

Dear Customer,

congratulations on the purchase of the Eschenbach smartlux DIGITAL.

As the market leader for magnifying glasses and reading glasses, we at Eschenbach can look back over many years of experience and this is reflected in the quality, usability and design of our products.

Firmware version

This manual is based on firmware version “SD2_fw_1.0” or higher.

Intended use

This electronic reading device is exclusively intended for magnification and reading or viewing of texts and images.

Before first use

Read this manual carefully before using the device for the first time. This is the only way to get to know all the features available for the device.

Safety information



- ▶ Risk of damage to the eye and risk of injury: Never look into the light sources on the underside of the device.
- ▶ Do not allow children to handle electronic devices without supervision.
- ▶ Only charge the reader with the supplied power adapter!
- ▶ Risk of suffocation and accidental swallowing: Keep packaging, films, and packing parts away from children.
- ▶ Check the device and the mains adapter with power cable for visible damage. If there is any damage disconnect the connected power unit from the power supply immediately. Have the product checked by the manufacturer or its customer service department before using it again.
- ▶ Place the power cable such that no one can stumble over it.
- ▶ Never open the device housing. There are no serviceable parts whatsoever inside. Opening the device will void the guarantee.
- ▶ The integrated lithium-ion batteries may only be removed or replaced by the manufacturer or its customer service.

- ▶ CAUTION! Explosion hazard! Never replace the battery with the wrong type. Never dispose of a battery in a fire. Never crush or cut a battery. Never leave a battery laying around in an environment with extremely high temperatures, as this can result in an explosion or cause flammable liquids or gases to escape. Never subject a battery to extremely low air pressures, as this can result in an explosion or cause flammable liquids or gases to escape.
- ▶ Never expose the device to moisture.
- ▶ Risk of pinching: When folding the stand feet together make sure you do not catch your fingers.
- ▶ Protect the device against impact or knocks and excessive heat. Never place the device on radiators or in direct sunlight.
- ▶ Do not store the device in places exposed to excessive heat, such as in a parked car.
- ▶ For domestic use only.

- ▶ This device may not be operated in a medical environment together with other devices that are used for life support.
- ▶ Ensure that other people, particularly children, are aware of these risks!
- ▶ The device is a Class I medical device (non-sterile, without measuring function) and complies with Regulation (EU) 2017/745. For use of the device outside the EU member states, the respective country-specific directives must be observed.

Package contents

- ▶ smartlux DIGITAL
- ▶ Universal charging device with adapters for EU, GB, US, AU
- ▶ Hard foam case
- ▶ Operating instructions
- ▶ Carry strap
- ▶ Microfiber cloth
- ▶ USB cable (Type C)

Functional elements

1. LCD (Liquid Crystal Display)
2. Contrast button  for selecting the screen mode
3. Button for decreasing zoom factor
4. Button for increasing zoom factor
5. Photo button  for saving images and confirming menu options
6. On/Off button
7. Menu button
8. HDMI output (micro-HDMI)
9. LED illumination for reading material
10. Camera
11. Foldable stand foot
12. RESET button for resetting the device
13. USB / charging connection
14. Charging check LED
15. Eyelet for neck strap

Basic operation

Before you use the smartlux DIGITAL for the first time, you must fully charge the internal rechargeable battery.

To do this, fit the appropriate country adapter to the power supply. Connect the USB port of the power supply to the USB/charging port ⑬ using the supplied USB cable. Then plug the power adapter into the power outlet.

While the battery is charging, the charge indicator LED ⑭ lights up red. When the battery is fully charged, the indicator lights up green. You can use the device while it is charging and it can remain permanently plugged in.

Turning on/off

Press the On/Off button ⑥ for one second to turn on the device. The camera icon will appear on the screen ① after a few seconds. Icons briefly show the current status on battery charge, magnification factor, and brightness setting.

To turn the device off, press and hold the On/Off button ⑥ for one second. Current settings are saved.

Usage modes

You can either hold the device in your hand, stand it up, or use it in writing position.

Hand-held operation:

If you are using the device in hand-held operation, fold the stand in and move the device at a suitable distance above the subject material. You can also use the smartlux DIGITAL with the optionally available handle. To learn more about this option, please read the operating instructions of the handle.



Propped-up operation:

For propped-up use, completely fold out the stand on the underside of the device. Place the smartlux DIGITAL on the reading material to be magnified.



Writing position:

smartlux DIGITAL can also be used to write below it. To use this option, unfold the stand to the first latching position and place the device upright.

Viewing functions

Adapting the zoom

To increase the zoom factor when the live image is being displayed, press and hold the \oplus button ④. To decrease the zoom factor, press and hold the \ominus button ③.

Overview function

With these functions you can get better overview of the reading material. Pressing the \oplus button ④ and \ominus button ③ simultaneously sets the lowest magnification (3x). If you press the \oplus button ④ and \ominus button ③ again, the previously set magnification will be selected again.



The magnification factor you have set will be displayed briefly on the right after the button is released.

False color display

To show the camera image in false colors for increased contrast, press the  button **2**. If necessary, press this button repeatedly to switch through the various false color modes and to return to true color display. By default, the false colors are preset as black/white and white/black.

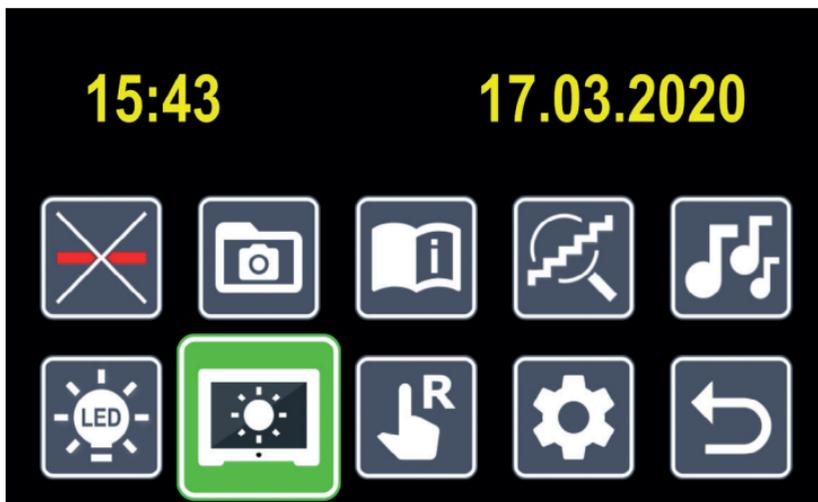
To adapt the false color display, open the “Adapt false colors” menu (Page 49).

Saving the live image as a file

Press the  button **5** briefly to save the current camera image as a file in JPG format and to display it as a still image on the screen. You can also change the magnification factor and the contrast color for this image as already described. Press the  button **5** again to return to the live image display.

Settings

Press the MENU button ⑦ to access the first level of the menu:



You can use the \ominus button ③ and \oplus button ④ to control the individual icons. Use the \oplus button ④ to move the selection to the left and the \ominus button ③ to move it to the right. The icon for the selected function is always shown slightly larger and with a color marking. To turn the selected function on or off, or to access a corresponding submenu, press the  button ⑤.

You can exit the menu at any time by pressing the MENU button ⑦.



Turning reading guideline/line on/off

Select this icon and then press the  button ⑤ to turn the reading guideline/line function on or off. If the reading aid function is turned on, the  icon is displayed; if the function is turned off, the  icon is displayed.



Managing the photo album

Select this icon and then press the  button ⑤ to access the photo album.

5 icons will appear:



– Image selection backward



– Image selection forward



– Select zoom factor (2 × – 10 ×)



– Delete current image



– Return to the first level of the settings menu.

Use the  button **4** to move the selection to the left and the  button **3** to move it to the right. Press the  button **5** to activate the selected function.

To view the details of an image, first select the desired zoom factor and then press the menu button **7**.

The 5 icons are hidden and you can use the buttons **2**, **3**, **4**, **5** to move the image section in four directions. To show the 5 icons again, press the menu button **7** again.

Tip: To activate the photo album without the settings menu, press and hold the  button **5** for 3 seconds. This type of access takes you back to the live image display via the  icon.



Opening the quick guide

Select this icon and then press the  button **5** to access the quick guide. Press the MENU button **7**. 5 icons will appear:



– Scroll page backward



– Scroll page forward



– Select zoom factor (2 × – 10 ×)



– Select desired language



– Return to the first level of the settings menu.

The operation is analogous to viewing the photo album (previous section).



Adapting the zoom mode

Select this icon and then press the  button to then change the variable/incremental zoom function via the  button ③ and  button ④. The  icon appears for variable function and the  icon appears for incremental function.



Setting the confirmation signal

The currently selected sound setting is displayed as an icon. Select this icon and then press the  button ⑤ to adjust the level of the device's signal tone using the following icons:

 - Signal tone 1,  - Signal tone 2,  - Signal tone 3,  - no signal tone.



Adapting the reading material brightness

Select this icon and then press the  button ⑤ to adjust the reading material lighting using these icons:



– Turn on the left, right, or both LEDs

Tip: Use this function to optimize the lighting in writing position. Generally, we recommend the 100% setting for the writing position.



– turning the LED light off



– the LEDs light up with 50% power



– the LEDs light up with 100% power

Confirm the selected lighting with the  button ⑤.

You can use the  icon and confirm it with the  button ⑤ to return to the first level of the settings menu.

Tip: To set the reading material brightness without using the menu, press and hold the  button ② until the desired illumination level is shown on the display.



Adjusting the screen display brightness

Select this icon and then press the  button  to adjust the display brightness using the following icons:



- Display brightness = 25%



- Display brightness = 50%



- Display brightness = 75%



- Display brightness = 100%

Confirm the selected lighting with the  button .

You can use the  icon and confirm it with the  button  to return to the first level of the settings menu.



Switching between right-hand/left-hand use

You can use this function to set the appliance for left-hand and right-hand use. By default, the device is set for right-handed users. Select this icon and then press the  button **5** to switch to right-hand use. The  icon indicates that the device is now set for left-hand use. The display is turned 180° so that it can be read by left-handed users. When the icon is activated again, the device can be used by right-handed users again. The function of the buttons remains unchanged despite the rotation of the display.



Opening the second menu level

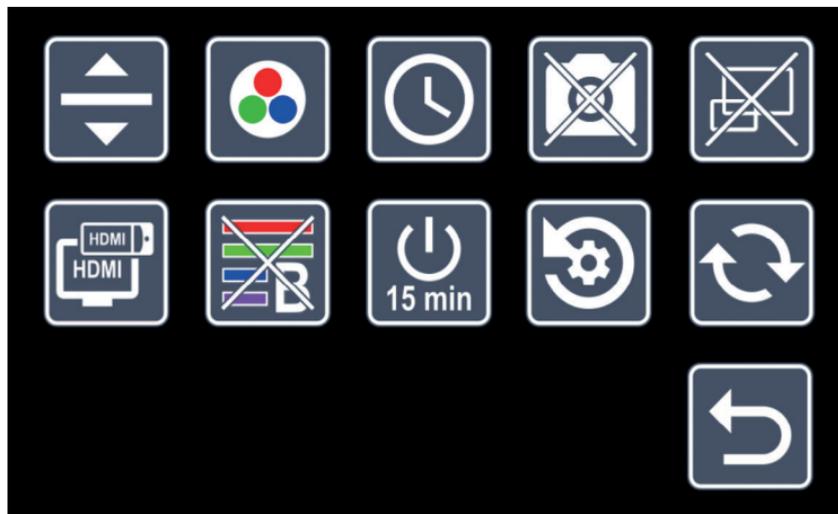
Select this icon and press the  button **5** to enter the second menu level.



Quit the menu

Select this icon and press the  button **5** to return to the live image display.

Extended settings





Setting the reading guideline/line

Select this icon and then press the  button **5** to customize other details via these icons:



- Move the reading guideline upward or magnify the reading line



- Move the reading guideline downward or reduce the reading line



- Switch to "red reading line" or "reading row"



- switch between horizontal/vertical reading line/row



Adjusting false colors

Select this icon and then press the  button **5** to select the false color display that should be available next time you press the  button **2**. Black and white plus inversion are activated by default. Non-activated combinations are shown crossed out.



Setting the date and time

Select the icon and press the  button  to set the date and time. Select the  icon and press the  button  to increase the number of parameters displayed in white. Select the  icon and press the  button  to increase the number of the parameter displayed in white. Select the  icon and press the  button  to select the next setting parameter. Select "24H" and then press the  button  to switch between 24-hour display and the 12-hour display usually used in English-speaking areas.

Use the  icon to return to the settings menu.



Turning the photo button on and off

Select this icon and press the  button  to turn the  button  on/off.



Enabling/disabling the overview display

Select this icon to deactivate the overview display function. If you would like to enable the overview display again, press the  button **5** again.



- Overview display turned off



- Overview display turned on



HDMI display selection

Select this icon and press the  button **5** to set the HDMI display selection. This allows you to determine whether the built-in display is also shown if an HDMI device is connected. If the function is turned on, the  icon is displayed; if the function is turned off the  icon is displayed.



Enabling/disabling the blue light filter

By default, the blue light filter is disabled. Select this icon and press the  button **5** if you want to enable it.

If the blue light filter is enabled () , the amount of blue light is reduced. The display becomes more yellow and the colors appear softer.



Changing the timeout settings

By default, the device turns off automatically after approximately 5 minutes, if it is not being used. Select this icon and press the  button **5** to extend this period to approximately 8 hours.

Restore factory settings

Select this icon and then press the  button **5** to reset the device to factory settings, if necessary. All settings will then be as set at the works.



Updating the firmware

Select this icon and press the  button **5** to display the current firmware version of the device and to update it, if necessary. If you have registered your smartlux DIGITAL, you will be notified about any available firmware updates.

To update the firmware please proceed as follows:

1. Connect the smartlux DIGITAL using the provided USB cable.
2. Turn on the smartlux DIGITAL. The screen will display 2 icons:



USB data connection – the internal memory of the smartlux DIGITAL will then be recognized as a USB stick/removable drive by the computer and displayed as “ESCHENBACH” drive.



USB connection for charging only.

Select the USB data connection icon and press the  button **5**.

3. Use the connected PC to open the web address that was provided in the email notifying you about the firmware update.
4. Download the firmware update and save it directly on the drive – not in a drive subfolder.

5. Disconnect the smartlux DIGITAL from the PC using the “Unplug and eject hardware” function, whose icon you can find on your operating system taskbar.
6. Open the settings menu, select the  icon and press the  button ⑤.
7. Select the  icon and press the  button ⑤. To cancel the update and return to the previous page, select the  icon and press the  button ⑤.
The following icon will be displayed on the screen during the firmware update:



The smartlux DIGITAL turns off automatically after a successful update. **Do not turn off the device under any circumstances during the firmware update.** Otherwise, the smartlux DIGITAL could be irreparably damaged. This type of damage is not covered by the warranty!

You can use the  icon and confirm it with the  button ⑤ to quit this menu level and return to the main menu.

Using the neck strap

If you want to hang the device around your neck, take the enclosed neck strap, pass it through the eyelet and pull it through the created loop.

Connections

USB port

You can use the supplied USB cable to connect the device from its USB connection 13 to the USB connection on another device, e.g. a computer. The screen will then display 2 icons:

 USB data connection – the internal memory of the smartlux DIGITAL will then be recognized as a USB stick/removable drive by the computer and provided for file operations as “ESCHENBACH” drive.

 USB connection for power supply only (operation and charging).

HDMI output

You can connect the device from its HDMI output 8 to the HDMI input on another device, e.g. a television. This enables both the camera image and the image files to be displayed on the connected device.

Technical specifications

Display size:	12.7 cm (5")
Zoom range:	3 × – 15 ×
Display modes:	Real color, contrast-enhanced up to 14 false color combinations selectable
Operating time:	approx. 3 hours
Charging time:	approx. 3.5 hours
Charger power supply:	100 V – 240 V ~ 50 – 60 Hz
Battery:	Lithium-ion battery, 3300 mAh, 3.6V
USB connection:	Type C
HDMI output:	HDMI 1.4, depending on the target device
Temperature range:	10 °C - +40 °C / 50 °F - +104 °F
Dimensions:	185 × 43 × 88 mm (W × H × D)
Weight:	240 g / 8.5 oz

This manual is also available at <http://www.eschenbach-optik.com/>

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Reset

If the device no longer functions as described in these instructions, it may be due to a malfunction, which you can eliminate yourself by resetting the device. Then press the RESET button ⑫.

Care instructions

- ▶ When cleaning the device do not use any soap solutions that contain softening agents, no alcohol-based or organic solvents and no abrasive detergents!
- ▶ Do not clean the device in an ultrasonic bath or under flowing water!
- ▶ Only use a soft, dry cloth to clean the device. If the optical elements (camera, LEDs) are dirty, e.g. with fingerprints or similar, clean them carefully with the enclosed microfiber cloth.

Disposal

- ▶ This product is subject to the provisions of European WEEE Directive covering old electrical and electronic devices in its currently applicable version. Never dispose of your old device in normal domestic waste. Instead dispose of it through an approved disposal facility or your municipal waste facility. Observe the regulations applicable in your country. In case of doubt, contact your waste disposal facility. Dispose of all packaging materials in an environmentally friendly manner.



Warranty

Within the parameters of the applicable statutory provisions, we provide a warranty for the functioning of the product described in this manual with regard to faults arising in connection with manufacturing defects or material defects. No warranty claims can be accepted for damage that arises due to improper handling, including damage from falls or impacts. Warranty claims can only be accepted upon presentation of the sale receipt!