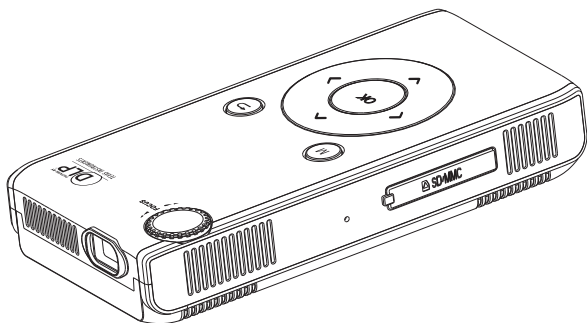


User's Manual

Pico Digital Projector

PP100



Read This Before Using the device

SAFETY INSTRUCTIONS

- Do not drop, puncture or disassemble the Pico Projector.
- Use the Pico Projector with care. Rough handling may damage the internal components.
- Do not expose the Pico Projector to high temperature. Avoid contact with water.
- Please notice that the Pico Projector body may become warm when operating it for an extended period.
- Test for proper operation before using the Pico Projector.
- Only use accessories supplied by the manufacturer.

Product Information

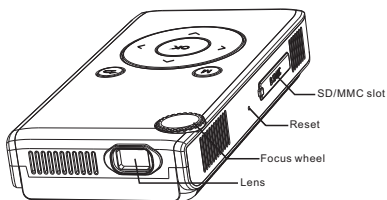
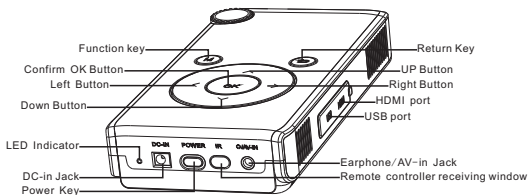
- Designs and specifications of the Pico Projector are subject to change without notice. This includes primary product specifications, software, and this user's manual.
- This User's Manual is a general reference guide for the Pico Projector.
- The illustrations in this manual may not be the same as the actual design of your Pico Projector and those you see on the LCD screen.

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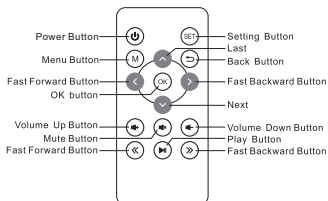
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1. Knowing the Device

Product Overview



Remote Control



2. Getting Started

Check the package contents

- Projector device
- AC power adapter
- AV cable
- USB cable
- USB-OTG cable
- HDMI cable
- HDMI adapter
- Quick start guide
- Pouch
- Remote controller
- CD (including User's manual, USB projection driver, and MPtG presentation file convertor)
- iPhone cable (optional)
- MHL cable (optional)

Charging the battery

The internal battery of the device may not be fully charged when you use the projector for the first time. You can charge the battery by following two ways:

- Plug the AC power adapter into the DC-IN jack of the device, and connect the other end to the power source. (recommended)
- Connect the small end of the supplied USB cable to the USB port of the device, and the large end to a powered PC.

Please be noted that the device will be turned on when you plug in the AC power adapter. You may turn it off if you don't use it.

Reading LED Indicators

During charging, the LED on the device indicates the charging status.

- Red - battery charging
- Green - battery full

Inserting a SD Memory Card (if media file(s) available in SD card)

Open the cover of the SD Card Slot. Hold the SD card by the edges and gently insert it into the slot until it reaches the bottom of the slot.

To remove the memory card, gently push the top edge of the card inwards and it will pop up slightly, then pull the card out of the slot.

3. Functions and Operations

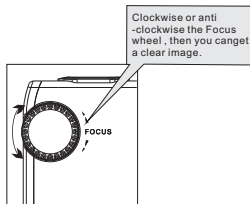
Turn on the device

Push the power button and hold it till the blue LED is on. If you need to turn it off, press the power button again till the LED is off.

This device can be powered by AC power adapter or internal rechargeable battery. In order for longer battery operation life, the projection brightness will be reduced when powered by rechargeable battery.

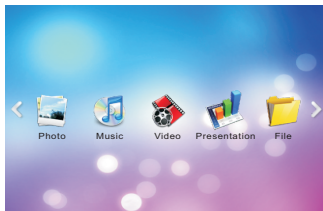
Adjusting the Focus

Adjust the focus by turning the Focus Wheel to get a sharper and clear projected picture.



Main menu

After turn on the projector, you will see the main menu as below.



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PHOTO - To select image files to project on screen.

MUSIC - To select audio files to play from the projector.

VIDEO - To select video files to project on screen.

PRESENTATION - To select PPT and PDF files to present on the projector. Please note that the PPT and PDF files need to be converted using the bundled MPtG application program on your PC before playback.

FILE - The File Navigator is a fast and convenient way of viewing and playing the image, music or video files in insertde devices.

SETTING - To set some system settings for using this device.

MEMORY - To select the storage device between internal memory and SD Card.

Use the left (<) and right key (>) to navigate through the main menu and choose the option you like to enter by pressing OK.

General Settings

On the main menu screen, select the Setting item and press the OK button.

You will see the Setting screen.

- **Language**: This item allows users to select the displayed system language.
- **Display mode**: This item allows users to select the displayed mode, full screen or original size.

- **Default:** The item allows users to restore to the factory default settings.
- **Firmware upgrade:** This item is reserved for technical service if needed.
- **AV-in:** This item allows users to switch projection source to AV input if any.
- **Information:** This item displays the system information, including the system version and available memory space.



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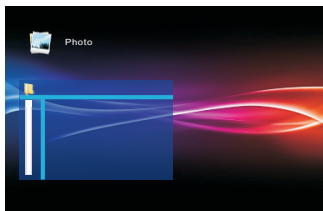
To configure the setting:

1. Select the Setting item and press the OK button to display the available setting options of the item.
2. Select the desired option and press the OK button. The setting will be saved automatically.
3. To discard the setting, simply press the Return (↵) button. You will return to the previous screen

General Operation

Playing Photo

1. On the Main menu, select the Photo item and press the OK button to enter the Photo screen.



- Press the Left/Right (< / >) or Up/Down (^ / v) button to select the target photo.
- Press the (OK) button to project this photo.
- Press the Left/Right (< / >) button to jump to the previous/next photo.
- Press the Up/Down (^ / v) button to increase/decrease the volume of background music while in slideshow.

2. Press the Menu (M) button to bring up the Photo settings screen. On the Photo settings screen, you can set up the following options.

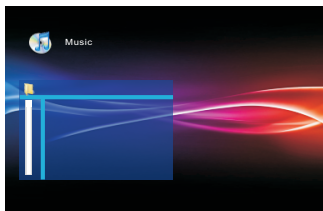
- **Slideshow Effect:** Enable or disable the transition effect while changing photos during the slideshow.
- **Slide Show:** Enable or disable the slideshow function. If disabled, the selected picture will be shown after manually change by using Left/Right (< / >) button.
- **Speed:** Set the interval time of changing photos during the slideshow.
- **Music:** Enable or disable the music playback during the slideshow.
- **Copy:** Copy the played music file to another available inside memory.
- **Exit:** Exit the Photo settings screen.

Here below are the support picture format:

Image Type	Sub Type	Encode Type	Max Pixels
JPEG / JPG	Baseline	YUV400	No Limit
		YUV401	No Limit
		YUV402	No Limit
		YUV403	No Limit
		YUV404	No Limit
	progressive	YUV405	<64 x Panel Resolution
		YUV407	
		YUV408	
		YUV409	
BMP			No Limit

Playing Music

1. On the Main menu, select the Music item and press the OK button to enter the Music screen.



- Press the (M) button to start playing the music track. Press OK button again to pause the track.
- Press the Left/Right (< / >) button to jump to the previous/next file.
- Press the Up/Down (^ / v) button to increase/decrease the volume.

2. Press the Menu (M) button to bring up the Music settings screen. In the Music settings screen, you can set up the following options:

Repeat: Repeat playing all tracks in the selected memory.

Copy: Copy the played music file to another available inside memory.

Exit: Exit the Music settings screen.

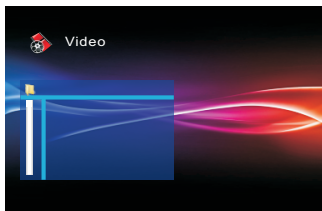
Here below are the support audio format:

Music Type	Sample Rate(KHz)	Bit Rate(Kbps)
MP1/MP2/MP3	8-48	8-320
WMA	22-48	5-320
OGG	8-48	64-320
ADPCM	8-48	32-384
PCM-WAV	8-48	128-1536
AAC	8-48	8-256

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Playing Video

1. On the Main menu, select the Video item and press the (OK) button to enter the Video screen.



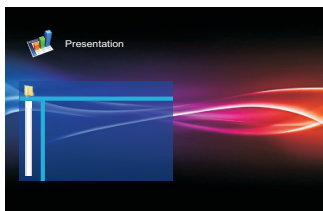
- Press the (OK) button to start playing the video. Press (OK) button again to pause the video.
 - Press the Left/Right (< / >) button to jump to the previous/next file.
 - Press the Up/Down (^ / v) button to increase/decrease the volume.
2. Press the Menu (M) button to bring up the Video settings screen. On the Video settings screen, you can set up the following options:
- **Repeat:** Repeat playing all tracks in the selected memory.
 - **Copy:** Copy the played music file to another available inside memory.
 - **Exit:** Exit the Music settings screen.

Here below are the support video format:

File Format	Video Format	Profile & Level	Max Resolution & Format Rate	Max Bit Rate	Audio Format	Sample Rate	Bit Rate	
AVI/MOV/ MP4/3GP/ MPG/VOB/ DAT	H264	Base Profile	1280*720 30fps	27M bps	MP3/AAC LC/PCM (ulaw alaw)/ ADPCM (ms, ima) /AMR-NB	32KHz	8Kbps~ 320Kbps	
		Main Profile		12M bps		44.1KHz		
		High Profile		12M bps		48KHz		
	MPEG1/2	All Profile	1280*720 30fps	16M bps		32KHz	128Kbps	
	MPEG4	All Profile	1280*720 30fps	12M bps		44.1KHz		
						48KHz		
	VC1	Main Profile	720*560 30fps	6M bps		8KHz~48KHz	No Limit	
	MJPEG	Base Profile	1280*720 30fps	No Limit		8KHz~48KHz	No Limit	
						8KHz	4.75~12.2Kbps	

Playing Presentation

1. On the Main menu, select the Presentation item and press the OK button to enter the Presentation screen.



2. The projector can play the converted PPT/PDF file stored in internal memory or SD card. For more information, see the Converting presentation files section.
 3. While playing the PPT file, you can:
 - Press the Left/Right (< / >) button to move to previous/next page.
 - Press the (OK) button to start/pause presentation.
 - Press the Up/Down (^ / v) button to go to the previous/next animation effect.
 4. While playing the PDF file, you can:
 - Press the Left/Right (< / >) button to move to previous/next page.
 - Press the Up/Down (^ / v) button to move page up/down.
- Note: 4:3 (Width: Height) PDF file are not supported.

Playing from File Folder

1. On the Main menu, select the File item and press the OK button to enter the File screen. All of the photo, music or video files in selected memory will be listed

2. Press the UP/Down (∧/∨) button to select the target file from the folder.
3. Press the (OK) button to playback this file.
4. Press Return button to return to previous screen or (M) button to main menu.

4. Playing files in other devices

You can connect the projector to your media players via composite AV or HDMI interface. Before connecting your media player or Notebook PC to projector, you need to have the necessary AV cable or HDMI cable ready.

When HDMI connection is built, the projection screen will be switched to HDMI source automatically. But for AV connection, you will need to go to the AV-in item on main menu to make switch.

If you need to project the photos or videos from iPod, iPad or iPhone, you will need their compliant AV cable to connect with.

5. Converting presentation files

Before PDF/PPT files can be playback on the projector, a converting to MPtG file is necessary.

System Requirements

CPU: Intel Pentium-M 1.5G or above



Memory: 256M or above

Operating System: Windows XP SP2 or higher, Windows Vista, Win 7

Office: Office 2003, Office 2007

PDF Reader: Adobe Reader 8, 9, 9.1

To install the converting utility

1. Please find the installation program from bundled CD.
2. Double click on the icon to run the Setup Wizard, and then follow the on-screen instructions to continue the installation.
3. When the installation is completed, the utility icon will appear on your desktop .
4. Double click the icon to launch the converting utility. The control panel of the utility will appear as shown below: .

To convert PPT/PDF to MPtG

1. On the control panel, do one of the following:
 - Click to convert PPT to MPtG.
 - Click to convert PDF to MPtG.
2. Select the PPT/PDF file you want to convert.
3. Select target destination.
 - Input File: The full path of selected PPT/PDF file.
 - Output Drive: The path of target storing disk.
 - Output File Name: The name and full path of converted MPtG file. The system will store the converted file in the same folder (if there is not any removable disk detected) with the same name of the source file.

4. Click (OK) to start converting. When done, you can directly play the file on your projector.

Limitations and Settings



- MPtG supports most of animation effects of PPT that could be displayed on desktop screen, excluding:
- The animation effect that uses timer or repeat function to playback automatically.
- The single animation effect that is longer than 60 seconds. If there is the recycling animation effect, MPtG will record it for up to 60 second.
- If the PPT screen stop to change for 3 seconds, the system will distinguish it as finished of current animation and will send "Enter" key to ask PPT for next step.
- The embedded VBA object and OLE object.
- To change the maximum of animation effect time, click the icon on the controlpanel and then select 10/20/30/60 seconds from the Maximum Animation Display Time dropdown menu.

6. USB Projection

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(Only when the connected Notebook PC is without HDMI port)

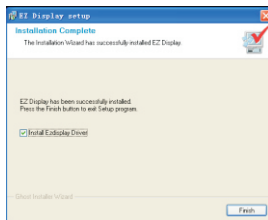
Before using the projector to projection, you need to install the EZ Display driver on your Notebook/PC.

You can find the setup program included in the software CD ROM, insert the CD ROM to your Notebook/PC, you will find  in "My Computer", double click  to run the Setup Wizard, and then follow the on-screen instructions to continue the installation. Pls find steps as below:

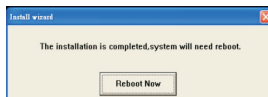




Select a location where you want to install the driver and press “Next” to continue.



When the driver installation is completed, Computer Restart dialog will pop up. Please choose “Yes” to reboot your computer, and then click “Finish” to close the program.

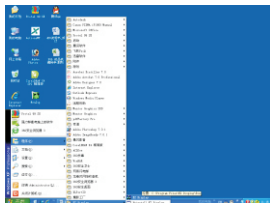


After rebooting, EZ Display driver is installed in your Notebook /PC successfully.

Start the Projection

After rebooting, connect the projector to your Notebook/PC with the supplied USB cable. The device will update the driver automatically for the first time use. Simply follow the on-screen instructions to continue.

After the update is finished, press “Start” as show below:



Find  **EZ Display** icon and click it to start application, a dialog window as below will pop up and synchronized projection will get started.

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Press “Minimize” button to hide the “EZ Display” dialog window to the taskbar.

7.Troubleshooting

If your projector does not seem to be functioning properly, check the items below before you contact an authorized service center. DO NOT disassemble or repair it by yourself, there is no serviceable parts.

1. The projector can not be turned on

- Battery has run out, pls charge the battery
- Fails to press “POWER” button. The power button is a precised component, press it with care.

2.The projected image is dim

- Focus is not well adjusted, adjust the gear of the lens to a proper position.
- The lens of the projector is too close or too far from the projection screen.

8. Specifications

Optical Technology	DLP
Light Source	RGB LED
Aspect Ratio	16:9
Resolution	854X480(WVGA)
Projection Image Size	10" ~120" (Diagonal)
Contrast	> 1000:1
Zoom & Focus	Manual
Projection Source	External from 3-in-1 AV jack, build-in memory or memory HDMI or memory USB or SD memory card
Play Back Format	Photo: JPEG, BMP Video: H.264, MPEG4, MOV, MP4, AVI, 3GP Audio: MP3, WAV, OGG
Presentation	PPT(with animation effect) PDF *Through bundled MPtG converter
Audio Speaker	3.5 mm Mono
LED life	20000 hours
Build-in Memory	2GB
Memory Slot	SD card (up to 32GB)
Power Supply	5V/3.0A, AC power adapter or 3500mAh Li-polymer battery
Battery Life	90 minutes
Dimension (LxWxH)	146*74*27.5mm (Only Projector)
Weight	229g

How to connect to smart phone

1. Select the right connecting cable

- For iPhone 4/4S or iPad

You can purchase the optional iPhone cable (dedicated for this projector) which one end is Apple connecting port and another end is AV jack.

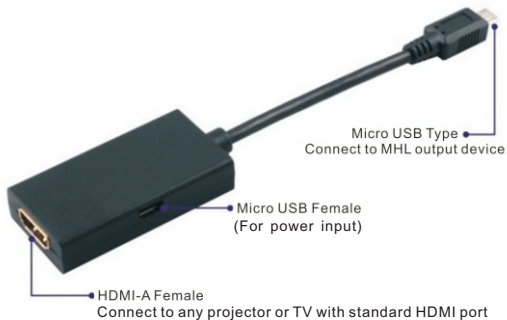
- For MHL enabled smart phone

You can purchase the optional MHL enable cable which one end is micro USB and the other end is HDMI port.

2. Project multimedia file in smart phone from projector

After connecting with each other, go to the multimedia file folder in your smart phone and select the file to play. After clicking play, the contents will be projected.

Application note for MHL cable connection (Only for MHL enabled smart phones)



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