## Video Otoscope

Otoscope Probe & High-Res Camera with a Battery Operated or External Light Source





# MedRx sells several different Video Otoscope Configurations with either the Battery Powered Light Source or the External Light Source.

We've combined the wiring instructions, trouble shooting & warranty information into one manual.

In addition to the camera, probe and light source each configurations comes with additional components listed below. See the manuals that come with your particular configurations for additional information.

#### **Deluxe Video Otoscope**

Printer, Cart & 13" Monitor.

#### **Ultra Lite Video Otoscope**

Comes with either a flat screen or conventional monitor.

#### **Video Companion**

USB2 video capture cable and the MedRx VO Software.

#### The AVANT™

HIT Box, Speakers, Headsets, Bone & Air Conductors, Mics, Handswitch and Testing, Fitting & Presentation Software.

#### The AVANT™ Audiometer

Speakers, Headsets, Bone & Air Conductors, Mics, Handswitch

#### The AVANT™ Mobile Office

(AVANT™ REM Speech & AVANT™ A<sup>2</sup>D Audiometer)

Speakers, Headsets, Bone & Air Conductors, Mics, Handswitch

If you would like to upgrade your system call MedRx toll free at 888-392-1234

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# Using the Video Otoscope

CAUTION: The MedRx Video Otoscope is only to be used by a person qualified in the use of an Otoscope. Misuse can cause a patient pain and possible injury.

Video otoscopy has multiple purposes in hearing assessment and hearing instrument fitting.

#### The Video Otoscope is used for:

- Performing the initial otoscopic examination prior to testing
- Probe microphone placement for Live Speech Mapping measurements
- Capturing and storing images to the NOAH patient database
- Troubleshooting problems with the hearing aid, such as blocked receivers and microphones.

Always perform an otoscopic examination of the ear canal prior to testing to determine if earwax or other foreign matter will interfere with probe tube insertion. If this is a problem, the patient should be referred to an appropriate resource for removal of the wax or debris. If abnormal ear conditions are noticed on this examination, an appropriate medical referral is recommended before the hearing instrument is fitted.

**The speculum cover** is always to be used with the system. The speculum cover must be cleaned or replaced between usage per accepted medical practice procedures.

**Prior to insertion**, the probe should be held within 1/4" of a known object, such as your finger, to check the quality of the image. Sometimes the lens is smeared with cerumen or other matter and will need to be vigorously cleaned with an alcohol wipe in order to provide a clear image.

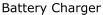
**IMPORTANT:** Since the Video Otoscope incorporates glass lenses for image transmission it is breakable. Although the tip is tapered to improve durability, any impact or crushing to the tip may cause serious damage to the instrument.

### **Battery Operated Light Source**

### **Install Freshly Charged Batteries Every Day**

A Second Set Of 3 Batteries Is Supplied So That A Fully Re-Charged Set Is Always Available







### **Charging**

Main Features:

- Micro Computer Control
- AA, AAA Battery Types are compatible
- Suitable for Ni-CD and Ni-MH rechargeable batteries
- Four charge channels that can charge one to four batteries
- Folding AC plug blade for easy storage

Туре	Size	CAP.	Charging Time	
			1,2 cells	1,2,3,4 cells
NI-MH NI-CD	AA	2000mA	Approx. 120min	Approx. 240min
	AA	2500mA	Approx. 150min	Approx. 300min
	AAA	600mA	Approx. 80min	Approx. 150min
	AAA	850mA	Approx. 120min	Approx. 200min



Insert
Battery Pack
into the Light
Source Handle
with "UP"
at Top of
Battery Pack



### **Battery Replacement WARNING**

### **IMPORTANT**

Grasp the Upper Portion of the Silver Handle,
NOT the Probe or Camera,
When Unscrewing the Lower Section to Replace the Batteries.

Otherwise, Possible Damage May Occur to the Probe.

Refer to Pictures Below.





### Wiring Diagram - Battery Operated Light Source

- Deluxe Video Otoscope System
- Ultra Lite Video Otoscope System
   Digital Video Otoscope System
  - Video Companion System
     AVANT™ Audiometer
  - AVANT™ Mobile Office (AVANT REM Speech & A<sup>2</sup>D Audiometer)



### Wiring Diagram - Battery Operated Light Source

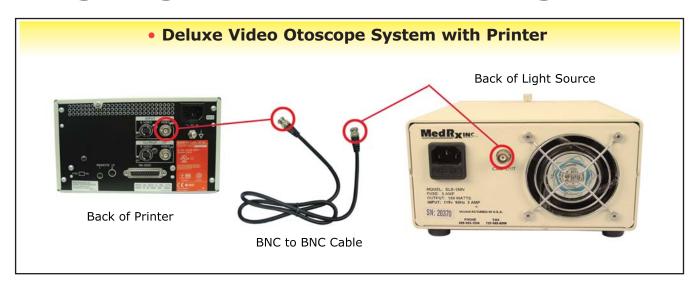


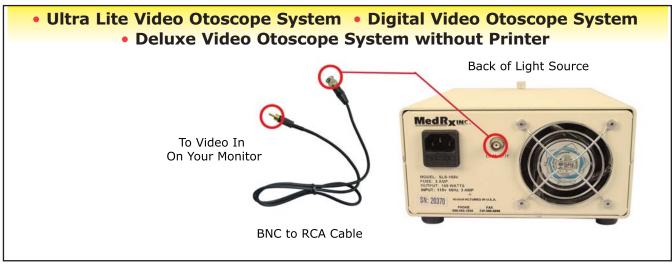
### Wiring Diagram - External Light Source

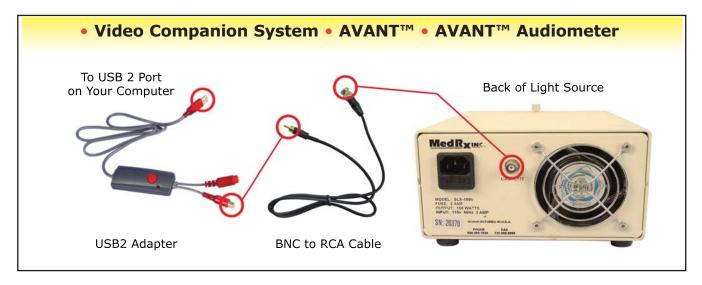
- Deluxe Video Otoscope System
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   The AVANT™



### Wiring Diagram Cont. - External Light Source







### **Trouble Shooting Guide**

#### **External Light Source**

Problem	Main Cause	Solution
Fuzzy or out of focus picture.	Dirty probe tip (dried cerumen)	Vigorously clean probe tip with an alcohol wipe
	Short in twin lead cable.	Replace twin lead cable
No picture on display	Light Source not turned on	Turn light source on
	Loose wire connection	Re-check wire connection
Indicator light switch on light source not on	Power supply not plugged in Short in twin lead cable	Plug in power supply  Unplug twin cable from light source; see if light comes on, if so replace twin leads cable
No light from probe tip	Light source not on  Bulb burnt out	Turn on light source Replace bulb
Picture is dark	Switch on back of camera in wrong position Light source too low	Move camera shutter switch to off position  Turn up intensity of light
	Light 30dice too low	source
Cleaning probe does not improve picture	Probe dropped and physically damaged	Call MedRx for service

This guide was designed to assist you in diagnosing minor problems. Should service be needed, please call MedRx at 888-392-1234 for Technical Support Monday—Friday, EST 9AM to 5PM

### **Cleaning & Disinfecting**

Your MedRx Video OtoScope has been designed to provide years of trouble-free service. Do not remove or open the cabinets of the equipment, as there are no user serviceable components inside.

#### Cleaning

To keep your system looking new, wipe the exterior of the components with a soft cloth. Stubborn stains may be removed using a cloth moistened with water and mild detergent. Do not allow debris or fluid to enter in the components. Use an alcohol wipe to clean the lens on the end of the Otoscope probe, or a common disinfectant.

#### **Video Otoscope Disinfecting**

The Video Otoscope is sealed so that it may be wiped with the following surface cleaners to disinfect:

75% Alcohol • Chlorhexiderm • Cidex • Nolvasan • Parvocide • Parvosol • Roccal • Synphenol

The scope should **NEVER** be heat sterilized, gas sterilized or soaked in liquid because damage may result.

# Transportation & Storage

The probe tip cover should be retained and used for additional transportation protection of the videoscope optics while in or out of the foam case.

When transporting or storing your Video Otoscope, it is best to use the original packing case or similar packaging. Store the system in a cool, dry location and do not place your system in direct sunlight. Care must be taken to protect the system from shock, moisture damage and mishandling. Do not place heavy objects on any of the system's components.

To assure proper operation and warranty protection, use manufacturer's replacement components only.

### **Limited Warranty**

MedRx, Inc. warrants the MedRx Video Otoscope System to be free from defects in material and workmanship for one year from the time of purchase. If this system fails to perform as specified during this period, the purchaser is responsible for calling MedRx at 888 392-1234. The company's representative will advise the owner to either return specific components or the entire system to:

MedRx, Inc. 1200 Starkey Road #105 Largo, FL 33771

MedRx will repair or replace any defective parts, fully test and calibrate the system and/or components and ship the system promptly back to the owner. There is no cost for this warranty service, provided the system is one year old or less and has not been misused, abused, or damaged. Such damage includes, but is not limited to, dropping, exposure to excessive heat (greater than 100 degrees F), and water/liquid damage. Repair or replacement of the system as provided under this warranty is the sole and exclusive remedy of the purchaser. MedRx shall not be liable for any consequential or incidental damages, or for breach of any express or implied warranty. Except to the extent of applicable law, any implied warranty, merchantability or fitness of this product is limited to the duration of this warranty.

MedRx will, at its discretion, service and repair out of warranty components at the purchaser's request, charging for parts and labor as necessary.

#### **Components Registration for Customer Information**

Probe Serial Number:				
Camera Serial Number:				
Super Nova™ Light Source Serial Number:				
LED Light Source Serial Number:				
- Followed Links Course Coriel Novelson				
or External Light Source Serial Number:				
Date Purchased:				