

# **FOREWORD**

Dear Customer,

We wish you a great deal of fun and success taking photographs with your new Leica Q2 Monochrom. Please read this manual thoroughly to familiarize yourself with the full scope of functions your camera has to offer. You can find all information about the Leica Q2 Monochrom whenever you need it at:  $\underline{\text{q2-monochrom.}}$   $\underline{\text{leica-camera.com}}$ .

Your Leica Camera AG

## SCOPE OF DELIVERY

Before using your camera for the first time, please check that the accessories supplied are complete.

- Leica Q2 Monochrom with attached lens hood
- Lithium-ion battery Leica BP-SCL4
- Charger Leica BC-SCL4, incl. mains cable (US, EU)
- Lens hood cap
- Thread protection ring
- Accessory shoe cover
- Carry strap
- Quick Start Guide
- Test certificate
- CE flyer
- Creative Cloud flyer

# REPLACEMENT PARTS/ACCESSORIES

Please contact Leica Customer Care or visit the Leica Camera AG website for information on the extensive range of Leica replacement parts/accessories:

en.leica-camera.com/Photography/Leica-Q/Accessories

Only the accessories specified and described in this manual or by Leica Camera AG must be used with the camera (battery, charger, mains plug, mains cable, etc.). These accessories should only be used with this product. Third-party accessories may result in malfunctions or damage to the product. Please read the chapters "Legal information", "Safety remarks", and "General information" before using your camera for the first time. Knowledge of the content will prevent inadvertent damage to the product, possible injuries and other risks.

# **LEGAL INFORMATION**

## **COPYRIGHT NOTICE**

- Compliance with copyright laws is mandatory. The recording and publication of pre-recorded media like tapes, CDs or other published or broadcast material may breach copyright laws. The same applies for all software supplied in the scope of delivery.
- The following applies for all video material created with this camera: This product is governed by the AVC Patent Portfolio license and is meant for private use by a consumer only. The device may furthermore be used for purposes for which the consumer receives no remuneration, e.g. (i) encoding in accordance with the AVC Standard ("AVC Video") and/or (ii) decoding of AVC Video that was encoded by a consumer in accordance with the AVC Standard within the scope of personal use and/or which the consumer has received from the provider, who is in possession of a license to offer AVC Video. No license is granted or implied for any other use. Any other use, specifically the provision of AVC video in exchange for remuneration, may require a separate license agreement with MPEG LA, L.L.C. Please visit the MPEG LA, L.L.C. website at: www.mpegla.com for more information.

## **LEGAL INFORMATION ABOUT THIS MANUAL**

### **COPYRIGHT**

All rights reserved.

All text, images and graphics are subject to copyright and other laws to protect intellectual property. They must not be copied, modified or used for any purpose including trade purposes.

#### **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.

#### **BRANDS AND LOGOS**

The brand names and logos used in this documented are protected trademarks. These brands or logos must not be used without prior approval by Leica Camera AG.

#### LICENSE RIGHTS

Leica Camera AG intends to provide you with innovative and informative documentation. Due to the amount of creativity that has gone into its design, we ask for your understanding that Leica Camera AG must protect its intellectual property, including patents, trademarks and copyrights and that possession of the documentation does not infer any licensing rights of the intellectual property of Leica Camera AG.

# IMPORTANT NOTES REGARDING THE USE OF WLAN/BLUETOOTH®

- Appropriate measures must be taken to ensure security and protect against disruptions to the systems in place where devices or computer systems are in use that require more stringent security than WLAN devices.
- Leica Camera AG shall not accept liability for damages arising from the use of the camera for purposes other than as a WLAN device.
- It is assumed that the WLAN function will be used in countries where this camera is sold. There may be a risk of breaching statutory wireless communication regulations when using the camera in other countries. Leica Camera AG shall not accept liability for such breaches.
- Please note that there is a risk of unauthorized third party interception of wirelessly communicated data. We highly recommend that you activate encryption in the wireless access point settings to ensure data safety.
- Avoid using the camera in areas where it can be exposed to magnetic fields, static electricity or other interferences, e.g. near a microwave oven. RF transmissions may otherwise not reach the camera.

- Using the camera near devices like microwave ovens or wireless phones that use the 2.4 GHz RF band may negatively affect the performance of both devices.
- Do not attempt to connect to wireless networks you are not authorized to use.
- The device will automatically search for wireless networks, once the WLAN function is enabled. A list, including networks you are not authorized to access, will be displayed (SSID: Network identifier for a WLAN network). Do not attempt to connect to such a network, as this could be construed as unauthorized access.
- We recommend disabling the WLAN function while on an aircraft.
- The use of the WLAN-RF band between 5150 MHz and 5350 MHz is permitted only in enclosed spaces.
- Please read the important notes on specific functions of Leica FOTOS on p. 138.

## **REGULATORY INFORMATION**

You will find the manufacturing date of your camera on the stickers in the Warranty Card and/or on the packaging.

The date format is year/month/day.

Specific regional approvals for this device can be found in the camera menu.

- ► Select Camera Information in the main menu
- ► Select Regulatory Information

## **CE MARK**

The CE mark on our products documents compliance with the fundamental requirements of applicable EU guidelines.

English			
Declaration of Conformity (DoC)			
Hereby, "Leica Camera AG" declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.			
Customers can download a copy of the original DoC to our Radio Equipment products from our DoC server:			
www.cert.leica-camera.com			
In case of further questions, please contact: Leica Camera AG, Am Leitz-Park 5, 35578 Wetzlar, Germany			
Depending on product (see technical data)			
Туре	Frequency band (central frequency)	Maximum power (dBm E.I.R.P.)	
WLAN	2412-2462/5180-5240 MHz/	20	
	5260-5320/5500-5700 MHz		
Bluetooth® Wireless Technology	2402-2480 MHz	20	

# 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**

## **GENERAL INFORMATION**

- Do not use your camera in the immediate vicinity of devices that generate powerful magnetic, electrostatic or electromagnetic fields (e.g. induction ovens, microwave ovens, television sets or computer screens, video game consoles, cell phones, broadcasting equipment). Their electromagnetic fields can interfere with recordings.
- Strong magnetic fields, e.g. from speakers or large electric motors can damage the stored picture data or disrupt recording.
- Switch off the camera, remove the battery briefly, replace it and switch the camera back on in case of a camera malfunction due to the effects of electromagnetic fields.
- Do not use the camera in the immediate vicinity of radio transmitters or high-voltage power lines. Their electromagnetic fields may interfere with recordings.
- Always store small parts e.g. the accessory shoe cover as follows:
  - out of the reach of children
  - in a safe location, where they will not get lost or stolen
- State-of-the-art electronic components are sensitive to static discharge. Since people can easily pick up charges of several 10 000 volts by walking on synthetic carpets, a discharge can occur when you touch the camera, and especially it is placed on a conductive surface. A static discharge on the camera housing poses no risk for the electronics. Despite built-in safety circuits, you should avoid direct contact with external camera contacts like those in the flash shoe.
- Take care not to soil or scratch the sensor for lens detection in the bayonet. You must similarly prevent direct contact of the bayonet with grains of sand or similar particles, as these could

- cause irreparable damage. This component must only be cleaned with a dry cloth (in system cameras).
- Use a cotton or linen cloth instead of a microfiber cloth from an optician's (synthetic) when cleaning the contacts. Make sure to discharge any electrostatic charge by deliberately touching a heating or water pipe (conductive, grounded material). Dirt deposits and oxidation on the contacts can be avoided by storing your camera in a dry location with the lens cap and the flash shoe/viewfinder cap (in system cameras) attached.
- Only use accessories specified for this model to prevent faults, short circuits or electric shock.
- Do not attempt to remove parts of the housing (covers) yourself.
   Repairs must be done at authorized service centers only.
- Protect the camera against contact with insect sprays and other aggressive chemicals. Petroleum spirit, thinner and alcohol must not be used for cleaning. Some chemicals and liquids can damage the camera housing or the surface finish.
- Rubber and plastics are known to expel aggressive chemicals and should therefore not be kept in contact with the camera for extended periods of time.
- Prevent any sand or dust or water penetration into the camera,
   e.g. during snowfall or rain or on the beach. Be extra careful
   when changing the lens (in system cameras) and when inserting
   or removing the memory card and rechargeable battery. Sand
   and dust can damage the camera, the lens, the memory card
   and the battery. Moisture can cause malfunctions and
   irreparable damage to the camera and memory card.

## **LENS**

 A camera lens can have the effect of a magnifying glass when exposed to direct frontal sunlight. The camera must therefore be protected against extended exposure to direct sunlight.  Attaching the lens cap and keeping the camera in the shade or ideally in its camera case, will help prevent damage to the interior of the camera.

## RECHARGEABLE BATTERY

- Improper use of the batteries or the use of unapproved battery types may result in an explosion!
- Do not expose the rechargeable battery to sunlight, heat, humidity or moisture for prolonged periods of time. Likewise, the batteries must not be placed in a microwave oven or a high-pressure container as this would pose a fire or explosion hazard.
- Do not under any circumstances charge or insert a damp or wet battery into the camera!
- A safety valve in the battery ensures that any excess pressure caused by improper handling is discharged safely. It is nevertheless important to dispose of a bloated battery immediately. It may pose an explosion hazard!
- Keep the battery contacts clean and easily accessible. Although lithium-ion batteries are secured against short circuits, they should still be protected against contact with metal objects like paper clips or jewelry. A short-circuited battery can get very hot and cause severe burns.
- When a battery is accidentally dropped, make sure to check the housing and the contacts immediately for any damage. A damaged battery can damage the camera.
- The battery must be removed from the camera or charger and must be replaced immediately in case of a strange smell, discoloration, deformation, overheating or leakage. Continued use of the battery may result in overheating, which can cause fire and/or explosion!
- Never throw batteries into a fire as they may explode.

- Keep the battery away from sources of heat in case of leakage or if you smell burning. Leaked fluid can catch fire!
- The use of other chargers not approved by Leica Camera AG can cause damage to the batteries – and in extreme cases – cause serious or life-threatening injuries.
- Make sure that the power socket is freely accessible at all times.
- Do not attempt to open the battery or the charger. Repairs must only be carried out by authorized service centers.
- Keep batteries out of the reach of children. Batteries can cause suffocation when swallowed.

### **FIRST AID**

- Battery fluid may cause blindness if it comes into contact with the eyes. Rinse the eyes thoroughly with clean water immediately. Avoid rubbing. Seek medical attention immediately.
- Leaked battery fluid poses an injury hazard when it comes in contact with clothing or skin. Rinse the affected areas thoroughly with clean water.

### **CHARGER**

- Using the charger in the vicinity of broadcasting receivers may interfere with reception. Ensure a distance of at least 1 m (3 ft) between the charger and the receiver.
- When the charger is in use, it may emit a buzzing sound this is normal and not a malfunction.
- Disconnect the charger from the mains when it is not in use, as it consumes electricity (a very small amount), even if no battery is inserted.
- Always keep the charger contacts clean, and never short circuit them.

## **MEMORY CARD**

- Never remove the memory card during a datasave or card reading process. The camera must not be switched off or be subjected to impact or vibrations while working.
- Do not open the cover/remove the memory card or the battery while the status LED is lit, which indicates memory access. Data on the card may otherwise be destroyed and camera malfunctions may occur.
- Do not drop or bend memory cards as this will cause damage and result in the loss of stored data.
- Do not touch the connections on the reverse of the memory card and keep them clean and dry.
- Keep memory cards out of the reach of children. Swallowing a memory card may cause suffocation.

# **SENSOR**

· Cosmic radiation (e.g. during flights) may cause pixel defects.

### **CARRY STRAP**

- Carry straps are usually made of very robust material. You should therefore keep it out of the reach of children. A carry strap is not a toy and poses a strangulation risk.
- Use the carry strap only for its intended purpose on a camera or on binoculars. Any other use poses the risk of injury and may possibly result in damage to the carry strap and is therefore not permitted.
- Carry straps should also not be used for cameras/binoculars during sports activities that pose a risk of entanglement (e.g. when mountain climbing and similar outdoor activities).

### **TRIPOD**

When using a tripod, make sure it is standing securely and turn
the camera only by turning the tripod, not the actual camera.
Ensure that the tripod screw is hand-tightened only. Avoid
transporting the camera while the tripod is attached. You might
injure yourself or others and the camera could get damaged.

# **FLASH**

 The use of incompatible flash units with your Leica Q2 Monochrom may result in irreparable damage to the camera and/or the flash unit.

# **GENERAL INFORMATION**

Please read the section about "Care/Maintenance" for more information about what to do in case of problems.

# **CAMERA/LENS**

# (For system cameras)

- Make a note of the serial numbers of your camera (engraved in the base of the camera housing) and lenses, as this information will be extremely important in case of loss.
- Make sure to always have a lens or the camera bayonet cover attached to prevent dust or other foreign bodies penetrating the camera.
- That is why you should always replace lenses quickly and in a dust-free environment.
- Never store the camera bayonet cover or the lens back cover in a pants pocket, as they will attract lint and dust, which could then be accidentally introduced into the camera.

## LCD PANEL

- Condensation may form on the LCD panel if the camera is exposed to great temperature fluctuations. Wipe the screen carefully with a soft, dry cloth.
- The screen image will initially be slightly darker than normal if the camera is very cold when it is switched on. The normal level of brightness will be reached as soon as the LCD panel warms up.

## RECHARGEABLE BATTERY

- The battery must have a temperature between +10°C and +30°C for charging (otherwise the charger will not switch on or will switch off again immediately).
- Lithium-ion batteries can be charged at any time, regardless of their current charge level. A partially charged battery will charge to full capacity faster than a fully discharged one.
- The rechargeable batteries come only partly charged ex works and should therefore be charged fully before their first use.
- A new battery only reaches its full capacity after it has been fully charged and – by using it in the camera – depleted 2 to 3 times.
   This depletion process should be repeated roughly every 25 cycles.
- Battery and charger heat up during the charging process. That is normal and not a malfunction.
- Rapid flashing of the two LEDs (> 2 Hz) when charging commences indicates a charging error (e.g. maximum charging time exceeded, voltages or temperatures outside permitted ranges or a short circuit). Disconnect the charger from the mains and remove the battery. Ensure that the above temperature conditions are met and then restart the charging process. Please contact your dealer, the Leica representative in your region or Leica Camera AG if the problem persists.
- Rechargeable lithium-ion batteries generate power by way of internal chemical reactions. These reactions are influenced by ambient temperature and humidity. To ensure a maximum service life of the battery, it should not be exposed to extreme temperatures (high or low) for extended periods of time (e.g. in a parked car in the summer or winter).
- However, every battery has a limited service life! After several hundred charging cycles, this limitation will become evident as the operating times get significantly shorter.

- The replaceable battery supplies power to a backup battery, which is permanently installed in the camera. This backup battery retains the date and time for some weeks. Once the backup battery is depleted, it must be replenished by inserting a charged main battery. The time and date will have to be set again after a full depletion of both batteries.
- As the battery capacity deteriorates or if using an older battery, warning messages may appear and some functions may be restricted or blocked entirely.
- Always remove the battery if the camera will not be used for an
  extended period of time. Make sure to switch the camera off via
  the main switch before removing the battery. Leaving the battery
  in the camera will result in a deep discharge after a few weeks.
   Voltage levels will decrease significantly, as the camera uses a
  low idle current to maintain settings.
- Dispose of damaged batteries in accordance with the relevant regulations at an approved collection point for proper recycling.
- The date of manufacture can be found on the battery. The date format is week/year.

## **MEMORY CARD**

- The range of available SD/SDHC/SDXC cards on the market is too extensive for Leica Camera AG to test for compatibility and quality. Generally, any type of memory card may be used without any damage to the camera or memory card. As some "no name" cards may not fully comply with the SD/SDHC/SDXC standards, Leica Camera AG cannot provide any guarantee of function.
- We recommend formatting memory cards from time to time, as fragmented residual data from deleted files may block some of the storage capacity.
- Generally, it is not necessary to format (initialize) memory cards that have been previously used. Formatting will, however, be necessary if you insert an unformatted memory card or a card

- that was formatted in another device (e.g. a computer) for the first time.
- We recommend backing up your data on a PC, because electromagnetic fields, static electricity and any damage to the memory card or camera defects may result in irretrievable damage or loss of your data.
- SD, SDHC, and SDXC memory cards come with a write protection slider to prevent accidental overwriting. This slider is located on the non-beveled side of the card. All data on the card is protected when the slider is set to its lower position, marked LOCK.
- All data stored on a memory card will be lost during formatting.
   Formatting will <u>not</u> be prevented by the deletion protection set for individual pictures.

### **SENSOR**

 Any dust or dirt particles stuck to the glass cover of the sensor may result in noticeable dark stains or specks on the pictures (in system cameras). You can send your camera to the Leica Customer Care department for sensor cleaning (see p. 164). This service is not part of the warranty offering and will therefore incur charges.

# **DATA**

- All data, including personal information, may be changed or deleted due to incorrect or accidental operation, static discharge, accidents, malfunctions, repairs and other measures.
- Please note that Leica Camera AG does NOT accept liability for direct or consequential damage due to the manipulation or destruction of data and personal information.

# FIRMWARE UPDATE

Leica is continuously working on the further development and optimization of Leica Q2 Monochrom. As digital cameras have many functions that are controlled electronically, improvements and enhancements to the functions can be installed on the camera retroactively. Leica releases what are known as firmware updates at irregular intervals. Cameras are always supplied ex works with the latest firmware installed or you can download the latest version from our website yourself and transfer it to your camera.

You will receive a newsletter informing you of the availability of a new firmware update if you register your camera on the Leica Camera homepage.

Visit the download section or the "Customer Area" for information about how to register or how to get firmware updates for your Leica Q2 Monochrom. Additionally, you can find information about changes or additions to the manual at: <a href="club.leica-camera.com">club.leica-camera.com</a>
Leica releases firmware updates for lenses at irregular intervals. You can download any new firmware version from our homepage and transfer it to your lens. Please see p. 136 for more information

Select the menu item Camera Information (see p. 136) to check whether your camera and lenses are running the latest firmware version.

## WARRANTY

In addition to your statutory warranty rights regarding your dealer, you will receive an additional Leica Camera AG product warranty valid from the date of purchase at an authorized Leica retailer. Previously, the product warranty was included with the product in the packaging. From now on, the product warranty will only be available online as a new service. You will be able to review the warranty conditions for your product at any time, without having to search fr the document. Please note that this new policy applies only for products that are no longer delivered with a hardcopy product warranty included in the packaging. Any products still delivered with the warranty document in the packaging remain governed exclusively by that document. For more information regarding the warranty scope, services and limitations, please visit: warranty.leica-camera.com

# Leica Q2 Monochrom comes with splash water and dust protection.

The camera was tested under controlled laboratory conditions and is classes as IP52 in accordance with DIN EN 60529. Please note: The splash water and dust protection coating is not permanent and will diminish over time. Please read the section on "Care/Storage" for detailed instructions on how to clean and dry the camera. The warranty does not cover liquid damage. Any attempt to open the camera casing by an unauthorized retailer or service partner will cause an immediate expiration of the splash water and dust warranty.

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# Definition of the various categories of information found in this manual

# Note

Additional information

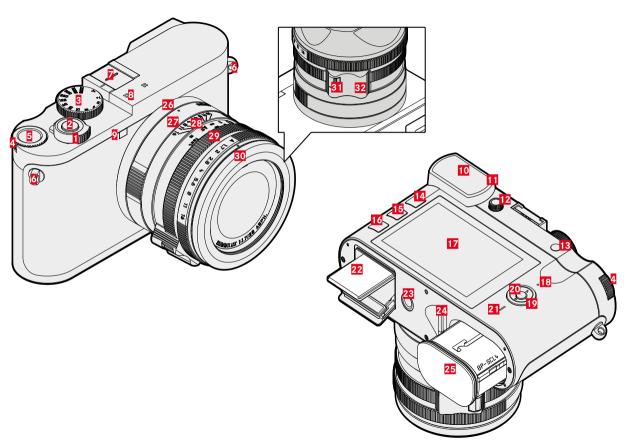
# Important

Failure to comply with instructions may result in damage to the camera, the accessories or the recordings

## Attention

Non-compliance may result in personal injury

# PART DESIGNATIONS



## LEICA Q2 MONOCHROM

- Main switch
- 2 Shutter button
- 3 Shutter speed setting dial
- 4 Thumbwheel
- 5 Thumbwheel button
- 6 Strap lugs
- Accessory shoe
- 8 Microphone
- Self-timer LED/AF assist light
- 10 Viewfinder eyepiece
- 11 Eye sensor
- 12 Diopter setting wheel
- Zoom/Lock button
- 14 PLAY button
- 15 FN button
- 16 MENU button
- 17 LCD panel
- 18 Status LED
- 19 Directional pad
- 20 Center button
- 21 Speaker
- 22 Memory card slot
- 23 Tripod thread
- 24 Battery release lever
- 25 Battery compartment

# LENS "SUMMILUX 28 f/1.7 ASPH."

- 26 Alignment point for macro function
- 27 Macro setting ring
- 28 Focus ring
- 29 Aperture setting ring
- 30 Thread protection ring
- 31 AF/MF lock release
- 32 Focus tab

## DISPLAYS

The images displayed on the LCD panel and in the viewfinder are identical.

## **PHOTO**

## STATUS SCREEN



## WHEN TAKING A PICTURE

All displays/values refer to the actual settings.

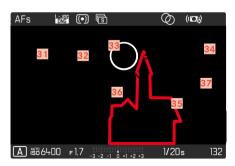


## IN REVIEW/PLAYBACK MODE

All displays/values refer to the displayed image.



# **ACTIVATED** Capture Assistants

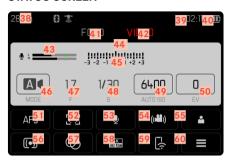


- 01 Focal length
- Remaining memory capacity
- 03 Battery capacity
- 04 Menu section PHOTO
- 05 Menu sections VIDEO
- 06 Light balance
- 07 Exposure compensation scale
- 08 Exposure mode
- 09 Exposure value
- 10 Shutter speed
- 11 ISO Sensitivity
- 12 Exposure compensation value
- 13 Focus mode
- 14 Autofocus metering method
- 15 Picture mode (Drive Mode)
- 16 Self-timer
- 17 User profile
- 18 Exposure metering method
- 19 Toning
- 20 File format/compression level/resolution
- 21 Leica FOTOS
- 22 Favorites menu / Main menu
- 23 Flash mode/flash exposure compensation
- 24 Stabilization activated
- 25 AF Field
- 26 Bluetooth® (Leica FOTOS)
- 27 Automatic storage of the recording location (Exif data) (Only while connection to Leica FOTOS is active)

- lcon for marked picture
- 29 File name
- File number of the picture shown
- 31 Histogram
- 32 Grid lines
- 33 Clipping identification of overexposed subject elements
- 4 Automatic magnification as focus assistance for manual focusing (3x 4 or 6 6x magnification available)
- Focus peaking (identification of in sharp edges in the object)
- 36 Level gauge
- Display of cropped section size and position (only visible for enlarged sections)

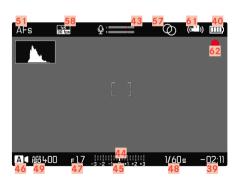
# VIDEO

## STATUS SCREEN



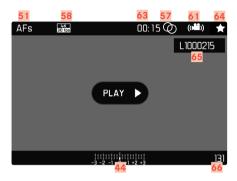
## WHEN TAKING A PICTURE

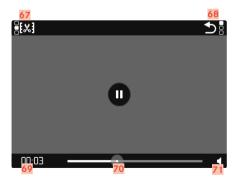
All displays/values refer to the actual settings.



# IN REVIEW/PLAYBACK MODE

All displays/values refer to the displayed image.





- 38 Focal length
- 39 Remaining memory capacity
- 40 Battery capacity
- 41 Menu section PHOTO
- 42 Menu sections VIDEO
- 43 Microphone recording level
- 44 Light balance
- 45 Exposure compensation scale
- 46 Exposure mode
- 47 Exposure value
- 48 Shutter speed
- 49 ISO Sensitivity
- 50 Exposure compensation value
- 51 Focus mode
- 52 Autofocus metering method
- 53 Microphone sensitivity (Microphone Gain)
- 54 Video stabilization
- 55 User profile
- 56 Exposure metering method
- **57** Toning
- 58 Resolution / Frame rate
- 59 Leica FOTOS
- 60 Favorites menu / Main menu
- 61 Stabilization activated
- 62 Indicates recording in progress
- 63 Length of recording
- 64 Icon for marked picture

- 5 File name
- File number of the picture shown
- Video editing function
- 68 Exiting video playback
- 9 Current time of the playback
- Playback status bar
- 71 Playback volume

# CHARGE STATUS INDICATOR ON THE LCD PANEL

The battery charge status is displayed in the status screen and in the header line at the top right.

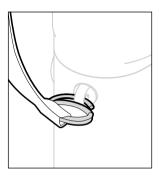


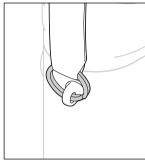


Display	Charge status
	approx. 75 - 100%
	approx. 50 - 75%
	approx. 25 - 50%
	approx. 0 - 25%
	approx. 0% The battery needs charging or replacing

# **PREPARATION**

# ATTACHING THE CARRY STRAP



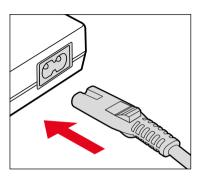


## Attention

 Once you have attached the carry strap, please make sure that the clips are mounted correctly to prevent the camera from falling.

# PREPARING THE CHARGER

Use the mains cable with the matching regional plug to connect the charger to mains electricity.



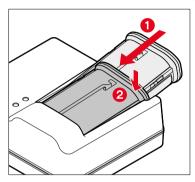
## Note

• The charger will automatically adapt to local mains voltage.

## CHARGING THE BATTERY

The camera is powered by a lithium-ion battery.

## INSERTING THE BATTERY IN THE CHARGER

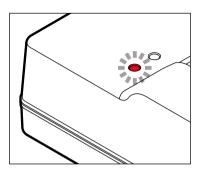


- Slide the battery into the charger with the groove facing up until the contacts meet
- Press down on the battery until you can hear and feel it clicking into place
- ▶ Ensure that the battery is fully inserted into the charger

# REMOVING THE BATTERY FROM THE CHARGER

▶ Tilt the battery up and lift it out at an angle

## CHARGE STATUS INDICATORS ON THE CHARGER



The status LED indicates a correct charging process.

Display	Charge status	Charge time*
CHARGE flashes green	battery is charging	
80% lights up orange	80%	approx. 2 h
CHARGE continuous green light	100%	approx. 3½ h

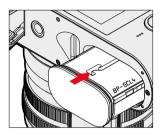
Disconnect the charger from mains electricity when the charging process is complete. There is no risk of overcharging.

<sup>\*</sup> for a completely discharged battery

# **INSERTING/REMOVING THE BATTERY**

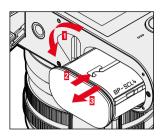
► Ensure that the camera is switched OFF (see p. 34)

# **INSERTION**



Insert the battery into the slot with the groove pointing towards the LCD panel and gently push until you hear and feel it clicking into place

## **REMOVAL**



- ► Turn the battery release lever
  - Battery is pushing out slightly.
- ▶ Press down on the battery <u>lightly</u>
  - The battery unlocks and pushes out fully.
- ► Removing the battery

## Important

 Removing the battery while the camera is switched on may result in the loss of custom settings or damage to the memory card.

# INSERTING/REMOVING THE MEMORY CARD

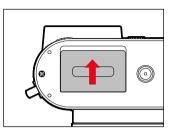
The camera will save exposures to an SD (Secure Digital), SDHC (High Capacity) or SDXC (eXtended Capacity) memory card.

#### Notes

- SD/SDHC/SDXC memory cards are available from various suppliers in various sizes and with differing read/write speeds. Memory cards with high storage capacities and high read/write speeds offer quick storage and rendering.
- The memory card may not be supported (capacity) or will have to be formated in the camera before first use (see p. 134). The camera will in that case display a relevant message. Please see the section "Technical Data" for information about supported cards.
- Check the memory card for correct alignment if you are having difficulties inserting it into the camera.
- See p. 10 and p. 13 for additional information.
- Video recordings require a high write speed.

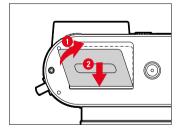
► Ensure that the camera is switched OFF (see p. 34)

## OPENING THE COVER OVER THE MEMORY CARD SLOT



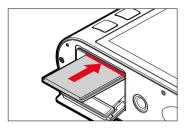
- ► Slide the cover as shown in the illustration until you hear a click
  - The cover lifts automatically.

## CLOSING THE COVER OVER THE MEMORY CARD SLOT



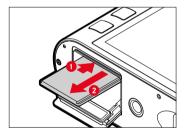
- Close and hold down the cover
- Slide the cover as shown in the illustration until it audibly clicks into place

## **INSERTION**



 Push the memory card into the slot with the contacts pointing towards the LCD panel until you hear and feel it clicking into place

## **REMOVAL**



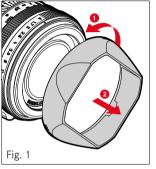
- ▶ Push down on the card until you hear a click
  - The card pushes out slightly.
- ► Remove the memory card

# ATTACHING/DETACHING THE LENS HOOD

This camera comes with a matching lens hood. It is pre-mounted ex works.

The use of the lens hood is recommended to reduce vignetting.

## DETACHING

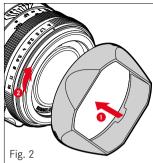




- ▶ Unscrew the lens hood in counter-clockwise direction (Fig. 1)
- Screw on the thread protection ring (Fig. 2)

#### **ATTACHING**





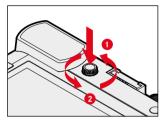
- Unscrew the thread protection ring in counter-clockwise direction (Fig. 1)
- Screw on the lens hood in clockwise direction to the stop (Fig. 2)

#### Notes

- The lens hood cover supplied will only fit the lens hood and cannot be used as lens cover on its own.
- A matching lens front cap E49 (Order No. 14001) is available as an optional accessory for use of the camera without the lens hood: <u>store.leica-camera.com</u>

# **DIOPTER ADJUSTMENT**

The viewfinder has a diopter setting function with a range between +3 and -4 diopter to allow glasses wearers the use of the camera without eyeglasses (Diopter adjustment).



- Push the diopter setting wheel into its groove until you hear an audible click
  - This unlocks the diopter setting wheel and it pushes out a little.
- Look through the viewfinder
- ► Turn the diopter setting wheel until you see the image in the viewfinder and the displays in perfect focus
- Push the diopter setting wheel back into its groove until it audibly clicks into place

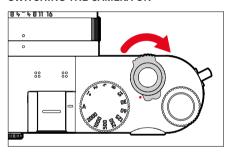
# **CAMERA OPERATION**

## **CONTROL ELEMENTS**

## MAIN SWITCH

The main switch switches the camera on and off.

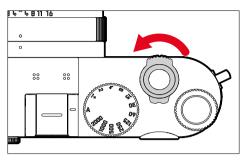
## SWITCHING THE CAMERA ON



### Notes

- Once switched on, the camera will be ready to use after approx.
   1 s.
- The LED lights up briefly and the displays in the viewfinder appear.

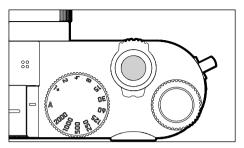
## **SWITCHING THE CAMERA OFF**



#### Note

• The function Auto Power Off (see p. 55) deactivates the camera automatically if no operation occurs within a preset time. Use the main switch to deactivate the camera if this function is off to prevent inadvertent exposures and battery discharge when the camera is not in use.

#### SHUTTER BUTTON



The shutter button works in two stages.

- Tapping (= Pressing the shutter button to the 1st pressure point)
  - Activating the camera electronics and displays
  - Metering memory lock (metering & saving):
    - saves the metered exposure value in aperture priority mode, i.e. the shutter speed calculated by the camera
  - Canceling a running self-timer delay time
  - Return to picture mode
    - from review/playback mode
    - from menu control
    - from standby mode

## 2. Press down fully

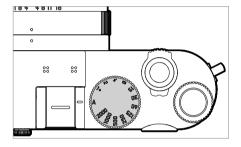
- Shutter release
  - The data is then transferred to the memory card.
- Starting a preselected self-timer delay time
- Starting a picture series or interval shooting

#### Notes

- Press down the shutter button in a smooth motion until you hear the click of the shutter to prevent camera shake.
- · The shutter button remains locked:
  - if the memory card inserted and/or the internal buffer memory are (temporarily) full
  - if the battery has exceeded its performance limits (capacity, temperature, age)
  - if the memory card is write-protected or damaged
  - if the sensor is too hot

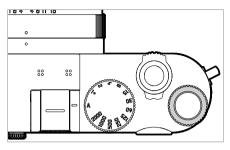
#### SHUTTER SPEED SETTING DIAL

The shutter speed setting dial has no stop, which means it can be turned in either direction from any position. It will click at each engraved position and for intermediate values. Intermediate positions outside the click positions must not be used. Please read the section "Exposure" (see p. 78) for details about exposure settings.



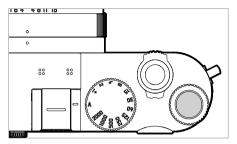
- A: Aperture priority (automatic shutter speed control)
- 2000 1+: Fixed shutter speeds

## **THUMBWHEEL**



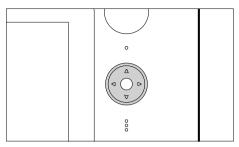
- Menu navigation
- Exposure compensation value selection
- Enlarging/reducing viewed pictures
- Setting selected menu items/functions
- Setting the program shift

## THUMBWHEEL BUTTON



- Applying menu settings
- Direct access to menu functions
- Accessing the submenu

# **DIRECTIONAL PAD/CENTER BUTTON**



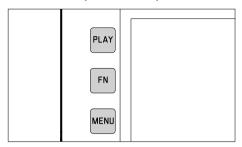
## **DIRECTIONAL PAD**

- Menu navigation
- Setting selected menu items/functions
- Scrolling through the picture memory
- Shifting the metering field (Field or Spot AF)

## **CENTER BUTTON**

- Accessing the information display
- Accessing the submenu
- Applying menu settings
- Display of settings/data when recording
- Display of picture data during review
- Playback of video recordings
- Confirming the prompts

# PLAY BUTTON/FN BUTTON/MENU BUTTON



## **PLAY BUTTON**

- Activation and deactivation of the (continuous) review/playback mode
- Return to full-screen display

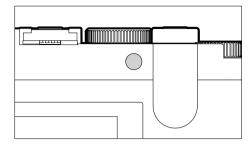
# **FN BUTTON**

- Direct access to menu functions
- Direct access to delete function

## **MENU BUTTON**

- Accessing the menu (incl. status screen)
- Accessing the Playback/Review menu
- Exiting the currently displayed (sub) menu

# **ZOOM/LOCK BUTTON**



- Direct access to menu functions
- Marking/rating a recording

# LCD PANEL (TOUCH SCREEN)

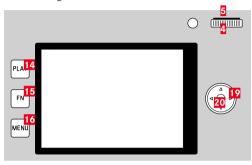
TOUCH CONTROL*		in picture mode	in playback/review mode
<u></u>	tap briefly	Shifting the AF metering field and focusing (while Touch AF is activated)	Select the recording
<b>%</b>	double tap	Reseting the AF metering field (while Touch AF is activated)	Enlarging/reducing viewed pictures
50	swipe		Scrolling through the picture memory Shifts the enlarged image section
<b>F</b>	horizontal swipe (full length)	Mode change (photo/video)	Scrolling through the picture memory
Į.E.	vertical swipe (full length)	Switch to playback/review mode	Switch to picture mode
	touch and hold	Adjusting the size of the AF metering field	
	two-finger pinch/ spread		Enlarging/reducing viewed pictures
	swipe and hold/ hold and swipe	Shifting the AF metering field and focusing (while Touch AF is activated)	Continuous scrolling

<sup>\*</sup> A light touch is enough, don't apply pressure.

# **MENU CONTROL**

# **CONTROL ELEMENTS**

The following elements are used for menu control.



- 14 PLAY button
- 15 FN button
- 16 MENU button

- 5 Thumbwheel button
- Thumbwheel
- 19 Directional pad
- 20 Center button

# **MENU SECTIONS**

The following menu sections are available: Status Screen, Main Menu and Favorites.

## Status screen:

- quick access to the most important settings

## Favorites:

your custom list (see p. 50 for details on how to manage this list)

## Main Menu

- offers access to all menu items
- contains various submenus

## Note

 The favorites menu can only be displayed if it has at least one menu item assigned.

## STATUS SCREEN

## Photo

## Video



# Main Menu Drive Mode Self Timer Focusing Exposure Metering Exposure Compensation ISO Auto ISO Settings Photo File Exposure

MAIN MENU

## **FAVORITES**



## SWITCHING MENU SECTIONS

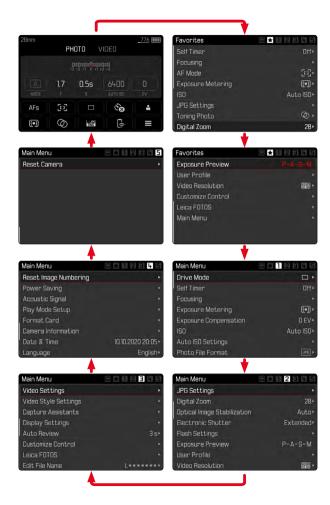
The status screen will <u>always</u> be displayed as the first menu section. The top menu level is organized into pages, which are displayed in the header line: Status Screen, Favorites Menu (up to 2 pages) and five subsections of the main menu. You can switch between menu sections by scrolling through the pages. Alternatively, the status screen and the favorites menu offer access to the main menu as their respectively last menu item.

#### To scroll forward

- ▶ Press the MENU button
  - The status screen will appear again after page 5 of the main menu.

#### To scroll backward

- ▶ Press the directional pad left
  - In reverse order, you can only browse back to the status screen.



## STATUS SCREEN

The status screen offers an overview of the most important information regarding the current camera status and active settings.

It furthermore allows direct access to important settings. The status screen is optimized for touch control.



- Mode: picture/video
- Exposure settings (see p. 78 and p. 106)
- Menu items
- Access to the main menu.

## Notes

- Where touch control is not possible or not desirable (e.g. in EV mode), the status screen can alternatively be controlled via the directional pad, center button, thumbwheel and the thumbwheel button.
- The settings become effective immediately.
- The framed control panels can be selected. Unframed values are added in automatically (depending on the active exposure mode).
- The available menu items in picture and video mode differ.

## SELECTING SETTINGS

Settings can be selected in various ways from within the status screen. The setting types vary from menu to menu.

- ▶ Briefly touch the desired control panel
  - The relevant menu appears.

## **DIRECT SETTINGS**

A version of the menu bar appears in the lower area of the status screen (see p. 48).



► Select the desired function directly or swipe

## ACCESSING A STANDARD SUBMENU

These menus behave as if they were accessed from within the main menu (see p. 45). Touch control is therefore unavailable. From there, you return to the status screen and not to the next higher menu item.



► Select the desired setting

## **FAVORITES MENU**

The favorites menu offers quick access to the most frequently used menu items. It can contain up to 15 menu items. These can be assigned individually (see p. 50).



## **MAIN MENU**

The main menu offers access to all settings. Most of these are organized in submenus.



- Menu sections: Main Menu and Favorites
- Menu item name
- Menu item setting
- Submenu reference

## **SUBMENU**

There are various types of submenus available. The following pages describe their operation.





- Current menu item
- B Submenu item
- References to other submenus
- Scrollbar

There are various types of submenus available. The following pages describe their operation.

## **MENU NAVIGATION**

## SCREEN BY SCREEN NAVIGATION

To scroll forward

- ► Press the **MENU** button (repeatedly if needed)
  - The status screen will appear again after page 5 of the main menu.

#### To scroll backward

- Press the directional pad left
  - In reverse order, you can only browse back to the status screen.

## LINE BY LINE NAVIGATION

(Function/function option selection)

- ► Press the directional pad up/down
- or
- ► Turn the thumbwheel (to the right = down, to the left = up)
  - Once the last menu item has been reached scrolling up or down, the display will automatically jump to the previous or next screen. The currently active menu section (Favorites, Main Menu) is not exited.

## Note

 Some menu items can only be accessed under specific circumstances. The text in the relevant line is displayed in gray to signify the existence of a submenu.

#### SHOW SUBMENU

- ► Press the center button/thumbwheel button or
- Press the directional pad to the right

#### CONFIRM SELECTION

- Press the center button/thumbwheel button
  - The screen image changes back to the active menu item. The set function variant is shown on the right in the relevant menu line.

## Note

#### GO BACK ONE STEP

(Return to the superordinate menu item)

- ► Press the directional pad left
  - This option is only available for list-type submenus.

## GO BACK TO TOP MENU LEVEL

- ▶ Press the **MENU** button 1x
  - The top level of the currently selected menu section is displayed.

#### **EXITING THE MENU**

You can exit the menus and submenus at any time – with/without applying the settings selected there.

go to picture mode

► Tap the shutter button

go to review mode

► Press the PLAY button

## **SUBMENU**

## **KEYBOARD/NUMBER PAD**







- A Entry line
- Keyboard/Number pad
- "Delete" button (deletes the last character entered)
- "Confirm" button (to apply individual values and existing settings)
- Return to previous menu level
- Shift key (toggles between upper and lower case letters)
- G Changing the character type

## SELECTING A BUTTON (ICON/FUNCTION BUTTON)

## Using button control

- Press the directional pad left or right as needed
  - The currently active button will be highlighted.

#### or

- ► Turn the thumbwheel
  - The currently active button will be highlighted.
  - There will be an automatic jump to the next/previous line when the end/beginning of the line is reached.
- Press the center button

## Using touch control

▶ Press the button of your choice

#### SAVE

► Select button D

## CANCEL

► Select button **E** 

## **MENU BAR**



# Using button control

- Press the directional pad left/right or
- ► Turn the thumbwheel

## Using touch control

▶ Select the desired function directly or swipe

#### Notes

- The currently active setting displayed in the center is highlighted in red.
- The set value is displayed above the scale/below the menu bar.
- The following applies for direct access: The selected function requires no additional confirmation and will be active immediately.

#### SCALE MENU



# Using button control

- ► Press the directional pad left/right or
- ► Turn the thumbwheel

## Using touch control

▶ Select the desired setting directly or swipe

# Note

 The currently active setting displayed in the center is highlighted in red.

# DATE/TIME MENU



To move to the next settings field

▶ Press the directional pad left/right

To set values

- ► Press the directional pad up/down or
- ► Turn the thumbwheel

To save and return to superordinate menu item

▶ Press the center button

## **USER-DEFINED OPERATION**

## **FAVORITES MENU**

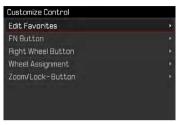
Assign your most frequently used menu items to a favorites menu (up to 15 items) for quick and easy access. The available functions are shown in the list on p. 150.

The favorites menu will be represented by an asterisk in the header line, provided it contains at least one menu item.



#### MANAGING THE FAVORITES MENU

- ► Select Customize Control in the main menu
- ► Select Edit Favorites



► Select the desired menu item



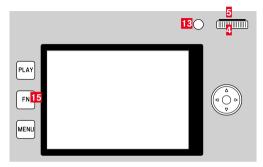
- ► Select □n/□ff
  - A warning message appears when the favorites menu has reached the maximum of 15 menu items and no further items can be added.

## Note

 The favorites menu will be deleted completely if all menu items are set to off.

## DIRECT ACCESS TO MENU FUNCTIONS

You can assign specific menu functions to the following operating elements for extra quick direct access to menu items in recording mode. The available functions are shown in the list on p. 150.



- 13 Zoom/Lock button
- 5 Thumbwheel button

15 FN button

Thumbwheel

## Notes

- The submenus accessed via direct access may look differently than when they are accessed via the main menu. Specifically, they often appear as menu bars to allow quick settings.
- The settings can be done via key control or using touch control on the LCD panel. The operating mode depends on the type of submenu

#### DYNAMIC DIRECT ACCESS

The two following buttons additionally allow a quick assignment of menu functions from a custom list of items.

- FN button (factory setting: Self Timer)
- Thumbwheel button (factory setting: [50)

#### CREATING THE CUSTOM LIST

- ► Select Customize Control in the main menu
- ► Select FN button/Right Wheel Button
- ► Select on or off for each menu item
  - You can activate a maximum of 8 menu items for this list.

#### **CHANGING AN ASSIGNMENT**

- ▶ Press and hold the FN button / thumbwheel button
  - The direct access list you have created will appear on the LCD panel.
  - This list can be modified at any time via the menu item
     Customize Control.
- ▶ Select the menu item you want by pressing the center button
  - You will not be prompted to acknowledge your selection. The change is applied immediately.

#### ACCESSING THE ASSIGNED MENU FUNCTION

- ▶ Press the FN button/thumbwheel button briefly
  - The assigned function is accessed, or a submenu appears on screen.

## STATIC DIRECT ACCESS

The two following operating elements can only be assigned one of the preset functions via menu control. A custom list is not available.

- Zoom/Lock button
- Thumbwheel

# **ZOOM/LOCK BUTTON**

Factory setting: Digital Zoom

Alternatively, you can assign automatic exposure metering and/or metering memory lock to the Zoom/Lock button.

- ► Select Customize Control in the main menu
- ► Select Zoom/Lock-Button
- ► Select Digital Zoom, AF-L + AE-L, AE-L or AF-L

#### ACCESSING THE ASSIGNED MENU FUNCTION

▶ Press the Zoom/Lock button briefly

#### **THUMBWHEEL**

Factory setting: Auto

You can assign the exposure compensation function to the thumbwheel permanently.

- ► Select Customize Control in the main menu
- ► Select Wheel Assignment,
- ► Select Exp. Comp.

The thumbwheel has varying functions depending on the exposure mode (see p. 79) when it is set to Auto.

	Off	Auto	Ехр. Сотр.
Р	No function	Program shift	Exposure compensation
Α	No function	Shutter speed	Exposure compensation
S	No function	Exposure compensation	Exposure compensation
М	No function	Shutter speed	Exposure compensation

#### ACCESSING THE ASSIGNED MENU FUNCTION

► Turn the thumbwheel to the left/right

# **CAMERA BASIC SETTINGS**

For details on how to navigate in the menus and for inputs see chapter "Menu control" (see p. 40).

The two menu items Language and Date & Time appear automatically when switching the camera on for the first time, after a reset to factory settings (see p. 136), or after a firmware update.

# **MENU LANGUAGE**

Factory setting: English

Available menu languages: German, French, Italian, Spanish, Russian, Japanese, Korean, Traditional or Simplified Chinese

- ► Select Language in the main menu
- ► Select your language
  - Aside from a few exceptions, the language will be changed for all information.

# DATE/TIME

## DATE

You can choose one of 3 options.

- ► Select Date & Time in the main menu
- ► Select Date Setting
- Select the desired date format (Day/Month/Year, Month/Day/Year, Year/Month/Day)
- Set the date

## TIME

- ► Select Date & Time in the main menu
- ► Select Time Setting
- ► Select the desired brightness (12 Hours, 24 Hours)
- ➤ Set the time (Select am or pm for the 12-hour format)

## TIME ZONE

- ▶ Select Date & Time in the main menu
- ► Select Time Zone
- ▶ Select your time zone/current location
  - The Greenwich Mean Time offset is shown on the left of the line
  - Major cities in the relevant time zones are shown on the right

## **DAYLIGHT SAVING TIME**

- ▶ Select Date & Time in the main menu
- ► Select Daylight Saving Time
- ► Select □n/□ff

# POWER SAVE MODE (STANDBY MODE)

The camera will switch to the power-saving standby mode after a preset time to extend battery life if this function is activated.

The device has three power save levels.

- Activates device standby mode in seconds
- Activates device standby mode in minutes
- Automatic LCD panel shutdown (see p. 58)

## AFTER A FEW SECONDS

The camera will switch to standby mode within a few seconds to maximize battery capacity.

Factory setting: Off

- ► Select Power Saving in the main menu
- Select Power Saving Model
- ► Select the desired setting (Off, 3 s, 5 s, 10 s)

## **AFTER A FEW MINUTES**

Factory setting: 2 min

- ► Select Power Saving in the main menu
- ► Select Auto Power Off
- Select the desired setting (Off, 2 min, /5 min, /10 min)

## Note

 The camera can be woken from standby mode at any time by pressing the shutter button or by switching the main switch off and on again.

# **DISPLAY/VIEWFINDER SETTINGS**

The camera comes equipped with a 3" liquid crystal color panel, which is protected by a glass cover made of extremely hard and scratch-resistant Gorilla® glass.

The following functions can be configured and used individually:

- Use of the LCD panel and EVF (electronic viewfinder)
- Eye sensor sensitivity
- Brightness
- Color rendering
- Information display
- Automatic LCD panel shutdown

# LCD PANEL/EVF USE

You can preset the situations in which EVF and LCD panel should be used. The displays appearing on screen and in the viewfinder are identical.

Factory setting: Auto

	EVF	LCD panel
Auto	The eye sensor in the viewfinder automatically toggles the camera between LCD panel and EVF.  • Recording  • Playback/Review  • Menu control	
LCD		Recording     Playback/Review     Menu control
EVF	Recording     Playback/Review     Menu control	
EVF extended	Only EVF is used for picture mode. The eye sensor in the viewfinder automatically toggles the camera between LCD panel and EVF for playback and menu control.  • Recording	
	Playback/Review	
	Menu control	

- ► Select Display Settings in the main menu
- ► Select EVE-LCD
- ► Select the desired setting

## Note

 Select wif if you want to keep the LCD panel switched off (e.g. on dark environments).

## **EYE SENSOR SENSITIVITY**

You can adjust the eye sensor sensitivity to ensure that the changeover functions reliably if you wear eyeglasses.

Factory setting: Low

- ► Select Display Settings in the main menu
- ► Select Eye Sensor Sensitivity
- Select the desired setting

## **BRIGHTNESS**

You can adjust brightness for best visibility in various lighting conditions. Brightness is set individually for the LCD panel and the viewfinder. Selection occurs via key control or touch control.



#### LCD PANEL

- ► Select Display Settings in the main menu
- ► Select LCD Brightness
- Select the desired brightness of Auto
- ► Confirm selection

## **EVF**

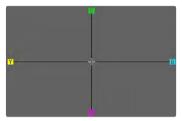
- Select Display Settings in the main menu
- ► Select EVF Brightness
- Look through the viewfinder
- Select the desired brightness
- Confirm selection

#### Note

The setting Auto is not available here.

## **COLOR RENDERING**

Color rendering can also be adjusted. Brightness is set individually for the LCD panel and the viewfinder. Selection occurs via key control or touch control.



## LCD PANEL

- ► Select Display Settings in the main menu
- ► Select LCD Color Adjustment
- ► Select the desired color setting
- ► Confirm selection

# **EVF**

- ► Select Display Settings in the main menu
- ► Select EVF Color Adjustment
- ► Look through the viewfinder
- ► Select the desired color setting
- Confirm selection

## **AUTOMATIC LCD PANEL SHUTDOWN**

The LCD panel deactivates automatically to save power. Factory setting: Imm

- ► Select Power Saving in the main menu
- ► Select All Displays Auto Off
- ► Select the desired setting (30 s, 1 min, 5 min)

## **EVF FRAME RATE**

The image frequency o the EVF can be set.

- ► Select Display Settings in the main menu
- ▶ Select EVF Frame Rate
- ► Select the desired setting (60 fps, 120 fps)

## **ACOUSTIC SIGNALS**

Some functions can be acknowledged with acoustic signals. The following special functions can be configured separately:

- Electronic shutter sound
- AF confirmation

## **VOLUME**

The volume of active signals can be set.

- ► Select Acoustic Signal in the main menu
- ► Select Volume
- ► Select Low/High

## **ACOUSTIC SIGNALS**

This setting specifies, whether the camera shout output general notification signals, e.g. during the delay time of the self-timer or as a warning signal, when the memory card is full.

- ► Select Acoustic Signal in the main menu
- ► Select Acoustic Signals
- ► Select 🗔

## **ELECTRONIC SHUTTER SOUND**

- ► Select Acoustic Signal in the main menu
- ► Select Electronic Shutter Sound
- ► Select 📠

## **AUTOFOCUS CONFIRMATION**

A signal sound can be selected for successful AF settings.

- ► Select Acoustic Signal in the main menu
- Select AF Confirmation
- ► Select 🛅

## **SILENT PHOTOGRAPHY**

When pictures should be taken as quietly as possible.

- ► Select Acoustic Signal in the main menu
- Select Electronic Shutter Sound/AF Confirmation/Acoustic Signals
- ► Select of these menu items

# **ELECTRONIC SHUTTER**

The Leica Q2 Monochrom comes equipped with a mechanical shutter and a purely electronic shutter function. The electronic shutter expands the available shutter area and functions completely noiseless, which may be important in some work environments.

- ► Select Electronic Shutter in the main menu
- ► Select the desired setting

Off	Only the mechanical shutter is used. Working range: 120 s to 1/2000 s.
Always On	Only the electronic shutter function is used. Working range: 1/2500 s to 1/40000 s.
Extended	You can add in the electronic shutter functions if you need faster shutter speeds than can be achieved with the mechanical shutter. Working range: 120 s to 1/2000 s + 1/2500 s to 1/40000 s.

# **BASIC RECORDING SETTINGS (PICTURE)**

# **FILE FORMAT**

Choose the JPG format so or the standardized raw data format (= digital negative). These can be used individually or simultaneously.

Factory setting: DNG + JPG



- ► Select Photo File Format in the main menu
- ► Select a format (DNG, DNG+JPG, JPG)

## Notes

- The standardized DNG (Digital Negative) format is used for the storage of raw picture data.
- When picture data is saved in INE and in INE format simultaneously, then the camera will use the resolution setting for the INE format is used for the IPG file.
- The INE format always works with the highest available resolution, no matter what IPE setting is selected.
- The remaining number of frames shown in the LCD panel will not necessarily change after every picture taken. That very much depends on the object; very fine image structures result in higher data quantities, while homogeneous surfaces mean less data.

# JPG SETTINGS

The functions and settings described in this section apply for pictures taken in **Property** format only.



## **RESOLUTION**

The IPE format setting offers 3 image resolution (number of pixels) options. IPE (47 MP), M-IPE (24 MP) and IPE (12 MP). You can therefore adjust your settings to the intended use and available memory card capacity.

Factory setting: L-JPG



- ► Select JPG Settings in the main menu
- ► Select JPG Resolution
- Select the desired resolution.

When the Digital Zoom function (see p. 93) is selected, then images will be saved with the following actual resolutions.

	28 mm	Digital Zoom 35 mm	Digital Zoom 50 mm	Digital Zoom 75 mm
L-JPG	47 MP	30 MP	15 MP	7 MP
M-JPG	24 MP	15 MP	8 MP	3 MP
S-JPG	12 MP	8 MP	4 MP	2 MP

## **IMAGE PROPERTIES**

One of the many advantages of digital photography is that it is very easy to change key image properties.

You can manipulate contrast, sharpness and toning before recording.

## CONTRAST

The contrast setting, i.e. the difference between light and dark image sections, determines whether an image comes across as "flat" or "brilliant". Increasing or decreasing this difference impacts on contrast, meaning that some image sections are rendered with more or less light.

Factory setting: Standard

- ► Select JPG Settings in the main menu
- ▶ Select Contrast
- ► Select the desired level
  (Low, Medium low, Standard, Medium high, High)

## **SHARPNESS**

The impression of sharpness in a picture is largely determined by edge sharpness, i.e. by how slight the transition area between light and dark is at edges in the picture. Expanding or reducing these areas will therefore change the impression of sharpness.

Factory setting: Standard

- ► Select JPG Settings in the main menu
- ► Select Sharpness
- ► Select the desired level (Low, Medium low, Standard, Medium high, High)

## **TONING**

A color tone can be added to recordings. The color and intensity of this effect can be adjusted.

Factory setting: Off



- ► Select JPG Settings in the main menu
- ► Select Toning
- Select the desired setting (Sepia (weak), Sepia (strong), Blue (weak), Blue (strong),
   Selenium (weak), Selenium (strong)

# **IMAGE STABILIZATION**

The less favorable the lighting conditions during recording, the slower will be the required shutter speeds for correct exposure. Visual image stabilization is a great tool for preventing out-of-focus images due to blurring.

Factory setting: Auto



- ▶ Select Optical Image Stabilization in the main menu
- ► Select the desired setting (On, Off, Auto)

# **BASIC RECORDING SETTINGS (VIDEO)**

## **FILE FORMAT**

Videos are recorded in MP4 format

## **VIDEO FORMAT**

Video can be recorded in the formats C4K (Cinema4K)  $(4096 \times 2160 \text{ pixel})$ , +4  $(3840 \times 2160 \text{ pixel})$  or Full HD  $(1920 \times 1080 \text{ pixel})$ .

Video can be recorded with different frame rates if  $\mathbb{HK}$  or  $\mathbb{Full} \ \mathbb{HD}$  is selected.

- 4k: 24 fps (frames per second), 30 fps
- Full HD: 24 fps, 30 fps, 60 fps, 120 fps

You can therefore adjust your settings to the intended use and available memory card capacity.

- ► Select Video Resolution in the main menu
- Select the desired resolution / frame rate
   (C+K / 24 fps, 4K / 30 fps, 4K / 24 fps, Full HD / 120 fps, Full HD / 60 fps, Full HD / 30 fps, Full HD / 24 fps)

## **MICROPHONE**

The sensitivity of the integrated microphone can be set.

Factory setting: Medium

- ► Select Video Settings in the main menu
- ► Select Microphone Gain
- Select the desired level
   (High, Medium, Medium low, Low, Off)

#### Note

 The Autofocus function and manual focal length adjustments generate noise that may be picked up in the recording.

## WIND NOISE REDUCTION

Factory setting: In

- ► Select Video Settings in the main menu
- ► Select Wind Noise Reduction
- ► Select In/Off

## **VIDEO STABILIZATION**

The stabilization function helps to reduce blurring for handheld recordings.

- ► Select Video Settings in the main menu
- Select Video Stabil.
- ► Select □n/□ff

## **IMAGE PROPERTIES**

The image properties for video recordings are easy to customize. You can manipulate contrast, sharpness and toning before recording.

## CONTRAST

Factory setting: Standard

- ► Select Video Style Settings in the main menu
- ► Select Contrast
- ► Select the desired level



## **SHARPNESS**

Factory setting: Standard

- ► Select Video Style Settings in the main menu
- ► Select Sharpness
- ► Select the desired level

```
(Low, Medium low, Standard, Medium high, High)
```

## **TONING**

Factory setting: Off

- ► Select Video Style Settings in the main menu
- ► Select Toning
- Select the desired setting

```
(Sepia (weak), Sepia (strong), Blue (weak), Blue (strong),
Selenium (weak), Selenium (strong))
```

# **PICTURE MODE**

# **DRIVE MODE**

The functions and settings described in the following generally refer to the exposure of individual pictures. In addition to single frame shots, the Leica Q2 Monochrom offers a number of other picture modes. Please read the relevant sections for information about functionalities and setting options.

- ► Select Drive Mode in the main menu
- ► Select the desired function options

Mode	Setting options / Variants
Single frame exposure	Single
Serial exposures (see p. 88)	Speed: - Continuous - Low Speed - Continuous - High Speed
Self-timer (see p. 92)	Delay time: - Self Timer 2 s - Self Timer 12 s
Interval shooting (see p. 89)	Number of Frames Interval between the pictures (Interval) Delay time (Countdown)
Exposure bracketing (see p. 91)	Number of Frames (3 or 5) EV Steps Exposure Compensation

## **FOCUSING**

Your Leica  $\Omega 2$  Monochrom allows automatic as well as manual focusing. There are 2 operating modes and 3 metering methods available for AF photography.

#### **AF PHOTOGRAPHY**

- Press and hold the AF/MF release button
- ► Turn the focus ring to the **AF** position
- ▶ Position the AF metering field as needed
- ► Tap and hold the shutter button
  - Focusing occurs one time (AFs) or continuously (AFc).
  - Metering was successful: The AF metering field lights up green.
  - Metering was unsuccessful: The AF metering field lights up red.
  - Alternatively, focus settings and/or exposure settings can be done and saved via the Zoom/Lock button ("Exposure lock", see p. 84).
- ► Shutter release

## **MF PHOTOGRAPHY**

- ▶ Press and hold the AF/MF release button
- ► Turn the focus ring away from the **AF** position
- ▶ Use the focus ring to manually focus on the object
- ▶ Shutter release

Please read the following chapters for more information.

## **AUTOFOCUS MODES**

The following AF modes are available: AFs and AFc. The currently selected AF mode is shown in the header line.

# AFs (single)

Suitable for objects with little or no movement. Focusing is done only once and the setting remains as long as the shutter button is held at the pressure point. That also applies if the AF metering field is pointed at another object.

## AFc (continuous)

Suitable for objects in motion. As long as the shutter button is held at the 1st pressure point, focusing is continuously adjusted to the object in the AF metering field.

- ► Select Focusing in the main menu
- ► Selecting Focus Mode
- Select the desired setting

## **AUTOFOCUS METERING METHODS**

The AF mode offers various metering methods for focusing. A successful focus setting is identified by a green metering field, an unsuccessful one is shown in red.

Factory setting: Multi-Field



- ► Select Focusing in the main menu
- Select AF Mode
- ► Select the desired setting (Multi-Field, Spot, Field, Face Detection)

#### Note

- AF focusing can be unsuccessful:
  - If the distance to the object is too great (macro mode) or too small
  - If the object is not sufficiently illuminated

#### MULTI-FIELD METERING

Several metering fields are detected automatically. This function is particularly useful for snapshots.

## SPOT/FIELD METERING

Both methods detect only those parts of the object that are within the relevant AF metering fields. The metering fields are indicated by a small frame (field metering) or a cross (spot metering). The very small measuring range for spot metering allows focusing on tiny details of the subject.

The slightly larger measuring range in field metering is less critical for focusing, but still permits selective metering.

These metering methods can also be used for serial exposures in which the part of the object you want to focus on will always be at the same off-center position in the image.

Simply move the AF metering field to another position.

- Press the directional pad left or right as needed or
- Briefly tap the LCD panel (while Touch AF is activated)

## Note

 In both cases, the metering fields remain at their last positions set, even if the metering method is changed or the camera is switched off.

## **FACE DETECTION**

In this metering method, the Leica Q2 Monochrom automatically detects faces in the image field. The focus is set automatically on the faces closest to the camera. Multi-field metering is used if no faces are detected.



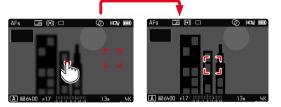
## **TOUCH AF**

Touch AF allows a direct placement of the AF metering field.

- ► Select Focusing in the main menu
- ► Select Touch AF
- ► Select □n/□ff

## Positioning the AF Metering Field

▶ Briefly tap the LCD panel in the desired position



To move the metering field back to the center of the screen

▶ Double tap the LCD panel

## Note

 This function is available in conjunction with the AF metering methods Spot metering and Field metering.

## TOUCH AF + SHUTTER BUTTON

The combination Touch AF + Release allows a direct placement of the AF metering field for immediate recording.

- Select Focusing in the main menu
- ► Select Touch AF
- ► Select Touch AF + Release
- ▶ Briefly tap the LCD panel in the desired position

#### TOUCH AF IN EVF MODE

Touch AF is deactivated by default when EVF is in use to prevent any inadvertent altering of the AF metering field. Touch AF can, however, also be used in EVF mode.

Factory setting: Off

- ► Select Focusing in the main menu
- ► Select Touch AF in EVF
- ► Select □n/□ff

#### Note

 In this case, you can change the position of the AF metering field by swiping.

## MF ASSIST FUNCTIONS

#### **ENLARGEMENT IN AF MODE**

You can access the enlargement function independent of focusing for a better assessment of the settings.

The Magnification function must be assigned to the **FN** button or thumbwheel button to use this feature (see p. 51).

Accessing the enlargement function

- ▶ Press the FN button / thumbwheel button
  - An enlarged image section appears. The position of the enlargement depends on the position of the AF metering field.
  - The rectangle within the frame at the top right represents the current magnification, as well as its position in the displayed cropped section.

Adjusting the enlargement function

- Press the center button
  - The image section toggles between magnification factors (3x/6x).

Changing the position of the enlarged section

▶ Press the directional pad left or right as needed

**Exiting the enlargement function** 

Tap the shutter button

#### Notes

- The enlargement function remains active until it is exited.
- The most recently used function and zoom factor will still be set the next time the function is accessed.

#### AF ASSIST LIGHT

The integrated AF assist light allows operation of the AF system in unfavorable lighting conditions. This light comes on as soon as the shutter button is pressed, provided the function is activated.

- Select Focusing in the main menu
- ► Select AF Assist Lamp
- ► Select In/Off

#### Notes

- The AF assist light illuminates an area of up to approx. 5 m.
- The AF assist light switches off automatically, once focusing was successful (AF metering field is green) or has failed (AF metering field is red).

#### ACOUSTIC AF CONFIRMATION

You can set an acoustic confirmation signal for successful focus metering in AF mode (see p. 59).

## **AF QUICK SETTING**

The AF quick setting allows quick changes to the metering field size during field metering. The viewfinder image remains visible continuously during setting adjustments.

#### ACCESSING AF QUICK SETTING

- ► Touch and hold the LCD panel
  - · All auxiliary displays are hidden.
  - Red triangles appear at two corners of the metering field if the metering method Field is set.



# ADJUSTING THE METERING FIELD SIZE

(only Field)

Turn the thumbwheel

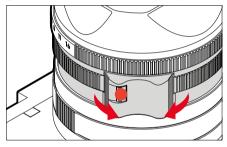
01

- ► Two-finger pinch/spread
  - The size of the AF-metering field is adjustable in 3 increments.

# MANUAL FOCUSING (MF)

Focusing manually may in some situations be a better choice than autofocus.

- the same setting is used for several exposures
- it would take longer to use the metering memory lock function
- the setting is to be kept at infinity for landscape pictures
- poor, i.e. very dark lighting conditions prevent AF operation or would slow it down
- ► Move the focus ring out of the **AF** position (press and hold the AF/MF lock release)



 Turn the focus ring until the desired part of the object is in clear focus

## MF ASSIST FUNCTIONS

The following assist functions are available in MF mode.

#### **FOCUS PEAKING**

This assist function highlights the edges of in focus subject elements in color. The color can be user-specified.



- ► Select Focusing in the main menu
- ► Select Focus Assist
- Select Focus Peaking
- ► Select the desired setting (Off, Red, Green, Blue, White)
- ► Select an image section
- ▶ Turn the focus ring to mark the desired subject elements

#### Note

• Focus peaking is based on subject contrast, i.e. differences between light and dark. As a result, high contrast subject parts could be marked, even if they are not completely in focus.

#### **ENLARGEMENT IN MF MODE**

The larger the details of the subject are shown, the better you can assess their sharpness and the more accurately you can focus. Turning the focus ring will automatically enlarge the image section in the center, which means the focus quality can be better

- assessed.

  Select Focusing in the main menu
- ► Select Focus Assist
- ► Select Auto Magnification
- ► Select 📠
- ► Turn the focus ring
  - An enlarged image section appears. The position of the enlargement depends on the position of the AF metering field.
  - The rectangle within the frame at the top right represents the current magnification, as well as its position in the displayed cropped section.
- ► Tap the shutter button
  - The image is no longer enlarged.

Adjusting the enlargement function

- ▶ Press the center button
  - The image section toggles between magnification factors (3x/6x).

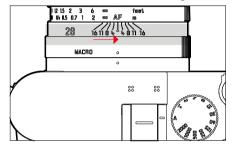
Changing the position of the enlarged section

Press the directional pad left or right as needed

- The enlargement will automatically return to normal viewing size about 5 s after the last turn of the focus ring.
- The most recently used function and zoom factor will still be set the next time the function is accessed.

#### MACRO FUNCTION

The working range for the focus setting can be switched quickly and easily from the standard focus range (30 cm to infinity) to the macro range (17 cm to 30 cm) using the macro setting ring. AF and MF mode are available in both ranges.



- ► Turn the macro setting ring until the alignment point is set to MACRD
  - The distance scales on the focus ring change when the focus ranges change.

## ISO SENSITIVITY

The ISO setting covers a range between ISO 100 and ISO 100 000, allowing you to adapt to the relevant situation as required.

There is more leeway for the use of preferred shutter speed and aperture combinations when setting the exposure manually. You can set priorities within the scope of the automatic setting, e.g. for reasons of picture composition.

Factory setting: Auto ISO



#### **FIXED ISO VALUES**

Values between ISO 100 and ISO 100 000 can be selected in 11 increments

- ▶ Select 150 in the main menu
- Select the desired value

## Note

 When high ISO values are used or the image is edited later, image noise, as well as vertical and horizontal stripes may become visible, particularly in larger, evenly lit areas of the object.

#### **AUTOMATIC SETTING**

The camera automatically adjusts the sensitivity to ambient brightness and/or to the configured shutter speed/aperture settings combination. In conjunction with aperture priority mode, this function extends the range for automatic exposure control.

- ▶ Select so in the main menu
- ► Select Auto ISO

#### LIMITING SETTING RANGES

A max. ISO value can be set, which will then limit the automatic setting range (Maximum ISO). A max. exposure time can also optionally be configured. There are focal length related settings (I/I, I/(21), I/(31), I/(41)) and fixed max. shutter speeds I/2 s and I/(2000) s available for that purpose.

In the focal length-specific settings, the camera will only switch to a higher sensitivity if the shutter speed would fall below the set threshold due to low light.

Separate settings are available for flash photography.

#### LIMITING ISO VALUES

All values from ISO 400 are available.

Factory setting: 6400

- ► Select Auto ISO Settings in the main menu
- ► Select Maximum ISD
- Select the desired value

#### LIMITING SHUTTER SPEED RANGES

Factory setting: 1/(2f)

- Select Auto ISO Settings in the main menu
- Select Min. Shutter Speed
- Select the desired value (17, 17(21), 17(31), 17(41), 172000, 171000, 17500, 17250, 17125, 1760, 1730, 1715, 178, 174, 172)

#### LIMITING ISO VALUES (FLASH)

All values from ISO 400 are available.

Factory setting: 6400

- ► Select Auto ISO Settings in the main menu
- ► Select Maximum ISO with Flash
- Select the desired value

#### LIMITING SHUTTER SPEED RANGES (FLASH)

Factory setting: 1/(2f)

- ► Select Auto ISO Settings in the main menu
- ► Select Shutter Speed Limit with Flash
- Select the desired value (M; 17(2f), 17(3f), 17(4f), 172000, 171000, 17500, 17250, 17125, 1740, 1730, 1715, 178, 174, 172)

## **EXPOSURE**

#### **EXPOSURE METERING METHODS**

Optional methods are Spot metering, Center-Weighted and Multi-Field metering.

# SPOT METERING -

This metering method is concentrated exclusively on a small area in the center of the image. The metering fields are joined together when the exposure metering method Spot is combined with the AF metering methods Spot and Field. Exposure metering will then occur at the point specified by the AF metering field, even if it is moved.

# CENTER-WEIGHTED METERING -

This method considers the entire image field. The subject elements captured in the center will, however, impact on the calculation of the exposure value more so than areas around the edges.

# MULTI-FIELD METERING -

This metering method is based on the detection of multiple values. These values are used in an algorithm to calculate an exposure value appropriate for a good rendering of the assumed main subject.

- ► Select Exposure Metering in the main menu
- Select a metering method (Spot, Center-Weighted, Multi-Field)
  - The selected metering method is displayed in the header line of the screen image.

Spot metering allows a shifting of the metering field:

Press the directional pad left or right as needed

#### Note

 The exposure information (ISO value, aperture, shutter speed and light balance with exposure compensation scale) will help to determine the settings required for correct exposure.

## **EXPOSURE MODES**

There are four exposure modes available to adjust the rendering of the object or to create the desired picture composition:

- Automatic program (P)
- Aperture priority mode (A)
- Shutter speed priority mode (S)
- Manual setting (M)

## **SELECTING A MODE**

The four operating modes are activated automatically via the following setting combinations:

	Setting via the shutter speed setting dial	Setting via the aperture setting ring
Р	Α	Α
Α	Α	manual setting
S	manual setting	Α
М	manual setting	manual setting

- ▶ Set the shutter speed setting dial to the relevant position
- $\,\blacktriangleright\,$  Set the aperture setting ring to the relevant position

## **FULLY AUTOMATIC EXPOSURE SETTING - P**

#### **AUTOMATIC PROGRAM - P**

The automatic program mode facilitates fast and fully automatic photography. The exposure is controlled by an automatic shutter speed and aperture setting.

- ► Turn the shutter speed setting dial to the **A** position
- ► Turn the aperture setting ring to the **A** position
- Tap and hold the shutter button
  - Exposure information is displayed at the bottom of the screen.
     This contains the automatically set value pair of aperture setting and shutter speed.
  - All other visible displays of the info bars will be hidden.
- ▶ Shutter release

or

 Adjusting the automatically set value pair (Program shift)

# CHANGING THE PRESET SHUTTER SPEED AND APERTURE COMBINATIONS (SHIFT)

Changing the preset values using the Shift function combines the reliability and speed of fully automatic exposure control with the opportunity to vary the speed/aperture combination selected by the camera at any time to fit in with your own ideas and intentions. The overall exposure, i.e. the brightness of the image, remains unchanged. Faster shutter speeds are a good choice for e.g. sports pictures, while longer speeds will offer more depth of field for e.g. landscape pictures.

- ► Turn the thumbwheel to the left/right (left = greater depth of field, right = shorter shutter speeds)
  - Shifted value pairs are marked with an asterisk next to the .

#### Notes

- The adjustment range is limited to guarantee correct exposure.
- The values will be reset after each shot (and also if exposure metering is set to deactivate automatically after 12 s) to prevent unwanted use.

# SEMI-AUTOMATIC EXPOSURE SETTING - A/S

#### **APERTURE PRIORITY - A**

Aperture priority mode sets the exposure automatically according to the manually selected aperture. This mode is suitable for pictures in which the depth of field is a critical compositional element.

By selecting an appropriately low exposure value, you can reduce the depth of field range, for example to make a face "stand out" in sharp focus against an unimportant or distracting background. Conversely, you can use a higher exposure value to increase the depth of field range, so that everything from the foreground to the background will be in full focus in a landscape shot.

- ► Turn the shutter speed setting dial to the A position
- ► Set the exposure value setting via the aperture setting ring
- ► Tap and hold the shutter button
  - Exposure information is displayed at the bottom of the screen.
     This contains the automatically set value pair of aperture setting and shutter speed.
  - All other visible displays of the info bars will be hidden.
- ► Shutter release

#### Notes

off during that time.

- The remaining exposure time after shutter release is counted down in seconds on the display for shutter speeds greater than 2 s.
- Image noise becomes apparent when using higher sensitivities, particularly on uniform dark areas. Long exposure times may cause severe image noise. In order to reduce this annoying phenomenon, the camera will take a second "black picture" (taken with the shutter closed) automatically after pictures taken with slow shutter speeds and high ISO values. The noise metered in this parallel picture is then digitally "subtracted" from the data for the actual picture. In such cases the message
  Noise reduction in progress will appear with a relevant time value. The doubling of the "exposure" time must be taken into account for long-term exposure times. The camera must not be switched

**SHUTTER SPEED PRIORITY - S** 

Shutter speed priority mode will set exposure automatically according to the manually selected shutter speed. It is therefore particularly suitable for pictures of moving objects, where the sharpness of the movement depicted is a critical picture composition element.

An appropriately fast shutter speed can help to avoid e.g. unwanted motion blurring and will "freeze" the object. Conversely, an appropriately longer shutter speed can help create a better feeling of motion in the image with targeted "tracer effects".

- ► Turn the aperture setting ring to the **A** position
- ► Select the desired shutter speed
  - via the shutter speed setting dial: in full increments
  - using the thumbwheel: fine tuning in 1/3 increments
- ► Tap and hold the shutter button
  - Exposure information is displayed at the bottom of the screen.
     This contains the automatically set value pair of aperture setting and shutter speed.
  - All other visible displays of the info bars will be hidden.
- Shutter release

#### Note

Fine tuning can alternatively be done via the status screen. This
will be the only option if Exp. Comp. (see p. 52) is assigned to
the thumbwheel.

#### MANUAL EXPOSURE SETTING - M

The following manual settings for shutter speed and aperture are a good choice:

- to create a special image mood that can only be achieved with a very specific type of exposure
- to ensure a perfectly identical exposure for multiple images with different cropped sections
- Set the desired exposure manually (using the shutter speed setting dial and the aperture setting wheel on the lens).
  - The exposure compensation is done using the scale of the light balance:

	Correct exposure
-3 -2 -1 0 +1 +2 +3 	under/overexposure by the displayed value
101000	under or overexposure by more than 3 EV (Exposure Value)

- ► Tap the shutter button
  - Exposure information is displayed at the bottom of the screen.
  - All other visible displays of the info bars will be hidden.
- ▶ Shutter release

#### Notes

- The screen image will show an exposure preview if P-A-S-M is selected under the menu item Exposure Preview.
- The shutter speed setting dial must be clicked to one of the engraved exposure shutter speeds.

#### SETTING SHUTTER SPEEDS

The shutter speed is set in two steps.

- 1. via the shutter speed setting dial: in full increments
- 2. using the thumbwheel: fine tuning in 1/3 increments

Shutter speed setting dial	Thumbwheel
all settings from <b>2</b> to <b>1000</b>	Fine tuning the shutter speed in 1/3 EV increments, max. ±2/3 EV
Set to 1+	Longer shutter speeds than 1 s (0.6 s to 120 s in 1/3 EV increments)
Set to <b>2000</b>	Shorter shutter speeds than 1/1000 s (1/1250 s to 1/40000 s in 1/3 EV increments)

# **EXAMPLES FOR SHUTTER SPEED FINE TUNING SETTINGS**

- set shutter speed  $1/125 \, s$  + move the thumbwheel one click to the left =  $1/100 \, s$
- set shutter speed 1/500 s + move the thumbwheel two clicks to the right = 1/800 s

## Note

Fine tuning can alternatively be done via the status screen. This
will be the only option if Exp. Comp. (see p. 52) is assigned to
the thumbwheel.

#### **LONG-TERM EXPOSURE - T**

In this setting, the shutter remains open after shutter release until the shutter button is pressed again (ax. 2 min depending on ISO setting).



- ▶ Set the shutter speed setting dial to 1+
- ▶ Set the aperture setting ring to a fixed value
- $\blacktriangleright$  Turn the thumbwheel until the time value in the footer line changes to  $\overline{\mathbb{I}}$
- ▶ Shutter release

#### Notes

- The thumbwheel must have the assignment off or Auto (see p.52).
- Image noise becomes apparent when using higher sensitivities, particularly on uniform dark areas. Long exposure times may cause severe image noise. In order to reduce this annoying phenomenon, the camera will take a second "black picture" (taken with the shutter closed) automatically after pictures taken with slow shutter speeds and high ISO values. The noise metered in this parallel picture is then digitally "subtracted" from the data for the actual picture. In such cases the message

  Noise requestion in proposess will appear with a relevant time value.

The doubling of the "exposure" time must be taken into account for long-term exposure times. The camera must not be switched off during that time.

#### **EXPOSURE CONTROL**

## **EXPOSURE PREVIEW**

The brightness of the screen image mirrors the effects of the selected exposure settings when pressing and holding the shutter button on the first pressure point. You can now assess and control the effect of the relevant exposure setting on the image before taking the picture. This will apply as long as the subject brightness and the set exposure don't result in excessively low or high brightness values.

This function can be disabled for the manual exposure setting (M). Factory setting:  $\mathbb{P}\text{-}A\text{-}S\text{-}M$ 

- ► Select Exposure Preview in the main menu
- Select P-A-S (only in automatic, aperture priority and shutter speed priority mode) or P-A-S-M (also for manual setting)

#### Notes

- Depending on ambient lighting conditions, the brightness of the screen image may differ from that of the actual pictures, despite the settings described above. The screen image will appear considerably darker than the – correctly exposed – picture. That is particularly the case in long-term exposures.
- The exposure preview will also be displayed if exposure metering is done via another control element (e.g. using the Zoom/Lock button, provided is was assigned the As-1 function).

#### **EXPOSURE LOCK**

We often want to arrange important subject elements outside the center of the picture for reasons of picture composition and these elements may sometimes be very bright or very dark. Center-weighted metering and spot metering, however, mainly capture an area in the center of the image and are calibrated to an average gray scale value.

In that case the metering memory lock initially allows a metering of the main object and to store the relevant settings until the final image section is set. The same applies for focusing (AF-L) in any autofocus mode.

Usually both lock functions (focusing and exposure) are done at the same time with the shutter button. You can, however, divide the lock functions between the shutter button and the Zoom/Lock button or assign both to the Zoom/Lock button. The functions include settings and storage.

#### AE-L (AUTO EXPOSURE LOCK)

The camera stores the exposure value. The focus can therefore be set on another object, no matter which exposure value is selected.

## AF-L (AUTO FOCUS LOCK)

The camera stores the focus setting. That makes it easier to change the image section when focusing is fixed.

#### AE-L/AF-L

With this option enabled, the camera stores the exposure value and the focus setting when the assigned button is pressed and held.  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left( \frac$ 

- A metering memory lock doesn't make much sense in conjunction with multi-field metering, because a targeted capture of an individual object element will not be possible.
- A change in the aperture setting after the metering memory lock is set will not result in an adjustment of the shutter speed, i.e. the end result would be an incorrect exposure.
- Only one of the two exposure locks (AF-L or AE-L), or both at the same time (with AF-L + AE-L) can be set for a recording.
- The assigned button must be pressed again to remove the memory lock and to take a new measurement.

#### METERING MEMORY LOCK IN AF MODE

The metering functions are distributed as follows while the <u>Zoom/Lock button is pressed and held</u>:

Menu settings	Shutter button	Zoom/Lock button
AF-L + AE-L	No function	Exposure and focus
AF-L	Exposure	Sharpness
AE-L	Sharpness	Exposure

The shutter button will retain both functions, provided no exposure lock is done via the Zoom/Lock button.

#### Via the shutter button

- ▶ Aim at the key part of the object or at a similar detail
- ► Tap and hold the shutter button
  - The measurement is taken and saved.
- Pan the camera to capture the final image section while keeping the shutter button pressed
- ▶ Shutter release

# Via the Zoom/Lock button

- ► Select Customize Control in the main menu
- ► Select Zoom/Lock-Button
- ► Select the desired setting
  - (AF-L + AE-L, AE-L, AF-L)
- ▶ Aim at the object
- Press and hold the Zoom/Lock button
  - · The measurement is taken and saved.
  - A small padlock icon with the letters AE appear at the bottom left of the screen to signify that the exposure value was saved.
  - A green AF metering field signifies that the focusing was saved.
  - The exposure value/focusing remain until the same button is pressed again.
- ► Select the final image section
- Shutter release

#### METERING MEMORY LOCK IN MF MODE

In MF mode, only the exposure can be locked via the shutter button. Similarly, the Zoom/Lock button will only have that one function (with an assignment of AF-L + AE-L or AE-L).

#### EXPOSURE COMPENSATION

Exposure meters are calibrated for a medium gray scale value, which matches a standard, i.e. average image object. Should the measured image detail not fulfill that requirement, then the a relevant exposure compensation can be effected.

Specifically where several pictures are taken in sequence, for example if for a series a slightly lesser or greater exposure is desired for a particular reason, then exposure compensation can be a very useful function: Once set, the setting remains active – unlike the metering memory lock – until it is reset.

Exposure compensation values can be set in the range  $\pm 3$  EV in 1/3 EV increments (EV: Exposure Value).



A Set compensation value (marks at 0 = Off)

## Using thumbwheel control

- ► Select Customize Control in the main menu
- Select Wheel Assignment,
- Select Exp. Comp.
- Set the desired value using the thumbwheel

## Using menu control

- ► Select Exposure Compensation in the main menu
  - A scale appears as a submenu item.
- Set the value on the scale
  - The set value is displayed above the scale.

- While setting the value, you can see the effect on the screen image, which becomes darker or lighter.
- This function can be selected for direct access via the thumbwheel (see p. 52). That will allow the user to set the values quickly using the thumbwheel.
- The following applies for set compensation values, no matter how they were initially set: They remain effective until they are manually reset to I, i.e. even if the camera is switched off and on again in the meantime.
- The set exposure compensation is indicated by a mark on the exposure compensation scale in the footer line.

## PICTURE RECORDING MODES

## **SERIAL EXPOSURES**

The camera is set to single shot exposures by default (Single). Serial exposures can also be created to e.g. capture motion sequences at various stages.



- ► Select Drive Mode in the main menu
- Select the desired setting

```
(Continuous – Low Speed, Continuous – Medium Speed,
Continuous – High Speed, Continuous – Very High Speed
```

Once you have finalized your settings, the camera will take serial exposures as long as you keep the shutter button pressed down fully (and you have sufficient space on your memory card).

- We recommend deactivating the preview playback mode (Preview) when using this function.
- The specified picture sequence stated in the technical information refers to a default setting (ISO 200, JPG format L-JPS).
- Regardless of how many pictures were taken in a series, the last picture in the series or the last picture saved on the memory card while the save process is ongoing will be displayed first in both review modes.

- Serial exposures with Continuous High Speed set are taken at a frequency of max. 10 fps, provided shutter speeds of 1/60 s or faster are used.
- Serial exposures are not possible if a flash is used. Only a single picture will be taken if the flash function is activated.
- Serial exposures are not available in combination with the self-timer function.
- The buffer memory of the camera only allows a limited number of exposures in series and in the selected exposure frequency. The exposure frequency is reduced, once the capacity limit of the camera is reached. This slow-down is due to the time required to transfer the data from the buffer memory to the card
- Continuous Low Speed/Continuous Medium Speed:
   For the modes AFs, AFs and MF, the exposure settings are done individually for every recording. Focusing is done additionally in the modes AFs and AFc.
- Continuous High Speed/Continuous Very High Speed:
   In the modes AFs, AFc and MF the exposure and focus settings specified for the first recording will be applied to all subsequent recordings.

#### INTERVAL SHOOTING

This camera allows you to capture motion sequences over extended periods of time automatically using the interval shooting function. You specify the number of pictures, the intervals between pictures, and the start time of the series.

The exposure and focus settings are no different from those for normal pictures, but you should remember that the lighting conditions may change during the course of the picture series.

## SPECIFYING THE NUMBER OF PICTURES

- ► Select Drive Mode in the main menu
- ► Select Interval Shooting
- ▶ Select Number of Frames
- Enter the desired value

#### SPECIFYING THE INTERVALS BETWEEN SHOTS

- ► Select Drive Mode in the main menu
- ► Select Interval Shooting
- ▶ Select Interval
- Enter the desired value

#### SETTING THE DELAY TIME

- ► Select Drive Mode in the main menu
- Select Interval Shooting
- ► Select Countdown
- Enter the desired value

# To get started

- Press the shutter button
  - The remaining time until the next exposure and its number is displayed at the top right.
  - The LCD panel will switch off automatically between recordings. Tapping the shutter button reactivates the LCD panel.

# To cancel a running serial exposure

- ► Press the **PLAY** button
  - A small menu appears.
- ► Select End

## Notes

- The use of autofocus in interval shooting may result in not all exposures having their focus on the same object.
- The camera may switch off and on again if "Auto power off" is set and no other camera operation occurs between the individual shots.
- Interval shooting over an extended period of time in a cold location or in a place with high temperature and humidity may result in malfunctions.
- Interval shooting will be interrupted or canceled in the following situations:
  - if the battery is depleted
  - if the camera is switched off

Make sure to check the battery for sufficient charge.

- Interrupted or canceled interval shooting can be resumed by switching the camera off, replacing the battery or memory card as needed and then switching the camera back on. A prompt will be displayed on screen if the camera is switched off and on again while the Interval Shooting shooting function is active.
- The interval function remains active after a picture series is completed, and also after the camera is switched off and on again, until another exposure mode (picture series) is set.
- Availability of the interval function does not mean that the camera is suitable for use as a monitoring device.
- Regardless of how many pictures were taken in a series, the last picture in the series or the last picture in the series or the last picture saved on the memory card while the saving process is ongoing will be displayed first in both review modes.
- The pictures of an interval shoot are marked with in review mode

 The camera may under some circumstances be unable to take good pictures. That may happen if, for example, focusing was unsuccessful. In that case, the camera will not take a picture and the series will continue with the next interval. The message Some Frames are dropped appears on screen.

#### **EXPOSURE BRACKETING**

Many attractive objects are rich in contrast, which means they have very bright and very dark areas. The image effect can be dramatically different, depending on which of these areas you choose to align your exposure with. The automatic bracketing function in aperture priority mode allows you to produce several alternatives with graduated exposure values and varying shutter speeds. You can then select the picture you like best or use relevant picture editing software to calculate an image with a particularly broad contrast spectrum (HDR).



- A Number of pictures
- Exposure difference between the pictures
- Exposure compensation
- Light value scale
- Exposure values of the images marked in red (The scale will be offset by the relevant value if exposure compensation is set concurrently.)

You can select the desired number of exposures (3 or 5). The exposure difference, which can be set via EV Steps, can be up to 3 FV.

- ► Select Drive Mode in the main menu
- ► Select Exposure Bracketing
- Select the desired number of pictures under Number of Frames in the submenu
- Select the desired exposure offset under EV Steps in the submenu
- ► Select the desired Exposure Compensation value in the submenu
  - The marked exposure values change positions according to the settings selected. In the case of exposure compensation, the scale also shifts.
  - The selected exposure compensation value will be applied to the entire exposure series.
- ▶ Select the desired setting under Automatic submenu
  - With the factory setting in place (Im), the entire exposure series will run after the shutter button is pressed once; when the setting is IIII, each picture must be taken individually.
- All pictures are taken by pressing the shutter button once or several times

#### Notes

- Each Appears on the LCD panel if the bracketing function is activated. You can watch the effect of the function on screen while the pictures are taken (brighter or darker).
- Depending on the exposure mode, the exposure gradations are produced by changing the shutter speed and/or aperture value:
  - Shutter speed (A/M)
  - Aperture (S)
  - Shutter speed and aperture value (P)
- The picture sequence: underexposure/correct exposure/ overexposure.
- The working range for automatic bracketing may be limited depending on the available shutter speed/aperture combination.
- With automatic ISO sensitivity control enabled, the sensitivity
  calculated by the camera automatically for the raw picture will
  also be applied to all other pictures in a series, i.e. the ISO value
  will not change during bracketing. This may mean that the
  slowest shutter speed specified under Min. Shutter Speed is
  exceeded.
- The focus range for automatic bracketing may be limited (depending on the originally set shutter speed). The specified numbers of pictures will be taken regardless. Several pictures in a series may consequently be taken with the same exposure values.
- The function remains active until another function is selected in the <u>Orive Mode</u> submenu. If no other function is selected, another series of pictures is taken each time the shutter button is pressed.

## **SELF-TIMER**

The self-timer function allows taking pictures with a preset time delay. We recommend that the camera is placed on a tripod.



- ► Select Self Timer in the main menu
- ► Select Self Timer 2 s/Self Timer 12 s
- ▶ Shutter release
  - The remaining time until exposure is counted down on screen.
     The self-timer LED at the front of the camera counts down the delay time. It flashes slowly during the first 10 s, then fast for the last 2 s.
  - The self-timer delay time can be canceled at any time by taping the shutter button; the relevant settings remain intact.

- Exposure metering is done first; in autofocus mode, focusing is first. Only then will the delay time commence.
- The function remains active until another function is selected in the Self Timer submenu.
- The self-timer function is only available for individual recordings.

#### DIGITAL ZOOM

Three cropped section sizes are available in addition to the Summilux 28 f/1.7 ASPH. image section. They are similar to the focal lengths 35 mm, 50 mm and 75 mm.

#### 35 mm







75 mm



## PERMANENT SETTING

- ► Select Digital Zoom in the main menu
- Select the desired setting

#### DIRECT ZOOM CHANGE

- Press and hold the Zoom/Lock button
  - A frame appears around the image section on screen, indicating the final image size.
  - Pressing the Zoom/Lock button will toggle the display between 28 mm (full screen), 35 mm, 50 mm and 75 mm.
  - The selected increment will remain set until the next change.

- The relevant setting must be selected via the menu if the Zoom/ Lock button has a different function assigned (direct access, see p. 52).
- The desired cropped section is displayed for DNG recordings, but the entire 28 mm image field will be saved. That will allow a later editing of the full image.
- Only an enlarged cropped section will be displayed and stored for JPG images. A higher zoom value means a lower resolution as shown in the following table. Cropped sections can also be created using editing software.

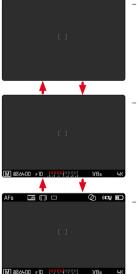
	28 mm	Digital Zoom 35 mm	Digital Zoom 50 mm	Digital Zoom 75 mm
L-JPG	47 MP	30 MP	15 MP	7 MP
M-JPG	24 MP	15 MP	8 MP	3 MP
S-JPG	12 MP	8 MP	4 MP	2 MP

# **INFO DISPLAYS**

## INFO DISPLAYS IN PICTURE MODE

Various information is displayed in the header and/or footer line. The exposure information (ISO value, aperture, shutter speed and light balance with exposure compensation scale) will help to determine the settings required for correct exposure. Select one of the three available display options.

- ▶ Press the center button
  - The display cycles through the display options.



- No picture data

 Footer with exposure information, auxiliary displays

 Header with recording information, footer with exposure information, auxiliary displays

# Showing/hiding information temporarily

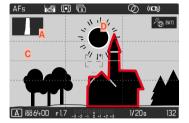
- ► Tap and hold the shutter button
  - (Only) the exposure information and currently active auxiliary functions will be visible.

#### Note

• All displays are visible at all times in video mode.

#### **AUXILIARY DISPLAYS**

You can select a number of other displays in addition to the standard information contained in the header and footer to adapt the screen image to your needs. Four functions are available.



- A Histogram
- B Grid lines (Grid)
- Level display (Horizon)
- Clipping

#### Note

 Histogram, clipping display and level gauge will only be visible when the relevant information display is visible. The grid will appear independently of the info display.

#### CLIPPING

The Clipping display marks very bright image areas. This function is a very easy and exact tool for checking the correct exposure setting.



- ► Select Capture Assistants in the main menu
- ► Select Clipping
- ► Select □n/□ff
- ► Tap and hold the shutter button
  - The clipping display appears.

#### LEVEL GAUGE

The integrated sensors of the camera show its orientation. These indicators ensure exact camera orientation along the longitudinal and transverse axes of critical objects, e.g. architecture.



- ► Select Capture Assistants in the main menu
- ► Select Horizon
- ► Select □n/□ff

Two long lines to the left and right of the image center indicate the transverse axis on screen.

- in zero position = green
- in tilted position = red



The longitudinal axis is indicated in level position by two green double-lines immediately left and right of the image center. When the camera is tilted, these lines are white, and a short red line appears above or below them.



## Note

The camera will switch the aspect of the level gauge autonomously for pictures taken in portrait format.

#### **GRID**

The grids divide the image frame into multiple fields. They facilitate picture composition and an exact camera orientation.



- ► Select Capture Assistants in the main menu
- ► Select Grid
- ► Select □n/□ff

## **HISTOGRAM**

Histogram represents the brightness distribution in the picture. The horizontal axis shows the graduated values from black (left) through gray to white (right). The vertical axis corresponds to the number of pixels at each brightness level.

This type of rendering allows an additional quick and easy assessment of the exposure setting.



- ► Select Capture Assistants in the main menu
- ► Select Histogram
- ► Select On/Off

- The histogram is always based on the brightness displayed; depending on the settings used, it may not represent the final exposure.
- In picture mode, the histogram should be regarded as a "trend indicator".
- The histogram during rendering may differ slightly from the one during exposure.
- · Histogram is available only in full screen mode.

## **FLASH PHOTOGRAPHY**

The camera determines the necessary flash intensity by firing one or more pre-flashes before taking the actual picture. The main flash fires immediately after, i.e. during exposure. All factors influencing exposure (e.g. filters, aperture settings, distance to the main subject, reflective ceilings, etc.) are automatically considered.

#### **COMPATIBLE FLASH UNITS**

The entire scope of functions described in this instruction manual, incl. TTL flash metering, is available only for Leica system flash units like the SF 40. Other flash units, which only have a positive middle contact, can be safely fired via the Leica Q2 Monochrom, but cannot be controlled via the camera. Correct function cannot be guaranteed when using any other flash unit.

# Important

 The use of incompatible flash units with your Leica Q2 Monochrom may result in irreparable damage to the camera and/or the flash unit.

## ATTACHING THE FLASH UNIT

- Switch off the camera and flash unit
- ▶ Pull off the accessory shoe cover and store it in a safe place
- Slide the foot of the flash unit all the way into the accessory shoe and use the clamping nut (where available) to secure it against accidental movement
  - Movement inside the accessory shoe can interrupt required contacts and therefore cause malfunctions.

# **DETACHING THE FLASH UNIT**

- Switch off the camera and flash unit
- Detaching the flash unit
- ► Replace the accessory shoe cover

#### Note

 The accessory shoe cover should always be attached when no accessory is used.

# FLASH EXPOSURE METERING (TTL METERING)

The camera offers a fully automated, camera-controlled flash mode in conjunction with system-compatible flash units (see p. 98) and for the auto modes aperture priority and manual setting.

In aperture priority mode and with manual setting, the camera furthermore allows the use of other interesting flash techniques like flash synchronization and firing with slower shutter speeds than the max. sync time.

The camera additionally communicates the sensitivity setting to the flash unit. The flash unit can use this information to automatically adjust its range data, provided the device comes with these displays and the aperture setting selected on the lens is also entered manually on the flash unit. The ISO sensitivity setting cannot be altered via the flash unit on system-compatible units, because the information is received from the camera.

# **HSS (HIGH SPEED SYNC.)**

# Automatic flash activation at fast shutter speeds

A fully automated, camera-controlled HSS flash mode for all shutter speeds and all exposure modes is available in the Leica Q2 Monochrom for use with system-compatible flash units (see p. 98). It is activated by the camera automatically if the selected or calculated shutter speed is faster than the sync speed (1/180 s).

#### Note

 The range for HSS flashes is significantly smaller than for TTL flashes.

## SETTINGS ON THE FLASH UNIT

Operating mode		
TTL	Automatic control by the camera	
Α	SF 40, SF 60: Automatic camera control, no flash exposure compensation SF 58, SF 64: Control via the flash unit using a built-in exposure sensor	
М	The flash exposure must be set to an output level to match the aperture and shutter speed settings determined by the camera.	

- Set the flash unit to TTL mode to allow automatic control of the unit by the camera.
- When set to A, objects with above or below average brightness may not be exposed correctly.
- Please read the relevant manual provided with third party flash units regarding their various operating modes.

## **FLASH MODES**

Select one of the three available operating modes.

- Automatic
- Manual
- Long-term exposure

# 40 AUTOMATIC FLASH ACTIVATION

That is the default flash mode. The flash unit will fire automatically if poor lighting conditions would mean slower shutter speeds, which could result in blurred images.

# 4 MANUAL FLASH ACTIVATION

This mode is suitable for backlit pictures in which the main subject does not fill the entire frame and is in shadow, or in situations where a fill-in flash will moderate sharp contrasts (e.g. in direct sunlight). The flash will fire each time a picture is taken, regardless of prevailing lighting conditions. The flash intensity depends on the metered ambient brightness: in poor light it is the same output as in automatic mode, with output decreasing with increasing brightness. The flash will then work as a fill-in light, e.g. to light up dark shadows in the foreground or backlit objects, and to create more balanced overall lighting.

# 46 AUTOMATIC FLASH ACTIVATION AT SLOWER SHUTTER SPEEDS (LONG-TERM SYNCHRONIZATION)

This mode ensures appropriately exposed, brighter dark backgrounds and bright foreground.

The shutter speed is not extended beyond 1/30 s in the other flash modes to minimize the risk of blurring. This may mean, however, that pictures with flash exposure can end up with objects in the background not illuminated by the flash and therefore being underexposed. In this mode, slower shutter speeds (up to 30 s) are permitted to avoid this effect.

- ► Select Flash Settings in the main menu
- ► Select Flash Mode
- Select the desired setting
  - The currently active mode is displayed on screen.



#### **FLASH CONTROL**

The settings and functions described in the following sections only apply to settings and functions available in this camera and in system-compatible flash units.

#### SYNC POINT

Flash exposures are lit by two light sources:

- Ambient light
- Flash

Any subject elements lit primarily by the flash will almost always be rendered in perfect focus by the short burst of light, provided the focus is set correctly. All other subject elements in the same frame lit by ambient light or lit from within will be rendered with varying degrees of sharpness. Whether or not these object elements will be rendered in sharp focus or blurred, as well as the degree of "blurriness" depends on two interdependent factors:

- the shutter speeds
- the speed of movement of the subject elements or camera during recording

The longer the shutter speed and the faster the motion, the greater the difference between the two superimposed partial images.

A flash is usually fired at the start of exposure (Start of Exp.). This may result in apparent contradictions, e.g. the picture of a vehicle being overtaken by its own light trail. This camera allows you to synchronize the flash firing with the end of exposure (End of Exp.). The sharp image will in this case be a rendering of the end of the captured motion. This flash technique creates a more natural impression of movement and dynamics in the image.

This function is available with all camera and flash unit settings. Factory setting: End of Exp.

- ► Select Flash Settings in the main menu
- ► Select Flash Sync
- ► Select the desired setting (Start of Exp., End of Exp.)

- Do not use sync cables that are longer than 3 m/10 ft.
- When using the flash with faster shutter speeds, a difference between the two flash times will be barely discernible or only noticeable for very fast movements.

## **FLASH RANGE**

The usable flash range depends on the aperture and sensitivity values set manually or calculated by the camera. It is important to ensure that the subject is within the relevant flash range for sufficient illumination. A permanent setting to the shortest available shutter speed for flash mode (sync time) may often result in unnecessary underexposure of those subject elements that are not lit sufficiently by the flash.

This camera allows the fine tuning of the shutter speed used in flash mode in combination with aperture priority depending on the conditions of the object or your own picture composition ideas.

Factory setting: 1/(2f)

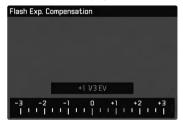
- ▶ Select Auto ISO Settings in the main menu
- Select Shutter Speed Limit with Flash
- Select the desired value (17f, 17(2f), 17(3f), 17(4f), 172000, 171000, 17500, 17250, 17125, 1760, 1730, 1715, 178, 174, 172)

## FLASH EXPOSURE COMPENSATION

This function can be used to selectively reduce or enhance flash exposure regardless of ambient light, e.g. to brighten the face of a person in the foreground when taking a picture outdoors in the evening while retaining the same general lighting mood.

Factory setting: DEV

- ► Select Flash Settings in the main menu
- Select Flash Exp. Compensation
  - The submenu displays a scale with a red setting mark. The function is deactivated if the value is set to \( \bar{\text{\mathbb{0}}} \).
- Set the value on the scale
  - The set value is displayed above the scale.



## Notes

- The following applies for set compensation values, no matter how they were initially set: They remain effective until they are manually reset to I, i.e. even if the camera is switched off and on again in the meantime.
- A compensation value configured on the camera will be overruled when a relevantly equipped flash unit is attached, e.g. a Leica SF 60 and a compensation value is entered on that flash unit.
- The menu item Flash Exp. Compensation can only be used in conjunction with flash units on which the compensation value cannot be set manually (e.g. Leica SF 26).
- A brighter flash illumination with Plus compensation will require a greater flash intensity. Flash exposure compensation will therefore impact on the flash range: A Plus correction will decrease it, a Minus correction will increase it.
- An exposure compensation set on the camera will only affect
  the measurement of ambient light. If a simultaneous TTL flash
  exposure metering compensation is desired in flash mode, then
  it must be additionally set on the flash unit. (Exception: On the
  Leica SF 26, the compensation value must be set on the camera
  via menu control.)

## **FLASH PHOTOGRAPHY**

- Switch on the flash unit
- Set the desired guide number control mode (e.g. TTL or GNC = Guide Number Control) on the flash unit
- Switching the camera on
- Set the desired exposure mode, shutter speed and/or aperture setting
  - It is imperative to take note of the shortest flash sync speed, as it determines whether a "normal" flash or an HSS flash is fired.
- ➤ Tap the shutter button before each flash exposure to activate exposure metering
  - The flash unit may not fire if this step is missed by pressing the shutter button down completely and skipping these settings.

- A flash unit that is not ready to flash may cause incorrect exposures or error messages.
- Studio flash systems may have a very long flash firing duration. It
  may therefore be advantageous to select a slower shutter speed
  than 1/180 s when using such a system. The same applies for
  RF-controlled flash firing for so-called "off-camera" flashes, as
  the transmission time may cause a delay.
- Serial exposures and automatic bracketing with flash are not available. With the camera set to one of these modes, there will be no flash display on screen even if the flash unit is attached and the flash will not fire.
- Use a tripod to prevent blurring at slow shutter speeds.
   Alternatively, you can select a higher sensitivity.
- The 49 setting (long-term synchronization) is unavailable and grayed out if a flash unit is attached that is not system compatible.
- Depending on the setting selected in the <u>Auto ISO Settings</u> menu, the camera may not support slower shutter speeds, because an increase in ISO sensitivity takes priority.

# FLASH EXPOSURE DISPLAYS IN THE VIEWFINDER (with system-compatible flash units)

The flash icon in the viewfinder display of the Leica Q2 Monochrom gives feedback on and indicates various operating states.

does not appear (despite the flash unit being switched on and ready)	The flash unit cannot fire  A correct operating mode must be set on the flash unit or an HSS-compatible flash unit must be connected
flashes slowly before the picture is taken (2 Hz)	The flash unit is not yet ready for use
4 <u>lights up</u> before the picture is taken	The flash unit is ready for use
remains continuous- ly lit after shutter release*	The flash is still ready
flashes rapidly after shutter release (4 Hz)*	Successful flash photography     The flash unit is not yet ready for further use
switches off after shutter release*	Flash intensity was insufficient

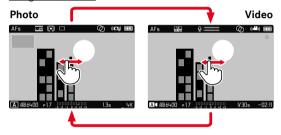
<sup>\*</sup>only in TTL flash mode

# **VIDEO MODE**

# START/EXIT VIDEO MODE

This camera is equipped to take pictures and record video. There are two methods for toggling between Picture and Video mode:

#### Using touch control

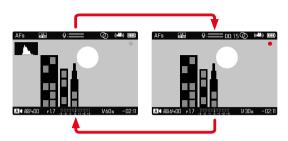


## Using button control

- Accessing the status screen
- ► Select VIDEO
- ► Tap the shutter button

- As only part of the sensor area is used in video recordings, the relevantly effective focal length is increased, which slightly reduces the size of the image sections.
- You can record up to 29 minutes of uninterrupted video.
- The max. file size for uninterrupted video recording is 96 GB.
   Once a recording exceeds this file size, the overrun will be automatically stored in a new file (but cannot be longer than 29 min).
- Some menu items are unavailable in Video mode. The text in the relevant line is displayed in gray to signify the existence of a submenu.
- The max. length for an uninterrupted video recording depends on the selected resolution.
- The screen image of video recordings with the Leica Q2 Monochrom appears with corresponding frame depending on the selected resolution and aspect ratio.

# START/END VIDEO RECORDING



- Press the shutter button
  - · Video recording begins.
  - The dot flashes red.
  - · Recording time is running.
  - The Status LED flashes.
- ▶ Press the shutter button again
  - · Video recording ends.
  - · The dot lights in gray.

#### Notes

- Basic video settings (see p. 66) and <u>ligital Zoom</u> (see p. 93) must be configured before recording.
- Access to menu functions (including direct access) is limited during video recording.

## **EXPOSURE CONTROL**

The exposure mode and exposure settings are selected exactly like in picture mode. Please note the following:

- The max, available shutter speed is limited by the set frame rate (Video Resolution).
- Automatic exposure control takes into account any fluctuations in brightness. Set the shutter time manually if this is undesirable, e.g. for landscape recordings or panning.
- The clipping display is unavailable in video mode.

## **FOCUSING**

Focusing can be done during operation, depending on the selected focus mode:

- by turning the focus ring (MF)
- by tapping and holding the shutter button (AFs)
- automatic (AFc)

Focusing is done as needed when AFs is in use. The area in the AF metering field will be focused continuously if AFc is in use. Continuous focusing can be suppressed by using a metering memory lock. The Zoom/Lock button must have AF-L or AF-L assigned (see p. 84).

# Note

• The AF assist light is deactivated in video mode.

# PLAYBACK/REVIEW MODE

There are two completely independent playback/review functions available:

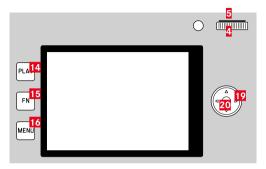
- short-term rendering directly after exposure (Preview)
- normal Review mode, in which the stored recordings can be viewed and managed for any length of time

#### Notes

- Recorded pictures are not automatically rotated in Review mode to utilize the full screen area.
- It may not be possible to render files with this camera that were not recorded with this device.
- In some cases, the screen image may not have the expected quality, or the LCD panel will remain blank and only display the file name.
- You can toggle back from review mode to recording mode at any time by tapping the shutter button.
- The histogram and clipping displays are available only when viewing the full size picture, but not during zooming or in the overview.

# CONTROL ELEMENTS IN PLAYBACK/REVIEW MODE

# **CONTROL ELEMENTS ON THE CAMERA**



- 14 PLAY button
- 15 FN button
- 16 MENU button
  - 4 Thumbwheel

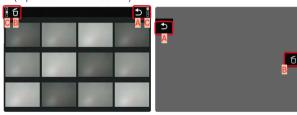
- 5 Thumbwheel button
- 3 Zoom/Lock button
- 19 Directional pad
- 20 Center button

## CONTROL ELEMENTS ON THE LCD PANEL

On-screen control elements generally function by intuitively by touch. Many can also be selected by pressing one of the three buttons to the left of the LCD panel. A control element in the header is accompanied by an icon denoting the relevant button. A control element on the edge of the screen will be positioned directly next to the relevant button.

Example: The "Go back" icon  $\mathfrak D$  can be selected in one of two ways:

- Tap the "Go back" icon briefly right away
- Press the relevant button (top button = **PLAY** button)

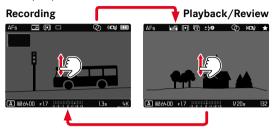


- A Control element "Go back"
- B Control element "Delete"
- C Display of the relevant button

# INITIATE/EXIT PLAYBACK/REVIEW MODE

#### Using touch control

Swipe up or down



#### Using button control

- Press the PLAY button
  - The last picture taken appears on the screen.
  - The following message appears if the inserted memory card does not contain any picture data: No valid picture to play.
  - The PLAY button function differs, depending on the current camera setting:

Initial situation	After pressing the PLAY button
Full screen display of a recording	Picture mode / Recording mode
Display of an enlarged cropped section/or several thumbnails	Full screen display of the recording

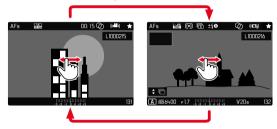
# SELECTING/SCROLLING THROUGH RECORDINGS

The recordings are visually arranged in a horizontal reel. When the end of an image series is reached, the display automatically jumps back to the first image in the series. All recordings can therefore be reached by scrolling either right or left.

## **SINGLE**

## Using touch control

► Swipe to the left or right

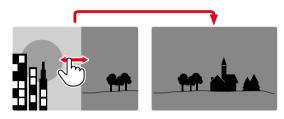


## Using button control

▶ Press the directional pad left/right

## **CONTINUOUS**

- Swipe to the left or right and hold the finger on the edge of the screen
  - The subsequent recordings will move past continuously.



# INFO DISPLAYS IN PLAYBACK/REVIEW MODE

With the factory settings in place, recorded pictures will be displayed without the information in the header and footer lines for an unobstructed view of the image.



The configured displays can be accessed at any time. The displays for Histogram and Clipping will appear if these functions are activated.

- ▶ Press the center button
  - The displays for Histogram and Clipping will appear if these functions are activated.



Video recordings are always rendered with header and footer and with PLAY on screen.



#### DISPLAYING ASSIST FUNCTIONS

The display of histogram and clipping in playback/review mode can be set separately from the relevant settings for the recording mode.

- ► Select Play Mode Setup in the main menu
- ► Select Histogram/Clipping
- ▶ Select □n/□ff

#### Note

• The clipping display is not available in video mode.

## **PICTURE SERIES REVIEW**

Serial and interval shootings often produce a large number of individual images. It would be very difficult to find other pictures that are not part of a series if every image of all these series was displayed individually. Organizing the images in groups creates more clarity in Review mode.

Factory setting: Iff

- ► Select Play Mode Setup in the main menu
- ► Select Group display mode
- ► Select In/Off

All images in all series are displayed individually if IIII is selected. The images are grouped in series and only one representative image will be displayed if IIII is selected. Only that one representative image will be displayed and all other images in that series are hidden during scrolling.



The representative image is shown with PLAY in the center and at the bottom left.

There are two options for viewing the images in a group: manual scrolling or automatic playback. Automatic playback is the default setting.

#### UNINTERRUPTED PLAYBACK OF THE PICTURE SERIES

The images in a group can be played back from start to finish without interruption. This may be very helpful to get a better idea of the processes or conditions rendered than if the images were scrolled manually.

- ► Touch PLAY ▶ briefly
- or
- ▶ Press the center button
  - · Auto Review commences.

A prompt screen with additional functions can be accessed while playback is running.

- ► Briefly tap the LCD panel
- or
- Press the center button

Playback stops, the current picture in the series is displayed. Various control elements appear on screen.

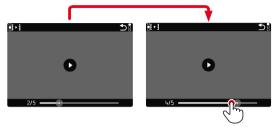


#### Note

 The control elements disappear after about 3 s. Touching the LCD panel or pressing the center button will cause them to be displayed again.

## JUMPING TO A SPECIFIC PICTURE IN THE GROUP

► Touch the playback status bar briefly at the desired position



## RESUMING PLAYBACK/REVIEW

While the control elements are visible:

- ▶ Briefly tap the LCD panel
- or
- Press the center button

#### SAVE AS A VIDEO

The image series can additionally be saved as a video.

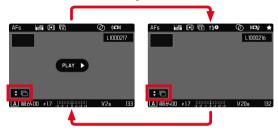
- Starting and stopping playback/review
  - The control elements appear.
- ▶ Tap

or

- ► Start playback
- ► Press the FN button
  - The prompt screen for video creation appears.
- ► Select Yes/No
  - Yes: A video is created
    - A progress screen for the video creation is displayed briefly (while the data is being processed). It also offers the option of canceling the process by pressing the center button.
    - Once video creation is complete, the first frame of the new video is displayed.
  - No: Revert to the same picture of the (still paused) automatic review

#### SCROLLING THROUGH THE INDIVIDUAL PICTURES OF A SERIES

The images in a picture series can also be viewed individually. Switch to the manual scrolling function to do so.



- ▶ Press the directional pad up/down
  - The information displays disappear in full-screen mode.
  - When the information displays are activated, 

     □ will appear
     at the bottom left of the image.
- Press the directional pad left/right

or

Swipe to the left or right

Returning to standard Playback/Review mode

- Press the directional pad up/down
  - 🕈 🗖 Is displayed at the bottom left of the image.

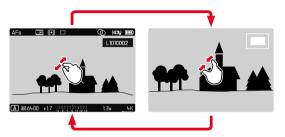
#### Notes

- The review will be limited to the current picture series for as long as you are scrolling in that series, which also applies to the overview display of 12 or 30 thumbnails.
- The images of a series are marked with ☐ in the header line, those of an interval Shooting shoot by a .

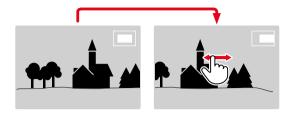
## CROPPED SECTION ZOOM

You can zoom in to any section of an image for closer inspection. You have a five-step zoom factor available via the thumbwheel, while zooming is stepless if you use touch control.

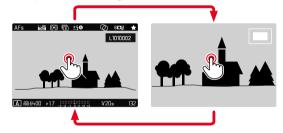
## Using touch control



- ► Two-finger pinch/spread
  - The recording will be zoomed in/zoomed out at the desired point.



- Swiping will allow you to move the position of an enlarged cropped section
  - The rectangle within the frame in the top right corner represents the currently magnified section, as well as its position in the image.



- Double tap
  - Toggles between the third zoom increment at the tap position and standard full screen view.

## Using button control

► Turn the thumbwheel (to the right: increase magnification, to the left: decrease magnification)

or

- Press the thumbwheel button
  - Toggles between the third zoom increment at the tap position and standard full screen view.
- Press the directional pad to move the cropped section anywhere in the enlarged image
  - The rectangle within the frame in the top right corner represents the currently magnified section, as well as its position in the image.

You can move directly from one picture to the next in magnification mode, which will then also be displayed with the same magnification.

▶ Press and hold the **PLAY** button while turning the thumbwheel

#### Notes

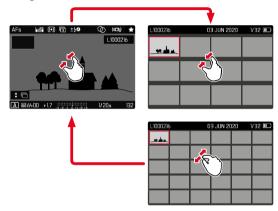
- It may not be possible to enlarge pictures taken with other camera types.
- · Video recordings cannot be enlarged.

## DISPLAYING MULTIPLE RECORDINGS AT ONCE

The camera offers an overview function in which several thumbnail images can be viewed on one screen, which makes it easier to find a specific image. You can choose 12 or 30 images per overview.

#### **OVERVIEW**

Using touch control



- ► Two-finger pinch
  - The display toggles from 12 to 30 thumbnails.

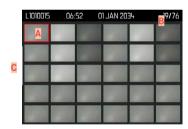
To view other recordings

Swipe up or down

# Using button control

- ► Turn the thumbwheel to the left
  - 12 thumbnails are shown at the same time. Another turn on the thumbwheel increases the number of displayed recordings to 30.





- A Currently selected recording
- B Number of the currently selected recording
- Scrollbar

The currently viewed recording is framed in red and can be selected for a closer look.

# To navigate between recordings

- Press the directional pad left or right as needed or
- ▶ Press and hold the **PLAY** button while turning the thumbwheel

## To display the recording in full size

## Using touch control

- Two-finger spread
- or
- Briefly touch the recording



## Using button control

- ► Turn the thumbwheel to the right or
- Press the thumbwheel button / the PLAY button / the center button

# TAGGING/RATING OF RECORDINGS

Recordings can be tagged as favorites to find them quicker or to simplify the later deletion of multiple recordings. Tagging can be done in regular view mode or in the overviews.

#### Note

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

## Tagging a recording

- Press and hold the Zoom/Lock button
  - The recording is marked with . The icon will appear in the header line on the far right when viewing images in full size, and in the top left corner of the thumbnail in overview mode.

## Removing a tag

- ▶ Press and hold the Zoom/Lock button
  - The marking disappears.

## **DELETING RECORDINGS**

There are several methods available to delete recordings:

- deleting individual recordings
- deleting multiple recordings
- deleting all recordings without a tag/ranking
- deleting all recordings



## Important

• Once deleted, recordings are no longer retrievable.

#### QUICK ACCESS TO DELETE FUNCTIONS

All functions of the playback/review menu can be assigned to the **FN** button. That way, you can access the delete functions you use most frequently with a single button push.

Factory setting: Delete Single

- ▶ Pres and hold the FN button
  - A list of functions of the playback/review menu will appear.



Select the desired function

• The function is assigned to the FN button.

The descriptions in the next few sections presume factory settings.

#### Note

 The assigned function is independent of the current display mode; the delete functions overview can therefore be accessed directly in full screen display mode. That will not apply if the FN button controls an LCD panel control element (e.g. in the deletion screen).

#### **DELETING INDIVIDUAL RECORDINGS**

- ▶ Press the **MENU** button
- ► Select Delete in the Playback/Review menu
  - The Delete screen appears.



- Select the Delete icon ฉี (tap the icon briefly or press the center button)
  - The LED will flash during the delete process. The process may take a few seconds.
  - The next recording will be displayed once deletion is complete. The following message appears if no other recordings are saved on the card: No valid picture to play.

## To cancel deletion and return to the normal Playback/ Review mode

► Select the "Go back" icon ⊃
(tap the icon briefly or press the PLAY button)

#### Notes

- The Delete screen can be called up only by pressing the MENU button when in overview mode, because the menu function
   Delete of the Review menu is not available in this context.
- The "Scroll" and "Magnify" functions continue to be available when the "Delete" screen is active.

## **DELETING MULTIPLE RECORDINGS**

Several recordings can be marked in a Delete overview with twelve thumbnails and can then be deleted all at once. This overview can be reached in two ways.

- ► Turn the thumbwheel to the left
  - The overview screen appears.
- ▶ Press the **MENU** button
- ► Select Delete Multi in the Review menu
  - The Delete overview appears.

or

- ▶ Press the **MENU** button
- ► Select Delete in the Playback/Review menu
  - The Delete screen appears.
- ► Turn the thumbwheel to the left
  - · The Delete overview appears.



Any number of recordings can be selected in this view.

- Select a recording
- ▶ Press the center button/thumbwheel button

or

- ► Briefly touch the recording
  - The recordings selected for deletion are marked with a red Delete icon fi

To delete the selected recordings

- ► Select the Delete icon to (tap the icon briefly or press the center button)
  - The prompt Do you want to delete all marked files? appears.
- ► Select Yes

To cancel deletion and return to the normal Playback/

► Select the "Go back" icon ⊃
(tap the icon briefly or press the PLAY button)

## **DELETING ALL RECORDINGS**

- Press the MENU button
- ► Select Delete All in the Review menu



• The prompt Do you want to delete all files? appears.



► Select Yes

#### Note

 The message No valid picture to play appears after successful deletion. The same picture is displayed again if deletion was unsuccessful. When deleting several or all pictures/recordings, a notification screen may appear for the time needed to process the data.

## **DELETING UNRATED RECORDINGS**

► Press the **MENU** button



- ► Select Delete Unrated in the Review menu
  - The prompt Do you really want to delete all not rated files? appears.
- ► Select Yes
  - The LED will flash during the deletion process. The process may take a few seconds. The next marked recording appears once deletion is complete. The message No valid picture to play appears if no other recordings are saved on the card.

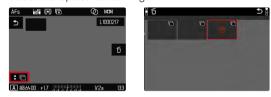
#### **DELETING PICTURE SERIES**

Picture series can be displayed in groups for quick deletion. The pictures will have to be displayed in groups.

- ► Select Play Mode Setup in the main menu
- ► Select Group display mode
- ► Select □n/□ff



► Select the representative image



- Delete
  - All pictures in the picture series will be deleted.

#### PREVIEW OF LATEST RECORDING

Photo and video recordings can be displayed automatically directly after they are taken to e.g. check the success of the recording quickly and easily. A duration for the automatic display can be configured.

- ► Select Preview in the main menu
- Select the desired function or duration in the submenu (Off, 1s, 3s, 5s, Permanent, Shutter pressed)

Penmanent: The most recent recording is displayed until automatic review is ended by pressing the **PLAY** button or by tapping the shutter button.

Shutter pressed: The most recent recording is displayed for as long as the shutter button is pressed down.

#### Notes

- All buttons except the FN button, the menu button and the thumbwheel button change to the regular Review mode and execute their normal functions there for the duration of the automatic review. The camera will remain in Playback/Review mode until it is exited.
- Tagging and deleting can only be done in regular Playback/ Review mode and not during automatic review.
- When pictures were taken with the functions Serial exposures or Interval shooting, then the last image in the series will be displayed or - if the save process is still incomplete - the last image in the series saved to the memory card.
- Where display times were configured (Is, Is, Is) automatic review can be ended immediately by pressing the PLAY button or tapping the shutter button.

#### SLIDE SHOW

A slide show function is available in Review mode, in which the saved images are shown automatically in series. Choose to see all recordings (Play All), only photos (Pictures Only) or only videos (Videos Only) should be displayed. For photos, select how long each image should be displayed (Duration).



## SETTING THE DURATION

- ▶ Press the **MENU** button
- ► Select Slideshow in the Review menu
- Select Duration
- ► Select the desired duration (1s, 2s, 3s, 5s)

#### STARTING THE SLIDE SHOW



- ► Press the **MENU** button
- ► Select Slideshow in the Review menu
- ► Select the desired setting (Play All, Pictures only, Videos only)
  - The slide show will start automatically with the selected recordings and runs in an endless loop until it is exited.

## **ENDING THE SLIDE SHOW**

► Press the **PLAY** button

or

- ► Tap the shutter button
  - The camera switches to the relevant mode.

#### Notes

- An intermediate screen may appear while the data is prepared for playback.
- The settings in <u>Duration</u> remain intact even after the camera is switched off and on again.
- The <u>Slideshow</u> can also be assigned to the **FN** button for quick access (see p. 119).

## VIDEO PLAYBACK

PLAY D appears on screen if you have selected a video file in playback mode.



#### START PLAYBACK

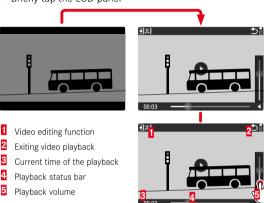
- ► Press the center button or
- ► Touch PLAY ▶ briefly

#### ACCESSING THE CONTROL ELEMENTS

The control elements are displayed when playback is stopped.

## Using touch control

► Briefly tap the LCD panel



## Using button control

▶ Press the center button

## Note

 The control elements disappear after about 3 s. Touching the LCD panel or pressing the center button will cause them to be displayed again.

## PAUSE PLAYBACK

- Briefly tap the LCD panel
- or
- Press the center button

## **RESUMING PLAYBACK/REVIEW**

While the control elements are visible:

## Using touch control

► Touch the LCD panel briefly anywhere in the picture



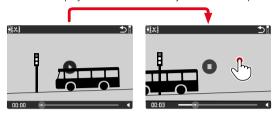
## Using button control

Press the center button

## CONTINUE PLAYBACK FROM ANY POINT IN THE FILE

While the control elements are visible:

► Touch the playback status bar briefly at the desired position

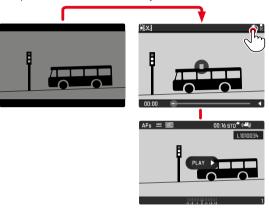


## **END PLAYBACK**

# Using touch control

While the control elements are visible:

► Tap the "Go back" icon **5** briefly



# Using button control

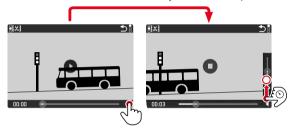
► Press the **PLAY** button

## **SETTING THE VOLUME**

## Using touch control

While the control elements are visible:

- ► Tap the volume icon briefly
- ► Touch the volume status bar briefly at the desired position



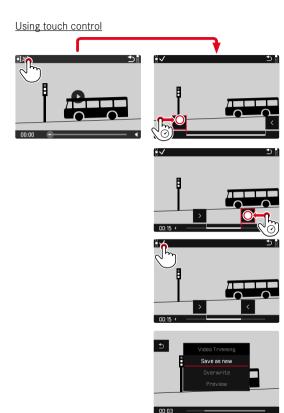
## Using button control

- ▶ Press the directional pad up/down
  - The volume status bar appears.
- ▶ Press the directional pad up (louder) or down (quieter)

#### Note

 Sound is switched off at the lowest part of the bar and the volume icon changes to .

## **VIDEO EDITING**



## Using button control

#### ACCESSING THE VIDEO EDITING FUNCTION

- ► Press the FN button
  - The video editing screen appears, the left cutting mark is highlighted in red (= active).

#### CHANGING THE CURRENT CUTTING POINT

- ▶ Press the directional pad left/right
  - The selected cutting point is highlighted in red (= active).

#### MOVING THE ACTIVE CUTTING POINT

- ► Turn the thumbwheel
  - The currently selected time of the relevant cutting point is displayed at the bottom left of the footer line. A still of the video sequence at that point is displayed in the background.

#### CUTTING

- Press the FN button to confirm the cuts
  - The Video Trimming menu appears.
- Select a function from the Video Trimming menu (Save as new, Overwrite, Preview)

Save as new	The new video is <u>additionally</u> saved, the original video remains unchanged.
Overwrite	The newly cut video is saved and the original one is deleted.
Preview	The new video is played. The newly cut video is not saved and the original remains unchanged.

#### CANCELLING THE VIDEO EDITING FUNCTION

The editing function can be canceled at any time, provided no selection was made in the Video Trimming menu.

- ▶ Press the PLAY button
  - The video playback screen reappears.

#### Notes

- In all three cases, a notification screen appears while the data is being processed. Then the new video is played back.
- The numbering of existing recordings will not be changed when Save as new is selected. The newly created video will be added to the end of the series of videos.

## **OTHER FUNCTIONS**

## **USER PROFILES**

This camera allows the permanent storage of any menu settings, to e.g. access them quickly and easily for recurring conditions/image objects. Six memory slots are provided to store custom settings, plus the factory setting, which is always available and cannot be modified (Default Profile). You can assign names for the saved profiles yourself.

Any profiles configured for the camera can be saved to a memory card for use on another camera. Similarly, profiles saved on a memory card can be transferred to the camera.





## SAVING CURRENT SETTINGS AS A USER PROFILE

Saving settings/creating a profile.

- Create custom settings for the desired functions via menu control
- ► Select User Profile in the main menu
- Select Manage Profiles
- ► Select Save as Profile
- ► Select a memory slot



► Confirm the selection

## Note

• Existing profiles are overwritten with the latest settings.

#### RENAMING PROFILES

- ► Select User Profile in the main menu
- ► Select Manage Profiles
- ► Select Rename Profiles
- ► Select a profile
- ► Enter a name for the profile via the associated submenu keyboard and confirm your input (see p. 47)

# **APPLY/ACTIVATE PROFILES**

Factory setting: Default Profile

- ► Select User Profile in the main menu
  - A list of profile names is displayed.
- ▶ Select a profile
  - The selected profile is marked as Active.
  - · Free memory slots appear in gray.

## **DELETING PROFILES**

- ► Select User Profile in the main menu
- ► Select Manage Profiles
- ▶ Select Delete
- ► Select a profile
- ► Confirm the selection

# EXPORTING/IMPORTING PROFILES TO/FROM THE MEMORY CARD

- ► Select User Profile in the main menu
- ► Select Manage Profiles
- ► Select Export Profiles or Import Profiles
- Confirm the selection

#### Notes

- When importing and exporting, <u>all</u> profile slots are transferred to the card, i.e. including any empty slots. Any existing profiles stored in the camera will be overwritten, during the profile import. Individual profiles cannot be imported or exported.
- Any existing set of profiles will be replaced on the memory card during an export without an acknowledgment prompt.

## DATA MANAGEMENT

## DATA STRUCTURE ON THE MEMORY CARD

#### **FOLDER STRUCTURE**

The files (= pictures) on the memory cards are saved in automatically generated folders. The first three characters signify the folder number (numerals), the last five the folder name (letters). The first folder is assigned the name "100LEICA", the second "101LEICA". A folder will always be created with the next available number; you can have max. 999 folders.

#### **FILE STRUCTURE**

The file names in these folders consist of eleven characters. In the factory settings, the first file is named "L1000001.XXX", the second "L1000002.XXX", etc. The first letter can be selected, the "L" from the factory settings denotes the camera brand. The first three characters signify the folder number (numerals). The next four digits denote the sequential file number. Once file number 9999 is reached, then a new folder will be automatically created, in which the file numbering begins at 0001 again. The last three places after the dot denote the file format (DNG or JPG).

#### Notes

- When using memory cards that were not formatted with this camera, the file numbering will begin with 0001 again. Should the memory card already contain a file with a higher number, then numbering will be continued from that number.
- A relevant message will be displayed on the LCD panel once folder number 999 and file number 9999 are reached, and all numbering must be reset.
- Format the memory card and reset the picture number right after to reset the folder number to 100.

#### EDIT FILE NAMES

- ► Select Edit File Name in the main menu
  - · A keyboard submenu is displayed.
  - The input line contains the factory setting "L" as the first letter of the file name. Only this letter can be changed.
- ► Enter a letter of your choice (see p. 47)
- ► Confirm

#### Notes

- The change to a file name applies to all subsequent pictures or until a new change is made. The sequential number will not be affected; but it will be reset when a new folder is created.
- During a reset to factory settings, the first letter will always be reset to "L".
- Lower case letters are unavailable.

## **CREATING A NEW FOLDER**

- ► Select Reset Image Numbering in the main menu
  - A relevant prompt is displayed.
- ► Confirm the creation of a new folder (Yes) or cancel the new folder (No)

#### Note

 The name part (first letter) of a new folder created this way remains unchanged. The file numbers in that folder will start again at 0001.

# RECORDING THE IMAGE LOCATION WITH GPS (ONLY IN CONNECTION WITH THE LEICA FOTOS APP)

The GPS (global positioning system) allows the pinpointing of a receiver anywhere in the world. The GPS function is activated automatically when a connection to the Leica FOTOS app is active. The camera will then continuously receive the current GPS data (latitude and longitude, elevation above sea level) and writes this information into the Exif data of the images.

#### Notes

- This function is available only as long as the camera is on line with the Leica FOTOS app.
- The use of GPS and associated technologies may be restricted in some countries or regions. Violations will be prosecuted by local authorities
- You should therefore contact your travel agent or the embassy of your destination country for relevant information beforehand.

#### FORMATTING A MEMORY CARD

Memory cards that have already been in use with this camera will usually not require formatting. An unformatted memory card that is inserted into the camera for the first time must be formatted. We recommend formatting memory cards from time to time, because residual data traces (data pertaining to individual pictures) may reduce the card's memory capacity.

- ► Select Format Card in the main menu
- ► Confirm the selection

#### Notes

- Never switch off the camera while data transfer is in progress.
- <u>All</u> data stored on the memory card will be lost during formatting. Formatting will <u>not</u> be prevented by the deletion protection set for individual pictures.
- All images should therefore be regularly transferred to a safe mass storage medium, e.g. the hard disk of a computer.
- A simple formatting process will initially not irretrievably destroy
  existing data on the card. Only the directory will be deleted,
  which means the data will no longer be directly accessible. Data
  access can be restored with appropriate software. Only data
  that is overwritten when new data is saved will actually be
  irretrievable.
- A memory card should be formatted again in the camera if it was formatted in another device, e.g. a computer.
- Contact your retailer or Leica Customer Care if the memory card cannot be formatted/overwritten (see p. 164).

#### **DATA TRANSFER**

Data can be conveniently transferred to mobile devices via Leica FOTOS (see p. 138). Alternatively, a card reader can be used for the transfer.

#### Note

• We recommend using a card reader for the transfer of large files.

# **USING RAW DATA (DNG)**

You will need specific software for editing data in DNG format, e.g. the professional raw data converter Adobe® Photoshop® Lightroom®.

It allows high-quality conversions of stored raw data. It furthermore provides quality-optimized algorithms for digital color processing, delivering exceptionally low-noise photographs with incredible resolution. During editing, you can adjust parameters like gradation, sharpness etc. in retrospect to achieve the best possible image quality.

You will receive a temporary membership for the Adobe Creative Cloud Foto subscription with the purchase of this camera. You will have to register the camera online to take advantage of this membership: <a href="club.leica-camera.com">club.leica-camera.com</a>

## **RESETTING THE CAMERA TO FACTORY SETTINGS**

This function allows you to reset all your custom menu settings back to the factory settings. You can optionally exclude the user profiles, WiFi and Bluetooth settings, as well as the image numbering from the reset individually.

- ▶ Select Reset Camera in the main menu
  - The prompt Reset Camera Settings? appears.
- ► Confirm or reject the reset to factory settings (Yes) / (No)
  - Selecting will cancel the reset and the display will return to the main menu. Selecting will trigger additional prompts regarding the settings you can opt to keep.
- ► Confirm or reject the reset of the user profiles (Yes) / (No)
- ► Confirm or reject the reset of the WiFi and Bluetooth settings

  (Yes) / (No)
- ► Confirm or reject the reset of the image numbering (Yes) / (No)
  - The message Please Restart the Camera appears.
- ► Switch the camera off and on again

#### Notes

- Date & time, as well as the preferred language will have to be set up again after a reset. Relevant prompts will appear on screen.
- You reset the image file numbering separately via the menu item
   Reset Image Numbering (see p. 133).

## FIRMWARE UPDATES

Leica is continuously working on the further improvement and optimization of your camera. Since many camera functions are entirely controlled by software, some of these improvements and additions to the functional scope can be installed in retrospect. Leica offers firmware updates at irregular intervals, which you can download from our website.

Leica will notify you of any new updates, once you have registered your camera.

Find out which firmware version is currently installed

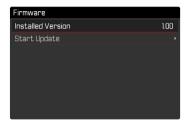
- ► Select Camera Information in the main menu
  - The current firmware versions are displayed.

More information about registering, firmware updates and how to download them to your camera, as well as any amendments and additions to this manual can be found in the customer area of our website at:

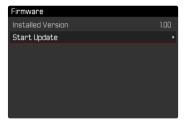
club.leica-camera.com

#### **UPDATING THE CAMERA FIRMWARE**

- Download the latest firmware version
- ► Save the download to the memory card
- ► Insert the memory card into the camera
- Switching the camera on
- ► Select Camera Information in the main menu
- ► Select Firmware



- ▶ Select Start Update
  - A prompt with information about the camera is displayed.



- ► Check the version information
- Select Yes
  - The prompt Save profiles on SD Card? appears.

- ► Select Yes/No
  - The update will start automatically.
  - Once the process has completed successfully, a relevant on-screen message and prompt to restart the device will appear on screen.
- ► Switch the camera off and on again

#### Notes

- The camera must not be switched off before the update is completed.
- The message insufficient battery update not possible will appear if the battery is not sufficiently charged. Please recharge the battery and then repeat the process described above.
- Data & time, as well as the preferred language will have to be set up again after the restart. Relevant prompts will appear on screen.
- You will find additional device and country-specific registration marks and numbers in the Camera Information submenu.

# **LEICA FOTOS**

The camera can be controlled remotely using a smartphone/tablet PC. This will require an installation of the Leica FOTOS app on the mobile device.

► Scan the following QR code with the mobile device



or

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

## CONNECTING

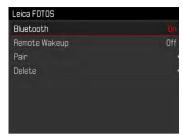
## FIRST-TIME CONNECTION TO A MOBILE DEVICE

The connection is established via Bluetooth. A pairing of the camera and the mobile device is required for a first-time connection to a mobile device.

#### ON THE MOBILE DEVICE

- ► Activate Bluetooth
- ► Launch the Leica FOTOS app
- ► Select the camera model

#### IN THE CAMERA



- ► Select Leica FOTOS in the main menu
- ► Select Bluetooth
- ▶ Select □ □
  - · Activate the Bluetooth function.
- Select Pairing
- ► Follow the Leica FOTOS instructions
  - The process adds the camera to the list of known devices.
  - The icons "Bluetooth" and "GPS" appear on the LCD panel once a connection is established.

#### Notes

- The pairing process may take a few minutes to complete.
- Each mobile device only needs to be paired with the camera once. The process adds the device to the list of known devices.
- GPS data will be automatically determined and written to the Exif data when pictures are taken while the camera is connected to the Leica FOTOS app.

#### CONNECTING WITH PAIRED DEVICES

- ► Select Leica FOTOS in the main menu.
- ► Select Bluetooth
- ► Select □n
  - · Activate the Bluetooth function.
  - The camera connects to the mobile device automatically.

#### Notes

- Should there be more than one known device in the vicinity of the camera, then it will automatically connect to the first device responding. A favorite mobile device cannot be specified.
- Disconnect and reconnect if the wrong device was connected.

## SHUTTING DOWN THE CONNECTION

It is recommended to shut down the WLAN provided by the camera, once a connection to a mobile device is no longer needed.

- ► Select Leica FOTOS in the main menu
- ► Select Bluetooth
- ▶ Select □ff

#### REMOVING PAIRED DEVICES FROM THE LIST

We recommend removing rarely used devices from the list of known devices to prevent unwanted connections.

- ► Select Leica FOTOS in the main menu
- ► Select Delete
- ► Select the relevant device
  - A security prompt appears on the LCD panel.
- ► Select Yes

#### Note

 The pairing process will have to be repeated to reconnect a deleted device to the camera.

## REMOTE CAMERA CONTROL

You can take pictures and record video remotely via the mobile device, and can also change image settings or transfer data to the mobile device. A list of available functions and instructions for their use can be found in the Leica FOTOS app.

#### REMOTE CAMERA ACTIVATION

The camera can be activated remotely from off or standby if this function is activated in the camera. The Bluetooth function must be active.

- ▶ Select Leica FOTOS in the main menu
- ► Select Remote Wakeup in the submenu
- ► Select 🕠
  - The camera will scan for known devices and automatically establishes a connection.

# Important information

- Remote activation <u>will activate the camera even if it was</u> switched off via the main switch.
- Accidental remote camera activation may result in unwanted pictures taken and excessive power consumption.
- A third-party device can provided is has been paired with the camera – access the camera remotely if your own mobile device is not currently connected or its Bluetooth function is deactivated. This poses a danger of unauthorized access to your data or camera functions.

#### Solution

- Only activate this function just before you want to use it.
- Disable the function as soon as it is no longer needed.

# CARE/STORAGE

We recommend the following if the camera will not be used for an extended period of time:

- Switching the camera off
- Remove the memory card
- Remove the battery (after approx. 2 months the set date and time will be lost)

## **CAMERA HOUSING**

- Keep your equipment meticulously clean, as any kind of dirt residue presents a breeding ground for micro organisms.
- Only clean the camera with a soft, dry cloth. Stubborn dirt should first be moistened with a watered-down detergent and can then be wiped away with a dry cloth.
- Wet a soft cloth with tap water, wring it out thoroughly and use it to wipe down the camera. Then wipe it down thoroughly with a dry cloth.
- Wipe the camera with a clean, lint-free cloth to remove stains and fingerprints. Tougher dirt in hard to reach corners of the camera housing can be removed with a small brush. Take care not to touch the shutter blades.
- Store the camera in a closed and padded container to prevent friction damage and protect it against dust accumulation.
- Keep the camera in a dry, sufficiently ventilated place, where it
  will not be subjected to high temperatures and humidity. Make
  sure to remove all moisture from the camera if it was used in
  humid conditions.
- Do not store the camera in a leather case for extended periods of time to prevent fungal contamination.
- Empty you camera bag completely if it ever gets wet during use.
   Your equipment might otherwise be subjected to moisture and tanning residue released by the moist leather.

- All mechanical bearings and sliding surfaces on your camera are lubricated. Remember to press the shutter button several times every three months to prevent the lubrication points hardening if the camera will not be used for an extended period of time. We also recommend repeated adjustment and use of all the other operating elements.
- When using your camera in tropical climates, make sure to expose the equipment to sunlight and fresh air as much as possible to prevent fungal growth. Storage in airtight containers or cases is recommended only in conjunction with a desiccant like silica gel.

## **LENS**

- A soft-bristle brush will usually suffice to remove dust from the outer lenses. Remove more severe soiling with a clean, soft cloth that is completely free of foreign matter. Wipe the lens in a circular motion from the center outward. We recommend using microfiber cloths that come in a protective container and are available from photography shops and other optical retailers. These cloths are machine-washable at 40°C. Do not use fabric softener and do not iron them. Never use spectacle lens cleaning cloths, as these are soaked in chemicals, which could damage the glass of the camera lenses.
- Attach a transparent UVA filter for optimal front lens protection in unfavorable conditions (e.g. sand, salt water spray). Please remember that the filter may create unwanted light reflections in some backlight situations and in case of high contrasts.
- Lens caps also protect the lens against accidental fingerprint smudges and rain.
- All mechanical bearings and sliding surfaces on your lens are lubricated. Make sure to periodically move the focus ring and the aperture setting ring to prevent seizing if the lens will not be used for an extended period of time.

# VIEWFINDER/LCD PANEL

 Switch off your camera and leave it to stand at room temperature for around 1 hour if condensation has formed on or in the camera. The condensation will disappear, once the camera temperature has reached room temperature.

## **RECHARGEABLE BATTERY**

 Lithium-ion rechargeable batteries should only be stored partially charged, i.e. not fully depleted or fully charged. The camera LCD panel will show the current charge level of the battery. Charge the battery twice a year for around 15 minutes to avoid deep discharge in case of very long storage periods.

## **MEMORY CARDS**

- Make sure to store memory cards in their anti-static container when not in use.
- Do not store memory cards where they will be exposed to high temperatures, direct sunlight, magnetic fields or static electricity. Always remove the memory card if the camera will not be used for an extended period of time.
- We recommend formatting the memory card from time to time, because fragmented residual data from deleted files may block some of its storage capacity.

# FAQ

Problem	possible cause to be verified	Troubleshooting suggestions
Battery issues		
Battery is depleted too quickly	Battery too cold	Warm the battery (e.g. in pants pocket) and only insert directly before use
	Battery too hot	Allow battery to cool down
	LCD panel or EVF set too bright	Reduce brightness
	Power save mode deactivated	Activate Auto Power Off
	AF mode permanently activated	Select other mode
	Permanent WLAN connection	Deactivate WLAN when not in use
	Continuous use of LCD panel (e.g. in Live View mode)	Deactivate the function
	Battery has been recharged too many times	The battery has reached the end of its operating time Replace battery
	Preview of the recorded images (Preview) activated	Deactivate the function
Charging process not starting	Incorrect battery polarization or faulty charger connection	Check polarization and connection
Charging takes too long	Battery too hot or too cold	Charge the battery at room temperature
Charging pilot light is on, but battery isn't charging	The battery contacts are dirty	Clean the contacts with a soft, dry cloth
	Battery has been recharged too many times	The battery has reached the end of its operating time Replace battery
Camera problems		
The camera suddenly switches itself off	Battery is depleted	Charge or replace the battery
The camera won't switch on	Battery is depleted	Charge or replace the battery
	Battery too cold	Warm the battery (e.g. in pants pocket)
Camera is heating up	Heat development due to high-res video recording (4K) or serial exposures with DNG	Not a fault; allow camera to cool down if it gets too hot
The camera switches off again immediately after it is switched on	Battery is depleted	Charge or replace the battery
Camera does not recognize the memory card	The memory card is not compatible or defective	Replace the memory card
	Memory card is incorrectly formatted	Format the memory card in the camera

Menus and displays		
Electronic viewfinder is dark	EVF brightness is set too low	Set the EVF brightness
Display language is not English	-	Select English in the Language menu
The LCD panel is to dark or too bright/not clear	The brightness setting is incorrect	Adjust the display brightness
	Viewing angle is too small	View it at a perpendicular angle
	Brightness sensor blocked	Make sure that the brightness sensor is not blocked
Favorites menu does not appear	The favorites menu is empty	Add at least one function
Live View stops suddenly or doesn't start	The camera is hot due to high ambient temperature, extended Live View operation, extended video recording or serial exposures	Allow camera to cool down
The brightness in Live View mode is not the same as in the pictures	The brightness settings for the LCD panel have no influence over the exposures	Adjust the brightness settings as needed
	Exposure Simulation is deactivated	Activate the function
The number of remaining exposures does not count down after a picture is taken	The exposure requires only very little memory space	This is not a fault; the number of remaining exposures is calculated as approximations
Recording		
Image noise appears on the LCD panel/in the viewfinder when the shutter button is pressed to the first pressure point	The gain is increased to aid image composition if the object is insufficiently lit with reduced aperture opening	Not a fault - picture quality will not be impacted
LCD panel/viewfinder deactivates after a very short time	Power Save settings are activated	Change the settings as needed
The display switches off after the picture is taken/ the LCD panel goes dark after the picture is taken	Flash loads after picture is taken, LCD panel deactivates during load time	Wait until the flash is loaded
Flash won't fire	The flash cannot be used with the current settings	Refer to the list of flash function-compatible settings
	Battery is depleted	Charge or replace the battery
	Pressing the shutter button while flash is still loading	Wait until the flash is loaded
	Automatic bracketing or Picture series is activated	Change the setting
The flash does not fully illuminate the object	Object is outside the flash range	Move object into flash range
	Flash is covered	Make sure the th flash unit is not covered by your finger or some object
Image does not sharpen automatically	AF is deactivated	Activate AF

The camera won't take a picture/shutter button is	Memory card is full	Replace the memory card
	The memory card is not formated	Reformat the memory card (Caution: Loss of data!)
	The memory card is write protected	Deactivate the write protection on the memory card (small lever on the side of the memory card)
	Dirt on the memory card contacts	Clean the contacts with a soft cotton or linen cloth
	The memory card is damaged	Replace the memory card
	The sensor is overheating	Allow camera to cool down
	The camera has switched off automatically (Auto Power Off)	Switch the camera on again deactivate auto shutdown as needed
	Picture data is being written to the memory card and the cache is full	Wait
	Noise reduction function is working (e.g. after night photography with long exposure times)	Wait or deactivate noise reduction
	Battery is depleted	Charge or replace the battery
	Camera is processing a picture	Wait
	Image numbering has reached its limit	See section "Data Management"
No face detection/faces are not recognized	Face is covered (sunglasses, hat, long hair, etc.)	Remove distracting objects
	Face takes up to little space in the picture composition	Change image composition
	Face is tilted or horizontal	Keep face straight
	Camera not held straight	Hold camera straight
	Face is insufficiently lit	Use flash, improve illumination
Camera selects incorrect object	The incorrectly selected object is closer to the image center that the main object	Change the image section or take picture using the focus lock
	The incorrectly selected object is a face	Deactivate face detection
No continuous recording available	The camera is overheated and the function was temporarily disabled to protect the camera	Allow camera to cool down
The image on the LCD panel displays lots of noise	Light enhancement function of the LCD panel in dark surroundings	Not a fault – picture quality will not be impacted
Image storage takes a long time	Noise Suppression is activated for long-term exposures	Deactivate the function
	The memory card inserted is slow	Use a suitable memory card
Electronic viewfinder is dark	Switchover between EVF and LCD incorrectly set	Select a suitable setting
Camera does not focus	Desired object part is too close to the camera	Select Macro mode
	Desired object part is very far away	Exit Macro mode
	Object not suitable for AF	Use Focus lock or select manual focus

Viewfinder is out of focus		Check the diopter setting and adjust as needed
AF metering field is framed in red with activated AF; images out of focus	Focusing was unsuccessful	Try to focus again
No AF metering field selectable	Focus ring not in AF position	Turn the focus ring to the AF position
	Automatic Metering Field Control, Portrait Mode in the Scene Modes menu or Face Detection in AF mode is selected	Select other control mode
	Image Review is activated	Deactivate Image Review
	Camera is in Standby mode	Press the shutter button to the first pressure point
AF assist light does not light up	The AF mode "AFc" is selected or "Continuous AF" is activated in AFs mode	Change the mode
	Camera is recording a video or is in Live View mode	Change the mode
	Function is deactivated	Activate AF
Video recording		
No video is recorded	The camera is overheated and the function was temporarily disabled to protect the camera	Allow camera to cool down
Video recording stops	Maximum length of individual video sequence was reached	
	The memory card's write speed is too low for the selected video resolution/compression	Insert another memory card or change the storage method
Review/playback and video/image manageme	ent	
Selected images cannot be deleted	Some of the selected images are write protected	Remove write protection (using the device with which the file was originally set to write protected)
File numbering does not start at 1	The memory card contains previously stored images	See section "Data Management"
The time and date settings are incorrect or are not displayed	The camera has not been in use for an extended period of time (the battery was removed)	Insert a charged battery and configure the correct settings
The time and date stamp on images are incorrect	Time settings are incorrect	Set the time correctly Caution: Time settings will be lost if the camera is not used/remains in storage with a depleted battery over an extended period of time
The time and date stamp on images are unwanted	Setting was ignored	Cannot be removed in retrospect Deactivate the function as needed
Pictures/recordings are damaged or missing	The memory card was removed while the readiness indicator was flashing	Never remove the memory card while the readiness indicator is flashing. Charge the battery.
	The memory card formatting is faulty or the card is damaged	Reformat the memory card (Caution: Loss of data!)

The most recent recording is not displayed on the LCD panel	Preview is deactivated	Activate Preview	
Picture quality			
The picture is too bright	Light sensor was covered while picture was taken	Make sure that the light sensor is not obstructed	
Image noise	Long exposure times (>1 s)	Activate the noise suppression function for long exposure times	
	ISO sensitivity set too high	Decrease ISO sensitivity	
Round white stains, similar to soap bubbles	Flash photography in very dark environment: reflections of dust particles	Deactivate the flash	
Images are out of focus	Lens is dirty	Clean the lens	
	Lens is obstructed	Make sure that lens is unobstructed	
	Camera moved during exposure	Flash, modes	
		Mount the camera on a tripod	
		Use shorter shutter speeds	
	Macro Function	Select the appropriate mode	
Images are overexposed	Flash is activated in bright surroundings	Change the flash mode	
	Strong light source in the image	Avoid strong light sources in picture composition	
	(Half) backlight falling into the lens (also from light sources outside the image range)	Use the lens hood or change to another subject	
	Selected exposure time is too long	Select a shorter exposure time or turn the shutter speed setting dial to <b>A</b>	
Out of focus/picture stabilizer not functioning	Exposure at a dark location without flash	Use a tripod	
The image is grainy or there is image noise	ISO sensitivity set too high	Decrease ISO sensitivity	
Horizontal stripes	Picture was taken with electronic shutter under a light source like a fluorescent lamp	Try shorter shutter speeds	
No images are displayed	No memory card inserted	Insert the memory card	
	The recordings were taken with another camera	Transfer the recordings to another device to view them	
Images cannot be displayed	File name of the image was changed on a PC	Use appropriate software for image transfers from a PC to the camera	
Video quality			
Video recordings show flickering/stripes	Light source interference in artificial lighting	Select a different frame rate (suitable for the local Alternating current (AC) grid frequency) under Video Resolution	
Camera noise in video recording	The setting wheels were used	Avoid using the setting wheels during video recordings	

No sound on video recording	Playback volume is set too low	Increase playback volume	
	Microphone was covered during recording	Make sure the microphone is not obstructed while recording video	
	Speakers are covered	Make sure that speakers are unobstructed during playback	
	Microphone was deactivated while recording	Activate the microphone	
Flickering or horizontal stripes in the video recording	CMOS sensors will display this phenomenon when light sources like LED lamps or fluorescent tubes are used	Quality may be improved by selecting a manual shutter speed (e.g. 1/100 s)	
Smartphones/WLAN			
WLAN connection gets interrupted	Camera deactivates when it overheats (safety feature)	Allow camera to cool down	
Cannot pair with a mobile device	The camera was already paired with the mobile device	Delete the camera registration from the Bluetooth settings in the mobile device and repeat pairing process	
Mobile device connection/image transfer not	The mobile device is too far away	Bring the devices closer to each other	
working	Interference from other devices in the vicinity, e.g. other smartphones or a microwave oven	Increase distance to interfering devices	
	Interference from multiple mobile devices in the vicinity	Re-establish the connection/remove other mobile devices	
	Mobile device is currently connected to another device	Check connection	
Camera does not appear on the WLAN configuration screen of the mobile device	Mobile device does not recognize camera	Switch the WLAN function of the mobile device off and on again	

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	Favorites <b>menu</b>	FN button	Thumbwheel button	Page
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<sup>\*</sup> The Magnification function is only available via direct access and not via the main menu.

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# **TECHNICAL DATA**

**CAMERA** 

Designation

Leica Q2 Monochrom

Camera type

Digital 35 mm compact camera

Type no.

4889

Order No.

19 055 EU/JP/US, 19 056 ROW (black)

**Buffer memory** 

DNG™: 14 recordings JPG: 25 recordings

Storage medium

UHS-II (recommended), UHS-I, SD cards up to 2 GB / SDHC cards up to 32 GB / SDXC cards up to 512 GB  $^{\prime}$ 

Material

Full metal housing: Magnesium die-cast, leather covering

**Operating conditions** 

0 to +40 °C

Interfaces

ISO accessory shoe with additional control contacts for Leica flash units

**Tripod thread** 

A 1/4 DIN 4503 (1/4") with stainless steel in the base

Dimensions (W x H x D)

130 x 80 x 87 mm

Weight

approx. 718 g/637 g (with/without battery)

SENSOR

Sensor size

CMOS sensor, 50.4/47.3 MP (total/actual)

Processor

Leica Maestro series (Maestro III)

File formats

Photo: DNG™ (raw data), DNG+JPG, JPG Video: MP4 (AAC sound recording format)

Resolution

DNG™: 8368 x 5584 pixels (46.7 MP)

JPG: 8368 x 5584 pixels (46.7 MP), 6000 x 4000 pixels (24 MP), 4272 x 2848 pixels (12 MP)

File size

DNG™: 84.4 MB

JPG: depending on resolution and image content

Color depth

DNG™: 14 bit IPG: 8 bit

Color space

sRGB

Video resolution/frame rate

©4K (4096 x 2160 pixels): 24 fps 4K (3840 x 2160 pixels): 24 fps, 30 fps

Full HD (1920 x 1080 pixels): 24 fps, 30 fps, 60 fps, 120 fps

**LENS** 

Designation

Leica Summilux 28 f/1.7 ASPH., 11 lenses in 9 segments, 3 aspherical lens areas

Lens filter thread

E49

#### **Digital Zoom**

Optionally approx. 1.25x (equivalent to 35 mm), approx. 1.8x (equivalent to 50 mm) or approx. 2.7x (equivalent to 75 mm)

# Image stabilization

Visual compensation system for picture and video recordings

#### Aperture range

1.7 to +16 in 1/3 EV increments

VIEWFINDER/LCD PANEL

# Viewfinder (EVF)

Resolution: 3.68 MP, 120 fps, magnification: 0.76x, aspect ratio: 4:3, exit pupil position: 20 mm, setting range  $\pm 3/-4$  diopters, with eye sensor for automatic switchover between viewfinder and LCD panel

# LCD panel

3" TFT LCD, 1,036,800 dots, touch control available

#### SHUTTER

# Shutter type

Mechanical central shutter or optional electronic shutter

# Shutter speeds

Mech. shutter: 120 s to 1/2000 s

Electronic shutter function: 1/2500 s to 1/40000 s

Flash Synchronization: up to 1/2000 s

#### Shutter button

Two-step (1. step: Activation of the camera electronics including exposure metering and exposure lock (in aperture priority mode); 2. step: firing)

# Self-timer

Delay time: 2 s or 12 s

#### **Drive Mode**

Sinale

Continuous - Low Speed approx. 2 fps

Continuous – Medium Speed approx. 6 fps

Continuous – High Speed approx. 10 fps

Continuous - Very High Speed approx. 20 fps

Interval Shooting

Exposure Bracketing

#### FOCUSING

# Working range

30cm to ∞

With macro setting: from 17 cm

#### Focus Mode

Automatic (Autofocus) or manual

With manual setting: optional magnifying glass function

(Auto Magnification) and edge marking (Focus Peaking) available as

focus aids

# Autofocus system

Based on contrast metering

#### Autofocus modes

AFs (exposure only after successful focusing), AFo (anytime exposure), AF setting can be saved

# Autofocus metering methods

Spot (can be shifted), Field (can be shifted), Multi-Field, Face Detection

#### **EXPOSURE**

# **Exposure metering**

TTL (exposure metering through the lens), with working aperture

# **Exposure Metering Methods**

Spot, Center-Weighted, Multi-Field

#### **Exposure compensation**

±3 EV in 1/3 EV increments

# Automatic bracketing

3 or 5 exposures, up to  $\pm 3$  EV, in 1/3 EV increments

Shift function: up to  $\pm 9$  EV

# ISO sensitivity range

Auto ISO: ISO 200 to ISO 100 000 Manual: ISO 100 to ISO 100 000

#### FLASH EXPOSURE CONTROL

#### Flash unit connector

Via accessory shoe with central and control contacts

# Flash sync time

← : 1/2000 s, slower shutter speeds available, automatic changeover to TTL linear flash mode with HSS-compatible Leica system flash units if sync time is undercut

# Flash exposure metering

Using center-weighted TTL pre-flash metering with Leica flash units (SF 26, SF 40, SF 60) or with system-compatible flash units, remote controlled flash SF C1

#### Flash exposure compensation

SF 40: ±2 EV in 1/2 EV increments SF 60: ±2 EV in 1/3 EV increments

#### **EQUIPMENT**

#### Microphone

Stereo

#### Speaker

Mono

#### WLAN

WLAN function for connecting to the Leica FOTOS app. The Leica app is available from the Apple App Store™ or the Google Play Store™. Complies with Wi-Fi IEEE802.11b/g/n, 2.4 GHz, channel 1-11 (2412-2462 MHz) and Wi-Fi IEEE802.11ac, 2.4 GHz & 5 GHz, channel 39-48 (5180-5240 MHz), channel 52-64 (5260-5320 MHz), channel 100-140 (5500-5700 MHz) (standard WLAN protocol), encryption method: WLAN-compatible WPA™/WPA2™

#### **GPS**

Not available everywhere due to country-specific legislation; can be added via the Leica FOTOS app. Data is written to Exif header of the picture files.

#### Bluetooth

Bluetooth v4.2 (Bluetooth Low Energy (BLE)), 2402 to 2480 MHz

# Menu languages

English, German, French, Italian, Spanish, Russian, Japanese, Simplified Chinese, Traditional Chinese, Korean

#### POWER SUPPLY

# Rechargeable battery (Leica BP-SCL4)

Lithium-ion rechargeable battery, rated voltage: 7.2 V (DC); capacity: 1860 mAh (min.), approx. 340/300 recordings (LCD/EVF, based on CIPA standard); charging time: approx. 140 min (after deep discharge); manufacturer: Panasonic Energy (Wuxi) Co. Ltd., Made in China

# Charger (Leica BC-SCL4)

Input: AC 100–240 V, 50/60 Hz, 0.25 A, automatic switchover; Output: DC 8.4 V 0.85 A; Manufacturer: Salom Electric (Xiamen) Co., Ltd., Made in China

# 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.

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