

Corporate Headquarters 2125 SW Highway 484 Ocala FL 34473

1-800-364-1608

Fax: 352-203-4617 www.magnifyingamerica.com







Patriot 7 FHD User Manual

Congratulations	4
Features	4-5
Packaging content	5
Technical specifications	6
Product structure	7
Use introduction	8
1. Install SD card (NOT SUPPLIED)	8
2. Charge battery	
3. Power on and power off	
4. Use digital video magnifier	9
Functions	10
1. Color mode switch	
2. Zoom rate adjustment	10
3. Touch screen operation (optional)?	10-12
4. Far lens and near lens switch	12
5. Image freeze and unfreeze	12
6. Reading line	.13-14
7. Storage and playback	14-15
8. Voice control (optional)	16
9. Voice memo	17
10.Flashlight	17
11.Memory function	18
12.Power saving	
13.Low battery tips	19
14.Handwriting	19
15.Connecting to TV	20
16.Connecting to computer	
Menu instruction	21
1. Setting menu	22

<ul> <li>LCD brightness adjustment</li> </ul>	22
<ul> <li>White LED brightness adjustment</li> </ul>	
Beep volume adjustment	
<ul> <li>Touch screen on and off (optional).</li> </ul>	
<ul> <li>Voice control on and off (optional)</li> </ul>	23
Date and time setting	
Color mode setting	
2. Playback menu	
Delete current voice memo	
Delete all voice memos	25
Delete current photo	25
Delete all photos	
Format disk	
3. Information menu	
Battery power display	26
File information display	
Disk information display	
<ul> <li>Version information display</li> </ul>	
Computer configuration requireme	
Precautions	28
Problems/Solutions	29

# Congratulation

Thank you very much for your purchase of the Patriot 7 FHD portable video magnifier! Please read this user manual to get a better understanding of all the features packed into this very powerful digital magnifier.

### **Features**

- 1080P30(far lens)\*720P60 (near lens), no lag, no smear, fluent HD
- Professional image processing DSP to restore colors and details
- 7.0 large anti-glare screen, 1024x600 resolution, high definition
- Touch screen, Support picture-in-picture, zoon and out and drag gestures (optional)
- Custom-made high-end lens, large filed angle and extended depth of field, more text
- Dual lens auto-focus
- 4Mega pixels camera, HD storage and playback of pictures and text.
- 2x-32x magnification
- Portable
- 26 color modes
- Freeze capability convenient to take a closer look
- Image zoom panning function; Image zoom can be moved up and down, easy to read
- Reading line function and auxiliary continuous reading text
- Voice control is a simple operation and easy to use for the visually impaired (optional)

### **Problems solutions**

Problems	Solutions
Black screen	Hold down power button to open magnifier Battery is dead, charging it; Make sure the lens focus on the reading
Can not power on	Battery is dead, charging it;
No sound	Confirm whether the volume at 1 to 5 in the menu setting
The image is too dark or too bright	Make sure the lens focus on the reading Confirm whether to choose the right lens (Far or near lens)
Image is blurred or dirty	Wipe the LCD screen and lens goggles Confirm whether to choose the right lens (Far or near lens)
Reading text is too small	to adjust zoom rate by pressing the zoom in key
Can not save or card error prompt	Please format TF or change TF card
Connected to the TV, but the TV is not shown	Make sure the TV is on When using the AV cable, switch the TV input to AV input When using HDMI cable, switch the TV input to HDMI input Make sure the video cable is properly connected to the magnifier and TV

## Computer configuration requirements

This digital video magnifier requires the PC to meet the following requirements:

- •Windows® Win7/Vista/XP operating system
- ●Intel® Pentium 4, 2.8 GHz CPU or higher
- At least 1GB RAM
- Standard USB 2.0 or higher
- ●512MB or higher video card

#### **Precautions**

In order to keep digital video magnifier works in the best condition, please read the following notes carefully

- Please do not expose it directly to high temperatures or sunlight
- •Please keep it away from moisture, rain, liquids and chemicals
- Please do not use it near to electronic equipments, and medical equipments, which are not under insufficient shield
- Please ensure that using it at temperatures between 10 ° C and 40 ° C
- ◆Please ensure that it is stored at temperatures between -20 ° C and 65 ° C
- Do not try to repair or open the aids to avoid damaging warranty
- Please use the matching power supply and battery, otherwise danger or loss will occur

Using soft cloth to clean it: Alcohol solvents or other cleaning agents can not used; Before cleaning, unplug power and remove battery.

### **WARNING:**

DO NOT USE THE PATRIOT 7" FHD WHILE CHARGING! WHITE SURFACE IS HOT DO NOT TOUCH!

- Voice prompts is easy to use
- Voice memo is available for noting picture content by voice
- · Large icons, clear and concise
- Adjustable backlight, White LED light with adjustable brightness
- SD storage card (optional) can expand storage (NOT included)
- Memory function can automatically save the user all the last settings and remember the user's last settings
- AV and HDMI 1080i60 connecting to HD TV to provide clearer images
- Type-c USB interface is available, both positive and negative inserts are available
- Flashlight can supply temporary lighting
- The lens is strategically centered
- Four hours of continuous use on full battery
- Auto shut down after 3 minutes of no use.

## Package content

Digital video magnifier HDMI cable Video output cable USB cable DCIN charging cable Power adapter User Guide Carrying case Lens cloth

Page 28 Page 5

# **Technical specification**

- Screen size: 7.0 HD colorful LCD screen (1024\*600)
- Pixel size: 4mega pixel (far focus lens), 4 mega pixel (near focus lens)
- Zoom rate: 2X to 32X magnification
- Color combination modes: 26
- Dual lens
- Touch screen
- Adjustable LED light
- Last settings stored
- Image freeze
- Line marker
- Playback
- SD card supported (NOT included)
- Flashlight function
- TV output: AV and HDMI
- Voice control
- Voice prompt
- Voice memo
- Bracket handle
- Over 4 hours battery life
- Battery capacity: 5200mAH high-capacity chargable lithium battery
- Dimension: 150mm(length)x84mm(width)x 30mm(hight)
- Weight: 17.4oz

### Disk information display





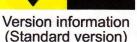
Built-in memory information

SD card information

See above figure, the disk information menu displays the current disk free space and the total space.

### Version information display







Version information (Plus touch screen)

See above figure, the version information menu displays the product model, firmware version number, and firmware compilation time.

#### Format disk



Format menu Confirm format Formatting
See above figure, **zoom in +** and **zoom out -** can select
confirmed option, and press **freeze key O** to format disk.

**Special reminder:** Once deleting the file, the file can not be restored. Please be careful

Once formatting the disk, all files will be deleted and can not be restored. Please be careful

#### 3.Information menu

Hold down **Freeze key**  $\Omega$  to enter information menu to check system information.

### Battery power display



See above figure, battery power will be displayed as a percentage.

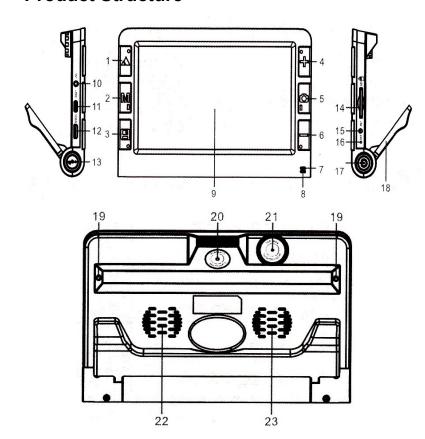
### •File information display





See above figure, the file information menu displays the total number of pictures and voice memos.

## **Product Structure**

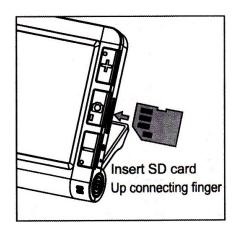


1	Far/near key 🛦	9	LCD	17	Power button <b>o</b>
2	Mode key M	10	AV interface	18	Stand
3	Save key   ☐	11	TYPE-C USB interface	19	White LED
4	Zoom in key +	12	HDMI-C interface	20	Near focus lens
5	Freeze key O	13	Smart key i	21	Far focus lens
6	Zoom out key -	14	SD card slot	22	Speaker
7	Power light(green)	15	DCIN interface	23	Ventilation
8	Battery charging light(red)	16	Reset button		

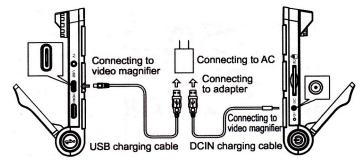
Page 26 Page 7

# **Use introduction** 1. Install SD card (NOT INCLUDED)

- Insert SD card to its slot up connecting finger
- Push SD card and it will click in place



# 2. Charge battery



- Connecting video magnifier to adapter by USB cable or DCIN cable
- Connecting adapter to AC power
- Charging light (red light) is on when charging
- Charging light (red light) will be off when fully charged
- Please charge the battery fully before the first use
- When battery symbol flashes low—charge unit

Warning: While charging, keep unit well ventilated to avoid overheating.

# 3. Power on and power off

### Delete all voice memos











Delete all voice memo menu

Confirm delete all voice memo

Deleting all voice memo

See above figure, zoom in + and zoom out - can select confirmed option, and press freeze key O to delete all voice memo.

### Delete current photo











Delete current photo

Confirm delete current photo

Deleting current photo

See above figure, zoom in + and zoom out - can select confirmed option, and press freeze key O to delete current photo.

### Delete all photos











Delete all photos

Confirm delete all photos

Deleting all photos

See above figure, zoom in + and zoom out - can select confirmed option, and press freeze key o to delete all photos.

Page 25 Page 8

See above figure, zoom in + and zoom out key - can adjust value. Press freeze key o to move setting option.

### Color mode setting













Color mode

Open black on white mode

Turn off black on white mode

See above figure, **zoom in +** and **zoom out -** can switch. Press freeze key o to turn on or turn off mode.

Only the selected mode will be used in the mode switch; the unselected mode will be skipped in the mode switch.

Attention: Color mode can not be turned off.

## 2.Menu Playback

Under playback, hold down to enter playback menu and manage files.

### Delete current voice memo











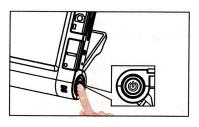


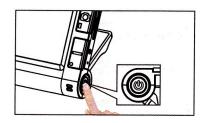
Delete current voice Confirm delete current memo menu

voice memo

Deleting current voice memo

See above figure, zoom in + and zoom out - can select confirmed option, and press freeze key o to delete current voice memo.





Hold down right Power button to power on unit.

Hold down right Power button to power off unit.

Hold down right Power on button U until green indicator lights and enter the magnifying mode

Start using when screen center is in alignment with the reading Adjusting zoom rate, enhanced mode, freezing the screen and other operations can achieve the best reading

Rehold down Power on button () to close the magnifier

Attention: For best results, remove the protective film from the LCD and of lens goggles before usage.

### 4. Use digital video magnifier

Color mode switch: Press **Mode key M** to switch color mode: Zoom in and out : Press Zoom in key + to enlarge image and press **Zoom out key** — to shrink image.

Freeze and unfreeze image: Press freeze key to freeze image and repress freeze key to unfreeze image.

Far and near lens switch: Press Far/Near key A to switch far and near lens.

Picture storage and playback: Press save key E to picture and save and hold down save key H to playback.

System parameter setting: Hold down mode key M to enter menu setting and hold down freeze key o to enter information menu.

Time and date view: Press smart key i to enter time and date interface.

For more details, please refer to the chapter on function introduction and menu setting.

#### **Functions**

#### 1.Color mode switch

Switch the LCD screen image enhancement mode by Mode key M to meet the different needs.

26 kinds of image enhancement modes:

1)Color mode	10)Black on yellow	19)Orange on black
2)Color enhancement mode	11)Yellow on blue	20)Black on orange
3)Negative mode	12)Blue on yellow	21)Yellow on green
4)Monochrome mode	13)Green on white	22)Green on yellow
5)Black on white	14)White on green	23)Red on white
6)White on black	15)Orange on white	24)White on red
7)Blue on white	16)White on orange	25)Yellow on white
8)White on blue	17)Red on black	26)White on yellow
9)Yellow on black	18)Black on red	

The desired color mode can be customized by menu setting -> color mode, details see Color mode setting section.

# 2. Zoom rate adjustment

**Zoom in +** or **zoom out -**, adjusts zoom rate to achieve the best magnifying effect.

This magnifier can zoom in or zoom out infinitely between 2X -32X

### 3. Touch screen operation (optional)

This video magnifier supports touch screen the following functions Picture-in-picture function: Without zoom in, drag the touch screen, achieve picture-in-picture function

Touch screen on and off(optional)





Touch screen on

Touch screen off

See above figure, zoom in + and zoom out key - can adjust between touch screen on and off.

Attention: Only models with a suffix of Plus support touch screen operation.

Voice control on and off (optional)







Voice control on

Voice control off

See above figure, zoom in + and zoom out key - can adjust between voice control on and off.

Attention: Only models with a suffix of Plus support touch screen operation.

Date and time setting





2017/01/01 04:49:10



Year setting

2017/01/01 4:49:24

Month setting

Date setting 2017/01/01



Hour setting

04:49:31

Minute setting

Second setting

Page 23 Page 10

### 1.Setting menu

Under preview mode, hold down the **mode key M** to enter the setting menu for magnifier parameter setting.

### LCD brightness adjustment



See above figure, **zoom in +** and **zoom out key -** can adjust between 1 ~ 5.

### White LED brightness adjust



See above figure, **zoom in+** and **zoom out key -** can adjust between 0 ~ 5.

Attention: 0 level to turn off white LED, mainly for reading mobile phones, panel and texts on other self-luminous instruments.

### Beep volume adjustment

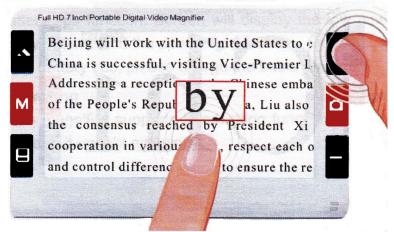


Volume: See above figure, **zoom in +** and **zoom out key -** can adjust between 0 ~ 5.

Attention: 0 level is beep off.



## Picture-in-picture (PIP effect)



Zoom in/ Zoom out key adjust font in picture-in-picture

Click: Menu button operation

Double click: Freeze/Unfreeze operation

Hold down: Mode switch operation Zoom in gesture: Zoom in image Zoom out gesture: Zoom out image

Dragging gesture: Start picture-in-picture without zoom out;

After zoom in, pan image is available

### Attention:

The touch screen must be kept clean in order for it to respond correctly. Please use the original charger, any other charger used with the unit may cause the unit to malfunction. Only models with a suffix of PLUS support touch screen operation.

# 4. Far lens and near lens switch **A** symbol

Switch Far/Near key to see near or far. Far and scenes are the same symbol.

Near lens uses: Newspapers, books, prescription bottles, signatures, cellular phones, tablets, bank statements and much more.

Far lens uses: Blackboards, bus stop sign, road signs, distance menus and much more.

When the camera light is too dark, there will be a low light message on the screen.

# 5. Image freeze and un-freeze



Press the freeze symbol in order to enhance an image close up. Press the freeze symbol to un-freeze the image to return to normal Viewing.

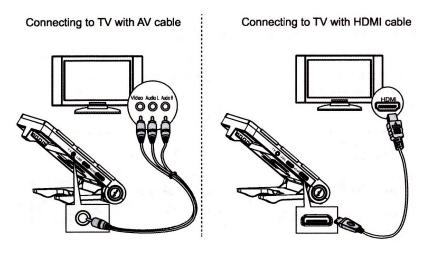
Connect the provided USB cable to the computer and the USB-C end to the Patriot 7FHD. The computer will recognize the device's storage and allow for playback of the saved pictures and voice memo files on the computer.

#### Menu introduction

Under menu open mode, the keys are defined as follows:

Pressing key	Operation
Far/near key	Previous menu
Mode key M	Exit menu
Save key	Next menu
Zoom in 🛨	Previous option
Freeze key	Option setting
Zoom out —	Next option

# 15. Connecting to TV

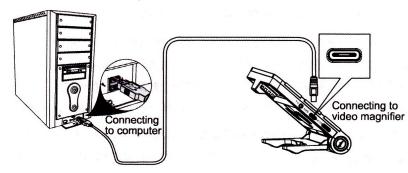


Connect Patriot 7FHD to TV with Av video cable to get a bigger display.

Connect Patriot 7FHD to TV with HDMI cable to get a more clearer and larger image.

When the Patriot 7FHD is connected to the TV, the LCD screen will automatically turn off.

# 16. Connecting to computer

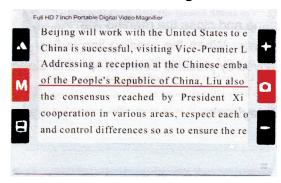


Page 20

# 6. Reading line

Reading lines are useful to position the reading material and enable the user to follow the sentence.

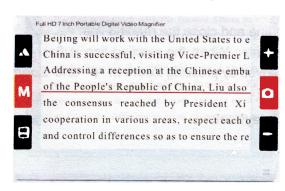
# Horizontal reading line



# Vertical reading line



# Turn off the reading line



Hold down Far/near key **\( \Lambda \)** to switch horizontal reading line, vertical reading line and close the reading line.

Moving reading line: When the reading line is flashing, the reading line is moved by pressing **Zoom in +** and **Zoom out -** keys.

# 7. Storage and playback

Press the **Save key** to save the current picture, easy to follow local playback or computer playback.

Hold down the **Save key** to enter the playback interface and replay magnifier saved photos.

# 13. Low battery



Low battery function: Screen will display the **Low Battery!** when battery needs to be charged along with the power button flashing. Plug the Patriot 7FHD into the charger for a minimum of 4 hours. The unit can be used while charging.

# 14. Handwriting

The Patriot 7FHD supports handwriting function. Open the stand, keep it upright to write.



Page 14 Page 19

# 11. Memory function

After powering unit off, memory function will save all the last settings automatically.

# 12. Power saving

The video magnifier has an intelligent power saving function. When no key operation and the screen rests for 1 minute, the unit will enter the sleep state automatically. The screen shows the battery power level and the current date and time.



While in automatic sleep mode, press any key to wake up magnifier. No operation after 2 minutes, it will shut down automatically to save power.

Under playback mode, the keys are defined as follows:

Pressing key	Short press operation	Hold down operation
Far/near key	Previous picture	Image shift(Zoom in)
Mode key	Color mode switch	Exit playback/ Image left shift(Zoom in)
Save key	Next picture	Image down( Zoom in)
Zoom in 🕂	Zoom in image	Image zoom in
Freeze key	Voice note/playback	Image right shift(Zoom in)
Zoom out —	Image zoom out	Image zoom out

#### Attention:

The number of files to be saved depends on the storage media. The built-in memory can store about 50 to 100 files.

Page 18 Page 15

# 8. Voice control (Optional)

The unit has voice control function and can be controlled by voice using corresponding voice command. Instructions are as follows:

Voice instruction	Instruction remark
Image freeze	In preview mode, freeze the image
Image unfreeze	In freeze mode, unfreeze the image
Zoom in	Zoom in the image
Zoom out	Zoom out the image
Move left	Move left the image
Move right	Move right the image
Move up	Move up the image
Move down	Move down the image
Lens switch	Switch to near lens/ far lens
Mode switch	Switch color enhanced mode
Photo save	In preview mode, save the image
Current time	Display the current date and time,
	and the battery level
Power off	Turn off digital video magnifier

### 9. Voice memo

Under playback mode:

Press freeze key, make voice memo on the current picture, noting content of the photo by voice memo. The voice memo will automatically play when the photo is opened.

Press freeze key to stop recording when narration is completed.

### Attention:

Voice recording can be deleted and added with the above same simple steps.

# 10. Flashlight

Flashlight plays the role of temporary lighting for a video magnifier. Turn on flashlight: Under off status, Hold down freeze key and press power button, flashlight is on.

Mode switch: freeze key switches bright, slow flash, flash, gradient, close.

Brightness adjustment: Zoom in (+) or zoom out (-) can brighten or dim light brightness (except for the gradient mode).

Turn off flashlight: Hold down power button.