# **User Manual**

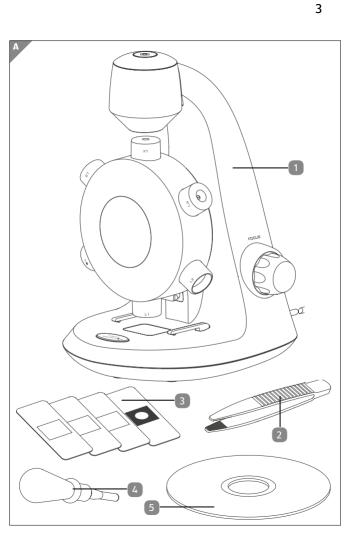
# MAGINON USB MICROSCOPE UM-2000

MAGINON

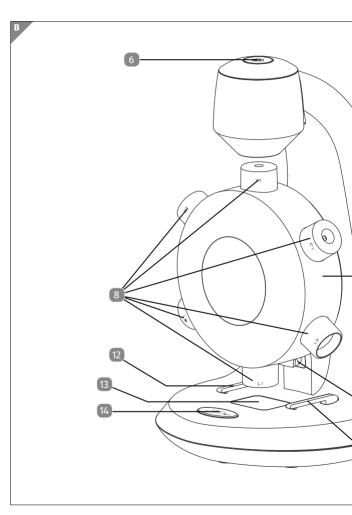


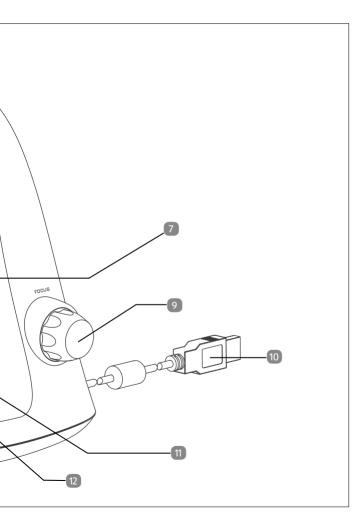
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# Scope of delivery/device parts

- USB Microscope
- 2 Tweezers
- 3 4x Slides 3x blank, 1x prepared slide
- 4 Dropper
- 5 Software CD
- 6 Snapshot button
- Objectives turret
- 8 Objectives
- 9 Focusing knob
- 10 USB connecting cable
- 11 LED-light
- 12 Specimen slide clip
- 13 Specimen stage
- 14 Light selector switch

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# Preface

Dear customer,

Congratulations on purchasing a high quality MAGINON product.

You have acquired a modern USB Microscope with excellent technical features and respective accessories, which is particularly easy to operate. Please study all notices carefully and diligently. Please study this information in detail observing, in particular, the safety instructions.

The device comes with a 3 year warranty. In case of a defect in the Microscope you require the enclosed warranty card and proof of purchase. Keep these in a safe place together with the Instruction Manual. Please include the Instruction Manual when passing the USB Microscope on to a third party.

## Imprint

Issued by:

#### supra

Foto-Elektronik-Vertriebs-GmbH Denisstr. 28A 67663 Kaiserslautern Germany

# General

# **Read and keep instructions**



This Operating Instruction belong to this USB Microscope. It contains important information about the start up and handling.

For ease of understanding, the USB Microscope is just referred to as Microscope in these Operating Instructions.

Study these Operating Instructions and, in particular the Safety Information in detail prior to using the Microscope. Non observance of these Operating Instructions can lead to loss of data or damage to the Microscope.

These Operating Instructions are based on valid standards and regulations of the EU. Also observe specific guidelines and laws in other countries!

Keep the Operating Instructions for further use. When passing on the Microscope to third parties please also include these Operating Instructions.

# **Explanation of symbols**

The following symbols and signal words are used in these Operating Instructions, on the device or on the packaging.



These signal words indicate a high level hazard which could cause death or serious injury if not avoided.

#### General

# A WARNING!

These signal words indicate a medium level hazard which could cause death or serious injury if not avoided.

# A CAUTION!

These signal words indicate a medium level hazard which could cause death or serious injury if not avoided.

# NOTE!

This signal word warns against potential material damage or provides useful additional information regards assembly or operation.



This symbol indicates useful additional information for the assembly or operation.

Declaration of conformity (see chapter "Declaration of conformity"): Products marked with this symbol meet all applicable Community regulations for the European Economic Area.

# Safety

## Correct use

The Microscope is solely designed to be used as a Microscope. It is only suitable for private and not for commercial use.

Only use the Microscope as described in the operating instructions. Any other use is deemed to be incorrect and can cause material damage and loss of data.

The manufacturers or dealers do not accept any liability for damage resulting from improper or incorrect use.

# Safety information

# A WARNING!

## Danger of electrocution!

Faulty electrical installations or excessive mains voltage can cause electrocution.

- Only connect Microscope if the mains voltage of the power point matches the voltage specified on the rating plate.
- Only connect the Microscope to an easily accessible USB socket allowing quick disconnection of the Microscope from the power supply in case of a fault.
- Do not operate Microscope in case of visible damage or the USB connecting cable is defective.
- Damaged USB connecting cable of the Microscope must be replaced by the manufacturer or customer service or a similar qualified person.
- Do not open housing but have repair carried out by an expert. Contact a specialist workshop. All liability and warranty claims shall be void in case of repairs carried out

#### Safety

by users, incorrect connection or improper use.

- The USB Microscope may not be dismantled, modified or repaired, there is a danger of fire and electrocution.
- For repairs only use parts corresponding to the original devices. This equipment contains electric and mechanical parts required for protection against hazard sources.
- The Microscope may not be operated with an external timer or separate remote control system
- Never immerse Microscope or accessories in water or other fluids.
- Never touch USB connecting cable with wet hands.
- Never use USB connecting cable as a carrying handle.
- Keep Microscope and accessories away from open flames and hot surfaces.
- Install USB connecting cable in such a way that it does not become a trip hazard.
- Do not kink USB connecting cable and do not install it over sharp edges.
- Never store the Microscope in such a way that it can fall into a trough or wash basin.
- Never touch an electric device that has fallen into water.
  Disconnect device from power supply immediately in such a case.
- When not in use, clean Microscope or in case of a fault, always switch off Microscope and pull USB connecting cable out of socket.
- Only place the USB Microscope on sturdy surfaces. The USB Microscope could otherwise fall or topple over, causing damage or injury.
- Do not wrap up USB Microscope or place on textiles. This could produce a build up of heat in the device that could cause deformation of the housing and may represent a fire hazard.

- Ensure adequate ventilation to avoid overheating.
- Do not place any open ignition sources, such as lit candles onto or close to the device.

# 🛦 WARNING!

Hazard for children and persons with reduced physical, sensory or mental abilities (such as partially disabled, older persons with limited physical and mental abilities) or lack of experience and know-how (such as older children).

- These Microscope may be used by children 8 years or older and persons with reduced physical, sensory or mental abilities or lack of experience or know-how provided they are supervised or have been instructed on how to safely use the Microscope and understand hazards resulting therefrom. Children may not play with the Microscope. The camera may not be cleaned or maintained by children without supervision.
- Ensure that children do not push objects into the device.
- Keep Microscope and USB connecting cable away from children below the age of 8.
- Do not leave the Microscope unintended during operation.
- Keep packaging foil away from children. They could get caught in it during play and could suffocate.

# NOTE!

#### Danger of damage

Incorrect use of the Microscope can damage the Microscope.

 Keep packaging foil away from children. They could get caught in it during play and could suffocate.

# Start

## **Content of box**

## NOTE!

#### Danger of damage!

If the packaging is carelessly opened with a sharp knife or other pointed objects, the Microscope can be easily damaged.

- Please open packaging carefully.
  - 1. Check that delivery is complete (see Fig. A).
  - 2. Remove Microscope from packaging and check whether the equipment or parts are damaged. If yes, do not use Microscope. Contact the service address of the manufacturer listed on the Warranty card.

## **Product description**

- This product diers from a traditional optical microscope such that, instead of looking through an eyepiece, magnied image or live video is displayed on the computer monitor via a USB connection.
- This product has an integrated object turret carrying six dierent object lenses. When viewing the image on a 17" monitor, this product can magnify specimens at 100x, 200x, 300x, 400x, 500x and 600x. The magnication is dependent on the size of the computer monitor – the larger the monitor, the higher the magnication.
- Snapshot of the specimens can be captured using the snapshot button located on the top of the device. Live videos and snapshots can also be captured and stored on the computer using the software provided.

## **Computer requirements**

#### Windows based PC

systems	Windows 10 (32 bit or 64 bit) Windows 8 (32 bit or 64 bit) Windows 7 (32 bit or 64 bit) Windows Vista (32 bit or 64 bit) Windows XP SP2, SP3
USB:	USB 2.0

#### Mac OS based PC

Compatible operating systems	Mac OS X 10.6 - Mac OS X 10.11.x
USB:	USB 2.0

## **Software installation**

#### Windows based PC

- Insert the supplied software CD 5 to the CD-ROM of the computer.
- Double click the "xploview v3.2.xx.exe" icon software CD 5.
- Follow the xploview setup wizard to install the application software for the digital microscope.

#### Mac OS based PC

- Insert the supplied application CD 5 to the CD-ROM of the computer.
- Double click the "xploview v3.2.xx.dmg" icon located on the software CD 5.
- Drag the xploview icon 💓 into the Applications folder.

## **Connecting the device**

Connect the device to the computer using the USB cable provided.

## Starting the xploview software

#### Windows based PC

 The xploview software can be launched by double clicking the xploview icon *from* the desktop, or from the start menu.

#### Mac OS based PC

 The xploview software can be launched by double clicking the xploview icon 2 from the Applications menu.

When the device is connected to the computer for the first time, a driver will automatically be installed by Windows or Mac OS. This process could take up to a few minutes.



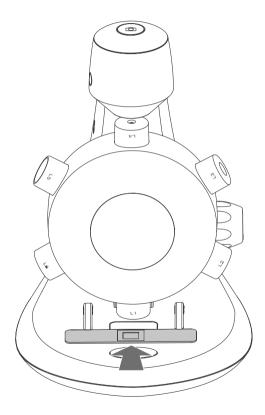
Each time when the xploview software is started, the device should start up automatically. Otherwise, the device can be selected from the device setup section of the system settings menu.



When the device is connected to the computer for the first time, a driver will automatically be installed by Windows or Mac OS. This process could take up to a few minutes.

## Installing a specimen slide

Place a prepared specimen slide 3 on the specimen stage and slide it into the specimen slide clips 12 such that the clips hold the specimen slide 3 securely.



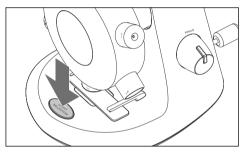
Start

# Selecting a light source

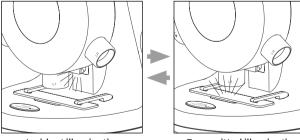
This digital microscope contains two light sources, one located above the stage and one underneath providing incident and transmitted illumination respectively.

When the device is connected to a computer, on executing the provided software, one of the lights will be switched on.

Press the light selector switch 12 once to switch over to the desired illumination system. When quitting the software, the light will switch off automatically.



Press once to switch over illumination system



Incident illumination

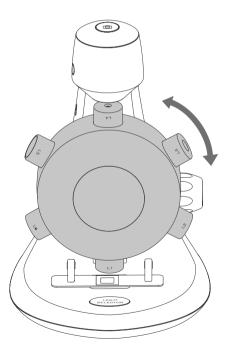
Transmitted illumination

# Selecting a magnication power

The objective turret **7** can be rotated both ways – clockwise or anticlockwise.

Taking the lease powerful objective **3**, L1, as an example; rotate the objective turret **7** such that L1 is directly on top of the specimen. When the objective is correctly aligned, you will feel a 'click'.

Rotate the object turret 🔽 to select the desired magnication.

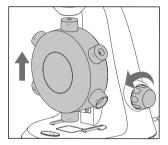


## Focusing

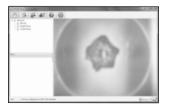
Rotate the focusing knob **9** clockwise or anticlockwise until the image is sharp.

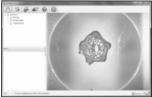


Note: Please make sure that the objective 8 is clear from obstacles and does not hit the specimen slide 3 while lowering the objectives turret 7 during focusing.



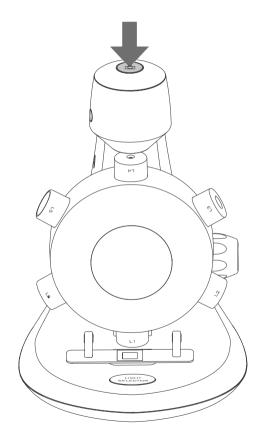






## Taking a snapshot

Press the snapshot button 6 to take a snapshot.



# Using the xploview software

## **Button menu**

The icons on the button menu :



**Open System Settings Menu** 



Capture on screen image.



To start and to stop Timed Shot.



To start and to stop Video Recording.



Information of the application software. This information maybe helpful when updating software

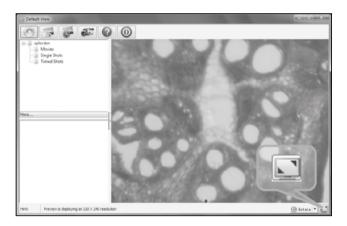


Shut down the application software.

## **Full screen viewing**

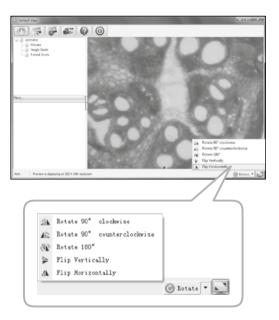
To activate the full screen mode, click the full screen button located on the bottom right corner of the xploview application software window.

To exit full screen mode, either double click on the screen, or press the "Esc" button on the keyboard.



## Image rotation / flip

Click OR Rotate T button to rotate or flip the image.



## System settings menu

The first time the xploview software is started, the default settings will be loaded, you may change these settings manually in the system settings menu.

ings				-X
Device Setup Device	US82.0 Camera	•		Apply
Resolution	1600 × 1200	•		Undo
Timed Shot Set	,			More
		⊛ minute : ◯ hour : ◯ day		Default
Duration:	200 @ ninute(s)	s) 🔘 hour(s) 💿 day(s)	(max. 999)	
	n file size: 100	• MB (16MB - 4097MB)		
Maxim Save Setting	n file size: 100			
Maxim Save Setting C:1Users i sat	n file size: 100	MB (16MB - 4097MB)		
Maxim Save Setting C:1Users i sat	n file size: 100	MB (16MB - 4097MB)		
Maxim Save Setting C:1Users i sat	n file size: 100 Nocuments	MB (16MB - 4097MB)		

#### **Device setup**

If the image captured by the digital microscope was not displayed by default, you can change this by selecting it from the "Device" drop-down menu.

The resolution of images you capture can be changed from the "Resolution" drop-down menu.

Device Setup		
Device:	USB2.0 Camera	•
Resolution:	1600 X 1200	•

#### **Timed shot setup**

The frequency and duration of automatic images capture can be adjusted under this option.

Timed Shot Setu	p						
Take:	40	shots per	() minute	) hour	🗇 day	(max. 300)	
Duration:	200	@ minute(s)	🔿 hour(s	i) 🔿 d	sy(s)	(max. 999)	

#### **Movie setup**

The resolution of videos you record can be changed from the "Resolution" menu. You can also set a maximum le size for each video.

Novie Setup		
Resolution:	640(480 🔻	
Maximum file size:	100	MB (16MB - 4097MB)

#### Save setting

The default location for captured images or videos can be changed under this option.



#### Language setting

The language of the xploview software can be changed under this option.

Language Setting	
English	•

#### **Advanced settings**

By clicking the "More..." button on the right of the system settings menu, you will be able to manually adjust all of the image settings. Note that the settings available may be dierent, depending on your operating system.

#### Windows based PC:

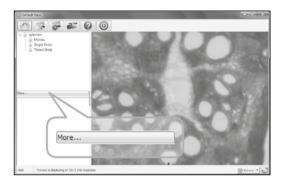
xploview Properties				- ×
Video Proc Amp Camera C	ontro	4		
				Auto
Brightness		0	0	
Contrast		0	64	
Bue		0	0	
Saturation		0	64	
Shargness				
Gamma		0	100	
White Balance				
Backlight Comp				
Gain				
ColorEnabl	e 🗌	PowerLine Frequency (Anti Flicker)		Y
		Default		
		OK Cano	el	Apply

#### Mac OS based PC:

	xploview	
Hue:		0.5
Saturation:		0.5
Brightness:		0.5
Contrast:		0.5
Sharpness:		0.5
		Default
	Cancel	Ok

## Saved files

With the xploview application software opened, you can locate the saved files folder by clicking the "More…" button located on the left of the main software window.



## Uninstalling the xploview software

#### Windows based PC:

Select "Uninstall" from the start menu (Start > All Programs > xploview >Uninstall).

#### Mac OS based PC:

Drag the xploview application icon from the "Applications" folder to "Trash".

# **Declaration of conformity**

# The EC Declaration of Conformity can be requested from the below address.

The Manufacturer hereby declares that the CE marking was applied to the product in accordance with the basic requirements and other relevant provisions of the following European Directives:

2011/65/EG RoHs-Guideline 2004/108/EG EMV-Guideline

#### supra

Foto-Elektronik-Vertriebs-GmbH, Denisstraße 28A, 67663 Kaiserslautern, Germany

# Storing

When not in use please disconnect the Microscope from the power supply and store it in a clean and dry place outside of the reach of children.

# Cleaning

# A WARNING!

#### Burn hazard!

Microscope becomes hot during operation!

Let Microscope cool down completely!

# **NOTICE!**

#### Danger of short circuit!

Any water that has entered the housing can cause a short.

- Never immerse Microscope in water.
- Ensure that no water enters the housing.

# **NOTICE!**

#### Danger from incorrect operation!

Incorrect use of the Microscope can cause the Microscope to be damaged.

- Do not use any aggressive cleaners, brushes with metal or nylon bristles or sharp or metallic cleaning objects, such as knives, hard spatulas and similar. These can damage the surface.
- Never place Microscope in dishwasher. This would destroy the camera
  - 1. Pull out mains connector prior to cleaning.
  - 2. Let Microscope cool down completely.
  - 3. Wipe the Microscope with a slightly damp cloth. Let Microscope dry completely.

# **Technical specification**

Model:	MAGINON UM-2000
Sensor:	CMOS
Photo resolution:	1600 x 1200 pixels (JPG)
Video resolution:	640 x 480, 320 x 240 (AVI)
Light source:	2 built-in lightsources
Magnification:	100x-600x (with a 17" computer screen)
Connectors:	USB 2.0 connector
Power supply:	USB 5.0 V 250 mA
Data Transfer:	USB 2.0
Dimensions:	208mm x 130mm x 153mm
Weight:	350 g



We reserve the right to make technical and optical changes to the product as part of product improvements.

# Disposal

# **Dispose of packaging**



For disposal, separate packaging into different types. Cardboard and board must be disposed of as paper and foil must be recycled.

# Dispose of used device

(Applicable in European Union and other European countries using systems for separate collection of recyclables).



#### Do not dispose of used device in household waste!

If the Microscope can no longer be used each consumer is **legally obliged to dispose of used** cameras, separately from domestic waste, e.g. at

a collecting point of the municipality/district. This

ensures that used equipment is recycled correctly and that negative effects on the environment are avoided. Electrical equipment is consequently marked with the adjacent symbol.



#### **Made in China**

**DISTRIBUTED BY:** ALDI STORES **1 SARGENTS ROAD MINCHINBURY NSW 2770** 

www.aldi.com.au

#### AFTER SALES SUPPORT

**2** (AUS) 1 800 623 432

info@supra-electronics.com

MODEL: **UM-2000**  54514 W<sup>2</sup>

08/2016





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