



HIV Care Continuum Telehealth Technical Assistance ECHO

Virtual Health Network Telemedicine Peripherals

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OLIVER BLACK: IT SPECIALIST, UT SYSTEM VIRTUAL HEALTH NETWORK

Disclaimer

- This is an informational presentation about peripherals available for use in telemedicine applications.
- This presentation should not be used as an endorsement of any specific vendor, device or technology by UT Systems, UTMB, VHN, or MTREC.
- We are looking at VHN Clinical Applications, not direct-to-patient applications



Medical Cameras

- What to look for:
 - Interchangeable lenses
 - Rechargeable batteries
 - High Definition 1080 output (not “high resolution”)
 - Video and Image Capture
 - USB Interface
 - HDMI Interface
 - Ease of use
 - FDA Approved or Cleared
- <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfRL/rl.cfm>



Medical Camera

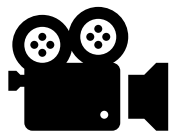
Hand Held Chassis

- High Definition (1920 x 1080)
- Interchangeable lenses for different medical specialties
- Built In Screen
- Newer units have Touch Screen
- Live Video or Store and Forward File Capability
- HDMI or USB output



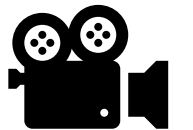
Medical Camera Ear

- Otoscope Lens
 - Built in Illumination LEDs
 - Provides imaging for tympanic membrane and auditory canal.
 - Uses standard Heine or Welch-Allyn specula (adult and pediatric)
 - Insufflation bulb available



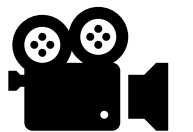
Medical Camera General

- General View Lens
 - Built in Illumination LEDs
 - Provides imaging for dermatology, oral examinations, general body images

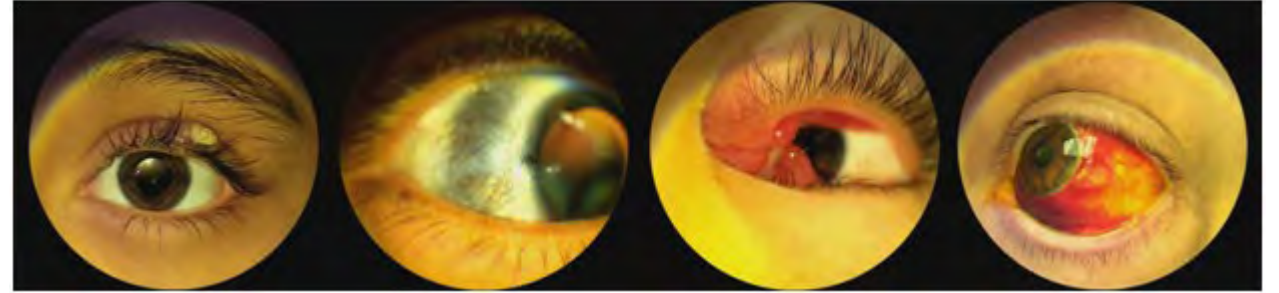


Medical Camera Derm

- Surface Lens (Dermatology)
 - Built in Illumination
 - Built-in polarization for reduction of skin reflection
 - Equipped with 5mm ruler (1mm increments)



Medical Camera Eye

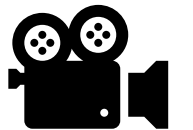


- Anterior Chamber Lens
 - Built in Illumination LEDs
 - Built in cobalt blue lighting for fluorescein eye stain test
 - Provides highly magnified images of the anterior segment



Medical Camera Retina

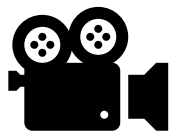
- Fundus Camera Lens
 - Built in IR LED lighting for focusing on retina
 - Press OK and 200ms flash captures the image.
 - Provides highly magnified images of the retina without dilating of the eye.





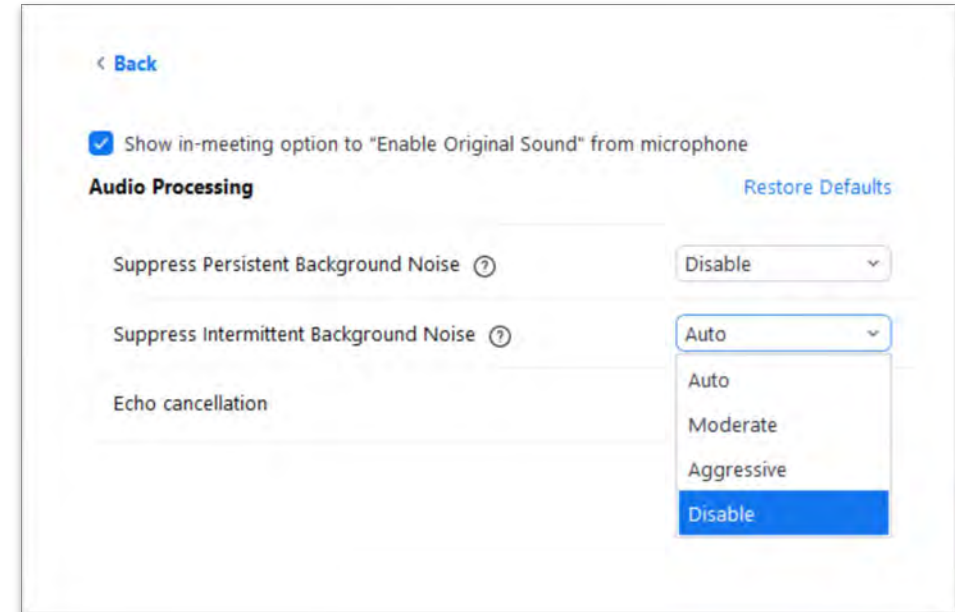
Electronic Stethoscope

- Thinklabs One
 - Up to 100x amplification
 - 30hz to 1500hz Frequency Response
 - Built in adjustable filtering
 - Built in volume control
 - Rechargeable battery



PC Based Setup for Stethoscopy

- Go to **Audio Settings** > **Advanced** and turn off all audio background noise filters.



Questions?

