



User's Manual

Pico Projector

English / Deutsch / Français / Русский / 繁體中文 / 한국어

Welcome

Thank you very much for purchasing this product. It is a pico projector with DLP technology inside. The DLP Technology, known for great cinema projectors, provides rich colors and high contrast to this Pico Projector. Integrated with media player, Office and PDF reader, and versatile connection options including HDMI, AV-in, USB and Micro SD-card slot make this product the best solution for mobile use.

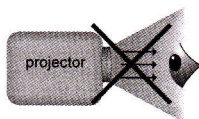
Before you start, you are recommended to read this manual step by step to obtain the best results with your new Pico Projector. We wish you a lot of fun.

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 25% ~ 80%, non-condensing.
8. The battery is integrated with the device. Do not disassemble and modify. The battery should be replaced by an authorised 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.



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.

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.
- Move the equipment away from the receiver.
- Plug the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for additional suggestions.

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.



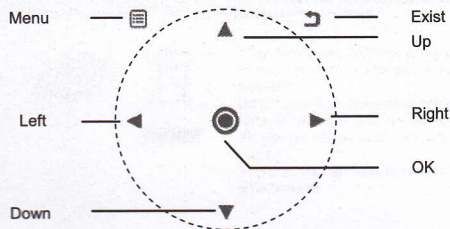
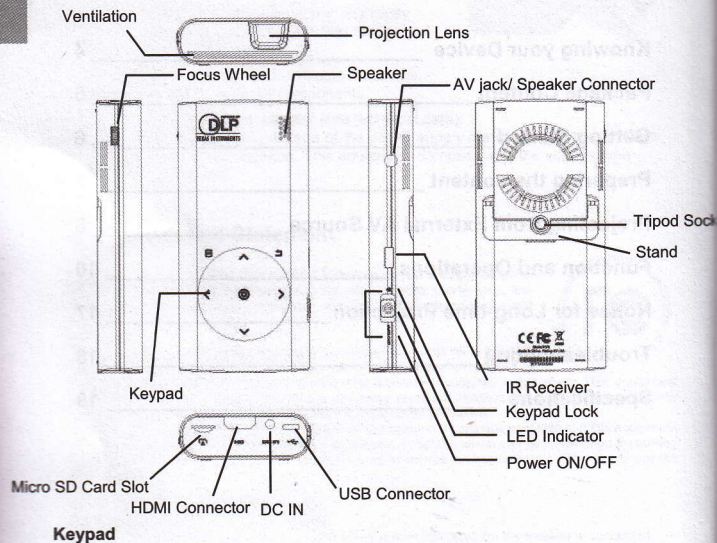
If the time arises to throw away your product, please recycle all the components possible.
Batteries and rechargeable batteries are not to be disposed in your domestic waste!
Please recycle them at your local recycling point.
Together we can help to protect the environment.

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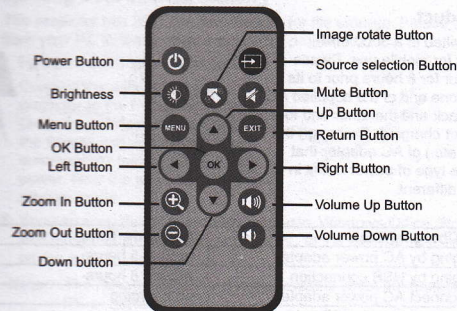
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Knowing your Device

Projector



Remote Control



Warning:

Improper use of the battery may cause overheating, explosion or ignition, which can result in an injury or a fire. Battery leakage may damage the remote controller. Do not expose the remote controller unit to direct sunlight. Do not expose the battery to fire or water. Immediately replace the exhausted battery. Take out battery when the remote is not in use for a long time.

Package Content

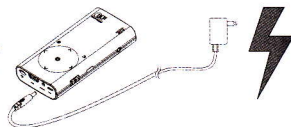
Please check if the following items are located in your packaging:

- Projector
- AC Adapter
- Exchangeable power plug
- Remote Control
- HDMI Cable (A to A type)
- USB Cable
- USB Adapter
- Pouch
- User Manual

Getting Started

Charging the product

The projector is built in a 3000 mAh Li-Polymer battery for mobile use. Please charge the projector for 8 hours prior to its first use. Connect one end of the supplied AC 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.



Charging Status	Charging Time
Power Off, charging by AC power adapter	around 5 hours
Power Off, charging by USB connection	around 8 hours
Power On and connect AC power adapter	no charging
Power On and connected with USB cable	no charging

Charging LED Indicator

During charging, the LED on Power Button turns Orange. It turns to Green when the battery is fully charged.

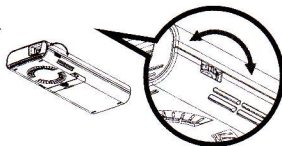
Turn On / Off the Projector

Push the Power Switch downward for 1 second to turn ON the projector.

To turn off the projector, push the Power Switch downward for 2 seconds.

Adjusting the Focus

Adjust the focus by turning the Focus Wheel upward or downward to get a sharp and clear picture.



Select the Language

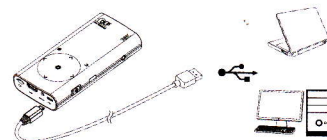
Use the navigation keys ▲▼◀▶ to select 'Setting' and press Ⓞ (OK) to enter the submenu. Select 'Language' and press Ⓞ (OK) to enter the language list. Select your preferred language and confirm with Ⓞ (OK). Press ➡ (Exist) to return to Main Menu.

Preparing the content

Projecting from Internal Memory

The projector has 2GB internal memory for file storage. Please download media files from your PC to the internal memory for projection:

1. Turn on the PC and the projector.
2. Connect the micro-USB port of the projector to the PC via USB cable. Once the connection is established, the screen and ventilation fan will automatically turn off to save the power. Now the projector is in mass storage mode.
3. You can copy the pictures, videos, music, Windows Office (PowerPoint, Word, and Excel), and PDF files from your PC to the internal memory or delete the files on the internal memory.



Note: The remote controller is not applicable when the projector is connected to PC or notebook.

Projecting from External Memory

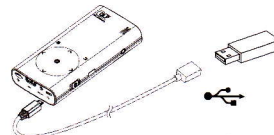
External Micro SD/SDHC card slot

A single built-in memory card reader is available for reading the following flash memory cards: Micro SD and SDHC card up to 32GB. Gently insert the card by following the direction shown below until it reached the bottom of the slot. To remove the memory card, gently push the top edge of the card and pull it out.



USB Device

The projector can project the content from USB device such as USB memory stick. Connect one end of the USB adaptor to the micro-USB port of the unit and the other end to USB device as shown.



Note: External memory source will be the default memory displayed on the playlist. When both Micro SD/SDHC card and USB memory stick are in use, USB memory stick will be the default memory displayed on the playlist.

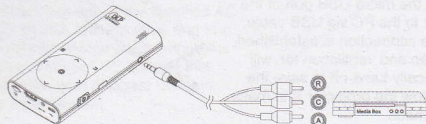
Selecting the memory source

Use the navigation keys ▲▼◀▶ to select 'Setting' and press Ⓞ (OK) to enter the submenu. Select 'Memory' and press Ⓞ (OK) to enter the memory options. Select your preferred memory source and confirm with Ⓞ (OK). Press ➡ (Exist) to return to Main Menu.

Projecting from External AV Source

AV IN

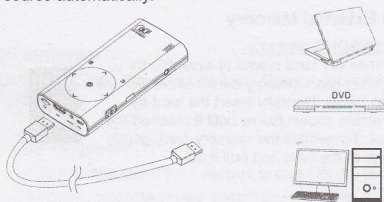
Follow the figure below to connect the external AV output device to the AV jack near the speaker. Connection is color-coded. After connection, the screen switches to AV source automatically.



Note: AV-IN cable is optional.





HDMI

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



Note: Most video content are at 16:9 ratio. USB "Menu Button" to select among three projection modes to optimized the visual quality.

Illustration for the three kinds of Projection Mode:

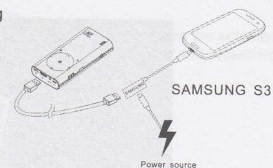
Smartphone (Source) Screen	<div data-bbox="402 754 529 770">16:9 Aspect Ratio</div> 		
Projection Screen	<div data-bbox="223 876 349 892">Pan & Scan (4:3)</div> 	<div data-bbox="405 876 521 892">Letterbox (16:9)</div> 	<div data-bbox="574 876 706 892">Theme mode (4:3)</div> 

Projecting from Smart Phone

1. Connect Samsung Galaxy S3 for Mirror projection

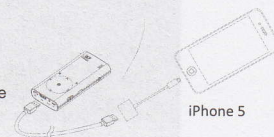
Connect A to A HDMI cable with Samsung S3 sole sale accessory, HDTV (MHL) Adaptor, to make mirror projection from Samsung Galaxy S3.

Note: The MHL Adaptor requires an external power source.



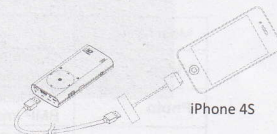
2. For iPhone 5 connecting (with Lightning connector)

If you have iPhone5, iPad 4th, iPad mini and iPod touch 5th, use Apple Lightning Digital AV adapter and A-to-A HDMI cable to connect with the Projector to make mirror projection.



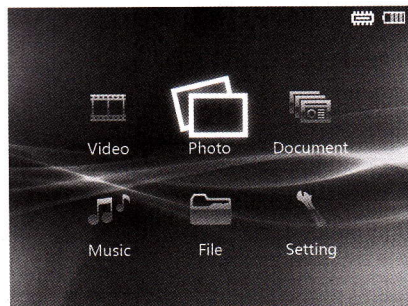
3. For iPhone 4S connecting (with 30pin connector)

If you have iPhone 4S, New iPad, iPad2, iPad and iPod touch 4th, use 30pin Apple Digital AV Adapter and A-to-A HDMI cable to connect with the Projector to make mirror projection.



Function and Operations

Main Menu



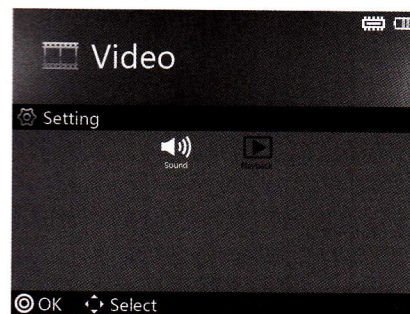
Press the navigation key $\blacktriangle\blacktriangledown\blacktriangleleft\blacktriangleright$ to highlight the desired item and press \odot (OK) to enter the submenu; press \rightarrow (Exist) to return to Main Menu.

Main Menu	Description
Video	This function allows users to select video file for projection.
Photo	This function allows users to select JPEG or BMP image file for projection.
Document	This function allows users to select Office PowerPoint, Word, Excel, and PDF files for projection.
Music	This function allows users to select MP3, WAV, and OGG files to playback on the projector.
File	It allows users to navigate all folders and files regardless their file format in the selected memory source. Photo and Video can be previewed while navigating the list. You can copy selected file to another memory source or delete it.
Setting	This function allows users to setup preference settings including Brightness, Key Sensitivity, Language, and Memory.

Projecting Videos

Select and project video files.

1. Select and enter 'Video' on the main menu.
2. In the videos list, use $\blacktriangle\blacktriangledown$ to select the folder and press \odot to open the selected folder. Use $\blacktriangle\blacktriangledown$ to navigate the playlist. Press \odot to start playing and projecting the selected video.
3. During playback, press $\blacktriangleleft\blacktriangleright$ to play the previous / next video.
4. Press $\blacktriangleleft\blacktriangleright$ longer to fast rewind / fast forward.
5. Press \odot to pause and press it again to resume.
6. To adjust the video volume, press $\blacktriangle\blacktriangledown$ to adjust the value.
7. Menu settings for video playback:
Press \square (Menu) to enter the video setting.



- 1) Sound: Turn the audio ON or Off.
- 2) Playback: Select the playback mode (as Table A) for video clips.

<Table A>

\odot	Repeat Off	Play current video or track once
\Rightarrow	Normal	Play current folder
\odot	Repeat One	Play current video or track repeatedly
\odot	Repeat All	Play current folder repeatedly
\times	Random	Play current folder repeatedly in random order

Note: The projector supports the following video formats:

File Extension	Video Decoder	Audio Decoder
*.avi	MJPEG Xvid H.264/AVC MPEG4	AAC (AAC-LC and HE-AAC) PCM ADPCM
*.mov *.mp4	MPEG4 H.264	AAC PCM ADPCM
*.mpg	MPEG1	LPCM



Projecting Photos

Select and project still images.

1. Select **'Photo'** and press **⊙** to enter Photo Mode on the main menu.
2. Use **▲▼** to select the folder and press **⊙** to open the selected folder. Use **▲▼◀▶** to navigate the thumbnail of photos.
3. Press **⊙** to project the selected photo in full screen.
4. Press the Left/Right (**◀▶**) key to move to previous/next picture.
5. Zoom or Pan the picture:
 - Press the Up **▲** key to enter Zoom mode. Use Up/Down (**▲▼**) keys to Zoom in / Zoom out.
 - In Zoom mode, press **⊙** to switch to pan function.

Please see the detail operation as following <Table B>.

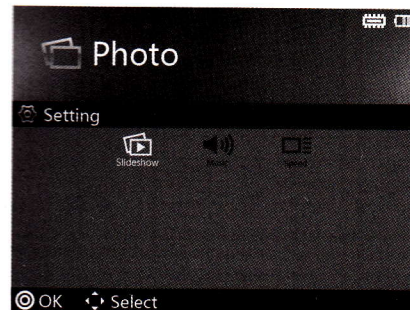
<Table B>

Zoom 	▲▼	Zoom in / Zoom out (Photo: The Magnification levels are 1x ~ 4x. Document: The Magnification levels are 1x ~ 8x.)
	◀▶	Previous / Next picture (page)
	⊙	Enter to Pan mode
	↶	Return to full screen
Pan 	▲▼ and ◀▶	Pan up, down, left, right
	⊙	Return to Zoom mode
	↶	Return to full screen

6. Rotate the picture:

Press **⊙** (Menu) to enter Rotation function. Use Left/Right (**◀▶**) key to select the direction to rotate and press **⊙** to confirm. To return, press **↶** (Exist) to photo folders or thumbnails.

7. To start a slideshow, press **⊙** (Menu) to enter 'Slideshow' and select ON.



- To have background music during slideshow, enter 'Music' setting and select ON.
- Setup the slideshow speed, enter Speed and select among 5 sec, 10 sec, 30 sec, 1 min and 10 min.
- To stop a slideshow, press **⊙**. Use **◀▶** to navigate previous / next picture. Press **⊙** again to resume the slideshow.

Note: The projector supports the following photo formats:

File Format	File Extension
JPEG	*.jpeg
JPG	*.jpg
BMP	*.bmp

Projecting Document

1. On the Main menu, select the **'Document'** and press the **⊙** button to enter the Document Mode.
2. Navigate the folders and files and press **⊙** to open the selected document.
3. Press the Left/Right (**◀▶**) button to move to previous/next page.

4. Zoom or Pan the document:

- Press the Up ▲ key to enter Zoom mode. Use Up/Down (▲▼) keys to Zoom in/ Zoom out.
- In Zoom mode, press Ⓞ to switch to pan function.

Please see the detail operation in Table B (page 12).

Note: 1. The projector supports the following document formats:

File Format	File Extension
POWERPOINT	*.ppt, *.pptx,
PDF	*.pdf
WORD	*.doc, *.docx,
EXCEL	*.xls, *.xlsx

- During file opening, magnify and pan operation, it may take a few moments to open the page since a large file size or multiple photos on one page.
- The projector has limited font support. When open a document with unsupported font, the Viewer automatically substitutes unsupported fonts with default fonts. This may cause the layout different.

Playing Music

Select and playback audio files.

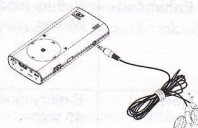
- Before you are able to listen to music, you must first store music files on the internal memory or external memory devices.
- Press ▲▼ to select one song and press Ⓞ to start the music playback.
- To adjust the music volume, press ▲▼ to adjust the value.
- Press Ⓞ to pause the music. Press it again to resume normal playback.
- The screen will be automatically turned off after 20 seconds to save power. To turn on the screen, touch the keypad to activate the projection function.
- Press Ⓜ (Menu) to enter the music setting.
 - Sound: Turn the audio ON or Off.
 - Playback: Select the playback setting as Table A (Page 11).

Note: The projector supports the following music formats:

File Format	File Extension
MP3	*.mp3
WAV	*.wav
OGG	*.ogg

Using Headphones

The projector equips speaker for providing the best audio performance. Additionally, you can connect the earphone or external speaker to the AV jack of the unit. When earphone is connected, the speaker will automatically turn off.



Warning: Avoid Hearing Damage

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



File Manager

The File navigator is a fast and convenient way to navigate, project, and manage files in different formats.

- On the Main Menu, select 'File' and press Ⓞ to enter File list.
- Navigate the file list, select a file, and press Ⓞ to start projecting.
- To manage the files, highlight a file on the list and press Ⓜ (Menu) key to enter 'Copy & Delete' function.



- Copying file**
Select and press Ⓞ "Copy" to copy the selected file to another memory device.
- Deleting file**
Select and press Ⓞ "Delete" to delete the selected file.
- Press ↵ to cancel and return to file list.

Setting

Change the default setting of projectional brightness, keyboard sensitivity, lanaguge, and memory devices

1. Brightness

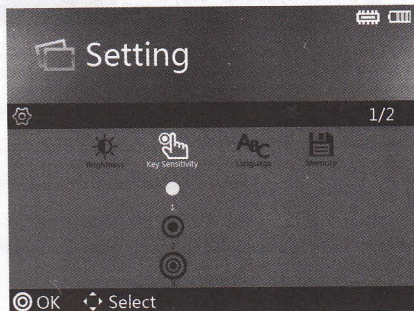
This setting allows users to change the brightness by selecting as Eco Mode or Enhanced Mode. In Eco mode the brightness is reduced but the power consumption is less (suggest for battery mode) than Normal and Enhanced mode.

Mode	Lumens	Battery Life	Recommendation
Enhanced	Battery mode: 50 lms	60 mins	This mode is recommended when external power supply is available to maximize the performance.
Normal	Battery mode: 40 lms	80 mins	This mode is recommended when the brightness of the room is easy to control, making the environment ideal for projection.
Eco	Battery mode: 30 lms	100 mins	This mode is recommended when the projector is operated under battery mode to save power.

Note: The projector will be automatically switched to Enhanced mode when connect the supplied AC adapter.

2. Keypad Sensitivity

This item allows users to set the key sensitivity (available setting value is 1~3). The higher value indicates higher sensitivity.



3. Language

This item allows users to select the displayed system language.

4. Auto Power Off

This item allows users to enable or disable the auto power off function of the projector. If auto power off is turned ON, the projector will be automatically turned off after the chosen period is due.

5. Memory Source

This function allows users to select the storage devices between internal memory, Micro SD Card, and USB devices.



: Internal memory



: Micro SD/SDHC



: USB Dongle

6. Mobile Charging Mode

The projector's battery can charge your mobile phone in urgent case. Activate the Mobile Charging Mode for saving power by turning off the projecting screen while charging your cellphone.

Note: USB port output — 5V, 500mA (max.)

7. System

- Factory Setting
Reset the projector to factory default setting.
- Firmware Update
Firmware update information is available on our website. Please follow up the instruction on the website for the update.
- Information
Detail information about the projector.

Notice for Long-time Projection

The built-in battery supports approximately 100 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.

Troubleshooting

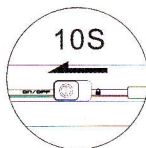
If your projector does not seem to be functioning properly, check the items below before you contact an authorized service center.

Symptom	Check Point
The projector does not work when connecting to a notebook PC.	1. Check if the HDMI cable is plugged correctly. 2. Make sure the PC has been switched to projector display.
The projected image is too dark.	1. Use the projector in a darker environment. 2. Increase the brightness by using the AC power adapter. 3. Scale down the projectional image size.
The projected image is blur.	1. Adjust the focus. Please refer to "Adjusting the Focus". 2. Check if the protection film is removed. Or, 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.

Reset Your Device

Occasionally, you may need to reset your Micro Projector.

This can be useful when a program is not performing properly. Push the Power switch downward for 10 seconds to RESET your device.



Specifications

Item	Description
Optical Technology	DLP
Light Source	RGB LED
Aspect ratio	4:3
Resolution	640 x 480 Pixels (VGA)
Contrast Ratio	500:1
Projection Image Size	15 cm ~ 152 cm (6" ~ 60")
Projection Distance	20 cm ~ 200 cm (8" ~ 79")
Throw Ratio (Diagonal : Distance)	1.59 (Projection Distance/Width of Image)
Brightness	35 ANSI Lumens / 50 Peak Lumens
Focus	Manual
Offset	0%
Playback Format	Photo: *.jpeg, *.jpg, *.bmp Video: *.avi, *.mov, *.mp4, *.mpg Audio: *.mp3, *.wav, *.ogg Document: *.ppt, *.pptx, *.pdf, *.doc, *.docx, *.xls, *.xlsx
Internal Memory	2 GB (1.5 GB for storage)
Internal Speaker	Mono
Card Slot	Micro SD / SDHC card up to 32 GB
Power Supply	Input: 100 ~ 240V AC Output: 5V, 3A DC
Battery Type	Embedded 3000 mAh Li-polymer rechargeable battery
Battery Life	Enhanced mode: 60 min Normal mode: 80 min Eco mode: 100 min
Power Consumption	Enhanced mode: 9.0 W Normal mode: 7.5 W Eco mode: 6.3 W
Dimensions (L x W x H)	135 x 65 x 22 mm
Weight	190 g
Humidity	20 ~ 80%, 80% (Max.), non-condensing.
Operating Temperature	5°C ~ 35°C.