

Video Otoscope

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



Battery Operated
Light Source

Economical
Video Otoscope

External
Light Source



MedRx

Let Our Image Enhance Your Image

MedRx sells several different Video Otoscope configurations with either the battery powered light source or the external light source

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

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

Deluxe Video Otoscope

Printer, Cart & 19" Flat Screen Monitor.

Ultra Lite Video Otoscope

Comes with a flat screen monitor.

Video Companion

USB 2.0 video capture cable and the MedRx VO Software.

The AVANT™

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

The AVANT™ Audiometer

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

AVANT™ REM Speech+ & AVANT™ A²D⁺ Audiometer

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

NEW - The Economical Video Otoscope System

Carrying case, battery charger, rechargeable batteries, a sleeve of Welch Allyn® 4mm specula.

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

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 evaluating hearing or fitting hearing instruments.

The speculum is always to be used with the system. The speculum 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



Note: The handle will become **HOT** if left on when not in use for an extended period of time and the batteries will become discharged

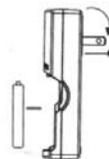
Battery Charger



Charging

Main Features:

- Micro Computer Control
- AAA Battery Types are compatible-but do not put in charger
- 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



Type	Size	CAP.	Charging Time	
NI-MH			1, 2 cells	1,2,3,4, cells
NI-CD	AAA	600 mA	Approx. 80min	Approx. 150min
	AAA	850mA	Approx. 120min	Approx. 200min



Insert Battery Pack into the Light Source Handle with "+" on 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 - Economical VO with Battery Operated Light Source

Otoscope Probe

High-Res Camera



Note: The handle will become HOT if left on when not in use for an extended period of time and the batteries will become discharged.

Install Freshly Charged Batteries Into the Light Source Every Day.
A Second Set Of 3 Batteries Is Supplied So That A Fully Re-Charged Set Is Always Available.

Wiring Diagram - Battery Operated Light Source

- Deluxe VO • Ultra Lite VO System • Video Companion System
- AVANT™ Audiometer • AVANT™ REM Speech+ & A²D+ Audiometer



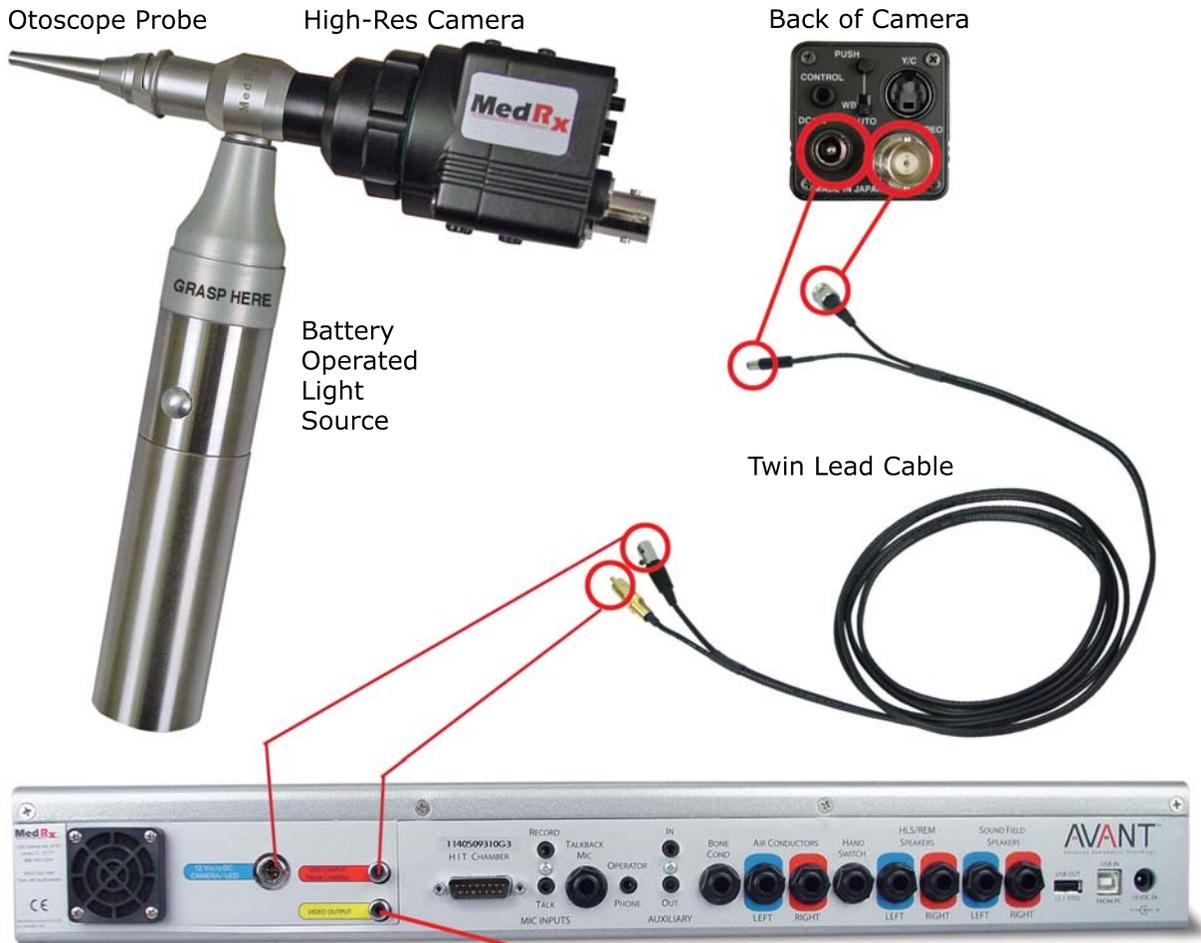
Install Freshly Charged Batteries Into the Light Source Every Day.

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

Note: The handle will become HOT if left on when not in use for an extended period of time and the batteries will become discharged.

Wiring Diagram - Battery Operated Light Source

• The AVANT™



USB Video Capture Cables

(One Ships With Your VO. Depends On Availability Of Design - Which One You Receive. Use Yellow Jack - Remaining Jacks Not Used)



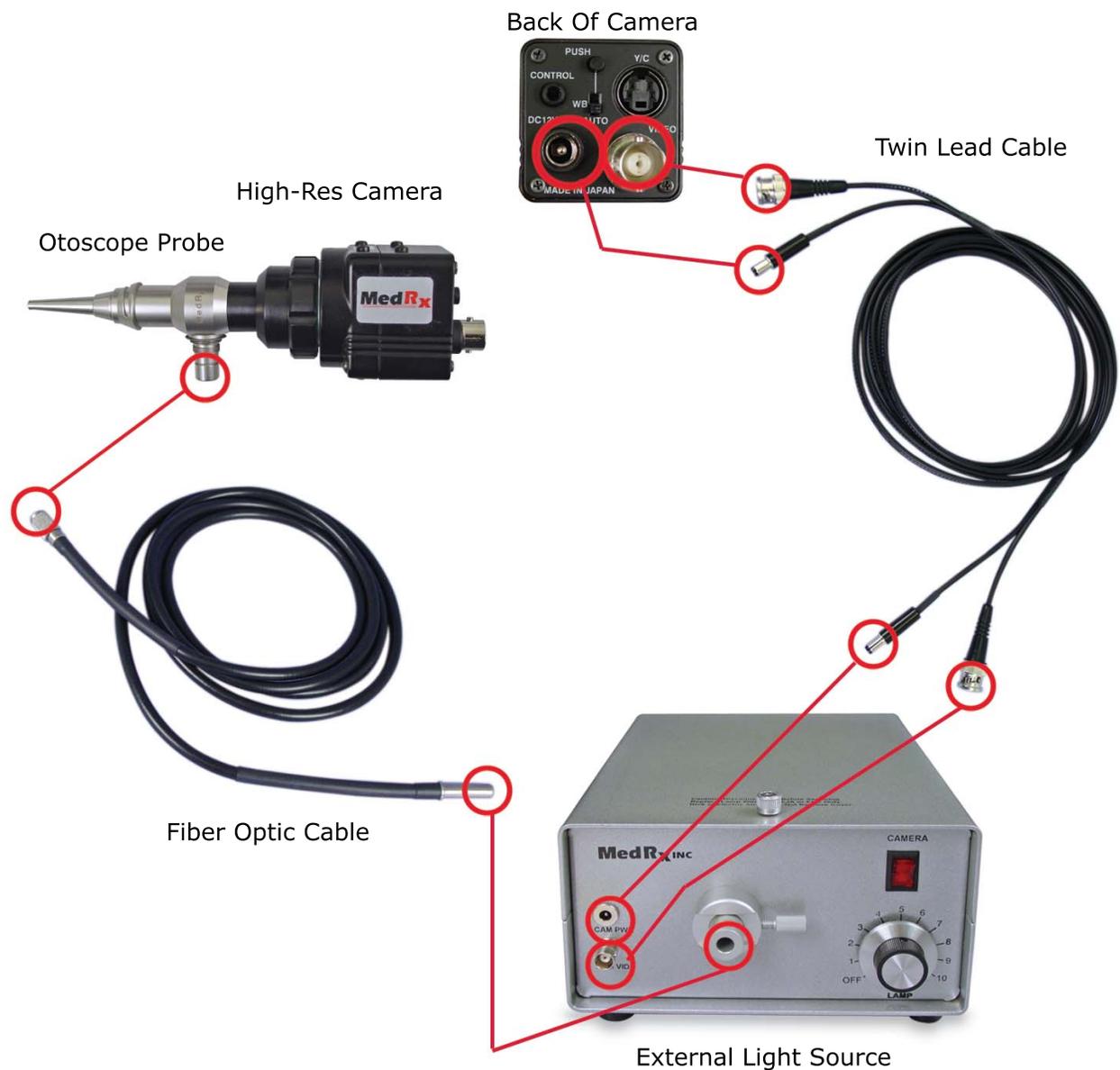
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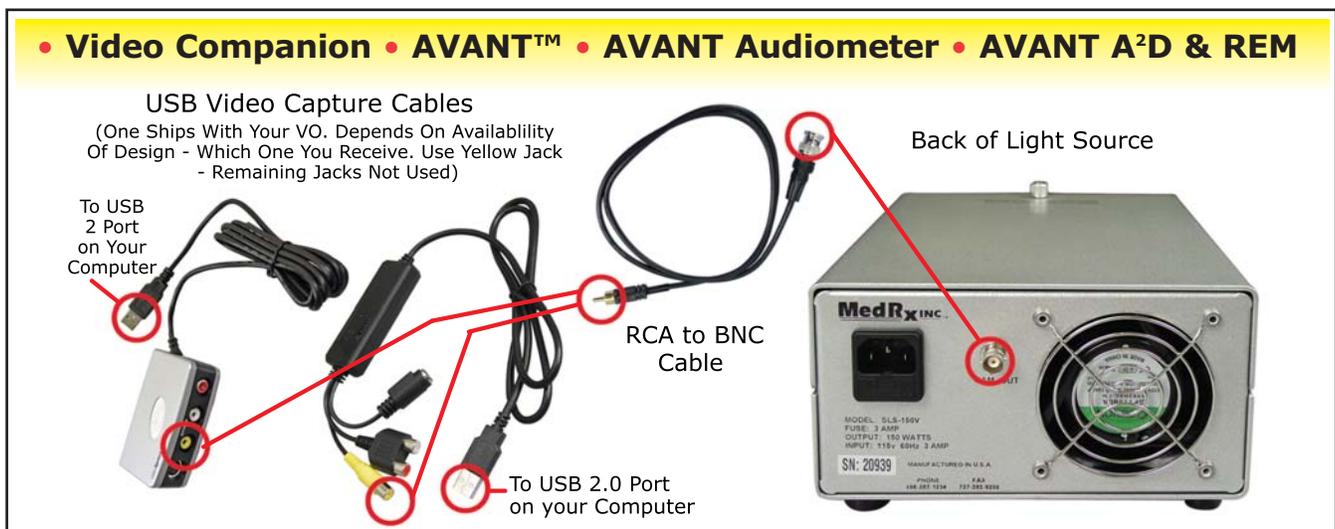
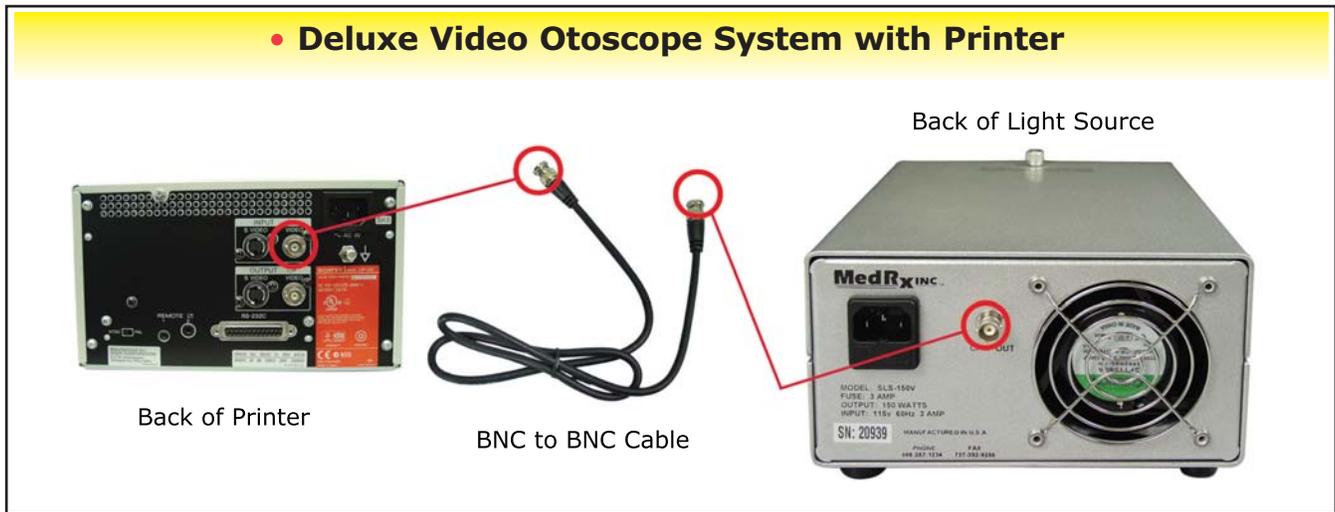
Note: The handle will become HOT if left on when not in use or an extended period of time and the batteries will become discharged.

Wiring Diagram - External Light Source

- Deluxe Video Oscope System
- Ultra Lite Video Oscope System
- Video Companion System • AVANT™ Audiometer
- AVANT™ REM Speech & A²D Audiometer • 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) Short in twin lead cable.	Carefully clean probe tip with an alcohol wipe Replace twin lead cable
No picture on display	Light Source not turned on Loose wire connection	Turn light source on 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 lead 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 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 camera housing, 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 into 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 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 this product 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 or (727) 584-9600. 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 USA**

MedRx will repair or replace any defective devices, fully test the system and/or components and ship the system promptly back to the owner. There is no cost for the repair or return shipping, 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°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 products at the purchaser's request, charging for parts and labor as necessary.

The limited warranty is deemed void if software or hardware is installed on this product which is not pre-approved by MedRx, Inc. Approved software includes NOAH™ and HIMSA approved hearing aid manufacturer programming modules for fitting hearing aids.

MedRx, Inc is not responsible for problems resulting from installation of unapproved software or hardware. In the event of unapproved software or hardware installed on the system causing a conflict, MedRx will service the product for a fee to be determined at the time of service.

Any extension of this warranty past the initial one-year warranty is subject to the following (where applicable).

1. A \$300 deductible per repair.
2. Extended warranty does not include cables, connectors or peripherals.
3. Extended warranty of the Video Otoscope covers optics only.