

FOREWORD

Dear Customer,

we wish you a great deal of enjoyment and every success with your new Leica product.

Please read this manual to familiarize yourself with the full scope of functions your product has to offer.

Please use this product only as described in this manual. Only then can safe and easy operation be guaranteed.

Your Leica Camera AG

Please read the chapters "Safety Remarks" and "Important Information" before using the product for the first time. Knowledge of the content will prevent inadvertent damage to the product, possible injuries and other risks.

LEGAL INFORMATION

LEGAL INFORMATION ABOUT THIS MANUAL

COPYRIGHT

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TECHNICAL DATA

Product changes with regards to the product or services may have occurred after the editorial deadline. The manufacturer reserves the right to effect structural or shape changes, color deviations and changes to the scope of delivery or service, where these changes or deviations are reasonably acceptable for the customer, while taking into consideration the interests of Leica Camera AG. In that respect, Leica Camera AG reserves the right to changes and errors. The images in this manual may depict accessory, special features or other items that are not part of the standard scope of delivery or service. Some pages may contain model types and services, which are not offered in specific countries.

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REGULATORY INFORMATION

You will find the manufacturing date of your product on the stickers on the packaging. The date format is year/month/day.

DISPOSAL OF ELECTRICAL AND ELECTRONIC EQUIPMENT

(Applies within the EU and for other European countries with active waste separation policies.)



This device contains electric and/or electronic components which must not be disposed of in general household waste. Instead, it should be disposed of at a recycling collection point provided by your local authority.

This service is free of charge. Any standard or rechargeable batteries used in this device must be removed and disposed of separately in accordance with local regulations.

Please contact your local authorities, waste disposal collection point or the retailer, from whom you purchased the device for more information on correct waste disposal.

SAFETY REMARKS

WARNING

Non-compliance with the following points may result in serious injury or death.

GENERAL INFORMATION

- · Keep the device out of the reach of small children.
- Do not use the device while walking. You might trip and fall.

BATTERY

- Only the battery type stated and described in this manual must be used. Any improper use of the batteries or the use of unapproved battery types may result in an explosion!
- Do not expose the battery to sunlight, heat, humidity or moisture for prolonged periods of time. It must not be placed in a microwave oven or a high-pressure container as this would pose a fire or explosion hazard!
- Never dispose of batteries in fire and never attempt to heat, recharge, dismantle or break open a battery.
- Batteries must always be stored out of the reach of children. Do not leave batteries lying around, as they could be swallowed by children or pets.

CAUTION

Non-compliance with the following points may result in personal injury or damage to the device.

GENERAL INFORMATION

- Do not attempt to disassemble or modify the device; exposing the internal electronics may cause damage, injury or electric shock.
- The rifle scope should be mounted with the eye relief distance provided to prevent injury to the brow from the recoil of the eyepiece (see technical information for measurements).

WARNING - KEEP BUTTON BATERIES OUT OF REACH OF CHILDREN

Swallowing may lead to serious or fatal injury in as little as 2 hours, due to chemical burns and potential perforation of the oesophagus. Never allow children to replace button batteries of any device. If you suspect your children has swallowed or inserted a button battery immediately call emergency medical service. Regularly examine devices and make sure the battery compartment is correctly secured, battery cover is tightened. Do not use if the compartment is not secured. Dispose of used button batteries immediately and safely out of the reach of children. A battery can still be dangerous even when it can no longer operate the device.

IMPORTANT INFORMATION

GENERAL INFORMATION

- Do not attempt to take the device apart yourself. Repairs must only be carried out in authorized workshops.
- Protect the device against any kind of shocks that are not caused by the weapon.
- Do not use excessive force when making adjustments via the setting turrets.
- Do not touch the glass surfaces with your fingers, especially if you have previously applied hand cream, insect repellent, etc.
 These substances may contain chemicals that damage or destroy the coatings on the glass surfaces.
- Make a note of the serial number of your device, as this information will be extremely important in case of loss.

BATTERY

- Low temperatures impair battery performance. Carry the device close to the body in cold conditions and use a fresh battery.
- Make sure to store the batteries in a cool, dry place.
- Depleted batteries must never be disposed of in household waste as they contain toxic materials that are harmful to the environment. Battery collection points are provided at most large retail outlets; alternatively, you can dispose of old batteries at a local special waste collection point to ensure correct recycling.

EYEPIECE

 An eyepiece can have the effect of a magnifying glass when exposed to direct frontal sunlight. The device must therefore be protected against extended exposure to direct sunlight. Storing the device in the shade or ideally in its case will help prevent damage to the device interior.

WATERPROOFING

- The covers complete with sealing rings must always be tightened with a <u>little</u> force ("hand tight") to protect the device from moisture.
- Damaged sealing rings must be replaced.

WARRANTY

In addition to your statutory warranty rights with regards to the seller, Leica Camera AG offers a 10-year warranty for the optics and housing of this Leica rifle scope, as well as a 2-year warranty for the electronics as stated in the conditions below. The Leica warranty does not impact on any statutory consumer rights in accordance with relevant national law or any consumer rights vis-a-vis the retailer arising from the purchase contract concluded between them.

WARRANTY CONDITIONS

By purchasing this Leica accessory, you have acquired a rifle scope that is manufactured in compliance with special quality standards, and which was thoroughly tested at each individual production step by experienced specialists. Our ten-year warranty for this product commences on the date of sale by an authorized retailer under the following conditions:

- 1. In case of a complaint due to a manufacturing fault, we will assume all material costs during the warranty period. We will additionally cover all required labor costs during the first five years. We shall decide at our own discretion to repair the faulty product, to replace faulty parts or to replace the entire product with a faultless product of the same type. All other claims of any kind and on whatever legal basis shall not be accepted in connection with this warranty.
- Wear parts like eyecups, leather details, armoring, carry straps and accessories are exempt from the warranty. The same applies for surface damage.
- Any warranty claims become void if the defect in question is a result of improper handling – which also includes the use of third-party accessories – or if the product was manipulated by

- unauthorized persons or workshops or if the serial number of the product was rendered illegible.
- 4. Warranty claims can be submitted only in conjunction with the original proof of purchase complete with the date of purchase, as well as the address and signature of an authorized retailer.
- 5. In case of a warranty claim, please send the Leica product, the original proof of purchase and a description of the fault to Leica Camera AG Customer Care or a Leica regional subsidiary.

PICK-UP SERVICE FOR REPAIR SUBMISSIONS

(Applies for EU only)

We will organize the shipping of your device to our Customer Care department if you should notice a problem with your device during the warranty period. Please contact our service hotline to make the necessary arrangements (+49 (0)6441 2080 189). Our pick-up service will collect your Leica product at the agreed time from your premises free of charge and transport it to our Customer Care location for evaluation.

Contact: en.leica-camera.com/Contact

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Definition of the various categories of information found in this manual

Note

- Additional information

Caution

- Non-compliance may result in damage to the device and accessories
- Non-compliance may result in personal injury

Warning

- Non-compliance may result in serious injury or death

The rifle scope comes equipped with excellent optics. These optics deliver a clear, bright image even in difficult conditions or less than optimal lighting for a reliable reticule and a relevantly accurate and professional shot. The shooter can rely on this additional accuracy for narrow clearances or in difficult terrain. Its particularly rugged product design makes the Leica rifle scope a reliable companion for all types of hunting.

The rifle scopes with a 42 mm lens diameter or higher are optionally available with rapid reticle adjustment (Leica BDC). Leica BDC is the perfect solution to allow the intuitive aim you are used to, while compensating for any relevant point of impact compensation (see p. 24 for functional scope and operation).

SCOPE OF DELIVERY

The standard scope of delivery* contains the following:

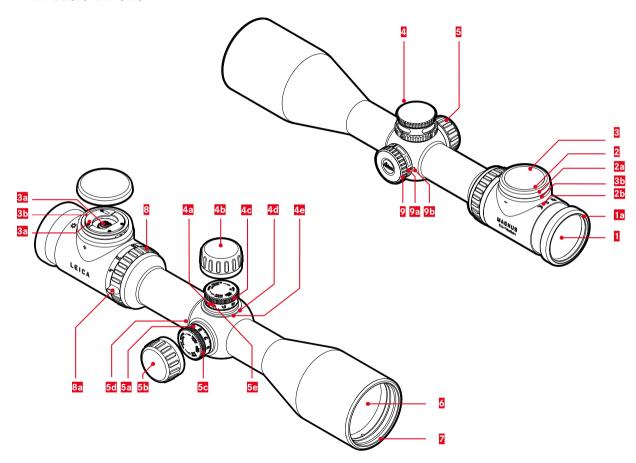
- Rifle scope
- Transport cover
- Test certificate
- 1 lithium coin battery (CR 2032)
- Lens cleaning cloth
- Safety information

^{*}The actual scope of delivery may vary depending on model.

REPLACEMENT PARTS / ACCESSORIES

Contact Leica Customer Care or your specialist Leica retailer for details on the latest replacement parts / accessory range: https://en.leica-camera.com/Stores-Dealers/Leica-dealer-locator

PART DESIGNATIONS



- Evepiece
- Eyecups (rotating)
- 2 Mode selector
 - Index point
 - Modes
- 3 Brightness setting button/battery compartment cover
 - a Battery compartment
 - Sealing ring
 - Locking tab
- 4 Elevation adjustment turret
- a Scale
- **b** Cover
- Knurled wheel
- d Index point
- Sealing ring
- 5 Lateral adjustment turret
- a Scale
- Cover
- C Knurled wheel
- d Index point
- Sealing ring
- 6 Lens
- 7 Filter thread
- 8 Magnification adjustment ring
- Cams
- Parallax compensation adjustment ring
- a Scale
- Index point

Caution

Never look directly at the sun or other bright sources of light through your Leica optics! Doing so may seriously damage your eyes.

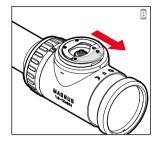
Warning

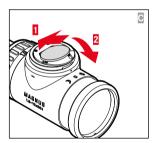
Make sure the weapon is not loaded before doing any work or changing settings on the rifle scope and before changing batteries.

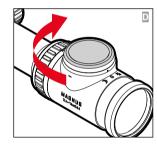
PREPARATION

INSERTING/CHANGING THE BATTERY









A 3 V lithium coin cell (type CR 2032) is required for power supply.

- Unscrew the battery compartment in counter-clockwise direction
- ▶ Push back the locking tab as shown in the illustration
- ▶ Remove the battery (if any) and dispose of it safely
- ▶ Insert the battery with the plus contact pointing up
- ▶ Pull the locking tab back into place
- Screw the battery compartment cover back on in clockwise direction (hand tight)

BATTERY CAPACITY DISPLAY

The luminous reticle will display the battery status for the first 10 s after activation.

Capacity	Display
Good	Steadily lit
Low	Flashes off for a short time in regular intervals
Weak	Continuous flashing

Note

 The battery capacity display will appear only after a manual activation of the luminous reticle, not after automatic deactivation (see p. 18).

MOUNTING

The first prerequisite for a robust point of impact is the correct mounting of the rifle scope on the weapon. A wide selection of mounting parts are available from specialist retailers. We recommend using only high-quality parts from renowned manufacturers that match the quality characteristics of your Leica rifle scope.

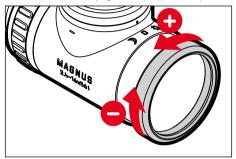
You can mount the device yourself, but you will have to ensure a perfectly aligned and tension-free structure. Leica strongly recommends contracting a specialist workshop.

Caution

• We recommend gluing the lower mounting ring to prevent any travel of the rifle scope within the ring mount.

DIOPTER SETTINGS

The viewfinder has a diopter setting function with a range between -4 and +3 diopter to allow glasses wearers the use of the Leica rifle scope without eyeglasses (diopter compensation).



- ▶ Aim the rifle scope at a neutral, bright background
- ► Turn the eyecup fully to the left
- From this starting position, turn slowly to the right until you reach optimal sharpness for the reticle

This method takes into consideration the accommodation capability of the human eye and therefore ensures the best possible setting.

SETTINGS AND OPERATION

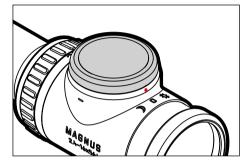
SETTING THE ENLARGEMENT

- ► Turn the magnification adjustment ring 8
 - higher magnification = to the left
 - lower magnification = to the right

The cam 8a facilitates settings in darkness.

SETTING THE LUMINOUS RETICLE

Reticle illumination can be switched On or Off via the mode selector. The brightness of the illuminated dot can be adjusted in multiple increments.



Two mode settings/brightness ranges are available.

- ▶ Turn the mode selector to the desired setting
 - **0**: Off
 - **(**: Night operation (at night/twilight)
 - ☼: Daytime operation (in daylight)

The day and night modes differ in their brightness setting ranges for the illuminated dot. In both modes, the brightness can set in 60 increments to adapt to operational parameters.

- Press the brightness settings button
 - in direction of the minus icon: brightness decreases
 - in direction of the plus icon: brightness increases
 - push and release: change by one increment
 - push and hold: rolling change

Note

 The setting will remain unchanged after a battery change or a manual deactivation of the luminous reticle.

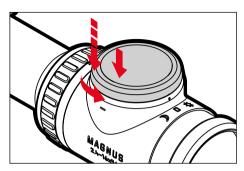
AUTOMATIC SWITCH-OFF

Regardless of the selected mode, the luminous reticle will automatically switch off in various situations to preserve battery power:

- If the rifle scope is not moved for more than 3 minutes (e.g. on a raised hide)
- If the rifle scope is tilted to one side by more than 45° (e.g. when the weapon is set aside temporarily)
- If the rifle scope is tilted by more than around 80° upward or 65° downward, or is in a vertical upright position (e.g. when the weapon is shouldered)

The illuminated dot will be automatically reactivated with the previously set brightness, once these conditions no longer apply.

ACTIVATE/DEACTIVATE AUTOMATIC SWITCH-OFF



- ▶ Set the mode selector to daytime mode
- Press and hold the brightness setting button towards the Minus icon until minimal brightness is set
- ▶ Release the brightness setting button
- Press the brightness setting button towards the Minus icon again and hold for at least 20 s
 - The setting changes. The illuminated dot will light for 10 s in confirmation and will display the current setting.
 - single flash: active
 - double flash: inactive
 - The setting will remain unchanged after a battery change or a manual deactivation of the luminous reticle.

ADJUSTING THE POINT OF IMPACT

A calibration of the reticle to the weapon will be required in case of an offset of the point of impact. The procedure is the same on both setting turrets (elevation: 4, lateral 5).

► Unscrew the cover 4b/5b in counter-clockwise direction



- Point of impact too high (downward correction required)
- ► Turn the knurled wheel 4c in anti-clockwise direction



- Point of impact too low (upward correction required)
- ► Turn the knurled wheel 4c in clockwise direction



- Point of impact too far left (correction to the right required)
- ► Turn the knurled wheel 5c in clockwise direction



- Point of impact too far right (correction to the left required)
- ► Turn the knurled wheel 5c in anti-clockwise direction

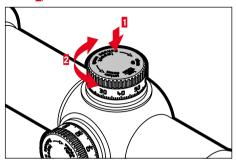
► Screw cover 4b/5b back on in clockwise direction

Note

• The knurled wheels have a very fine detent: one click is equal to 1 cm at 100 m (\sim 1/3 MOA).

ZEROING THE TURRET SCALES

The procedure is the same on both setting turrets (elevation: 4, lateral 5).



- ► Unscrew the cover 4b/5b in counter-clockwise direction
- ► Adjust the point of impact (see p. 19)
- ► Hold the knurled wheel 4c/5c
- Press the inside of the turret downward
- Turn the scale ring until the zero is directly opposite the index point
- ► Screw cover 4b/5b back on in clockwise direction

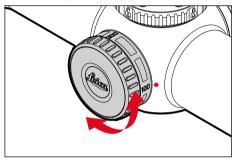
Note

Once you have done your adjustments on knurled wheels, you
can get back to the basic setting for the firing distance after any
change to the point of impact by simply going back to the 0
positions, without having to remember or note down anything.

PARALLAX COMPENSATION

Leica rifle scopes with a maximum magnification of 12x are adjusted parallax-free up to a range of 100 m, so that you can see the reticle and the target at the chosen distance in perfect focus concurrently.

Any deviations in the point of impact with the eye not perfectly centered are generally negligible.



With larger magnifications, however, these deviations must be taken into consideration. That is why rifle scopes with magnification ranges above 12x have parallax compensation.

- ► Turn the adjustment ring ② until the image of the target appears in perfect focus
 - We recommend using the highest magnification for the most accurate settings.
 - An optimum adjustment is achieved when reticle and image no longer move relative to one another when you change the position of your eye over the eyepiece.

TECHNICAL DATA

Leica Magnus i	1-6.3 x 24 i	1.5 – 10 x 42 i	1.8 – 12 x 50 i	2.4 – 16 x 56 i
Lens diameter	24 mm	42 mm	50 mm	56 mm
Magnification	1 to 6,3x	1.5 to 10x	1.8 to 12x	2.4 to 16x
Zoom ratio	6.3	6.7	6.7	6.7
Exit pupil max./min.	12.4 - 3.8 mm	12.4 - 4.2 mm	12.4 - 4.2 mm	12.4 - 3.5 mm
Field of view max./min. (100 m)	44 - 6.5 m	26 - 4.1 m	22.5 - 3.7 m	17 - 2.6 m
Illuminated dot size (L-4a)	2.4 cm/100 m	1.5 cm/100 m	1.5 cm/100 m	1.5 cm/100 m
Number of brightness levels	120	120	120	120
Eye relief	>90 mm	>90 mm	>90 mm	>90 mm
Light transmission	approx. 92%	approx. 92%	approx. 92%	approx. 92%
Reticle image plane	2.	2.	2.	2.
Available reticles	4a, L-3D	4a	4a	4a
Lens coating	AquaDura®	AquaDura®	AquaDura®	AquaDura®
Diopter compensation	-4/+3 dpt	-4/+3 dpt	-4/+3 dpt	-4/+3 dpt
Parallax-free	100 m	100 m	100 m	setting range 50 m - ∞
Center tube diameter	30 mm	30 mm	30 mm	30 mm
Length	272 mm	317 mm	335 mm	360 mm
Weight (without/with rail)	544 g/570 g	620 g/650 g	700 g/725 g	785 g/815 g
Mountings	Rings (30 mm), Zeiss internal rail			
Max. adjustment track elevation/lateral (cm/100 m)	400 x 400 cm	260 x 260 cm	230 x 230 cm	200 x 200 cm
Impact point correction / click	1 cm (0.1 mil / 0.1 mrad)			
(cm/100 m)	≈ 1/3 MOA	≈ 1/3 MOA	≈ 1/3 MOA	≈ 1/3 MOA
Filter thread on lens side	M28 x 0.75 mm	M46 x 0.75 mm	M52 x 0.75 mm	M58 x 0.75 mm
Impermeability (nitrogen-filled)	4 m water depth			
Reticle lighting	Point	Point	Point	Point

Leica Magnus i	1 – 6.3 x 24 i	1.5 – 10 x 42 i	1.8 – 12 x 50 i	2.4 – 16 x 56 i
Automatic switch-off	yes (after 3 mins or depending on position/directionality)	yes (after 3 mins or depending on position/directionality)	yes (after 3 mins or depending on position/directionality)	yes (after 3 mins or depending on position/directionality)
Power supply	CR2032 – lithium coin battery, rated voltage 3 V, capacity: 230 mAh	CR2032 – lithium coin battery, rated voltage 3 V, capacity: 230 mAh	CR2032 – lithium coin battery, rated voltage 3 V, capacity: 230 mAh	CR2032 – lithium coin battery, rated voltage 3 V, capacity: 230 mAh

FAST RETICLE ADJUSTMENT BDC

(optional accessory)

The Leica fast reticle adjustment BDC (Bullet Drop Compensator) is an optional accessory you can add to your Leica rifle scope.

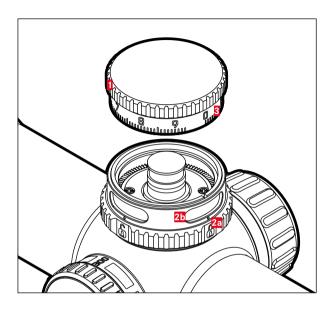
SCOPE OF DELIVERY

- Fast reticle adjustment BDC (BDC unit)
- Hex key SW 1.5 mm

Note

• Possible deviations from the product images do not influence the basic functions and handling of the product.

PART DESIGNATIONS



- Upper knurled wheel
- 2 Lower knurled wheel
 - Locking status indicator
 - Inspection window
- Scale ring (with engraving)

DELIVERY CONDITION

Upon delivery, the reticle of the Leica rifle scope is set to the mechanical midpoint of the total adjustment track. The scale of the BDC unit is set to 45 clicks by default.

LOCKING AND RELEASING

The BDC unit comes with a locking to prevent accidental adjustment changes.

► Turn the lower knurled wheel 2 by 90° in anti clockwise direction until the relevant icon 1,7 1, appears

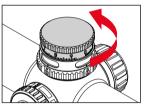
ZEROING

- ► Mounting the rifle scope (see p. 14)
 - Ensure the best possible parallelism of the rifle scope and weapon, so that the adjustment range for zeroing compensation is minimal.

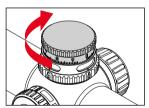
ADJUSTING THE POINT OF IMPACT

- Align the weapon so that the center of the target is visible centrally when looking through the barrel
 - The system lock must be removed.
- Look through the attached rifle scope and correct the offset of the target marker to the center of the target by turning the elevation and/or lateral adjustment
 - Do not change the position of the weapon while doing so.
- Check again, whether the target marker and the center of the barrel are aligned and can be seen congruently on the target









Notes

- Depending on the mounting type, there may be a limited adjustment track available in use after zeroing. You can use a relevantly tilted downward mounting if the total adjustment track is too short.
- We recommend use of a mounting tilted forward by around 10 MOA. This mounting gives you an additional approx. 29 cm per 100 m adjustment track.

ZEROING THE SCALE

- ▶ Make sure that the rifle scope and weapon are zeroed in
- ▶ Lock the BDC by turning the lower knurled wheel 2
- Loosen the hex screws 1a
- ► Lift the upper knurled wheel 1 complete with the scale ring 3 until it uncouples
- Set the upper knurled wheel including the scale ring to the zero position until the zero mark appears in the inspection window 25
- ▶ Press the upper knurled wheel I fully down and hold it
- Tighten the hex screw 1a

Note

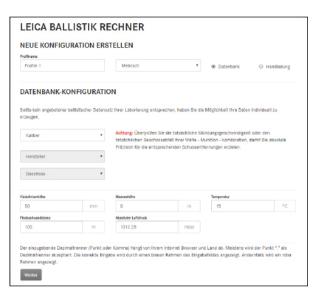
 The zero position of the scale on the BDC unit should always correspond to your minimum zero distance, since no allowance has been made for a negative BDC adjustment track.

LEICA BALLISTIC CALCULATOR

We recommend using the Leica Ballistic Calculator to take full advantage of the reticle quick adjustment.

Taking into account relevant parameters like firing distance, line of sight height, temperature and elevation, the Leica Ballistic Calculator can calculate the trajectory for virtually any ammunition.

The Ballistic Calculator can be found here: <u>ballistictool.leica-camera.com</u>



CARE/STORAGE

- Your Leica product requires no special care.
- Coarse dirt particles like sand can be removed with a soft brush or simply blown off.
- Fingerprints, etc. on front lenses and eyepiece lenses can be pre-cleaned with a damp cloth and then wiped dry with a clean leather or lint-free cloth.
- Do not use alcohol or chemical cleaning solutions on the optics or housing.
- Do not use excessive force when cleaning a severely soiled lens surface. The coating is abrasion resistant, but not impervious to sand or salt crystals.
- The housing should be cleaned using a damp leather cloth only.
 Using a dry cloth may cause friction, which may result in a static discharge.
- Always rinse off any traces of salt water! Dried salt crystals could damage the surfaces.
- The device should be stored in a well-ventilated, dry and cool place to prevent fungal growth (particularly important in humid climates).
- Remove the battery from the housing if you will not be using the product for an extended period of time.

LEICA HUNTING APP

You can create and store your personal ballistics profiles with the Leica Hunting app. Install the Leica Hunting app on the mobile device.

► Scan the following QR code with the mobile device

for iOS:

for Android:





or

► The app is available from Apple App Store™/Google Play Store™

LEICA CUSTOMER CARE

Please contact the Customer Care department of Leica Camera AG for the maintenance of your Leica equipment and for help and advice regarding Leica products and how to order them. You can also contact the Customer Care department or the repair service provided by your regional Leica subsidiary for repairs or warranty claims.

Leica Camera AG Leica Customer Care Am Leitz-Park 5 35578 Wetzlar Germany

Phone: +49 (0)6441 2080-189 Fax: +49 (0)6441 2080-339

Email: customer.care@leica-camera.com

www.leica-camera.com