

CLOVER 7

Handheld Video Magnifier

User Guide

Rev D

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Precaution



Before using Clover 7 for the first time, you must charge its battery. Refer to **Charging the battery** section for more details.



Always operate the unit in a place where the temperature is between 10°and 35°C(50°and 95°F)



Keep the unit away from wet areas, rain, and other sources of liquids. Do not submerge the unit



Do not attempt to repair the unit. Any unauthorized attempt will void the product warranty. Contact your distributor to service.



Use the supplied power adapter and battery.

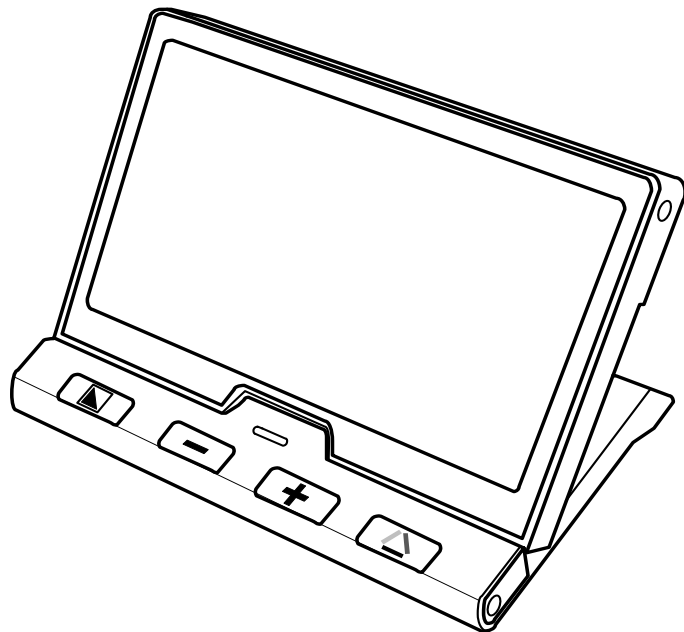
Quick Start

Overview

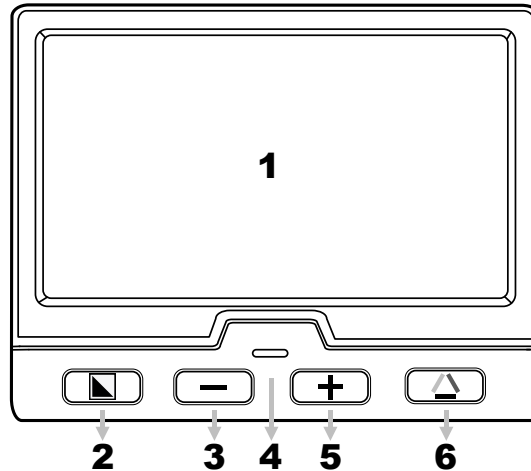
Thank you for purchasing Clover 7.

Clover 7 is a portable 7 inch video magnifier, providing high definition image quality.

The unit allows you to put the magnifier on the object for continuous zoom with reading & writing stand released, or to freeze or store the image for further viewing. This unit is ideal for close viewing such as labels, books, newspapers, and etc and far viewing when the stand is folded.

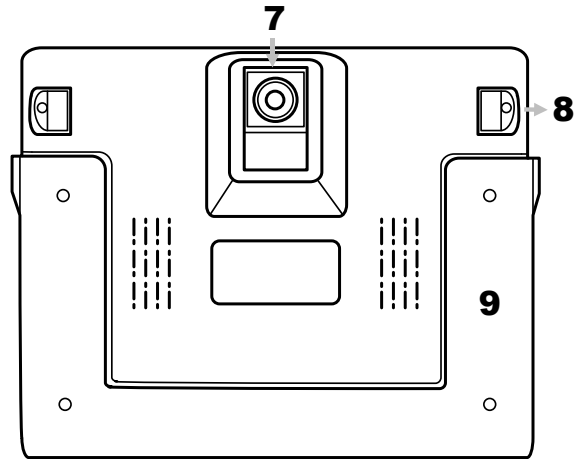


Compositions



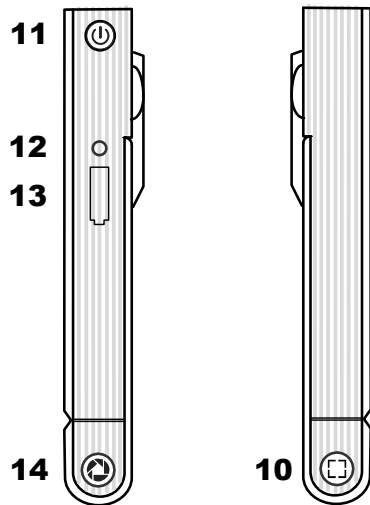
1. LCD Screen
3. Zoom Out
5. Zoom In

2. Enhanced Color
4. Power LED
6. True Color



7. Camera
9. Stand

8. LED lights



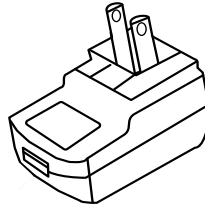
- 10. Mask/Focus Control
- 12. Power Port
- 14. Freeze Control

- 11. Power Button
- 13. USB Port

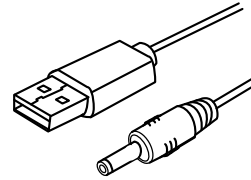
Accessories



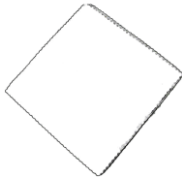
User Manual



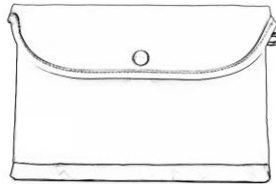
Power Adapter



Power Cable



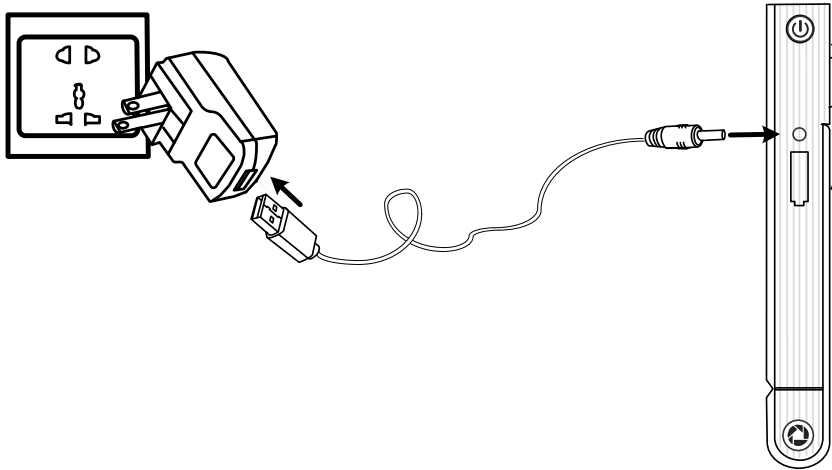
Cleaning Cloth



Carrying Case

Charging the battery

1. Connect the supplied power cable to the power adapter
2. Connect the supplied power cable to the power port in the unit
3. Plug the power adapter into an AC outlet and start charging



Power LED indicator

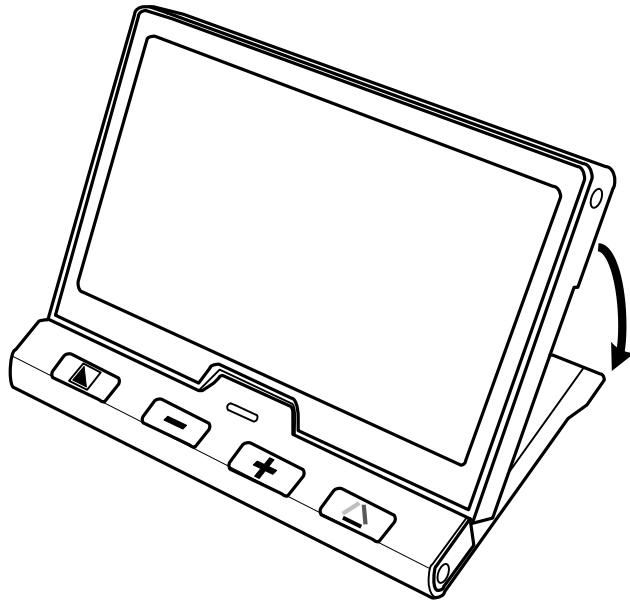
- Charging when the unit is off, the power LED will be green, and then auto turn off when fully charged. A fully Charging will take about 5 hours, and will support the unit about 4 hours of continuous working
- When the unit is on, the power LED will be green when using the power adaptor
- When the unit is on and the power adaptor is not connected, the power LED will be green when the battery is high and will be red when the battery is low. When the red light starts to flash, you will need to charge the battery

- You can also check the battery status by pressing the power button; refer to the following instructions for more details

Stand




The foldable stand is used for comfortable reading and writing experience. Release the stand as the following figure shows.

The camera is designed to auto rotate according to the status of the stand, so that both the near viewing and far viewing mode are fully supported on this unit.



Operation

Power Button


- Press and hold the power button  for 3 seconds to turn on the unit when it is off
- Press and hold the power button  for 3 seconds to turn off the unit when it is on
- Press the power button  to check the current status of battery capacity, freeze mode , focus status, and beep

- ❑ Press other button when holding the power button will make combo function, refer to the following instructions for more details





Beep Type

- Unit on/off beep
- Button beep
- Threshold beep
- Low battery beep

Beep Control:

- ❑ Press and hold the freeze button  for 3 seconds to turn on/off the beep

Magnification


- ❑ Press the Zoom In button  to increase magnification, and Holding the Zoom In button  for continuous increasing
- ❑ Press the Zoom Out button  to decrease magnification, and Holding the Zoom Out button  for continuous decreasing


- Magnification range:
2.2x – 16x

Color Mode

A color mode is a pre-defined color combination. Full color mode is suitable for picture, map viewing, and enhanced

contrast mode is combined with different foreground and background colors and can help to reading clearly.

- ❑ Press the Enhanced Color Mode  to cycle in one direction through the enhanced color combination list

- ❑ Press the True Color button  to return to the Full color mode

- ❑ Holding the Enhanced Color button for 5 seconds to switch between the Simplified Enhanced Color Combination List and the Integrated Enhanced Color Combination List (factory default)

The Simplified Enhanced Color Combination List (5 modes):





- | | |
|---|--|
| <input checked="" type="checkbox"/> White on Black | <input checked="" type="checkbox"/> Black on White |
| <input checked="" type="checkbox"/> Yellow on Black | <input checked="" type="checkbox"/> White on Blue |
| <input checked="" type="checkbox"/> Yellow on Blue | |

The Integrated Enhanced Color Combination List (18 modes)

- | | |
|---|---|
| <input checked="" type="checkbox"/> White on Black | <input checked="" type="checkbox"/> Black on White |
| <input checked="" type="checkbox"/> Yellow on Black | <input checked="" type="checkbox"/> Black on Yellow |
| <input checked="" type="checkbox"/> White on Blue | <input checked="" type="checkbox"/> Blue on White |
| <input checked="" type="checkbox"/> Yellow on Blue | <input checked="" type="checkbox"/> Blue on Yellow |
| <input checked="" type="checkbox"/> Green on Black | <input checked="" type="checkbox"/> Black on Green |
| <input checked="" type="checkbox"/> Violet on Black | <input checked="" type="checkbox"/> Black on Violet |
| <input checked="" type="checkbox"/> Blue on Black | <input checked="" type="checkbox"/> Black on Blue |
| <input checked="" type="checkbox"/> White on Green | <input checked="" type="checkbox"/> Green on White |
| <input checked="" type="checkbox"/> White on Red | <input checked="" type="checkbox"/> Red on Black |

Brightness

Adjust the display brightness for both Full color mode and Enhanced contrast mode. Factory default value will be highlighted green.

- Combo: Power button  and Zoom In button , increasing the brightness
- Combo: Power button  and Zoom Out button , decreasing the brightness

Lighting





- Combo: Power  & Freeze button , turn on/off the LED Lighting manually

Image Freeze

Freezing an image on the LCD screen can be useful for further reading, and also further zooming in or zooming out or changing the color mode for a better view. The brightness adjusting is not allowed when freezing.

- Press Freeze button  to lock the active image
- Press again Freeze button  to release
- When increase the magnification of the locked image, you can use the following combo buttons to navigate.









- Upward: hold Power  and press Zoom In 
- Downward: hold Power  and press Zoom Out 
- Leftward: hold Power  and press Enhanced Color 
- Rightward: hold Power  and press True Color 

Image Storage













- When in Freeze mode, long press the Freeze button  for 3 seconds to store the current image. You can save up to 20 images.
- When the saved images reach to the maximum value (20 images), you will need to delete some picture first in Playback mode before successful saving (Memory Full ICON appears).





Image Playback

- ❑ To enter the Playback mode, long press the true color button  for 3 seconds
- ❑ Press the Zoom In  and the Zoom Out  to select the target image from the Four Grids Thumbnail. Press the true color button  to view the target image. You can view and navigate the image with the same operations described in the Image Freeze Section. Press the Freeze button  to return to the Four Grids Thumbnail





- ❑ Press the Mask/Focus button  to delete the target, press the Mask/Focus button  again to confirm, press other button to cancel. Hold the Mask/Focus button  for 5 seconds to delete **all** the image, press the Mask/Focus button  again the confirm, press other button to cancel
- ❑ Long press the true color button  for 3 seconds to exit the Playback mode

Line & Mask

Press the Mask/Focus Control button  to switch among different Reading Line & Mask modes.

- One horizontal line
 - Horizontal mask
 - Normal, no line & mask
- Press and hold the Power button  and press the Zoom In button  or Zoom Out button  to change the position of reading line or change the distance between the masks. The brightness adjusting is not allowed in Line & Mask mode
- Click the Power button  only will quickly return to normal

Focus Control

- Press and hold the Power button  and click the Mask/Focus button  to trigger the camera focus
- Long press the Mask/Focus button  for 3 seconds to lock the focus
- Long press the Mask/Focus button  for 3 seconds again to unlock the focus



Memory

The unit will memorize automatically the most recent settings such as color mode, magnification, beep when power off normally and use them in the next power on




Auto power saving

If no operation and no moving for over 3 minutes, the unit will turn off automatically

Restore

Holding the Freeze button  and the Mask/Focus button  at the same time for 5 seconds to reset to the default factory settings. Auto power off when reset is done.

Hardware Reset

When the unit is hung or can't be shut down normally, press the Power  + Freeze button  + True Color button  at the same time to trigger the hardware reset.

Troubleshooting

The unit does not turn on

- Connect to the power adapter
- Charge the battery
- Hardware Reset

Black screen or White screen

- If the unit is sitting on a flat pure surface, the screen may be black or white, Lift the unit off to ensure change happens.
- Adjust the magnification
- Adjust the color mode
- Restart the unit
- Hardware Reset

The image does not change

- If the unit enter the freeze mode or playback mode, the image will not change
- Press power button to check the current status
- Restart the unit
- Hardware Reset

Smudges or blemishes on the screen

- Adjust brightness
- Clean the LCD screen and camera

Please contact your local distributor if problem is not solved

Specifications

- **Display:** 7 inch wide screen LCD
- **Camera:** Auto Focus, 720P@60fps
- **Size:** $\leq 176*145*25\text{mm}$
- **Weight:** <450 grams
- **Color Mode:** True color, 5 Simplified enhanced color modes; 18 Integrated enhanced color modes
- **Magnification:** 2.2x – 16x
- **Battery:** Integrated rechargeable Li battery; 4 hours continuous use; charges in approximately 5 hours
- **Power Adapter:** Input: 110-240V; Output: 5V/2A