD monitor or HDTV by using the appropriate cable.

HDMI Input

Use the HDMI cable to connect the HDMI port on the rear panel of the projector to the external HDMI signal source. After connected, the screen switches to HDMI source automatically.



Projecting from Smartphones or Tablets

1. Connect your smartphone supporting **MHL (Mobile High-Definition Link)** for projection.

Connect your smartphone (e.g. **Samsung Galaxy S2, Note; new HTC one, one X; or Sony Xperia Z2, Z Ultra, Z**) with the projector via the bundled MHL (Type A to USB Type D type HDMI) cable.



- Note:**
1. For **Samsung Galaxy S5, S4, S3, Note 4, Note 3, Note 2**, Samsung 5 to 11 pin MHL converter (as illustration shows) is needed.
 2. It's normal that the projector is automatically charging the smartphones or tablets when connected with the MHL cable for projection.
 3. Samsung 5 to 11 pin MHL converter is not included in the package.

2. Connect iPhone 6 plus, 6, 5S, 5, iPad Air2, Air, iPad mini 3, mini 2, mini and iPod touch 5th with the projector via Apple Lightning Digital AV adapter and A-to-A type HDMI cable.



iPhone 4S, 4, New iPad, iPad 2, and iPod touch (4th) can connect with projector with Apple 30-pin digital AV adapter and A-to-A type HDMI cable

- Note:** Apple Lightning Digital AV adapter and 30-pin digital AV adapter are not included in the package.

Displaying the image on an External LCD Monitor

The projector has built-in a HDMI output interface on the rear side. If the environment is not suitable for projection, you can connect the projector to an LCD monitor or HDTV with HDMI input port by using a HDMI cable.

HDMI Output

Use the HDMI cable to connect the HDMI output port on the rear panel of the projector to a LCD monitor or HDTV. After connected, the screen switches to LCD monitor automatically.



Charging the External Mobile Device

The internal battery of the projector cannot only be used for projection, but also charge your mobile device.

1. Connect your mobile device to the projector via the USB cable with the end of Type A connector plugged into the USB port on the rear side of projector.
2. When the projector is powered on, the device will be charged automatically.
3. When the projector is powered off, please press the Brightness button (✱) to start or stop charging.
4. Some MHL device does not follow the standard power design, so that its battery can not be charged by the projector (e.g. Samsung Galaxy Nexus, HTC M8)



- Note:**
1. The projector provides max 5V / 1A output power for charging the mobile devices.
 2. USB cable is not included in the package.

Overview of the Main Screen

Power on the projector, the following screen appears after the projector boots up.



For first-time use, please install the wireless application software first, on your PC or smartphone.

Computer users (Windows and MAC):

Please scan the QR code or enter the IP address into the address bar of your PC browser to download the driver.



<http://www.iezvu.com/download>

Android users:

Please scan QR code to download **EZCast** APP from Google Play™ or search for **EZcast** in Play Store.



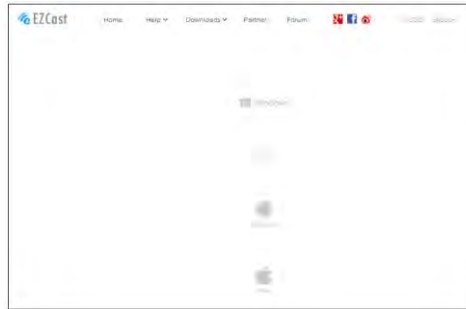
iPad and iPhone users:

Please scan QR code to download **EZCast** APP from **App Store** or search for **EZcast** in **App Store**..

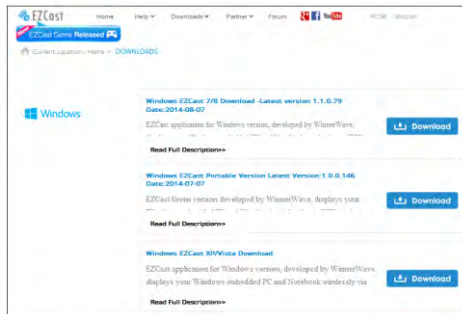


Install the wireless application software on your computer

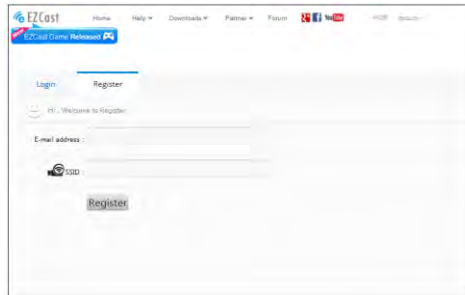
1. Connect the computer to an available network for Internet access.
2. Open the Internet browser on your computer then enter the IP Address **<http://www.iezvu.com/download>** in the browser's address bar.




3. Select the driver for Windows or Mac OS depending on your operating system and then click <Download> to enter the download page.



4. If you are the first time downloading, please enter the "Register" page to fill out your E-mail address and the SSID named on top side of the projector's main screen (see screenshot Overview of the Main Screen).



5. Click <Download> to start the installation and follow on-Screen instructions to complete the setup and reboot the computer. When the installation is completed, an icon, labeled **EZCast**  will appear on your computer desktop.



Peer-to-Peer (direct) wireless projection from computer

Peer-to-peer wireless connection from your computer with the projector allows you quickly start the presentation or watch a movie wirelessly.

1. Power on the engine and enter to main screen of the projector.
2. Make a note of the Password in 8 digits XXXXXXXX on the top side of main screen. You will need the information to log in later.







3. Connect your computer to the projector Wireless network by selecting SSID: **Projector-XXXXXXX** on the network list, enter the Password (see Step 2) and click <OK> to confirm.










4. Double-click **EZCast** icon on your computer desktop to start the application.
5. After successfully logged in, the wireless projection between the computer and the projector has been established.
6. Select the projection output method from **Off** (default) to **Mirror** or **Extension** to start the wireless projection

Advanced functions of EZCast app









Item	Descriptions
	<p>This item allows users to select the projection output methods.</p> <p>Off: Click to stop the wireless projection</p> <p>Mirror: Displays the same picture on the screen of the computer</p> <p>Extension: Extend the screen from computer to the projector.</p>
	<p>Click to select the ideal mode for watching movie or photo slideshow.</p> <p>High Quality: ideal for photo slideshow</p> <p>Low Quality: ideal for watching movie</p>
	<p>Stream the Audio to the projector's speaker.</p> <p>Note: If you don't like to hear the sound from the computer at the same time, disable the speaker on the computer by choosing 'mute'.</p>
	<p>Click to enhance 3rd party software compatibility. (The performance (frame rate) of wireless streaming may be reduced.)</p>

 Music	Search music files on the computer and stream to the projector's speaker.
 Video	Click to select the ideal mode for watching movie or photo slideshow Video: ideal for watching movie Graphic: ideal for photo slideshow
 Update	This item allows users to on-line upgrade the latest version for EZCast app.
 Web	Projecting Web pages. (Home Network mode only) * Please see page 26 to enable Home Network mode.
 Cloud Video	Click to flinging on-line video to the projector. (Home Network mode only) * Please see page 26 to enable Home Network mode.
 DLNA	EZCast acts as a DLNA DMR (Digital Media Renderer) for DLNA application.
 Setting	Click to enter the EZCast settings menu. * Please switch the output method to "Off" before select this item.

EZCast Settings menu



Item	Descriptions
 Resolution 1920x1080_30P	This item allows users to select the running output resolution of EZCast. * The resolution will be changed after the projector reboots.
 Password 22168893	This item allows users to change the password of the projectors (EZCast SSID).
 Internet WIFI, 2.4GHz, 5GHz, 802.11n	This item allows users to connect the projector to a Wi-Fi network (home network).
 Language English	This item allows users to select the displayed system language.
 Default Mode EZCast	This item allows users to select the default running mode (EZCast or EZMirror) when power on the projector.
 Upgrade	This item allows users to online upgrade the latest firmware version for the projector. (Home Network mode only) * Please see page 26 to enable Home Network mode

Install the wireless application software on Apple or Android devices

EZCast for Android smartphone and Apple iDevice

EZCast is an application that runs on your Android smartphone or Apple devices and transmits still images or presentations to the projector. The EZCast is only used for a wireless connection. If you are connecting your phone to the projector using a cable, you can use the built-in video App of your phone.

Installing EZCast from Google Play™ (For Android device)

1. Connect to the Internet and open the Google Play™ or Google Play™ web page. (Google Play™ is a trademark of Google Inc.)
2. In the search bar, type **EZCast**. (Or scan the QR code directly from the Main Screen.)



3. Click the <INSTALL> button to download and install the free **EZCast** app.



4. Follow the instructions to finish the installation.

Installing EZCast from Apple App Store (For Apple devices)

1. Connect your iPhone to the Internet and Launch the App Store.
2. In the search bar, type EZCast. (Or scan the QR code directly from the Main Screen.)



3. Click the <INSTALL> button to download and install the free **EZCast** app.



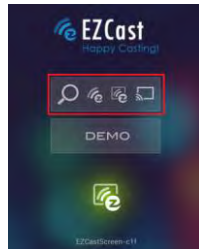
4. Follow the instructions to finish the installation.

Peer-to-Peer (direct) wireless projection from Apple or Android devices

Before you can transmit images to the projector using EZ Cast, you must connect your Android smartphone or Apple device to the projector (peer-to-peer).

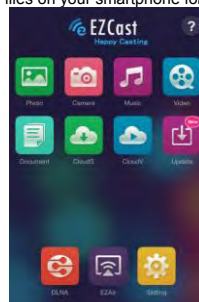
Opening EZCast and Logging into the projector










1. Open the EZCast application and click the first icon (search). EZCast will search for compatible devices.





2. Choose WiFi Projector (Name as SSID shown on the top of projection screen) and enter the Login password shown on the projector screen as well. After connecting to the projector a blue connection icon will be shown on projection screen in right top corner <<PLEASE ADD SCREEN SHOT>>

3. Select the type of files on your smartphone for projection.



Item	Descriptions
 Photo	Projecting Photos stored on your smartphone.
 Camera	Real-time project the image by iPhone or Android phone camera.
 Music	Stream the Music to the projector's speaker.
 Video	Stream videos stored on your iOS and Android devices to the projector.
 Document	Projecting Office Documents and PDFs stored on your smartphone.
 Web	Projecting Web pages. (Home Network mode only) * Please see page 26 to enable Home Network mode.
 Cloud Video	Click to flinging on-line video to the projector. (Home Network mode only) * Please see page 26 to enable Home Network mode.
 Cloud Storage	Streaming cloud server. (Home Network mode only) * Please see page 26 to enable Home Network mode.
 Update	This item allows users to upgrade the latest version for EZCast app. (Home Network mode only) * Please see page 26 to enable Home Network mode
 DLNA	EZCast acts as a DLNA DMR (Digital Media Renderer) for DLNA application.

	Click to enable Miracast feature of the projector for the Miracast supported devices.
	Click to enter the EZCast settings menu.

EZCast Settings menu



Please refer to page 17 for the **Setting items** introduction.

Adding Content to EZCast using iTunes® (For Apple device)

1. Attach your iPhone to your computer.
2. On your computer, launch iTunes® unless it automatically opened when you attached your iPhone.
3. Click the iPhone or iPad device in the sidebar.
4. Click the Apps in the Settings panes.
5. Click EZCast to see all of the files loaded into EZCast.
6. Click the "Add" button and choose files to **upload to EZCast**. You can load Photo, Video and Document files.
7. In the lower left hand corner, click the Sync button to transfer the files to your iPhone.

Sketch the image from EZCast

A sketch tool is built in Photo / Document / Web modes, to let presenter make note on the projected page. You can draw, highlight in color or erase by touch easily. All the sketched images can be saved in camera roll at once.

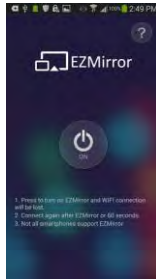


Wireless mirror projection with your Miracast enabled devices.

1. Click <EZMirror> icon to enter the EZMirror screen



2. Then an "ON" button appears on your smart screen



3. Clicking the "ON" button and follow the steps shown on the screen



DLNA feature for EZCast App

The EZCast DLNA feature is a DLNA Digital Media Renderer (DMR), which supports DLNA-compliant Digital Media Players (DMPs) and Digital Media Controllers (DMCs). Before using this feature, please install the DLNA application apps from Google Play or App Store first. The recommended of DLNA application apps are as below.

Recommended DLNA apps for Android devices:.



BubbleUPnP



imediashare personal

Recommended DLNA app for iOS devices:




imediashare personal

1. Click the <DLNA> icon and a DLNA supported list will appear on your smartphone screen, You can click the DLNA apps from the list or scan the QR code above to install the DLNA apps from Google Play or App Store
2. Click the DLNA app you want to select to open the app's main page.
3. Select the device name for **Projector-XXXXXXX** as the renderer, then follow the operation steps of DLNA application app to stream Videos, Pictures or Musics to the projector via DLNA.

Connect the projector to available Wi-Fi network (Home Network Mode) for Internet access

You are recommended to connect the projector to a Wi-Fi network (home network) so your computer, tablet, and smartphone can access to Internet at the same time. You only need to key in the network key to set up the connection for the first time. The projector will be automatically connected to the network when it's powered on the next time.

1. Go to  **Setting menu, select and enter 'Internet' .**



2. Select the Wi-Fi network (SSID) you would like to connect with and confirm with OK button to open the password dialog and typed the password.



3. If wireless security is enabled on your Wi-Fi network, you should type the password (network key) by using the virtual keyboard on the smartphone or your PC keyboard.



- Click OK to set up the Internet access point and make the connection. It will take a while till the connection is successfully established. In home screen you will see the connection status in the right top corner >>PLEASE ADD SCREENSHOT<<



- After the projector is connected to your Wi-Fi network (home network), please close the APP on you smartphone / Computer. Next, please connect your smartphone to your Wi-Fi network (home network) and open the APP again use the search button to connect to the projector again.

Note: Internet access (Home Network mode) performance is affected by a variety of factors, such as the CPU performance of your smartphone/ notebook, the distance between the access point, and walls/obstacles that obstruct direct line-of-sight. Cordless phones, bluetooth devices, microwaves, and anything that may cause RF interference in the 2.4GHz frequency range can affect the WLAN performance as well. Therefore, once the internet speed drops or intermittent disconnects during the projection, we recommend you to select another access point with a stronger signal or disconnect the projector client from your access point (disable internet access) to ensure the best experience of wireless projection.

Troubleshooting

If your projector does not seem to be functioning properly, check the items below before you contact an authorized service center.

Symptom	Check Point
The projector does not work when connecting to a smartphone notebook or PC with cable.	Check if the HDMI or MHL cable is plugged correctly.
The projector can't be detected when running EZCast app.	<ol style="list-style-type: none"> 1. Enable your WLAN of PC or smartphone and select the access point labeled 'Projector-XXXXXXX' to connect with the projector. 2. Disconnect the Ethernet cable from your computer to avoid affecting the wireless network connection.
The projected image is too dark.	<ol style="list-style-type: none"> 1. Use the projector in a darker environment. 2. Increase the brightness by using the power adapter. 3. Scale down the projectional image size.
The projected image is blurred.	<ol style="list-style-type: none"> 1. Adjust the focus. Please refer to "Adjusting the Focus". 2. Check if the lens is dirty.
The surface temperature of projector is high.	Because of the high-luminance LED, it is normal that this projector generates heat in long-time use. It will not affect the performance of the projector. Always keep the ventilation slots free of dirt or obstructions and operate the projector in a properly ventilated environment.
Recovering from abnormal	If the projector is running slow, freezing, crashing or locking up during the operation, you can try to insert a slim, pointy object into the reset hole to trigger a hardware reset.

Support Input Timings

Resolution	Max. frames per second	MHL	HDMI
640x480p	60fps	x	x
720x480p	60fps	x	x
1280x720p	60fps	x	x
1920x1080i	60fps	x	x
1920x1080p	60fps	-	x
720x576p	50fps	x	x
1280x720p	50fps	x	x
1920x1080i	50fps	x	x
1920x1080p	50fps	-	x

Specifications

Item	Description
Optical Technology	DLP
Light Source	RGB LED
Aspect ratio	16:9
Resolution	854 x 480 Pixels (WVGA)
Contrast Ratio	1000:1
Projection Image Size	36 cm ~ 300 cm (14" ~ 120")
Projection Distance	50 cm ~ 425 cm (20" ~ 167")
Throw Ratio (Diagonal: Distance)	1.66 (Projection Distance/Width of Image)
Brightness	Up to 100 Lumens
Focus	Manual
Offset	100%
Connections	HDMI In: HDMI Type A HDMI Out: HDMI Type A Audio Out: 3.5 mm mini jack USB: Type A for charging
WiFi	Module: IEEE 11n Standard: 802.11 b/g/n
Internal Speaker	Yes
Power Supply	Input: 100 ~ 240V AC Output: 12V, 2A DC
Battery Type	Embedded 7.4V / 2000 mAh Li-polymer battery
Battery Life	Enhanced mode: 80 min Standard mode: 100 min Eco mode: 120 min
Power Consumption	AC mode: 12 W Battery mode: 8 W ~ 12 W
Dimensions (L x W x H)	113 x 113 x 26 mm
Weight	260 g
Humidity	20 – 80%, 80% (Max.), non-condensing.
Operating Temperature	5°C – 35°C.