ZEISS DTI
3/25 GEN 2 | 3/35 GEN 2
4/35 | 4/50
Instructions for use

Attaching the carrying strap

INSTRUCTIONS FOR USE

ZEISS products are famous for outstanding optical performance, precision engineering and a long service life.
Please observe the following instructions for use in order to obtain the best from your thermal imaging camera and to ensure that it remains your constant companion for many years to come.

Scope of supply

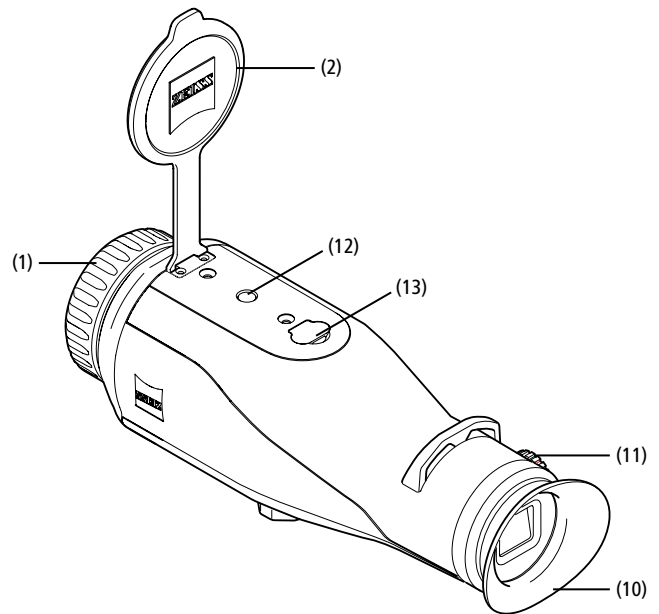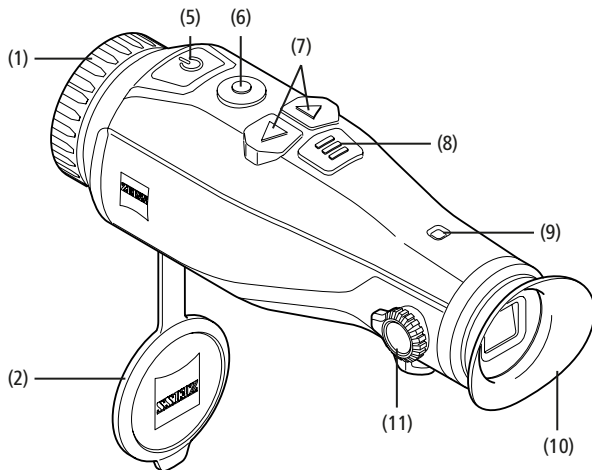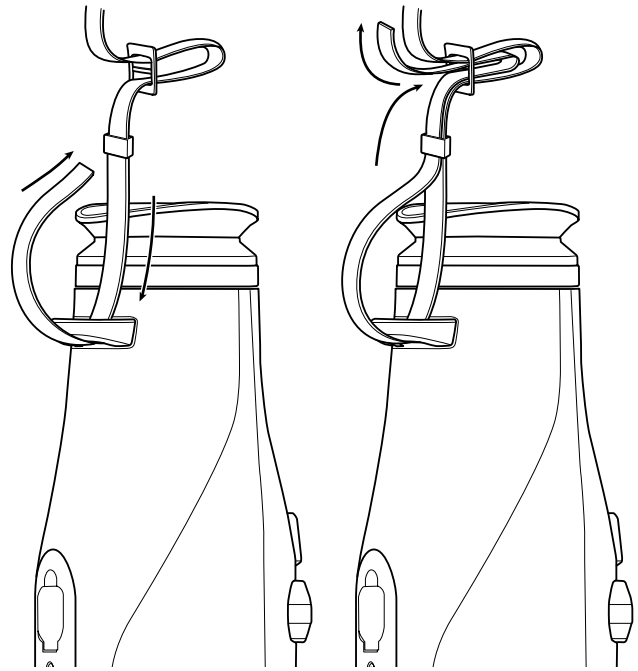| Product	Order no.	Scope of supply
DTI 3/25 GEN 2	527014	
DTI 3/35 GEN 2	527013	Thermal imaging camera
		Neoprene strap
		Carrying case incl. shoulder strap
DTI 4/35	527017	USB cable
		USB adapter
		Optics cleaning cloth
DTI 4/50	527018	

Function test
- Before use, please ensure that your thermal imaging camera has no visible damage.
- Test to see if the thermal imaging camera displays a clear, undisturbed image.
- Check that the settings for the thermal imaging camera are correct. See the notes in the section "Observation mode".

Installing/removing the battery
The ZEISS thermal imaging camera DTI 3/4 is equipped with a permanently installed battery. To replace the battery, please contact our Service. The battery can be separated from the device for recycling purposes. Please refer to the paragraph "Disposal of batteries" in the safety instructions.

Observation with and without glasses
Thanks to the flexible eyecup, the thermal imaging camera can be used with or without glasses. It offers a full field of view in both cases.

| TECHNICAL DATA		3/25 GEN 2	3/35 GEN 2	4/35	4/50
Optics					
Focal length		25 / F1.0	35 / F1.0	35 / F1.0	50 / F1.1
Detection range (object size 1.8 m × 0.5 m; 2 yd × 0.6 yd)	m (yd)	930 (1,018)	1,302 (1,425)	1,845 (2,018)	2,635 (2,883)
Subjective angle of view	°		30		30
Field of view at 100 m (at 100 yd)	m (ft)	26 (78)	19 (56)	22 (66)	15 (46)
Field of view	° horizontal × vertical	15 × 11	11 × 8	13 × 10	9 × 7
Optical magnification		1.7	2.4	2	2.9
Maximum digital zoom		1.0 x – 4.0 x		1.0 x – 4.0 x	
Zoom increments		0.5x		0.5x	
Sensor					
Sensor resolution	px	384 × 288		640 × 512	
Sensor pixel pitch	μm	17		12	
Frame rate	Hz	50		50	
NETD	mK	≤ 35		≤ 25	
Display					
Display resolution	px	1,024 × 768		1,024 × 768	
Display type		AMOLED		AMOLED	
Electronics					
Interfaces		USB: charging + data transfer WLAN: data transfer		USB: charging + data transfer WLAN: data transfer	
Battery		Lithium-ion		Lithium-ion	
Battery life	h	8		7	
External power supply		5V / 2A (USB)		5V / 2A (USB)	
Internal memory	GB	32		32	
Video/image/live-streaming feature		✓		✓	
WLAN frequency	GHz	2.4		2.4	
WLAN standard		IEEE 802.11/b/g/n		IEEE 802.11/b/g/n	
Connection with other devices		ZEISS Hunting App, USB		ZEISS Hunting App, USB	
General					
Protection type		IP66		IP66	
Operating temperature range	°C (°F)	-10 / +40 (+14 / +104)		-10 / +40 (+14 / +104)	
Length × width × height	mm (inch)	187 × 60 × 65 (7.4 × 2.4 × 2.5)	193 × 60 × 65 (7.6 × 2.4 × 2.5)	193 × 60 × 65 (7.6 × 2.4 × 2.5)	206 × 60 × 65 (8.1 × 2.4 × 2.5)
Weight	g (oz)	410 (14.5)	420 (14.8)	430 (15.2)	470 (16.6)

Subject to changes in design and scope of supply due to technical improvements.

Power on/off
Press the on/off button **(5)** for a longer time to switch on the device.
Press and hold the on/off button **(5)** to switch off the device again.

Note: The on/off button **(5)** must be pressed until the OFF symbol appears on the display. Only then can the on/off button **(5)** be released and the device switches off. If the on/off button **(5)** is released before the OFF symbol is displayed, the device does not switch off but switches to standby mode.
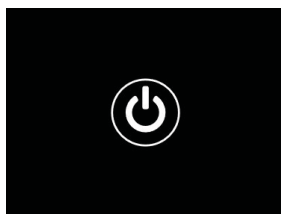
Standby mode
Briefly press the on/off button **(5)** to switch the device to standby mode. Briefly press the on/off button **(5)** again to switch the device back to observation mode.

Calibration
The device can be calibrated automatically (Auto Calibration = On) or manually (Auto Calibration = Off).

In automatic mode, the device automatically performs a calibration by closing and opening an internal shutter when necessary. A gentle click should be heard. In this mode, you also have the option of performing the calibration manually by pressing the shutter button **(6)** and the menu button **(8)** simultaneously.

There is a further option for performing a manual, silent calibration. Go to the device menu and set the "Auto Calibration" option to "Off". Then return to the observation mode. Close the lens cap manually **(2)**. Now press the shutter button **(6)** and the menu button **(8)** simultaneously. The device is now calibrated again.

Note: Always cover the lens when performing a manual calibration. Otherwise the sensor cannot calibrate correctly and the image will deteriorate, e.g. ghost images. If you forget to cover the lens during a manual calibration, repeat the calibration procedure with the lens covered.

Observation mode
Look through the viewfinder **(10)** to observe the scene. Turn the diopter adjustment **(11)** on the side to focus the screen.
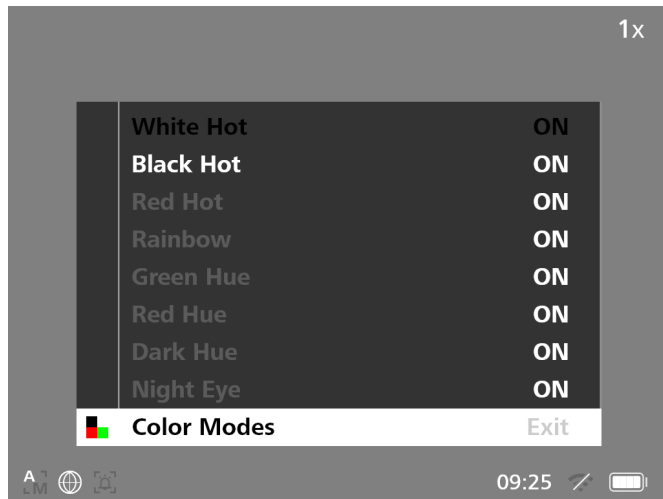Turn the focus ring **(1)** on the lens to focus on the scene.

Zoom
In observation mode, the arrow buttons **(7)** can be used to zoom in (right arrow button) and zoom out (left arrow button) the scene. Zoom in increments of 0.5 between 1.0x and 4.0x. The zoom function is circular, i.e. if you press the right arrow key **(7)** again after a 4.0x zoom, you will return to 1.0x.
The currently set digital magnification is shown on the display. Under the system menu item "Max. Zoom Level" you can set the maximum desired zoom level.

Color modes

The scene can be displayed in different color modes. Briefly press the menu button **(8)** to change the observation mode. When changed, the selected mode is shown on the display as text for about 2 seconds. You can activate or deactivate the desired modes under the system menu item "Color Modes". When changing with the menu button **(8)**, only the active modes are changed. The following color modes are available:

		1x
	White Hot	ON
	Black Hot	ON
	Red Hot	ON
	Rainbow	ON
	Green Hue	ON
	Red Hue	ON
	Dark Hue	ON
	Night Eye	ON
	Color Modes	Exit
		09:25

- **White Hot:** Cold areas are displayed here in black and warm areas in white.
- **Black Hot:** Cold areas are displayed here in white and warm areas in black.
- **Red Hot:** Cold areas are displayed here in black and warm areas in white. In addition, the warmest areas are shown in yellow to red.
- **Red Hot:** A varied color palette displays cold areas in black to blue and warm areas in yellow to white.
- **Red Hue:** Cold areas are displayed here in black and warm areas in red.
- **Green Hue:** Cold areas are displayed here in black and warm areas in green.
- **Dark Hue:** Cold areas are displayed here in a sepia tone and warm areas in violet.
- **Night Eye:** This is a combination of White Hot and Black Hot. Cold areas are displayed here in black to dark brown and warm areas in sepia to light brown.

Shooting mode

You have the possibility to take photos and make videos.
Briefly press the shutter button **(6)** once to capture a photo; a photo symbol appears on the display. Press and hold the shutter button **(6)** to record a video; a video symbol appears on the display. During a video recording, photos can also be taken by briefly pressing the shutter button **(6)**; to confirm, the video symbol briefly switches to the photo symbol.

Note: Longer video recordings are automatically split into several smaller files of 10 minutes each when saved.
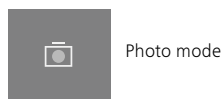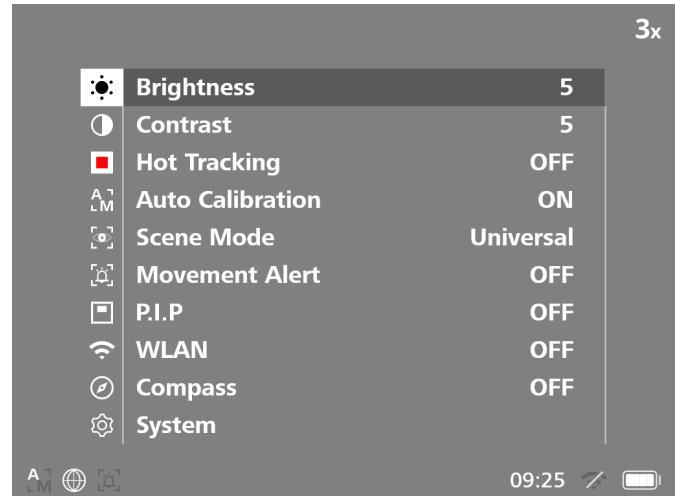
📷	Photo mode	📹	Video mode

Menu

Press and hold the menu button **(8)** to show the main menu on the display. Look through the viewfinder **(10)**. The main menu offers the following options:

		3x
☀	Brightness	5
◑	Contrast	5
◼	Hot Tracking	OFF
A/M	Auto Calibration	ON
[⊙]	Scene Mode	Universal
[⊡]	Movement Alert	OFF
▣	P.I.P	OFF
📶	WLAN	OFF
⊘	Compass	OFF
⚙	System	
		09:25

- **Brightness:** Set the brightness of the display here. There are four brightness levels to choose from. The brightness is lowest at level 1. The brightness is highest at level 10.
- **Contrast:** Adjust the contrast of the scene here. There are ten contrast levels to choose from. The contrast is lowest at level 1. The contrast is highest at level 10.
- **Hot Tracking:** In observation mode, select "Hot Tracking" to highlight the warmest point in the scene with a small red square.
- **Auto Calibration:** Set manual (Auto Calibration = Off) or automatic calibration (Auto Calibration = On) here.
- **Scene Mode:** Choose from three different modes.
    - Universal – Standard mode for general observation.
    - Detect – The Detect mode generates a high-contrast image to make thermal signatures more visible.
    - Fog – The Fog mode improves the image in high humidity or foggy conditions by increasing the sensitivity of the sensor to better see the target signal.

Universal	Detect	Fog

  You can also cycle through the different modes by simultaneously pressing the right arrow button **(7)** and the menu button **(8)**.
- **Movement Alert:** The movement alert tracks the hottest heat source in the image and alerts the user when this heat source moves.
- **P.I.P. (Picture in Picture):** A central section of the image is enlarged by a factor of 2 and shown in a small magnification window on the display.
- **WLAN:** Switch WLAN on/off. When WLAN is switched on, the device creates a hotspot that allows another device (e.g. smartphone) to make a connection.
- **Compass:** Activate the Compass to orient yourself using the cardinal points.
- **System:** Make all system-relevant settings here, including language, time and factory settings.

The arrow buttons **(7)** and the menu button **(8)** are used to navigate in the main menu.
Press the right arrow button **(7)** to scroll down. Press the left arrow button **(7)** to scroll up.
Briefly press the menu button **(8)** to select a menu item. This opens the submenu. Make your settings using the arrow buttons **(7)**.
Briefly press the menu button **(8)** to confirm your selection and return to the main menu.
Press and hold the menu button **(8)** to exit the main menu and return to observation mode.

Movement Alert

You can activate or deactivate this function using the menu item. Alternatively, you can press both arrow buttons **(7)** simultaneously. If the movement alert is active, the alarm symbol on the bottom left on the screen lights up.

When you switch on the movement alert, it takes 10 seconds for the alarm to become active. The display then switches off. If movement is detected, it switches on again.

The movement alert tracks the hottest heat source in the image. The user is alerted to the movement by the flashing LED **(9)** on the top of the device or by the screen turning on again. If the device is not moved, the screen turns off again after 20 seconds.

Note: If there is a hotter heat source in the image than the moving animal, the alarm may not be triggered or may be triggered incorrectly.

Compass

The compass can be activated or deactivated by pressing the left arrow button **(7)** and the menu button **(8)** simultaneously.

Note: If the system is not held horizontally, the cardinal direction may be displayed incorrectly.

Note: Make sure to calibrate the compass prior to its first use. This can be done in the submenu "System" under "Compass Calibration".
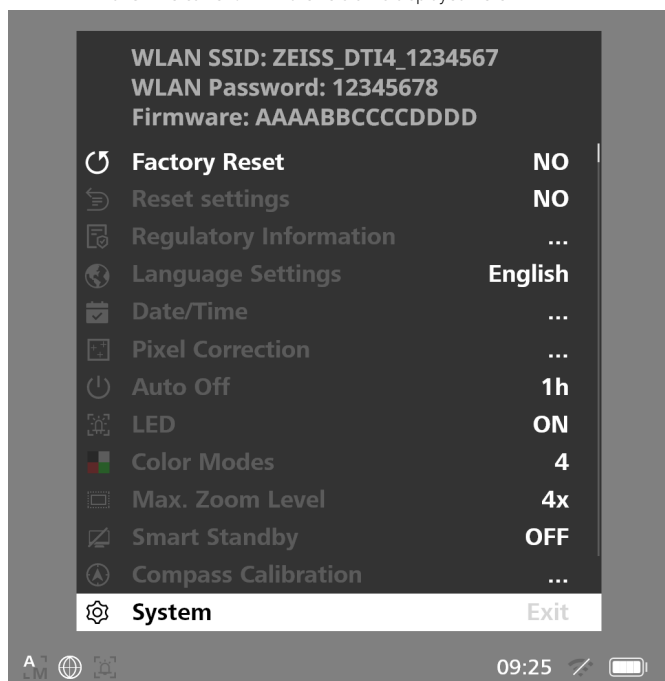
System

The "System" submenu has the following options:
- **Factory Reset:** Select "Factory Reset" to reset the device to the factory settings. This also deletes all data saved on the device, including images and videos.
- **Reset Settings:** Select "Reset Settings" to reset all settings to the default values for the device.
- **Language Settings:** Select a menu language here.
- **Date / Time:** Set the date and time of the device here.
- **Pixel Correction:** Remove defective pixels for a perfect field of view.
- **Auto Off:** Activate or deactivate the automatic switch-off function.
- **LED:** Activate or deactivate the LED on the top of the system.
- **Color Modes:** Activate or deactivate the desired color modes here.
- **Max. Zoom Level:** Here you can specify the maximum zoom value.
- **Smart Standby:** The device automatically switches to standby mode when it is not in use.
- **Compass Calibration:** Calibrate the compass prior to its first use.

You can also view the following information:
- **WLAN SSID:** The name of the WLAN hotspot is displayed here.
- **WLAN Password:** The currently used WLAN password is displayed here.
- **Firmware:** The current firmware version is displayed here.

Factory Reset

To perform a factory reset, select "System" in the main menu. Then navigate to "Factory Reset". Select "Yes" and confirm your selection. A second security prompt follows, which must also be confirmed with "Yes".

Resetting the settings

To reset the settings, select "System" in the main menu. Then navigate to "Reset Settings". Select "Yes" and confirm your selection.

Note: The device must be restarted for the reset of the settings to be completed successfully.

## Personal data when you dispose of or pass on your ZEISS device

Remember that there may be personal photos and videos on the internal device memory. Before passing on the device to a third party, please perform the factory reset to delete this data and verify it has been deleted. By doing so, you help maintain your privacy and data security.

Participating in IT security

Please take an active role in protecting the IT security of your device by using the ZEISS Hunting App and installing new firmware updates as soon as they become available.

Date / Time

Select "System" in the main menu to set the date and time. Then navigate to "Date / Time". You can now set the year, month, day, hour and minute individually. The "Time Format" setting allows you to choose between 24-hour and 12-hour display. Be sure to set the current date and time, as your photos and videos will be time stamped. At the very bottom in the menu item you can activate or deactivate the display of the time on the main screen.
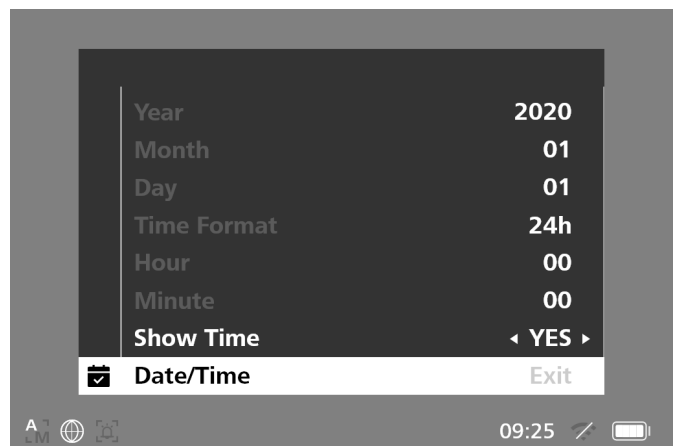
Note: If the battery is completely discharged, the device loses the set date and time. Reset the date and time so that your images and videos get a correct timestamp.

Pixel Correction

If individual pixels fail, you can locate them here and fix the error. Select "System" in the main menu to start the correction. Navigate to "Pixel Correction" and start the correction by briefly pressing the menu button **(8)**. A crosshairs appear, which you use to capture the affected pixel. For more precise detection, the area around the crosshairs is displayed enlarged in an additional window. To set the X axis: press the left arrow button **(7)** for Minus and the right menu button **(7)** for Plus. Every time you press the button, you move one pixel further. To jump several pixels further, press and hold the arrow button **(7)**. Confirm the setting by briefly pressing the menu button **(8)**. Now make the settings for the Y axis in the same way. Switch between the setting for the X and Y axis by briefly pressing the menu button **(8)**.
To save the settings, press and hold the menu button **(8)**. Confirm the prompt whether you would like to save or discard the calibration by briefly pressing the menu button **(8)**.
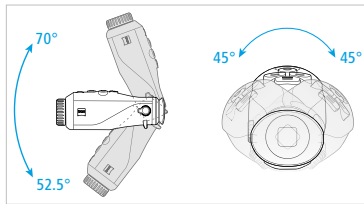
Auto Off

The ZEISS DTI 3/4 switches off automatically after a time of inactivity in order to save battery power. The switch-off duration can be adjusted in the menu item "System" under "Auto Off".

Smart Standby

Smart Standby automatically activates the standby mode when the system is tilted more than 70° up, 52.5° down or more than 45° to the left or to the right.

Compass Calibration

The compass calibration should be performed before using the compass function for the first time. The system must be rotated around all three axes for 40 seconds. You achieve this by holding the system in front of you and doing a horizontal figure eight.

A progress bar is displayed on the screen which disappears after 40 seconds.
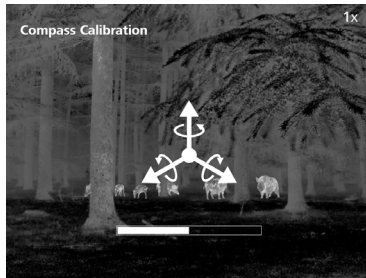
Firmware update

A firmware update can be carried out using the ZEISS Hunting App. Follow the instructions for this in the ZEISS Hunting App.

Note: Make sure that the device is fully charged before updating the firmware. Do not switch off the device during the update, otherwise it may be damaged.

Note: If you initiate an update via the ZEISS Hunting App, you must confirm this again on the device for security reasons.

WLAN

This device is equipped with a WLAN function. Go to the menu and switch on the WLAN function. When activated, WLAN is indicated by a WLAN symbol in the lower right corner of the display. You can now connect your smartphone to the device via WLAN.

Note: When first used, the preset password for the WLAN connection to the device needs to be changed to prevent unauthorized access by third parties. The ZEISS Hunting App is required to change the password.
Default password: 12345678

To increase user comfort, the ZEISS Hunting App synchronizes your password on all logged-in devices.

To increase the security of the connection, we recommend that you change your password.

To extend battery life, we recommend that you only switch on the WLAN function in the device when the device needs to establish a data connection to the ZEISS Hunting App.

ZEISS Hunting App

Install the ZEISS Hunting App on your smartphone and open the app. Follow the steps shown there to connect to the ZEISS DTI 3/4.
The ZEISS Hunting App allows you to transfer images and videos to your smartphone, view the live image, make settings and use other functions. A more detailed description can be found in the help function of the app.

Note: To use the ZEISS Hunting App and its functions, ensure that your smartphone is connected to the ZEISS DTI 3/4 WLAN network.

Note: Every time you connect to the ZEISS Hunting App, the current date and time are automatically transferred from your smartphone to the device.

Note: Please note that you are not connected via the normal WLAN if you have established a WLAN connection to your ZEISS DTI 3/4. To return to the normal WLAN, disconnect your ZEISS DTI 3/4 from your smartphone.

USB port

Use the USB port **(13)** on the bottom to charge your device or to transfer data (photos and videos) to your PC.

The ZEISS DTI 3/4 connects as an MTP device using the USB port. The device is automatically recognized and can be used immediately on computers with Microsoft Windows 10 operating system software or later. For computers with Apple Mac OS operating system software, you need to install additional third-party software to access the data stored on the device, such as "Android™ File Transfer". ZEISS assumes no responsibility or guarantee for third-party software.

Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corp. in the United States and/or other countries.
Apple and macOS are registered trademarks of Apple Inc. in the USA and other countries.
Android is a trademark of Google LLC.

Tripod thread

A 1/4-inch standard thread **(12)** for standard tripods is located on the bottom of the device. Screw the device onto a tripod for more steady shooting.

Charging the device

Charge the device via the USB port **(13)** when the battery is empty. An LED **(9)** is located under the cover that indicates the current charge level.
The battery charge level is shown in the upper right corner of the display. When the charge level is low, the display changes to red. In the following graphic you can see what percentage of your battery charge is still available.

<10%	10–<36%	36–<63%	63–<90%	90–100%

Replacing the lens cap

To replace the lens cap **(2)**, unscrew the screws **(3)** using a screwdriver. Remove the retaining plate **(4)** and the defective lens cap **(2)** . Fit the new lens cap **(2)** and retaining plate **(4)**. Tighten the screws **(3)** using a screwdriver.
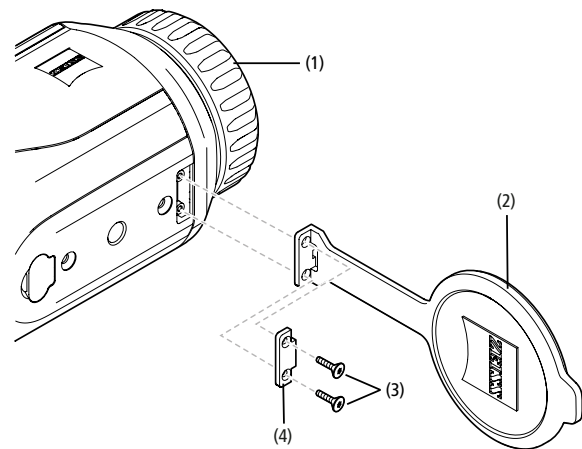
Care and maintenance of the device

Please do not wipe coarse particles from the lenses (e. g. sand), rather blow them away or use a fine brush to remove them! Over time, fingerprints can corrode the lens surface. Breathing on the lens and polishing it with a clean optical cleansing cloth is the easiest method of cleaning the lens surface.

Dry storage and keeping the outer lens surfaces well ventilated, especially in the tropics, helps to prevent a possible mold film forming on the optics.

Your ZEISS DTI 3/4 requires no further special care.

Care and maintenance of the battery

Follow these steps to extend the battery life:
- Avoid storing the device at extreme temperatures.
- Avoid storing the device with a fully charged battery.
- Avoid complete discharging of the device.

Troubleshooting

Fault	Possible reasons	Solution
Will not boot.	Battery is empty.	Charge the device.
The device is not charging.	The USB cable is defective.	Replace the USB cable.
	External power supply is not sufficient.	Check if the external power supply is fine.
	The USB cable is not properly connected to the device.	Unplug the USB cable and check that the connector and port are undamaged and free from dirt.
The image is unclear. The image has streaks. The background is not uniform.	The device must be recalibrated.	Follow the instructions when performing the calibration procedure.
The image is too dark.	The screen brightness is set too low.	Adjust the screen brightness.
The image on the display is flat.	The contrast is set too low.	Adjust the contrast.
The computer does not recognize the device (internal memory).	The device is not switched on.	Transfer the images after turning on the power.
	The USB cable is not connected properly.	
	The required software has not been installed.	Please read the notes in the section "USB port".
The time information on the images is incorrect.	The time information (time/date) in the device is not yet set.	Follow the instructions to set the time information.
Image quality is poor. The detection range is too short.	Poor weather conditions may have adverse effects (e.g. heavy snowfall, rain, fog, etc.).	
The smartphone does not connect to my ZEISS DTI 3/4.	The WLAN password is incorrect.	Enter the correct password.
	There are too many WLAN networks in the immediate vicinity of the device. There may be adverse effects.	Move the device to a location with few or no direct WLAN networks.
The WLAN signal is repeatedly lost or interrupted.	The ZEISS DTI 3/4 is too far away or there are too many other WLAN networks nearby.	Change the location of the device so that a WLAN signal is detected directly.
	There is an obstruction between the device and the receiver.	

Software updates

As part of the statutory warranty (2 years from the transfer of risk of the goods – under German law), we will provide appropriate updates to correct defects. Generally, updates are used for security-related aspects or to eliminate functional impairments and do not include new functions of the software. Insofar as the provision of new functions is necessary to remedy security aspects, this shall not in principle constitute a claim to new functions as such.

After the legal warranty period has expired, we will of course endeavor to provide you with appropriate further updates. However, there is no entitlement to this.

Spare parts

Should you require spare parts for your device, e.g. the lens cap, please contact your specialist retailer, your local distributor or our Customer Service.

For Customer Service inquiries we are happy to take your calls from Monday to Friday from 8:00 a.m. to 4:30 p.m. (CET).
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Fax: +49 (0) 64 41-4 83 69
service.sportsoptics@zeiss.com

ZEISS is a byword for reliability and a high level of quality. Therefore, quite independently of the seller's warranty obligations to the customer, we the manufacturer offer a two year warranty on this ZEISS product, which can be extended for a further year upon registration of the product if registration is made within four weeks of purchase.
The scope of the warranty can be seen by accessing the following link:
www.zeiss.com/cop/warranty

Register your product at: www.zeiss.com/cop/register

Manufacturer's address

Carl Zeiss AG
Carl-Zeiss-Straße 22
D-73447 Oberkochen
www.zeiss.com/nature und www.zeiss.com/hunting

Subject to changes in design and scope of supply due to technical improvements. No liability for mistakes and printing errors.

Data protection notice

Personal data is processed when using the ZEISS DTI 3/4.
Our information on data protection and the processing of personal data can be found in our download center: www.zeiss.com/cop/manuals

Licenses

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Updates

Download the ZEISS Hunting App to receive the latest hardware updates:

Hunting App