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Microscope Assembly Instruction Manual



*This instruction manual provides information on the use of
microscopes sold by Microsurgery Training Ltd (UK),
troubleshooting any problems and its care and maintenance.*

CONTACT US AT:

www.microsurgerytraining.com

1. Before you begin

1-1 Operating the microscope

- Avoid exposure to direct sunlight or extreme temperatures.
- The microscope is a precision instrument and should be handled with care.
- In order to maintain a clear image, avoid touching the aperture of the microscope.

1-2 Maintenance and care

- Keep the microscope clean where possible. Any dust should be removed with delicate wipes to avoid scratching to the surface. If any oil residues require removal, one can use dilute window cleaner solution on a damp cloth to clean it. Always dry your microscope after cleaning with a dry, microfiber cloth.
- Avoid using any harsh solvents which may damage the lens or surface of the microscope.
- Cover the microscope when not in use to minimize any dust interference. Keep it stored in a dry environment at ambient temperature to reduce the risks of rust or mold formation.

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2. Specifications

Microscope Model : WMT M1. Lens Pieces : 10X(for 10cm working distance)/20X
(for 15cm working distance), 45°inclination. **Optical Zoom : 0.7X-4.5X. Total**
zoom : 7X-45X. Interpupillary Distance : 55-75mm

10cm working distance microscope

1. Check for parts seen above - A, B, C, D (Fig. 1)
2. Remove the caps on item A (Fig. 2)
 - i. A-1 – unscrew the cap with a screw driver
(Fig. 3)
 - ii. A-2- unscrew manually
3. Fit part A into construct B *en bloc*.
4. Place the lens (C) into the sockets.

5. Lock the light source in place.

Loosen the screws on the light source

Before placing them over A-2.

6. Finished product as seen in (Fig.5)

7. Adjust focus with large knob at back (stand), followed by fine tuning with the smaller knob at the front.



15cm working distance microscopes



Requirements: X20 eyepieces (LEFT) X2 + 0.5X lens to attach to base X1



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Attach 0.5X lens piece at base here to covert 10cm working distance to 15cm coupled with x2 X20 eyepiece lenses.

To change the 10cm working distance to the 15cm working distance scope, the eye pieces should be changed to the x20 lens pieces. Also a ring lens 0.5X should be attached to the bottom of the main head piece as seen above.

Video Microscopes – use either 10cm or 15cm working distance

Simply attach the camera attachment to the third eyewindow hole at the top of the microscope and plug and play. To simply view in real-time, connect the HDMI or VGA cable to a LED screen.



Screw on camera adapter at 3rd lens viewer socket



Remove transparent cover film at camera aperture before use.



Screw on camera to adapter. Adjust camera focus and clarity by twisting the ring below the camera (arrow)

- Adjust microscope focus before adjusting the camera focus for the screen via the black ring at the base of the camera aperture.
- Simply plug in the power to the camera to start. Attach the HDMI or VGA cable to your screen to plug and play.
- Ensure you select the correct source for the projection in real-time.
- To enable recording either insert a microSD card or for laptops, install the software from this link here:

<https://www.dropbox.com/sh/ub46aixfij0p6wl/AAB8BKoAfg2QtApq8b-wLtw1a?dl=0>

4. Troubleshooting

	Problems	Solution
1.	Single image not seen in field of vision	Adjust interpupillary distance. Refocus the scope. Ensure that the eyepieces are of the same power.
2.	Foreign bodies within field of vision.	Clean the outer or inner lens.
3.	Blurry image.	Clean the lenses.
4.	Unclear image which adjusting zoom.	Refocus the image.
5.	Difficulty turning the zoom knobs.	Release screws slightly.
6.	Scope unstable and slides up and down.	Tighten the holding screws at the back of the stand.
7.	Eye fatigue	Ensure the light intensity is adequate and the zoom is corrected.
8.	Dim light.	Ensure light source is plugged in and bulb is working.
9.	Light bulb fuses easily.	Check the voltage and use the designated light bulbs that can be bought from our website.
10.	Flickering light source.	Change light bulb or ensure that current is of a steady nature.