

**CLOVER 10**  
Handheld Video Magnifier  
**User Guide**

Rev F

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## Precaution



Before using Clover 10 for the first time, you must charge its battery. Refer to **Battery Charging** 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. Please contact your distributor.



Use the supplied power adapter and battery.

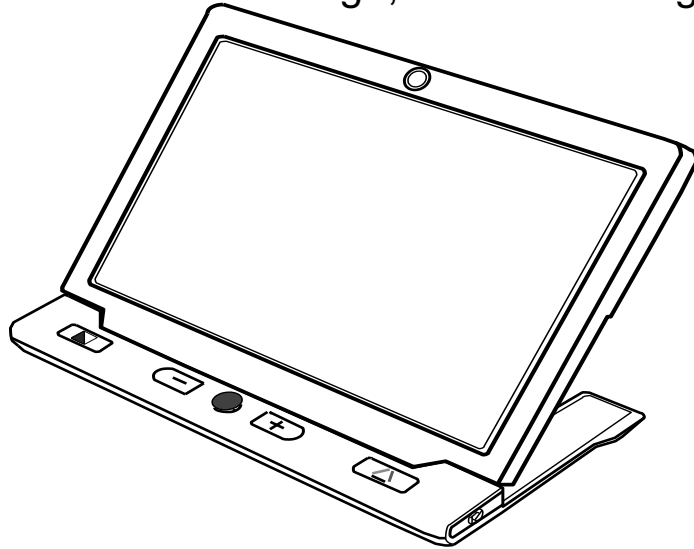
## Quick Start

### Overview

Thank you for purchasing Clover 10.

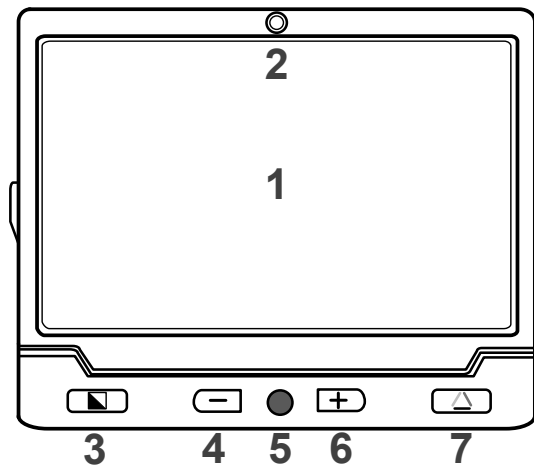
Clover 10 is a portable 10 inch video magnifier with excellent Full HD image quality, and it assures the real-time crisp image while moving or changing magnification continuously from 2.5X to 18X. The integrated dual camera system provides three viewing ways to fulfill the daily use. For example, **Near View** to read books or newspapers; **Far View** to see posters or blackboards; **Mirror View** to dress up.

Besides the common zooming and color mode function, there are also various practical functions such as Reading Line & Mask, Image Freeze and Storage, Find and Navigation.





## Compositions



1. LCD Screen

4. Zoom Out

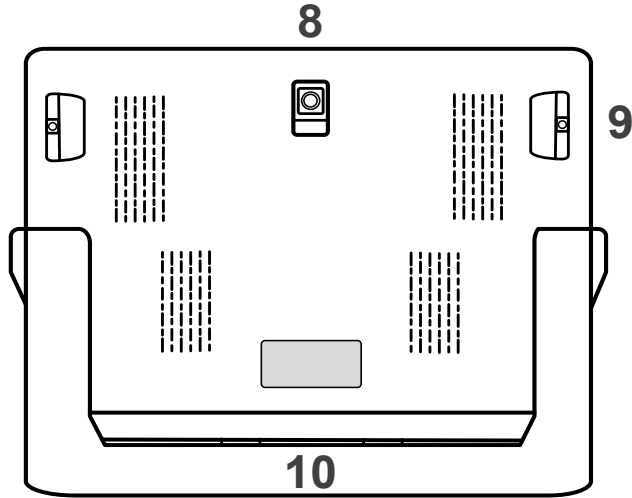
7. True Color

2. Front Camera

5. Joystick

3. Enhanced Color

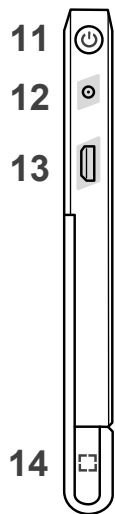
6. Zoom In



8. Rear Camera

9. LED Lights

10. Stand



11. Power Button

13. HDMI Port

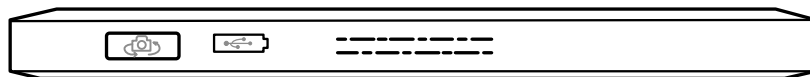
15. Freeze Button

17. USB Port

12. Power Port

14. Locate Button

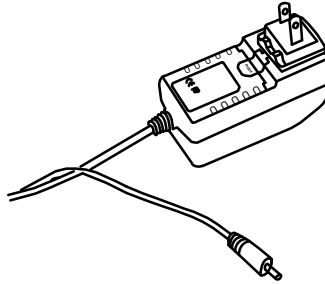
16. Camera Switch



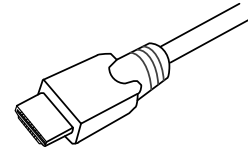
## Accessories



User Manual



Power Adapter



HDMI Cable



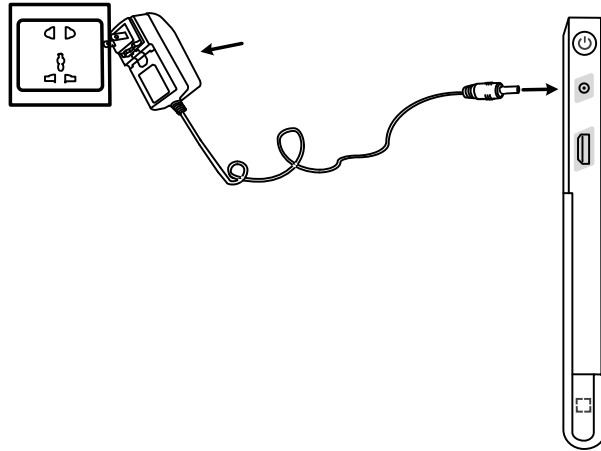
Cleaning Cloth



Carrying Case

## Battery Charging

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



## Power LED

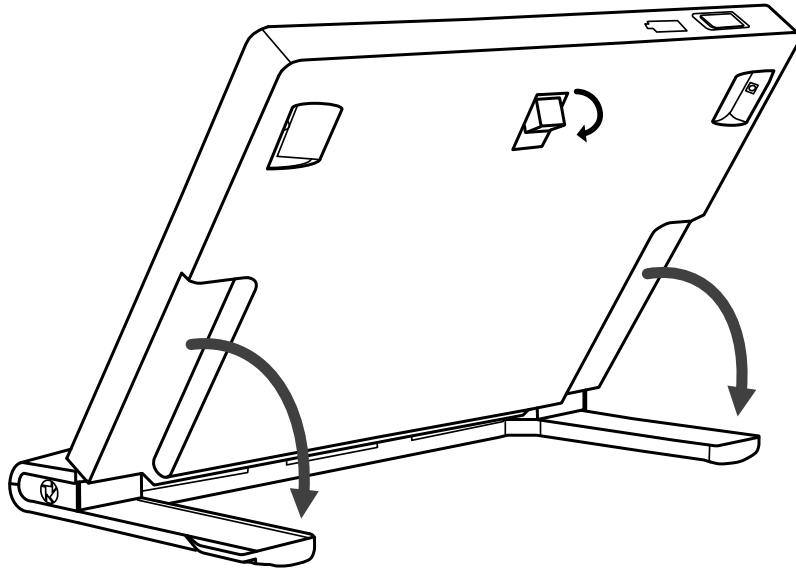
- Charging when the unit is off, the power LED will be green, and then auto turn off when fully charged. A full Charge will take about 5 hours, and will support the unit working for about 3 hours.
- Charging when the unit is on, the power LED will be green.
- When the unit is on without charging, the power LED will be green when the battery level is high and will be red when the battery is dying. As long as the red light starts to flash, it is a signal 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**

With integrated fold-away writing stand at an ergonomic viewing angle, clover 10 can satisfy users' desire to read more and long time in a comfortable position. Also there's enough space under the camera to work the pen. Unfold the stand as the following figure shows.



The rear camera is designed to auto rotate according to the status of the stand, so that both the Near View and Far View are supported on this unit.





## Operation



### Power Button

- Press and hold the power button  for 5 seconds to turn on/off the unit.
  
- When the unit is on, press the power button  to check the current status of battery capacity, freeze mode, focus status, and beep.
  
- Press other buttons when holding the power button will make combo functions. 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 Power button  and press the True Color button  to turn on/off the beep.

## Camera Switch

- Turn the Camera Switch  left to open the rear camera for Near View and Far View

- ❑ Turn the Camera Switch  → right to open the front camera for Mirror View



## Magnification

- ❑ Press the Zoom In button  to increase magnification, and hold the Zoom In button  for continuous increase.
- ❑ Press the Zoom Out button  to decrease magnification, and hold the Zoom Out button  for continuous decrease.
- Magnification range when standing on table:  
Back/Front Camera: 2.5x – 18x

## Color Mode

A color mode is a predefined color combination. Full-color mode is suitable for viewing pictures or maps.

Enhanced-contrast mode is combined with different foreground and background colors which can help to read more clearly.

- Press the Enhanced Color button  to go 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):

- White on Black
- Black on White
- Yellow on Black
- White on Blue
- Yellow on Blue



The Integrated Enhanced Color Combination List (18 modes)



- White on Black
- Black on White
- Yellow on Black
- Black on Yellow
- White on Blue
- 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

Brightness of the screen can be adjusted in both Full-color mode and Enhanced-contrast mode.


- Press and hold the Power button  and press the Zoom In button  to increase the brightness. Factory default value will be highlighted green.



- ❑ Press and hold the Power button  and press the and Zoom Out button  to decrease the brightness.

## Lighting


- ❑ Press and hold the Power button  and press the Freeze button  to turn on/off the LED Lighting manually.

## Image Freeze

- ❑ Freezing an image on the LCD screen can be useful for further reading. At this status, magnification as well as color change are still allowed for a better experience.
- ❑ Press Freeze button  to lock the active image.





- ❑ Press Freeze button  again to unlock.
- ❑ For the locked image with increased magnification, you can use the Joystick  to navigate around freely.






## **Image Storage**

- ❑ Long press the Freeze button  for 3 seconds to store the current image. You can save up to 18 images.
- ❑ Note: When the saved images reach to the maximum value (18 images, Memory Full ICON appears), you will need to delete some pictures first in Playback mode before the next successful saving.






## Image Playback

- ❑ To enter the Playback mode, long press the True Color button  for 3 seconds.
- ❑ Slide the Joystick  to select the target image from the Nine Grids Thumbnail Image Gallery. 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 Nine Grids Thumbnail.



- ❑ When in Nine Grids Thumbnail, press the Locate button  to select the target Image which needs to be deleted. Press the Locate button  again to confirm, or any other buttons to cancel.
  
- ❑ When in Nine Grids Thumbnail, hold the Locate button  for 5 seconds to delete **all** the images. Press the Locate button  again to confirm, or any other buttons to cancel.
  
- ❑ Long press the True Color button  for 3 seconds to exit the Playback mode.

## Line & Mask

Press the Locate button  to switch among different Reading Line & Mask modes.







- One horizontal line
  - One vertical line
  - Horizontal mask
  - Normal, no line & mask
- Slide the Joystick  to change the position of reading line or the distance between the masks. The Real-time Navigation is unusable in Line & Mask mode.
- Press the Power button  will quickly exit the Line&Mask modes.


## Find

- Long press the Locate button  for 2 seconds and hold not to release it, a location box would appear.
- Move and change the content in the location box, aiming it at the part you want to view, and then release the Locate button , the image will return back to the previous magnification with the refreshed content.

For example, you are viewing one part of a map with a certain magnification. Then you want to see another part without changing your favorable magnification. Then the function would be convenient and useful for you.

## Real-time Navigation

- ❑ In the state of amplification, users can slide the Joystick  when in the real-time video mode to navigate the image for seeing more without moving the unit.
- ❑ Press the Zoom In  and Zoom Out  buttons at the same time to help you re-center the image (Red Dot appears).
- ❑ Press and hold the Power button , and slide the Joystick  to quick jump to the start point or end point for better reading experience. For example, if you have finished reading a horizontal line and want to read from the beginning of the next line, just press and hold the Power button  and

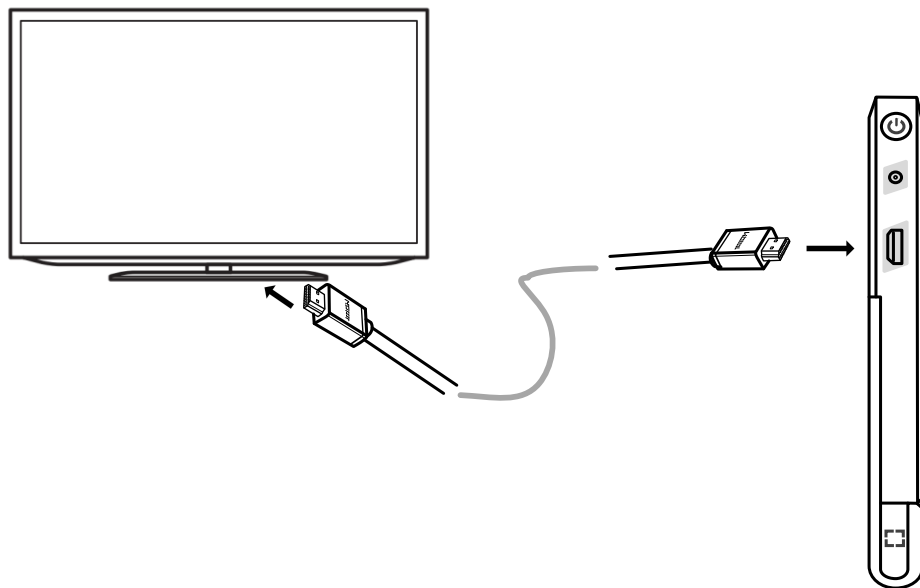
slide the Joystick  left. The start point or end point will be auto recorded and refreshed according to the maximum navigation range when reading.

## **Memory**

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



## **HDMI Output**

Connect the unit to your external display device with HDMI cable for a better and larger viewing.





## Auto Power Saving

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




- ❑ Press and hold the Power button  and click the Enhanced Color button  to turn on/off the Auto Power Saving function manually (factory default is on).

## Restore

Long press the Freeze button  and the Locate 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 turned off 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:** 10 inch wide LCD, HD screen
- **Camera:** Auto Focus, HD
- **Size:**  $\leq 245*200*22\text{mm}$
- **Weight:**  $\leq 680$  grams
- **Color Mode:** True color, 5 Simplified enhanced color modes; 18 Integrated enhanced color modes
- **Magnification:** 2.5x – 18x
- **Battery:** Integrated rechargeable Li battery; 3-hour continuous use after 5-hour charge
- **Power Adapter:** Input: 110-240V; Output: 5V/3A