



Leica XL Universal Base User Manual

Important Safety Notes

Safety concept

Before using your microscope for the first time, please read the “Safety concept” brochure included with your instrument. It contains additional information about handling and care.



Transport and assembly



The Leica XL Universal Baseplate is very heavy! To prevent injury and property damage, have someone help you when transporting, setting up and positioning this unit!

For optimum lifting, grip the base by the recesses provided for this purpose.



Use in clean rooms

The Leica XL Universal Baseplate can be used in clean rooms without any problems.

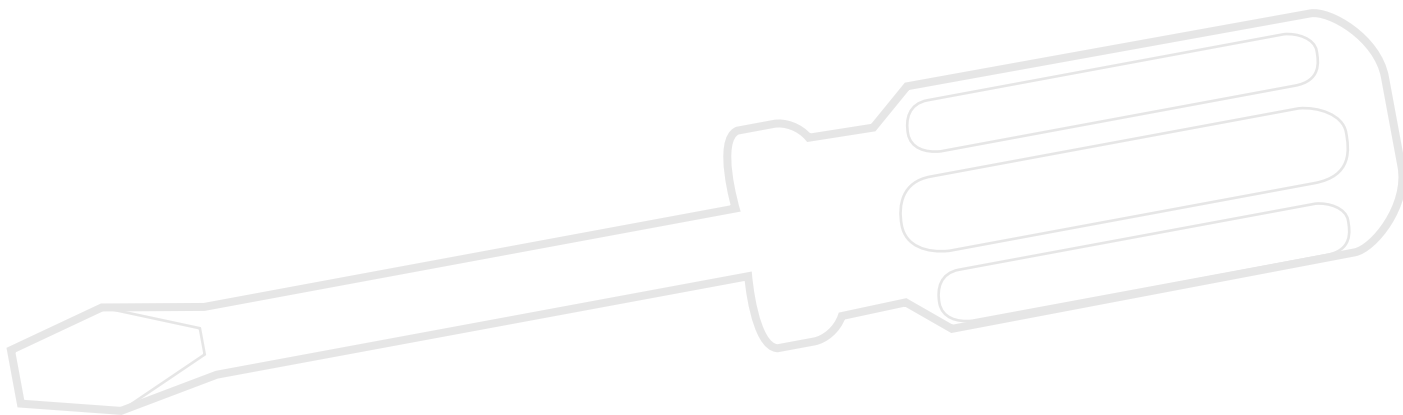
Cleaning

Please follow the cleaning instructions provided on page 14.

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Assembly





Installing the Base and Focusing Column

Tools used

- ★ Allen key provided


Assistance for installation

 Installing the focusing column will be considerably easier if you have someone help you.

 The Leica XL Universal Baseplate is predrilled, both on the longitudinal and on the lateral sides, with the holes necessary for installing the base. If, however, you plan to use the inspection table with the 300×300 mm travel range, the focusing column must be installed on the lateral side.

Installing the column

1. Place the Leica XL Universal Baseplate onto the table so that the desired installation holes point over the edge of the table.

 Move the Leica XL Universal Baseplate only far enough over the table edge to make the drill holes accessible. If you pull the baseplate too far over the edge of the table, it can fall. This may lead to injury or damage.

2. While having another person, if possible, hold the Leica XL Universal Baseplate steady, screw the focusing column in place using the screws provided.




What is next?

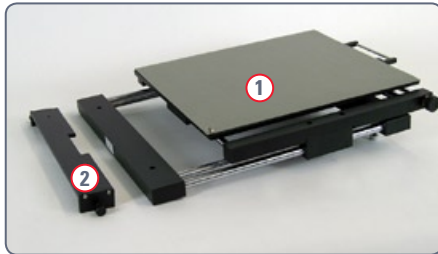
- ★ If you plan to use an inspection table, continue from the next page of the Installation Instructions.
- ★ If you do not intend to use an inspection table, skip to page 7 of the Installation Instructions.


Installing the Inspection Table

Tools used

- ★ Allen key provided

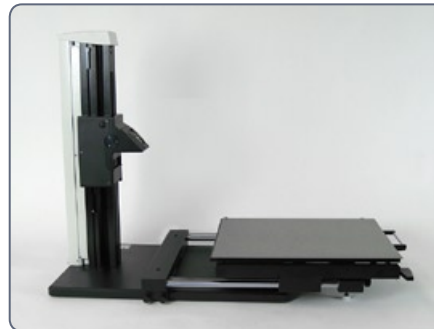
 The inspection table (1) is attached to the base using the assembly bar (2) provided.



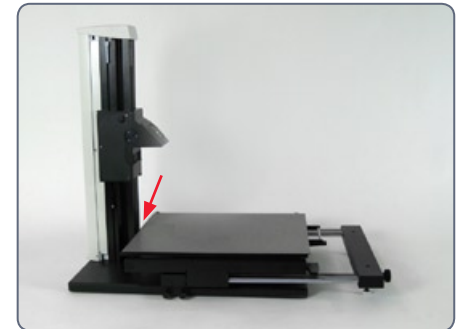
 After installing the assembly bar, the inspection table is simply attached using setscrews — its own weight is sufficient for ensuring a secure position.

Assembly

1. Place the assembly bar over the inspection table at a minimum distance of 110 mm from the focusing column.
2. Tighten the screws on the assembly bar to affix it.
3. Place the inspection table onto the assembly bar so that the setscrews grab in the holes.



4. Slide the work top of the inspection table towards the focusing column. Be sure that the work top cannot touch the focusing column when it is fully extended.




5. If the work top touches the focusing column, remove the inspection table. Attach the assembly bar a little further from the focusing column.

Installing the XL Extension

Tools

- ★ Allen key, 4 mm

Maximum load capacity

 The XL Extension is designed for a maximum weight of 8 kg! This value, however, is hardly reached in practice, as the following sample arrangement shows:

- Leica M205 A optics carrier
- 0.5× trinocular tube
- 2× eyepieces
- Leica DFC420 C digital camera
- Leica LED5000 MCI illumination
- 1.0× planapochromatic objective

Together, all of these components weigh 6.6 kg and can be used without problem.

Installing the XL Extension

1. Place the XL Extension on the focusing column so that the screw fits into the thread provided and the lug fits into the groove.



2. Press the XL Extension backwards to the focusing column and screw it in place using your other hand.



Assembling the Optics Carrier

Tools

- ★ Allen key provided

Assembling the Optics Carrier

1. Place the optics carrier on the XL Extension so that the screw fits into the thread provided and the lug fits into the groove.
2. Press the optics carrier backwards to the XL Extension and screw it in place using your other hand.

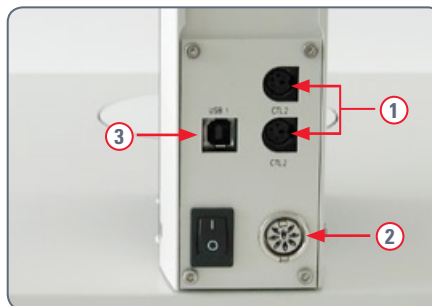


Cables: Connections

The terminals

The connection to the PC and to other instruments is made using the terminals on the rear side of the column:

1. 2× CTL2 terminals for auxiliary equipment such as the Leica SmartTouch, the foot switch, an illuminator from the Leica LED5000 series and other accessories from the Leica product range.
2. Terminal for the 50-watt power supply provided.
3. USB terminal for the connection to the PC.



Connecting the power supply

1. Connect the included power supply unit to the power socket on the focusing column.



Connecting the control unit

1. Connect the control unit (such as the Leica SmartTouch) to one of the two CTL2 terminals on the focusing column.



Cables: Cable Duct

The cable duct



The cable duct provides better organization by holding the cables for the illumination.



The cover for the cable duct consists of two elements, which can be removed and installed independently of each other.



A shorter cover is included as standard equipment. It can be used to replace a standard-length cover. The gaps created using the shorter cover can be used to feed the cable into and out of the cable duct.

Inserting the cables

1. Remove the standard cover from the cable duct.
2. Place the cable into the cable duct.
3. Install the shorter cover. Press this cover onto the cable duct until you hear it click into place.

Motorized Focus: Restricting the Travel Path



Depending on the work situation, it may be necessary to restrict the maximum travel path of the microscope. This prevents the following:

- ★ Injuries when manipulating the specimen because the fingers or hand get pinched.
- ★ Accidental contact between the lens and the specimen, and potential resulting damage.

Readjusting the motorized focus

The motorized focus is factory-adjusted and normally does not need to be readjusted—even if the maximum travel path is changed.



Exception: If the power fails while the motorized focus is moving, the position data are lost. In this case, the calibration must be repeated using the Leica LAS software or the Leica SmartTouch™. To do so, please consult the respective manual.

Restricting the bottom travel range

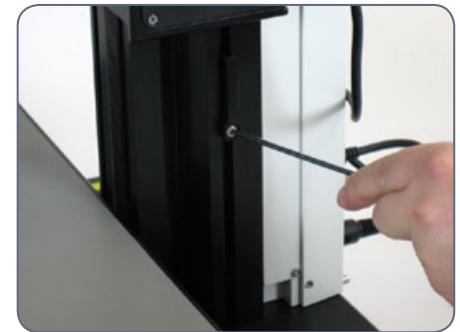
1. Move the motorized focus into the lowest position you want to reach.
2. Unscrew the screw of the limit stop on the side of the focusing column.




3. Push the limit stop to the height of the motorized focus.

It is easiest to move the limit stop by keeping the Allen key inserted and moving it upwards.


4. Tighten the screw of the limit stop.



ESD Terminals

 The Leica XL Universal Baseplate is equipped with two ESD terminals. Another terminal is located on the inspection table.




 Corresponding cables with banana plugs are not included as standard equipment.

Assembling the Remaining Components



For instructions on installing the remaining components, please refer to the documentation that was included with your microscope.

Cleaning the Focusing Column

 To guarantee trouble-free functionality for years, the focusing column should be cleaned regularly. Otherwise, dirt and dust can accumulate on the rollers, making it difficult or even impossible to focus accurately.

For cleaning, use a soft, lint-free cloth. Tough dirt can be removed using a mild cleaning agent.

Dimensional Drawings

Dimensions

Leica M80 with universal base, XL Extension and binocular ErgoTube®

