# **Mobile Business MINI Projector**

# **User Manual**





## Product Overview:

#### Dear User,

Thank you very much for your purchase "wireless mini projector" of HOYOTO P company. Mini, Simple and Portable is our biggest characteristic, It's very s uitable for business office. Read the entire user manual carefully, Follow all s afety instructions in order to ensure proper operation of your device.

Our company will continuously to perfect and strengthen the product quality, And the software function also constantly update, So the product specificati ons maybe change as result, Please refer to subject to the material object, all content in this user manual are subject to change without notice, Our company reserves the right of the final interpretation.

Since then hope you setting foot on a good visual enjoy journey...

## Product Features:

- Using wireless and wired transmission technology, wireless communication transmission distance around 12 meters
- Adopting TI 1280 \* 720 DLP projection technology, wide color gamut, color rich, high-definition image.
- The light source adopts OSRAM LED three-primary colors, the useful life I engthen out to 30000 hours.
- Wireless WiFi connect with mobile phone, IPAD and laptop to realize vid eo, music, pictures, documents, web pages real-time HD transmission.
- 1) Support ISO (5.1 and higher)/Android(above 4.0) system intelligent mo bile phone and ipad.
  - 2) Support Windows, MAC OS system have WIFI function computer
- Wired/wireless USB connect computer/ipad will full screen output, support s Windows/MAC OS operating system.
- Support android system or others digital equipment (Miracast) full screen mirroring, and then the screen contents will completely wireless output by projector, share video, music, pictures, documents, web pages, etc.
- Built-in multimedia function and laser pen module, support external TF ca rd (max 32 gb) and can directly read play and projection various formats video/music/photo/document from internal storage.
- The average brightness around 200 lm.
- Support projection image automatic and manual keystone correction.
- Support access HDMI signal and then HD output.

# Product standard

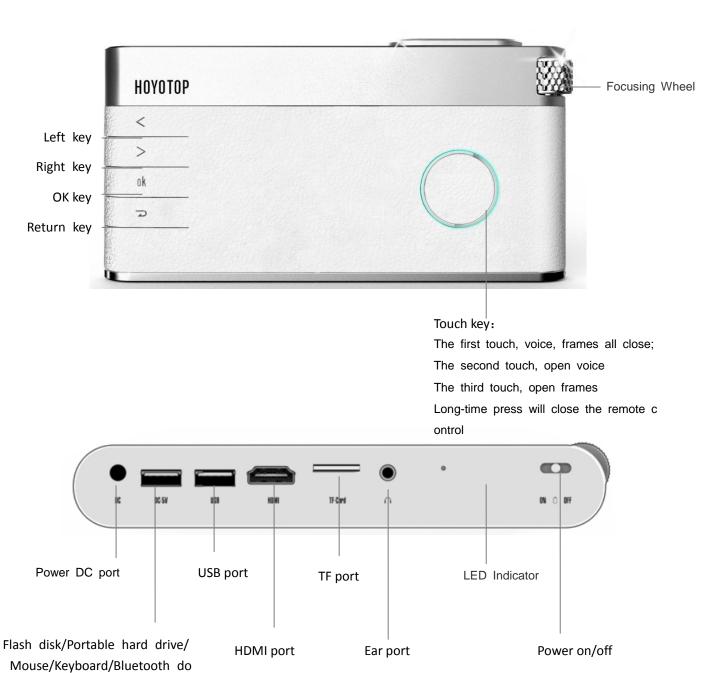
Projection parameters	Projection Technology	TI DLP technology	
	Standard resolution	Native 1280x800 pixels, support 1080p	
	Contrast Ratio	1000:1	
	Projection cover size	5.5 inch 80inch	
	Projection Distance	0.15m -3m	
	Screen Aspect Ratio	16: 9	
	Focus	Manual	
Lamp	Lamp type	RGB three-color LED light source	
	Lamp life	> 30,000 hours	
parameters	Brightness	200 lumens	
	Brightness Uniformity ratio	90%	
	Projection Type	Mini Projector	
	Dimension	172.5MM * 85MM * 27MM	
	Weight	350g	
		USB input * 1; TF card (U disk) input (maximum support 32G)	
	Port	* 1; USB External Charging * 1; HDMI input * 1, audio output *	
Hardware		1, IR Input * 1, battery indicator light * 4; 12V power input port	
Specifications		* 1	
	Built-in speakers	1.5W	
	Fan	Japan imported DELTA	
	Memory	4GB,maximum expansion16GB	
	Battery Specifications	6000mAh lithium polymer battery	
	Video Format	HD 1080P (1920 * 1080) play video file, support TS, MPG,	
		MPEG, AVI, MKV, MP4, MOV, DAT, RM, RMVB, VOB video	
		formats decoding picture browsing	
Main function	E-Book	Support PDF, WORD, EXCEL, TXT, PPT	
Main function	image	Support JPG, BMP	
	Audio Format	Support audio decoding of APE, FLAC, MP3, WMA, WAV	
	Miracast	Full image transmission (built Miracast, wifi display functions	
		such as cell phones or other products)	
Other	Environmental parameters	Operating temperature range: 0 $^{\circ}$ C ~ 40 $^{\circ}$ C (32 $^{\circ}$ F ~ 104 $^{\circ}$ F)	
		Storage temperature range: -20 $^{\circ}$ C ~ 45 $^{\circ}$ C (-4 $^{\circ}$ F ~ 113 $^{\circ}$ F)	
		Operating humidity range: 10% RH ~ 80% RH	
		Storage humidity range: 10% RH ~ 60% RH	

# 1. Packing list

ngle

Serial number	parts name	Unit	Quantity
1	Projector	Set	1
2	Power adapter	PCS	1
3	Remote control	PCS	1
4	Remote control charge cable	Root	1
5	Warranty card	Sheet	1

# 2. Keys on device panel



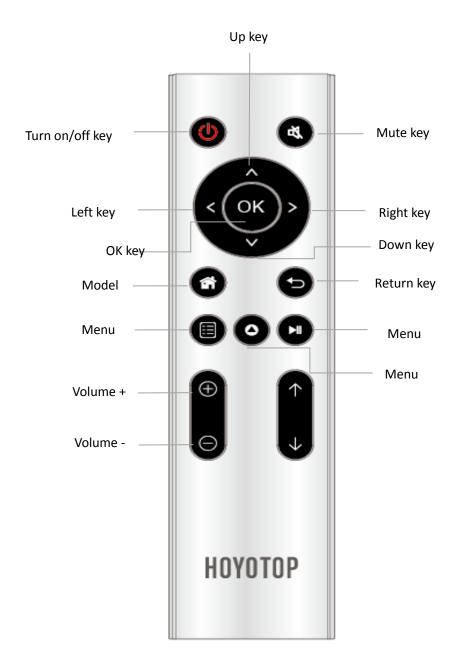




According to the arrow open the lens cover to 90  $^{\circ}$ , Can be used as the projector bracket

# 3. The remote control operating instructions

Up key



# 4. The projector operation instruction

## 4.1 Battery recharge

- 1. Please shifting the power on/off button into second gear when you make charging.
- 2. This device can be charged through connecting with our standard power adapter.
- 3. USB charging, connecting with PC via USB cable, it can be charging directly.

(Note: First use the projector, please charging projector and ensure the battery is full).

## 4.2 Switch on the projector

Shifting the power on/off button into third gear, After the initial screen the main menu appears, Use the focus wheel on the side to adjust the image sharpness. when the turn on/off button at third gear, through the remote control also can switch the projector. In battery full state will sustainable projection 90 minutes.

(Note: Do not cover the projector when it's working, Otherwise the device could overheat.)

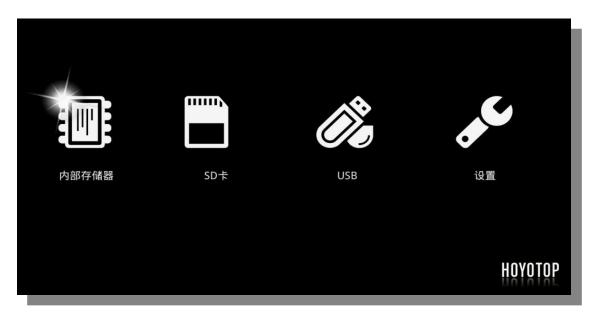


Main Menu

## 4.3 Interface graphic function introduce

## 4.3.1 "File" menu function introduce

Press "OK" button on remote control or projector shell, open will displayed picture 2 interface.



Picture 2

(1) "It's "Internal storage "menu, open it will appear picture 2-1 interface, you can play ph otos, video, music and various format document from internal storage.



Picture 2-1

- (2) "It's "TF" menu, After inserted Micro TF in the device, it will set current TF card as the default storage device, you can read and play the TF card multimedia files.
- (3) "It's "U disk" menu, After inserted U disk in the device, it will set current U disk as the default storage device, you can read and play the U disk multimedia files.

(4) "It's "setting" menu, open it will appear picture 2-2 interface.



Picture 2-2

1) The "system" menu, it's can choose through "USB", "TF" or "OTA" to update the software ver sion. Also can select the language type (Such as picture 2-2-1).



Picture 2-2-1

2) "Photos" menu, it's can choose the photos ratio, slides and the duration time(Such as picture 2-2-2).



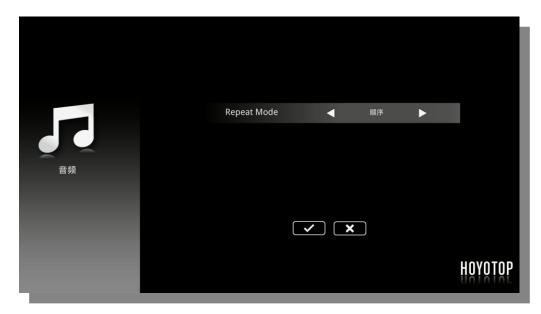
Picture 2-2-2

3) "Video" menu, It's can setting up the video ratio and repeat mode (Such as picture 2-2-3)



Picture 2-2-3

4) "Audio" menu, It's can setting up music repeat modes (Such as picture 2-2-4)



Picture 2-2-4

## 4.3.2"EZCast Pro" menu function introduce

EZCast Pro" menu, it will connect the projector with the external devices, such as smart p hone, ipad, laptop PC or other digital device to be realized HD image transmission in real time. Now, for example in Android phone,

Open "EZCast Pro" will appear picture 3 interface:



Picture 3

1.Scan the QR code and install the "EZCast Pro" app in your smart Phone.

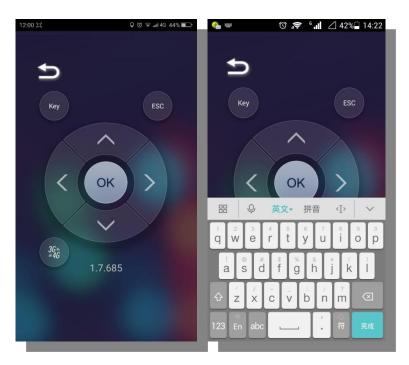


2. Open your smart phone WLAN, search the projector's WiFi signal and connect it, and enter password. (such as picture 3 SSID: EZCastPro\_560053C0, Password: 75787063).

3.Click the smart phone EZcast pro, the smart phone screen will appear picture A-1 interface, click the "EZcast pro", the smart phone will pop up picture A-2 interface, open the "mirroring", it will be realized screen mirroring interactive function, At this time operate all menu on your phone will be to your projector. (note: support android 5.0, Windows 7 and above, MAC systems).



Picture A-1Picture A-2



#### Picture A-3Picture A-4

If you need to connect wireless network, please click "setting", the phone screen will appear pict ure A-3 interface, at this time the projector will appear picture 3-1 interface, Select Internet option s press "OK" button on your phone will Prompt searching network interface as shown in picture 3-1-1. through manipulating the picture A-3 up/down key to select need to connect the wireless network, press the "OK" button will pop up enter password dialog such as picture 3-1-2, and the n enter the password on your phone (picture A-4), press "OK" button to connect the wireless net work, picture 3-1-3 is connecting, picture 3-1-4 is the connection successful. Use smart phone vis it Internet and projection the image by projector.

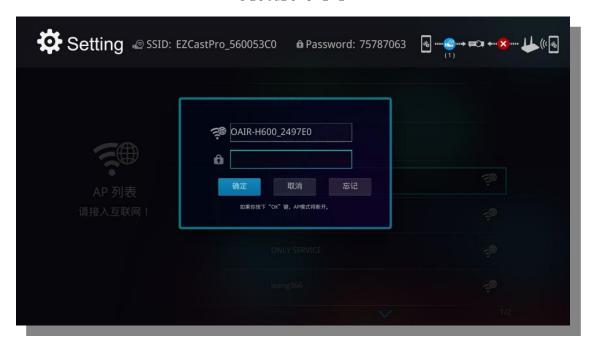
Apple phone, apple computer, I Pad, Windows PC all also similar operations.



Picture 3-1



Picture 3-1-1



Picture 3-1-2



Picture 3-1-3



Picture 3-1-4

## Below is the picture 3-1 interface function introduce

- (1) "Internet" it can be setting up to connect with wireless router to be realized the Internet functions;
- (2) "Boot default" it can be setting up the boot default for EZCast, EZMirror or EZMirror + AP;
- (3) "Connect" it can be setting up connection option for "by routing" and "only connect".
- (4) "More "open it will appear picture 3-2 interface.



Picture 3-2

- 1) "Password" it can be setting up to hide or change the SSID password.
- 2) "Language" it can be change display language type.
- 3) "Device name" it can be setting up to change the SSID equipment name.
- 4) "EZChannel" it can be setting up to "ON"/"OFF".
- 5) "Upgrade" it can be upgrade the version.

### 5. Mirroring function

If your mobile device with Miracast mirroring function or wifi function, also can through the "EZCa st Pro" menu realized Multi-screen Mirroring interactive. the setting interface will different acc ording to the different brand and different model, when the mobile devices connect with p rojector, please refer to the mobile device specification.

The IOS and MAC system mobile device can be synchronously display screen through Airplay, first connect the projector's wifi, then open Airplay and select the corresponding device will be realized multi-screen Mirroring interactive function.

Now, for example the Android phone,

According to the above step, till the mobile phone display picture A-2 interface, press the "EZMirr or", the phone's screen will appear picture A-5 interface, at the same time projection images into picture 3-3 interface:

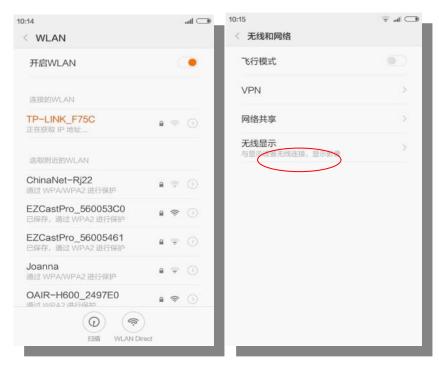


Picture A-5



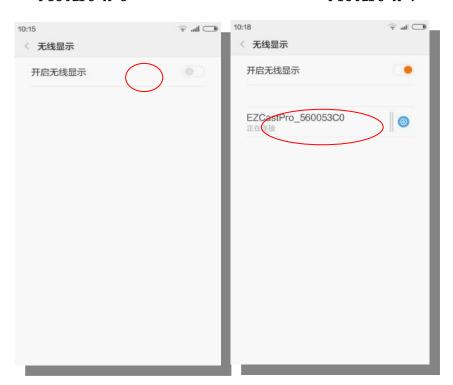
Picture 3-3

Click the "ON" button on your phone, after appear picture A-6 interface, press return key will appear picture A-7 interface. At this time projector display picture 3-3-1,click the "wireless display" on your phone into picture A-8 interface, open it will appear picture A-9, connect the "EZCastPro\_560053CO", the projection display is connecting, (as shown in picture 3-3-2) after successful will directly projection via projector.



Picture A-6

Picture A-7



Picture A-8

Picture A-9



Picture 3-3-1



Picture 3-3-2

## 5.1 "HDMI" menu function introduce

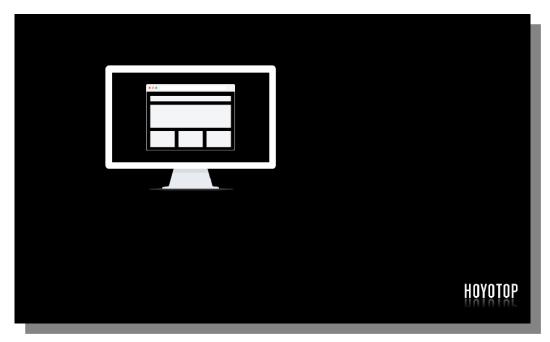
If you digital device with HDMI port, connect with the device and projector via HDMI cable, after successful, open the main interface HDMI "menu can be projection play HD video images from the digital equipment.

# 5.2 "Connect to PC" menu function introduced

### USB Wired connect

The projector connect with PC/ IPAD via USB cable can be used as U disk, it would be able to read and manage the files store by PC/ IPAD

Use USB cable connected to the projector and PC, open the projector "Connect to PC" menu the projection screen display as shown in picture 4.



Picture 4

#### PCas shown in picture 4



Picture 4-1

## 4.3 Setup menu function introduced

After the projector open successfully and normal projection images, when projection any images c an double-click the remote control or projector shell "OK" button all can turn into picture 5 interfac e.



Picture 5

## 4.3.1 Menu language

In picture 5 interface pitch on "language menu" option, press "OK" button to enter, press up, do wn, left and right choose the kind of language you need, press return key exit can be saved.

## 4.3.2 Factory reset

In picture 5 interface to select "Restore Factory Settings" option, press "OK" button to enter, after the picture 5-1 interface press left key "yes" is the restore factory Settings, press right key "no" to cancel the operation.



Picture 5-1

## 4.3.3 Software upgrading (USB)

When you want to upgrade software, Please copy the latest version software to the U disk, and then insert the U disk into USB port, select "software upgrade(USB)" option, press the "OK" key will also appear picture 5-1 interface after press left key "yes" will proceed upgrade the software operation, press right key "no" will cancel operation.

### 4.3.4 Auto keystone correction

In picture 5 interface to select "auto keystone correction" option, press the "OK" key will realize " on" and "off" switch, when "auto keystone correction on", projection screen up and down swing w ill automatically detect image tilt Angle and automatically correction the images, to ensure that the image is in a state of rectangular play.

## 4.3.5 Reset auto electronic keystone correction

In picture 5 interface to select "reset auto electronic keystone correction" option, press "OK" butto n will also display picture 5-1 interface after press left key "yes" will reset auto electronic keyston e correction, press right key "no" to cancel operation.

Note: The main function that after the projector updated software version, need to be reset auto matic electronic keystone correction, to make the projection images in the "automatic keystone correction" and "manual keystone correction accurately tiltangle adjustment on the image.

## 4.3.6 Touch key

In picture 5 interface to select "touch key" option, press the "OK" key will realized "on" and "off" switch, when the "touch key open", can be normal use projector shell touch-key function; When the "touch key close", touch keys function disappear

### 4.3.7 Volume

In picture 5 interface to select "Volume" option, press "OK" to enter interface of picture 5-2, according to the left key and right key to adjust the size of Volume, Volume value range of  $0 \sim 100$ .



Picture 5-2

## 4.3.8 Manual keystone correction

In picture 5 interface to select "manual keystone correction" option, press "OK" key to enter picture 5-3 interface, according to the left key and the right key to adjust the image tilt angle value, it mage tilt Angle numerical interval -  $35 \sim +35$ .

Note: when using "manual keystone correction" function need to close the "automatic keystone co rrection" function.



Picture 5-3

## 5. Projector simple troubleshooting

Fault phenomenon	Reason	Solution
Projector not turned on	No power supply	Check the projector power adapter successfully electrify and correctly inserted into the projector DC plug
	Low battery	Charging the projector
Image bluming	Lens focusing no accurately	Using the focusing wheel to adjust the lens focal length
Image blurring	Projector is not accura te screen	Adjust Angle and direction, if necessary, adjust the projector height
Don't identify memor	Memory card not accuracy insert or have	Please check whether the memory card had been accuracy insert, or use the detergent
y card	dust	wipe the gold part of the card slot, and t hen insert memory card again

## 6. Safety instructions and warning

#### 1) About battery

Normal working status, when prompted to power low, please recharge batteries or connect the p ower adapter as soon as possible, otherwise the playing images may be turned off at anytime.

#### 2) About power adapter

Please use the machine standard configuration power adapter for charging and power supply, oth er products adapter please don't use for this product, otherwise it will possible hazards such as fire.

#### 3) By rain or accidentally fell into the water

This machine not waterproof function, it is forbidden to drop into any liquid, if you accidentally dr op into the liquid, please immediately switch to OFF position, timely sent it to our factory obtain after-sales service.

#### 4) Clean item

Please don't use any high corrosive liquid to clean the machine, please use soft cleaning clo th and neutral detergent to clean the machine

### 5) Memory card operation

In order to guarantee correctness data, insert card must pay attention to the right direction, after insert the card to ensure that the card has been put in place .In order to guarantee correctness data and extend useful life of the memory card, please pull out memory card under the shutdow n state. When you are dealing with data or saving data, please do not outage or plug-pull card, lest cause data damage or loss.

### 6) Please don't disassembly by yourself

This machine was composed of high precision components, ban users to remove. Do not remove d the projector after failure, refer to "troubleshooting" after operation, such as fault is still cannot be ruled out, please contact the dealer.

#### 7) projector is placed

Please don't put the product on shaky platform, support or the desktop. If this product accidentall y drop may be severely damaged. Don't put where the temperature is too high, such as near the heating machine, electric heater. Don't put where excessive moisture, such as dust and smoke, it will pollution optical element, shorten the useful life and make the image darker.

#### 8) About ventilation opening

Grooving and openings for ventilation purposes, to ensure the product reliably operates and to pr event overheating. Do not block or cover these openings. Do not use any type of object from th ese openings into this product, otherwise it may touch dangerous voltage or short circuit, thus re sult in fire or electric shock.

## 7. Warranty and copyright information

HOYOTOP commitment that offer 12 months warranty service from the date of you received projector. In general, if the product develops a fault during the 365 days since you received it, and the fault is due to a quality issue rather than your own breakage or misuse. please show your warranty card, and write down detailed related content, then send projector and warranty card back to our factory, when we receive your authorized return, we will repair the product for free and send it back to you for free, repairing may involve changing parts for example a faulty screen, in general you will receive back, fixed, the same product you returned to us. If a repair is impossible we will credit you what you originally paid so you can choose to buy a new one or change to a different item.

## 8. FCC Warnning:

This equipment has been tested and found to comply with the 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 a residential installation. 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 harmful interference to radio or television 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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject 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 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.

9. Disclaimer

For any no express or implied content of this article, our company will not make any guarantee,

also refused to commercial or applicability of any special purpose shall be guaranteed. In additio

n, our company keep revision publications and any time modify this document, without prior notic

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