

eDiscovery

10×42



Operating instructions

STEINER 
Nothing Escapes You

SCOPE OF DELIVERY

With your eDiscovery binoculars you will receive the following accessories:

- Bag with carrying strap •
- Carrying strap (binoculars)
- Lens caps • Rain cover •
- Battery (rechargeable) •
- Charging cable / connection cable
- (USB-A to USB-C) • Charging cradle (USB-C) • Cleaning cloth
- Operating instructions

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BASICS OF OPERATION

Elements in Figure 1

- 1 selection button
- 2 Power/Off/Shutter button
- 3 eyepieces with eyecups
- 4 rain covers
- 5 Battery compartment with cover
- 6 lens caps
- 7 tripod thread with cover

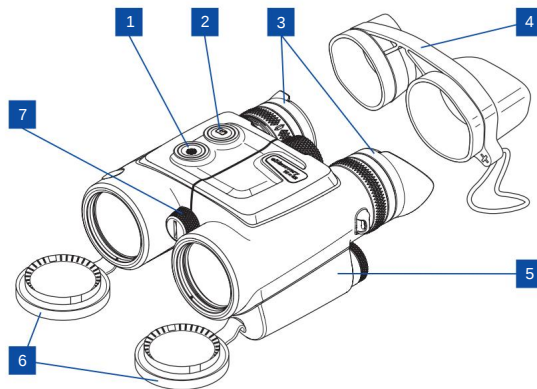


Fig. 1

Basics of operation

Elements in Figure 2

- 8 Diopter wheel (diopter adjustment)
- 9 Central drive wheel
- 10 Belt connection

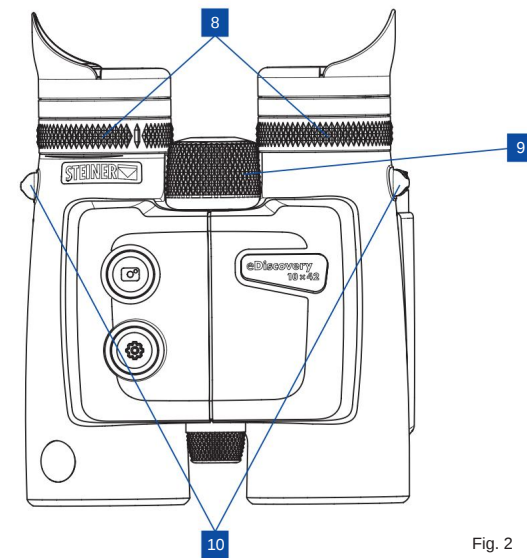


Fig. 2

BASICS OF OPERATION

Elements in Figure 3

- 1** diopter wheel (diopter adjustment) right
- 2** Diopter wheel (diopter adjustment) left
- 3** central drive wheel
- 4** Belt connection right
- 5** speakers
- 6** USB-C port
- 7** Microphone
- 8** Connection lens caps
- 9** Tripod thread with cover
- 10** Battery compartment
- 11** Battery installation direction (symbol)
- 12** Belt connection left
- 13** Battery compartment cover

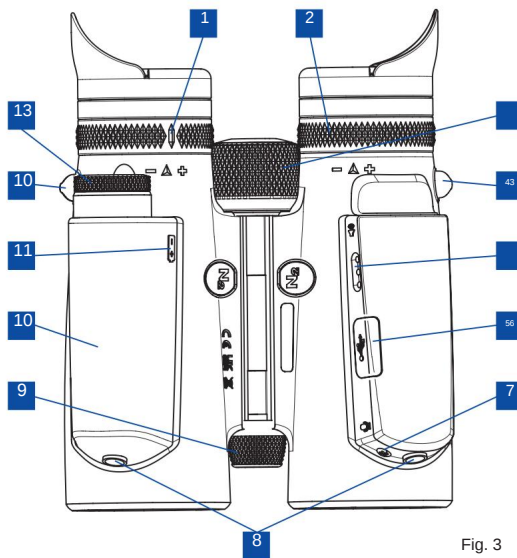


Fig. 3

Basics of operation

Elements in Figure 4

(View through the binoculars left side)

- 14** Reticle

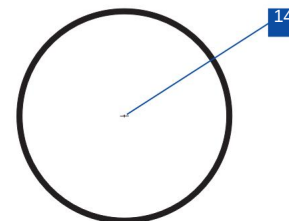


Fig. 4

Elements in Figure 5

(View through the binoculars right side)

- 15** Display

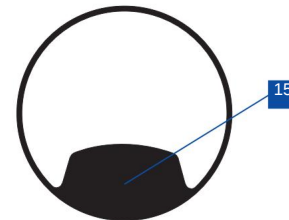


Fig. 5

OPERATION

Controls

The eDiscovery is operated using the buttons on the top of the eDiscovery, see also Fig. 1(2, 1) on page 4:

Power/off/trigger button, see Fig. 6

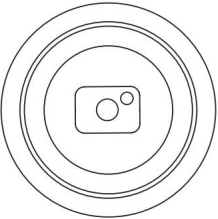


Fig. 6

Selection button, see Fig. 7

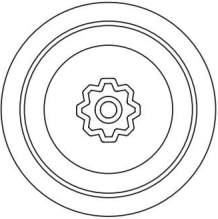


Fig. 7

OPERATION

Symbols and displays on the display

The following icons may appear on the eDiscovery display:

Wi-Fi	
Battery status (charge level)	
Battery status (charge level) during charging	
Single image mode	
Burst mode	
Video mode with microphone on	
Video mode with microphone off	
Recording time (only in video mode)	
Turn on / turn off	
Connected to a computer	Display "MASSTORAGE"
Reset to factory settings	Display "RESET DATA", "NO", "OK"

BATTERY

General information

The eDiscovery is powered by a rechargeable 18650 battery.

Optionally, the eDiscovery can be powered by a power bank via the eDiscovery's built-in USB-C port, both with and without a built-in battery.

DANGER!

Cold temperatures reduce battery life. Therefore, in cold temperatures, the binoculars should be carried as close to the body as possible and used with a fresh battery.

BATTERY

Battery status (charge level)

The battery status (charge level) is shown on the eDiscovery display:

The battery charge level: 

(The battery charge level is indicated by the number of bars.)

The battery is charging: 

BATTERY

Installing and removing the battery

Turn off the binoculars using the power button, see the Operation chapter.

Open the battery compartment by turning the cover counterclockwise, see Fig. 8.

Remove the battery.

Insert the battery into the battery compartment with the positive contact facing forward (according to the symbols on the battery compartment), see Fig. 9.

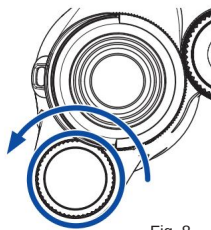


Fig. 8

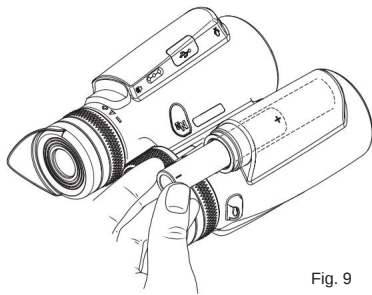


Fig. 9

BATTERY

Close the battery compartment firmly by turning the cover clockwise, see Fig. 10.

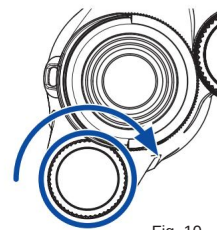


Fig. 10

BATTERY

Charge battery

The battery can be charged in the following ways:

- In a charging cradle suitable for this battery type (included in the scope of delivery), see Fig. 11 and Fig. 12.
- Built into the eDiscovery by connecting the eDiscovery to a suitable USB charger via the built-in USB-C port, see Figure 3(6) on page 6.
- Built into the eDiscovery by connecting the eDiscovery to a power bank via the built-in USB-C port, see Fig. 3(6) on page 6.
- Built into the eDiscovery by connecting the eDiscovery to a computer via the built-in USB-C port, see Fig. 3(6) on page 6.

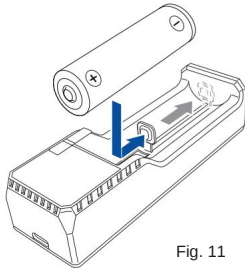


Fig. 11

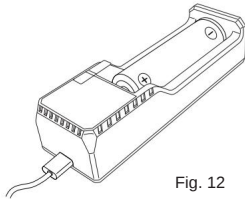


Fig. 12

FUNCTIONS

Features of the eDiscovery Binoculars

When switched off:

- Binoculars

When switched on:

- Take a single picture
- Take continuous shots (4 individual images)
- Record video
- Wi-Fi (always active; for connecting to the Steiner Connect app)
- Reset (for resetting the eDiscovery to factory settings)

When switched on and connected to the Steiner Connect app:

- Automatic download of the recorded images to the Steiner Connect App
- Manual download of recorded videos to the Steiner Connect App
- Live stream with up to 5 users via the Steiner Connect app
- Turn the microphone on/off via the Steiner Connect app

Connected to a computer:

- Mass storage (MASSSTORAGE) (for accessing the internal memory card)

FIRST STEPS

Prepare binoculars

Remove the rain cover from the binoculars, see Fig. 1(4) on page 4.

Fold the lens caps down, see Fig. 1(6) on page 4.

A NOTICE

The lens caps are attached to the binoculars and can be completely removed and reattached with little force.

The rain cover is connected to the carrying strap and can be removed and reattached by removing the carrying strap.

FIRST STEPS

Adjust eyecups

To ensure optimal viewing through the binoculars, the eyecups can be adjusted to different positions:

Folded up as glare protection, see Fig. 13

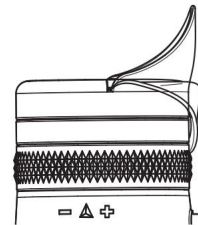


Fig. 13

Folded down for spectacle wearers, see Fig. 14

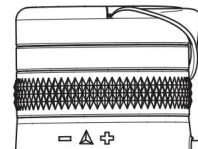


Fig. 14

FIRST STEPS

Adjust eye distance

By bending the binoculars over the central axis, see Fig. 15, the personal interpupillary distance between the left and right eye is adjusted.

This gives you a round image without shadows when looking through the binoculars.

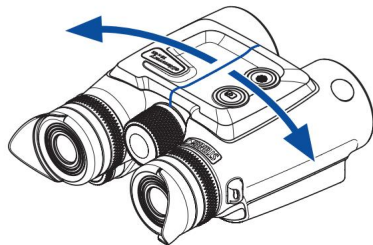


Fig. 15

FIRST STEPS

Adjust eyepieces

Steiner binoculars offer long eye relief for eyeglass wearers.

If you wear glasses, screw both eyepieces in, see Fig. 16

If you do not wear glasses, turn both eyepieces out, see Fig. 17

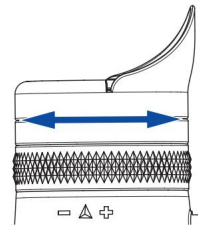


Fig. 16

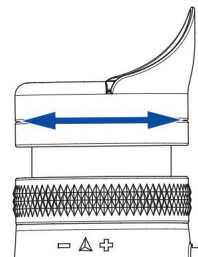


Fig. 17

FIRST STEPS

Focus the reticle

Focus the reticle, see Fig. 4(14) on page 7 and Fig. 18:

The more precisely the reticle is brought to the sharpest point, the more precise and faster the camera's autofocus works.

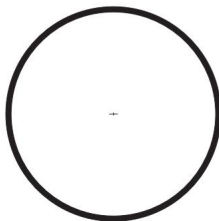


Fig. 18

CAUTION!

Never point the binoculars directly at the sun. This can cause serious eye damage, possibly even blindness.
 dung – lead.

- Concentration on the left side of the binoculars, the right
 It is best to close your eyes
- Look at a bright background far away • Use the diopter wheel on the left, see Fig. 3(2) on page 6 and Fig. 19, to bring the reticle into the sharpest image

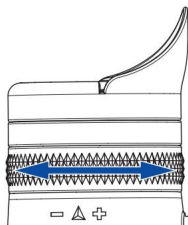


Fig. 19

FIRST STEPS

Focus binoculars

Focus the left side, see Fig. 20: • Point the left side at an object • Find the sharpest setting with the center drive wheel (see Fig. 2(9) on page 6)



Fig. 20

Focus the right side, see Fig. 21: • Point the right side at the same object, preferably closing the left eye

- With the diopter wheel on the right, see Fig. 3(1) on page -
 te 6 and Fig. 19 on page 19, find the sharpest setting



Fig. 21

FIRST STEPS

A NOTICE

The binoculars can be used as normal binoculars when turned off. When turned on, additional functions are available. See "Ediscovery Binocular Features" on page 14.

Turn on binoculars

To switch on the binoculars, the power/off/shutter button (see Fig. 1(2) on page 4 and Fig. 6 on page 8) must be held down for approximately 4 seconds.

The Steiner logo is shown on the binoculars' display with a progress bar, accompanied by a signal tone that acoustically confirms the power-on process.

Turn off binoculars

To turn off the binoculars, the power/off/shutter button (see Fig. 1(2) on page 4 and Fig. 6 on page 8) must be pressed and held for approximately 4 seconds.

The Steiner logo is shown on the binoculars' display with a progress bar, accompanied by a signal tone that acoustically confirms the shutdown process.

FIRST STEPS

Selecting the modes (single image, continuous shooting / video)

To select the modes, briefly press the select button (see Fig. 1(1) on page 4 and Fig. 7 on page 6). This switches between single image, continuous image, and video modes.

Depending on the selected mode, the corresponding symbol appears on the binoculars display. See Symbols and indicators on the display on page 999.

In video mode, the microphone can be deactivated or activated via the Steiner Connect app.

FACTORY SETTINGS

Reset binoculars to factory settings

A NOTICE

When you reset the binoculars to factory settings, the Wi-Fi password is reset to the default value of 12345678. Any previously changed Wi-Fi password will then no longer be valid, and... (The TODO regarding Wi-Fi still needs to be tested and better formulated). Likewise, various (???) settings of the binoculars will be reset (???) via the Steiner Connect app.

To reset the binoculars to factory settings, press and hold the selection button (see Fig. 1(1) on page 4 and Fig. 7 on page 6) for approximately 4 seconds.

"RESET DATE" and "NO" appear on the binoculars display.

By briefly pressing the power/off/trigger button (see Fig. 1(2) on page 4 and Fig. 6 on page 8) you can switch between "OK" and "NO".

Select "NO": Device will not be reset to factory settings

Select "OK": Device will be reset to factory settings

FACTORY SETTINGS

By briefly pressing the selection button when selecting "NO", the resetting of the binoculars to factory settings is canceled and the last previously selected mode (photo, series photos, video) is shown on the display with the corresponding symbols.

Briefly pressing the select button and selecting "OK" will reset the binoculars to factory settings. A short progress bar will appear, and the binoculars will then restart.

TAKE A SINGLE IMAGE

SHOOTING BURST PHOTOS

RECORD VIDEO

TO DO

DE

STEINER CONNECT 2.0 APP (TODO)

function

The STEINER CONNECT app enables the use of the measuring function of the M830rc X LRF via a smartphone or tablet. Advanced measurement functions are available in the app. In addition, further setting options can be used.

To do this, the M830rc X LRF must be connected to the APP via the Bluetooth transceiver.

The operating instructions can be found under the adjacent QR code, see Fig. 43.



Fig. 22

ERRORS AND BUGS (TODO)

Mistake	Possible cause:	Fix
No circular field of vision visible with both eyes	Interpupillary distance is incorrectly adjusted. Eyes are not on the optical axis of the M830rc X LRF.	Adjust the binoculars to the user, see "Eyepiece and eyecups" on page 61. Position the binoculars correctly.
Binoculars cannot be turned on	The battery charge level is too low. Temperature range outside the specification	Replace the battery, see "Battery" on page 57. Use the binoculars only between -19 °C and +49 °C

Errors and faults (TODO)

Mistake	possible cause	Fix
The expected display does not appear after a key is pressed repeatedly.	Key was pressed with insufficient Force or pressed too short/long	Press the button repeatedly. Always press the button until you hear a click.
"----- m" is displayed when measuring distance	The measured distance is outside the measuring range. Laser exit window or objective lens dirty. Exit window laser or objective lens obscured. Insufficient reflection: • Object too small or not correctly targeted • The binoculars were not held steady during the measurement • Bad weather conditions	Observe the specified measuring range, see "Technical data" on page 103. For cleaning, see "Cleaning and Care" on page 105. Remove any distracting elements. See "Factors influencing distance measurement" on page 85.

Errors and faults (TODO)

Mistake	Possible cause:	Fix
Azimuth measurement values are incorrect.	The stored declination value is incorrect. There are interfering magnetic fields at the measuring point. Calibration was performed in an area with disturbing magnetic fields.	Save the correct declination, see "Submenu Compass Declination" on page 72. See "Factors Affecting Compass Accuracy" on page 75. Calibrate the compass, see "Compass Calibration" on page 76.
 is not visible.	Eye-piece is not set to user.	To adjust the focus, see "Adjusting the diopter value" on page 61.
 is not displayed despite input	Declination not switched on (set to off).	Switch declination to "on", see "Compass Declination submenu" on page 72.

Errors and faults (TODO)

Mistake	possible cause	Fix
Measurement data cannot be transferred to PC.	Cable is not connected correctly sen.	Check and correct the cable connection, see "Connecting a cable" on page 88.
Measurement data cannot be transferred to the app.	Bluetooth transceiver is not connected correctly.	Check and correct the Bluetooth transceiver connection, see "Data transfer" on page 86.

SAFETY INFORMATION

FCC Declaration of Conformity

The device has been carefully tested and subsequently found to comply with the rules within the limits of a digital class B device pursuant to Part 15 of the FCC Rules. The limits have been established to ensure protection against any harmful interference within a residential area. These binoculars generate, use, and transmit radio waves and, if not installed and used in accordance with the requirements of these instructions, may cause harm-ful interference to radio communications. However, no guarantee can be provided that interference will not occur in some installations. If the binoculars cause harmful interference to radio or television reception, which cannot be confirmed by switching the device in question off and on, the user may correct these interferences by making use of the following options:

- Reorient or relocate the receiving antenna
- Increase the distance between the device and the receiver
- Consult the dealer or an experienced radio/television technician

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference,
- and (2) this device must accept any interference received, including interference that may cause undesired operation.

SAFETY INFORMATION

Notice to the user - Innovation, Science and Economic Development Canada

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. The exploitation is authorized in these conditions:

- (1) L'appareil ne doit pas produire de brouillage;
- (2) The device does accept the radio transmitter subi, but the brouillage is susceptible to compromising the function.

DISPOSAL OF ELECTRICAL AND ELECTRONIC EQUIPMENT

(Applies to the EU and other European countries with separate collection systems)

User information on the disposal of electrical and electronic equipment (private households)

This symbol on our products and/or accompanying materials means that used electrical and electronic products should not be mixed with unsorted municipal waste (general household waste). For proper treatment, recovery, and recycling, please take these products to the appropriate collection points, where they will be accepted free of charge. Before disposing of them at a collection point for old devices, please remove any used batteries and accumulators and dispose of them separately from the old device at the appropriate collection points.



In some countries, it may also be possible to return these products to your local retailer when purchasing a corresponding new product.

Proper disposal of this product will help protect the environment and prevent potential harmful effects on people and the environment that could result from improper waste handling. For more detailed information about your nearest waste collection point, please contact your local council. In accordance with local legislation, penalties may apply for improper disposal of this type of waste.

For business customers in the European Union

Please contact your retailer or supplier if you wish to dispose of electrical and electronic equipment. They will provide you with further information.

Information on disposal in other countries outside the European Union

This symbol is only valid in the European Union. If you wish to dispose of this product, please contact your local council or retailer and ask for information about disposal options.

TECHNICAL DATA (TODO)

General specifications *	
enlargement	8x
Entrance pupil	30 mm
Exit pupil	3.75 mm
AP distance	16.8 mm
Twilight number	15.5
Luminous intensity	14.1
Field of view at 1000 m angle	114 m 6.5°
Diopter range	± 5 dpt
Resolution	ÿ 11.25"
Interpupillary distance	56 mm – 74 mm
Operating temperature	-19 °C / +49 °C
Storage temperature	-32 °C / +71 °C
Tightness	5 m waterproof

crosshair	Mil-Dot SUMR
Focus system	Steiner Autofocus
Diopter adjustment	Individual eyepiece attitude
Measuring range	50 m/55 yds to ÿ 10,000 m/10,936 yds **
Specified measuring range - wide	50 m/55 yds to 6,000 m/6,561 yds ***
Measurement accuracy (1 ÿ)	± 5 m/± 6 yds
Angle of inclination	± 89°
Inclination accuracy (1 ÿ)	0.5°

Values refer to eyepiece settings of 0 dpt and eye relief of 65 mm.

** Larger objects such as buildings, with visibility > 30 km.

*** NATO targets (2.3 m × 2.3 m), visibility > 10 km

Technical data (TODO)

Optional digital compass	
Azimuth measuring range	360°/400 gon/6400 lines
Accuracy, azimuth at inclination ÿ45° (1 ÿ)	1° rms

Laser

Eye-safe invisible laser (1535 nm) according to IEC 60825-1:2014, Edition 3.0 and FDA Class 1

Accessories

Tripod adapter 1/4 inch thread

Weight (approx.)	
binoculars	950 g
carrying strap	60 g
Lens caps	24 g
Rain cover	18 g

Dimensions (approx.)	
Height	131 mm
Width	170 mm
depth	75 mm

CLEANING AND CARE (TODO)

cleaning

Remove dust and loose dirt from the lenses with a brush. Afterward, only use a soft, possibly damp cloth to wipe the lenses, as otherwise scratches may occur. Wipe away salt water with a damp cloth. Then, wipe the optics dry with a cloth.

Care of the rubber reinforcement

Water-resistant binoculars can be rinsed with liquid soap and under running water. To repair minor hairline cracks caused by UV radiation, the rubber armoring should be treated with cockpit spray or Nigrin plastic care.

A NOTICE

The lenses of the binoculars can be damaged if cleaned improperly.

ACCESSORIES (EXAMPLE (TODO))

The eDiscovery binoculars are compatible with various optional accessories:

- 1 Laser Protection Filter (LPF)
- 2 AntiReflection Device (ARD) (4240)
- 3 Steiner Bluetooth Transceiver for M830rc LRF 1535nm (4001)



NOTES

NOTES

NOTES



STEINER-OPTIK GMBH Dr.-
Hans-Frisch-Str. 9 D-95448
Bayreuth Germany

INTERNATIONAL: www.steiner.de USA:
www.steiner-optics.com DEFENSE:
www.steiner-defense.com



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