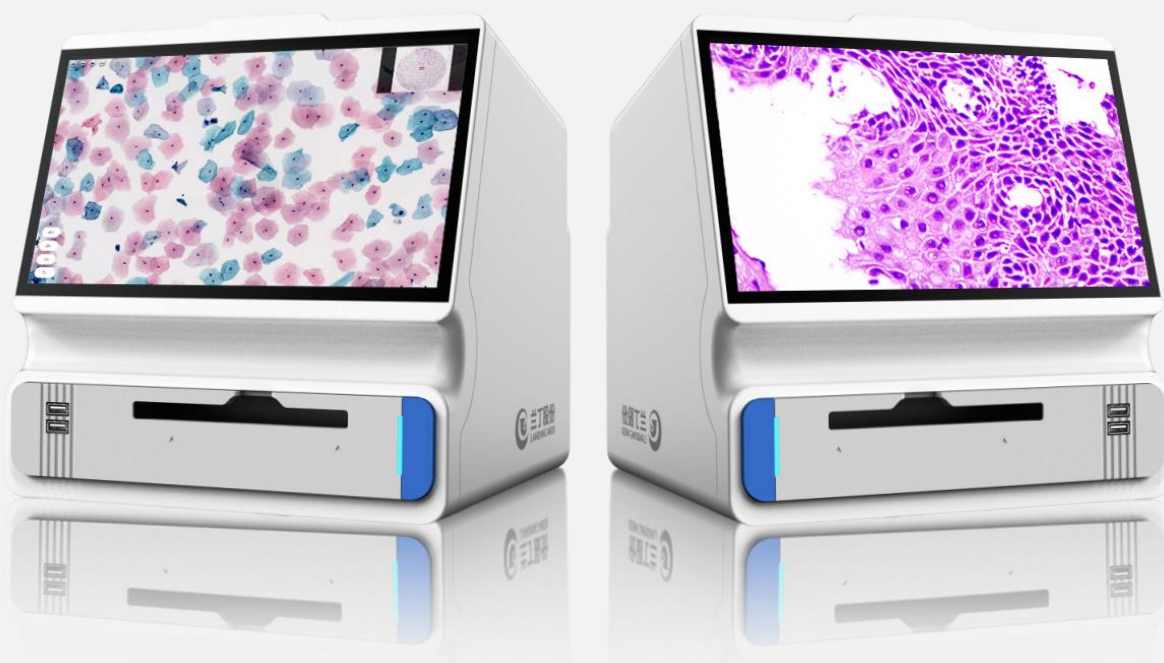


COMPACT DIGITAL PATHOLOGY SLIDE SCANNER

SMALL

SMART

ROBUST



LD Patho 340A User Manual

Website: www.landingmed.com

Email: hello@landing-med.com



LD Patho 340A	
Magnification	20X / 40X
Objective N.A.	0.8
Slide Capacity	2
Slide Specifications	75mm × 25mm
Light Source	LED
Image Format	JPEG, SVS, Landing Med
Size	274mm x 249mm x 286mm
Weight	8.3KG
Power Supply	AC220V
AC Power Level	50hz
Power Voltage	225VA
Operating Temperature/Humidity	10°C~30°C / ≤ 70%

LD Patho 340A

Basic Scanner Unboxing



Utility case × 1



LD Patho 340A scanner × 1



Metal slide tray × 1



Power cord × 1



1. Place utility case on a flat surface.



2. Twist and open the latch to open the lid.



3. Take out the scanner and accessories.



4. Connect the power cord to the scanner and plug it into a power outlet.



5. Turn on the power switch in the back of the instrument.



6. Press the blue LANDING button to turn on the scanner.

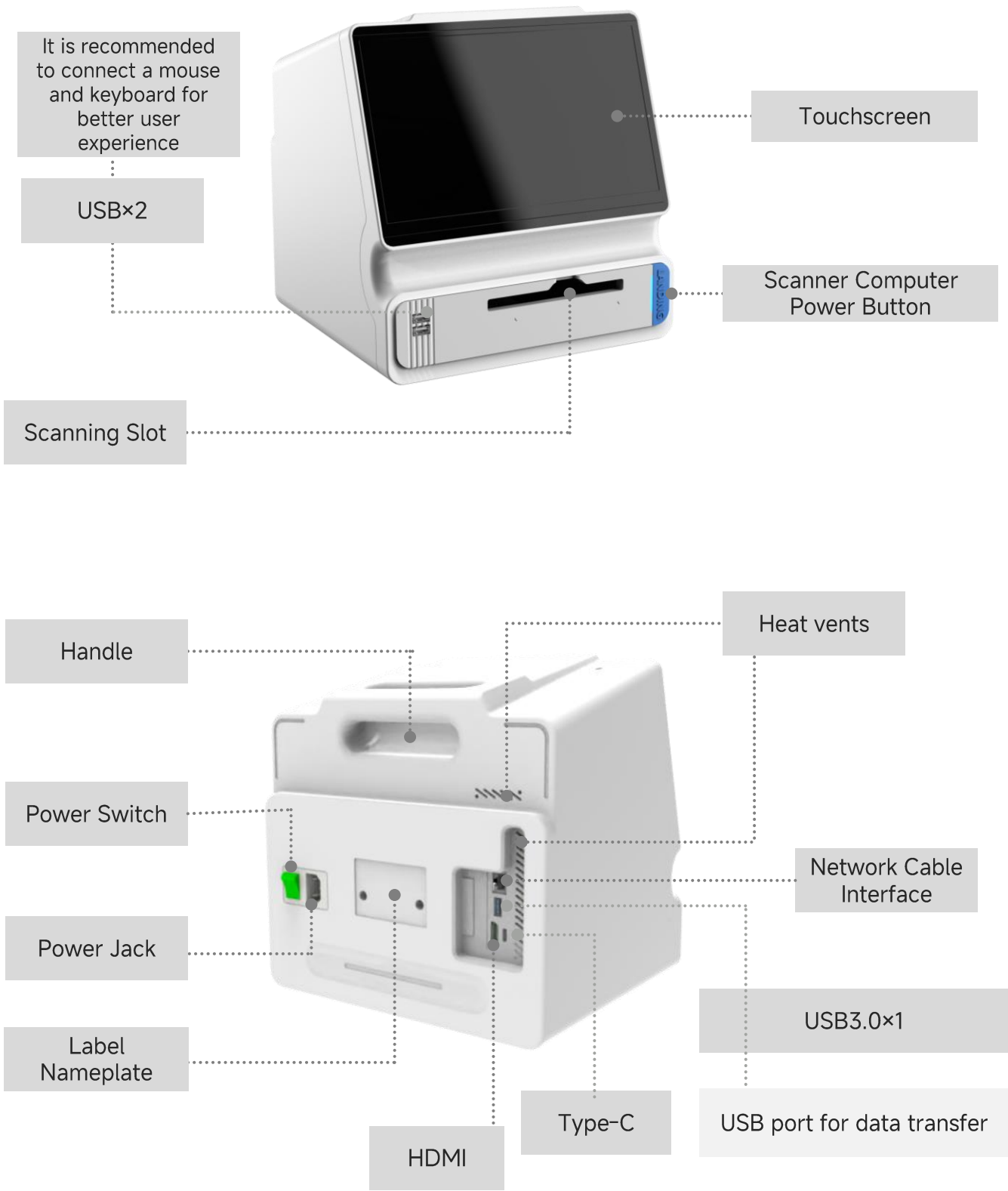
Shutdown operation



1. Click the Shutdown button on the floating window



2. Power off the device



Slide tray and slide direction

- Push slide down and pull clip to secure the slides. The slides must be parallel to the surface of the tray and all four corners are completely secured to avoid slide tilting.
- Scan two similar specimens in the slide tray; avoid mixing different types of specimens to reduce scan time.
- Do not remove the slide tray during scanning to avoid scanner malfunction.
- Place the slides in the tray with the specimen facing up, then insert the tray into the scanner with the slides facing upward.



Scanner

- The scanner should be used solely for scanning and slide review. Users must not download external software or connect the scanner to the internet for unrelated purposes, as this increases the risk of computer viruses.
- One application to be used at a time; avoid using multiple applications at the same time (eg. scanning, annotating, etc.).
- Ensure the slide and sealing agent are completely dry before scanning.
- For shut down, first turn off the scanner system on the touchscreen interface before switching off the power switch in the back.
- Ensure the electric source is stable to avoid sudden outages or electricity is cut off while scanning instrument is in operation. Sudden electric outages may damage the scanner.
- Do not move the scanner while it is in operation, handle the instrument with care.
- Place the slide tray in the scanner only after opening and entering the scanner software on the desktop.
- Do not update the Windows operating system when prompted.



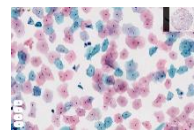
Slide Preparation

- Green Area: Maximum scanning area 60mm×25mm (see image 1).
- For better results, the specimen should be uniform and complete, and thickness is within 10μm.
- Slide size is 75*25mm (±1mm) and thickness is 1.1mm (±0.1mm).
- Annotation markings on slides will cause the automatic area recognition to be misinterpreted.
- The QR code must be at least 10×10mm to be automatically recognized, and not extend beyond the edges of the slide. Some barcodes may not be recognized.
- If the slide name is not recognized (or if it is manually written), the scanner will automatically assign a random label number.

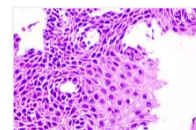
Image 1



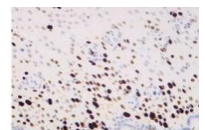
Specimen is placed outside of the scan area (×)



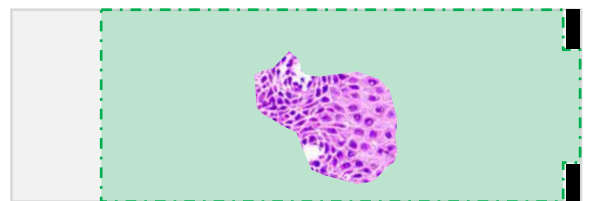
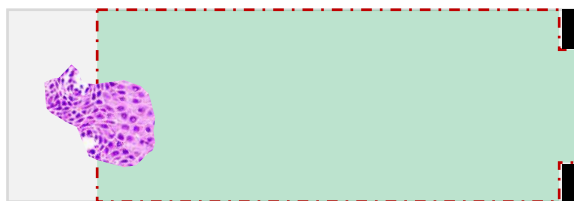
Cytology



Histology



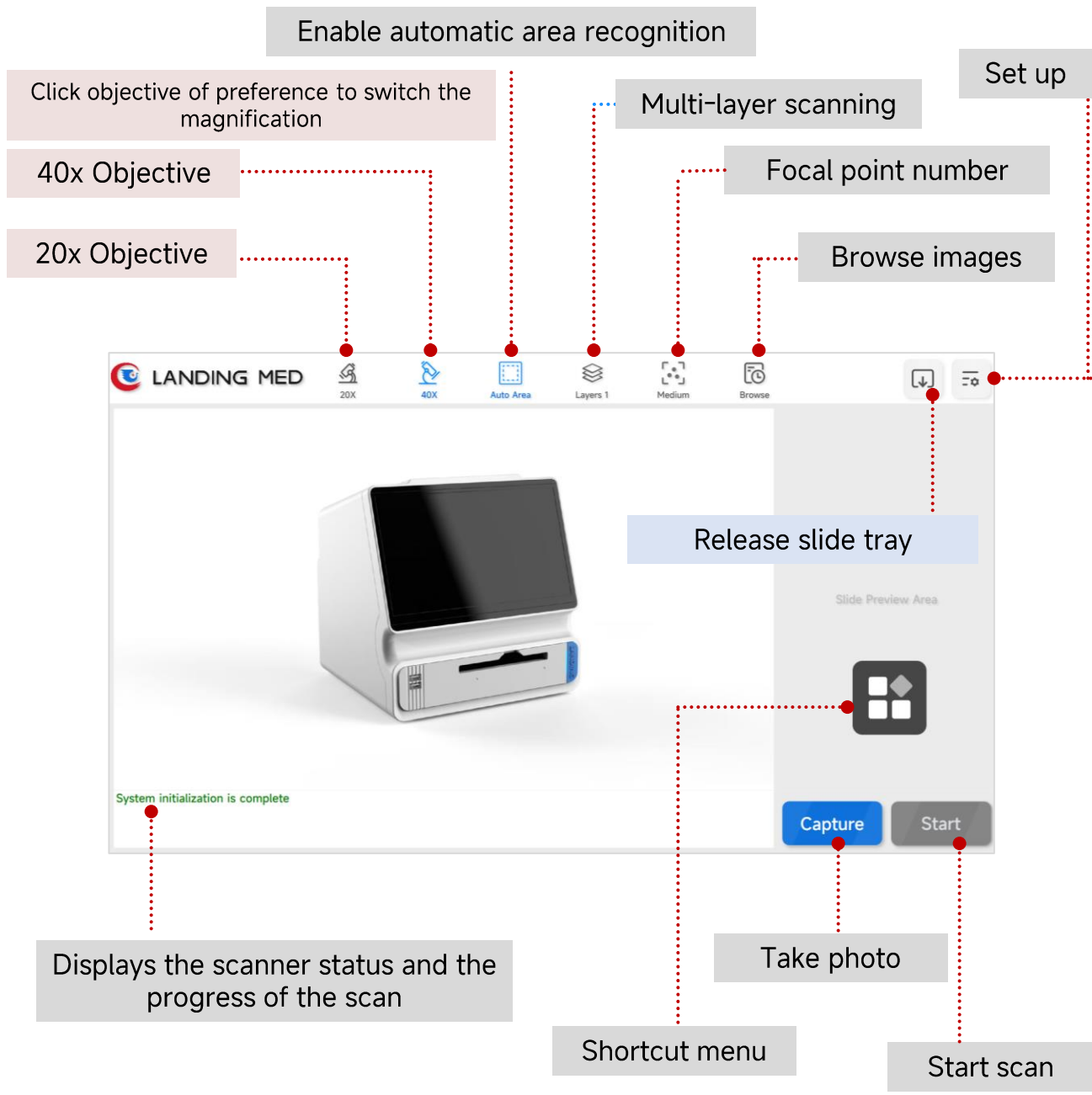
IHC



Set specimen in the middle (✓)

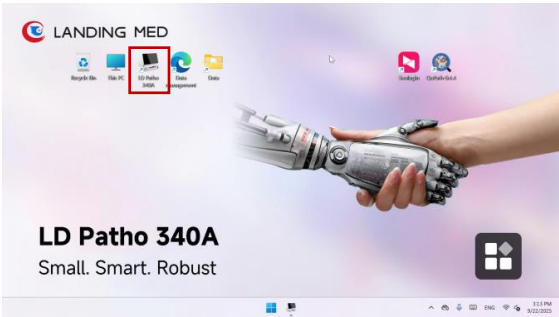
Connect scanner to keyboard, mouse and HDMI cable for a better viewing experience.



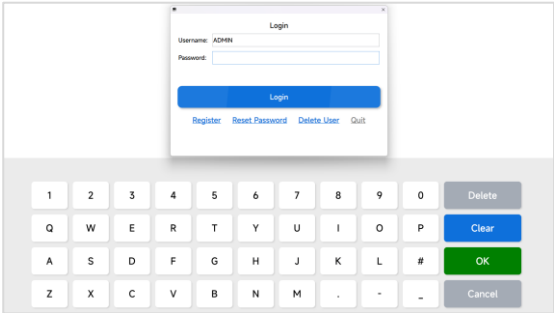


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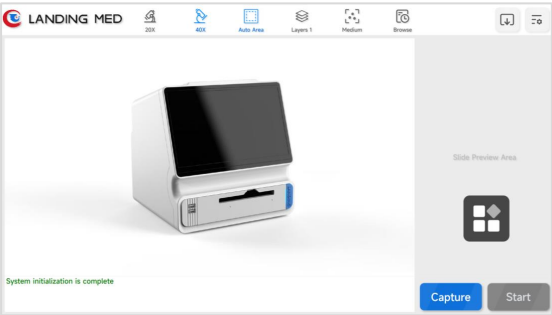
Account Settings



1. Double-click LD Patho Scanner icon to open the scanner software



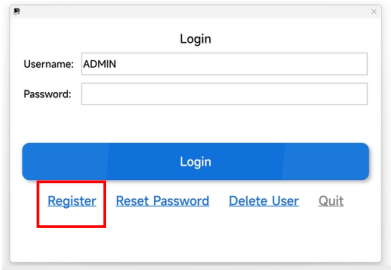
2. Enter password 000000 (six zeros) to enter into the scanning interface



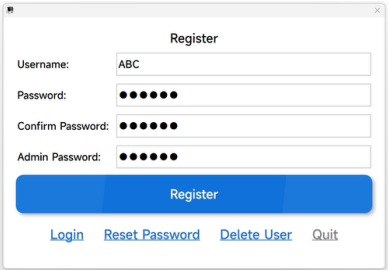
3. Homescreen interface

Note:

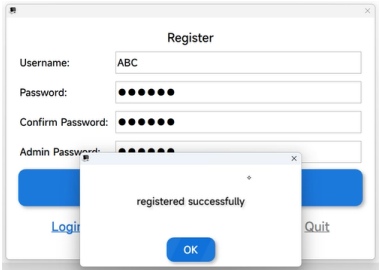
To set up a sub-account for users, first enter account "ADMIN" and password "000000"
Create a sub-account (user account)



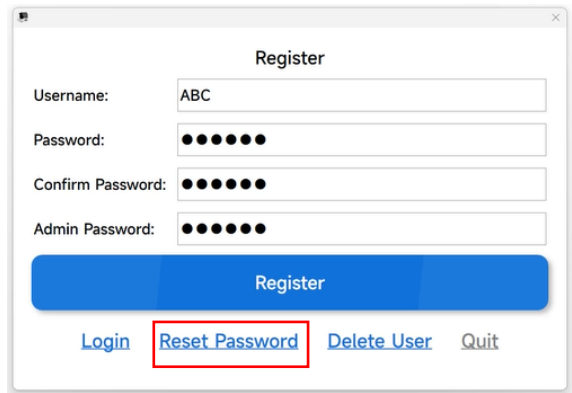
1. Click "Register" to create an account.



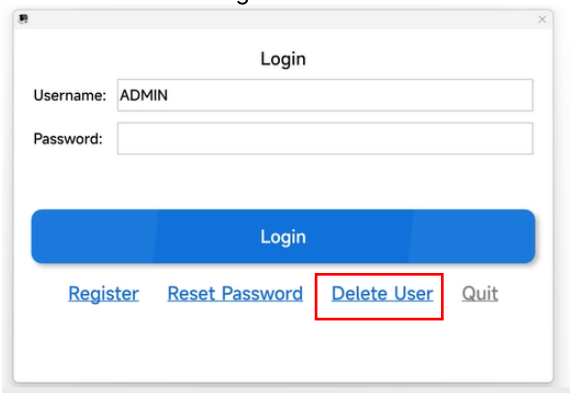
2. Enter your account information and admin password.



3. Click "Register" and a pop-up window will confirm successful registration.



4. "Reset Password" to change the password of the sub-account.



5. "Delete User" to delete an account that has been created.

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Introduction to Key Scan Formats



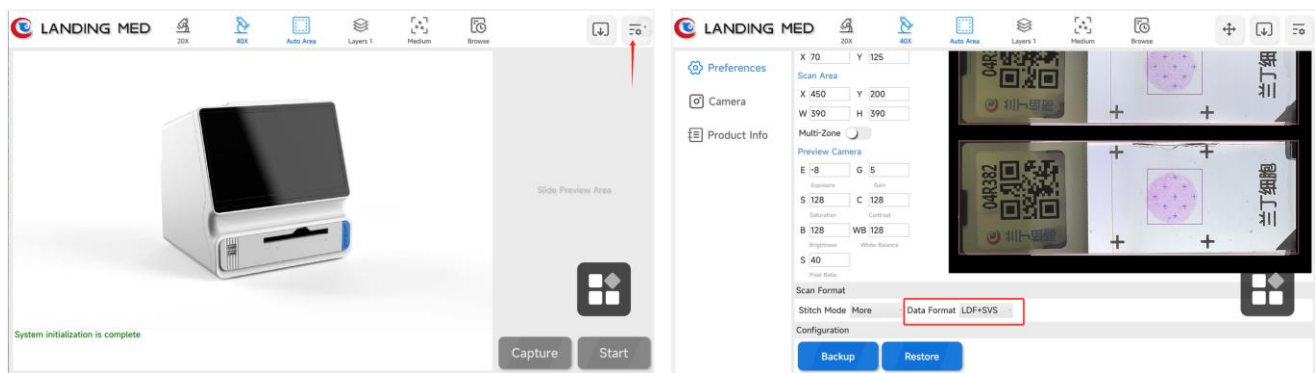
LDF+SVS mode (Default Mode)

LDF enables the WSI to be viewed directly on the scanner while SVS files can be viewed on other viewer software.

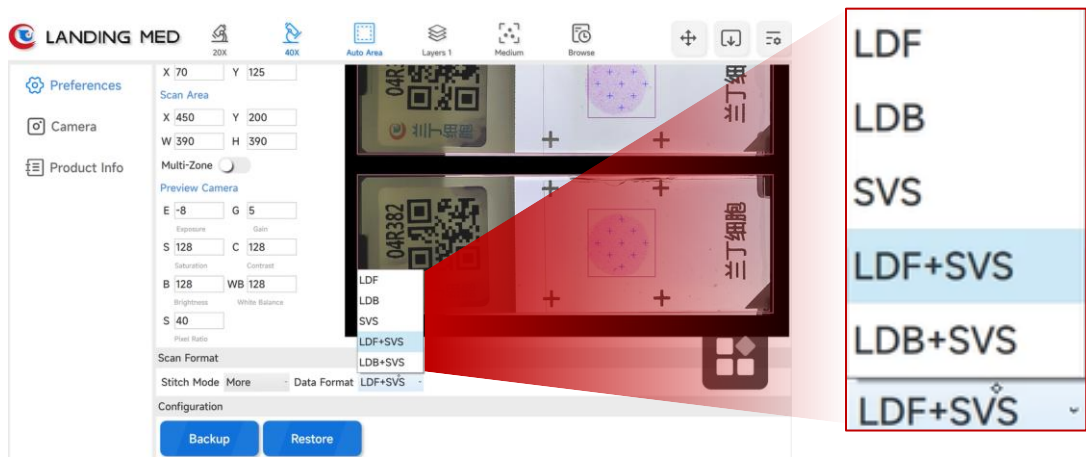
SVS mode

If the scanned specimen does not need to be reviewed directly on the scanner after scanning, then only SVS data format can be selected.

Format Selection

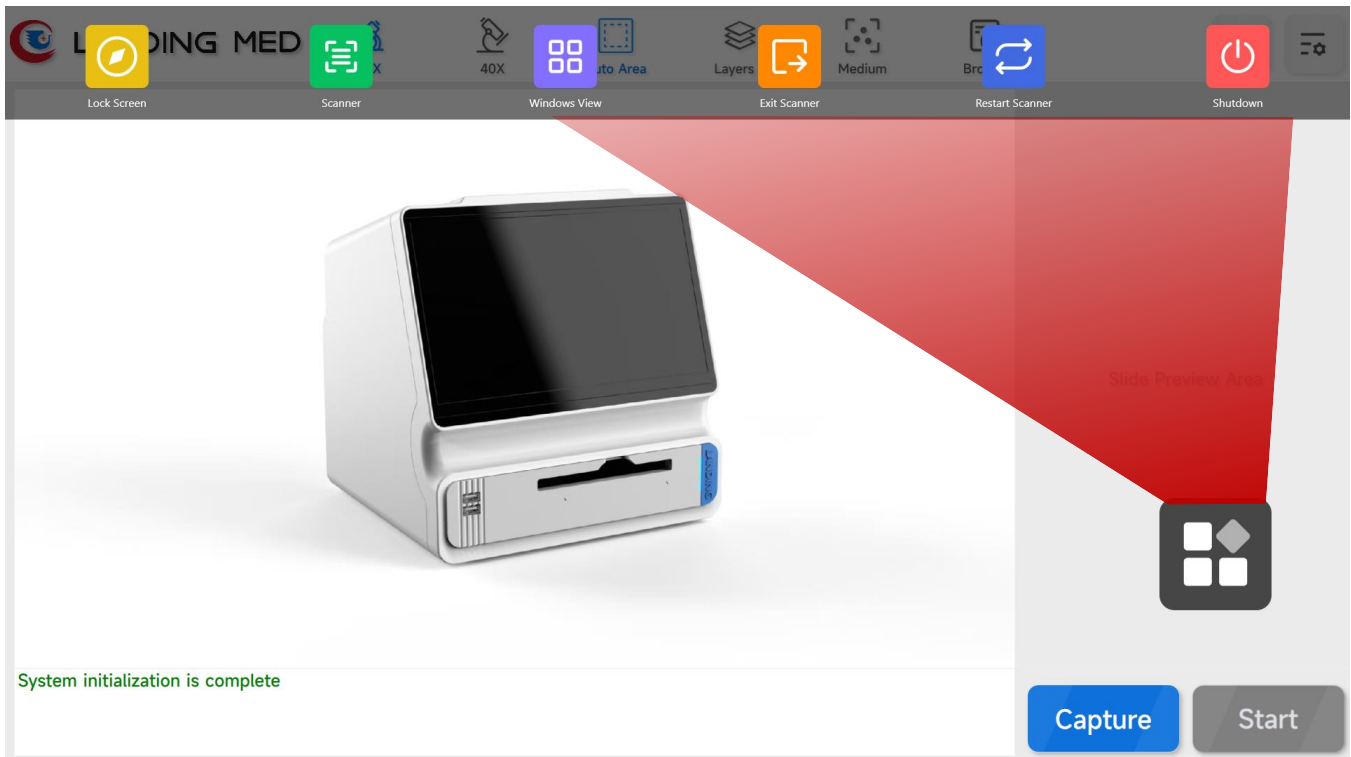


1. Click Settings in the upper right corner of the scanning interface
2. Swipe to the bottom to find "Data Format"



3. Choose the scan mode

If you need to adjust the mode, please do not modify it at will, consult our engineers first.



Shortcut Menu

Click for menu bar



Lock Screen

Lock the interface



Exit Scanner

Exit the scanning software



Scanner

Return to scanner interface



Restart Scanner

Restart the scanning software



Windows View

Return to desktop view

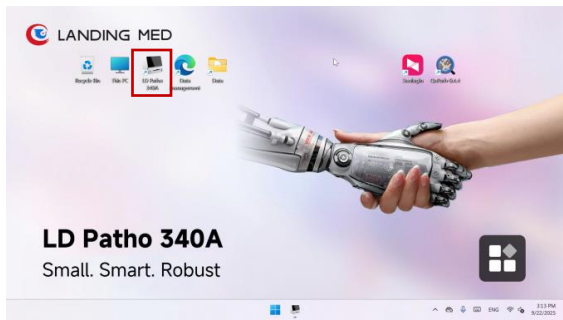


Shutdown

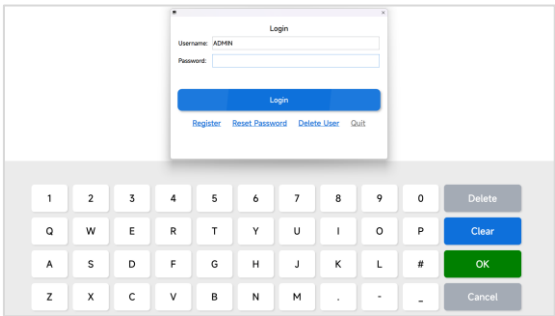
Turn off the scanner

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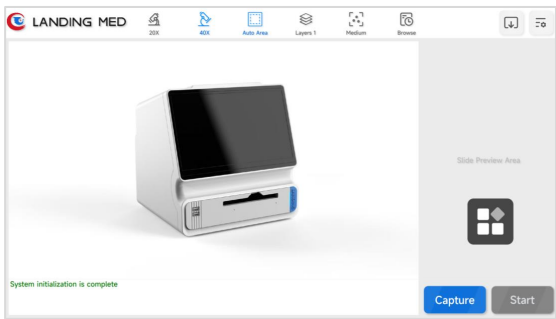
Slide Scanner Overview



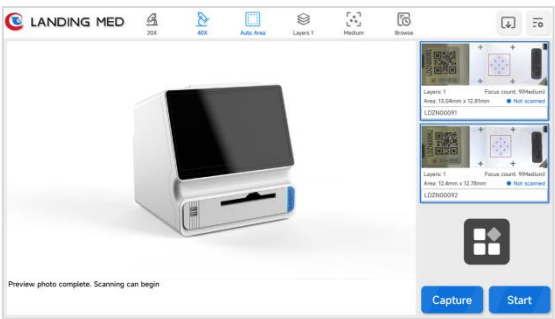
1. Double-click LD Patho Scanner icon to open the scanner software



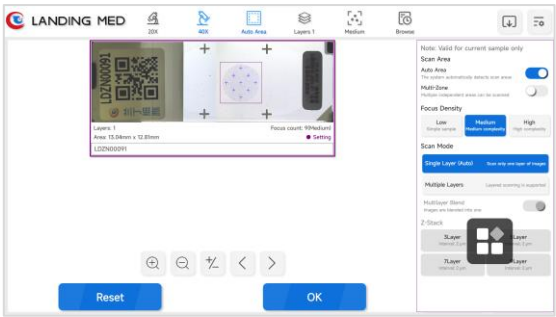
2. Enter password **000000** (six zeros) to enter into the homescreen



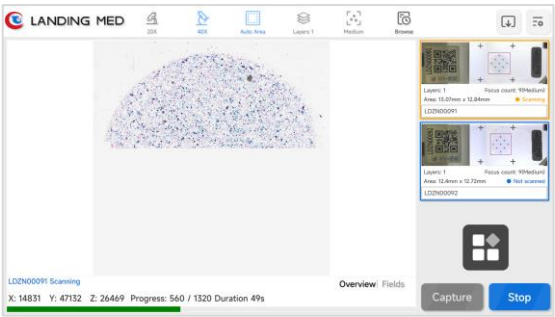
3. Insert the slide tray in the scanning slot on the lower center of the instrument and click the “Capture” button



4. After taking a photo of the slide(s), check if the slide label and scan area are automatically detected



5. If needed, click on the slide and manually change the slide name and adjust the slide settings (focus points, multi-layer scan, etc).
For more details, see next page.



6. Preview the scanning progress directly on the scanner. When the scan is complete, the slide bar turns green.



Gray: Not selected



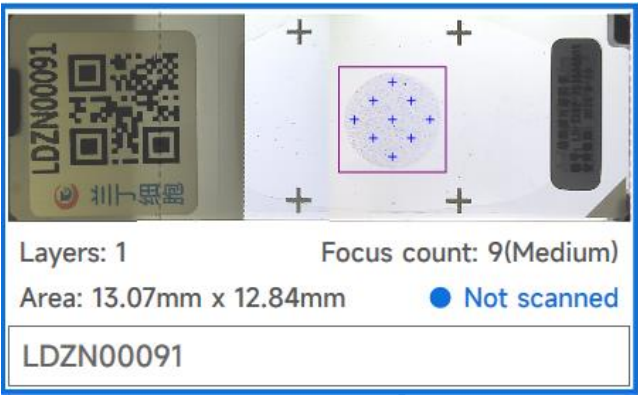
Blue: Not scanned



Orange: Scanning



Green: Success



Click slide to enter the manual settings interface

Overview of features

- Auto Area
- Multi-Zone
- Focus Density
- Scan Mode
- Z-Stack
- Multilayer Blend - Extended Depth of Field (EDF)

Note: Valid for current sample only

Scan Area

Auto Area ☒ The system automatically detects scan areas

Multi-Zone ☐ Multiple independent areas can be scanned

Focus Density

Low Simple sample **Medium Medium complexity** High High complexity

Scan Mode

Single Layer (Auto) Scan only one layer of images

Multiple Layers Layered scanning is supported

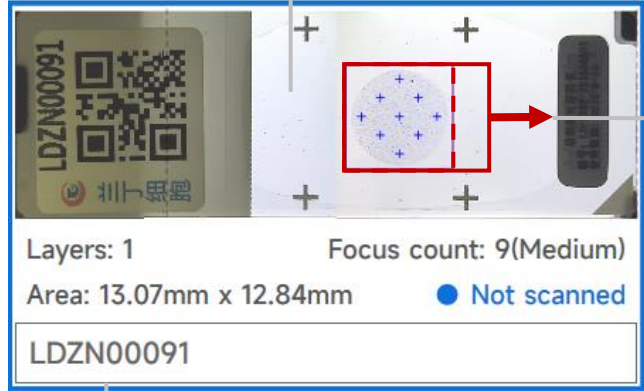
Multilayer Blend ☐ Images are blended into one

Z-Stack

3Layer Interval: 2 μm 5Layer Interval: 2 μm

7Layer Interval: 2 μm 9Layer Interval: 2 μm

Click on the selected slide to scan or not scan



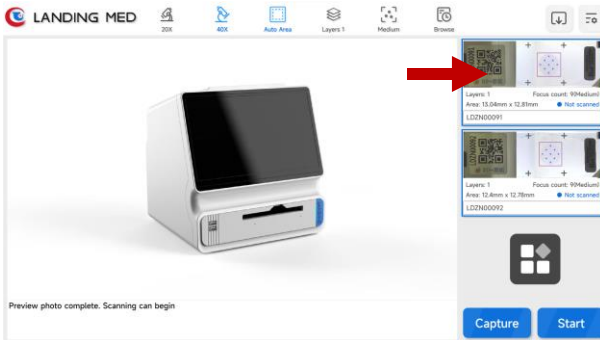
Drag to modify the scan area

Modify the slide name

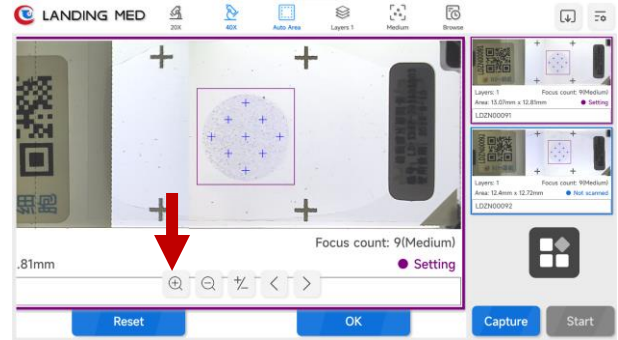
Note: The slide name should not contain special invalid characters (eg. /, ., :, *, <, >, |, ?.)

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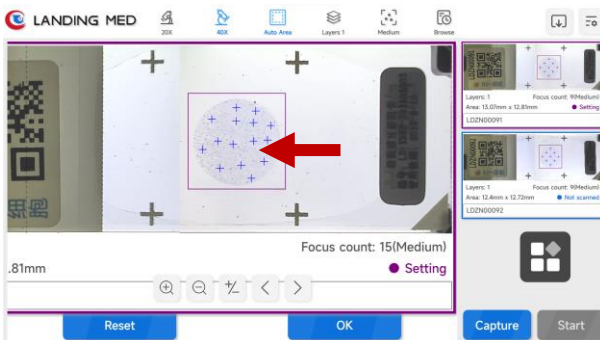
Manual Focus Settings



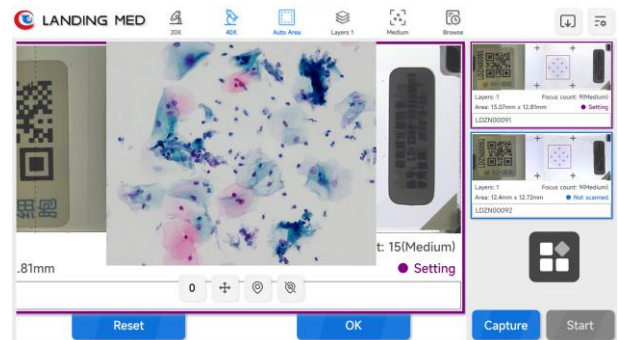
1. Double-click the slide to enter the manual settings.



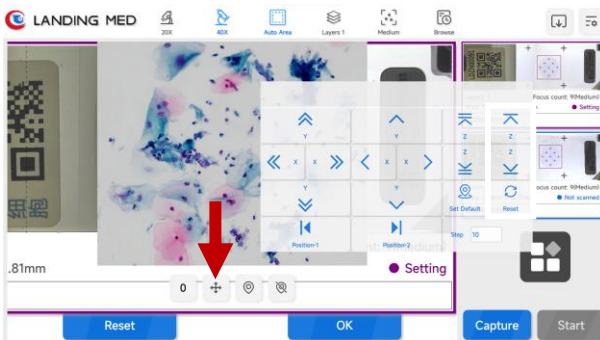
2. Tap “” to enlarge the display area.




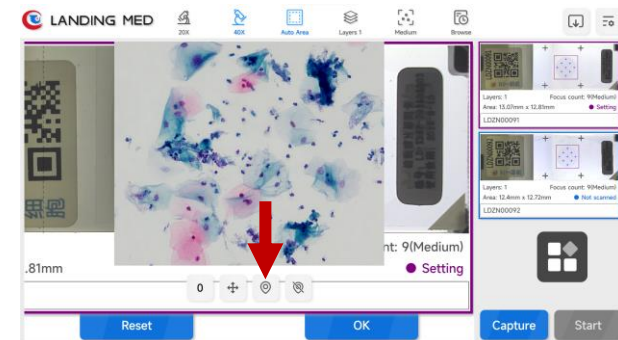
3. Right-click the area where the sample is located (must contain tissue or cells, avoid blank background areas) to add manual focus point(s).




4. Double-click the area where the sample is located to show the image.



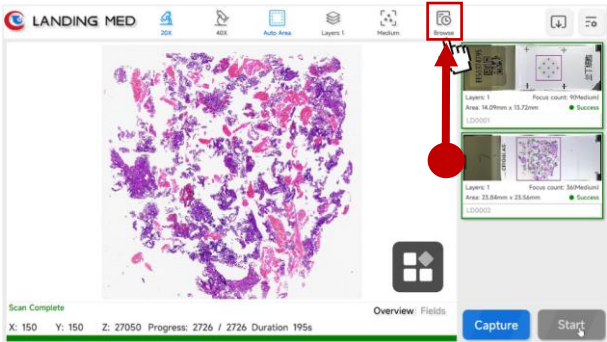
5. Tap “” to open the focus settings, then adjust the focus button up and down until satisfied with the image clarity.



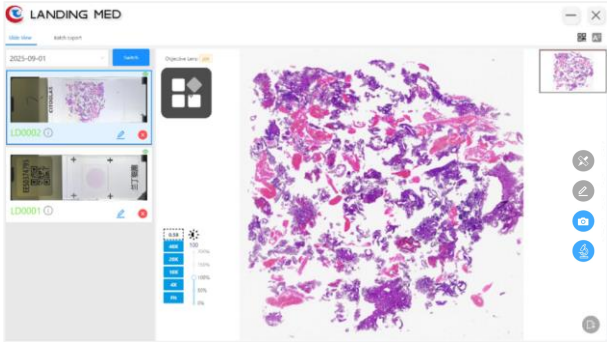
6. After the adjustment is clear, click on the the point to focus on then click “” set the specified focus reference plane. Continue with as many points as needed. Then press “OK” to save the manual focus settings then press “Start” scanning.

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Browse: Slide Review



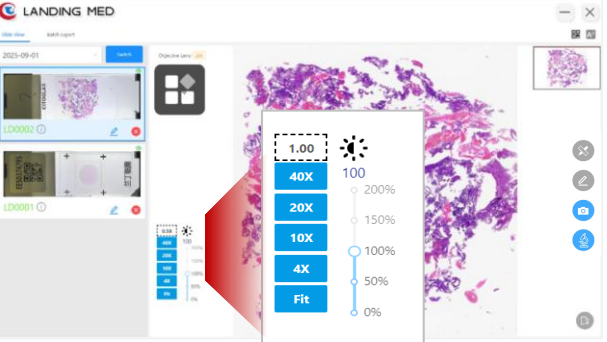
1. Click the Browse icon to review scanned slide image(s).



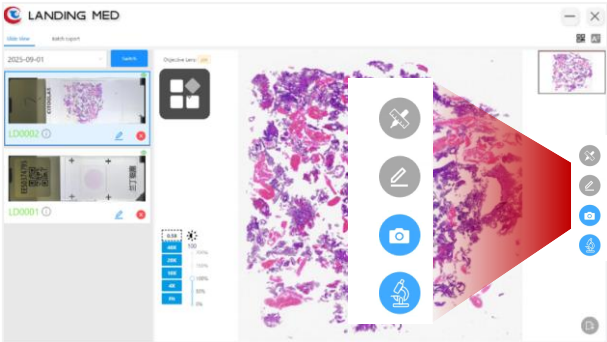
2. Select the date the slide was scanned. [🔗](#) Modify the slide name (*cannot contain special invalid characters*)



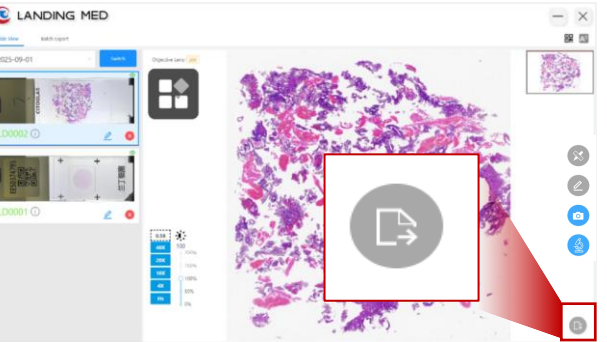
3. “” Delete the sample



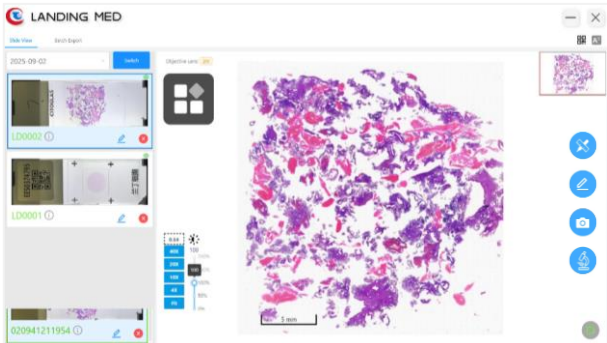
4. Adjust brightness (optional)



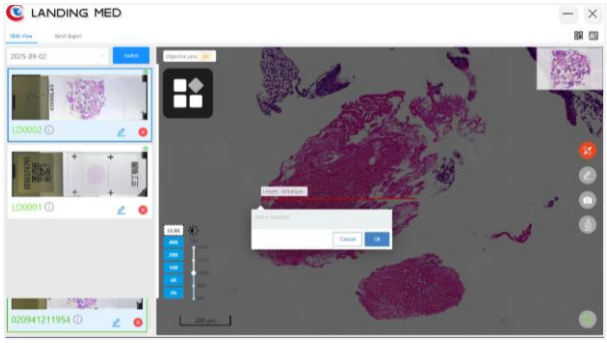
5. The blue tool is available directly and the gray tool needs to be converted and used.



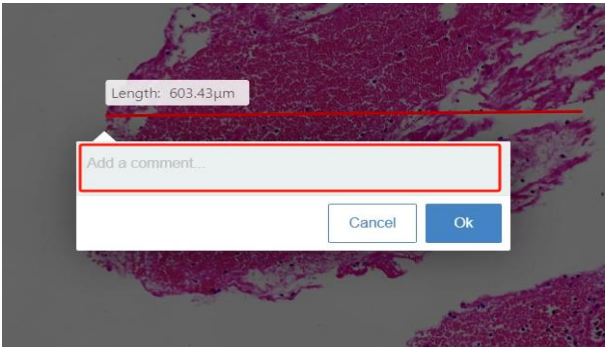
6. Click on “” Convert Format.”



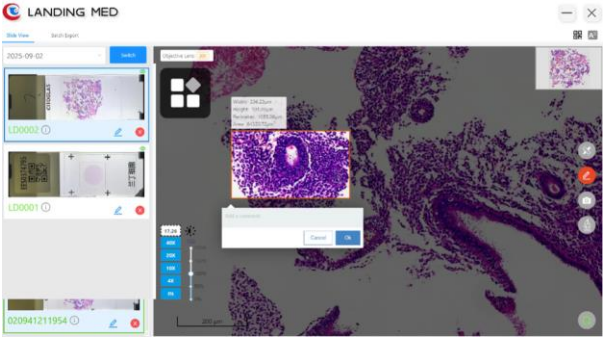
7. Once the conversion is complete, the tool is ready to use.



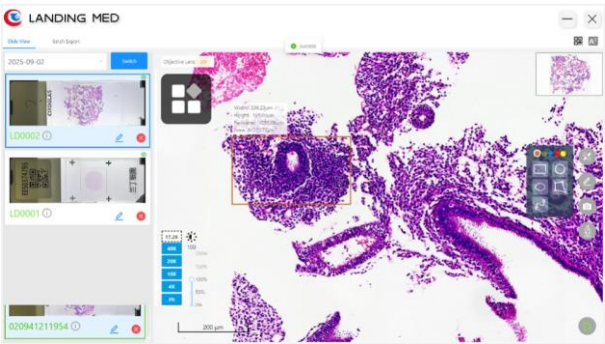
8. Click and drag to use the measurement tool.



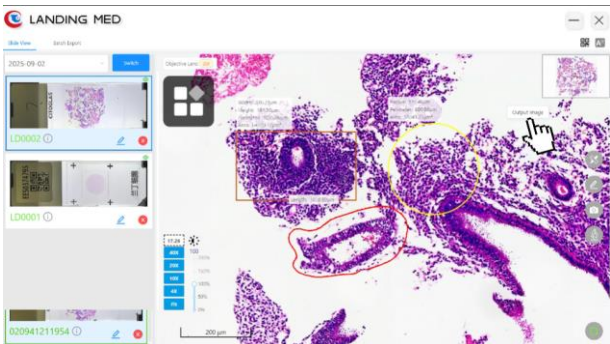
9. Enter a note (optional) and click "OK" to confirm.



10. Press OK.



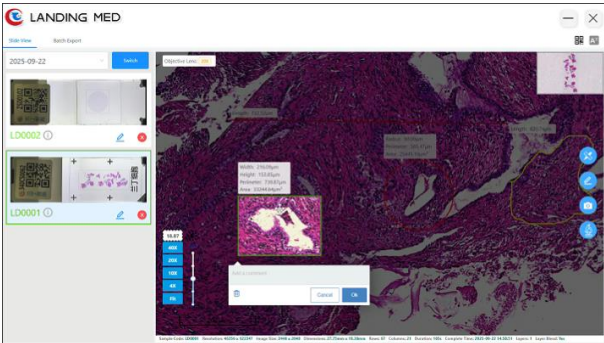
11. The measurements are automatically displayed with the annotation notes.



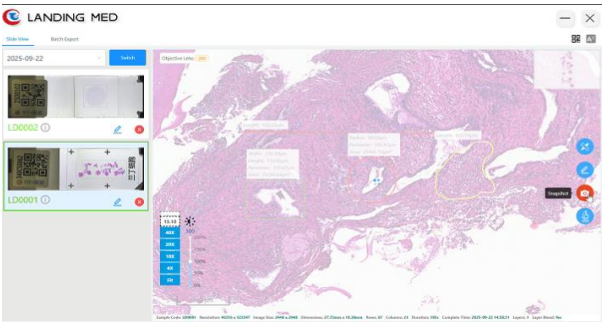
12. If using a mouse, right-click and click "Output Image" to export the annotated image.



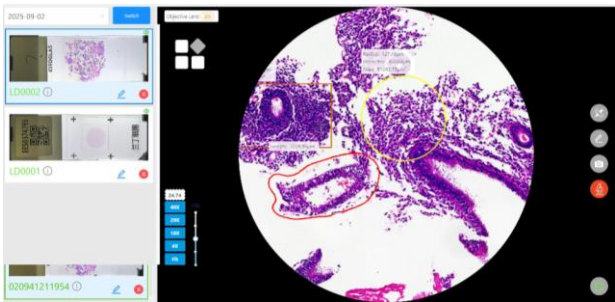
13. If using the touchscreen without a mouse, long press or right-click on the screen to export the marked image by clicking "Output Image."



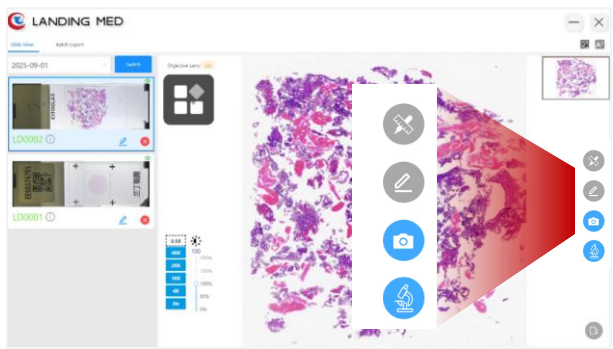
14. Click on the marked area to delete the measurement/annotation.



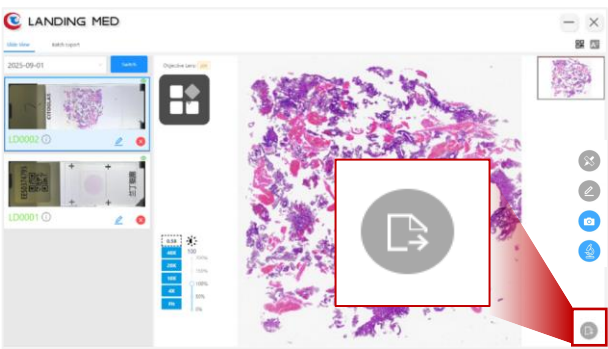
15. The photo button exports JPG screenshot images without marks.




16. Simulate the field of view under the microscope.



The icon marked in blue are available to use without file conversion and the gray icons need to be converted.



Click on “  ”Convert Format.” Unlock all tools



Measurement
Line measurement feature



Annotation
Select shape to annotate



Markup tool
Different shape markup tools



Camera
Take screenshot of the field of view and save it as a JPG image



Microscope simulation
Simulated microscope reading



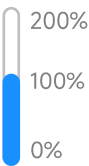
Convert
Convert image to annotate directly in scanner



Language
Switch instrument language



Magnification
Switch between different field magnifications



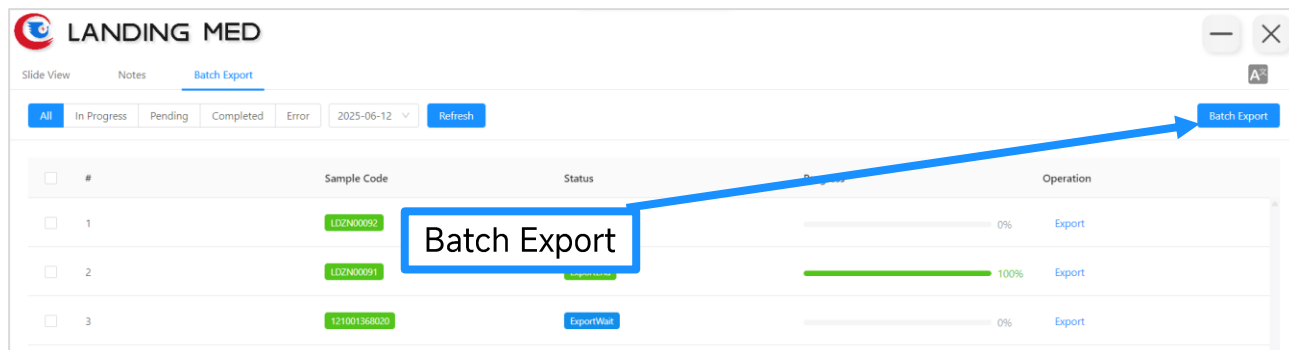
Brightness Adjustment
Adjust the brightness of the image



Color Selection
Select the preferred color for annotation

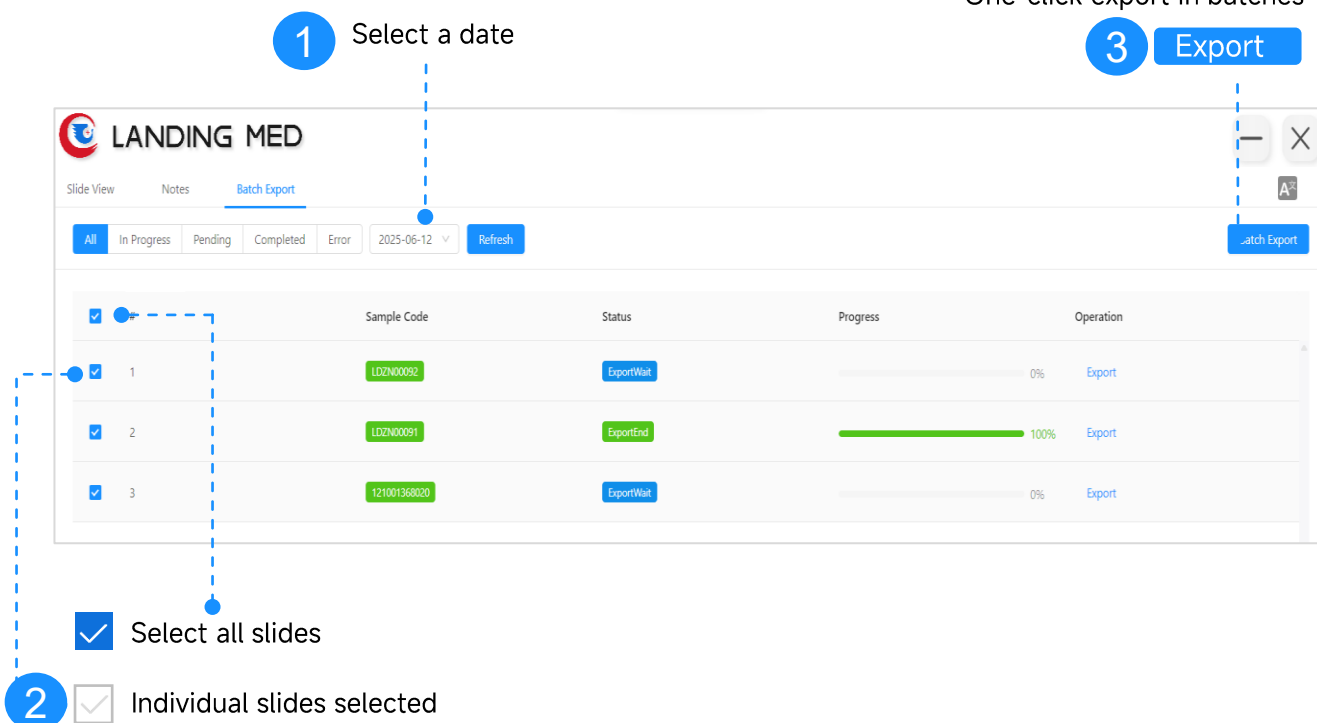
File Conversion

(To Simultaneously Convert Files for Annotation)



Click on the browse screen “Export”

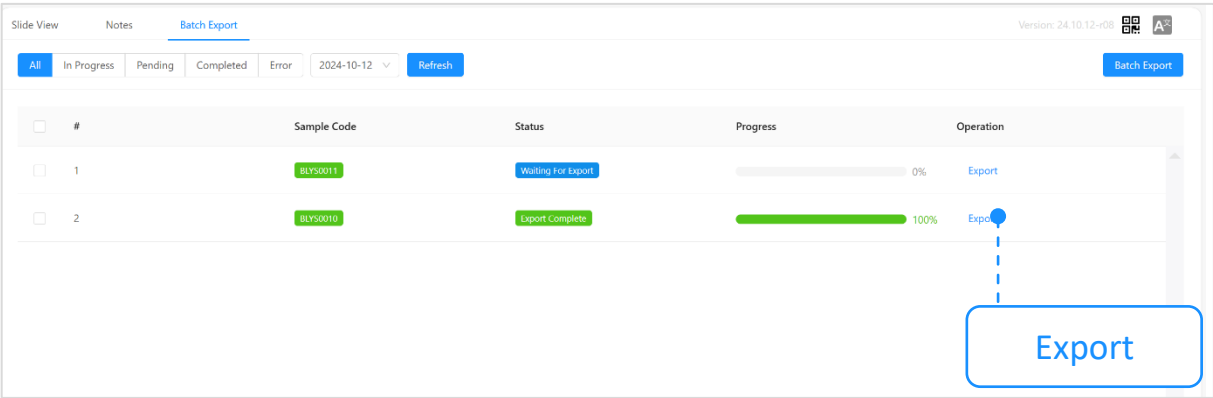
One-click export in batches



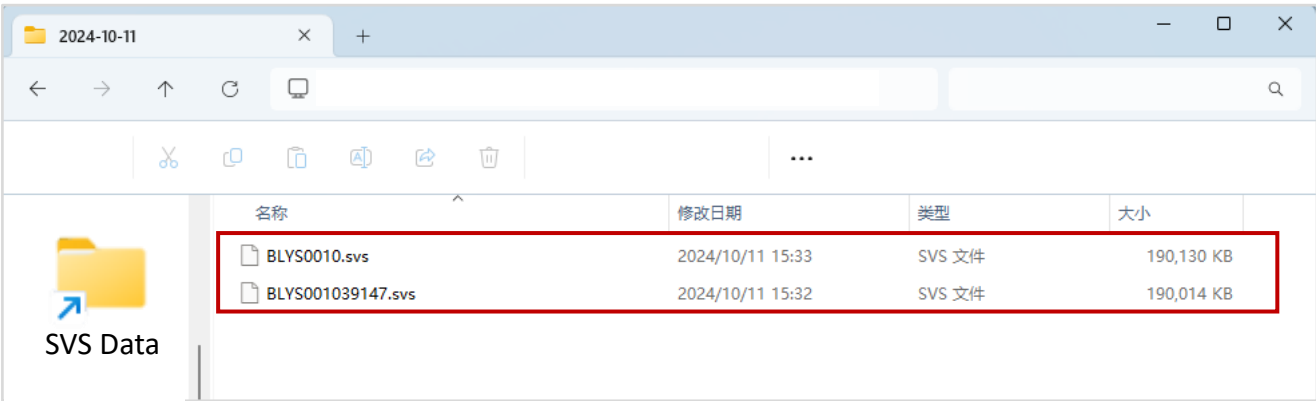
1. Select the date of the scan file to convert.
2. Choose the samples for conversion.
3. Click Batch Export.

* When exporting images, do not use other scanner functions

To export individual sample slides rather than as a batch, click the “Export” button



To retrieve the exported files (SVS file), go back to the desktop and open the “Data” folder



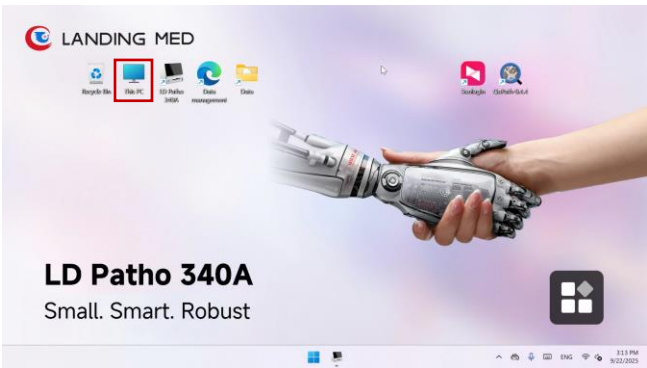
Copy or move file to another storage device



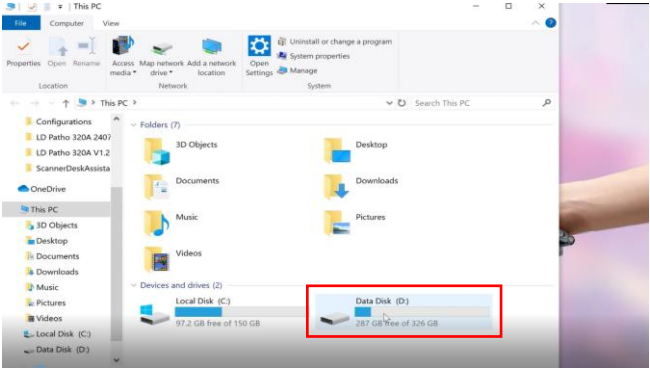
Note: If the SVS file is moved to a different device or deleted, the sample status progress bar will be updated to “Waiting for Export”

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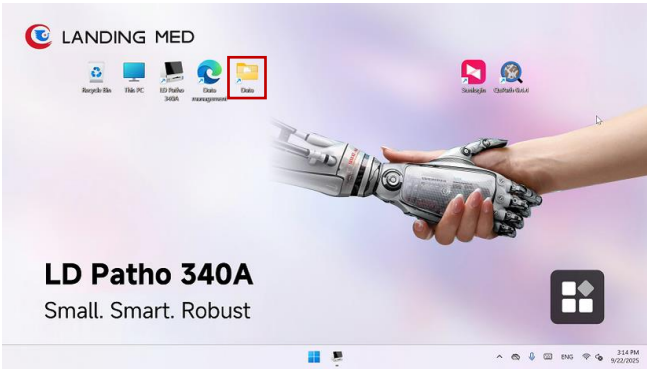
Data Management



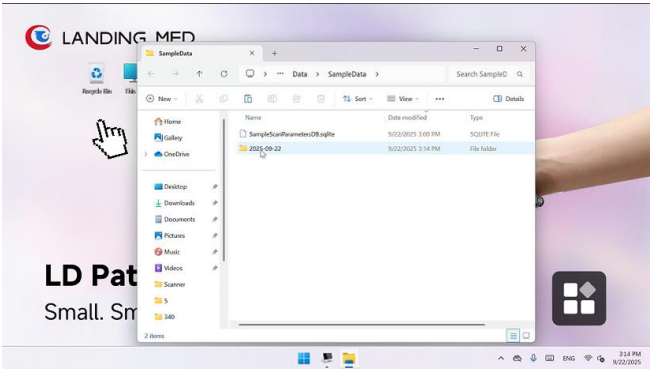
1.Double-click "This PC" to enter



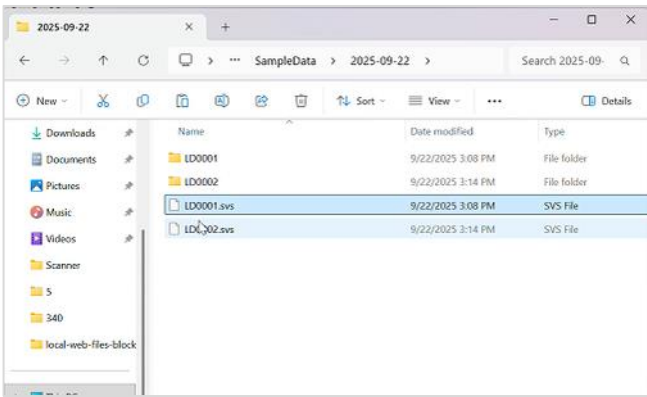
2.Go to the Data Disk (D:) drive, blue is normal, if it appears red, please backup and delete the saved files.



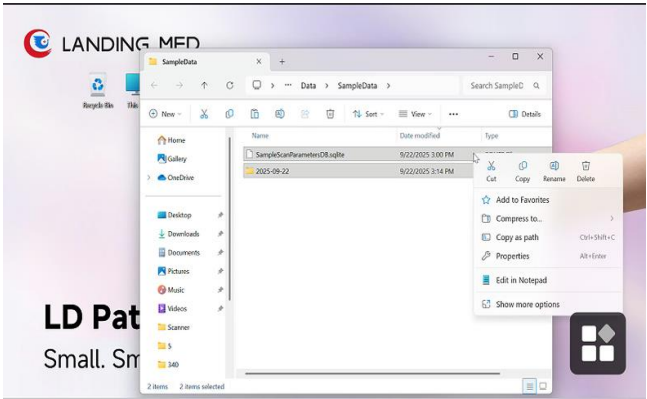
3.To backup the files, go back to the desktop and open the "Data" folder



4.Data files are sorted by date



5.Contains raw data folder and SVS files under the date

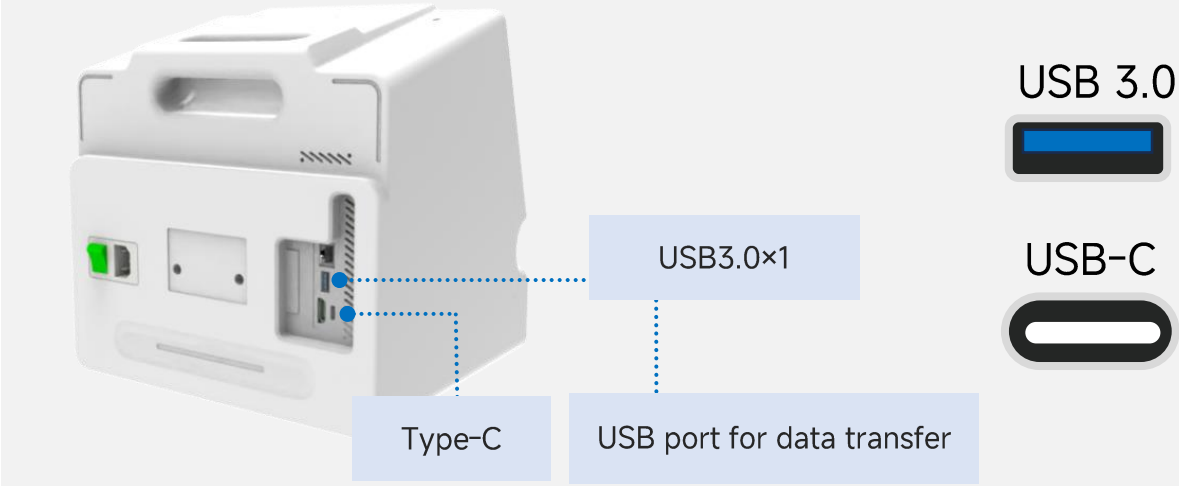


6.Backup or delete data

Recommended USBs for Mouse and Keyboard Connection



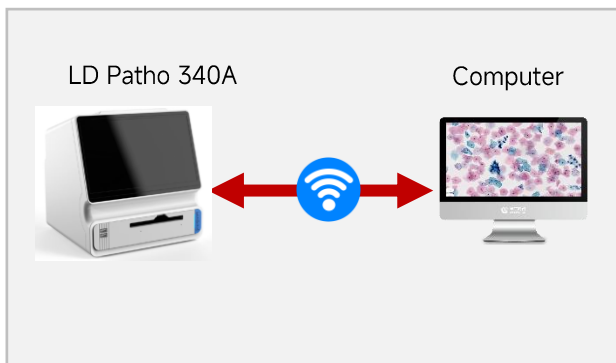
Recommended USBs for Data Backup



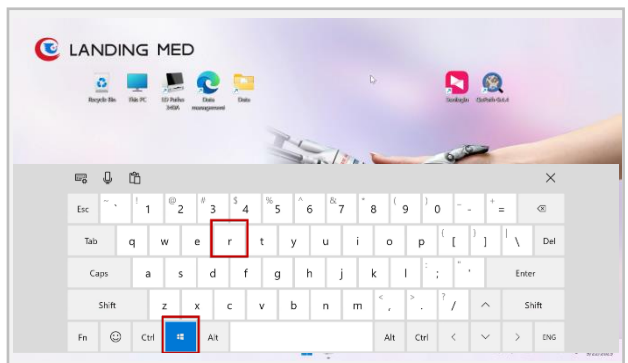
- Data Backup:** Please connect to the blue USB 3.0 interface for faster transmission.
- Short-Term Storage:** Please use 2.5-inch or M.2 solid-state drives (SSD) for storage (faster transmission speed).
- Long-Term Storage:** Please use 3.5-inch enterprise-grade mechanical hard drives (HDD) for storage (more stable data preservation).
- Storage Device Maintenance:** Storage devices should be kept in a dry and room-temperature environment.

Share Images

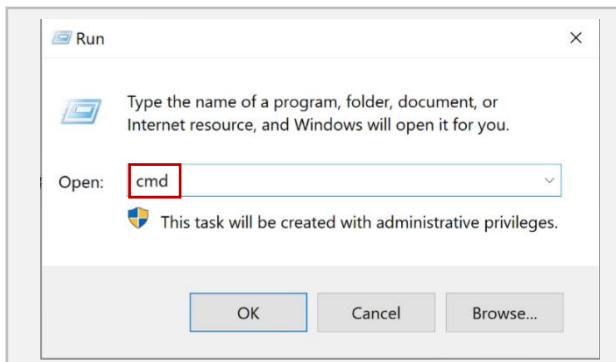
Local Area Network



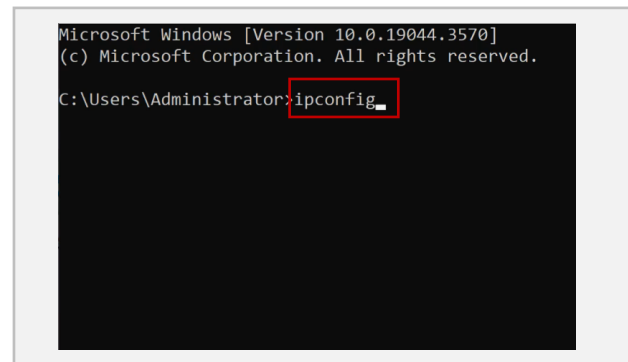
1. Configure local area network and connect instrument with computer



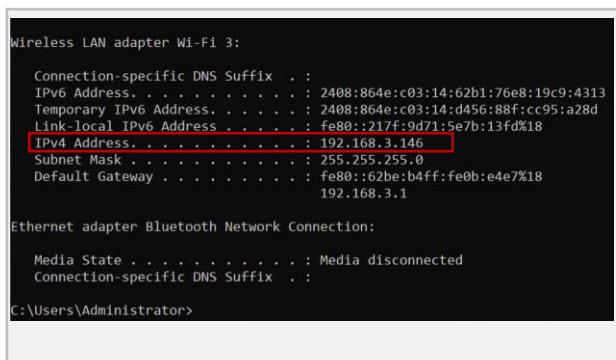
2. Input “  ” + R” keys



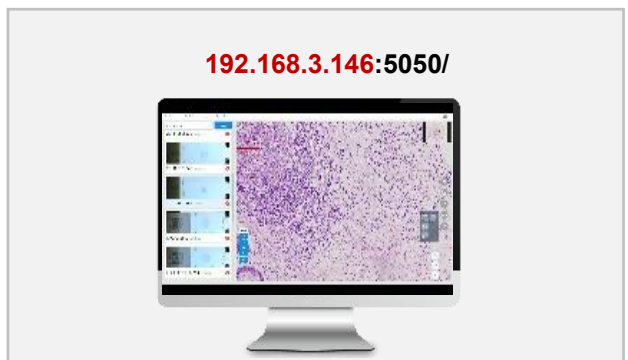
3. Input “cmd” in the textbox, then press OK



4. Input “ipconfig” after “Administrator:”



5. Find the IPv4 address then copy and send it to the recipient



6. In the recipient's internet browser, input the copied IP4 address and “:5050/” to remotely review the scanned slide(s)

Local Area Network

Local area network refers to the network signal emitted from the same network terminal. Devices within the same LAN are connected to the same network.



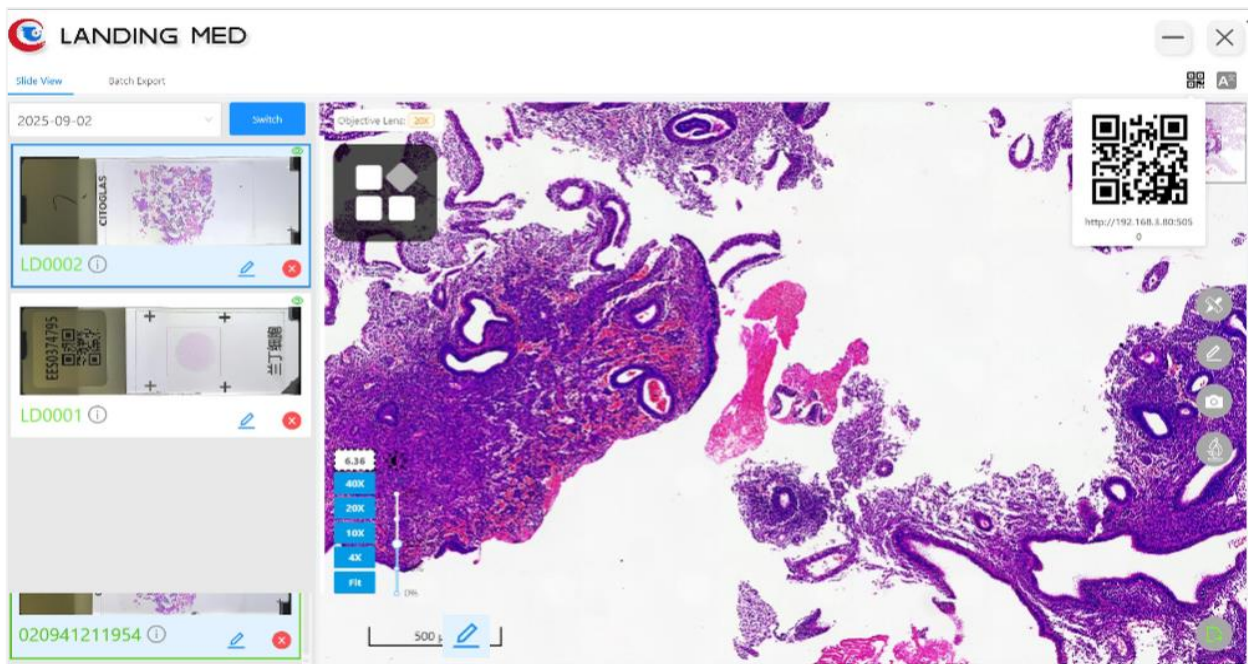
WAN: Extranet (Internet)

LAN: Intranet (LAN)

Computer: Connect Cable / wifi

Local Area Network

Ensure that the scanner and browsing devices are on the same local network (LAN).



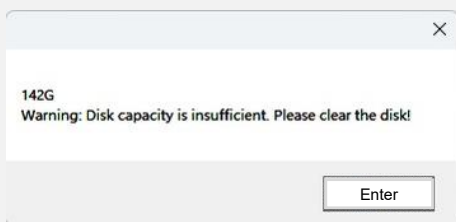
1. Click on the QR code logo in the upper right corner



2. Share URL for computers within the same LAN to access the browser interface.

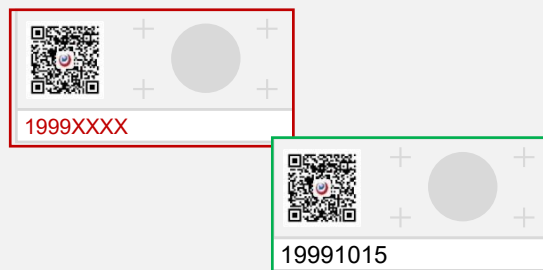
3. Share QR code for mobile devices within the same LAN to access the browser interface.

Troubleshooting



Indicates insufficient memory space

Save data files and delete them from the scanner.



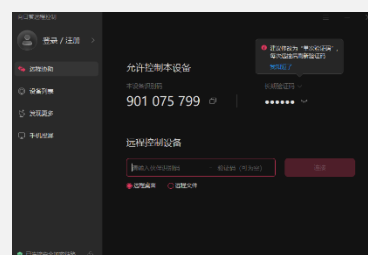
Label ID is inaccurate

Manually change the sample name.



The slide tray is stuck

Please turn off the scanner and power supply switch on the back of the instrument and unplug the scanner. Then replug and restart the scanner.



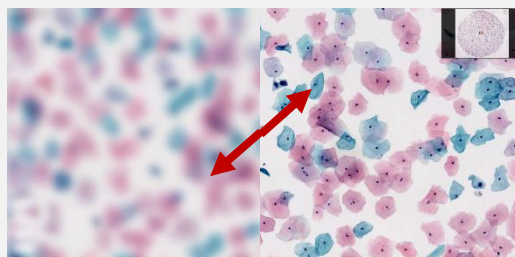
Remote assistance software

To enable remote technical support, open the SunLogin software icon on the desktop. Provide the Device ID and passcode to Landing Med for remote support.



Focus failure or blurry image

Ensure the slide is well secured and flat on the slide tray. Re-scan the slide.



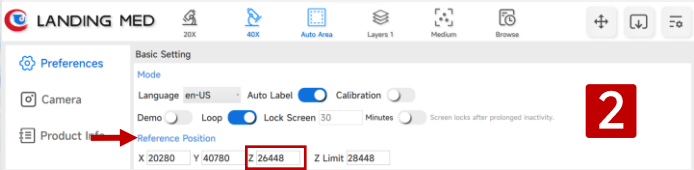
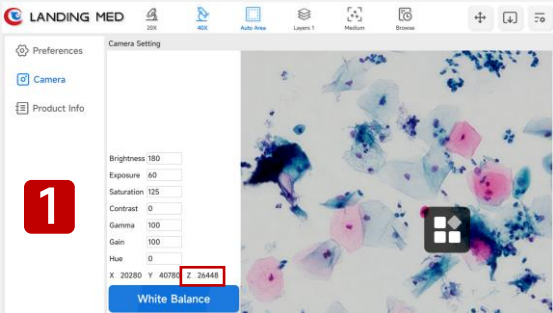
Part of image is blurry while previewing on scanner

Expand or minimize the image then drag the screen for a clearer image.


Note: If you encounter other problems, please contact Landing Med's technical team.



Only change settings if scanned images are repeatedly unclear. Avoid regularly changing settings.

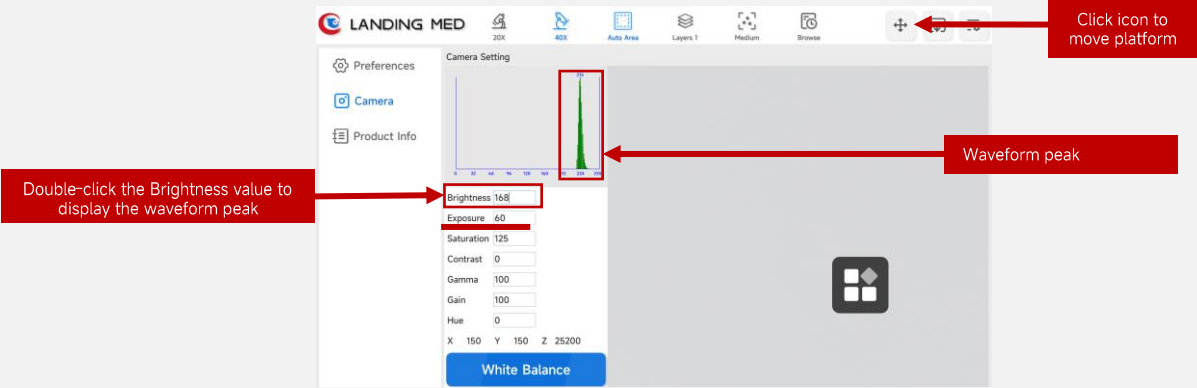


Manual focusing method:

In the Camera settings, control the platform operation through this icon  to adjust the field of view to a position with clear focus. Remember the Z value. Go to Preferences > Reference Position and fill in the Z value.



Only change settings if the scanned image is too bright or too dark. Avoid regularly changing settings.



Light intensity setting method:

In the Camera settings, when the specimen/cells are at their clearest position, move the platform so that the blank area is in the camera's field of view, adjust the Brightness and Exposure (no more than 60), so that the waveform peak is at 210-220. Finally, click the "White Balance."

LD Patho 340A Maintenance Guide



Transportation Maintenance

- Shipping temperature -20°C-55°C
- Humidity: ≤70%
- The outer packaging is firm and scanner is well protected with shock resistant material.
- Do not place the scanner upside down.
- Do not roll or shake scanner.

Daily Maintenance

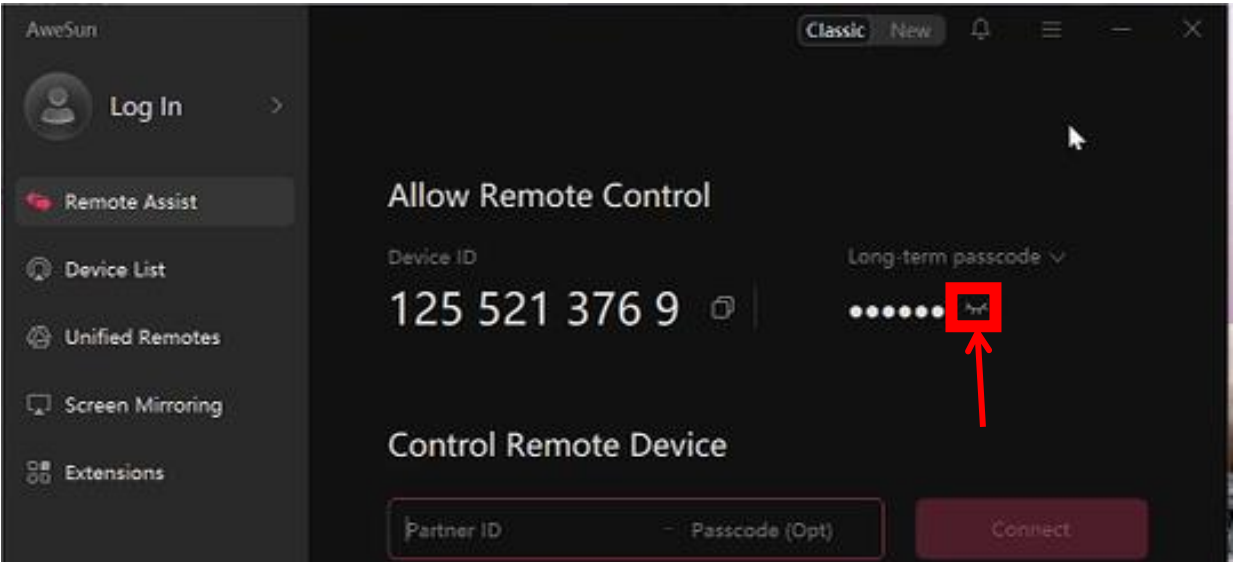
- Power supply voltage: 220V AC. Power supply ground input 220V AC, output 19V 11.8A DC
- Working temperature 10°C-30°C
- Room humidity: ≤70%
- Scanner to be placed on a flat and stable surface that can hold at least 20KG without vibrating.
- The room is well ventilated and cool.
- Scanner is not exposed to direct sunlight for extended periods of time.
- No obstruction within 10cm on all sides of the scanner.
- The touchscreen is coated to make it easier to clean. Clean the dust on the surface of the instrument with a soft, dry, lint-free cloth. Do not use scanner in a dusty environment.
- Clean the slide tray so that the surface is free of impurities, glue and other foreign matter


Special Attention

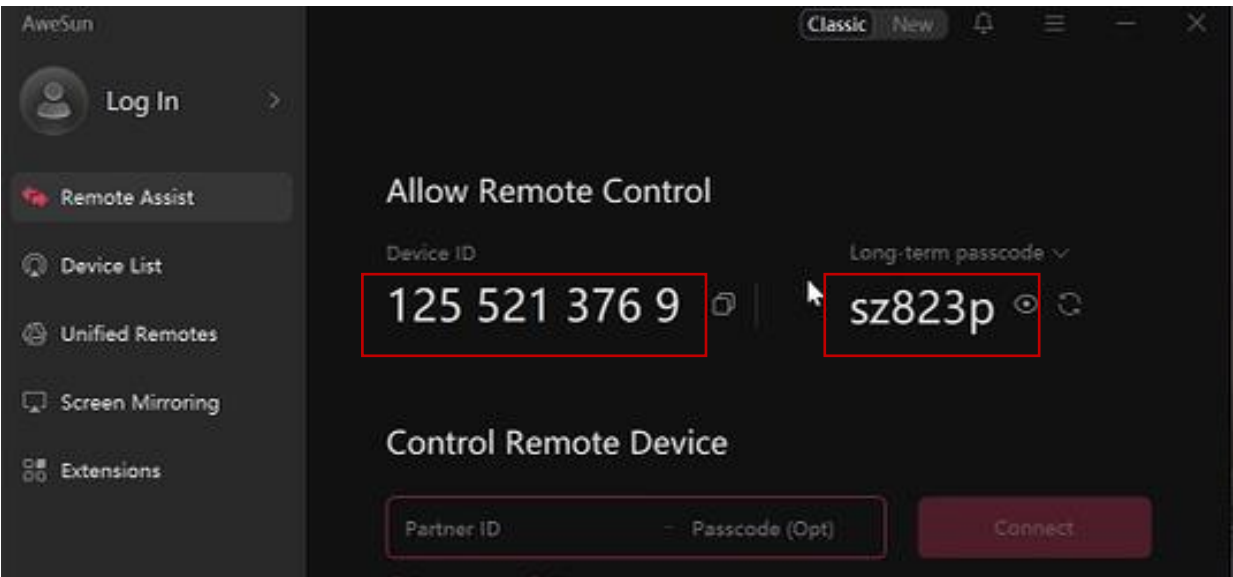
- Non-manufacturer or non-designated technical personnel are prohibited from disassembling and repairing the scanner.
- Do not modify the software and hardware of the equipment, otherwise the warranty will be invalid.



1. Contact technical support to confirm a service time. Double-click the Sunlogin icon to run the program.



2. Tap the “” to see the passcode.



3. Send the device ID and password to the engineer for remote assistance.



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