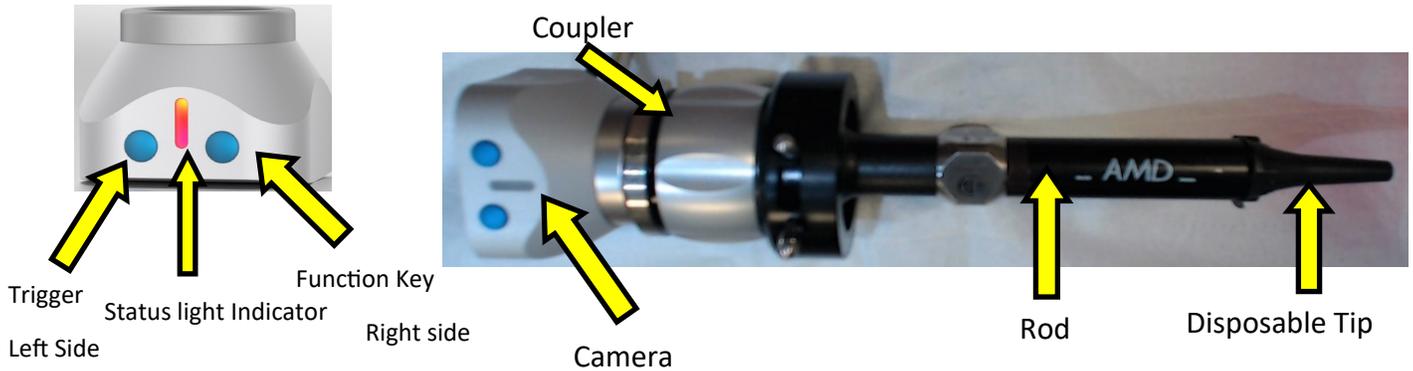


This Handy Guide provides an overview of the M-Cam and best practices for its use. The M-Cam device has no memory. It can be used for Live Video Images, but also for still images if saved to a secure location.

Device Overview



Status light meanings:

White flashing: The camera is in starting up or in update process mode. Wait for color change to continue.

Color Changing continually: Camera in standby mode.

White light: Camera is transmitting a live image.

Red light: There is a system error. Turn off and back on after a few seconds. If the error continues then contact local IT support.

Steps to obtain white balance to improve color clarity:

Use the right Function Key to perform a white balance prior to any use of camera to improve color clarity and accuracy.

1. Aim the otoscope tip at a blank white surface 1/2 to 1 inch away. Make sure it is displaying ideal exposure, you will see green with a white check mark as ideal.
2. Press and hold the right side function key. On your computer screen you will get a countdown to enable the white balance function (black circle with yellow ring progressing around icon).
3. The white balance icon will turn yellow. Release the function key and the white balance will be done. (circle turns completely yellow)
4. If you hold the function key too long it will not perform the auto white and just show a red circle icon. You can use the camera without doing a white balance, however, it is not recommended.



How to Attach Coupler and Rod to Otoscope

To attach the rod to the coupler, loosen the set screw, then squeeze the set screw to the post to open the clamp. Place the rod into the clamp, release the clamp and tighten the set screw. The coupler and rod can easily be attached to the camera by screwing it on turning clockwise. Attach the light source, to the bottom of the rod by screwing it on clockwise. To remove the light source, turn counter clockwise. Once everything is attached, it should not need to be removed. You do not need to remove the rod from the coupler to attach to the camera.



Make sure the camera and the rod are properly aligned. The status bar light on the camera should be pointing across the top of the rod. Light connection should be on the bottom of the rod. If you need to adjust rod, loosen the set screw on the coupler and turn the rod inside the coupler for proper alignment. Retighten the set screw on coupler when aligned.



Operating the M-CAM— Using Computer

1. Plug the cable into the USB port and wait for automatic installation of drivers for the camera.
2. The device will show up as an option on your computer.

NOTE: The camera must be plugged into a USB port to work.

3. Press the function key to turn on the camera.
4. The camera will go into standby mode (status indicator continually changing color).
5. To take photo press the trigger key. The photo will show on your computer screen.

Operating the M-CAM—Using AFHCAN Cart or Cart Client on a Computer:

1. Open case, select “Video Source” and choose M-CAM
2. Press take picture, live mode or freeze on the touch screen, or using the mouse. Use whichever is appropriate for what you are wanting to accomplish.

In All Uses of camera with AFHCAN cart or Computer or Cart Client on a computer:

The camera will continuously analyze the exposure of the captured image and display that on the computer screen.

The icons seen are overexposed , underexposed , and ideal exposure .

Press the function key to try to turn off the camera. The light will go off and the camera will appear to be in standby mode. The camera does get warm in standby, but that is okay.

Best Practice: Unplug the camera from the USB port to turn it off if using the function key will not turn it off.

Using the M-CAM for Live Video Teleconference Encounter

When using Zoom : Start Call

1. Click on carrot next to **video camera** icon.
2. Choose the **M-CAM** device.
3. You will need to start sharing your screen for others to view.
4. Click **share screen** in main menu. 
5. Choose the screen that is showing the images from the M-CAM.
6. Click stop share from main menu bar to end sharing. 
7. If needing to go back to your web camera repeat step 1 & 2 but in step 2 choose your web camera.



Cleaning and Troubleshooting

Cleaning:

1. Prior to the start of any cleaning make sure the device is off. Dispose of any attached speculum.
2. The M-CAM can be cleaned externally using a disinfectant wipe. Make sure no disinfectant gets into the interior.
3. Use an alcohol wipe to clean the tip of the otoscope rod after each use.

Troubleshooting:

1. Trouble focusing? Clean tip of Otoloscope.
2. Image color not accurate? Perform white balance.
3. Camera only showing one color on screen. Make sure coupler and rod are attached. Camera does not function if not properly attached.