



SIGHTCARE

MirrorPad

Hyper Magnifier

User Guide

REV2.0

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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

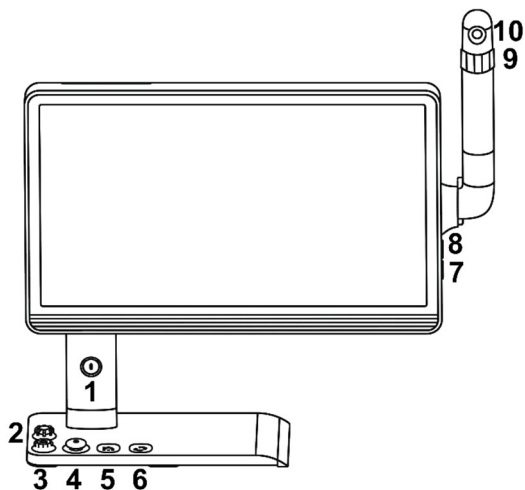
Overview

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.

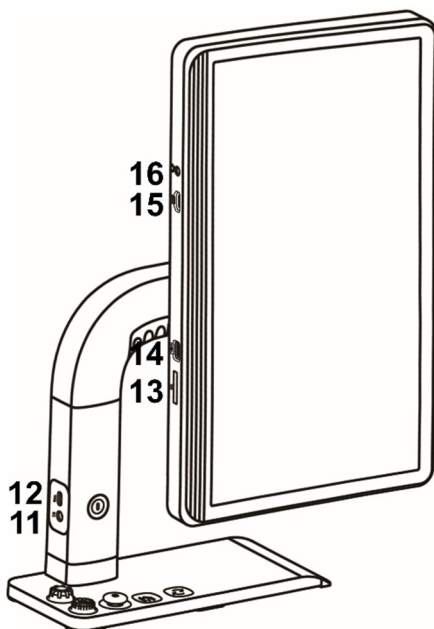
Equipped with multiple high-definition cameras, the device can fully meet the needs of the vision impaired for near-viewing, distance-viewing, self-viewing scenarios, with the support of multiple read-write auxiliary functions including magnification, enhanced-color, image freeze /lookup /panning /playback, 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



1. Power button
2. Color/Freeze knob
3. Zoom knob
4. Joystick/Enter
5. Menu/Return button
6. Switch/Enter button
7. Volume Down —
8. Volume Up +
9. Camera knob
10. Camera stick

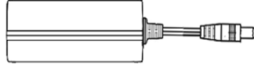
11. DC charging port
12. USB Type-C port
13. SD card slot
14. USB disk socket
15. HDMI Input
16. Earphone port



Accessories



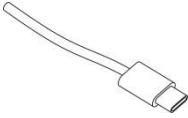
User Manual



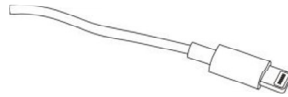
Power Adapter



Cleaning Cloth



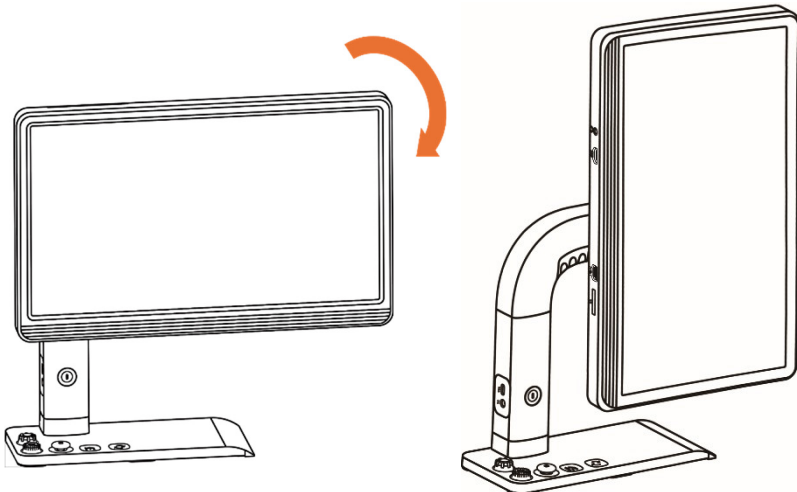
USB type-C cable



Lightning to USB type-C cable

Screen Rotation

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

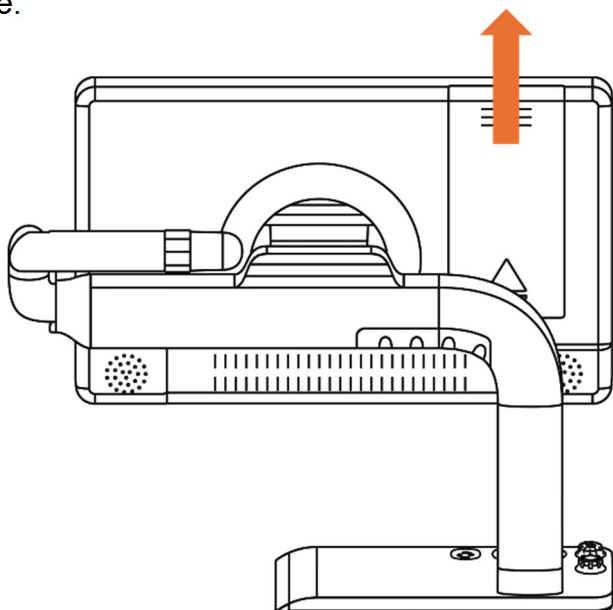


Battery Charging

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.



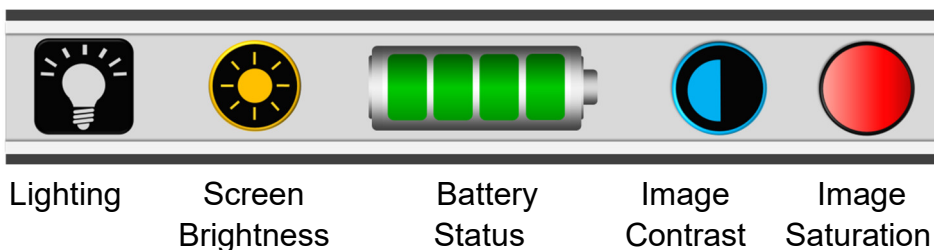
Basic Operation

Power On/Off

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

Quick Control Bar

Short press the Menu/Return button  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  or Switch/Enter button  to close the bar.



Module Switch

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

exit the current module and enter the Main Menu. Tap gesture or use the Joystick  and the Switch/Enter button  to enter the following modules:

Magnifier - A4 full page - Mirroring - Open - Setting

When the phone is plugged in, press and hold the Switch/Enter button  for 2 seconds to quickly switch between the Magnifier module and Mirroring module.

Image Operation

Image Scaling

Rotate the Zoom knob  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

Short press the Color/Freeze knob  to freeze/unfreeze the image which is not available in the Mirroring Module.

Image Storage

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

Image Lookup

Press down the Zoom knob  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  again or quickly double tap the lookup box to return to the original magnification.

Image Filling

Press down and hold the Zoom knob  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  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  to jump to the image center.

In the **Mirroring** module, press down the Joystick  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 and hold the Switch/Enter button  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/Mask

Press and hold the Switch/Enter button  and press down the Joystick  to pop up and switch between horizontal reading line, vertical reading line and reading mask.

Press and hold the Switch/Enter button  and push the Joystick  to change the position or the thickness of reading line/mask.

Press and hold the Switch/Enter button  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  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  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**

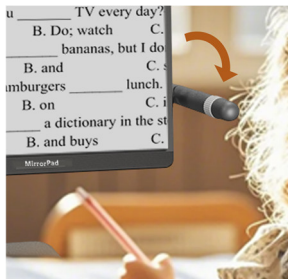
Flexible enough to rotate to any orientation, the multi-ability camera stick will automatically switch between camera modes: Distance view, Mirror view (selfie), Flip view (read/write) .



Distance view



Mirror view



Flip view

For Distance/Mirror View, click the Exposure icon  on the Quick Control Bar to adjust the exposure of camera.

Exposure Value = 0

Exposure Value $\neq$ 0

Auto Exposure



Manual Exposure



● Split Screen (Optional)

Tap to highlight and control the selected split-screen window.

Press and hold the Switch/Enter button  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



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 and hold the Switch/Enter button  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  to pop up the OCR checkbox,

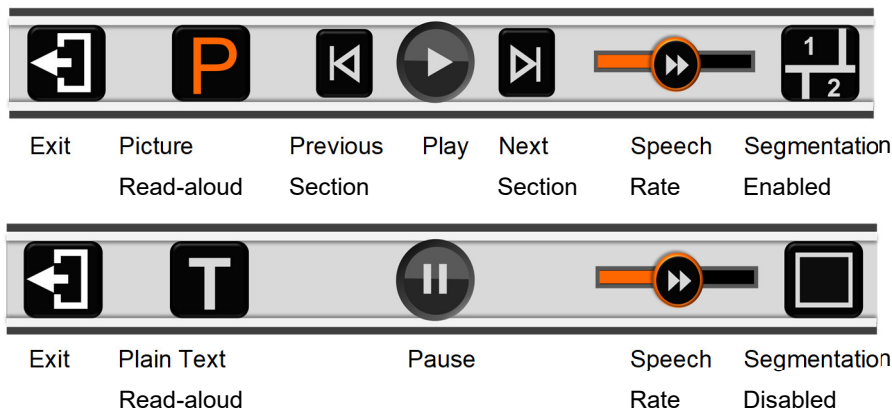
after confirmation, the current image will be recognized and the text will be converted to speech and start reading aloud.

Short press the Switch/Enter button  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  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 , 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

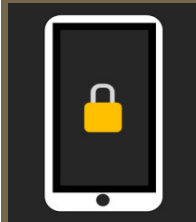
Android smartphone with **MirrorPlay** APP installed can be screen casted and reverse controlled.

iPhone can be screen casted without additional APP installed, and can 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.

	Please open the MirrorPlay APP on Android smartphone and authorize screen casting. If it is not working, please try reconnecting the USB Type-C cable.
	The phone is in the lock screen state, please unlock the phone.

Reverse Control

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.

Open

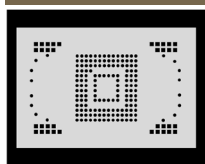
Recognized image formats: JPG, BMP, PNG

Recognized document formats: TXT, PDF

Supported file systems: FAT32, exFAT

This module is adapted to landscape mode

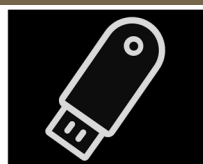
Storage Medium



Memory



SD Card



USB Disk
(optional)

- Tap gesture or rotate the Color/Freeze knob  and use the Joystick  to open the folder of selected storage medium.
- The memory folder can be formatted. Select and highlight the folder, press down and hold the Zoom knob  for 5

seconds to pop up the format checkbox , short press down the Zoom knob  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  to return to the parent directory. Click on the highlighted thumbnail or short press the Switch/Enter button  to open the selected file.
- Tap and hold on the thumbnail for 3 seconds or press and hold the Switch/Enter button  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 short-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  or short-pressing down the Color/Freeze knob .

- Tap and hold on the import / export icon  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 short press down the Zoom knob  to pop up the delete prompt on the highlighted thumbnail. Click the Delete icon  or short press down the Zoom knob  again to confirm the deletion, press

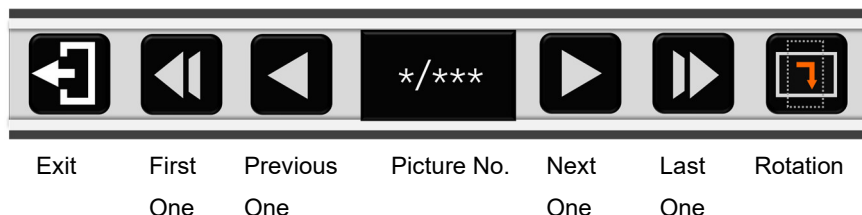
the other buttons or tap elsewhere on the screen to cancel the deletion.

- 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  or 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  to pop up the file control bar together with the quick control bar. Click the Exit icon  or press and hold the Menu/Return button  for 2 seconds to close the file and return to the thumbnail grid.

- Picture Control Bar:



- TXT Control Bar:



- PDF Control Bar:



- Click the image rotation icon  or short press down the Color/Freeze knob  to rotate the image.
- Automatic pagination for the large TXT format document.
- The PDF document may also contain TXT text information, click the PDF mode icon  or the TXT mode icon  to switch between each other. If the current PDF page

does not contain TXT format text, an Empty TXT icon



is displayed.

- 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.



Bluetooth: Displays the Bluetooth name and connection status, and allows switching the Bluetooth mode when reverse controlling the iPhone:

Automatic: Automatically connects to the last connected phone when Bluetooth connected;

Manual: Forces pairing every time Bluetooth connects.

Hardware Reset

When the device is hung or can't be turned off normally, press

down the Power button  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 hours duration	8700 mAh Li battery Detachable/Rechargeable 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

FCC Warning

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.

Radiation Exposure Statement

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 and your body.



Ver.

Low Vision

Video magnifier
Screen mirroring
Reverse control