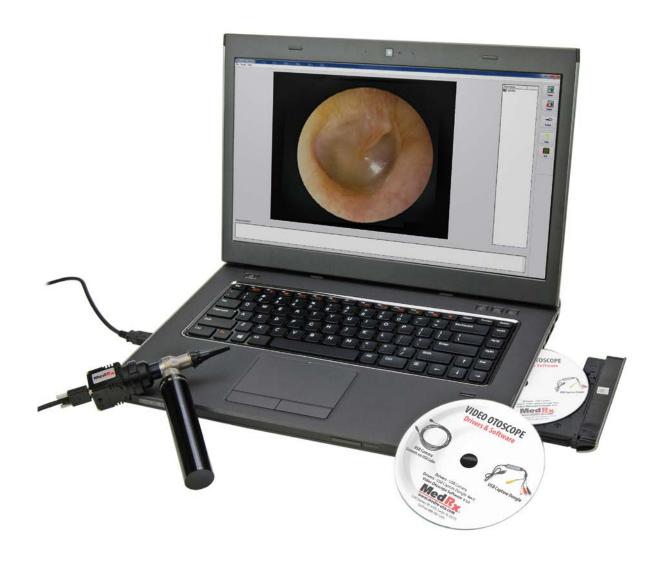
# **OPERATIONS MANUAL**

# Video Otoscope Software

Bringing Video Otoscopy To Your Computer





www.medrx-usa.com

# **Contents**

## **Video Otoscope Drivers & Software**

#### **USB CAMERA**







BACK

Driver Installation (USB Camera)	4
Software Installation (USB Camera)	7
Software Configuration (USB Camera)	
Adjusting Video Quality (USB Camera)	

#### Camera connects to computer via USB CAPTURE DONGLE







Driver Installation (USB Capture Dongle)	13
Software Installation (USB Capture Dongle)	14
Software Configuration (USB Capture Dongle)	
Adjusting Video Quality (USB Capture Dongle)	18

#### Using the Video Otoscope Software - Applies to both cameras

Taking Pictures	19
Capture Screen	
Main Screen	
View Screen	
Saving Images	



www.medrx-usa.com



1200 Starkey Rd., #105, Largo FL 33771 U.S.A. Toll Free: (888) 392-1234 • (727) 584-9600

Fax: (727) 584-9602 • Email: medrx@medrx-usa.com



MedRx's Authorized Representative in Europe

(Regulatory affairs only) Emergo Europe, Molenstraat 15 2513 BH The Hague, The Netherlands

## **Driver Installation**

### **USB** Camera

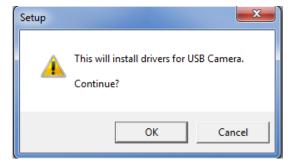
Go to page 13 for driver installation instructions if you are using Video Otoscope that connects via a USB Capture Dongle.



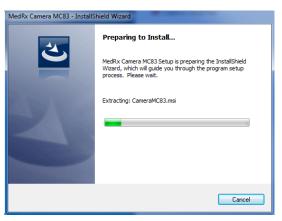
1. Connect the USB cable from the USB Camera to your computer.



- 2. Insert the Video Otoscope Drivers & Software CD-ROM into the CD drive.
  - If the Setup program does not automatically start, go to my computer, double click on the CD to open then double click Setup.
- 3. On the Driver Setup screen, click Install Drivers for USB Camera.



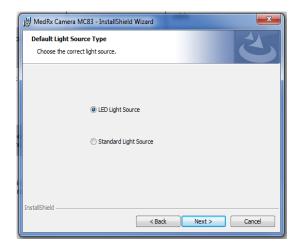
4. When this screen appears, click Ok.



5. Wait for the InstallShield Wizard to finish preparing. (This window may take a few seconds to appear.)



6. When this screen appears, click Next.



7. When this window appears choose which light source you have. Click **Next.** 



Meady to Install the Program
The wizard is ready to begin installation.

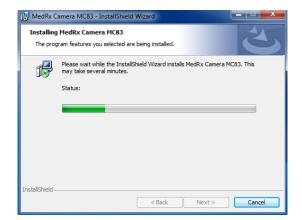
Click Install to begin the installation.

If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.

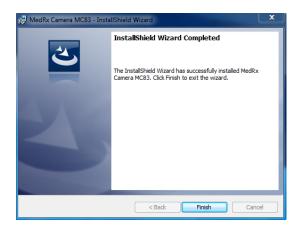
InstallShield

Sack Install Cancel

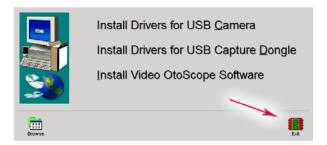
8. To begin installation click Install.



9. Wait for the InstallShield Wizard to finish.



10. When Installation is complete, click Finish.



**11.** When the setup screen reappears click **Exit.** 

# Installing the Video Otoscope Software USB Camera

The MedRx Video Otoscope software may be incorporated into any AVANT<sup>™</sup> software package. It is also available as a stand-alone application. When bundled with the AVANT software package, the Video Otoscope software is automatically installed. In this case, make sure you have installed the drivers. Driver installation instructions are on page 4 or 13 – depending on the camera you purchased.

#### **Stand Alone Video Otoscope Software Installation.**



- Insert the Video Otoscope Drivers & Software CD-ROM into the CD drive. Wait until the Setup program starts.
  - If the Setup program does not automatically start, go to my computer, double click on the CD to open then double click Setup..
- 2. On the Setup screen, choose **Install Video**OtoScope Software.

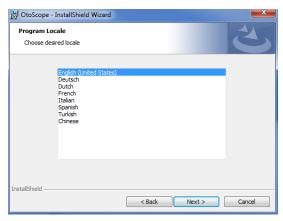


 Wait for the InstallShield Wizard to finish preparing. (This window may take a few seconds to appear)

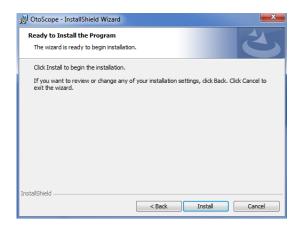


4. To Install the Otoscope Software, click **Next.** 







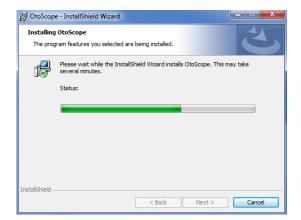


- 5. Read the Software License Agreement.
  - Click I accept...
  - Click Next.
  - To make changes, click Back.

6. Choose a language. Click Next.

- 7. This screen summarizes the installation configuration.
  - To continue, click Next.
  - To make changes, click Back.

8. To start the installation process click **Install.** 



9. Wait for the installation to complete.



10. This screen will appear when the installation is complete. Click **Finish**.



11. When the setup screen reappears click **Exit.** 

# **Software Configuration**

# **USB** Camera

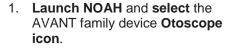
The MedRx Video Otoscope software can run stand-alone, through the AVANT family software, through NOAH $^{\text{TM}}$  or the TIMS $^{\text{®}}$  office system.

#### Launching the Software

#### **Stand Alone or AVANT Family**

#### NOAH and TIMS

 Double click the MedRx Otoscope icon or select the Otoscope Icon from any AVANT family device shortcut on your Windows desktop.







## **Configuring the Otoscope Software (USB Camera)**

Once the drivers are installed, you must configure the software to recognize the USB camera as follows:

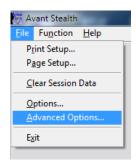
#### For Stand Alone software

- 2. From the main screen of the Otoscope software,
  - Click File.
  - Click Video Setup.



#### For Avant Family software

- 2. From the main screen of the Otoscope software,
  - Click File.
  - Click Advanced Options



• Then Click Video tab



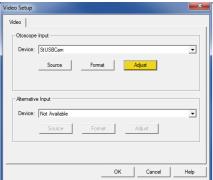
#### Applies to Stand Alone or the AVANT Family Software

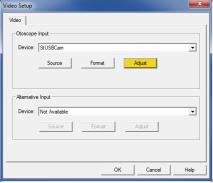


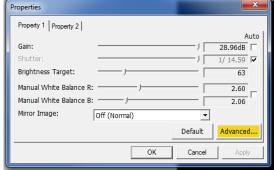
- 3. From the Video Tab:
  - Click the **Device** pull-down.
  - Select StUSBCam
- 4. Click OK

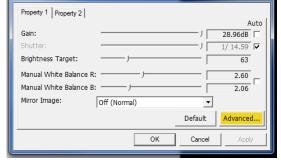
## **Adjusting Video Quality (USB Camera)**

It is sometimes desirable to adjust the video quality of the Otoscope software. To do this, follow the steps below:











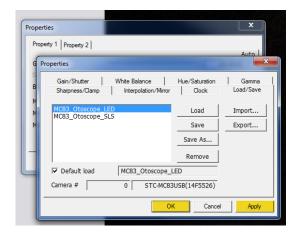


- 1. To open the Video Tab:
  - Click File.
  - Click Video Setup.
  - From the Video Tab Click the Adjust button.
- 2. On the Properties screen, click on Advanced.

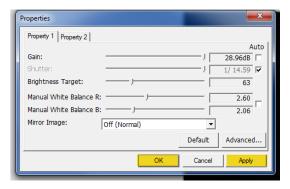
3. Click on Load/Save.

4. Select your light source, either LED or SLS (LED shown highlighted), then click Load.





5. Click Apply then click OK.



6. Click **Apply** in the Properties window, then click **OK** to complete changes.



7. Click **OK** on the Video Setup window to finish.

# **Driver Installation using a USB Capture Dongle**

Go to page 4 for driver installation instructions if you are using Video Otoscope that connects via a USB cable.



1. Connect the USB Capture Dongle to a USB port on your computer.



- 2. Insert the Video Otoscope Drivers & Software CD-ROM into the CD drive.
  - If the Setup program does not automatically start, go to my computer, double click on the CD to open then double click Setup.
- 3. On the Setup screen, click Install Drivers for USB Capture Dongle.



4. When this screen appears, click **Ok.** 



5. If this warning screen appears, click **Install this** driver software anyway.



6. On the Setup Window click **Exit**. (This window may take a few seconds to appear)

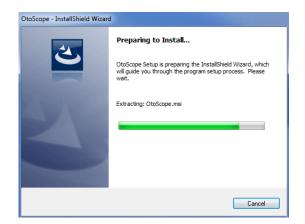
# Installing the Video Otoscope Software using a USB Capture Dongle

The MedRx Video Otoscope software may be incorporated into any AVANT<sup>™</sup> software package. It is also available as a stand-alone application. When bundled with the AVANT software package, the Video Otoscope software is automatically installed. In this case, make sure you have installed the drivers. Driver installation instructions are on page 4 or 13 – depending on the camera you purchased.

#### **Stand Alone Video Otoscope Software Installation.**



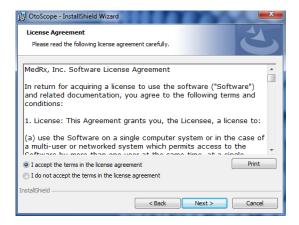
- Insert the Video Otoscope Drivers & Software CD-ROM into the CD drive. Wait until the Setup program starts.
  - If the Setup program does not automatically start, go to my computer, double click on the CD to open then double click Setup.
- 2. On the Setup screen, choose **Install Video**Otoscope Software.

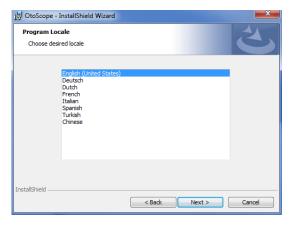


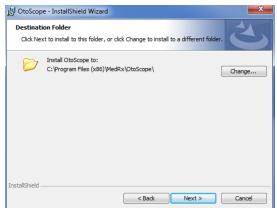
3. Wait for the InstallShield Wizard to finish preparing.

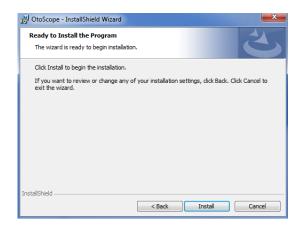


4. To Install the Otoscope Software, click **Next.** 







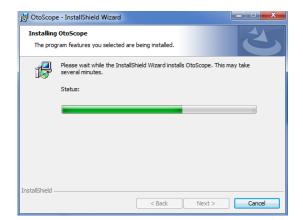


- 5. Read the Software License Agreement.
  - Click I accept...
  - Click Next.
  - To make changes, click Back.

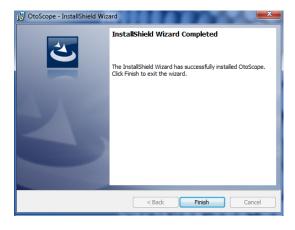
6. Choose a language. Click Next.

- 7. This screen summarizes the installation configuration.
  - To continue, click Next.
  - To make changes, click Back.

8. To start the installation process click **Install.** 



9. Wait for the installation to complete.



10. This screen will appear when the installation is complete. Click **Finish**.



11. On the Setup Window click Exit.

# **Software Configuration using a USB Capture Dongle**

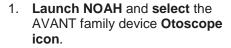
The MedRx Video Otoscope software can run stand-alone, through the AVANT family software, through NOAH $^{\text{TM}}$  or the TIMS $^{\text{®}}$  office system.

### Launching the Software

#### **Stand Alone or AVANT Family**

#### **NOAH and TIMS**

 Double click the MedRx Otoscope icon or select the Otoscope Icon from any AVANT family device shortcut on your Windows desktop.





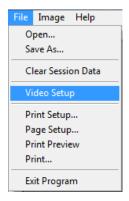


## **Configuring the Otoscope Software (USB Capture Dongle)**

Once the drivers are installed, you must configure the software to recognize the USB Capture Dongle as follows:

#### For Stand Alone software

- 2. From the main screen of the Otoscope software,
  - Click File.
  - Click Video Setup.

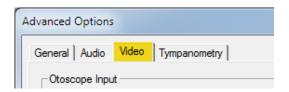


#### For Avant Family software

- 2. From the main screen of the Otoscope software,
  - Click File.
  - Click Advanced Options



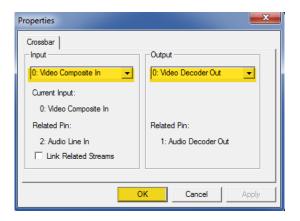
• Then Click Video tab



Applies to Stand Alone or the AVANT Family Software



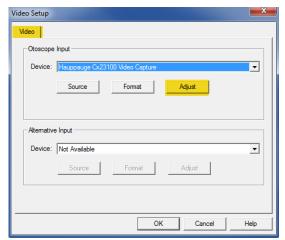
- 3. From the Video Tab:
  - Click the **Device** pull-down.
  - Select the name of your Video Capture Device
- 4. In the same screen, click the **Source** button.



- 5. In the Properties window, use the pull-down menus to verify the following settings:
  - Input = Video Composite In.
  - Output = Video Decoder Out.
- 6. Click **OK** to complete changes. Click **OK** on the Video Setup window to finish.

### **Adjusting Video Quality (USB Capture Dongle)**

It is sometimes desirable to adjust the video quality of the Otoscope software. To do this, follow the steps below:



Properties Video Decoder Video Proc Amp Auto Brightness 4992 4992 4992 Saturation 4992 Sharpness 50 White Balance 1 ColorEnable 🔲 PowerLine Frequency (Anti Flicker) Ŧ Default OK Apply

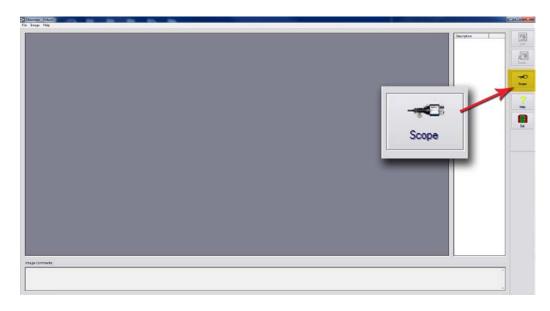
- 1. To open the Video Tab:
  - Click File.
  - Click Video Setup.
  - From the Video Tab Click the Adjust button.

- 2. Click on the Video Proc Amp Tab.
- 3. Adjust the sliders as needed.
- 4. Click **OK**. Click **OK** on the Video Setup window to finish.
- Repeat as needed to optimize the image on your particular system.

# **Taking Pictures**

## Within NOAH<sup>™</sup> or stand-alone

Always Use a clean speculum tip for each new patient. Refer to the "Set-Up Manual" for additional cleaning information.



Click on the **Scope Icon** on the **Main Screen**.



The Capture Screen Appears.

# The Capture Screen

#### Within NOAH<sup>™</sup> or stand-alone















#### There are three ways to take pictures:

1.If you do not check either box: When no items are selected, click on the Capture Icon to take one picture, the Main Screen appears.

#### 2. If you check Single Click Capture:

When you click the Capture Icon instead of immediately taking a picture, the program switches to the Single Click mode.

All the icons will turn gray on the screen, indicating that they are inactive.

You can now take a picture by pressing any key on the keyboard, clicking the left mouse button or pressing the foot pedal, the Main Screen appears.

#### 3. Or if you check both boxes.

When you click the Capture Icon instead of immediately taking a picture all the icons will turn gray, indicating that they are inactive.

You can now take as many pictures as you would like in a row without returning to the Main Screen by pressing any key on the keyboard, clicking the left mouse button or pressing the foot pedal.

To end the Single Click/Sequence mode, press the Esc key or the right mouse button.

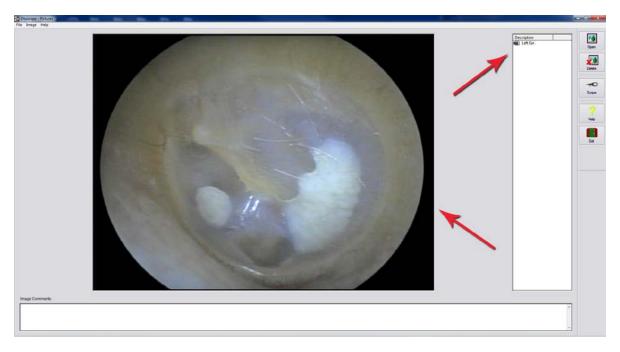
Press the Back button to return to the Main Screen to work with your pictures.

#### Naming your pictures:

Use the pull-down menu at the top of your screen. Select from the list provided or highlight box and type in any name.

# The Main Screen

Within NOAH<sup>™</sup> or stand-alone



#### The Main Screen shows a list and preview of the captured images.

An image in the list can be renamed by selecting it, clicking the right mouse button, and choosing the Rename option from the menu.



#### Open Icon:

Opens the selected picture in the **View Screen** where you can enhance it.



#### Scope Icon:

Click to take a new picture.

# The View Screen

Within NOAH<sup>™</sup> or stand-alone



This screen allows you to enhance your pictures.

#### **Tool Bar**



Use this button to enlarge the image.



Use this button to restore the image to the original size.



Use this button to maximize the image so that it occupies all available screen space.



Use this button to undo the last operation performed on the image.

#### **Enhancing**



Use this function to emphasize the details on the image.



Use this function to blur the details on the image.



Use this function to create a shadow effect on the image. Best when used with monochrome pictures.

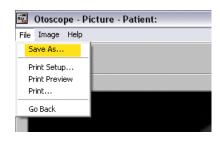


Use this function to reduce motion artifacts.

# Saving Images



**Using NOAH:** When you exit the program you will get a box that asks "do you want to Save NOAH session?" Click **Yes**.



**Not using NOAH:** from the View Screen go up to the File Menu and choose Save As. Save your images to your desktop in jpg or bmp formats.

## Symbols that may be used:



Read the instruction manuals for safe usage of the device. (operating instructions)



or SN Indicates that the device serial number will follow.



Manufacturer (MedRx)



**Authorized Representative in Europe** 



Special Disposal Required.



**Humidity Limitation** 



Caution, General warning sign



**Temperature limitation** 



Read the instruction manuals for safe usage of the device (operating instructions).







1200 Starkey Rd., #105, Largo FL 33771 U.S.A. Toll Free: (888) 392-1234 • (727) 584-9600 Fax: (727) 584-9602 • Email: medrx@medrx-usa.com