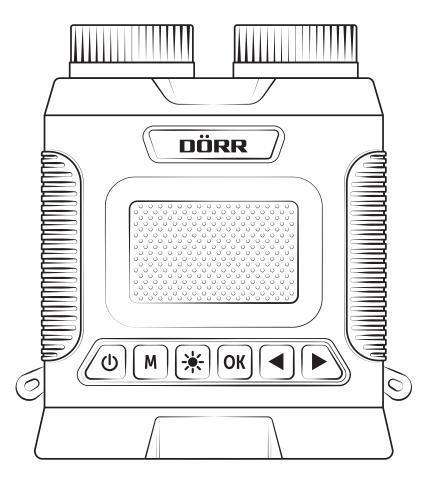
# DÖRR

# DIGITAL NIGHT VISION BINOCULARS

WITH PHOTO AND VIDEO RECORDING

(GB) INSTRUCTION MANUAL







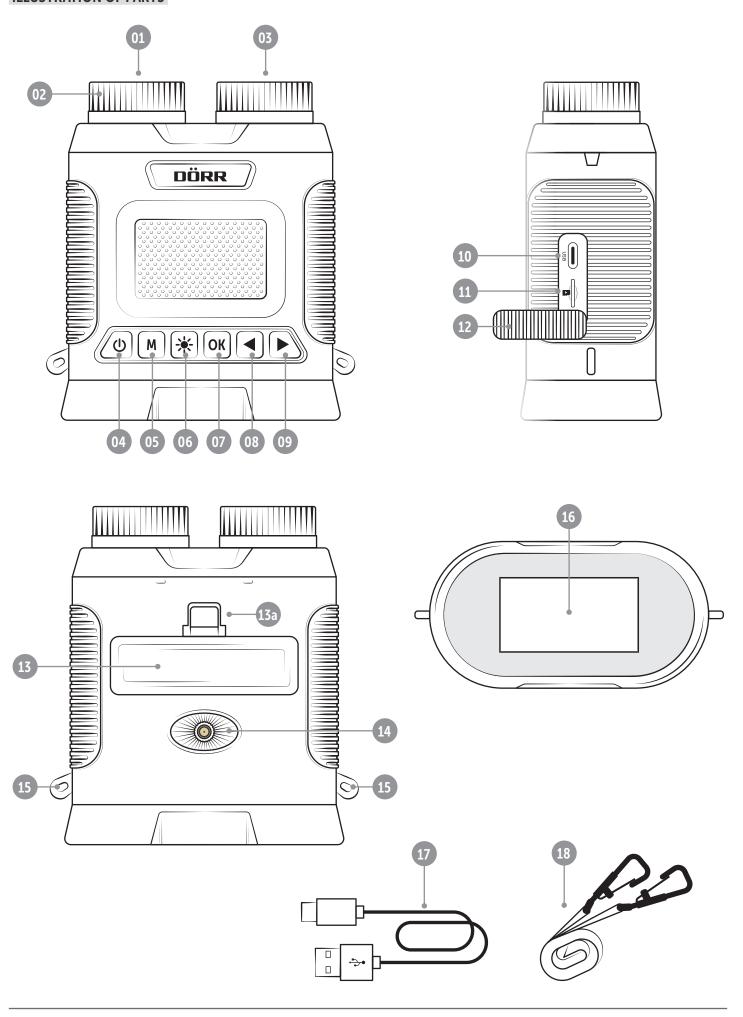




IR-QHD

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## **ILLUSTRATION OF PARTS**





**THANK YOU** very much for choosing a quality product by **DÖRR**.

Please read the instruction manual and the safety hints carefully before using the device for the first time.

Keep the operating instructions together with the device for reference. If other people use this device, provide them with these instructions. If you sell the unit, this manual forms an integral part of the device and must be supplied with it.

DÖRR is not liable for damage caused by improper use or failure to observe the operating and safety instructions.

In the event of damage caused by improper handling or by external influence, the guarantee or warranty claim becomes void. Any manipulation, structural modification of the product or opening of the housing by the user or an unauthorised third party shall be considered improper handling.

## 01 | A SAFETY HINTS

- Mever look at the sun through this night vision device! As you may damage your eyesight and become blind!
- This device is not a toy! To prevent accidents and suffocation keep the device, the accessories and the packing materials away from children and pets.
- People with physical or cognitive disabilities should use the device with supervision.
- People with cardiac pacemakers, defibrillators or any other electrical implants should maintain a minimum distance of 30 cm, as the device generates magnetic fields.
- Make sure to use the device only with an appropriate, high-quality
  Li-lon battery type 18650 3.7V 2.500mAh (included) which is protected against over or under voltage and against short circuit and reverse polarity. When inserting the battery please respect the correct polarity (+/-).
- To avoid deep-discharge of the Li-Ion battery when device is not in use for a longer period, please charge the Li-Ion battery up to approx. 60%.
- Never leave the device unattended while charging the batteries.
   After charging disconnect the device from power supply.
- · Turn off the device after use.
- Protect the device from rain, moisture, direct sunlight and extreme temperatures.
- Do not operate or touch the device with wet hands.
- Protect the device against impacts. Do not use the device if it has been dropped. In this case a qualified electrician should inspect the device before you use it again.
- Do not attempt to repair the device by yourself. Risk of electric shock! When service or repair is required, contact qualified service personnel.
- Protect the device against dirt. Never use aggressive cleansing agents or benzine to clean the device. We recommend a soft, slightly damp microfiber cloth to clean the outer parts of the device.
   Turn off the device and remove the battery before cleaning.
- Store the device in a dust-free, dry and cool place.
- If the device is defective or without any further use, dispose of the device according to the Waste Electrical and Electronic Equipment Directive WEEE. For further information, please contact your local authorities.

## 02 | A SAFETY HINTS FOR RECHARGEABLE BATTERIES

Only use high-quality batteries of popular brands. When inserting the battery please respect the correct polarity (+/-). Please remove battery when device is not in use for a long period of time. Do not throw batteries into fire, do not short-circuit and do not disassemble them — risk of explosion! Never charge non-rechargeable batteries — risk of explosion! Remove leaking batteries from the device immediately. Risk of battery acid burn! Clean the contacts before inserting fresh batteries. In case of contact with battery acid, rinse the affected area immediately with water and contact a doctor. Batteries can be dangerous to life if swallowed. Keep batteries away from small children and pets. Do not dispose of batteries in household waste (see also chapter "Disposal of Batteries/Accumulators").

## 03 | PRODUCT DESCRIPTION

Compact night vision device with photo and video recording function.

- · Colour images by day, black and white images in the dark
- · Range up to 300m by day and up to 150m in the dark
- · 3-level infrared illumination
- · With 8x digital zoom
- · Large 3-inch LCD colour display, adjustable brightness
- Images and videos can be stored on a micro SD/SDHC/SDXC memory card (not included)
- · 1/4 inch tripod mount
- Including battery, USB-C data and charging cable, shoulder strap and case

#### 04 NOMENCLATURE

- 01 Lens
- **02** Focusing wheel
- **03** Infrared illumination
- **04** On/Off button
- 05 Mode/Menu button M
- **06** Button infrared illumination \*\*
- **07** OK button
- **08** Left button **◄**
- **09** Right button ▶
- **10** USB-C charging socket
- **11** micro SD card slot
- 12 Rubber cover
- **13** Battery compartment cover

13a) Battery compartment cover lock

- 14 1/4 Inch tripod socket
- **15** Eyelets for neck strap
- **16** LCD Display
- 17 USB-C data and charging cable
- **18** Neck strap

#### 05 | FIRST STEPS

#### 05.1 Charging the battery

## NOTICE

Please fully charge the supplied 18650 3.7V 2,500mAh Li-Ion battery before first use.

## **CAUTION**

Never leave the device unattended while charging the batteries. After charging disconnect the device from power supply.

Open the rubber cover (12). Below is the USB-C charging socket (10). Use the supplied USB-C charging cable (17) to connect the night vision device to a USB charging source, e.g. PC/laptop/power bank. The battery is fully charged after approx. 4-5 hours. Disconnect the night vision device from the USB charging source. Close the rubber cover (12) again properly to ensure splash water protection.

## NOTICE

To avoid deep-discharge of the Li-lon battery when device is not in use for a longer period, please charge the Li-lon battery up to approx. 60%.

05.2 Insert a micro SD/SDHC/SDXC memory card

05.2.1 micro SDXC memory cards 64 GB & 128 GB

# IMPORTANT

#### micro SDXC memory cards 64 GB & 128 GB

Due to their standard formatting, micro SDXC memory cards with 64 GB and 128 GB must be formatted with the night vision device before use. If you want to use a micro SDXC memory card that still contains necessary files, save them to your computer before formatting. To format your SDXC 64GB or 128GB card with the night vision device, please proceed as follows:

- 1. Do **NOT** insert the memory card into the device yet.
- 2. Press the on/off button (04) for **approx. 3 seconds** to switch on the night vision device.
- 3. Press the **menu button M (05) for approx. 2 seconds** until the device menu opens.
- 5. Open the rubber cover (12) and now slide your micro SDXC memory card **with the labelled side up** into the micro SD card slot (11) until it clicks into place.
- 6. Select "Format" in the device menu with the right button ▶ (09)

- and press the **OK button** (07) to start formatting.
- 7. After successful formatting, the night vision device switches back to the live view and the following symbol appears in the top right of the LCD display (16):

64 GB card:

128 GB card:





#### 05.2.2 micro SD/SDHC memory cards 4 GB to 32 GB

## NOTICE

If you want to use a micro SD/SDHC memory card that still contains files, we recommend saving them to your computer and formatting the micro SD card before use.

Open the rubber cover (12) and slide your micro SD/SDHC memory card **with the labelled side up** into the micro SD card slot (11) until it clicks into place.

If the micro SD/SDHC memory card is inserted correctly, the following symbol appears in the top right of the LCD display (16) after switching on the night vision device:

#### Example 16 GB card:



If the memory card is not inserted correctly or if the card is missing or defective, the following symbol appears at the top right of the LCD display (16) after switching on the night vision device:



#### 05.3 Removing the memory card

To remove your micro SD/SDHC/SDXC memory card, push the card further into the micro SD card slot (11) until it pops out slightly with a click - the micro SD memory card can now be pulled out completely.

#### 05.4 Attaching the neck strap

To protect the night vision device from falling down, we recommend using the supplied neck strap (18). To fix the neck strap hang the two carabiners of the neck strap in the eyelets (15) of the night vision device.

#### 05.5 Mounting onto a tripod (optional)

With the 1/4" tripod socket (14) the night vision binoculars can be mounted onto a tripod (optionally available from DÖRR).

#### 06 OPERATION



#### CAUTION

Never look through this night vision binoculars at the sun! You may blind yourself!

#### NOTE FOR EYEGLASS WEARERS

If you wear glasses, please keep them on while using the night vision binocular to ensure best image results.

#### 06.1 Turning on

To switch on the night vision device, press the on/off button (04) for **approx. 3 seconds**. After the DÖRR logo, a coloured live view appears on the LCD display (16) with the following symbols:



	The device is in photo mode
16.	Correctly inserted memory card (e.g. 16GB)
20MP	Image resolution 20 megapixels
00000	Number of saved images on SD card
2023/04/01	Date
00:00:01	Time
EV-A	Brightness display
1.0X	Zoom factor
	Battery level

#### 06.2 Factory default settings

Photo Size	20 MP	
Self Timer	Off	
Photo Burst	Off	
Video Size	2.5K QHD	
Video Recording (Loop Recording)	Off	
Video Rate	Normal	
Time Stamp	On	
Brightness	Level 8	
Standby	after 2 minutes	
Auto Power Off	after 5 minutes	
Language	Deutsch*	
* The language of the device many is factory set to CEDMAN		

The language of the device menu is factory set to GERMAN. To change the menu language, please read chapter 07.

To change the pre-sets listed above, please refer to chapter 07.

#### 06.3 Focusing

To focus the night vision device, turn the focusing wheel (02) to the left or right until the live view on the LCD display (16) is sharp.

#### 06.4 Digital Zoom

until the desired magnification is reached. A blue bar and the LCD display (16) show the magnification factor. Maximum magnification = 8x.



Example 4,2 x

To zoom out the live view or to return to the 1:1 view, press and hold the right button ► (09) until the desired magnification or 1:1 view is reached.

#### 06.5 Adjust the brightness of the LCD display

To adjust the brightness of the live view on the LCD display (16), press the right button ▶ (09) or left button ◄ (08) repeatedly until the desired brightness is reached. **Adjustable in 8 steps from EV-A to EV-9.** The selected value is shown at the bottom of the LCD display (16), e.g.: EV-5:



#### 06.6 Infrared illumination (for use in the dark)

For use in the dark, switch on the infrared illumination (03) pressing the infrared lighting button \* (06) once. The symbol for lowest infrared illumination appears in the top left of the LCD display (16) and you see a black and white live view.

To increase the brightness of the infrared illumination, press the infrared illumination button \* (06). The symbol for IR brightness appears at the top left of the LCD display (16). **Setting from 1 to 3 possible.** 

#### Example infrared illumination on, brightness 2:



To switch off the infrared illumination, press the infrared illumination button \* (06) repeatedly until the symbol  $\checkmark$  disappears from the display.

#### 06.7 Taking pictures

Switch on the night vision device with the on/off button (04). The night vision device is automatically in photo mode. The pre-set image resolution is shown in the top centre of the LCD display (16), e.g. 20MP. At the top left of the display you can see the number of photos that can still be taken with this resolution, e.g. 09081photos:



Focus with the focusing wheel (02). For night shots, turn on the infrared illumination (see chapter 06.6).

Press the OK button (07) to take a photo.

#### 06.8 Video recording

Switch on the night vision device with the on/off button (04). The night vision device is initially in photo mode. Press the menu button **M** (05) to switch to **video mode.** The pre-set video resolution is shown in the top centre of the LCD display (16), e.g. 2.5K QHD. At the top left of the display you can see the remaining video duration that can still be made with this resolution, e.g. **00:45:30** (45 minutes and 30 seconds):



Focus with the focusing wheel (02). For night shots, turn on the infrared illumination (see chapter 06.6).

#### Press the OK button (07) to start the video recording.

During the recording, a red dot flashes in the top left of the LCD display (16) and the length of the video recording is displayed, e.g. • 00:00:12 (12 seconds):



Press the OK button (07) again to stop the video recording.

#### 06.9 View Photos/Playback Videos

To view or play back your recordings on the LCD display (16), press the menu button **M** (05) repeatedly until the following symbol appears in the top left of the display .

If your last shot was a **photo**, the LCD display (16) shows e.g. PICT0001.jpg. On the right you can see the resolution the photo was taken with and the total number of shots taken:



Use the right button  $\triangleright$  (09) or left button  $\triangleleft$  (08) to scroll through your recordings.

If your last recording was a video, the LCD display (16) shows e.g. MOVI0001.avi. On the right you can see the resolution the video was taken with and the total number of shots taken. In the centre of the display you will see the play icon :



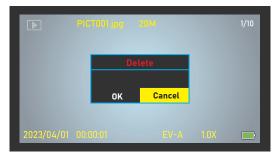
Press the OK button (07) to play the video.

#### 06.10 Delete files

To delete recordings, first go to **playback mode as described in chapter 06.9**. Use the right button ► (09) or left button ► (08) to scroll to the recording you want to delete.

Press the menu button  $\mathbf{M}$  (05) for about 2 seconds. Use the right button  $\blacktriangleright$  (09) or left button  $\blacktriangleleft$  (08) to select either  $\mathbf{OK}$  or  $\mathbf{Cancel}$ . The selected option is highlighted in yellow. Press the OK button (07) to confirm your selection.





#### 06.11 Transfer your recordings to PC

To transfer your photo and video recordings to your computer, connect the night vision device to your PC/notebook with the supplied USB cable and press the on/off button (04). Alternatively, remove the micro SD memory card and read it out with a suitable micro SD card reader on your PC/notebook.

#### 06.12 Battery status indicator

After you have switched on the night vision device with the On/Off button (04), the battery status indicator appears at the bottom right of the LCD display (16). If the battery is too weak, the night vision device stops working and "Low battery" appears on the LCD display (16). Charge the night vision device as described in chapter 05.1.

#### 06.9 Turning off

After use press the On/Off button (04) for **about 2 seconds** to switch off the night vision binoculars.

## 07 | CHANGE SETTINGS

To adjust the settings for your purposes, switch on the night vision device and press the menu button **M** (05) for **approx. 2 seconds** until the device menu opens. Use the right button ► (09) and/or the left button ◄ (08) to navigate to the desired submenu. Press the OK button (07) to open and edit the submenu. The selected submenu is **highlighted in yellow**.

Factory settings are marked with a \*.

Submenu	Explanations	Settings		
		3MP	(2368 x 1328 pixels)	
		5MP	(2992 x 1680 pixels)	
	Select the desired <b>image resolution</b> .	8MP	(3760 x 2112 pixels)	
Photo Size		10MP	(4208 x 2368 pixels)	
Piloto Size		20MP *	(6128 x 3456 pixels)	
		25MP	(6736 x 3792 pixels)	
		30MP	(7328 x 4128 pixels)	
		40MP	(8000 x 4752 pixels)	
		Off *		
Self Timer		2 Seconds		
Sett Tiller	Select a <b>delay</b> after which the night vision device should be triggered.		5 Seconds	
	[:	10 Seconds		
Photo Burst	Select whether the night vision device should take <b>single pictures</b> (=Off)	Off *		
	or a series of pictures with 3 photos.			
		720P	(1280 x 720 pixels)	
Video Size	Select the desired <b>video resolution</b> .	1080P	(1440 x 1080 pixels)	
Video Size	Select the desired <b>video resolution.</b>		(1920 x 1080 pixels)	
			(2560 x 1440 pixels)	
	mode (see chapter 06.8), the night vision device will record videos of the selected length one after the other.  NOTICE The night vision device keeps recording videos until you manually stop the video recording!			
			1 Minute	
Video Recording			2 Minutes	
(Loop Recording)			3 Minutes	
			5 Minutes	
			10 Minutes	
	In addition to the normal speed, you can also record videos in slow motion	Normal *		
		Slow		
	(4x slower) or in time lapse (4x faster). Indication in the LCD display (16):			
	p≅			
Video Rate				
	or:			
	p <b>≅ 1</b>			
	16: F2 Fast 2:5K UHU UU:45:3U			

Submenu	Explanations	Settings	
	Choose whether you want the <b>date and time</b> to be displayed on your	On *	
Time Stamp	photos and videos.	Off	
Brightness	Adjust the <b>brightness of the display</b> .	1 - 8*	
		Off	
Standby	Select a period of time after the night vision device should change to	1 Minute	
Standby	<b>standby mode</b> if there is no use within that period of time.	2 Minutes *	
		3 Minutes	
		Off	
Auto Power Off	Select a period of time after the night vision device should automatical-	1 Minute	
Auto rowel off	ly turn off if there is no use within that period of time.	3 Minutes	
		5 Minutes *	
		English	
		Deutsch *	
		Français	
		Italiano	
		Español	
Language	Select the desired <b>language</b> for the device menu.	Čeština	
		Dansk	
		Suomi	
		Nederlands	
		Magyar	
		Svenska	
	This function will delete the formula in CD	Cancel	
	This function will <b>delete all files from the microSD card</b> and <b>reformat</b> the card.	Format	
Format Card	NOTICE Before formatting, make sure that there are no files on the microSD card that are still needed!		
Data/Time Car	Set the current date in YYYY / MM / DD format and set time.	Example: 2023 / 07 / 15	
Date/Time Set		Example: 07 : 34	
		Cancel	
Restore Default	Restoring of factory settings. This function restores all settings to <b>initial factory settings</b> (except date and time).	ОК	
Version	Shows current <b>software version</b> . No change of setting possible within this menu.		

## 08 | CLEANING AND STORAGE

Never use aggressive cleansing agents or benzine to clean the device. We recommend a soft, slightly damp microfiber cloth to clean the outer parts of the device. Remove battery before cleaning! Store the device in a dust-free, dry and cool place. This device is not a toy - keep it out of reach of children. Keep away from pets.

# 09 | TECHNICAL SPECIFICATIONS

Display	3 Inch LCD Colour Display
Image sensor	CMOS
Brightness display	adjustable in 9 steps
Infrared illumination	IR LED 3 W, 850 nm adjustable in 3 steps
Visualisation	in colour by day, black and white by night
Range up to approx.	300m by day/150m by night
Picture angle approx.	10°
Magnification	8-times digital zoom
Recording capability	Photo / Video without audio
Picture format	JPEG
Image resolution	40MP, 30MP, 25MP, 20MP, 10MP, 8MP, 5MP, 3MP
Video format	AVI
video resolution	2,5K QHD, 1080 Full HD, 1080 HDV, 720HD
Memory card	micro SD/SDHC/SDXC 4GB to max. 128G (not included)
Power supply	1x 18650 Li-lon battery 3,7V 2.500 mAh (included)
Charging socket	USB-C
Operation time approx.	10 h in day mode/4 h with IR illumination
Menu languages	DE, GB, FR, ES, IT, CZ, DK, FI, HU, NL, SE
Tripod mount	1/4"
Housing	ABS
Operating temperature	-30° to +55° C
Colour	black
Dimensions approx.	13 x 13,5 x 6,3 cm
Weight approx.	300 g

DÖRR GmbH reserves the right to make technical changes without notice.

## 10 | SCOPE OF DELIVERY

1x Night vision binoculars IR-QHD

1x USB-C data and charging cable

1x Neck strap

1x Bag

1x Safety hints

#### 11 | DISPOSAL, CE MARKING

#### 11.1 DISPOSAL OF BATTERY/ACCUMULATOR

Batteries and rechargeable batteries are marked with the symbol of a crossed-out waste bin. This symbol indicates that empty batteries or rechargeable batteries that can no longer be recharged must not be disposed of in household waste. Old batteries may contain harmful substances that can cause damage to health and the environment. As the end user, you are legally obliged to return used batteries (under German battery law, Section 11 Act Revising the Law of Waste-Related Product Responsibility for Batteries and Accumulators). You can return batteries free of charge after use at the point of sale or in your immediate vicinity (e.g. at municipal collection points or in shops). You can also return batteries to the seller by post.

## 11.2 WEEE INFORMATION

The WEEE (Waste Electrical and Electronic Equipment) Directive, which came into force as European law on 13 February 2003, led to comprehensive changes in the disposal of discarded electrical equipment. The primary purpose of this directive is to prevent e-waste while promoting reuse, recycling and other forms of reprocessing in order to reduce waste. The WEEE logo (dustbin) shown on the product and on the packaging indicates that the product must not be disposed of in normal household waste. You are responsible for delivering all discarded electrical and electronic equipment to appropriate collection points. Sorting waste for separate collection and sensible recycling of packaging waste helps to use natural resources more sparingly. Furthermore, e-waste recycling is a contribution to preserving our environment and thus also people's health. Further information on the disposal of electrical and electronic equipment, recycling and collection points can be obtained from local authorities, waste disposal companies, specialist retailers and the manufacturer of the device.

#### 11.3 DISPOSAL OF THE PACKAGING

Dispose of the packaging by type. Give cardboard to the waste paper, foils to the collection of recyclables.

## ✓ 11.4 CONFORMITY WITH ROHS

This product complies with the European RoHS Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment and variations thereof.

#### C € 11.5 CE MARK

The imprinted CE mark complies with the applicable EU standards and indicates that the device meets the requirements of all EU directives applicable to this product.

DÖRR Night vision binoculars IR-QHD

Item-No. 490333

Made in China

#### DÖRR GmbH

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