USER SUPPORT

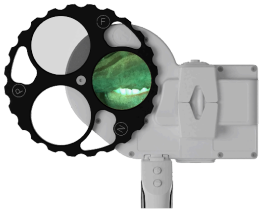
FAQ & Troubleshooting

Quick answers to the questions Mantis users ask most, from assembly and photos to cleaning and battery care.

1 Setup & assembly

Q Pushing the filter wheel all the way in

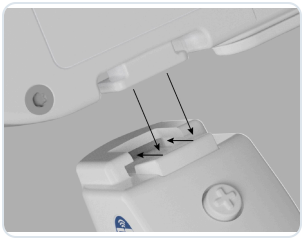
When you insert the filter wheel, you do not need to use excessive force. Push it all the way in, then rotate it into one of the three visualization mode positions (N, P or F). You should feel the filter wheel click into the proper position.



Q Attaching the Handpiece to the Ring Light Unit

The attachment of the Handpiece with the tab on the bottom of the Ring Light Unit (RLU) is intentionally tight, and you may encounter some resistance as you push the tab from the RLU into the slot on the top of the Handpiece. This is normal. Press in firmly until the spring-loaded locking mechanism on the Handpiece clicks back into its proper position.

This locking mechanism prevents the Handpiece from accidental detachment, and must be depressed again if you wish to remove the Handpiece from the RLU.

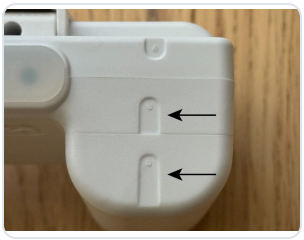


Q Replacing the battery

When replacing the battery, it may take moderate force to disconnect the battery connector from the receptacle in the unit. This is normal; wiggling or rocking it with your fingers as you pull off the connector may help.

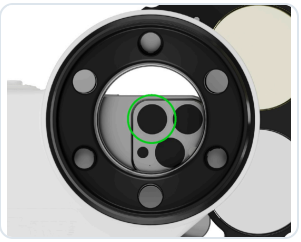
After connecting the new battery, make sure the leads from the pack are properly contained within the battery compartment before screwing the cover back on.

The battery compartment cover only attaches in one orientation. Make sure the visible mark on one end is at the bottom, lined up with the matching mark on the base of the RLU.



2 iPhone & app

Q Positioning the iPhone properly in the Jaws



When taking photographs with an iPhone in the Jaws of the RLU, remember that if your iPhone has multiple lenses, the lens being used by the photo app should be roughly centered in the viewport.

For example, in the picture shown at right where the upper left camera lens (circled in green) is being used by the app, it is that lens that should be centered. Depending on the iPhone model used, a differently positioned lens may need to be centered.

Q Bluetooth connection of the iPhone to the Handpiece

The VELscope Mantis photo app (free on the Apple App Store) has been carefully designed and tested to make the Bluetooth connection with the Handpiece as reliable and seamless as possible.

If you run into connectivity problems, make sure no other iPhone is already connected to the Handpiece. The help screen in the app has more troubleshooting suggestions if you are still having problems.

3 Cleaning

Q Cleaning the filters in the Filter Wheel

It is safe to wipe down the filters in the Filter Wheel with 70% IPA. You may wish to use a lens cloth or lens tissue to help remove smudges and get a completely clean, spotless finish.

Q Wiping down the unit with 70% IPA

Only use 70% IPA disinfectant when wiping down the unit between patients.

Use of the Mantis Shield lens cap to cover the delicate front-side LED optics during use on patients is highly recommended to keep this area as clean as possible. Doing so not only mitigates inadvertent cross-contamination risk but also minimizes need for extensive disinfection. Similarly for the Mantis Shield Barrier as it relates to the Handpiece.

We recommend a 70% IPA disinfectant wipe such as Wipex.

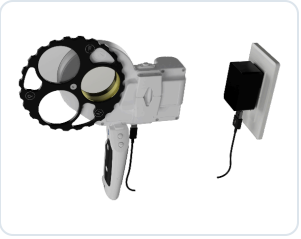
Do not use Cavicide, Caviwipes or other more aggressive disinfectants (see warnings in the Operation Manual). These will degrade the PC-ABS housing.

4 Power & battery

Q Unit turning OFF by itself

If the unit turns off by itself after an extended period of use, this is not a malfunction but intended behaviour. The unit is designed to shut down automatically after 5 minutes with the LEDs on and in the same visualization mode. Rotating the filter wheel resets the timer. If the unit does turn off like this, simply turn it back on.

Q Charging the battery



Only use the Wall Charger provided with the unit. The LEDs will not come on while the unit is charging. This is intended behaviour: if you connect the Wall Charger while the unit is powered, the LEDs automatically turn off and the unit goes into charging mode.

The green LED should flash, then go solid when fully charged. It takes approximately 3 hours to charge a fully depleted battery.

Q Charging the battery in the Wall Mount

If you are using the custom-designed Wall Mount (purchased separately or included in the VELscope Mantis Bundle), it is probably best to place the mount on a wall directly above an outlet. You can then charge the battery in the Wall Mount when the unit is not in use. The Wall Mount has a hook that holds the USB-C end of the charging cable for easy access when storing the device there.

Battery run time & recommended charging protocol

The blue LEDs in the VELscope Mantis use considerably more power than the white LEDs, so run time on a new, fully charged battery depends on how much you use white light versus the fluorescence modes.

2 dental operatories supported	**8** patients per day each, routine exams	**4 min** assumed per exam, with no recharge needed

Extended examinations with additional investigation and photo documentation will naturally use more of the battery. Under this kind of use, a reasonable protocol is to charge the battery overnight so it is ready for a full slate of patients the next day.

Under very heavy use, feel free to charge the battery between uses (for example, in the Wall Mount as described above). This does not harm the battery. It is in fact the best way to keep it at or near a full charge while maximizing overall battery life, because lithium-ion rechargeable batteries age more quickly when they are run down to near-depleted or fully depleted.

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