ASP HEALTH

ROSE View™

USER MANUAL

GENERAL INFORMATION

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A: BECOMING FAMILIAR WITH ROSE VIEW™

1. SAFETY INSTRUCTIONS

It is the sole responsibility of the user to ensure that they have read and understood this user manual and have the appropriate training in the handling and disposal of hazardous biological material.

NOTE: ROSE View™ has not been validated for any specific In Vitro Diagnostic (IVD) Test or Laboratory Developed Test (LDT).

1.1. CONVENTIONS USED IN THIS USER MANUAL

General Warning! Text preceded by this icon alerts the user to the possibility of injury or other serious adverse reactions associated with the use or misuse of the device.

General Mandatory Action! Text preceded by this icon alerts the user to the possibility of a problem associated with the use or misuse of the device. Such problems can include device malfunction or failure, and damage to the equipment. The caution statement includes a precaution that should be taken to avoid such issues.

Note: Text preceded by this icon contains useful information to assist the user in the effective operation of the System.

1.2. GENERAL CAUTIONS

- Read the entire User Manual prior to initial usage to avoid issues, accidents, and misuse.
- The device is only for use by appropriately trained professionals in a clinic or laboratory environment.
- Do not use the system if the housing or electrical components appear damaged.
- The device must be placed on a stable, level surface away from direct sunlight.
- The device should be turned off when not in use to ensure optimal lifetime performance.
- Ensure slides are properly positioned to prevent breakage when closing the stage.
- It is the responsibility of the user/clinical site to provide an appropriate connected computer and maintain all necessary cybersecurity mitigations for private information. Consult your institution for any necessary cybersecurity precautions.
- The ROSE VIEW™ System shall not be modified or changed without formal manufacturer approval.

1.3. ELECTRICAL SAFETY

General Warning! The User is responsible for ensuring that the ROSE View™ system, as installed and used at the user/clinical site, meets applicable workplace electrical safety requirements. If workplace policy or the facility's safety office requires a field safety evaluation/approval for the intended use environment (for example, by an OSHA-recognized Nationally Recognized Testing Laboratory (NRTL), such as evaluation to UL/CSA 61010-1), the user/clinical site is responsible for obtaining and documenting the required evaluation/approval before placing the ROSE View™ system into use.

WARNING

To reduce the risk of electrical shock:

- Do not attempt to disassemble the device. ROSE View™ contains no user serviceable parts. For service or technical assistance, see "Technical Support."
- Only clean the external surfaces of the device using the recommended cleaning agents (see "Cleaning the Device").
- Use only the supplied 24V Power Supply and region-specific outlet plug.

- Switch off the power and unplug the device when not in use.
- Do not handle the Power Supply or other electrical components with wet hands.
- Do not yank or twist the power cord. Remove the cord by gently pulling on the plug to remove it from outlet.

1.4. BIOLOGICAL HAZARDS

WARNING

To reduce the risk of exposure to any biological hazards:

- Only operate the device in an environment which is suitable for the biological hazards used in the operation of the device.
- The operator must wear Personal Protective Equipment (including gloves, eye protection, and clothing protection) that are suitable for the handling of potentially hazardous biological materials.
- The operator must be appropriately trained in the storage, use, and disposal of hazardous biological samples.
- The device must be decontaminated before transport, shipping, or storage, or when providing the device to maintenance personnel for servicing (see “Decontamination”).
- Dispose of all used components as biohazardous waste according to federal, state, and local regulatory requirements.
- Use only properly prescribed hazardous material waste receptacles for the disposal of biological material.

1.5. PERSONAL SAFETY

WARNING

To reduce the risk of injury:

- Take care when closing the stage to avoid pinching or catching fingers.
- Take care not to drop the device while carrying or moving.
- Only approved and trained service technicians should disassemble the system and perform internal troubleshooting or updates. Customers should not try to disassemble the system or replace/modify parts.
- **WARNING:** LED Light Hazard. Avoid direct eye exposure to light source during service or maintenance when housing is removed. Access restricted to trained service personnel only. Refer to the service manual for safety procedures

1.6. ELECTROMAGNETIC COMPATIBILITY (EMC) INOFRMATION

- The ROSE View™ system has been tested and found to comply with the applicable limits pursuant to FCC 47 CFR Part 15 Subpart B. These limits are designed to provide reasonable protection against harmful interference in a clinic or laboratory environment.

It is the responsibility of the user to ensure that a compatible electromagnetic environment is maintained so that the device will perform as intended.

Unapproved modifications to the system could violate EMC or FCC regulations and void the user’s authority to operate the equipment.

Do not operate the system near sources of strong electromagnetic radiation, as these may interfere with proper operation.

If interference is observed, increase the physical separation between the system and the source of interference as much as possible within the room.

- The ROSE View™ system has been tested in accordance with IEC 61326-1 for electromagnetic compatibility.

Under certain conditions, exposure to strong electromagnetic fields or electrostatic discharge — for example, when operating the system near radio transmitters, wireless communication equipment, or when touching a metal surface after walking on carpet — may cause the system to temporarily stop responding. Such behavior does not indicate a device malfunction. The system will typically recover once the disturbance is removed.

If the system does not recover automatically, follow the steps below to restore normal operation:

1. Close the microscope software application.
2. Turn off the microscope using the power switch.
3. Disconnect the USB cable(s) from the computer.
4. Reconnect the USB cable(s).
5. Turn on the microscope power switch.
6. Reopen the software application.

Normal operation should then resume.

To reduce the likelihood of electromagnetic interference, avoid operating the ROSE View™ system within close proximity (less than 1 m) of high-power wireless equipment, Bluetooth® transmitters, or Wi-Fi access points.

2. ABOUT ROSE VIEW™

2.1. PROCEDURE SUMMARY

ROSE View™ is a Light Microscope System designed to enlarge images of specimens, preparations, and cultures for medical purposes by providing detailed visualization of cellular structures. It may be used to assist in the rapid assessment of sample adequacy. The system alone is not intended to analyze, interpret, or provide diagnostic recommendations.

Features:

- Fully Automated Controls
- Seamless Magnification Options
- Multi-Slide Capability
- Basic Software Controls
- Digital Zoom

2.2. INTENDED USE

NOTE: The device is intended for the US market.

The ROSE View™ system is intended for use in a clinic or laboratory environment by professionals who have been trained to work with cytologic specimens. The intended users perform evaluations of cytological samples as part of their work and are aware of the hazards associated with handling biological samples. The users will have to read the ROSE View™ user manual and be aware of the hazards associated with the use of the system.

Intended Use - Microscope Slide Visualization and Evaluation:

The ROSE View™ system is a light microscope system intended to visualize and evaluate cytology samples. The system is not intended to analyze, interpret, or provide diagnostic recommendations.

Intended Operating Environment:

The ROSE View™ system is intended for use in a professional medical facility such as a hospital or clinic and is not intended for home use. The system is intended for indoor use only.

Intended Operational Setup:

The ROSE View™ system is intended as a stationary device operated on a cart or station. Typically, the instrument will be operated by a trained operator who works with a clinician who collects the cytologic samples to be evaluated. In some cases, the clinician may work alone and use the instrument to evaluate samples, and in other cases, the trained operator also collects and evaluates the samples.

Intended Patient Population:

The ROSE View™ system is not intended for a specific disease or condition, provided the sample meets the intended tissue type requirements.

Intended Tissue Type:

Specimens from cytology procedures such as FNA, EBUS, and TBNA for sampling of cells that, after being fixed and stained using the ROSE Prep™ System, will be examined under a microscope. Monolayer smears, touch-preps, brushings, and ROSE Prep™ depositions are appropriate slide preparations for the ROSE View™ system.

The ROSE View™ system is non-sterile. Do NOT place the ROSE View™ system in the sterile field.

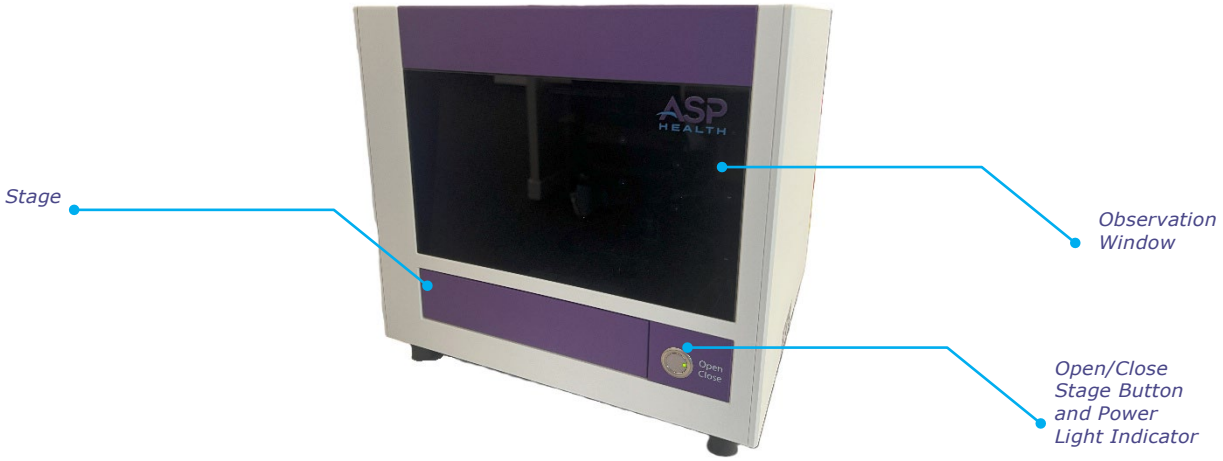
Intended Users:

The device is intended for use in a clinic or laboratory environment by professionals who have been trained to work with cytologic specimens.

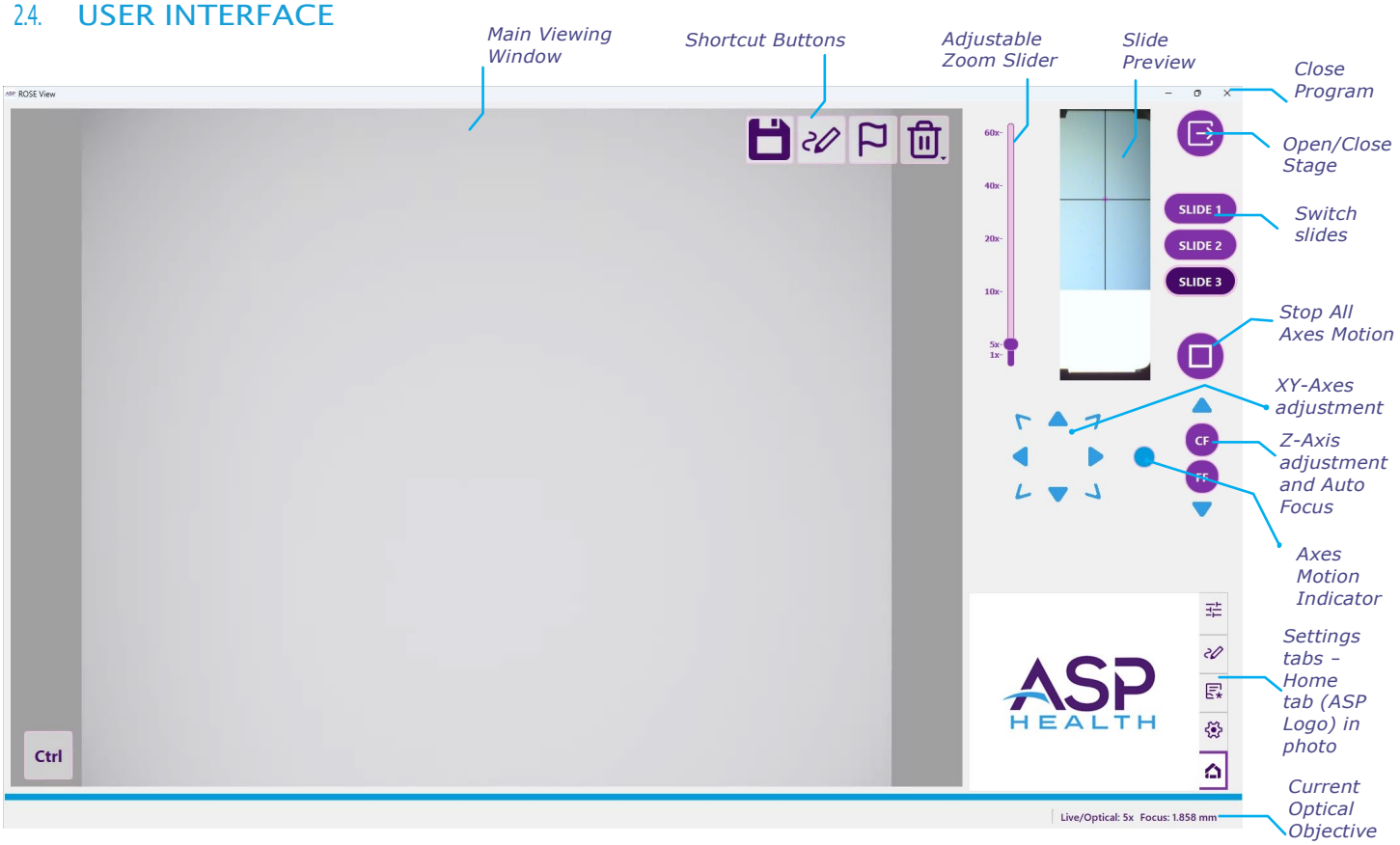
The intended users of the ROSE View™ system are usually clinical professionals who are trained to work with and evaluate cytologic specimens. These may be medical professionals such as Cytotechnologists, Cytopathologists, or other personnel who perform similar functions in different environments - such as a laboratory.

The intended users perform evaluations of cytological samples as part of their work. The users are aware of the hazards associated with handling biological samples.

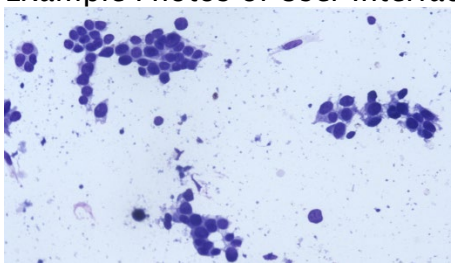
2.3. DEVICE OVERVIEW

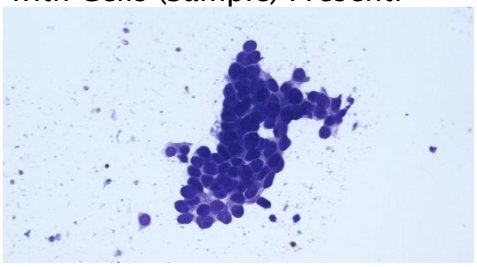


2.4. USER INTERFACE



Example Photos of User Interface with Cells (Sample) Present:





2.5. STORAGE

NOTE: The device must be decontaminated if it will be out of use for more than one week (see “Maintenance”).

Please use the original packaging, transport locking screw, and protective inserts for storage and/or transport.

Refer to section 10. For ambient and operational conditions such as temperature and humidity.

2.6. MOVING THE DEVICE

It is recommended that the device is installed on a workstation or cart to limit any lifting.

If the device must be lifted:

- Remove any slides from the tray/stage.
- Close the microscope stage.
- Before turning off the power switch at the back of the unit, go to the settings tab, press open settings, switch to the Maintenance tab, select Storage position, and press Yes on the popup window.
- This will move the microscope objective to the storage position and automatically close the software interface.
- Remove the power cord and any USB cable(s).
- Make sure to install the transport locking screw on the bottom of the device for transport (see Section 4.2).
- Lift the device from under the base of the side panels where marked. Do not lift from the sides or top.

3. CONSUMABLES

3.1. MICROSCOPE SLIDES

Name: Fisherbrand™ Superfrost™ Plus Microscope Slides (charged slides recommended)

Part Number: 12-550-15

Dimensions: 75mm x 25mm

4. INSTALLATION & SETUP

- The ROSE View™ must be installed on a stable, level surface or suitable medical workstation or cart.
- Ensure clear access to the rear of the device to allow the device to be easily switched on or off, and to allow for the easy disconnection and connection of the device power cable.
- Ensure at least 6 inches in front of the system to allow space for the opening of the stage.
- No initial nor routine calibration should be required for the ROSE View™ system.

Refer to section 10. For ambient and operational conditions such as temperature and humidity.

4.1. PACKAGE CONTENTS

- 1 x ROSE View™ System
- 1 x 24V Power Supply with region-specific plug

NOTE: Check all packaging and contents for any visible signs of damage.

4.2. Removing/Installing the Transport Locking Screw (Under Device)

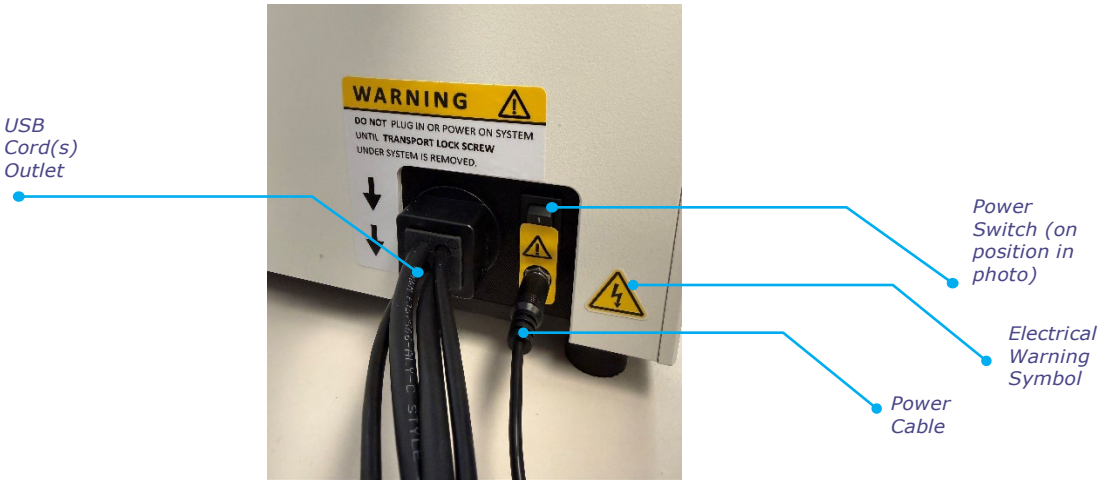
1. Before turning on ROSE View, remove the transport lock screw on the bottom of the device. Save the transport lock screw for future use. Gently tilt the device onto its side and use an Allen key to remove the screw, then slowly return the device to a flat, upright position.
2. Before transport/storage of the ROSE View device, place the system in Transport Mode. From Settings → Maintenance tab, click “Storage position” and select “Yes” when prompted. Allow 5-10 seconds for the objective to return to its home position.
3. Once the software has automatically shut down, gently and slowly tilt the device and place on its side. Screw in the transport lock fully until tight.

WARNING

If the transport lock screw is not removed before powering on, the auto-calibration sequence will damage the stage motors and internal components.

4.3. SWITCHING THE POWER ON/OFF

1. Ensure the power switch on the rear of the device is in the off position (O).
2. Plug the 24V power supply cable into the power cable connection on the back of the device.



3. Plug the cord securely into the wall power outlet.
4. Switch the device power switch to “on” (I). The power status light on the Open/Close stage button on the front of the system will illuminate when the device power is on.

4.4. COMPUTER SPECS, DOWNLOADING, AND INSTALLING ROSE VIEW™ SOFTWARE

The computer shall be purchased by the customer site and not provided by ASP Health, unless otherwise specified. Any standard modern computer meeting the following specifications is deemed acceptable:

- Operating System: Windows 11 Pro (64-bit) or newer
- RAM: 32 GB, 64 GB, or greater
- Processor: 16-core CPU (Intel Core i9-13900HX, 14900HX, or newer)
- Graphics Card: Nvidia Geforce RTX or better, 12 GB VRAM or higher
- Storage: 1 TB NVMe SSD or greater
- Ports: 2 × USB Type-A Gen 3.2 (SuperSpeed); 1 × USB Type-A or Type-C (High-Speed)
- Monitor: At least 24”, HD LED or better
- Network: Gigabit Ethernet + Wi-Fi 6/6E preferred

WARNING

The ROSE View™ system does not transmit, host, or store patient data, and does not perform clinical laboratory testing or issue test results. The ROSE View™ system itself does not perform or control network transmission of images or data. The Clinical Site is responsible for establishing and maintaining a secure, encrypted communication channel that complies with applicable HIPAA, institutional IT, and data-protection requirements.

In order to download the ROSE View™ Software, please contact ASP Health. The software will be downloaded by ASP Health, or instructions will be provided on a case-by-case basis.

4.5. SETUP

1. Connect the USB cord(s) to an appropriate, powered-on computer (see specs in section 4.3). The two main camera USBs should be plugged into opposite sides of the computer to avoid communication errors.
2. Open the downloaded ROSE View™ Software on the computer.

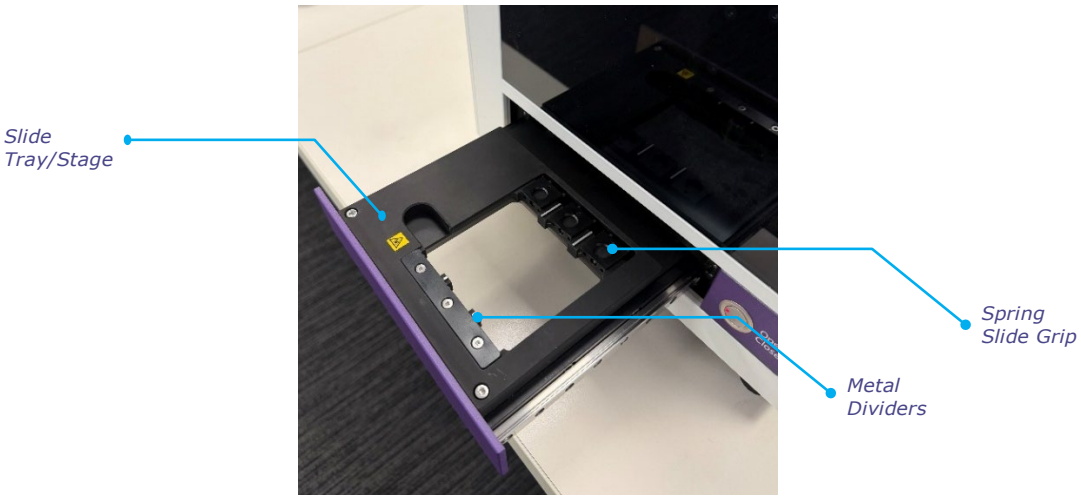
3. The microscope will finish initialization, the LED light turns on, and the Graphical User Interface (GUI a.k.a. UI) opens up on the computer.
4. Press the stage hardware button once to eject the stage. A long press may be used to open/close the stage if the software is not open.
5. Load at least one microscope slide into the tray (sample up with label toward the front of the device).

Ensure that the slide is sitting flatly and evenly at the bottom of the slide bed and that no edges are raised or resting on any of the ridges/dividers located around the slide bed.

6. Press the stage hardware button again to close the stage.
7. Once the h user interface is ready, the user selects from either Slide 1, 2, or 3 to move to that slide.
8. The user can now begin to move around, focus, and view the slides.

4.6. LOADING & UNLOADING CONSUMABLES

4.6.1. Slides



Loading a Slide

1. Hold the slide by the frosted/label end with the index finger on the top and thumb on the bottom. The sample side should be facing up. This should be done with gloves. No other tools are needed.
2. Angle the front edge of the slide slightly downward while inserting under the spring grip at the back of the slide bed.
3. Gently lower the frosted/label end of the slide into position between the dividers of the slide bed. The slide will now be held in place.

Ensure that the slide is sitting flatly and evenly at the bottom of the slide bed and that no edges are raised or resting on any of the ridges/dividers located around the slide bed.

Take care to ensure that slides are correctly placed. An incorrectly placed slide may result in slide breakage.

Unloading a Slide

1. Hold the label end of the slide and push the slide into the spring grip at the back of the slide tray.
2. Once there is enough clearance, lift the label end of the slide out of the slide tray.
3. The front of the slide is now free to remove from the slide tray. Clean any liquid from the tray/stage using a Kim Wipe, alcohol wipe, or other non-bleach disinfecting wipe.

C: OPERATING ROSE VIEW™

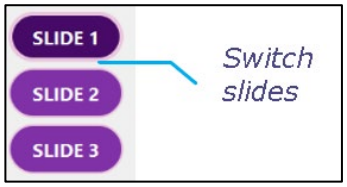
5. OPERATION

5.1. NORMAL USAGE

Typical operation for the visualization and evaluation of prepared microscope slides.

Required Items:

- Required Quantity of Glass Slides (either 75mm x 25mm or 76mm x 26mm slides that comply with the ISO 8037/1-1986)
- ROSE View™ Microscope and Connected Computer for Reviewing Slides
- Access to Standard Power Outlet
- Personal Protective Equipment (including gloves, mask, eye protection, and clothing protection)
- Biohazard and Glass Waste Receptacles
- *Instructional Steps:*

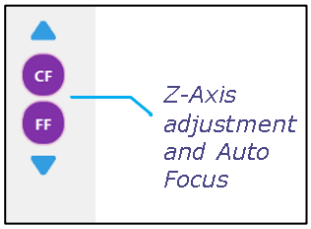


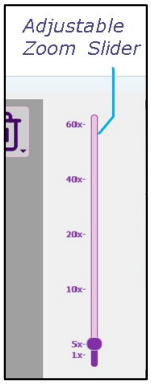
1. With the slides loaded and the software open, the user can start by picking a slide to view by clicking Slide 1, Slide 2, or Slide 3.

   Clicking between these buttons will allow the user to switch between the slides.

   The objective and crosshairs in the overview update to the central starting position for the first time or last saved position on the selected slide if returning to a slide.

   The slide label will also display for the currently selected slide when the option is turned on in the settings.





2. The user can choose to focus manually using the arrows on the UI, scroll wheel on a connected mouse at the same time as holding the keyboard CTRL button, or automatically using the Coarse (CF) and Fine Auto Focus (FF) buttons.

   Holding the keyboard CTRL button while pressing the Z-axis arrows will result in faster focusing.

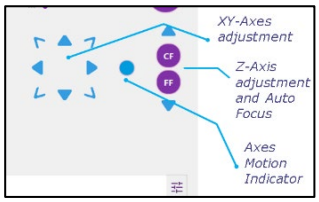
   Scrolling the mouse wheel over the main slide view will adjust the zoom magnification.

   When enabled in the settings, a CTRL button will appear in the bottom left corner of the screen. This is mainly for touch-screen compatibility. Pressing the CTRL button will toggle faster axis movement, as designated by the double XYZ arrows that appear when CTRL is selected.

   The user can also adjust the zoom magnification using the slider. The objectives seamlessly switch between 5x and 20x. 10x is a 2x digital zoom of the 5x objective. 40x and 60x are 2x and 3x digital zooms of the 20x objective, respectively.

   Zooming out all the way to the 1x zoom will display a whole slide image that matches the slide overview in the top right corner.

   The numbers 1 through 6 on the keyboard serve as shortcuts (hotkeys) for the various zoom objectives from 1x to 60x, respectively. The + and – buttons can be used to focus in and out.

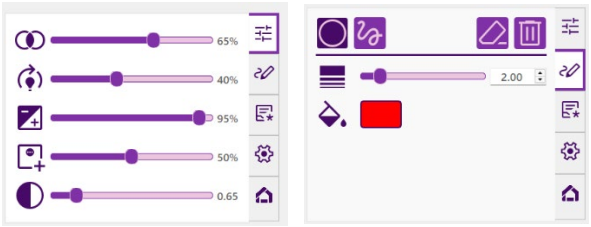


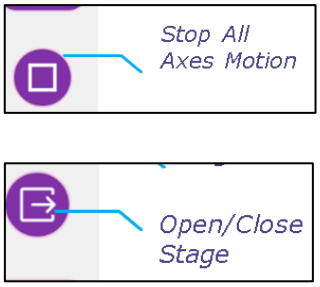
3. The user can move around the slide by clicking the directional arrows or clicking a point on the slide overview. The user can also double-click on a cell/area in the main view to center it. The keyboard arrows serve as shortcuts (hotkeys) to move around the slide image as well.

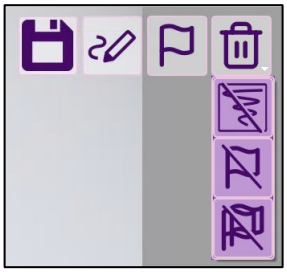
   The crosshair in the slide overview will update to the current position.

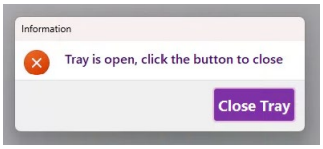
   Holding the keyboard CTRL button while clicking the directional arrows will result in faster movement.

   Any time any of the axes are moving, an indicator light on the UI will change colors.









4. At any point during the motion of the microscope, the user can press the Stop button to immediately halt any axis motion.

   The shortcut buttons overlayed in the top right corner of the main slide image allow for saving of the file/screenshot, adding annotations or drawings, flagging the current slide view (tile), and deleting the position tracking and flags.

   The button in the top right of the UI allows the user to open and close the stage from the software, instead of using the hardware button on the front of the system. After opening the stage, a separate pop-up window will appear, allowing the user to close the stage.

5. In the bottom right corner of the UI are 5 different user-accessible tabs.

   The first tab allows for adjustment of the image/camera sliders for image overlap, LED light power, Camera Exposure Time, Camera Gain, and Image Gamma.

   Image Overlap: Decreasing the Image Overlap slide close to 0% will enable the user to move from one field of view to another. Increasing it close to 100% enables the user to move the Field of View only a bit due to increased overlap.

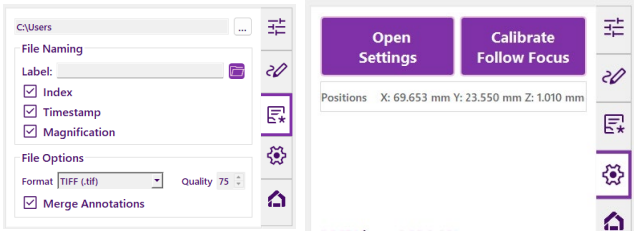
   LED Light Power: This slider enables the user to increase or decrease the LED light intensity based on the type of specimen viewed.

   Camera Exposure: Similar to LED light intensity, the camera exposure can be increased or decreased based on the type of specimen viewed.

   Camera Gain: In certain situations, the camera gain needs to be adjusted to better visualize the contents of the specimen. Note that increasing the Camera Gain might quickly saturate the camera.

   Image Gamma: This option changes the color saturation of the camera image. The users can adjust the Gamma slider based on their preference.

   The second tab allows for annotations or drawings to be added, saved, or deleted with the current slide view.



6. The third tab allows the user to specify how to name any saved files and screenshots.

   This includes selectable boxes that will auto-populate the saved file name.

   The fourth tab contains a button that opens the system settings.

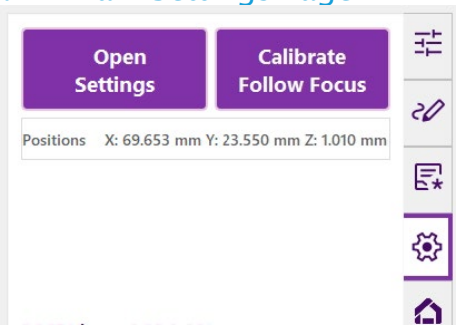
   This allows the user to adjust the XYZ axes' movement/speed settings and the auto focus feature settings (see "System Settings" in section 5.2).

   It also contains a button for calibrating the Follow Focus feature (see next section 5.2.1).

   The last tab is the Home tab and just displays the ASP Health logo.

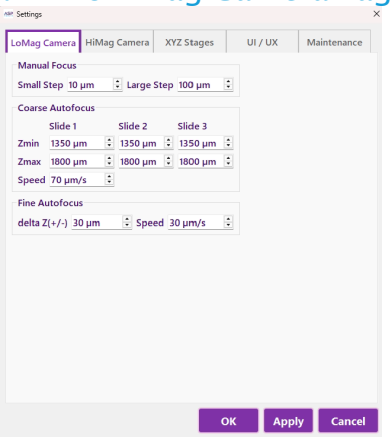
5.2. SYSTEM SETTINGS TAB

5.2.1. Main Settings Page



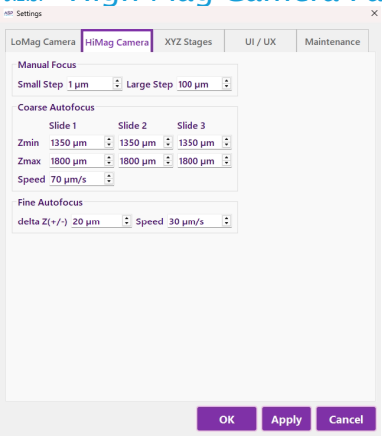
1. Displays the current XYZ position/coordinates, Software Version, and Serial Number. Click Open Settings to access system settings. This will open a pop-up window with the pages shown below.
2. This page also has access to the Calibrate Follow Focus Settings. Clicking this will open up a new pop-up window.
3. Start by selecting the desired slide and then clear any existing points.
4. Navigate to a corner of the slide where cells are present and adjust the focus until the image is in clear focus. Select add point. The number of points increases to 1.
5. Repeat the previous step for the other three corers of the slide and the middle of the slide. This will bring the total number of points to 5.
6. Close out the pop-up window, and the focus will now compensate for the tilt of the slide as the objective moves around the slide area.

5.2.2. Low-Mag Camera Page



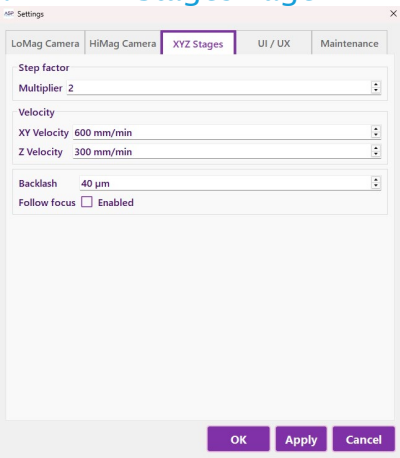
1. The first page adjusts Low-Mag Camera settings. This results in changes to the Low-Mag objective (5x-19.5x).
2. The small and large step settings adjust the Z-Axis (focus) step sizes when regularly using the arrows vs. combining with the CTRL button on the keyboard, respectively.
3. The Zmin and Zmax are the Z-axis end positions for the auto focus range. These should be set by ASP Health and not changed without contacting them. It is important that the Zmin value is high enough so that the objective does not touch the slides. The Zmax value should be high enough to accommodate both regular and cover slipped slides.
4. The number of steps and speed can be changed to affect the duration of the auto focus command. Lower number of steps and higher speeds result in faster auto focusing at the expense of accuracy and precision.

5.2.3. High-Mag Camera Page



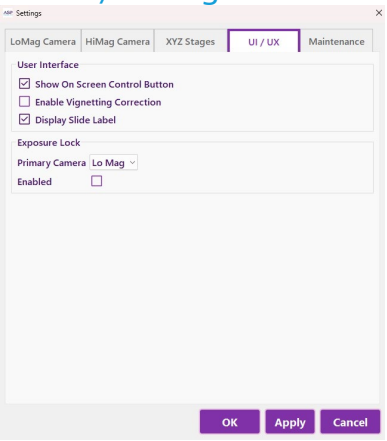
1. The second page adjusts Hi-Mag Camera settings. These result in the same changes as the previous section above, except to the Hi-Mag objective (20x and above).

5.2.4. XYZ Stages Page



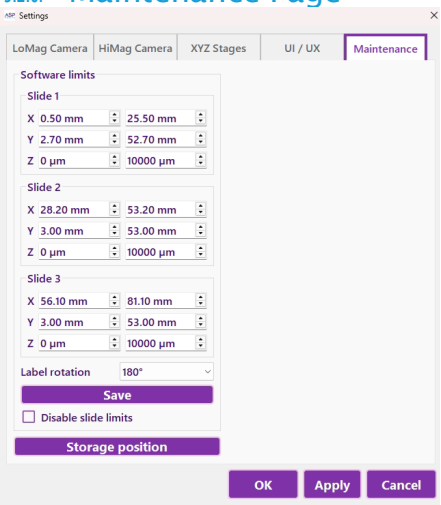
1. The third page adjusts XYZ Stages settings. This allows the user to adjust the multiplier when holding down the keyboard CTRL button and clicking one of the arrows on the UI. It also allows the user to adjust the speed of each axis' motion.
2. Higher stage multipliers and velocities results in less precise axis movement, but quicker usability.
3. The backlash setting compensates for slight mechanical imperfections. These should be set by ASP Health and not changed without contacting them. The follow-focus box should be left unchecked.

5.2.5. UI/UX Page



1. The fourth page adjusts the user interface and exposure lock settings. The on-screen control button can be used when operating a touchscreen computer.

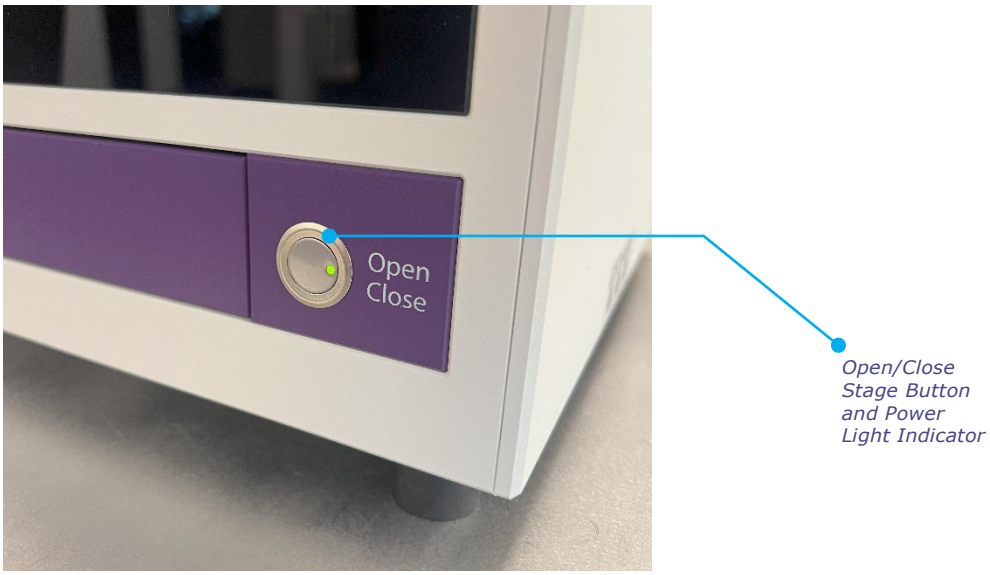
5.2.6. Maintenance Page



1. The fifth page adjusts Slides settings. This allows manual setting of each slide's boundary positions in each axis. Users should not modify or disable the slide limits unless specifically instructed by ASP Health. A minimum Z value for each slide should be set by ASP Health to prevent the objective from touching the slide (i.e. 500 um or 1000 um). The user has the ability to display the slide label, rotate the label orientation, and it also contains access to the Storage Position Button (see section 4.2).

5.3. SHUTDOWN PROCESS

1. Press the stage hardware button to eject the stage.



2. Remove the slides from the tray/stage.
3. Once ready, press the stage hardware button to close the stage.
4. Once the UI is ready, close the UI software application on the computer.
5. Turn off the rocker switch at the back of the system, disconnect the USB cable(s), and remove the power supply.

6. CLEANING THE DEVICE

Safe Cleaning:

- It is recommended that the device be switched off before cleaning the system to prevent any electrical hazards.
- The operator must wear gloves that are suitable for handling biological matter and cleaning agents.

6.1. MAINTENANCE

NOTE: The maintenance cleaning takes less than three minutes to complete. It is recommended that the ROSE View™ system be cleaned between patients and as part of End-of-Day (Daily) Cleaning to avoid cross-contamination and maintain functionality. Cleaning may also be needed between individual patient samples if any liquid and/or biological material is spilled from microscope slides onto the stage and tray areas.

Daily maintenance must be performed:

- To ensure correct operation and cleanliness.
- To avoid cross-contamination between samples/patients.

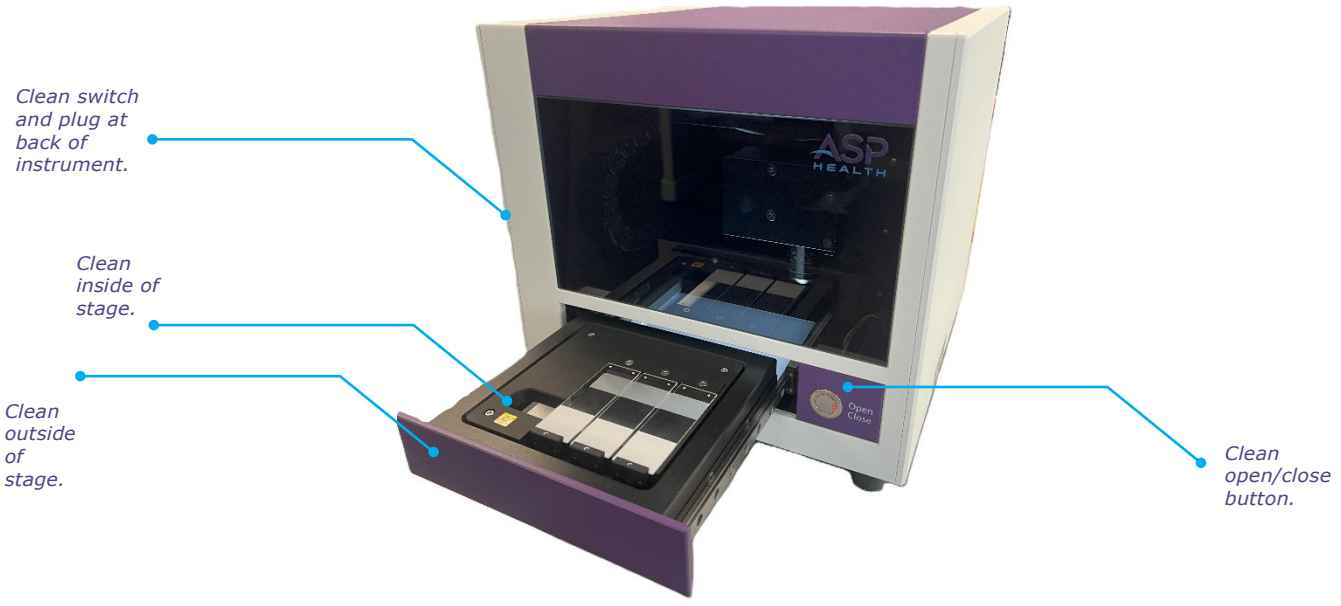
Required Items:

- Soft 70% alcohol cleaning wipe or other germicidal wipe.
- Personal Protective Equipment (PPE).

Do not use bleach-based wipes or harsh disinfectants/solvents. Stop and consult appropriate cleaning materials if any scratching or wearing of surface coatings is observed.

Instructional Steps:

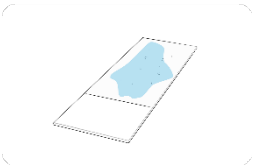
1. Eject the stage, remove any slides.
2. Turn off the power switch and disconnect the power cable.
3. Wipe down the tray and stage area.
4. Wipe down any high touch-point surfaces on the exterior like the power switch, plug, and stage button.
5. Allow all surfaces to air dry.



D

7. ORDERING CONSUMABLES AND ACCESSORIES

Consumables and accessories can be ordered from asp-health.com or ASP Health authorized distributors. For additional help contact technical support (see “Technical Support”).

Part Image	*Description*	*Part Number*	*Notes*
	Microscope Slides	Fisher 12-550-15	100 per box

8. TROUBLESHOOTING

If errors persist, please contact technical support (see “Technical Support”).

Error	*Possible Cause*	*Possible Solution*
Device Does Not Power On	• Power cord is not properly connected. • Power switch is not on.	• Remove the power cord and reconnect it. • Turn off power switch and turn it back on again.
User Interface Not Responding	• Improper user interface setup on startup. • USB cord(s) disconnected.	• Unplug and plug in the USB cord(s). • Turn the device off and on again. • Close and reopen the software.
XYZ Stage, Low-Mag, High-Mag, or Overview Camera Error	• Improper user interface setup on startup. • USB cord(s) disconnected.	• Unplug and plug in the USB cord(s). • Turn the device off and on again. • Close and reopen the software.
Stage Stuck in Closed Position, Doesn’t Open	• Software has stopped communicating with the stage. • The slides or tray/stage are stuck, preventing stage motion.	• Unplug and plug in the USB cord(s). • Turn the device off and on again. • Close and reopen the software.
Stage Stuck in Open Position, Doesn’t Close	• Software has stopped communicating with the stage. • The slides or tray/stage are stuck, preventing stage motion.	• Unplug and plug in the USB cord(s). • Turn the device off and on again. • Close and reopen the software. • Ensure slides are seated properly and not obstructing stage motion.
Slide Image is Blurry	• Incorrect image/camera or system settings • Lens/objective is scratched or dirty.	• Adjust the image settings sliders until a clear picture is obtained.
Slide image quickly goes out of focus when moving to a new position.	• Microscope is not level. • Slides are not fully flat in the stage. • Follow Focus Calibration not set up/enabled.	• Slightly unscrew the feet as needed to properly level the system. • Eject the stage, press down gently on the corner of the slides, or reseat to ensure they are fully flat, and close the stage again. Make sure the follow focus calibration is set, and the Follow Focus box is not checked in the settings.
Broken Slide	• Slide was not properly loaded when the stage was closed (see, “Loading & Unloading Consumables”). • Glass from a previously broken slide has not been completely removed from the slide bed. • Two slides were fitted on top of each other.	• Carefully remove and discard any broken glass with gloves and tweezers. • Using a new slide, ensure the slide is fully inserted and laying completely flat against the tray (see, “Loading & Unloading Consumables”). • Ensure only one slide is fitted in each slide bed.
Electromagnetic Compatibility (EMC)	• Exposure to strong electromagnetic fields. • Exposure to electrostatic discharge.	• Close the microscope software application. • Turn off the microscope using the power switch. • Disconnect the USB cable(s) from the computer. • Reconnect the USB cable(s). • Turn on the microscope power switch. • Reopen the software application.
“Strobing” Exposure (Brightness Dimming/Brightening Repeatedly)	• Exposure lock disabled. • Exposure slider too low.	• Open Settings and confirm that Exposure Lock is enabled (see icon/screenshot in User Manual). • Verify that the Exposure slider is set to ≥ 16% for both Hi-Mag and Lo-Mag cameras.

9. TECHNICAL SPECIFICATIONS

General Specifications	
Dimensions	L 310 (12.2") x W 315 (12.4") x H 272.5 (10.7") mm (plus feet height)
Approximate Weight	13.6kg (30lbs)
Power Supply Specifications	24V DC, 1.66A, 40.0W
Electrical Rating	100-240 VAC, 50-60 Hz, 1.5A
Input Power Cable Requirements	Connector End 1: Compatible With Regional Specific Power Inlet Connector End 2: IEC C13 Minimum Conductor Gauge: AWG 14
Ambient Operating Temperature	10˚C to 40˚C (50˚F to 104˚F)
Ambient Storage Temperature	-10˚C to 50˚C (14˚F to 122˚F)
Operating and Storage Relative Humidity	20% to 80% (non-condensing)
Operating Altitude	0 – 2500m (0.74 to 1 atm)
Transportation Environmental Conditions	20% to 80% RH (non-condensing), -10˚C to 50˚C (14˚F to 122˚F), 0 – 2500m
Pollution Degree	Level 2

10. TABLE OF SYMBOLS

	Manufacturer ISO 15223-1:2021 Reference no. 5.1.1 ISO 7000:2019 Reference no. 3082		Date of Manufacture ISO 15223-1:2021 Reference no. 5.1.3 ISO 7000:2019 Reference no. 2497
	Catalogue (SKU) Number ISO 15223-1:2021 Reference no. 5.1.6 ISO 7000:2019 Reference no. 2493		Serial Number ISO 15223-1:2021 Reference no. 5.1.7 ISO 7000:2019 Reference no. 2498
	Paper Instructions for Use ISO 15223-1:2021 Reference no. 5.4.3 ISO 7000:2019 Reference no. 1641		Consult Accompanying Documents ISO 7010 Reference no. M002
	Safety Markings: Caution Symbol ISO 15223-1:2021 Reference no. 5.4.4 ISO 7000:2019 Reference no. 0434A		General Warning Sign: General Warning Sign ISO 7010:2019 Reference no: W001
	Safety Markings: General mandatory action ISO 7010:2019 Reference no: M001		User Manual informal convention rather than a regulated safety symbol: text preceded by this icon contains useful information to assist the user in effective operation of the System.
	Wear Protective Gloves This is to signify that protective gloves must be worn while performing the staining operation ISO 7000:2019 Reference no: M009		Warning: Biological Risks ISO 15223-1:2021 Reference no. 5.4.1 ISO 7000: 2019 Reference no: 0659
	Warning, dangerous voltage ISO 3864 Reference: B.3.6 IEC /TR 60878 Ed. 3.0 b:2015		Maximum Altitude IEC 60417, IEC 61558-1, IEC 62368-1
	FCC Mark		Humidity Limit, Storage ISO 15223-1:2021 Reference no. 5.3.8 ISO 7000:2019 Reference No. 2620
	Humidity Limit, Operating ISO 15223-1:2021 Reference no. 5.3.8 ISO 7000:2019 Reference no. 2620		Temperature Limit, Storage ISO 15223-1:2021 Reference no. 5.3.7 ISO 7000:2019 Reference No. 0632
	Temperature Limit, Operating ISO 15223-1:2021 Reference no. 5.3.7 ISO 7000:2019 Reference No. 0632		This Way Up ISO 7000:2019 Reference no. 0623

	Keep Dry ISO 15223-1:2021 Reference no. 5.3.4 ISO 7000:2019 Reference no. 0626		Do Not Use if Package is Damaged ISO 15223-1:2021 Reference no. 5.2.8 ISO 7000:2019 Reference no. 2606
	Fragile, Handle with Care ISO 15223-1:2021 Reference no. 5.3.1 ISO 7000:2019 Reference no. 0621		

11. TECHNICAL SUPPORT

Email: info@asp-health.com
Web: https://asp-health.com and https://enhancingcancerdx.com
Phone: 877-527-7432

12. WARRANTY

Warranty information can be found by emailing ASP Health at info@asp-health.com, or on the ASP Health website Resources page: https://enhancingcancerdx.com/hcp/resources/

13. DISPOSAL

If you wish to dispose of used electrical and electronic products, please contact your local authority so as to comply with the correct disposal method.

WWW.ASP-HEALTH.COM