



Leica
MICROSYSTEMS

Leica DM750 M User Manual

Manufacturer Information

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Safety Regulations

Safety Concept

The individual modules of the Leica DM microscopy series include an interactive CD-ROM with all relevant user manuals in several languages. Keep it in a safe place, and readily accessible to the user. User manuals and updates are also available for you to download and print from our website at www.leica-microsystems.com.

This user manual describes the special functions of the individual modules of the Leica DM microscopy series and contains important instructions for their operational safety, maintenance, and accessories.

The "Safety concept" booklet contains additional safety information regarding the service work, requirements and the handling of microscope, accessories and electrical accessories as well as general safety instructions.

You can combine individual system articles with articles from external suppliers. Please read the user manual and the safety requirements of the supplier.

Before installing, operating or using the instruments, read the user manuals listed above. In particular, please observe all safety instructions.

To maintain the unit in its original condition and to ensure safe operation, the user must follow the instructions and warnings contained in these user manuals.

Symbols Used in this Instruction Manual

Warning of a danger



This symbol indicates especially important information that is mandatory to read and observe.

Failure to comply can cause the following:

- Hazards to personnel
- Functional disturbances or damaged instruments

Warning of hazardous electrical voltage



This symbol indicates especially important information that is mandatory to read and observe.

Failure to comply can cause the following:

- Hazards to personnel
- Functional disturbances or damaged instruments

Danger due to hot surface



This symbol warns against touching accessible hot surfaces, e.g. those of light bulbs.

Important information



This symbol indicates additional information or explanations that intend to provide clarity.

Explanatory notes

- ▶ This symbol within the text points to additional information and explanations.



Instructions for disposing of the instrument, accessory components, and consumables.

Important Notes

Description

The Leica DM750 M microscope meets today's state of the art of technology. Nevertheless, hazards may still arise during operation. The potential risks are described below.



Before installing, operating or using the instrument, it is mandatory to read this user manual. In particular, please observe all safety instructions.

User manual

This user manual includes important instructions related to operating safety, maintenance and accessories.



Your Leica DM750 M microscope comes with an interactive CD-ROM with all relevant user manuals. Keep it in a safe place, and readily accessible to the user. User manuals and updates are also available for you to download and print from our website at www.leica-microsystems.com.

Accessories from third-party suppliers

You can combine individual system articles with articles from external suppliers. Please read the user manual and the safety requirements of the supplier.

Original condition

To maintain the unit in its original condition and to ensure safe operation, the user must follow the instructions and warnings contained in these user manuals.

Legal requirements

Adhere to general and local regulations relating to accident prevention and environmental protection.

EC Declaration of Conformity

Electrically operated accessories are constructed based on the state of the art of technology and are provided with an EC Declaration of Conformity.

Instructions on Use



The Leica DM750 M microscope may be used only in closed rooms and must be placed on a solid substrate.



Always position the Leica DM750 M microscope so that you can disconnect it from the power supply at any time. The power cable must remain accessible at all times, because it is intended as a power disconnect device.

Place of use

Only use the instruments in closed, dust free rooms and between +10°C and +40°C. Protect the devices from oil, chemicals and extreme humidity. If using the devices outdoors, protect them from dust and moisture. Never use electrical devices outdoors. Install electrical devices at least 10 cm from the wall and away from flammable substances.

Avoid large temperature fluctuations, direct sunlight and vibrations.



In warm and warm-damp climatic zones, the individual components require special care in order to prevent the build-up of fungus.

Non-intended use



Never install any other plug or unscrew any mechanical components unless expressly instructed to do so in the instructions.



The devices and accessories described in this instruction manual have been tested for safety and potential hazards.

Instructions on Use (Continued)



The responsible Leica affiliate must be consulted whenever the instrument is altered, modified or used in conjunction with non-Leica components that are outside of the scope of this manual!



Unauthorized alterations to the instrument or noncompliant use shall void all rights to any warranty claims.

Transport

If at all possible, use the original packaging for shipping or transporting individual modules.

In order to prevent damage from vibrations, disassemble all moving parts that (according to the user manual) can be assembled and disassembled by the customer and pack them separately.

Disposal

Once the product has reached the end of its service life, please contact Leica Service or Sales about disposal.

Please observe and ensure compliance with the national laws and regulations that implement, for example, the EC Directive WEEE.



Like all electronic devices, this instrument, its accessory components and consumables must never be disposed of with general household waste. Disposal must comply with locally applicable laws and regulations.

Integration in third-party products

When installing Leica products into third-party products, the manufacturer of the complete system or its dealer is responsible for following all applicable safety instructions, laws and guidelines.

Health Risks and Dangers of Use

Health risks



Workplaces with microscopes facilitate and improve the viewing task, but they also impose high demands on the eyes and holding muscles of the user. Depending on the duration of uninterrupted work, asthenopia and musculoskeletal problems may occur. For this reason, appropriate measures for reduction of the workload must be taken:

- Optimum workplace layout
- Frequent changes of activity
- Thorough training of the personnel, giving consideration to ergonomic and organizational aspects

The ergonomic design and construction of the Leica microscopy series are intended to reduce the exertion of the user to a minimum.

Danger of infection



Direct contact with eyepieces is a potential transmission method for bacterial and viral infections of the eye.



The risk can be kept to a minimum by using personal eyepieces for each individual or detachable eyecups.

Dangers during use

- The Leica DM750 M microscope may only be connected to a grounded socket.
- The Leica DM750 M microscope may not be operated unless it is in proper functioning condition.

The microscope illumination is in the exempt group (risk group 0) according to EN 62471:2008 when used according to its intended use.



Never look directly into the LED beam of the illumination equipment – either with or without optical instruments – as this increases the risk class. Failure to observe this notice poses a risk of eye damage.

Information for the Person Responsible for the Instrument

Information for the person responsible for the instrument

- Ensure that the Leica DM750 M microscope is used only by qualified personnel.
- Ensure that this user manual is always available at the Leica DM750 M microscope.
- Carry out regular inspections to make certain that the authorized users are adhering to safety requirements.
- When instructing new users, do so thoroughly and explain the meanings of the warning signs and messages.
- Assign individual responsibilities for starting, operating and servicing the instrument and monitor the observance of these responsibilities.
- Do not use the Leica DM750 M microscope unless it is in perfect condition.
- Inform your Leica representative or Leica Microsystems (Schweiz) AG, 9435 Heerbrugg, Switzerland, immediately of any product defect that could potentially cause injury or harm.
- If you use accessories made by third-party manufacturers with the Leica DM750 M microscope, be sure that each such manufacturer confirms the safety-engineering, harmless usability of the product and observe the product's user manual.
- Modifications and maintenance of the Leica DM750 M microscope may only be performed by professionals expressly authorized by Leica.
- Only original Leica replacement parts may be used in servicing the product.
- After service work or technical modifications, the unit must be reconfigured with observance to our technical requirements.
- If the unit is modified or serviced by unauthorized persons, is improperly maintained (as long as maintenance was not carried out by us), or is handled improperly, Leica will not accept any liability.
- The electric installation in the building must conform to the national standard, e.g. current-operated ground leakage protection (fault-current protection) is suggested.

Care Instructions

General instructions

- Protect the Leica DM750 M microscope against damp, vapors, acids, alkalis, and corrosive substances. Do not store chemicals in the vicinity.
- Protect the Leica DM750 M microscope from oil and grease. Never grease or oil mechanical parts or sliding surfaces.
- Follow the instructions of the disinfectant manufacturer.
- It is advisable to enter a service agreement with Leica Service.

Cleaning coated parts and plastic parts

- Dust and dirt particles should be removed with a soft brush or lint-free cotton cloth.
- Remove coarse debris with a moistened disposable cloth.
- Acetone, xylene or nitro-containing thinners must NOT be used.
- Never use chemicals to clean colored surfaces or accessories with rubberized parts. This could damage the surfaces, and specimens could be contaminated by abraded particles.

Cleaning glass surfaces

- Remove dust using a dry and grease-free brush made from hair, by blowing with bellows, or by using a vacuum.
- Optical surfaces should be cleaned with a lint-free cloth, lens tissue, or cotton swab moistened with a commercially available glass cleaner.

Accessories, Maintenance and Repair

Accessories

Only the following accessories may be used with the Leica DM750 M microscope:

- The Leica accessories described in this user manual.
- Other accessories, provided that these have been expressly approved by Leica as being technically safe in this context.

Maintenance

- The Leica DM750 M microscope is basically maintenance-free. To ensure that it always operates safely and reliably, we recommend that you take the precaution of contacting the responsible service organization.



You can arrange for periodic inspections or, if appropriate, conclude a maintenance contract with them.

- It is advisable to enter a service agreement with Leica Service.
- For maintenance and repair, only OEM spare parts may be used.

Repairs and service work

- Only original Leica Microsystems spare parts may be used.
- Before opening the instruments, switch off the power and unplug the power cable.
- Avoid contact with powered electrical circuits, which can lead to injury.

Service address

In case of problems, please contact us as follows:

stereo.service@leica-microsystems.com

Electrical Data and Ambient Conditions

Fuse replacement



Unplug the instrument before changing any fuses. The Leica DM750 M includes two fuses that are located behind the power cable compartment.



Only use the following fuse types: 5×20 mm, 1 A/250 V, fast-acting fuse (# 13RFAG30003)

Electrical data

Input: 100–240 V, 50/60 Hz, 5 W (3 W LED)

Environment

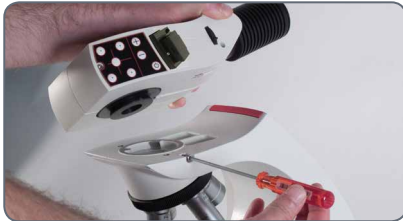
| | |
|---|---|
| Temperature for use | +10 °C ... +40 °C |
| Storage temperature | -20 °C ... +52 °C +50 °F ... +104 °F |
| Manipulation shock | 25 mm on 50 mm hard wood |
| Transport shock (unpacked) | 100 g / 6 ms |
| Transport shock (packed) | 800 mm free fall |
| Transport vibrations (unpacked) | 5–200 Hz / 1.5 g |
| Air pressure during use and storage | 500–1,060 mbar |
| Humidity during use and storage | 20–90 % |
| Installation Category II (Overvoltage Category) | |
| Pollution degree 2 | |

Assembling the Leica DM750 M

Assembling the Incident Light Axis

Assembly

1. Place the incident light axis with the heat sink facing backwards onto the tripod mount.
2. Align the incident light axis according to the tripod geometry.



3. Fasten the incident light axis into place by tightening the setscrew.



Assembling the Viewing Tubes



There are two types of viewing tube. Identify which viewing tube you have:



Type 1: Leica EZ viewing tube with integrated eyepieces



Type 2: Standard tube with separate eyepieces

Assembly

1. Loosen the setscrew (on top of the stand) using the Allen key provided.




2. Set the dovetail into the tripod mount and tighten the setscrew carefully. This way, the tube automatically shifts to the correct position on the optical axis of the microscope.



Leica EZ Viewing Tube with Integrated Eyepieces



Leica EZ viewing tube with integrated eyepieces

 Loosen the setscrew at the stand or replace the setscrew with the optional wingscrew to rotate the Leica EZ viewing tube.

1. In order to use the wingscrew, remove the setscrew that was delivered with the stand.



2. Detach the wing screw part completely before the screw is used on the stand.




3. Reinstall the Leica EZ viewing tube onto the stand.




4. Tighten the wingscrew using the wrench included in the delivery package.



Leica EZ Viewing Tube – Integrated Eyepieces (Continued)

 Now, you can rotate the Leica EZ viewing tube by loosening the wingscrew, bringing the tube to the desired position and tightening the wingscrew again.

 The eyepieces are integrated into the Leica EZ Viewing Tube and preset; therefore, there is no need to adjust or install the eyepieces.

Continue with the "Eyecups" section on [page 22](#).



Leica Standard Tube with Separate Eyepieces



Standard tubes; tubes do not include eyepieces yet

i The standard tube includes a rotatable dovetail. Therefore, you can now rotate the standard viewing tube freely in any orientation.

1. Insert the eyepieces into the tubes.




2. Secure the eyepieces in the tubes by tightening the silver screws at the bottom.




i The eyepieces can still be rotated, but no longer detached from the tubes.

Eyecups

 If you wear eyeglasses for microscope viewing, keep the rubber eyeguards folded down. If you do not wear eyeglasses, you may find it useful to unfold the rubber eyeguards in order to help block out ambient room light.



 If you have purchased a standard microscope configuration, the objectives are pre-installed on the objective nosepiece and the specimen stage condenser is installed onto the stand. In this case, continue with the "Use" section starting on [page 25](#). If you have purchased your Leica DM750 M in individual components and not according to the standard configuration, continue with the "Installing Objectives" section on [page 23](#).

Installing Objectives

Installing objectives



When rotating the objective nosepiece, always use the knurled ring on the objective nosepiece.

While rotating the objective nosepiece clockwise, screw the objectives into the objective nosepiece. Start with the lowest magnification.



Conversion to Incident Light Polarization

1. Insert the polarizer into the polarizing adapter.



2. Remove the cover of the analyzer.



3. Push the analyzer into the opening as far as it will go.



4. For reflected light, be sure beam splitter slider is pushed completely in.

When using transmitted light only, pull beam splitter slider to the out position. This will automatically shut off the reflected light to save energy and avoid any false pleochroism effect that could be caused by the beam splitter.

Use

Switching on the Microscope

Precautionary measures



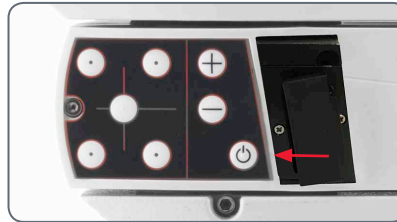
The light of the Leica DM750 M can be very bright. Therefore, only look into the eyepieces *after* you have switched on and reduced the illumination (see item 3)!

Connecting and switching on the microscope

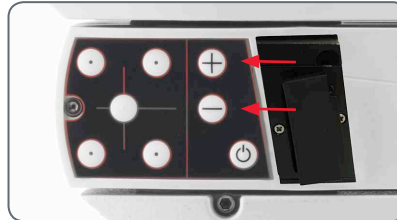
1. Connect the USB cable from the incident light axis to the 5 V/1.5 A USB power connector on the rear of the Leica DM750 M Stand. If you have a stand without a USB power connector, then connect the USB cable to an external USB power supply.



2. Switch on the illumination by briefly pressing the power switch.




3. Look through the eyepieces and adjust the brightness to the desired level.




The brightness can be adjusted in 15 increments.

Modifying the Aperture Diaphragm

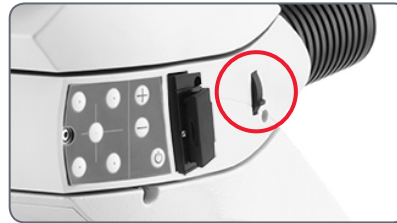
Aperture diaphragm

 The aperture diaphragm of the incident light axis can be opened or closed. An open aperture diaphragm generates a higher resolution with a decreased depth of field. A closed aperture diaphragm, on the other hand, reduces the quantity of light and resolution capacity, but the depth of field is increased.

 The aperture diaphragm must be completely open for all oblique light illumination scenarios.


Opening / closing the aperture diaphragm


1. Close the aperture diaphragm by moving the lever upwards.
2. Open the aperture diaphragm by moving the lever downwards.



Illumination Scenarios

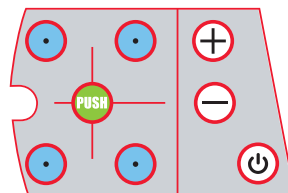
Illumination scenarios

 You can adjust the incident light axis illumination to your needs and requirements using the membrane control panel.

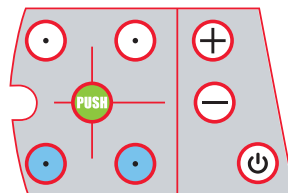
 The aperture diaphragm must be completely open for all oblique light illumination scenarios.

Changing the illumination mode

Press the button in the middle once to switch between bright-field illumination and oblique illumination (oblique incident illumination).



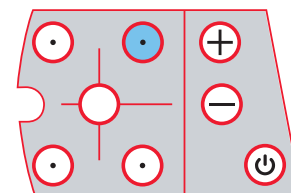
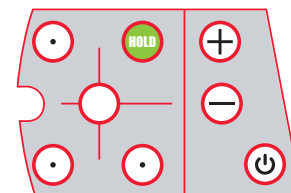
Bright field illumination



Oblique illumination

Individual light field (oblique light)

Hold a button pressed longer than two seconds to activate only one of the four light fields for oblique illumination. Combinations with other light fields are also possible.

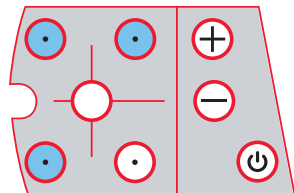
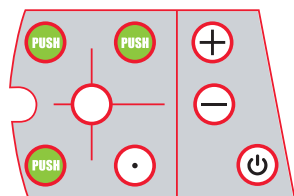


Individual light field

Illumination Scenarios (Continued)

Adding light fields

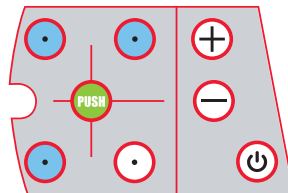
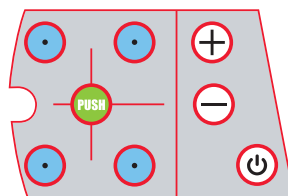
Press a button only briefly to switch an additional light field on or off.



Any arrangement

Switching to bright field

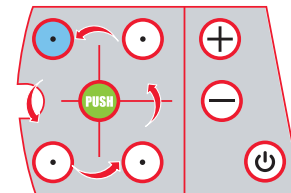
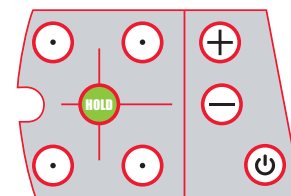
Press the middle button briefly to toggle between bright-field illumination and the previously selected oblique light configuration.



Switching between bright field illumination and the most recent setting


Automatically calling up oblique light illumination scenarios


Hold the middle button pressed longer than two seconds; as long as you do not release the button, the next light field is activated every two seconds.




Switching automatically between the light fields

Automatic Shutoff of Illumination

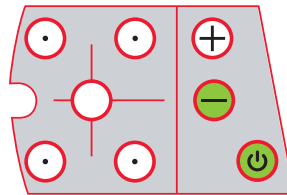
 The illumination of the Leica DM750 M is shut off automatically if the user does not make any modifications for two hours. This setting can be changed.


 If the incident light illumination is disconnected from the power supply and then reconnected, automatic shutoff is always activated (factory setting).

 When the beam splitter slider is moved to the out position, this will automatically shut off the reflected light to save energy and avoid any false pleochroism effect that could be caused by the beam splitter.

Deactivating delayed shutoff

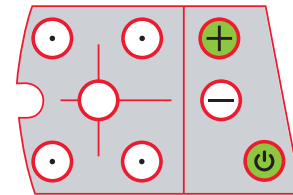
1. Switch the incident light axis off.
2. Hold the ⊖ button pressed while switching on the incident light axis.




 After the delayed shutoff is deactivated, the LED flashes three times slowly and then stays steady.

Activating delayed shutoff


1. Switch the incident light axis off.
2. Hold the ⊕ button pressed while switching on the incident light axis.




 After the delayed shutoff is activated, the LED flashes three times quickly and then stays steady.

Using Specimen Holders

Additional specimen holders

 Specimen holders are available in two different versions, with a diameter of 25 mm and 30 mm:

- Order number for 25 mm version:
13613167
- Order number for 30 mm version:
13613168

 The maximum height of the specimen is 30 mm.

Inserting the specimen holder

1. Unscrew the ring from the specimen holder.
2. Insert the specimen.
3. Screw the ring onto the specimen holder.



4. Set the specimen holder into the stage aperture and push it to the rear as far as it will go.



5. Position the specimen by moving the stage and looking through the eyepieces simultaneously.



Conversion and Use with Transmitted Light

Optional Koehler Illumination

Transmitted illumination



For the Leica DM750 M, there are two condensers available for optimum transmitted illumination. Determine which type of illumination is used for your instrument since this will be important later.

Type 1: Standard condenser

Adjustable condenser centering with tool kept at the ready:




Type 2: Koehler condenser

Adjustable condenser centering with wingscrews and adjustable Koehler field diaphragm:



Installing the Condenser

Condenser

 The Leica DM750 M is equipped with an open holder for the specimen stage condenser; in other words, the condenser must be installed.



The holder of the condenser is open

1. Move the specimen stage upwards as far as it will go using the coarse focusing knob.



2. Move the condenser holder into the lowest position using the condenser focusing knob.



3. Unscrew the two setscrews (or wingscrews for Koehler stands) on the condenser holder.



Installing the Condenser (Continued)

4. Push the condenser under the specimen stage into the holder by aligning the locating pin on the bottom of the condenser with the slot on the rear side of the fork.



5. Move the condenser into the highest position using the condenser focusing knob.



6. Tighten the two setscrews (Koehler stand: wingscrews) so that the upper lens of the condenser is centered under the objective in working position and the specimen stage condenser is thus roughly centered.



i How to center the condenser more precisely is described in the section entitled "Complete Condenser Centering" on [page 37](#).

Switching on the Microscope

Precautionary measures



The light of the Leica DM750 M can be very bright. Therefore, do not look into the eyepieces until *after* you have switched on the illumination!

USB power connector

The Leica DM750 M has a 5 V/1.5 A USB power connector in the center of the cord wrap. This can be used to power some Leica cameras, incident illuminator, or other devices requiring 5 V/1.5 A.

Connecting and switching on the microscope

1. Plug the power cable of the microscope into a corresponding grounded socket.



2. Reduce the brightness to the minimum.



3. Switch on the microscope using the switch at the bottom right of the microscope stand.



4. Look through the eyepieces and adjust the brightness to the desired level.

Complete Condenser Centering

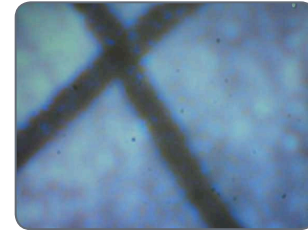
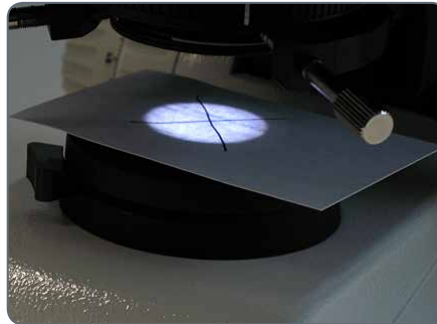
Complete condenser centering

1. Open the condenser aperture by rotating the knurled ring on the condenser to the right.

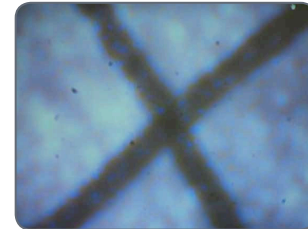


Make sure that the condenser is in the highest position.

2. Write an "X" on a piece of paper in the size of a business card and place it onto the light output of the microscope stand in such a way that the "X" is centered over the illumination.



Not centered



Centered

3. Look through the eyepieces and center the "X" in the field of view by tightening the setscrews. (Leica DM750 M with Koehler illumination: tighten the knurled screws).

Using the Condenser

Using the condenser



The condenser is furnished with an iris diaphragm, which can be adjusted to match the effective numerical aperture of the objective.

1. To open and close this diaphragm, simply turn the knurled ring on the condenser to the right or to the left so that the line on the ring is aligned with the objective magnification used.
2. Open the iris diaphragm of the condenser completely by turning the condenser ring all the way to the right.



The line on the ring is aligned with the objective magnification used.

Preparation for Viewing a Specimen Slide

1. Position a specimen slide on the specimen stage by sliding it under the slide grips.
2. Position the specimen slide such that a part of the specimen is under the objective used.



Slide grips hold the slide in place.



Slide grips




Focusing

1. Rotate the objective nosepiece in such a way that the objective with the lowest magnification level is in the working position.
2. Move the specimen stage upwards by turning the coarse focusing knob as far as it will go to the maximum position.



3. Look into the eyepieces and adjust the illumination intensity to the desired level.

 The stand of the Leica DM750 M has been calibrated at the factory so that the focus can be found from this position within 1.5 rotations of the fine focus.

4. Bring the specimen into focus using the fine focusing knob.



Viewing Tube Adjustment

Adjust the eyetubes

1. Adjust the tubes to your interpupillary distance. Fold or unfold the eyetubes to decrease or increase the distance between the eyepieces until you see one illuminated circle.



Leica EZ viewing tube

- If you are using a Leica EZ viewing tube, which has eyepieces that are integrated into the tubes, no further adjustments are required. Simply wear your glasses or contact lenses.
- For Leica DM750 M with Koehler field diaphragm, continue with the "Koehler Configuration" section on [page 44](#).

Standard viewing tube with two fixed eyepieces

- If you are using a standard tube with two fixed eyepieces (no focusing eyepieces), no further adjustments are required. Simply wear your glasses or contact lenses.
- For Leica DM750 M with Koehler field diaphragm, continue with the "Koehler Configuration" section on [page 44](#).


Viewing Tube Adjustment (Continued)

Standard tube

If you are using a standard viewing tube with one or two focusing eyepieces, you need to make some adjustments.


1. Set the focusing eyepieces to "0".



 If you are comfortable wearing your corrective lenses (contact lenses or eyeglasses) for microscope viewing, leave them on and your adjustments will be minimal.

2. Bring the specimen into focus using the fine focus setting knob while looking through only one of the eyepieces. Cover your other eye.



 If you are using one focusable and one non-focusable eyepiece, look through the non-focusable eyepiece.

3. Now look with the other eye just through the other eyepiece (focusing eyepiece). Bring the specimen into focus using the focus function of the eyepiece.



When doing so, do not change the height of the specimen stage.

4. Grip the knurled ring on the focusing eyepiece with one hand and rotate the top of the eyepiece with the other hand until the specimen is in focus for this eye and this focusing eyepiece. This corrects for any vision differences between your right eye and left eye.

Viewing Tube Adjustment (Continued)


5. Now, switch to an objective with a high magnification level and bring the microscope into focus while looking through the eyepieces with both eyes.



The depth of field is lower for higher magnification levels. Thus, you will notice that if you switch to low magnification after bringing the microscope into focus with great magnification, a minor adjustment of the fine focus may be required.

- If your DM750 M is equipped with a Koehler configuration, continue with the next section entitled "Koehler Configuration" on [page 44](#).

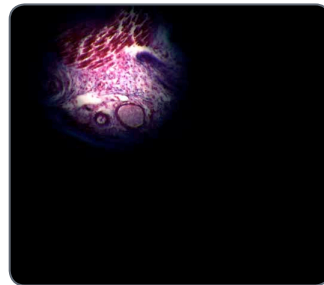
Koehler Configuration

 If your Leica DM750 M is equipped with a field diaphragm for Koehler illumination, center the condenser as described below.

1. Adapt the Koehler field diaphragm to the base of the microscope so that the illuminated field diaphragm is in the field of view when you look through the eyepieces.

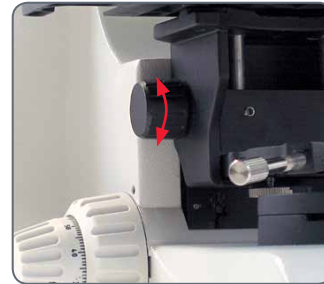


Close the Koehler field diaphragm

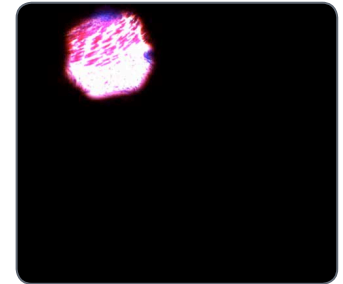


Closed Koehler field diaphragm

2. Focus the illuminated field diaphragm using the condenser focusing knob on the left side of the stage mount.



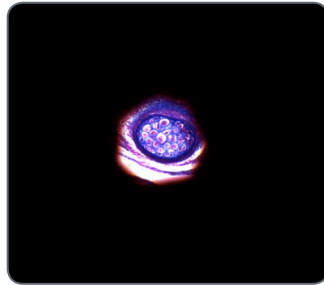
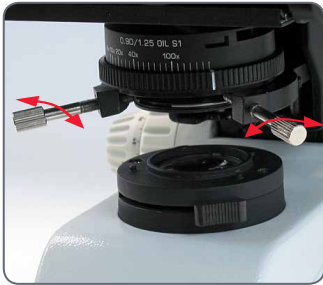
Condenser focusing knob



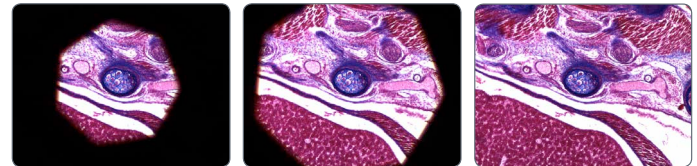
Illuminated field diaphragm is focused

Koehler Configuration (Continued)

3. Turn the condenser centering wingscrews simultaneously to center the image of the field diaphragm.



4. Open the field diaphragm until the diaphragm leaves are just outside of the field of view.



Care of the Microscope

General Maintenance

General



Always carry the microscope using two hands. There is a handle on the back of the microscope and an undercut in the front for this purpose.



- The cord wrap allows you to wrap the cord in such a way that only the length you need is extended.



- If any optical surface becomes coated with dust or dirt, clean the surface by blowing it off with a syringe or brushing it off with a camel hair brush before attempting to wipe the surface clean.
- Optical surfaces should be cleaned with a lint-free cloth, lens tissue, or cotton swab moistened with a commercially available glass cleaner.
- It is very important to avoid the excessive use of solvents, so use them sparingly. The lint-free cloth, lens tissue or cotton swab should be moistened with solvent, but not be wet enough for the solvent to seep around the lens.
- Keep all optical components clean. Cleanliness is important for maintaining good optical performance.
- The microscope should always be covered with the plastic dust cover (provided with the instrument) when it is not in use.

General Maintenance (Continued)

- No part of the microscope is quite so vulnerable to collecting dirt, dust, and oil as the front lens of the objective. Whenever you encounter lack of contrast, cloudiness or poor definition, carefully check the condition of the front lens with a magnifier.
- Cleaning 40× and 100× objectives requires more care. Note: To achieve the high degree of flatness obtained with higher magnification objectives, the objective has a small concave front lens of fairly short radius or curvature. The surface of this front lens can be readily cleaned with a toothpick covered with a cotton tip, or with a small cotton swab. Moisten the cotton with commercially available glass cleaner. Wipe the front lens lightly without applying undue force or scrubbing action. Make sure that the cotton tip contacts the concave lens surface. Check the objective with a magnifier after cleaning.
- If you need to remove the microscope's viewing body, be careful not to accidentally touch the outer lens surface (located on the underside of the body). Fingerprints on this surface will reduce image clarity. This lens can be cleaned in the same manner as objectives and eyepieces.

Illumination

- The Leica DM750 M uses LED illumination. Therefore, no lamp changing is required for the life of the microscope.



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