

CompacVideo Otoscope

Model 23120 (NTSC) and 23120P (PAL)



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Operating Instruction Manual Thank you for purchasing the Welch Allyn CompacVideo Otoscope System for ear care professionals. The operating and maintenance instructions found in this manual should be followed to ensure years of reliable service. Please read these instructions thoroughly before using your CompacVideo Otoscope System.

If you have questions regarding any Welch Allyn products please call Customer Service at (800)535-6663





ETL listed: UL2601-1, CSA C22.2 No. 601.1, IEC 60601-1, AS 3200.1. IEC 60601-1-2 Australia EMC Framework Compliance



The CE mark indicates this product has been tested to, and conforms with, the provisions noted within the 93/42/EEC Medical Device Directive.

European Contact for Regulatory Compliance:

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Introduction

The Welch Allyn CompacVideo Otoscope System is a portable, battery operated video camera to be used for obtaining high quality video images of the ear canal and tympanic membrane for the ear care professional. The CompacVideo Otoscope System consists of a video head (A) and an RCA Video Cable (B). A 3.5 volt Welch Allyn battery powered handle and a video monitor are necessary for the on screen display of video images.

The CompacVideo Otoscope System is designed for "Plug and Play" operation, meaning that all adjustments including focus, illumination and white balance are pre-set at the factory.

Video imaging offers several advantages over direct visualization. A higher level of magnification allows more detailed viewing of small structures. The otoscope can also be used to visualize small crevases in hearing aids, in order to address compliance issues related to hearing aids. Finally, by using the CompacVideo Otoscope System, ear care professionals can educate their patients using the product as a communication vehicle.



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Symbols



Consult operator's manual for important information



Type BF

IPXØ Not protected against the ingress of water

Safety & Warnings



DO NOT USE IN THE PRESENCE OF FLAMABLE **ANESTHETICS**

In order to obtain optimum video performance and ensure patient safety, it is important that this booklet be read thoroughly prior to using the instrument. If you have any technical or clinical questions concerning the use and / or care of the Video System, please call our Customer Service Department at (800)535-6663.

- The CompacVideo Otoscope System is designed expressly for use with Welch Allyn 3.5v, rechargeable battery handles. The system will be damaged if alternate power sources are attached to the video head. Do not use the video head with a wall transformer.
- Do not use this instrument for any purpose other than specified in this booklet. Doing so will invalidate the instrument's warranty.
- Do not use the Video System if you notice any signs of damage to the components of the system. Contact our Customer Service Department for immediate assistance.
- Do not attempt to disinfect the Video System using gluteraldehyde products, ethylene oxide gas, steam or any other liquid or gas disinfectant.

NOTE: The video monitor used with this product should comply with IEC 60601-1 by being an IEC 60601-1 listed monitor, or be tested to the requirements of the standard when used with the Welch Allyn CompacVideo Otoscope System.



This product has no user serviceable/replaceable parts except for the lamp and battery. Please refer all other service to authorized service personnel.

NOTE: This product complies with current required standards for electromagnetic interference and should not present problems to other equipment or be affected by other devices. As a precaution, avoid using this device in close proximity to other equipment.

Recycling Batteries

Welch Allyn now employs the services of an agency which can disassemble and recycle all components of rechargeable batteries so that nothing gets land-filled or incinerated. Should you wish to dispose of your expended Welch Allyn rechargeable battery via recycling (in the U.S. and Canada only) please send to:

Welch Allyn RECYCLE BATTERY 4341 State Street Road Skaneateles Falls, NY 13153-0220 Welch Allyn Canada RECYCLE BATTERY 160 Matheson Blvd. East Mississauga, Ontario CANADA L4Z 1V4

For locations outside the U.S. and Canada, consult your local recycling authority for correct disposal of batteries.

Setup

- 1. Attach the Video Otoscope Head to any 3.5V Welch Allyn rechargeable battery handle. **DO NOT ATTACH TO A WALL TRANSFORMER.**
- 2. With the power off, connect the video cable (supplied) to the output on the back of the Video head.
- 3. Connect the other end of the video cable to the "Input" or "Video In" on the video monitor, VCR, or other composite video input.

NOTE: The video monitor used with this product should comply with IEC 60601-1 by being an IEC 60601-1 listed monitor, or be tested to the requirements of the standard when used with the Welch Allyn CompacVideo Otoscope System.

- 4. Attach a Welch Allyn (4 mm) speculum, provided with the system, to the video head by rotating clockwise. The quality of the video image will deteriorate if other speculum are used.
- 5. Turn on the power switch on the monitor.
- 6. Turn the rheostat on the power handle to **FULL POWER**. For optimum performance, the Video System should always be used with the rheostat set on maximum brightness. The electronic controls within the Video System will automatically optimize the brightness of the image.

No further adjustments are necessary on the video head. The color and brightness controls on the video monitor may need to be adjusted to obtain the best possible picture quality.

Using The CompacVideo Otoscope System

The CompacVideo Otoscope System allows the visual anatomy to be shared with a patient. Indications for use include:

- Inspection of the outer ear canal
- · Inspection of the tympanic membrane
- Inspection of hearing aid devices

The CompacVideo Otoscope System should not be used for any other purposes. For a Video System capable of operating multiple systems (such as otoscopes, sinuscopes, rhinolaryngoscopes, and other endoscopes), please contact Welch Allyn Customer Service and ask for information on the Welch Allyn VDX-300.

Lamp Replacement

(Caution: The lamp base can get very hot. Be certain the lamp has cooled before attempting to remove the lamp assembly.)

The CompacVideo Otoscope System uses Welch Allyn lamp # 03500. Average lamp life is 20 hours.

To replace the lamp, remove the Video Otoscope Head from the power handle. From the bottom of the Video Otoscope Head, grasp the base of the lamp and pull straight out. A forceps or needle nose pliers may be needed to firmly grasp the black lamp base.

Insert the new lamp assembly by pushing the new lamp assembly firmly into the Video Otoscope Head. Attach the power handle to firmly seat the lamp. Avoid removing the lamp for reasons other than replacement.



Battery Replacement

Caution: The battery handle must be disconnected from the supply when removing batteries.

When a rechargeable battery will no longer accept a charge, replace as follows:

- 1. Unscrew bottom cap.
- 2. Shake out old battery.
- 3. Insert replacement battery <u>Important</u>: Please note battery polarity (see figure).

Caution: Insert battery fully until seated.

For Models 71000 and 71020 (non-convertible, rechargeable handles with self-contained charger), insure that plastic insulator cap is intact and securely seated on spring. If missing, or damaged, install new cap before using.

NOTE: For 719 series power handles, please consult the battery replacement instructions and caution statements provided with that equipment.

Warning:

- 1. Only a Welch Allyn Battery is to be used. Do not use any other non-rechargeable battery.
- 2. Batteries must be removed prior to disposal of product.
- 3. Used batteries are to be disposed of safely and in accordance with local disposal requirements.
- 4. If leaking batteries are encountered, use protective equipment when handling batteries to avoid contact of battery fluids with the skin. Then dispose of batteries safely in accordance with local authorities.



Specifications

Environment

Transport/Storage:

-20°C - 49°C, 10% - 95% R.H. Max, 500hPa - 1060hPa Altitude

Operating:

10°C - 40°C, 30% - 75% R.H. Max, 500hPa - 1060hPa Altitude

Internally Powered Equipment

Duty Cycle Operation



To minimize external otoscope housing temperatures, on-time should not exceed 90 seconds and off-time should not be less than 10 minutes.

Cleaning & Storage

The CompacVideo Otoscope System housings can be cleaned with a cloth <u>dampened</u> with warm water, alcohol, or a non-staining disinfectant such as Sporicidin® Spray and Towelettes or MetriSpray®. Liquids should not be dripped onto the surfaces of the Video Otoscope Head or Handle as they are not watertight. Care should be taken not to scratch the lens of the otoscope. DO NOT USE STEAM, ETO OR OTHER GAS STERILANTS TO STERILIZE THE PRODUCT.

The Video Otoscope System should be stored in a dry, temperature controlled environment. Unnecessary exposure to extremes in temperature and humidity should be avoided.

Replacement Parts:

Part Number	Description		
23101	CompacVideo Otoscope System (NTSC) - Includes VideoOtoscope Head, 10 Disposable (4 mm) Specula, Video Cable, and 71000-A Power Handle		
23100	CompacVideo Otoscope (NTSC) - Includes Video Otoscope Head, 10 Disposable (4 mm) Specula, and Video Cable		
23101P	CompacVideo Otoscope System (PAL) - Includes VideoOtoscope head, 10 Disposable (4 mm) Specula, Video Cable, and 71000-A Power Handle		
23100P	CompacVideo Otoscope (PAL) - Includes Video Otoscope Head, 10 Disposable (4 mm) Specula, and Video Cable		
23101SM	CompacVideo Otoscope System (NTSC) - Includes Video Otoscope Head, 10 Disposable (4 mm) Specula, Video Cable, and 71900 Power Handle		
23101P-SM	CompacVideo Otoscope System (PAL) - Includes Video Otoscope Head, 10 Disposable (4 mm) Specula, Video Cable, and 71900 Power Handle		
23120	CompacVideo Otoscope Head Alone (NTSC)		
23120P	CompacVideo Otoscope Head Alone (PAL)		
52434-C	Disposable Speculum, 4mm, pack of 1,000		
45518	Video Cable		
03500	Replacement Lamp		
72300	Replacement Battery for 71000-A Power Handle		
71960	Replacement Battery for 71900 Power Handle		
23160	Connector, RCA-f to BNC-m Adapter		

Limited Warranty

One Year Limited Warranty On New Instruments

Instrumentation purchased new from Welch Allyn, Inc. (Welch Allyn) is warranted to be free from original defects in the material and workmanship under normal use and service for a period of one year from the date of first shipment from Welch Allyn. This warranty shall be fulfilled by Welch Allyn or its authorized representative repairing or replacing at Welch Allyn's discretion, any such defect, free of charge for parts and labor.

Welch Allyn should be notified via telephone of any defective product and the item should be immediately returned, securely packaged and postage prepaid to Welch Allyn. Loss or damage in shipment shall be at purchaser's risk.

Welch Allyn will not be responsible for loss associated with the use of any Welch Allyn product that (1) has had the serial number defaced, (2) has been repaired by anyone other than an authorized Welch Allyn Service Representative, (3) has been altered, or (4) has been used in a manner other than in accordance with instructions.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, OR OTHER WARRANTY OF QUALITY, WHETHER EXPRESSED OR IMPLIED. WELCH ALLYN WILL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.



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