

CLOVER 7S
Handheld Video Magnifier
User Guide

Rev E

Contents

Precaution	1
Quick Start	3
Overview	3
Compositions	5
Accessories	8
Battery Charging	9
Power LED	10
Stand	11
Operation	13
Power Button	13
Beep Type	14

Beep Control	14
Magnification	14
Color Mode	15
Brightness	19
Lighting	20
Focus Control	21
Image Freeze	22
Image Storage	23
Image Playback	24
Line & Mask	26
Find	28
Live Panning	29

Memory.....	30
HDMI Output.....	32
Auto Power Saving.....	33
Restore.....	33
Hardware Reset.....	34
Troubleshooting	35
The unit does not turn on.....	35
Black screen or White screen.....	35
The image does not change.....	36
Smudges or blemishes on the screen.....	36
Specifications	37

Precaution



Before using Clover 7S in 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.

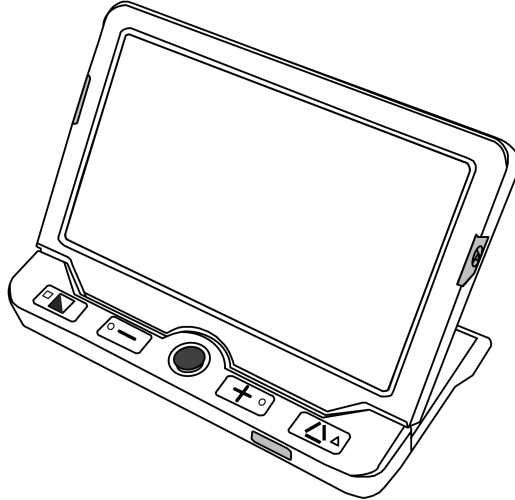
Quick Start

Overview

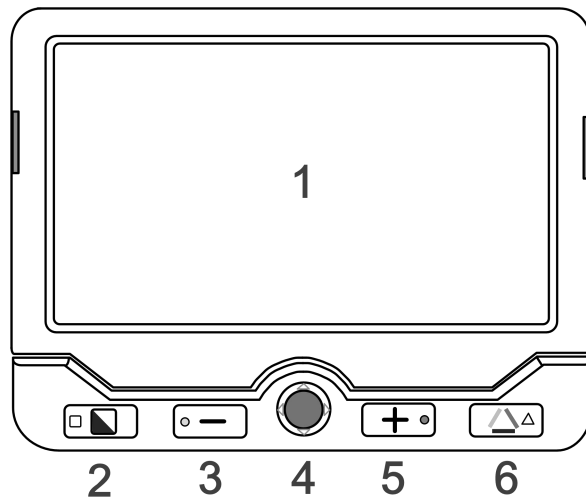
Thank you for purchasing Clover 7S.

Clover 7S displays fabulous HD images with vibrant colors on a large 7-inch widescreen LCD, which assures the real-time crisp images while moving or changing magnification continuously from 2.4X to 28X. The integrated camera system provides two viewing ways to fulfill the daily use, close read and look in a distance. It is the most compact and lightest 7-inch device among the market, and easiest to use.

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 Live Panning.



Compositions



1. LCD Screen

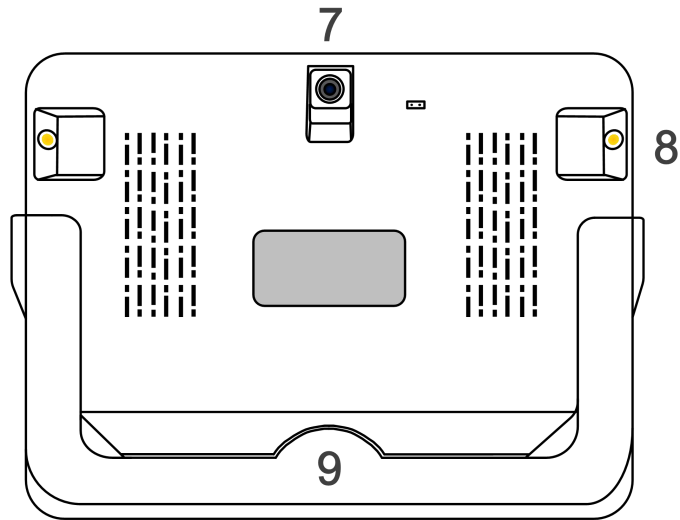
2. Enhanced Color

3. Zoom Out

4. Joystick

5. Zoom In

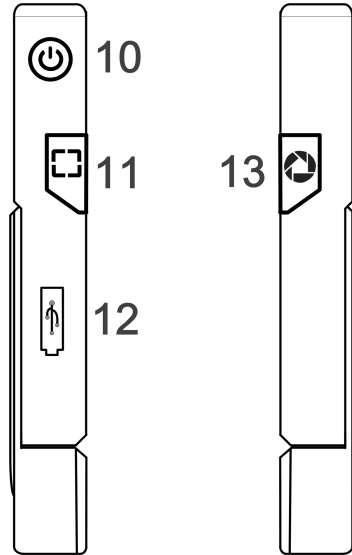
6. True Color



7. Rear Camera

8. LED Lights

9. Stand



10. Power Button

12. USB Port

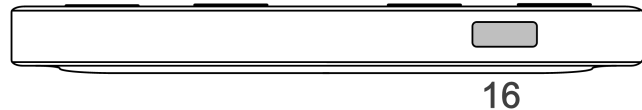
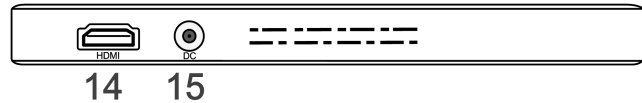
14. HDMI Port

16. Focus Control

11. Locate Button

13. Freeze Button

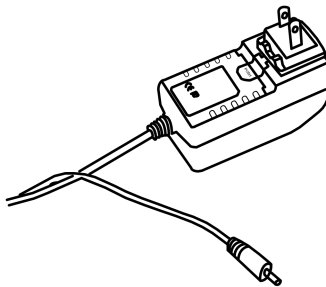
15. Power Port



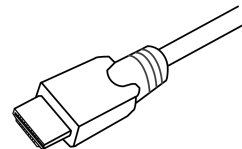
Accessories



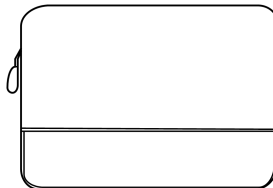
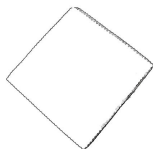
User Manual



Power Adapter

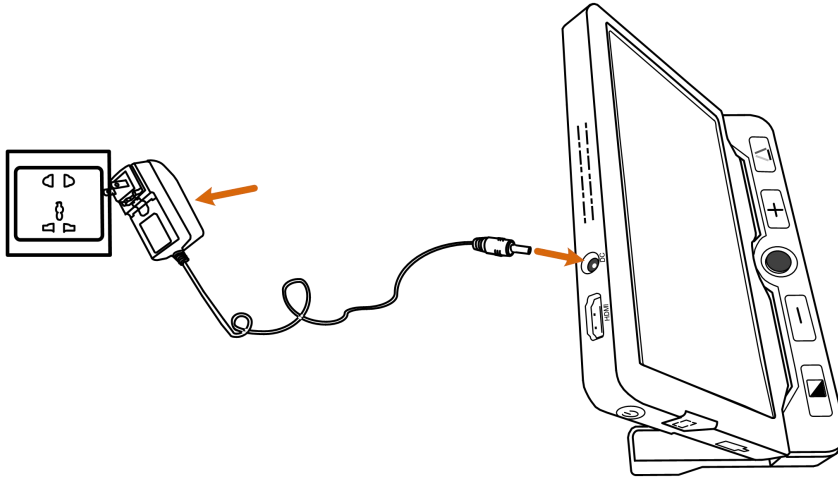


HDMI Cable



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

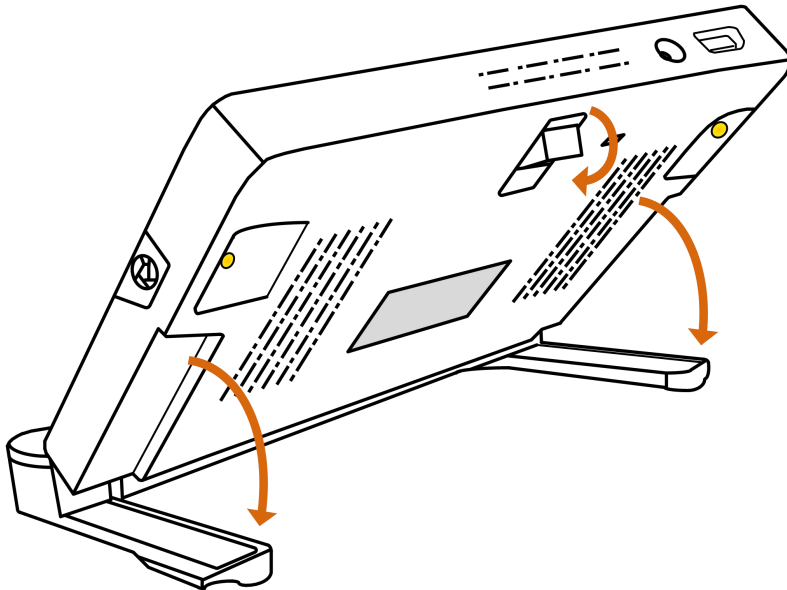
- Charging when the unit is off, the power LED will be green, and then auto turn off when fully charged. A full Charge will take about 4 hours and will support the unit working for about 3 hours.
- Charging when the unit is on, the power LED will be green.
- When the unit is on without charging, the power LED will be green when the battery level is high and will be red when the battery is dying. It is a signal to charge the battery as long as the red light starts to flash.

- 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 7S can satisfy users' desire to read more and for a 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 with the stand, so that both the Near View and Far View are supported on this unit. Please fold the stand when view in a distance.



Operation



Power Button

- Press and hold the power button  for 3 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.

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: 2.4x – 28x



Color Mode




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

Enhanced Color 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.

- ❑ While in the Enhanced Color Mode, long press the color mode button  for 3 seconds, a red heart icon  appears with two beeps which indicates the current color mode is added to your Favorite Enhanced Color Combination List.

- ❑ Short press the color mode button  to switch among “White on Black”, “Black on White”, “Favorite front color on Favorite back color”, “Favorite back color on Favorite front color”.
- ❑ Long press the color mode  for 3 seconds, the full view icon  appears with one beep which indicates that you have changed to the Integrated Enhanced Color Combination List

The factory default Favorite Enhanced Color Combination List
(4 modes)

 White on Black

 Black on White

 Yellow on Black

 Black on Yellow

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



Yellow on Blue



Blue on Yellow



Green on Black



Black on Green



Violet on Black



Black on Violet



Blue on Black



Black on Blue



White on Green



Green on White





White on Red





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 Zoom Out button  to decrease the brightness.

Lighting

There are four lighting statuses can be applied on the device.



Lights all off







Lights all on




Left light on, Right light off



Left light off, Right light on



- ❑ Press and hold the Power button  and click the Freeze button  to turn on/off the two LED lights simultaneously (The operation is compatible for all firmware version)
- ❑ Press and hold the Power button  and press the Focus Control button  to switch from three lighting statuses: Left light on, Right light on and All lights on/off (based on the latest setting).

Focus Control

- ❑ Click the Focus Control button  to lock the focus, which is especially useful when handwriting.

- ❑ Click the button  again to unlock the focus.

Image Freeze

- ❑ Freezing an image on the LCD screen can be useful for further reading. At this status, magnification as well as color change is 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 2 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



Slide the Joystick  up/down to change the position of horizontal reading line. Slide the Joystick  left/right to decrease/increase the width of the line.

- One vertical line



Slide the Joystick  left/right to change the position of vertical reading line. Slide the Joystick  up/down to


increase/decrease the width of the line.

- Horizontal mask

Slide the Joystick  up/down to change the position of the masks. Slide the Joystick  left/right to narrow/enlarge the distance between the masks.


- Vertical mask


Slide the Joystick  left/right to change the position of the masks. Slide the Joystick  up/down to enlarge/narrow the distance between the masks.

- Normal, no line & mask
- Press the Power button  will quickly exit the Line & Mask modes.

Please note that the Live-panning is unusable in this mode.


Find






- Long press the Locate button  for 1 second 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.


Live Panning

- 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).
- ❑ Two ways to quickly jump to the start/end point: 1) press and hold the Power button  , and slide the Joystick  . 2) quickly push the Joystick  in the same direction twice.

For example, if you have finished reading a horizontal line and want to read from the beginning of the next line, please hold the Power button  and slide the Joystick  left or just quickly push the Joystick  left twice. The start point or end point will

be auto recorded and refreshed according to the maximum navigation range when reading.

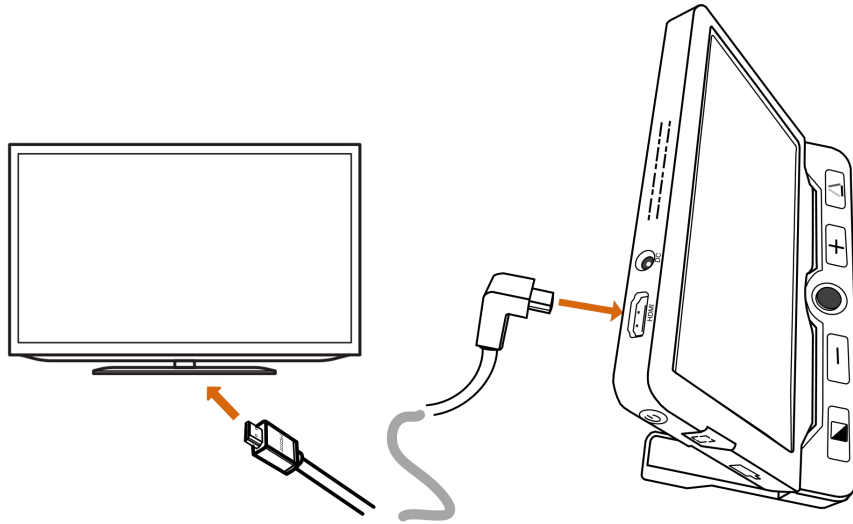
- ❑ The navigation speed can be adjustable in three levels: slow, medium (the factory default) and fast. Push the Joystick  to one side and press the Zoom in/out to increase/decrease the reading speed.

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 as following pictures show.





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  + True Color button  + Zoom In  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 IPS LCD screen / resolution: 1280*720
- **Camera:** 13M Pixels / video resolution: 1920*1080
- **Size:** <= 188*138*21 mm
- **Weight:** <=420 grams
- **Color Mode:** Nature color, favorite user defined mode; 18 Integrated enhanced color modes
- **Magnification:** 2.4x – 30x
- **Battery:** Integrated rechargeable Li battery; 3-hour continuous use after 4-hour charge
- **Power Adapter:** Input: 110-240V; Output: 5V/3A