Welch Allyn
Image Management System

Setup Document

Installation Instructions

and

Frequently Asked Questions

Part Number 652015 Rev. B

Thank you for your purchase of a Welch Allyn VideoPath ® Image Management System. The operating and maintenance instructions found in this manual should be followed to ensure many years of reliable service. Please read these instructions thoroughly before attempting to use your new VideoPath ® Image Management System. It is imperative that instruction manuals for associated equipment, including the VS-200 VideoPath Sigmoidoscope and VLX-20 VideoPath Light Source, be read and understood in detail.

WARNING: The user of this equipment should be thoroughly trained in the medical procedures appropriate to the equipment. Furthermore, time should be taken to read and understand these instructions before performing any procedures. Instructions for other equipment used in conjunction with any VideoPath product should also be read and understood. Failure to do so may result in injury to the patient and/or damage to the instrument.
While this manual describes the recommended protocol for inspecting and operating the equipment, it does not outline procedural techniques.

CAUTION: Federal (USA) law restricts this device to sale by/to or on the order of a physician or other appropriately licensed medical professional.

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Using this manual

A. Before starting…

1. Please check the packing slip that came with your Welch Allyn Image Management System boxes. See Appendix A for a listing of this packing slip and verify that you have received all the boxes necessary to assemble your system. The IMS with printer requires four electrical outlets to operate (a power strip is recommended but not provided).

2. Once you are sure you have received all the materials proceed to assembly instructions listed below. It is VERY important for system warranty that all original shipping boxes and materials are retained in case of equipment failure and a return to depot is required.

B. Document Conventions

1. This manual has been designed to walk a new user in detail through the steps needed to install and get started using the Welch Allyn Image Management System – please read it through before beginning an installation.

2. You will be directed throughout to perform certain actions you must take as opposed to a description or other instructions. For example, "Click Next" indicates that the user must click the left mouse button on the 'Next' button. It is assumed that either a Welch Allyn Videopath or Video Colposcope has already been properly assembled and is ready for use with the IMS.

⚠ Warning alerts the user to possible serious injury, death or other adverse reaction associated with the use or misuse of the device.

⚠ Caution indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It also alerts against unsafe practices.

NOTE provides supplemental information to the text and indicates a potentially hazardous situation which, if not avoided, may result in property damage. Additionally, it highlights important information on the use of the equipment.

Symbols

⚠ **Attention:** Consult Operator's Manual for additional information.

⚠☼ **Caution:** High-intensity light.

🔲 **Type BF equipment**

🅔 **Listed Product - ETL Laboratories**

C. Getting Help

A number of resources have been developed by Welch Allyn to assist in the assembly, usage and troubleshooting of the Image Management System:

1. **FAQ**: Appendix B of this document has a list of **frequently asked questions** that can be very helpful in troubleshooting any problems with the IMS.

2. The complete manual for the Welch Allyn Medview software is available in electronic format on the IMS hard drive. To review this resource, load **manual.pdf** from the Acrobat 3.0 reader which can be started from the same named desktop shortcut.

3. The Welch Allyn Medview software also has a comprehensive context sensitive help system that can be accessed from any screen in the program.

4. Finally, the below telephone resource is available to you M-F, 9AM to 5PM EST should you have trouble assembling and using your Image Management system:

Welch Allyn Customer Service: 1 (800) 535-6663

II. Assembling the Welch Allyn IMS

A. Step By Step Install - Start with box 1 (labeled HP Brio)

1. Remove the accessory box from on top of the cpu tower.

2. Remove the main cpu tower and place on work surface. Remove power cord from accessory box and connect between the computer and wall outlet (power cord not shown).

[Intentionally Left Blank]

3. Remove keyboard and mouse from accessory box and connect to back of CPU as shown below.
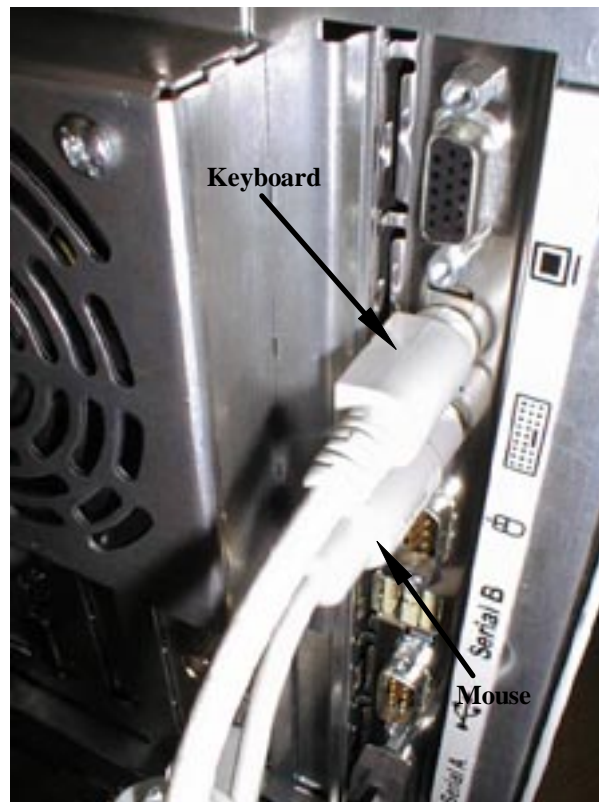
4. If the IMS is being used with a Welch Allyn Videopath system then remove the Videopath communications cable in bag #652010-501 and marked with a blue band.

If used with a Welch Allyn Video Colposcope remove the VideoColp communications cable in bag # 652009-501 and marked with a red label.

Connect this communications cable between the instrument (see manual) and the port labeled "**serial A**" on the back of the CPU.

5. Remove black s-video cable from bag labeled 455020-501 in the accessory box. Connect one end to the back of the CPU as shown below. Connect the other end to the "S video out" connector on the back of the analog monitor that is connected to the instrument (refer to the Welch Allyn instrument manual for details).
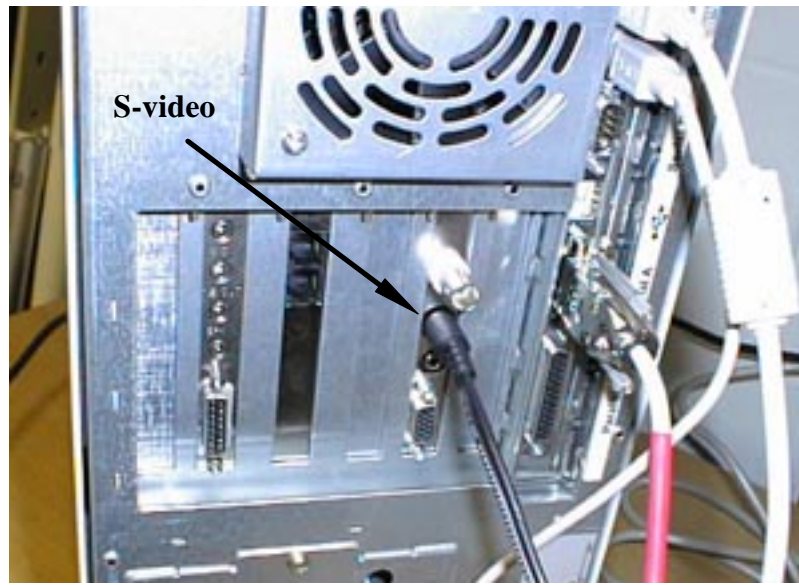
[Intentionally Left Blank]

B. Box 2 (Color Display)

1. Remove the fifteen inch VGA color display monitor and set next to the cpu.

2. Remove power cord and connect between back of monitor and wall outlet.

3. Connect VGA cable from back of monitor to the video card connector on the back of the CPU. Note this cable <u>should NOT be connected to the traditional VGA motherboard connector</u> found on the upper right corner of the CPU. See picture below.
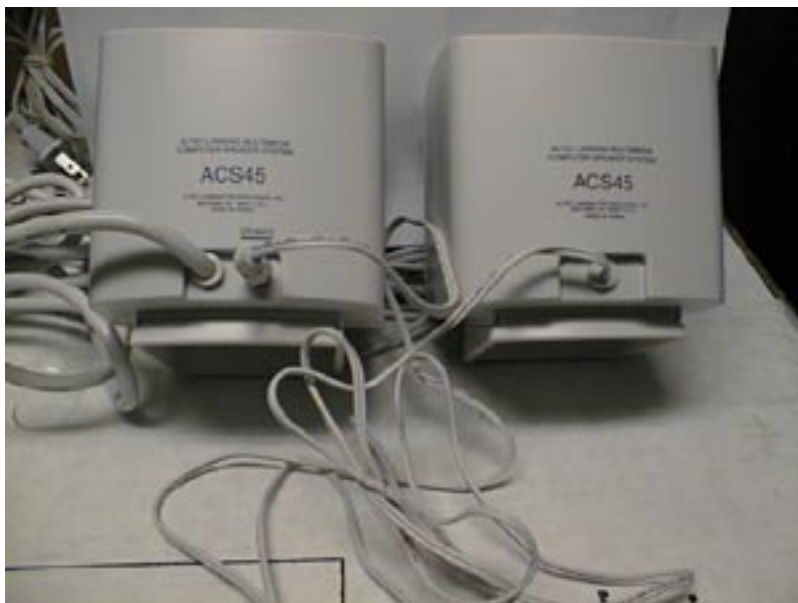
C. Box 3 (Speaker system)

1. Remove the large sub woofer from the box and place on work surface.

2. Remove the 2 small speakers from the box.

3. Connect the two small speakers together with the cable permanently attached to one into the "speaker" input of the other speaker.

4. Connect the 2 small satellite speakers using the large 5 pin permanently attached cable to the "**speaker out**" connector on subwoofer.

5. Plug the power cord from back of subwoofer into a wall outlet.

6. Remove patch cord from speaker box. Plug one end into "**input 1**" on back of sub woofer and the other end into "**line out**" on back of CPU (3rd from top).
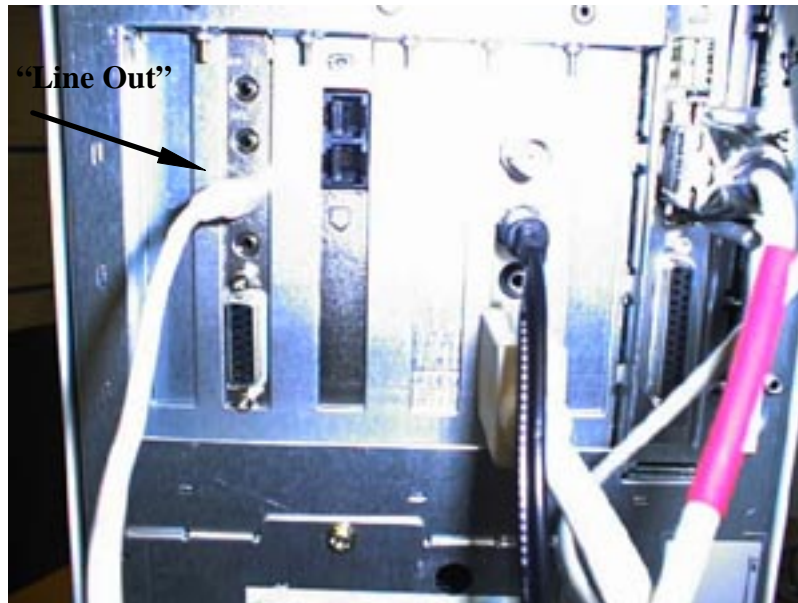
7. Remove the headset from the white box, labeled #5064-273, found in the HP brio accessory box. Plug the red microphone jack into "**MIC**" on back of CPU. Plug the black headphone jack into "**SPK**" as shown.
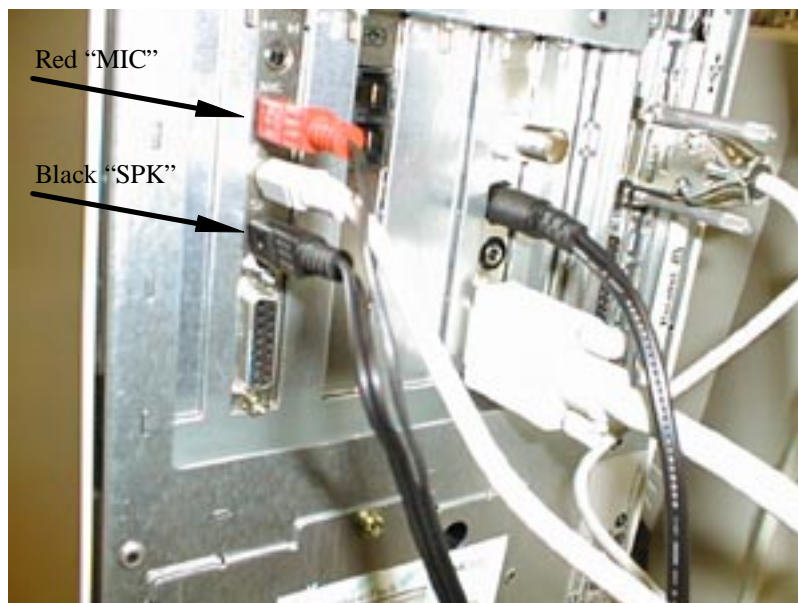
D. Optional Box 4 (Printer, paper and cable)

1. Remove the power supply, print cartridges and HP deskjet color printer and set next to the monitor.

2. Remove power cord with power supply from box and connect between back of printer and wall outlet.

[Intentionally left blank]

3. Connect printer cable from back of printer to parallel port on back of the PC. At this point the back of the cpu tower should look as shown below. Double check all cable connections.

4. Load paper tray with paper from the included packet with the white coated side up.

5. Open printer cover and remove plastic shipping shelf. Turn on printer to move print cartridges to middle of the printer.

6. Now load color and black ink cartridges as described in detail in the HP printer manual provided and shown below.

E. Setup Complete - Power Up and Test

1. Turn on power to monitor.

2. Turn on power to tower CPU.

3. The system should open to full screen Medview software.

4. Turn on the attached Welch Allyn instrumentation (either a Video Colposcope or Videopath).

5. Put on headphones and position microphone in front of mouth.

6. Click on **NEW REC** icon with mouse.

7. Enter a test alphanumeric patient id.

8. Click on extended patient information.

9. Enter a last name for testing purposes.

10. Click on the **SAVE/CAPTURE** button.

11. Observe live video from the instrument on the monitor.

12. Press and hold the **F** button on the instrument for one sec.

13. After hearing the PC beep observe a capture frame.

14. Click on the **REVIEW** icon to switch to the review screen.

15. Once in the review screen, click on the speaker icon for the captured image to bring up the sound recorder. This is the last of four icons above the image.

16. Click red **RECORD** circle and speak a test message. Click anywhere outside the recorder window to close.

17. Click on the speaker icon (which should be different now) for the image to play back the test message. To hear externally you may have to adjust volume controls on the back of the subwoofer and on top of the small speakers.

18. Click on the image to highlight it and press the **ARRANGE** icon.

19. Click the **PRINT** icon to bring up print screen.

20. Click on **PRINT** button on the print preview window to send image to printer.

21. Observe hardcopy output.

22. Click on **PATIENTS** icon to return to patient screen.

23. Click on test patient to highlight and press **DELETE**.

24. Press **OK** to confirm.

This concludes a successful installation of the Welch Allyn Image Management System!

III. Using the Welch Allyn IMS

A. Getting Started with the Medview software

Once the IMS is successfully installed powering on the system will automatically start Windows 95 and the Welch Allyn Medview image management software. Medview is based around three major windows which are briefly introduced below. For more details, review the electronic user's manual and the context sensitive Medview help system available from any window.

B. Patients Window

The patients window is displayed when Medview opens . It displays as a tabular database of patients that have been entered into the IMS. Across the top are compressed thumbnail images that have been captured, annotated and saved for each patient. These images change as a different patient is highlighted in the table below. Once a patient is selected, pressing the Review icon allows the user to review that patient's record in detail.

C. Review Window

The Medview Review Window shows all the images that have been captured, annotated and saved for a particular patient. From here the user can: zoom in to view the image in original captured resolution, add graphical and text annotations, add text notes, or add/review an audio annotation.

D. Capture Window

The capture window is opened whenever the Capture icon is clicked. This window shows live full screen video and allows the user to perform a video procedure and capture images to the patient's record using either the mouse or the buttons on the instrument's handle.

E. Exiting the Program

To exit the program either click the "x" in the upper right corner of the patients window or select File, Exit from the menu bar.

Appendix A – System Packing Slip

Below is a listing of the basic shipping configuration (4 boxes if printer option was purchased) for the Welch Allyn Image Management System:

+ Box 1 (HP Brio computer plus accessories)

1. 200 Mhz Pentium compatible PC with MMX.

2. 1 Power cable.

3. 1 Keyboard.

4. 1 Mouse.

5. 1 Videopath RS232 communications cable.

6. 1 VideoColp RS232 communications cable.

7. 1 S-video cable.

Software (Included with Box 1 but already pre-loaded at factory)

1. The Microsoft Windows 95 Operating System

2. Microsoft Plus

3. PCAnywhere 32 Host Only

4. Iomega Driver Pack

5. Welch Allyn Medview 3.2

6. Welch Allyn Keywedge 1.0

+ Box 2 (Color Display)

1. 15" SVGA monitor

2. Power cable.

+ Box 3 (Speakers)

1. Sub woofer

2. midrange small speakers

3. audio patch cord

+ Optional Box 4 (Printer)

1. HP Deskjet 692C Color Inkjet Printer.

2. 1 Color Ink Cartridge.

3. 1 Black&White Ink Cartridge.

4. 1 Photo Color Cartridge.

5. 1 Printer Cable.

6. 1 Power supply for the printer.

7. 1 set of 700 dpi high quality paper.

Appendix B - Welch Allyn Image Management System
Frequently Asked Questions (FAQ)

1. *How do I get the buttons on my instrument to control the IMS?*
A: **First** check that the IMS communications cable is connected from the instrument to serial port 1 on the back of the IMS PC. This cable has a 25 pin female connector for the back of the Videopath or there is a second cable included with the IMS that has a 9 pin female connector for the power supply of the Video Colposcope. **Secondly,** check that the Keywedge software program is running in the background of the IMS PC. If you cannot ALT-TAB to see the KeyWedge main menu then you must restart the IMS.

2. *How do I start Medview?*
A: Turning on the IMS should automatically start the Medview (and Keywedge) software programs because at the factory these programs were placed into the startup group of the Microsoft Windows 95 taskbar.

3. *The IMS starts OK but when I got to capture I can't see any video from the instrument!*
    A: First make sure the Welch Allyn video instrument is on. Check for video on the analog monitor sold with the instrument.
    + Check the svideo cable that runs from the back of the monitor to the Svideo input connector on back of the IMS. This should be attached and functional (check integrity of the cable using the analog monitor – these cables can be broken if a chair rolls over them etc)
    + Check the communications cable is attached between the instrument and serial port A.
    + In the capture screen of Medview check the settings icon. These should be set for NTSC video (as opposed to PAL) and for Svideo (as opposed to composite).
    With all of the above the user should see live full screen video in the capture window.

4. *How can I use images I have captured using Medview in other computer programs?*
    A: Medview allows the user to export any image to a number of industry standard graphic file formats from the review screen as follows:
    + Click on the review icon in the navigation bar to switch
    + Select the picture(s) you wish to export
    + On the menu bar select Arrange and then Export, which will ask for a filename, file type and the directory where you wish to export then press OK

5. *How can I create a report for my paper based patient record that documents images I have captured using the IMS?*
    A: Medview has a report module that works directly with Word 97 to create a basic report for hardcopy output to a paper based patient record system.
    + First select the patient and then move to the review screen
    + Select the images you wish to document
    + Then press the report wizard icon. You will be asked a series of questions that will fill out the sections of your report and then the print dialog box will appear.
6. *How can I mark a body map at the same time I capture the image of the pathology?*

A: In capture mode the mark image button toggles the body map feature on and off. When off, a green x is shown over the icon. When toggled on, a list of maps will pop up to select the map for the particular procedure being performed. Then when an image is captured the map will pop up allowing the user to mark where the anatomical context of the image for future reference and follow-up. Note this function is also available after a procedure from within the review screen.

7. *How do I turn off the frozen image in the capture screen so I always have full screen live video?*
A*:* In capture mode the show image button toggles the frozen image on and off. When off, a green x is shown over the icon and the user will always have full screen live video. When toggled on, a frozen resizable image will pop up after capture so the user can verify they got the image they wanted before continuing. Now the frozen image can be moved and Medview will remember the setting.

8. *How do I make a backup of my Image Management System's hard drive?*
A: The IMS comes with a factory installed Iomega zip drive for backup purposes. Included with the IMS are three 100-megabyte Zip disks for the user to perform an initial backup of the IMS. Additional disks can be purchased as needed from any computer supplies distributor. Place one of the disks in the zip cartridge, which is slightly larger than the floppy drive. Minimize Medview out of the way by clicking on the "underline" icon in the upper right corner of the window. Do the same for KeyWedge so the desktop is visible. Locate and click on the icon labeled "One-Step Backup" – this will begin a backup in the background of all the data on the hard drive. The program will analyze the IMS and show how many zip disks will be needed to complete the backup. The user may continue to use the Medview software and will be prompted when it is time to put another Zip disk in the drive and label the old disk properly as disk 1 etc. It is recommended that backups are performed on a daily end of the day basis.

9. *How do I restore a Medview backup?*
A: On the desktop is a shortcut icon labeled, "One-Step Restore". Click on this icon to start the restore program. Put the first zip disk of the backup in when prompted and select the backup name for restoration. The program will prompt the user for the next disks when needed. This may be necessary if there is a hard drive failure with the IMS and the unit is fixed by Welch Allyn and returned to the user. Welch Allyn is not responsible for any lost data.

10. *When the IMS starts Windows 95 claims scandisk needs to be run. What has happened?*
A: This error message generally occurs if the IMS was not properly shut down (e.g. a power outage etc). Press OK to scan the drive. Any files that are found can be deleted and the "make undo disk" option can be skipped.

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