

levenhuk RC1 DTX RC Remote Controlled Microscopes



levenhuk RC1 DTX RC Remote Controlled Microscopes User Manual

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levenhuk RC1 DTX RC Remote Controlled Microscopes



Specifications:

- Model: Levenhuk DTX RC Remote Controlled Microscopes
- Objective: Included
- Features: LCD screen, Brightness adjustment knob, Coarsefocusing knob, Optical zoom ring, Spotlights, Power connector,Stage, Specimen holders (RC2, RC4 only)
- Power Source: Power connector
- Control Interface: Remote controlled

Product Usage Instructions

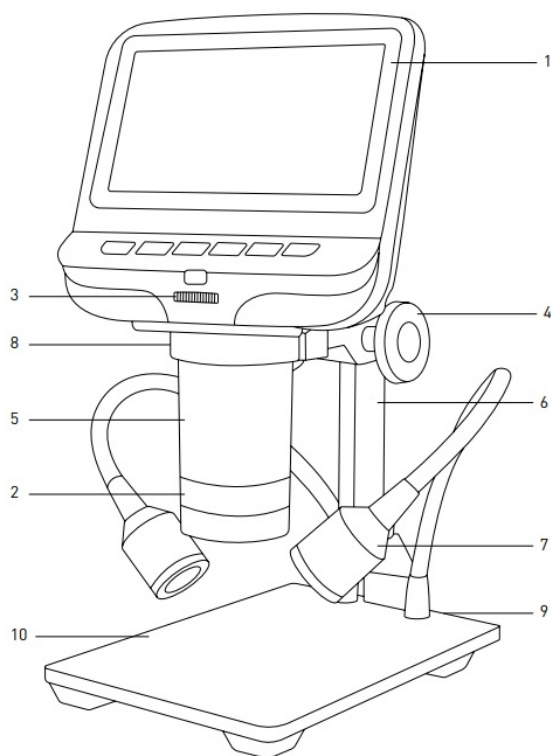
1. Power On/Off:
Use the power button to turn the microscope on or off.
2. Menu Navigation:
Use the menu button to navigate through different settings and options.
3. Adjusting Brightness and Zoom:
Use the brightness adjustment knob and optical zoom ring to adjust brightness and zoom levels for better viewing.
4. Focusing:
Utilize the coarse focusing knob to focus on the specimen.
5. Capturing Images:
Press the capture button to capture images using the microscope.
6. Connecting to External Devices:

Connect the microscope to external devices using the provided ports (MicroUSB, HDMI) for output.

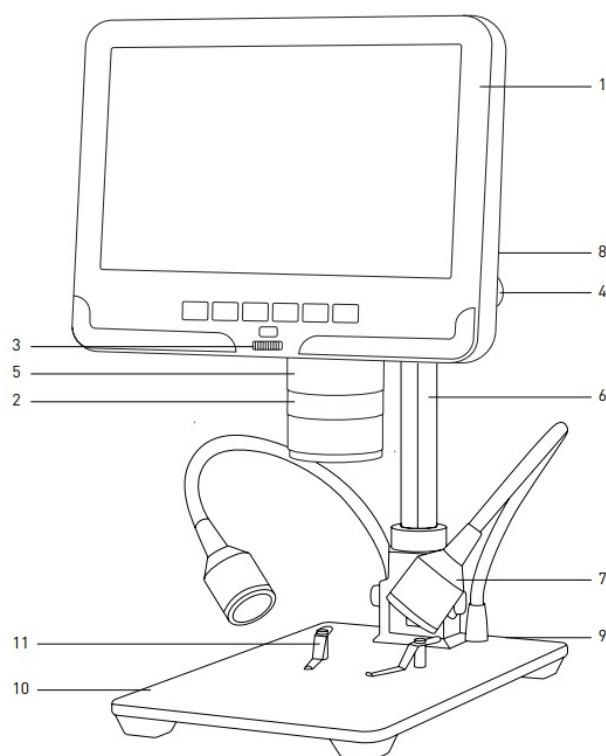
Please refer to fig. 1 (device), 2 (LCD screen), 3 (control panel), and 4 (accessories). Find your microscope model and view all of the details of the device.

PRODUCT OVERVIEW

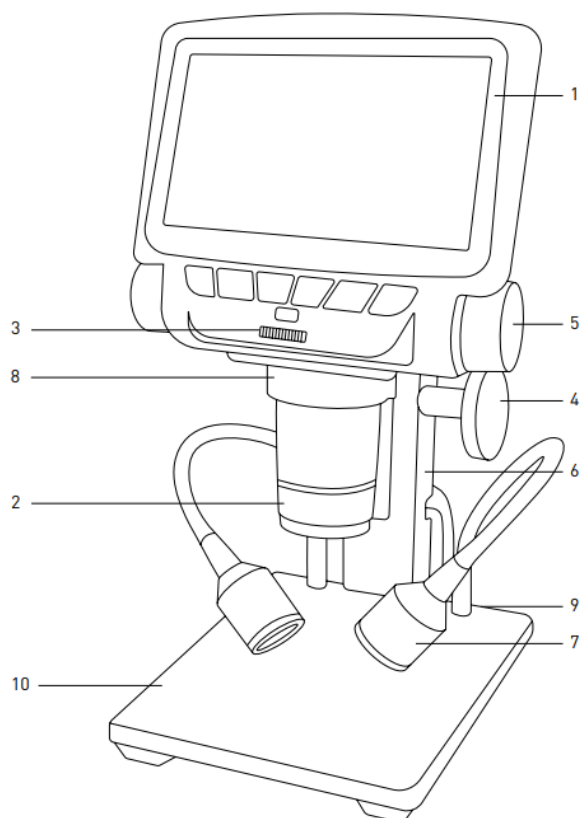
1. LCD screen
2. Objective
3. Brightness adjustment knob (except RC4)
4. Coarse focusing knob
5. Optical zoom ring
6. Pole
7. Spotlights
8. LCD screen locking screw (not shown)
9. Power connector (not shown)
10. Stage
11. Specimen holders (RC2, RC4 only)



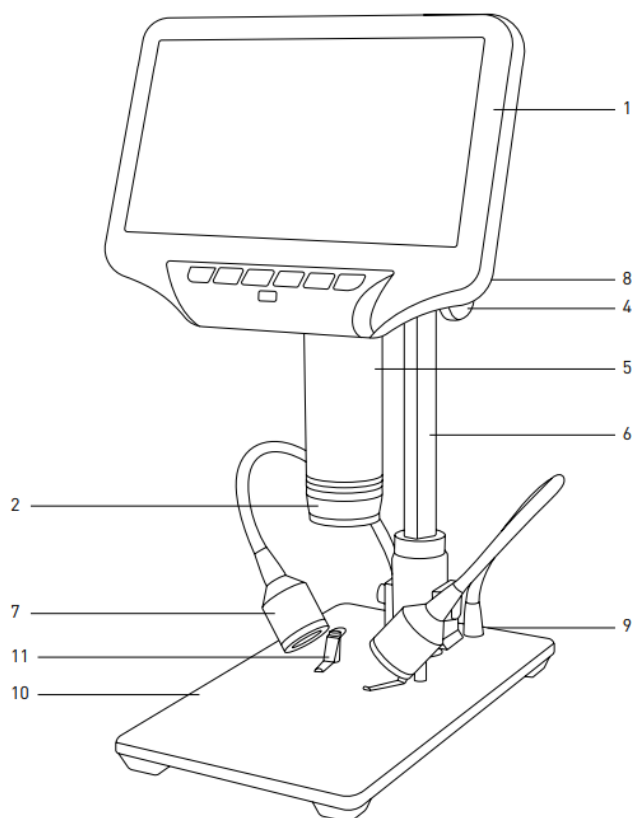
1a. Levenhuk DTX RC1



1b. Levenhuk DTX RC2

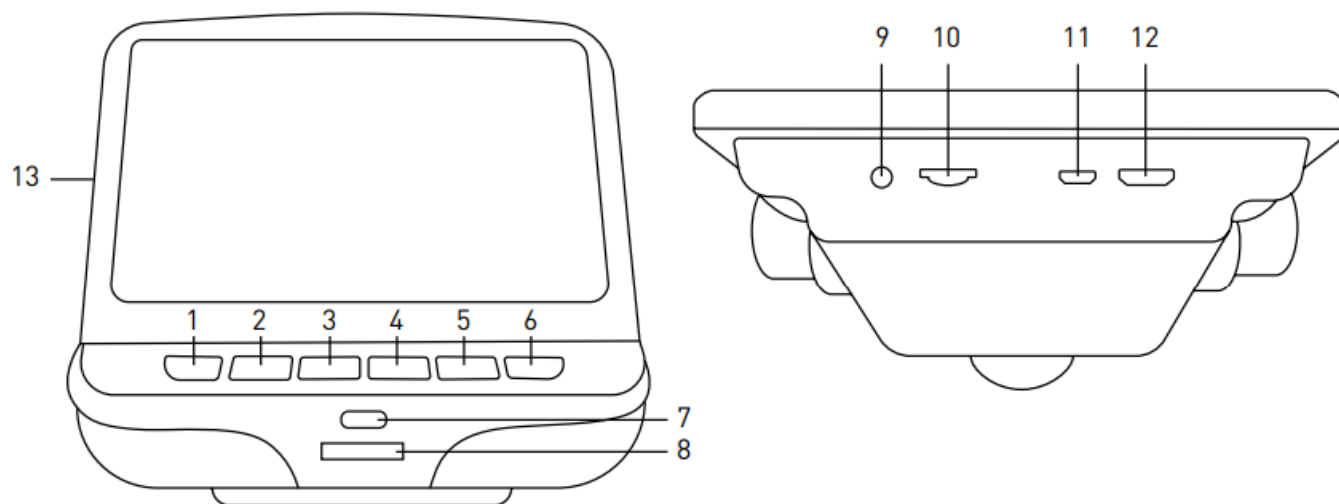


1c. Levenhuk DTX RC3



1d. Levenhuk DTX RC4

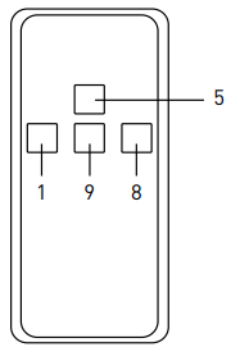
1. Power on/off
2. Menu
3. Up
4. Down
5. OK
6. Capture
7. Infrared sensor
8. Brightness adjustment wheel (except RC4)
9. AV out (RC3 only)
10. SD slot
11. MicroUSB: output to PC
12. HDMI out (RC3, RC4 only)
13. Reset (not shown)



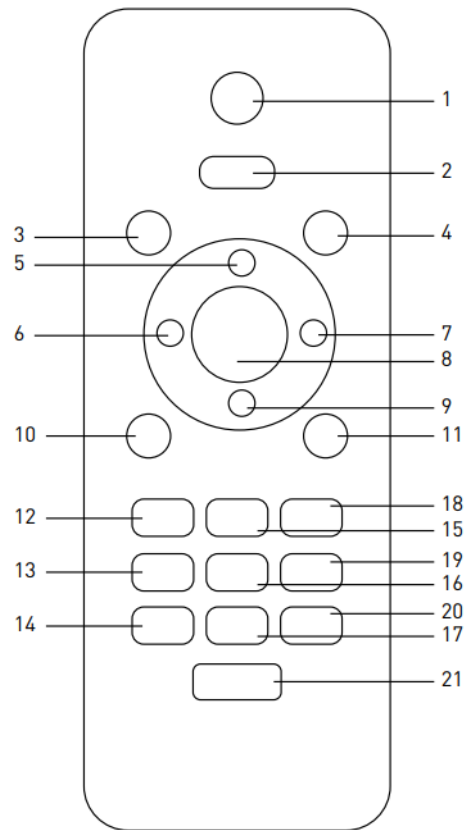
2.

REMOTE CONTROL

1. Capture
2. Menu
3. Frozen
4. Mode
5. Zoom up
6. Brightness down
7. Brightness up
8. OK
9. Zoom down
10. 50/60Hz
11. Cross line
12. Sharpness down
13. Contrast down
14. Inverse
15. Sharpness up
16. Contrast up
17. Black&white
18. Lock/unlock file
19. NTL/PAL
20. Default set
21. Image rotate

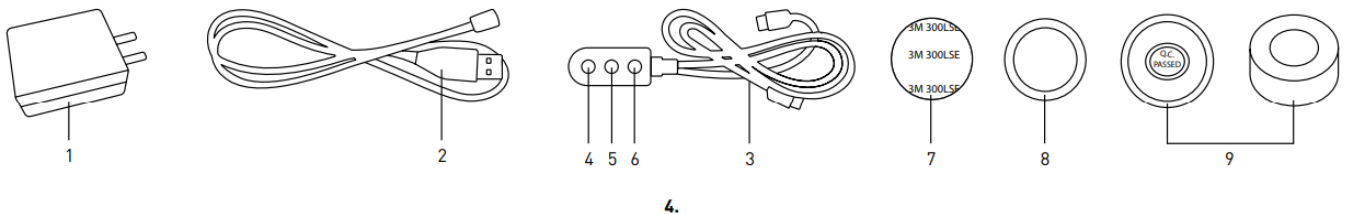


3a. Levenhuk DTX RC1



3b. Levenhuk DTX RC2, RC3, RC4

1. DC adapter
2. USB cable (RC1, RC3 only)
3. Switch cable
4. Brightness down
5. Brightness up
6. On/Off
7. 3M sticker (RC1 only)
8. UV filter
9. Lens covers (RC1 only)



Getting started

- Unpack the microscope carefully and place it on a flat surface.
- Use the supplied hardware to secure the pole and specimen holders to the base using the supplied hardware.
- Install the LCD screen on the pole and tighten the locking screw.
- Plug the power cable into the corresponding connectors on the base and on the LCD screen, and then the backlight and screen will turn on automatically.
- Press and hold the “Power on/off” button for 2 seconds on the screen to turn the screen on and off.

A microSD card (purchased separately) is required to save captured images and recorded videos. Turn the microscope off and insert the microSD card into the corresponding slot on the microscope body until it locks in place with a click. Do not apply excessive force when inserting the microSD card. Try rotating the card, if it does not lock in place with ease.

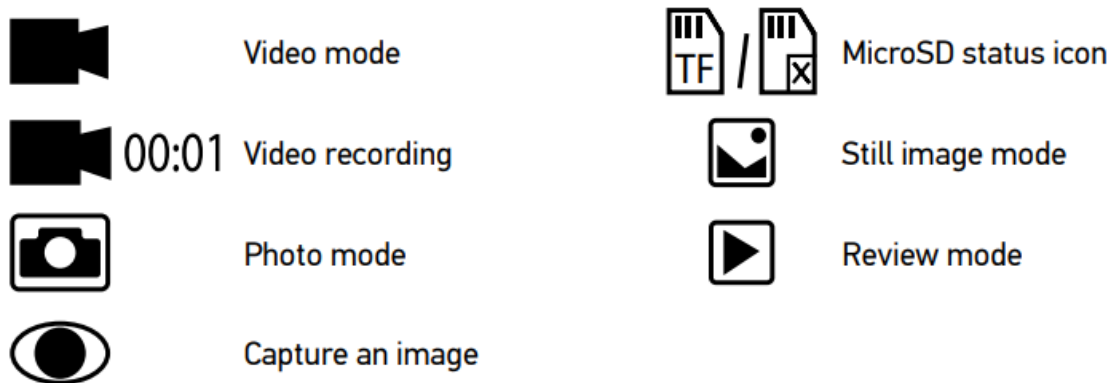
If the LCD screen freezes, look for the “Reset” button on the back of the LCD screen. Use a narrow object, such as a straightened paperclip, to press the button. This will reset all of the settings to the factory defaults and restart the LCD screen. Saved photos or videos will not be deleted.

UV filter

Use a 3M sticker to stick the UV filter and lens cover together. The threaded side of the filter must be glued to the lens cover.

Caution: Please refer to the specifications table for the correct mains voltage and never attempt to plug a 110V device into 220V outlet and vice versa without using a converter. Remember that mains voltage in the U.S. and Canada is 110V and 220–240V in most European countries.

Application menu



Digital magnification

During observations, press the “Up” button to enlarge the image and the “Down” button to reduce the image.

Capturing an image

1. Turn the microscope on and place a specimen on the stage.
2. Set the objective to the desired height using the coarse focusing knob.
3. Adjust the illumination brightness, so that the specimen is evenly lit.
4. Adjust the magnification and sharpness of the image by rotating the coarse focus knob and optical zoom ring.
5. To take a photo, press the “Capture” button.
6. In “Freeze” mode, briefly press the “OK” button to take a picture (except RC1).

Recording a video

1. Press the “Video” button to switch to video mode. The icon in the upper left corner of the screen will change in confirmation.
2. Press the “OK” button to start recording. Note: do not hold down the “OK” button; instead, briefly press and release it.
3. Press the “OK” button again to stop recording.

4. Press the “Capture” button to take a picture while the microscope is recording a video. If you take a photo this way, the image resolution may not be as high as the video resolution – the image quality will be lower.

View photos and videos

1. Insert the microSD card into the SD slot.
2. Press the “Video” button twice to turn on the viewing mode.
3. Press the “Right” and “Left” buttons to view the pictures and videos. Press the “Capture” button to start playing the video.

Use with a computer and TV

View on a computer (RC1, RC3 only)

AMCAP, ViewPlayCap, and Microscope Measure programs can be download from the official Levenhuk website.

Levenhuk DTX RC1

Windows 7/8/10, Mac OS:

1. Install the AMCAP (Windows 7/8) or ViewPlayCap (Windows 10) software on the computer. The PC camera icon will appear on your desktop after the installation of the software is complete.
2. Use the “Power on/off” button to turn off the LCD screen.
3. Use the USB cable for connecting the LCD screen to the computer.
4. Click the PC camera icon on your computer’s desktop to start viewing.
5. Microscope can be directly connected to Mac OS by simply opening the system’s native camera.

Levenhuk DTX RC3

Windows XP SP3/7/8/10:

1. Install the Microscope Measure software on the computer. The Microscope Measure icon will appear on your desktop after the installation of the software is complete.
2. Use the “Power on/off” button to turn off the LCD screen.
3. Use the USB cable for connecting the LCD screen to the computer.
4. Click the Microscope Measure icon on your computer’s desktop to start viewing.

Connecting to a TV/monitor with an AV connector (RC3 only)

1. Connect the microscope to the mains.
2. Use an AV cable (not included) for connecting the LCD screen to the TV/monitor. The image on the LCD screen turns off and the display on the connected screen starts.
3. Now, you can start viewing on the screen. If a microSD card is inserted into the microscope, you can take and save photos. Video recording function is not available in this display mode.

Connecting to a TV/monitor with an HDMI connector (RC3, RC4 only)

1. Connect the microscope to the mains.
2. Use an HDMI cable (included) for connecting the LCD screen to the TV/monitor. The image on the LCD screen turns off and the display on the connected screen starts.
3. Now, you can start viewing on the screen. If a microSD card is inserted into the microscope, you can take and save photos. Video recording function is not available in this display mode.

Setup

Press the “Menu” button to go to the settings menu of the LCD screen Use the control buttons to select the required parameters. Press the “Menu” button again to save the selected parameters. Do not turn off the power of the microscope while saving the settings.

Specifications

Product ID	76821	76822	76823	76824
Model	Levenhuk DTX RC1	Levenhuk DTX RC2	Levenhuk DTX RC3	Levenhuk DTX RC4
Digital magnification	3–220x	3–200x	5–260x	5–270x
Optical magnification	3–55x	3–50x	5–15x	5–40x
Optics material	optical glass			
Body	plastic			
Stage	100x160mm	120x200mm, with specimen holders	120x170mm	120x200mm, with specimen holders
Focus	coarse, 23mm	coarse, 150mm	coarse, 100mm	coarse, 77mm
Illumination	upper LED (2 illuminators on flexible arms and illumination inside the objective)		upper LED (2 illuminators on flexible arms)	
UV filter	+			
Rotatable color LCD screen	4.3"	7"	5"	7"
Megapixels (sensor/image)	1/12	2/12	3/12	4/24
Max. resolution (image/video)	4032x3024px/1920x1080px		4032x3024px/1920x1080px	5600x4200px/1920x1080px
Image/video format	*.jpg/*.avi		*.jpg/*.mov	*.jpg/*.mp4
Sensor	1/4	1/2.9	1/3	
Pixel size	3.0µm	2.8µm	2.2µm	2.0µm
Sensitivity	highly sensitive sensor	3800mV/Lux·s	2000mV/Lux·s	1900mV/Lux·s
Spectral range	410–1100nm			
Manual settings	white balance, exposure control			
Output (connectors)	microSD, microUSB	microSD, microUSB	microSD, microUSB, HDMI, AV	microSD, microUSB, HDMI
Operating system	Windows 7/8/10, macOS	–	Windows XP SP3/7/8/10	–
Power supply (microscope)	110–220V; 5V, 2A via USB cable			
Power supply (IR remote)	1pc CR2025 batteries	2pcs AAA batteries		
Operating temperature range	–20...+70 °C (–4...+158 °F)			

Levenhuk reserves the right to modify or discontinue any product without prior notice.

Care and maintenance

- Never, under any circumstances, look directly at the Sun, another bright source of light or at a laser through this device, as this may cause PERMANENT RETINAL DAMAGE and may lead to BLINDNESS.
- Take necessary precautions when using the device with children or others who have not read or who do not fully understand these instructions.
- After unpacking your microscope and before using it for the first time check for integrity and durability of every component and connection.
- Do not try to disassemble the device on your own for any reason. For repairs and cleaning of any kind, please contact your local specialized service center.
- Protect the device from sudden impact and excessive mechanical force. Do not apply excessive pressure when adjusting focus. Do not overtighten the locking screws.
- Do not touch the optical surfaces with your fingers. To clean the device exterior, use only special cleaning wipes and special optics cleaning tools from Levenhuk. Do not use any corrosive or acetone-based fluids to clean the optics.
- Abrasive particles, such as sand, should not be wiped off lenses, but instead blown off or brushed away with a soft brush.
- Do not use the device for lengthy periods of time, or leave it unattended in direct sunlight. Keep the device away from water and high humidity.
- Be careful during your observations, always replace the dust cover after you are finished with observations to protect the device from dust and stains.
- If you are not using your microscope for extended periods of time, store the objective lenses and eyepieces separately from the microscope.
- Store the device in a dry, cool place away from hazardous acids and other chemicals, away from heaters, open fire and other sources of high temperatures.
- When using the microscope, try not to use it near flammable materials or substances (benzene, paper, cardboard, plastic, etc.), as the base may heat up during use, and might become a fire hazard.
- Always unplug the microscope from a power source before opening the base or changing the illumination lamp. Regardless of the lamp type (halogen or incandescent), give it some time to cool down before trying to change it, and always change it to a lamp of the same type.
- Always use the power supply with the proper voltage, i.e. indicated in the specifications of your new microscope. Plugging the instrument into a different power outlet may damage the electric circuitry of the microscope, burn out the lamp, or even cause a short circuit.
- Seek medical advice immediately if a small part or a battery is swallowed.

Battery safety instructions

- Always purchase the correct size and grade of battery most suitable for the intended use.
- Always replace the whole set of batteries at one time; taking care not to mix old and new ones, or batteries of different types.
- Clean the battery contacts and also those of the device prior to battery installation.
- Make sure the batteries are installed correctly with regard to polarity (+ and –).
- Remove batteries from equipment that is not to be used for an extended period of time.
- Remove used batteries promptly.

- Never attempt to recharge primary batteries as this may cause leakage, fire, or explosion.
- Never short-circuit batteries as this may lead to high temperatures, leakage, or explosion.
- Never heat batteries in order to revive them.
- Do not disassemble batteries.
- Remember to switch off devices after use.
- Keep batteries out of the reach of children, to avoid risk of ingestion, suffocation, or poisoning.
- Utilize used batteries as prescribed by your country laws.

Levenhuk International Lifetime Warranty

All Levenhuk telescopes, microscopes, binoculars, and other optical products, except for their accessories, carry a lifetime warranty against defects in materials and workmanship. A lifetime warranty is a guarantee on the lifetime of the product on the market. All Levenhuk accessories are warranted to be free of defects in materials and workmanship for six months from the purchase date. The warranty entitles you to the free repair or replacement of the Levenhuk product in any country where a Levenhuk office is located if all the warranty conditions are met.

For further details, please visit: www.levenhuk.com/warranty

If warranty problems arise, or if you need assistance in using your product, contact the local Levenhuk branch.

The original Levenhuk cleaning accessories



Levenhuk Cleaning Pen LP10



Removes dust with a brush

The soft tip is treated with a special cleaning fluid that removes greasy stains

Does not damage optical coatings of the lenses

Leaves no smudges or stains

levenhuk.com

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Frequently Asked Questions (FAQ)

How do I change the magnification level?

Use the optical zoom ring to adjust the magnification level on the microscope.

Can I capture images with this microscope?

Yes, you can capture images by pressing the capture button on the device.


How do I adjust the brightness of the LED spotlights?

Use the brightness adjustment knob to control the brightness of the spotlights.

What power source does the microscope use?

The microscope uses a power connector as its power source.

Documents / Resources

	Levenhuk RC1 DTX RC Remote Controlled Microscopes [pdf] User Manual RC1, RC1 DTX RC Remote Controlled Microscopes, DTX RC Remote Controlled Microscopes, RC Remote Controlled Microscopes, Controlled Microscopes, Microscopes
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References

- [Levenhuk's official website in USA](#)
- [Доживотна гаранция на Levenhuk – Официален уебсайт на Levenhuk в България](#)
- [Levenhuk Limited Warranty – Levenhuk's official website in USA](#)
- [Doživotní záruka společnosti Levenhuk – Oficiální webové stránky Levenhuk pro Českou republiku](#)
- [Levenhuk Lebenslange Garantie – Die offizielle Website von Levenhuk in Deutschland](#)
- [Garantía internacional de por vida Levenhuk – Web oficial de Levenhuk en España](#)
- [Levenhuk Lifetime Warranty – Levenhuk's official website in USA](#)
- [A Levenhuk élettartamra szóló szavatossága – A Levenhuk hivatalos magyarországi weboldala](#)
- [Gwarancja bezterminowa Levenhuk – Oficjalna witryna internetowa Levenhuk w Polsce](#)
- [Поддержка - Гарантийное обслуживание Левенгук - Levenhuk Russia](#)
- [User Manual](#)

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