

APEXEL MS003 Digital Microscope Kit User Manual

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APEXEL MS003 Digital Microscope Kit



Product Information

The Digital Microscope Kit is a device used for observing specimens. It comes with a viewing platform and a monitor that displays the specimen. The microscope has a lift wheel to adjust the height of the observation and a colour temperature adjustment wheel to change the light colour. It also has an LED light that can be adjusted for brightness and colour.

Dear customer,

Thank you for purchasing our product. Please read the following instructions carefully before first use and keep this user manual for future reference. Pay particular attention to the safety instructions. If you have any questions or comments about the device, please contact the customer line.

<u>www.alza.co.uk/kontakt</u>

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Importer Alza.cz a.s., Jankovcova 1522/53, Holešovice, 170 00 Prague 7, www.alza.cz

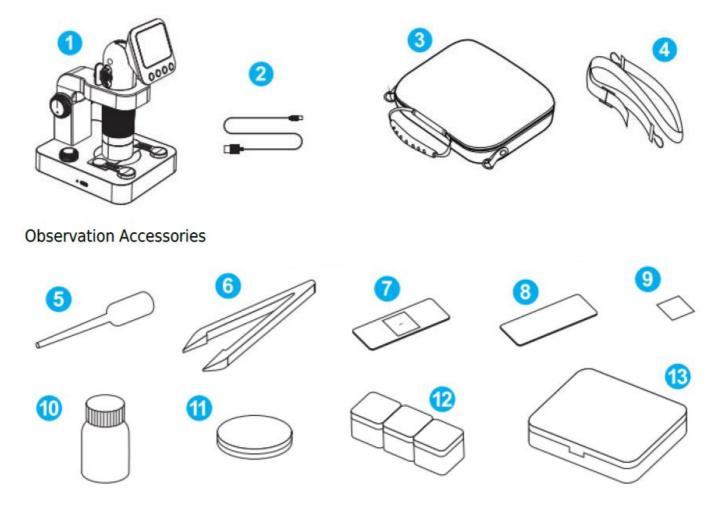
Thanks for choosing our microscope. Please read this manual carefully and keep it in a safe place. If you hand the product to others, please be sure to attach this manual. Please heel all warnings and follow all instructions in the manual.

Microscope Kit Introduction

MS003 is a new concept of digital microscope that can be used as a handheld or tabletop magnification tool, to provide bright and clear images, it offers a 3-LED illumination system with adjustable bright white output and provides a support platform that can adjust lifting height, lighting brightness and colour temperature. To offer flexibility in viewing visual data, the microscope features a tiltable 2" colour TFT LCD screen, which can be tilted 75° the most convenient viewing position and Long-term observation is comfortable for your cervical spine. That can be a great portable companion in your home, outdoor, lab, school, work, or in the field.

Microscope Kit Checklist

(This microscope kit includes the following parts)



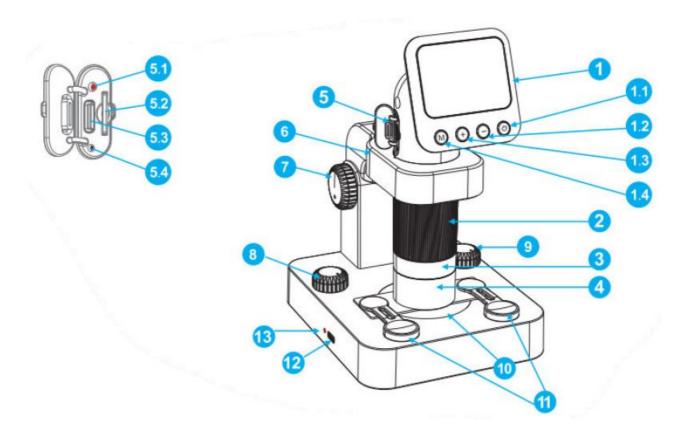
Microscope and Accessories Use Description

- The digital Microscope The microscope holds samples of very small things on clear glass slides. It shines a
 bright light from its bed plate LED lamp through the small sample, and then lenses make the sample look very
 big. This microscope can make things look 20 times, 400 times bigger than you can see them with just your
 eyes.
- 2. **Type-C data cable** used to transmit data, charge the microscope, and charge the observation platform.
- 3. **Carrying case and Straps** This is designed for safe storage of the microscope, shock resistance for transportation, and portability for viewing experience.
- 4. **Pipette** This is a plastic device that you can dip into a liquid to transfer a drop or two to a slide for examination.
- 5. **Tweezers** The tweezers are like little pinchers. They are used to pick up small samples and to handle samples that you don't want to touch with your hands.
- 6. **Prepare slides** These are glass slides, that have samples on then that have been prepared by professionals for you to examine.
- 7. **Blank slides** These are the clear slides that you will place prepared samples on for examination under microscope.
- 8. **Empty coverslips** For viewing liquids, the liquid is flattened onto a transparent glass slide for examination under a microscope. (Attention! This is a very thin piece of glass, please handle it with care of you will crush or scratch your fingers.)
- 9. **Specimen vials** These is are little plastic bottles with tight-fitting lids. They are used to carry your samples from where you collected them to where you have your microscope

set up.

- 10. Petri dish This is a round, flat dish with a clear cover. It is used to grow and observe samples such as mold.
- 11. **3 Plastic slide covers** These are made of thin, transparent square plastic boxes. They are mainly used to hold small samples such as solids, insects, powders, etc.
- 12. Accessory box for holding observation accessories

Microscope Details



- Display This is where you view and set up and perform microscope shooting functions. The image projected by the acquisition objective lens is displayed on the screen for you to view (you can choose the magnify 1X ~ 5X to view and capture the image/video). At the same time, it also includes the parameter setting of the display and the brightness adjustment of the microscope illumination.
 - 1. Power Key
 - 2. Keys
 - 3. + Key
 - 4. M key

For detailed operation, please refer to the microscope display buttons function and interface description.

- 2. Focus Ring Turn the ring very slowly to focus on the specimen you are viewing so you can see it clearly.
- 3. **Objective** It makes the specimen appear 400 times larger (400X) or (400X) than what you can see with your eyes alone.
- 4. **Transparent plastic cover** mainly for you to clearly see the current state of the specimen when you observe the specimen (the height of the cover is just best focusing distance of the microscope.
- 5. **Output Ports** Includes Type-C USB port and TF card slot, allowing you to charge the microscope and store image/video data. (Please cover the protective cover when the port is not in use).
 - 1. Microscope charging indicator
 - 2. TF card slot

- 3. Type-C charging port
- 4. Reset hole
- 6. **Lifting Arm** This curved part is the "pillar" of the microscope and holds the microscope on the platform for observation.
- 7. **Lift Knob** By turning the wheel, you can raise and lower the microscope for a more suitable viewing position.
- 8. **Light colour adjustment wheel** control the light colour temperature, (Note: When observing the specimen, you can try to adjust the light colour temperature to find the most suitable display colour for the specimen.
- 9. Light Brightness Adjustment Wheel Control light on/off and brightness from 0% -100%.
- 10. **LED Circular Light/Observation Table** This is the observation platform for the slides. The light from the LED light passes through the slide you are viewing, giving you a clearer view of the specimen you are viewing.
- 11. Clips The two clips on the stage hold your slides in place in case the coverslips slip while viewing.

Microscope Operating Instructions

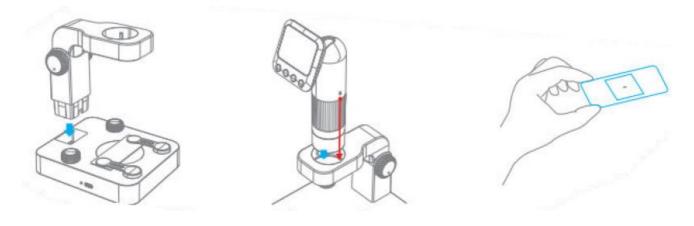
Pre-observation inspection

Microscope Check

- 1. Long press the power button on the monitor to light up the screen.
- 2. Please long press the + button to see if the light is turned on, and short press the +/-button to see if the light changes. Press and hold the button to see if the light is off.
 - Observation Platform Check
- 3. Turn the light adjustment wheel clockwise to turn on the light and check whether the brightness changes.
- 4. Rotate the colour temperature adjustment wheel to see if the light colour changes.
- 5. Rotate the lift wheel to adjust to see if ether is a lift change.

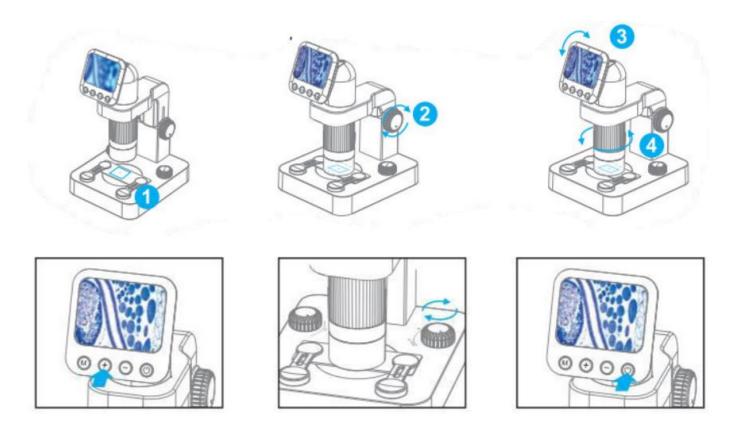
Preparation before observation

- 1. First mount the microscope arm on the viewing platform. (When you hear a click, it means it has been installed)
- 2. Insert the microscope into the round hole of the arm, make sure the positioning point is aligned with the positioning hole
- 3. The monitor faces the front
- 4. Prepare the specimen slide for observation



Begin to observe

- 1. Place the slide with the specimen on the viewing platform and centre it in the circle and compress it with the clips.
- 2. Rotate the lift wheel on the arm to adjust the microscope to the appropriate observation height
- 3. Adjust the inclination of the display screen to suit your viewing angle. The display can only adjust the tilt angle (about 75°) for viewing, please do not rotate it horizontally, as doing so may damage the hinge of the display.
- 4. Please gently rotate the focusing ring of the microscope, and carefully observe the changes of the screen. When the specimen is not withing the observation range, please move the sample to centre it on the screen, and the picture becomes clear. Please note: If the specimen you observe is an opaque specimen. You just need to turn on the microscope's LED light for fill light. When you are observing liquid or transparent specimens, you can choose microscope or observation platform LED light to fill in the light.
- 5. When you watch the picture is clear and bright, you can take pictures or videos.



Setup Instructions

Microscope display buttons function and interface description Microscope on/off

Press and hold the power button for 2 seconds, the startup screen will appear. In any mode, press and hold the power button for 2 seconds tot urn off the device.

Photo Mode/Video Model/Playback Mode

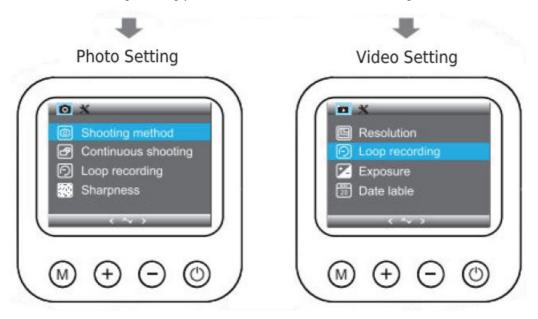
Turn on the device, the default is photo mode. Short press the power button to switch the modes.



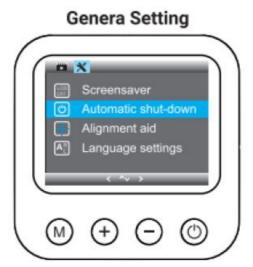
In both photo/video modes

Short press the + button to zoom in, the – button to zoom out, and the power button to take pictures/videos. Press and hold the + button to turn on the light/brightness+,

• button brightness-/turn off the light. Long press the M button to enter the settings menu for this.



In payback mode, short press the +/- button to select up and down, and the power button to executes the video playback. Press and hold the +/- button to fast forward/rewind during playback. Long press the M button to delete the file.

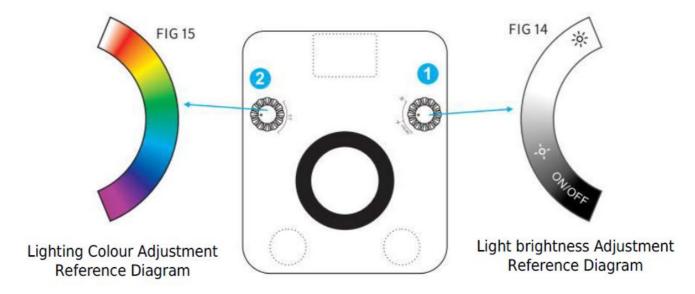


After entering the setting menu, short press the M button to switch setting type (photo/video setting or general setting), the +/- button can be selected up and down, and power button is executed to confirm. When you have

entered the menu bar, short press the M button to return to the previous menu.

Microscope observation platform lighting adjustment instructions

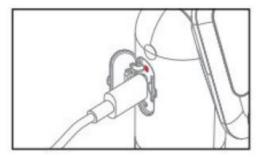
- 1. First, turn the brightness adjustment wheel clockwise to turn on the LED light (you hear a click to indicate that it is turned on), continue to turn clockwise to increase the brightness, and turn counter clockwise to decrease the brightness.
- 2. When the LED light is turned on, rotate the colour adjustment ween to change the light colour.

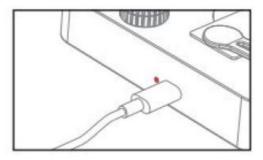


Other Instructions

Charging Instructions

- **Microscope charging:** Insert the type-c plug into the Type-c of the microscope, and connect the other end to the USB power supply for charging. The charging time is about 2 hours, and the usage time is about 2 hours. (Red light when charging, green light when fully charged)
- Observing platform charging: Insert the type-c plug into the Type-c of the platform, and charge the other end with a continuous USB power supply. The charging time is about 2 hours, and the use time is about 8 hours. (Red light when charging, green light when fully charged.)





Frequently Asked Questions

| Problem | Cause | Solution |
|-------------------------------|---|--|
| Microscope does not turn on | The battery may be dead | Please charge |
| The picture is noisy and dark | No light on | Please turn on the light |
| System stuck | Press the reset key | Please insert a sharp object into the reset hole and press it to reset the system |
| The picture is not clear | The focus is not in place, the sample is not placed or handled properly, and the surface of the slide is not clean. | Please check whether the focus is correct, whether the specimen is placed properly, and whether the slide is clean and free of foreign matter. |
| Bracket light flashes | Indicates the power of the stand is about to run out. | Please charge asap. |
| The screen is too bright | The exposure parameters are not adjusted correctly. | Please enter the setting menu to adjust exposure parameters. |

Precautions

- Keep children and animals away from any experiments or program.
- Store the microscope unit out of the reach of children.
- Always wash hands carefully after handling any samples, and always handle any samples in a safe manner.
- Keep your hands away from your mouth and eyes when handling samples.
- **WARNING:** This microscope contains glass parts and is intended for use by adults only. Children 8 yeas old and over require adult assistance. Children under 8 years old are prohibited.
- This product is a precision instrument, please avoid dropping, bumping or receiving heavy blows.
- Do not place this product in place where the temperature is too high, the high temperature may damage or explode the battery inside the product.

Friendly Reminder

- Use only a microfiber and dry cloth for cleaning the product.
- Do not leave the product in excessive heat, hight temperature can cause the product to malfunction.
- Please have the product checked by the authorized service or agent if your product has some problems.
 Please not that this warranty does not apply to repair arising out of malfunction of unauthorized disassembly, although you may request such repairs on a chargeable basis.
- Use of the original cable accessories is recommended. Please note, that this warranty does not apply to
 repairs arising out of the malfunction of non-original accessories, although you may request such repairs on a
 chargeable basis.
- The product is certificated by RoHS and CE. Please operate the product in full compliance with the operation standards. Please not that this warranty does not apply to repair airing from malfunction, although you may request such repairs on a chargeable basis.
- Use and store this product under the working conditions specified in this manual.
- · If this product is not used in accordance with this manual, or does not comply with the prescribed working or

storage conditions, it will be regarded as illegal use.

Warranty Conditions

A new product purchased in the Alza.cz sales network is guaranteed for 2 years. If you need repair or other services during the warranty period, contact the product seller directly, you must provide the original proof of purchase with the date of purchase.

The following are considered to be a conflict with the warranty conditions, for which the claimed claim may not be recognized:

- Using the product for any purpose other than that for which the product is intended or failing to follow the instructions for maintenance, operation, and service of the product.
- Damage to the product by a natural disaster, the intervention of an unauthorized person or mechanically through the fault of the buyer (e.g., during transport, cleaning by inappropriate means, etc.).
- Natural wear and aging of consumables or components during use (such as batteries, etc.).
- Exposure to adverse external influences, such as sunlight and other radiation or electromagnetic fields, fluid
 intrusion, object intrusion, mains overvoltage, electrostatic discharge voltage (including lightning), faulty supply
 or input voltage and inappropriate polarity of this voltage, chemical processes such as used power supplies,
 etc.
- If anyone has made modifications, modifications, alterations to the design or adaptation to change or extend the functions of the product compared to the purchased design or use of non-original components.

EU Declaration of Conformity

Identification data of the manufacturer's / importer's authorized representative: Importer: Alza.cz a.s.

Registered office: Jankovcova 1522/53, Holešovice, 170 00 Prague 7

CIN: 27082440

Subject of the declaration: Title: Digital Microscope Kit Model / Type: MS003

The above product has been tested in accordance with the standard(s) used to demonstrate compliance with the

essential requirements laid down in the Directive(s):

Directive No. 2014/30/EU

Directive No. 2011/65/EU as amended 2015/863/EU

WEEE

This product must not be disposed of as normal household waste in accordance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE -2012/19 / EU). Instead, it shall be returned to the place of purchase or handed over to a public collection point for the recyclable waste. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. Contact your local authority or the nearest collection point for further details. Improper disposal of this type of waste may result in fines in accordance with national regulations.

Documents / Resources



APEXEL MS003 Digital Microscope Kit [pdf] User Manual MS003 Digital Microscope Kit, MS003, Digital Microscope Kit, Microscope

References

- Name i name i
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- <u>alza.de</u>
- 🍇 alza.hu
- <u>alza.sk</u>

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