# Image: A state of the stat

# MirrorPad Hyper Magnifier

# **User Guide**

# **REV1.1**



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#### Precaution



Charge before first use. Refer to the **Battery Charging** section for more details.



Do not expose the device to high temperatures or sunlight for a long time, and try to use it in an environment with a temperature range of 10° and 35°C (50° and 95°F).



The device is not waterproof, keep it dry and away from liquids and chemicals, and try to use it in an environment with a relative humidity of less than 70%.



Do not attempt to repair the device. Any unauthorized attempt will void the product warranty. Please contact with your distributor.



Please use the battery, charger and data cable that comes with the device, and the compatibility of other unofficial accessories is not guaranteed. Please do not plug or unplug the battery when the device is powered on.

#### **Quick Start**

#### **Overview**

**MirrorPad** series hyper magnifier - the innovative multimodal electronic video magnifier for the vision impaired. It breaks the limitations of traditional electronic video magnifier and integrates screen mirroring and video magnification together, which makes the visually impaired not only be able to read and write on printed materials, but also use smartphones more conveniently.

The device supports both Android and IOS smartphone systems, and can reverse control the Android smartphones.

Equipped with multiple high-definition cameras, the device can fully meet the needs of the vision impaired for nearviewing, distance-viewing, self-viewing scenarios, with the support of multiple read-write auxiliary functions including magnification, enhanced-color, image freeze /lookup /panning /playback, focus lock, reading line and etc. The professional version also has more advanced vision aid features such as text to speech, full-page capture, split-screen and etc.

#### Compositions



- 11. DC charging port
- 12. USB Type-C port
- 13. SD card slot
- 14. USB disk socket
- 15. HDMI Input
- 16. Earphone port



#### Accessories



#### **Screen Rotation**

Rotate clockwise to change the horizontal screen to vertical as the picture shows below.



# **Battery Charging**

Connect the supplied power cable to the DC port of device, and plug power adapter into an AC outlet to start charging. The green light is on when charging, and the green light is off when it is fully charged in the shutdown state.

#### **Battery Replacement**

Turn the device to the back side. Slide the battery cover out to expose the battery, then take the battery out and replace a new one.



#### **Power On/Off**

Press and hold the Power button  $\upsilon$  for 3 seconds to turn on/off the device.

#### **Quick Control Bar**

Short press the Menu/Return button  $\widehat{\mathbf{h}}$  to pop up the quick control bar as below, and touch the following icons to adjust related settings. No operation for 8 seconds, or short press the Menu/Return button  $\widehat{\mathbf{h}}$  or Switch/Enter button  $\widehat{\mathbf{O}}$  to close the bar.



Press and hold the Menu/Return button **h** for 2 seconds to

exit the current module and enter the Main Menu. Tap gesture

or use the Joystick O and the Switch/Enter button  $\bigodot{O}$  to enter the following modules:

Magnifier - A4 full page - Mirroring - Open - Setting

# **Image Operation**

#### **Image Scaling**

Rotate the Zoom knob O to zoom in/out the image, or use

the pinch gesture to adjust the zoom level.

#### **Enhanced Color**

Rotate the Color/Freeze knob to switch between different enhanced color combinations which can be customized in the setting module.

#### **Image Freeze**

Press down the Color/Freeze knob et to freeze/unfreeze the

image which is not available in the Mirroring Module.

Press down and hold the Color/Freeze knob if for 3 seconds to save the current image.

#### Image Lookup

Press down the Zoom knob<sup>Q</sup> and the image returns directly to the minimum magnification with a lookup box appears to highlight the text part that you were reading.

In the Magnifier module, Use the drag gesture or use the

Joystick to change the position of the lookup box. Rotate the Zoom knob will move the lookup box back to the original position.

Short press down the Zoom knob<sup>QQ</sup> again or quickly double tap the lookup box to return to the original magnification.

#### **Image Filling**

Press down and hold the Zoom knob<sup>99</sup> for 2 seconds to quickly remove the black edges, enlarge the image and fill the

entire screen (In the case of Portrait mode or Mirroring module).

#### **Image Panning**

In a higher zoom level, use the Joystick  $\bigcirc$  or slide gesture to navigate the image around.

#### • Panning Speed Adjustment

Keep pushing the Joystick to any direction and short press the Volume Up + or Volume Down - to pop up and adjust the Panning Speed Bar.

#### • Picture Positioning

Quickly push the Joystick in the same direction twice to jump to the image edge directly.

In the Magnifier module, press down the Joystick  $\checkmark$  to jump to the image center.

In the Mirroring module, press down the Joystick  $\Psi$  to Jump to the upper left corner of the image.

Note: In other cases, press down the Joystick to confirm.

#### **Image Focus**

Tap on the screen for 2 seconds to trigger the focus manually. Press down and hold the Switch/Enter button  $\mathcal{O}$  and press down the Zoom knob to toggle between autofocus and focus lock which is especially useful for handwriting or handwork to prevent the fault focus on the hand or pen.

#### **Reading Line**

Press down and hold the Switch/Enter button  $\bigcirc$  and press down the the Joystick  $\bigcirc$  to pop up and switch between horizontal reading line and vertical reading line. Press down and hold the Switch/Enter button  $\bigcirc$  and push the Joystick  $\bigcirc$  to change the position or the thickness of reading line. Press down and hold the Switch/Enter button  ${f O}$  and Rotate

the Color/Freeze knob 🕙 to change the color of reading line.

# **Display Switching**

#### **Camera switching**

In the Magnifier module, short press the Switch/Enter button

O to switch between: Main camera display, Camera stick display and Dual-camera split-screen display.

#### • A4 Full Page (Optional)

Press and hold the Menu/Return button hold for 2 seconds to exit current module and enter the Main Menu, then choose to enter the A4 full page module.

Switching to camera stick or split-screen is not supported in A4 full page module.

#### • Camera stick

Flexible enough to rotate to any orientation, the multi-ability camera stick will automatically switch between camera modes: Distance view, Mirror view (selfie), Flip view (read/write).



Distance view

Mirror view

Flip view

#### • Split Screen (Optional)

Tap to highlight and control the selected split-screen window. Press down and hold the Switch/Enter button O and push the Joystick to adjust the window size.

# HDMI Input (Optional)

The device supports external HDMI audio and video input with 1920\*1080 video resolution. Once connected, the camera

stick display will be switched to HDMI input display.



# PIP (Optional)

In the Mirroring module, short press the Switch/Enter button **O** to enable/disable the PIP (picture-in-picture) display which will overlay the camera stick display window on the smartphone screen projection.

Tap to highlight and control the camera stick display window.

Press down and hold the Switch/Enter button  $\mathcal{O}$  and push the Joystick to adjust the window position.

Drag the four corners of the camera stick display window to change the window size.

### OCR/TTS (optional)

Abbreviation: OCR (Optical Character Recognition); TTS

(Text to Speech)

Before OCR recognition, set the corresponding language type

in the Language Setting Page.

This module is adapted to landscape mode.

Short press the Power button  $\upsilon$  to pop up the OCR checkbox,

after confirmation, the current image will be recognized and the text will be converted to speech and start reading aloud.

Short press the Switch/Enter button  $\mathbf{O}$  to play or pause the reading aloud.

Click the Exit icon or press and hold the Menu/Return button for 2 seconds to exit reading aloud.

# **TTS Control Bar**

Short press the Menu/Return button  $\mathbf{\hat{h}}$  to pop up the TTS control bar together with the quick control bar.



# **Picture Read-aloud**

Segmentation Enabled

- Tap and hold on any section for 2 seconds to jump to the corresponding section and start reading aloud automatically.
- When reading aloud, double tap any line in the section to jump and start reading from the target line.
- When the reading is paused, tap to switch and highlight the corresponding section.
- Click the Previous Section icon / Next Section icon
   to jump to the corresponding section.

Segmentation Disabled

- Tap and hold on any line for 2 seconds to jump to the corresponding line and start reading aloud automatically.
- When reading aloud, double tap any line to jump and start reading from the target line.

#### **Plain Text Read-aloud**

- When segmentation enabled 2, only the text of the current section is displayed. Click the Previous Section icon or the Next Section icon to jump and refresh the text of the corresponding section.
- When segmentation disabled , the whole recognized text is displayed.
- Tap and hold on any text for 2 seconds to jump to the corresponding text and start reading aloud automatically.
- When reading aloud, double tap any line to jump and start reading from the target line.
- When the reading is paused, drag the right scroll bar to jump and start reading from the highlighted line.

#### **Screen Mirroring**

Android smartphone with **MirrorPlay** APP installed can be screen casted and reverse controlled.

iPhone can be screen casted without additional APP installed,

but can not be reverse controlled.

Use the official USB type-C or Lightning cable to connect the phone and the device, and the device will automatically detect and enter the Mirroring module.

# Interaction

If the following user interface appears on the device screen, perform the following operations.



# **Reverse Control (Android only)**

In the minimum magnification, all gesture operations on the

device screen can directly reverse control the smartphone.

Tips: The image lookup function can be used to quickly return

to the minimum magnification.

When zoomed in with zoom bar prompt appears, only the tap gesture will reverse control the smartphone, and the other gestures will trigger the image scaling or panning operation. Note: Reverse control is not available for the IOS device.

#### Open

Recognized image formats: JPG, BMP, PNG

Recognized document formats: TXT, PDF

Supported file systems: FAT32

This module is adapted to landscape mode

# Storage Medium



The memory folder can be formatted. Select and highlight the folder, press down and hold the Zoom knob<sup>Q</sup> for 5 seconds to pop up the format checkbox<sup>Q</sup>, short press down the Zoom knob<sup>Q</sup> again to format the folder, or press the other buttons to cancel the formatting.
Note: The formatting will erase all files in the selected folder, so please do it carefully and make a backup.

#### Thumbnail Grid

- Drag the right scroll bar or push the Joystick to turn the page up and down when in the image or document folder of selected storage medium. Click the Exit icon or short press the Menu/Return button is to return to the parent directory. Click on the highlighted thumbnail or short press the Switch/Enter button is to open the selected file.
- Tap and hold on the thumbnail for 3 seconds or press and hold the Switch/Enter button O for 3 seconds to activate

or inactivate the multi-selection for files. Tap gesture or

use the Joystick to select the images or documents which can be transferred or deleted in batches.

 Files can be copied from different storage medium. Files from internal memory can be exported to an SD card or

USB disk by clicking the export icon () or pressing down the Color/Freeze knob (). Files from SD card or USB disk can also be imported into the Shared Picture or Shared Document folder of internal memory by

clicking the import icon clicking the import icon clicking the import icon clicking the color/Freeze knob clicking.

- Tap and hold on the import / export icon I (1)
   for 3 seconds or press down and hold the Color/Freeze knob for 3 seconds to copy all files in batches.
- Click the Delete icon or press down the Zoom knob
   to pop up the delete prompt on the highlighted

thumbnail. Click the Delete icon  $\blacksquare$  or short press down the Zoom knob<sup>(Q)</sup> again to confirm the deletion, press the other buttons or tap elsewhere on the screen to cancel the deletion.

- Tap and hold on the Delete icon for 5 seconds or press down and hold the Zoom knob for 5 seconds to delete all pictures or documents in this folder. Click the Delete icon for short press down the Zoom knob again to confirm the deletion, press the other buttons or tap elsewhere on the screen to cancel the deletion.
- The thumbnail of the image saved in the OCR/TTS module will appear with an embedded text icon in the upper left corner. Tap the icon to open the text attached to the image.

#### **File Control Bar**

Short press the Menu/Return button  $\mathbf{\hat{h}}$  to pop up the file control bar together with the quick control bar. Click the Exit

icon 🛃 or press and hold the the Menu/Return button

for 2 seconds to close the file and return to the thumbnail grid.

Picture Control Bar:

Ð			*/***			
Exit	First One	Previous One	Picture No.	Next One	Last one	Rotation
• тхт	Contro	ol Bar:				
•			*/***			
Exit	First Page	Previous Page	Page No.	Next Page	Last Page	
• PDF	- Contro	ol Bar:		5	5	
Ð			*/***			Ρ
Exit	First Page	Previous Page	Page No.	Next Page	Last Page	PDF mode
<ul> <li>Click the image rotation icon</li> <li>Or press down the</li> </ul>						
Color/Freeze knob 🖉 to rotate the image.						
Auto	<ul> <li>Automatic pagination for the large TXT format document.</li> </ul>					

• The PDF document may also contain TXT text information,



Tap and hold on the Page Up icon or Page Down icon to turn multiple pages at once.

# Setting

**Option Page** 





Color Mode Combination: Customize the desired color mode from 16 selectable color combinations.

Power Saving: The device will automatically shut down with no operation for 5 minutes in the Magnifier module.



Voice Guide: Voice prompt assistance when operating in the Magnifier module.

Language Setting: Set the target region and

language for voice guide and OCR.

Male and female voice selection.

# Factory Setting Page





System Reset: Restore the default factory settings.

Power Frequency: The power frequency can be manually set to 50HZ or 60HZ according to different countries and regions.

# Hardware Reset

When the device is hung or can't be turned off normally, press down the Power button  $\bigcup$  and Volume Up + and Volume Down button — at the same time to trigger the hardware reset.

# Specification

MirrorPad	Plus Model	Pro Model
Screen	17.3-inch IPS Touch 300nit, 72% NTSC	17.3-inch IPS Touch 300nit, 72% NTSC
Main Camera	Standard 48MP NA	Standard 48MP Wide-angle 48MP (A4)
Camera Stick	Telephoto 48MP	Telephoto 48MP
Video Resolution	4K(3840*2160)	4K(3840*2160)
Magnification	Near: 1.8x - 85x Distance: up to 30x	Near: 1.8x - 85x Distance: up to 30x
Color Mode	Nature color 16 enhanced colors	Nature color 16 enhanced colors
Brightness	Adjust LCD brightness	Adjust LCD brightness
Image Tuning	Adjust Contrast/Saturation	Adjust Contrast/Saturation
Connection	SD Card USB type-C NA	SD Card, USB Disk USB type-C HDMI IN
Split Screen	NA	Dual Split / PIP
OCR/TTS	NA	Built-in, Offline
Battery	8700 mAh Li battery Detachable/Rechargeable 5.5 hours duration	8700 mAh Li battery Detachable/Rechargeable 5.5 hours duration
Power Adapter	Input: 100-240V Output: 12V/3A	Input: 100-240V Output: 12V/3A
Weight	≤ 3600g	≤ 3600g
Dimension	≤ 468*400*111mm	≤ 468*400*111mm



# Ver.

Low Vision

Video magnifier Screen mirroring Reverse control