Dear Customer,
We would like to take this opportunity to thank you for purchasing this LEICA V-LUX 2. Please read these instructions carefully and keep them handy for future reference.

Carefully observe copyright laws.
• Recording of pre-recorded tapes or discs or other published or broadcast material for purposes other than your own private use may infringe copyright laws.
Even for the purpose of private use, recording of certain material may be restricted.

Notice:
Please note that the actual controls, components, menu items, menu screen illustrations etc. of your LEICA V-LUX 2 may look somewhat different from those shown in the illustrations in these instructions.
Information for Your Safety

To reduce the risk of fire, burns, or shock hazard and annoying interference:

- Use only the recommended accessories.
- Do not expose this equipment to rain or moisture, dripping or splashing water and make sure no objects filled with liquids such as vases are placed on the equipment.
- Do not expose to heat above 60 °C (140 °F).
- Do not remove the cover (back): there are no user serviceable parts inside.
- Refer servicing to your Leica dealer, an authorized Leica service station / the Leica distributor in your country (for addresses, see Warranty Card), or the Leica Customer Service department (for address (→78)).
- The mains outlet must be located near the connected equipment and it must be easily accessible.
About the battery pack

CAUTION
Battery pack (Lithium ion battery pack)
• Use the specified unit to recharge the battery pack.
• Do not use the battery pack with equipment other than the specified unit.
• Do not get dirt, sand, liquids, or other foreign matter on the terminals.
• Do not touch the plug terminals (+ and −) with metal objects.
• Do not disassemble, remodel, heat or throw into fire.
If any electrolyte should come into contact with your hands or clothes, wash it off thoroughly with water.
If any electrolyte should come into contact with your eyes, never rub the eyes. Rinse eyes thoroughly with water, and then consult a doctor.

CAUTION
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by Leica Camera AG (→50). Dispose of used batteries according to the instructions. (→48)

• Do not heat or expose to flame.
• Do not leave the battery(ies) in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.

Warning
Risk of fire, explosion and burns. Do not disassemble, heat above 60 °C (140 °F) or incinerate.

(U.S. only)
A recyclable lithium ion/polymer battery powers the product you have purchased. Please call 1-800-8-BATTERY for information on how to recycle this battery.

This Class B digital apparatus complies with Canadian ICES-003.
FCC Note: (U.S. only)
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, follow the attached installation instructions and use only shielded interface cables with ferrite core when connecting to computer or peripheral devices.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate this equipment.

Declaration of Conformity
Trade Name: Leica
Model No.: LEICA V-LUX 2
Responsible party/Support contact: Leica Camera Inc.
1 Pearl Court, Unit A
Allendale, New Jersey 07401
Tel.: +1 201 995 0051 232
Fax: +1 201 995 1684
e-mail: olesin@aol.com

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Caution for AC mains lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug. Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark or the BSI mark on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:
Blue: Neutral, Brown: Live.
As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use
Remove the connector cover.

How to replace the fuse
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below. Illustrations may differ from actual AC mains plug.
1. Open the fuse cover with a screwdriver.
2. Replace the fuse and close or attach the fuse cover.
About the battery charger

**CAUTION!**

- Do not install or place the charger in a bookcase, built-in cabinet or in another confined space. Ensure it is well ventilated. To prevent risk of electric shock or fire hazard due to overheating, ensure that curtains and any other materials do not obstruct the ventilation vents.
- Do not obstruct the charger’s ventilation openings with newspapers, tablecloths, curtains, and similar items.
- Do not place sources of naked flames, such as lighted candles, on the charger.
- Dispose of batteries in an environmentally friendly manner.

**Battery charger**

This battery charger operates on AC between 110 V and 240 V. But

- In the U.S.A. and Canada, the battery charger must be connected to a 120 V AC power supply only.
- When connecting to an AC supply outside of the U.S.A. or Canada, use a plug adaptor to suit the AC outlet configuration.

The battery charger is in the standby condition when it is connected. The primary circuit is always “live” as long as the battery charger is connected to an electrical outlet.

**Cautions for Use**

- Do not use any other AV cables except the supplied one.
- Do not use any other USB connection cables except the supplied one.
- Always use the genuine Leica HDMI mini cable (optional, →50).

**Keep the camera as far away as possible from electromagnetic equipment (such as microwave ovens, TVs, video games etc.).**

- If you use the camera on top of or near a TV, the pictures and/or sound on the camera may be disrupted by electromagnetic wave radiation.
- Do not use the camera near cell phones because doing so may result in noise adversely affecting the pictures and/or sound.
- Recorded data may be damaged, or pictures may be distorted, by strong magnetic fields created by speakers or large motors.
- Electromagnetic wave radiation generated by microprocessors may adversely affect the camera, disturbing the pictures and/or sound.
- If the camera is adversely affected by electromagnetic equipment and stops functioning properly, turn the camera off and remove the battery. Then reinsert the battery and turn the camera on.

**Do not use the camera near radio transmitters or high-voltage lines.**

- If you record near radio transmitters or high-voltage lines, the recorded pictures and/or sound may be adversely affected.
Information for Users on Collection and Disposal of Old Equipment and used Batteries

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

[Information on Disposal in other Countries outside the European Union]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.
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### Scope of Delivery

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rechargeable battery</td>
<td>BP-DC9-E 18 717</td>
</tr>
<tr>
<td></td>
<td>BP-DC9-U 18 718</td>
</tr>
<tr>
<td>Battery charger</td>
<td>BC-DC9-E 423-094.001-010</td>
</tr>
<tr>
<td></td>
<td>BC-DC9-U 423-094.002-010</td>
</tr>
<tr>
<td>Mains cable</td>
<td>EU 423-068.801-019</td>
</tr>
<tr>
<td></td>
<td>UK 423-068.801-020</td>
</tr>
<tr>
<td></td>
<td>AUS 423-068.801-023</td>
</tr>
<tr>
<td></td>
<td>TW 424-025.002-000</td>
</tr>
<tr>
<td></td>
<td>CN 423-082.805-004</td>
</tr>
<tr>
<td></td>
<td>KR 423-082.805-005 (delivery differs depending on markets)</td>
</tr>
<tr>
<td>Shoulder strap</td>
<td>423-094.001-014</td>
</tr>
<tr>
<td>Lens hood</td>
<td>423-094.001-015</td>
</tr>
<tr>
<td>Lens cap</td>
<td>423-094.001-018</td>
</tr>
<tr>
<td>Lens cap string</td>
<td>423-094.001-019</td>
</tr>
<tr>
<td>CD with instr. PDFs</td>
<td>423-094.001-016</td>
</tr>
<tr>
<td>USB cable</td>
<td>423-082.001-020</td>
</tr>
<tr>
<td>AV cable</td>
<td>423-082.001-022</td>
</tr>
<tr>
<td>Button template for Canada</td>
<td>423-094.001-025</td>
</tr>
<tr>
<td></td>
<td>Taiwan</td>
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<tr>
<td>Short instructions</td>
<td>93 353-56 (delivery differs depending on markets)</td>
</tr>
<tr>
<td>Instructions for registration and SW download</td>
<td>93 368</td>
</tr>
<tr>
<td>Warranty Card</td>
<td>439-399.100-026</td>
</tr>
</tbody>
</table>

### Accessories

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor case</td>
<td>18 721</td>
</tr>
<tr>
<td>HDMI mini cable</td>
<td>14 491</td>
</tr>
<tr>
<td>LEICA CF 22</td>
<td>18 694</td>
</tr>
<tr>
<td>Mini tripod</td>
<td>14 320</td>
</tr>
<tr>
<td>Tabletop tripod</td>
<td>14 110</td>
</tr>
<tr>
<td>Ball and Socket head</td>
<td>14 100</td>
</tr>
<tr>
<td>Outdoor case</td>
<td>18 721</td>
</tr>
<tr>
<td>HDMI mini cable</td>
<td>14 491</td>
</tr>
<tr>
<td>LEICA CF 22</td>
<td>18 694</td>
</tr>
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<td>Mini tripod</td>
<td>14 320</td>
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<tr>
<td>Tabletop tripod</td>
<td>14 110</td>
</tr>
<tr>
<td>Ball and Socket head</td>
<td>14 100</td>
</tr>
</tbody>
</table>

### Notes:
- Cards are optional. You can record or play back pictures on the internal memory when you are not using a card.
- Check that all items belonging to the scope of delivery are included before using the camera.
- The items and their shape may differ depending on the country or area where the camera was purchased.
- The battery pack is called either battery pack or battery in the text.
- The battery charger is called either battery charger or charger in the text.
- Please dispose of all packaging appropriately (→48).
Names of the Components

1. Lens
2. Flash
3. Self-Timer indicator
4. AF assist lamp
5. Bayonet for lens hood
6. [Q.MENU] button/Delete button
7. [DISPLAY] button
8. LCD monitor
9. Flash open button
10. Diopter adjustment dial
11. Viewfinder
12. [EVF/LCD] button
13. [AF/AE LOCK] button
14. Rear dial
15. Playback button
16. [MENU/SET] button

Rear dial operation is indicated as follows in these instructions:

- Rotate to the left or to the right
- Press

111213
16 Cursor buttons

- Self-Timer button

- Function button
  Assign [REC] Mode menu to ▼ button. It is convenient to register
  [REC] Mode menu that is used often.
  [FILM MODE]/[ASPECT RATIO]/[QUALITY]/[METERING MODE]/
  [WHITE BALANCE]/[I.EXPOSURE]/[GUIDE LINE]/[REC AREA]/
  [REMAINING DISP.]

- ISO

- Exposure compensation/
  Auto Bracket/Flash output adjustment

Cursor button operation, e.g. when one of them should be pressed, is
indicated as follows in these instructions:

or

Press ▼

17 Stereo microphone
18 Zoom lever
19 Shutter button
20 Motion picture button
21 Continuous Mode Button
22 Power lamp
23 Camera ON/OFF switch
24 Mode dial
25 Hot Shoe
For audio recording, you should exclusively use the Panasonic microphone model DMW-MS1. For remote control, you should exclusively use the Panasonic model DMW-RSL1.

When you use a tripod, make sure the tripod is stable when the camera is attached to it.

We recommend using a battery with sufficient power when recording motion pictures.
Preparation

Charging the Battery

About batteries you can use with this camera.

Use only the Leica battery BP-DC9 E/U (→50).

It has been found that counterfeit battery packs which look very similar to the genuine product are made available to purchase in some markets. Some of these battery packs are not adequately protected with internal protection to meet the requirements of appropriate safety standards. There is a possibility that these battery packs may lead to fire or explosion. Please be advised that we are not liable for any accident or failure occurring as a result of use of a counterfeit battery pack. To ensure safe operation we urgently recommend to use only the Leica battery BP-DC9 E/U (→50).

• Use the dedicated charger and battery.
• The camera has a function for distinguishing batteries which can be used safely. The dedicated battery supports this function. The only batteries suitable for use with this camera is the Leica battery BP-DC9 E/U (→50). (Batteries which do not support this function cannot be used). Leica cannot in any way guarantee the quality, performance or safety of any other batteries.

Charging

• The battery is not charged when the camera is shipped. Charge the battery before use.
• Charge the battery with the charger indoors.
• It is recommended to charge the battery in a temperature between 10 °C to 30 °C (50 °F to 86 °F). (The battery temperature should also be the same.)

1 Insert the battery into the charger.
  • The terminals should face the charger’s contacts and the Leica logo upwards.
About the [CHARGE] indicator

• When the [CHARGE] indicator flashes
  – The battery temperature is too high or too low. It is recommended to charge the battery again in an ambient temperature of between 10 ºC to 30 ºC (50 ºF to 86 ºF).
  – The terminals of the charger or the battery are dirty. In this case, wipe them with a dry cloth.

• Disconnect the charger from the electrical socket and detach the battery after charging is completed.

2 Connect the charger to the electrical outlet.

- Disconnect the charger from the electrical socket and detach the battery after charging is completed.

The [CHARGE] indicator A turns on: Charging has started.

The [CHARGE] indicator A turns off: Charging has been completed without any problem.

• When the [CHARGE] indicator flashes
  – The battery temperature is too high or too low. It is recommended to charge the battery again in an ambient temperature of between 10 ºC to 30 ºC (50 ºF to 86 ºF).
  – The terminals of the charger or the battery are dirty. In this case, wipe them with a dry cloth.
**Charging**

| Charging time | Approx. 155 min |

**Recording still pictures (When using the LCD monitor/Viewfinder)**

| Number of recordable pictures | Approx. 410 pictures | (By CIPA standard in Program AE Mode) |
| Recording time | Approx. 205 min |

Recording conditions by CIPA standard
- CIPA is an abbreviation of [Camera & Imaging Products Association].
- Temperature: 23 °C (73.4 °F) / Humidity: 50%RH when LCD monitor is on.
- Using a 32 MB SD Memory Card.
- Using the supplied battery.
- Starting recording 30 seconds after the camera is turned on. (When the Optical Image Stabilizer Function is set to [AUTO].)
- **Recording once every 30 seconds** with full flash every second recording.
- Rotating the zoom lever from Tele to Wide or vice versa in every recording.
- Turning the camera off every 10 recordings and leaving it until the temperature of the battery decreases.

**Playback (When using the LCD monitor/Viewfinder)**

| Playback time | Approx. 330 min |
About the Internal Memory/the Card

Internal Memory

• Memory size: Approx. 40 MB
• The internal memory can be used as a temporary storage device when the card being used becomes full.
• The access time for the internal memory may be longer than the access time for a card.

Card

The following cards which conform to the SD video standard can be used with the camera.

<table>
<thead>
<tr>
<th>Type of card which can be used with the camera</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD Memory Card (8 MB to 2 GB)</td>
<td>• SDHC Memory Card can be used with SDHC Memory Card or SDXC Memory Card compatible equipment.</td>
</tr>
<tr>
<td>SDHC Memory Card (4 GB to 32 GB)</td>
<td>• SDXC Memory Card can only be used with SDXC Memory Card compatible equipment.</td>
</tr>
<tr>
<td>SDXC Memory Card (48 GB, 64 GB)</td>
<td>• Check that the PC and other equipment are compatible when using the SDXC Memory Cards.</td>
</tr>
</tbody>
</table>

• Only cards bearing the SDHC logo (indicating that the card conforms to SD video standards) may be used as 4 GB to 32 GB cards.
• Only cards bearing the SDXC logo (indicating that the card conforms to SD video standards) may be used as 48 GB, 64 GB cards.
• Use a card with SD Speed Class * with "Class 4" or higher when recording motion pictures in [AVCHD]. Also, use a card with SD Speed Class with "Class 6" or higher when recording motion pictures in [MOTION JPEG].
  * SD Speed Class is the speed standard regarding continuous writing.

Note

• Keep the Memory Card out of reach of children to prevent swallowing.
Inserting and Removing Card and Battery

• Turn the power switch to [OFF] and confirm that the lens barrel is retracted.
• Close the flash.

1 Set the camera ON/OFF switch to OFF, slide the release lever in the direction of the arrow, and open the card/battery door.
   • Use only the Leica battery BP-DC9 E/U (→ 50).
   • We cannot guarantee the quality of any other batteries.

2 Insert battery and card. Be sure to insert in the correct orientation.
   Battery: Push it in until it is locked by the lever A. To remove, pull this lever in the direction of the arrow.
   Card: Push it down until it clicks into place. To remove, push it further down until it clicks, then pull it out upright.
   B: Do not touch the connection terminals of the card.
   • The card may be damaged if it is not fully inserted.

3 1: Close the card/battery door.
   2: Slide the release lever in the direction of the arrow.
Setting Date/Time (Clock Set)

The clock is not set when the camera is shipped.

1. Turn the camera on.
   - [MENU/SET] button
   - Cursor buttons
   - The lens barrel extends.

2. Press [MENU/SET].

3. Press ▲/▼ to select the language, and press [MENU/SET].

4. Press [MENU/SET].

5. Press ◀/▶ to select the items (year, month, day, hour, minute, display sequence or time display format), and press ▲/▼ to set.
   - You can cancel without setting the clock by pressing [ב].


7. Press [MENU/SET].
   - Press [□] to return to the settings screen.

Changing the clock setting

- It can be changed in steps 5 and 6 to set the clock.
Setting the Menu

This section describes how to select the Program AE Mode settings. The same setting can also be used for the [MOTION PICTURE], [PLAYBACK], and [SETUP] menus.

Example: To change the [AF MODE] from [ ] (1-area-focusing) to [ ] (Face detection) in program AE mode with the focus mode selector switch set to [AF].

1. Press [MENU/SET] to display the menu.

2. Press ▲/▼ to select [AF MODE], and then press ►.
   - Depending on the item, its setting may not appear or it may be displayed in a different way.

3. Press ▲/▼ to select [ ] and then press [MENU/SET] to set.

4. Press [MENU/SET] to close the menu.

Switching to other menus

E.g.: Switching to the [SETUP] menu
1. Press [MENU/SET] to display the menu.
2. Press ◄.
3. Press ▼ to select the [SETUP] menu icon [ ].
4. Press ►.
   - Select a menu item next and set it.
Mode switching

Selecting the [REC] Mode

1. Turn the camera on.
   - The power lamp 2 lights when you turn the camera on 1.

2. Change modes by rotating the mode dial.
   Align the desired mode with index A.
   - Make sure the dial is set exactly to the click-stop position of the desired mode.
   (The mode dial rotates 360°)

**Basic**

- **Snapshot Mode**
  For taking pictures with extended automatic settings.

- **Program Mode**
  For taking pictures with automatic exposure control.
Advanced Scene Mode

- **Portrait Mode**
  Use this mode to take pictures of people.

- **Scenery Mode**
  Use this mode to take pictures of scenery.

- **Sports Mode**
  Use this mode to take pictures of sporting events, etc.

- **Close-up Mode**
  Use this mode to take pictures of a close-by subject.

- **Night Portrait Mode**
  Use this mode to take pictures of night scenes and people against night time scenery.

---

**Advanced**

- **Aperture-Priority Mode**
  The exposure is determined by the automatically controlled shutter speed, based on the manually set aperture value.

- **Shutter-Priority Mode**
  The exposure is determined by the automatically controlled aperture value, based on the manually set shutter speed.

- **Manual Exposure Mode**
  The exposure is determined by the manually set aperture value and shutter speed.

- **Creative Motion Picture Mode**
  Record motion picture with manual settings.

- **Custom Mode**
  Use this mode to take pictures with previously registered settings.

- **Scene Mode**
  This allows you to take pictures that match the scene being recorded.

- **My Color Mode**
  Use this mode to check coloring effects, select a color mode from among twelve color modes, and then take pictures.
[REC] Mode:  

**Snapshot Mode**

The camera will set the most appropriate settings to match the subject and the recording conditions so we recommend this mode for beginners or those who want to leave the settings to the camera and take pictures easily.

1. **Set the mode dial to [A].**

2. **Hold the camera firmly with both hands, keep your arms still at your side and stand with your feet slightly apart.**

3. **Press the shutter button halfway to focus.**
   - The focus indication ① (green) lights up when the subject is focused.
   - The AF frame ② is placed over the subject’s face by the Face Detection function. In other cases, it is placed at the point on the subject which is in focus.
   - The focus range is 1 cm (3/8") (Wide)/1 m (3’ 3/8”) (Tele) to ∞.

4. **Press the shutter button fully (push it in further), and take the picture.**
Scene Detection

When the camera identifies the optimum scene, the icon of the scene concerned is displayed in blue for 2 seconds, after which its color changes to the usual red.

- \[\text{i-PORTRAIT}\]
- \[\text{i-SCENERY}\]
- \[\text{i-MACRO}\]
- \[\text{i-NIGHT PORTRAIT}\]
- \[\text{i-NIGHT SCENERY}\]
- \[\text{i-SUNSET}\]
- \[\text{i-BABY}\]

- [ ] is set if none of the scenes are applicable, and the standard settings are set.
- When [ ] [ ] or [ ] is selected, the camera automatically detects a person's face, and it will adjust the focus and exposure. (Face Detection)

AF Tracking Function

It is possible to have the focus set to the targeted subject.

1 Press [FOCUS].
   - [ ] is displayed in the upper left of the screen.
   - AF Tracking frame is displayed in the center of the screen.
   - Press [FOCUS] again to cancel.

2 Aim the AF Tracking frame at your subject and press [AF/AE LOCK] to lock the subject.
   - AF tracking frame will turn yellow.
   - An optimum scene mode for the framed subject will be chosen.
   - Press [FOCUS] to cancel.
[REC] Mode: P

Program AE Mode

The camera automatically sets both shutter speed and aperture value according to the brightness of the subject. You can take pictures with greater freedom by changing various settings in [REC] menu.

1. Set the mode dial to [P].
   - Set the focus mode selector switch to [AF].

2. Aim the AF frame at the point you want to focus on.

3. Press the shutter button halfway to focus.
   - The focus range is 30 cm (1”) (Wide)/2 m (6’ 6 3/4”) (Tele) to ∞.

4. Press the shutter button fully to take a picture.
In Program AE Mode, you can change the preset aperture value and shutter speed without changing the exposure. This is called program shift.

You can make the background more blurred by decreasing the aperture value or record a moving subject more dynamically by slowing the shutter speed.

- Press the shutter button halfway and then use the rear dial to activate program shift while the aperture value and the shutter speed are displayed on the screen (about 10 seconds).
- The program shift indication \( A \) appears on the screen when program shift is activated.
- Program shift is canceled if the camera is turned off or the rear dial is rotated back until the program shift indication disappears, i.e. is set back to 0.

**Example of program shift**

(A): Aperture value  
(B): Shutter speed  
1 Program shift range  
2 Automatic camera setting  
3 Program shift limit
[REC] Mode: Exposure Compensation

Use this function to adjust the exposure to the important part of the subject in case of large differences in brightness within the frame.

1. Press ▲ [▲] until [EXPOSURE] appears, compensate the exposure with ▼/▲.
   - Select [0 EV] to return to the original exposure.

   - You can also press the shutter button halfway to finish.

Operate with the rear dial

1. Press the rear dial to select [▲], and then rotate it to compensate the exposure.
   - Exposure compensation value

2. Press the shutter button halfway to finish.
Aperture- and Shutter-Priority Modes

Aperture-Priority Mode [A]
Set the aperture value to a higher number when you want a larger in-focus area (in front of and behind the main subject), to a lower number for a smaller in-focus area.

1. Set the mode dial to [A].
2. Rotate the rear dial to set the aperture value.
3. Take a picture.

Shutter-Priority Mode [S]
When you want to take a sharp picture of a fast moving subject, set with a faster shutter speed. When you want to create a trailing effect, set to a slower shutter speed.

1. Set the mode dial to [S].
2. Rotate the rear dial to set the shutter speed.
3. Take a picture.
[REC] Mode: M

Manual Exposure Mode

Determine the exposure by manually setting the aperture value and the shutter speed.

1. Set the mode dial to [M].
   • The Manual Exposure Assistance A appears for about 10 seconds.

2. Rotate the rear dial to set the aperture and shutter speed.
   B Aperture Value
   C Shutter Speed
   • Every time the rear dial is pressed, it switches between aperture setting and shutter speed setting operation.

3. Press the shutter button halfway.
   • The Manual Exposure Assistance A appears for about 10 seconds.
   • Reset aperture value and shutter speed if the exposure is not appropriate.

4. Take the picture.

<table>
<thead>
<tr>
<th>Manual Exposure Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
</tr>
</tbody>
</table>

• The Manual Exposure Assistance is an approximation.
[REC] Mode: P A S M 

Continuous Mode

With this mode, pictures are taken as long as the shutter button is pressed. This allows you to select the best ones from the series. The frame rate/frequency can be selected to match the recording conditions or subjects. Pictures recorded in continuous mode will be recorded as one group.

1. Press [ ] (Continuous Mode) button to display the Continuous setting menu.

2. Press ◀/▶ to select the frame rate and then press [MENU/SET].

<table>
<thead>
<tr>
<th>Frame rate / Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]: 2 fps (frames per second)</td>
</tr>
<tr>
<td>[ ]: 5 fps</td>
</tr>
<tr>
<td>[ ]: 11 fps</td>
</tr>
<tr>
<td>[ ]: 40 fps</td>
</tr>
<tr>
<td>[ ]: 60 fps</td>
</tr>
</tbody>
</table>

3. Take a picture.
You can record full high definition motion pictures compatible either with the AVCHD format or Motion JPEG. Audio will be recorded in stereo.

- Close the flash. (It is recommended that you close the flash when recording motion pictures. However, leaving the flash open will not result in a significant difference in sound quality.)

1. **Select the mode.**

2. **Start recording by pressing the motion picture button.**
   - A: Available recording time
   - B: Elapsed recording time
   - C: Release the motion picture button right after you press it.
   - The recording state indicator (red) will flash while recording motion pictures.

3. **Stop the recording by pressing the motion picture button again.**
   - If the internal memory or the card becomes full during recording, the process will be stopped automatically.

**Note**
- **With camera models 18 393 / 18 394:**
  Motion pictures can be recorded continuously in [MOTION JPEG] or [HIGH SPEED MOVIE] in Scene Mode up to a capacity of 2 GB. Only the maximum recordable time for 2 GB is displayed on the screen.
  The maximum time available for recording motion pictures continuously with [AVCHD] is 13 hours 3 minutes 20 seconds. Only respective times will be displayed on the screen.
  However, the recording may stop before that depending on the remaining battery level.
- **With camera model 18 392:**
  Motion pictures can be recorded continuously for up to 29 minutes. Also, motion picture recorded continuously in [MOTION JPEG] is possible for up to 2 GB.
  (Example: [7m 50s] with [ ])
  The remaining time for continuous recording is displayed on the screen.
[PLAYBACK] Mode: 

Playing back Pictures ([NORMAL PLAY])

1 Press [ ].

2 Press ◀/▶ to select the picture.
   • After selecting a motion picture, press ▲ to start playback.

[PLAYBACK] Mode: 

Deleting Pictures

Once deleted, pictures cannot be recovered.
• The picture being played back is deleted, regardless of whether it is recorded on the internal memory or the card.

1 Select the picture to be deleted, and then press [ ].

2 Press ◀ to select [YES] and then press [MENU/SET].
Using the Instructions on the supplied CD-ROM

- You have practised the basic operations introduced in these instructions and want to progress to advanced operations.
- You want to check the Troubleshooting.
In these kinds of situations refer to instructions (PDF format) on the supplied CD-ROM.

1. Turn the PC on and insert the supplied CD-ROM.

2. Open the CD-ROM.

3. Double click on the PDF with the desired language to open it.

■ When the Instructions (PDF format) will not open
You will need Adobe Acrobat Reader 5.0 or later or Adobe Reader 7.0 or later to browse or print the instructions (PDF format).
- You can download and install a version of Adobe Reader that you can use with your OS from the following Web Site.
http://get.adobe.com/reader/otherversions
### Technical Data

<table>
<thead>
<tr>
<th><strong>Image sensor</strong></th>
<th>1/2.33&quot; MOS sensor, total pixel number: 15,100,000, primary color filter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effective pixels</strong></td>
<td>14,100,000</td>
</tr>
<tr>
<td><strong>Minimum illuminance</strong></td>
<td>approx. 12 lx (when i-low light is used)</td>
</tr>
<tr>
<td><strong>Lens</strong></td>
<td>LEICA DC VARIO-ELMARIT 4.5 - 108mm f/2.8 - 8 (2.8 – 11 with motion picture recording)/ ASPH., 35mm camera equivalent: 25 - 600 mm</td>
</tr>
<tr>
<td><strong>Focus range</strong></td>
<td>P/A/S/M 11 3/8&quot; / 30 cm (Wide)/6 6 3/4&quot; / 2 m (Tele) to ∞</td>
</tr>
<tr>
<td><strong>Macro/Snapshot/Motion picture</strong></td>
<td>3/8&quot; / 1 cm (Wide)/3 3/8&quot; / 1 m (Tele) to ∞</td>
</tr>
<tr>
<td><strong>Scene modes</strong></td>
<td>May differ from the ranges above</td>
</tr>
<tr>
<td><strong>Digital Zoom</strong></td>
<td>max. 4×</td>
</tr>
<tr>
<td><strong>Shutter system</strong></td>
<td>Electronically and Mechanically controlled</td>
</tr>
<tr>
<td><strong>Shutter speed</strong></td>
<td>60 s to 1/2000 s, [STARRY SKY] mode: 15 s/30 s/60 s</td>
</tr>
<tr>
<td><strong>Series exposures frequency</strong></td>
<td>(maximum no. of frames/highest resolution)</td>
</tr>
</tbody>
</table>
| **For mechanical shutter** | 2 fps 100 / 14 MP  
5 fps 100 / 14 MP  
11 fps 15 / 14 MP |
| **For electronic shutter** | 40 fps 50 / 5 MP  
60 fps 60 / 3.5 MP |
<p>| <strong>During motion picture recording</strong> | 2/5/10 fps 40 / 3.5 MP |</p>
<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exposure modes</strong></td>
<td>Program (P), Aperture-Priority (A), Shutter-Priority (S), Manual setting (M)</td>
</tr>
<tr>
<td></td>
<td>Exposure compensation (increments: 1/3 EV Steps, range: ±3 EV)</td>
</tr>
<tr>
<td><strong>Metering modes</strong></td>
<td>Multiple / Center weighted / Spot</td>
</tr>
<tr>
<td><strong>Flash</strong></td>
<td>Built-in pop-up flash unit</td>
</tr>
<tr>
<td><strong>Flash modes</strong></td>
<td>AUTO, AUTO w. Red-eye reduction, Slow sync. w. Red-eye reduction, ON, OFF</td>
</tr>
<tr>
<td><strong>Flash range</strong></td>
<td>approx. 1’ / 30 cm - 31’ 3” / 9.5 m (with maximum wide angle setting)</td>
</tr>
<tr>
<td><strong>(with ISO AUTO)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>LCD monitor</strong></td>
<td>3.0” TFT LCD (approx. 460,000 dots), shows approx. 100% of the captured frame</td>
</tr>
<tr>
<td><strong>Viewfinder</strong></td>
<td>Color LCD (approx. 202,000 dots), shows approx. 100% of the captured frame, diopter adjustment possible between ±4 diopters</td>
</tr>
<tr>
<td><strong>Microphone</strong></td>
<td>Stereo</td>
</tr>
<tr>
<td><strong>Speaker</strong></td>
<td>Monaural</td>
</tr>
<tr>
<td><strong>Recording media</strong></td>
<td>Internal Memory (approx. 40 MB), SD/SDHC/SDXC Memory Card</td>
</tr>
<tr>
<td><strong>Recording file format</strong></td>
<td>Still Pictures: RAW / JPEG (based on Exif 2.3 standard) / DPOF compatible</td>
</tr>
<tr>
<td></td>
<td>Motion pictures: AVCHD/QuickTime Motion JPEG</td>
</tr>
<tr>
<td></td>
<td>* For audio recording, you should exclusively use the Panasonic microphone model DMW-MS1.</td>
</tr>
</tbody>
</table>
## Operating temperature / humidity

| Operating temperature / humidity | 32 °F - 104 °F / 0 °C - 40 °C / 10 - 80%RH |

## Interface

- Digital: USB 2.0 (High Speed)
- With model no. 18392, data from the PC cannot be written to the camera using the USB connection cable.
- Analog video/audio:
  - NTSC/PAL Composite (Switched by menu),
  - Audio line output (stereo)

## Terminals

- HDMI: for HDMI mini cable (type C)
- AV OUT/DIGITAL: Dedicated jack (14 pin)
- MIC/REMOTE: 2.5φ jack

## Dimensions

| Dimensions (W×H×D; lens retracted) | approx. 124.5 × 81 × 95 mm / 4 1/16 × 2 11/32 × 1 9/32 |

## Weight

| Weight (with/without card and battery) | approx. 540 g/0.480 lbs / 496 g/0.432 lbs |

## Battery (lithium-ion)

- **Voltage/capacity**: 7.2 V / 895 mAh

## Battery Charger

- **Input**: AC 110 - 240 V 50/60 Hz, 0.15 A
- **Output**: DC 8.4 V 0.43 A
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More detailed information and the current Leica Akademy brochure are available from:

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http://www.leica-camera.co.uk
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info@leica-camera.com

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