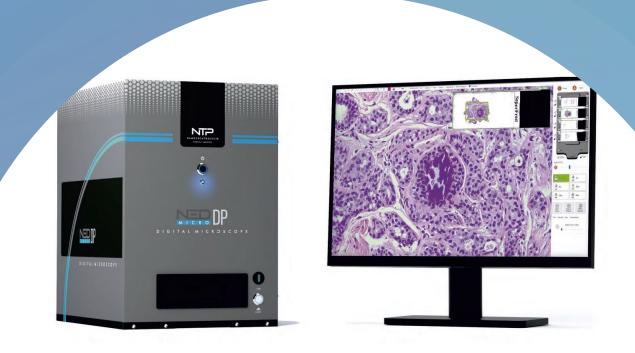




## QUICK-START GUIDE

NED.Micro.DP

Nano Eye Device - Digital Pathology









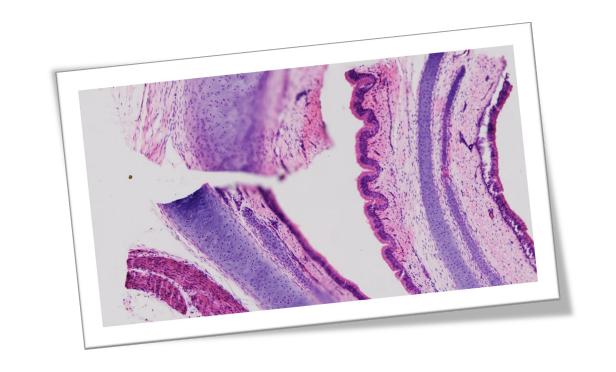
## The journey into digital pathology...

Made in Italy

### **DEFINITIONS AND ACRONYMS**

```
«NTP» NTP Nano Tech Projects SRL.
```

- «NED.Micro.DH» Nano Eye Device for Digital Hematology.
- «NED.Micro.DP» Nano Eye Device for Digital Pathology.
- «AF» Autofocus.
- «FHD» Full High-Definition screen.
- «HD» High-Definition.



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#### Local usage of NED.MICRO.DP

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## INTRODUCTION

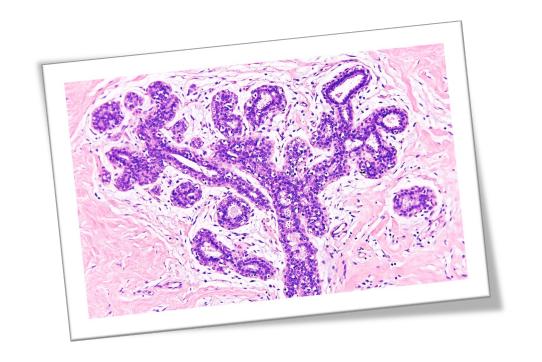
#### The digital revolution in digitale in anatomic pathology

NED-DP represents the latest generation of tools that optimize the connection processes between remote hospitals. The real-time sharing of diagnostic images on a local and geographical data network represents the new frontier of telemedicine.

The remote control of NED-DP, coupled with high-definition images, enables precise and timely diagnoses, with the option to seek a second opinion. The versatility of the new NED-DP tool makes access to diagnostic images faster and more effective.

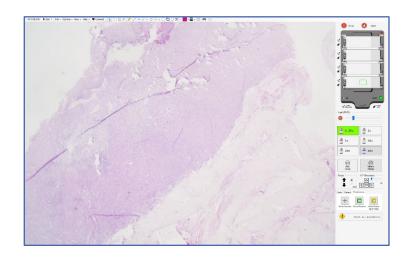
Complete remote control facilitates histopathological specimen consultation and reporting.

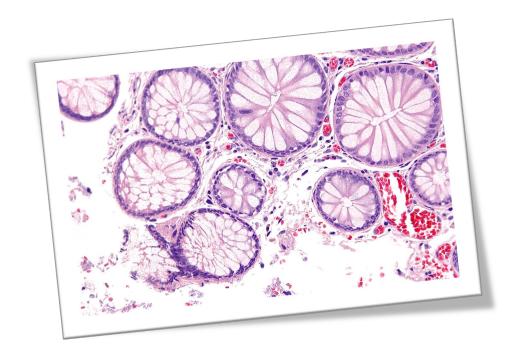
CE - IVD CERTIFIED (EU Regulation 2017/746)



# NED.MICRO.DP LOCAL SYSTEM

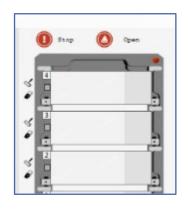






### HOW TO EJECT THE SLIDEHOLDER?

Press the button «Open» located on top of the right side menu, above the slideholder drawing.





Or directly pressing the button on the front panel of the instrument case.

To insert the slideholder simply put it in place; it will be automatically detected and inserted into the instrument. If this option is disabled, click again the button described above in the software interface.

i When the software is closed, a security message will be displayed asking if the slideholder must be ejected.

### HOW TO SCAN THE SLIDE?

Press the button "Scan Checked" of the element "Menu Minimaps Side Bar" to scan all the slides (to scan one slide only click on the corresponding paint roller button.



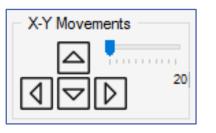


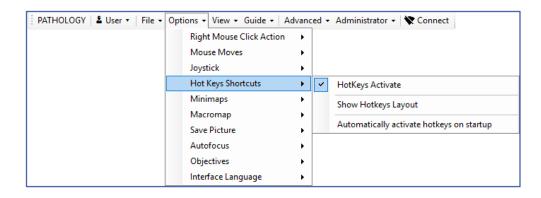
When the mouse pointer is placed on a scanned slide a bigger version of the slide will appear on the left; it is possible also to leave it always on screen.

To delete all the scans click the button «Clear All».

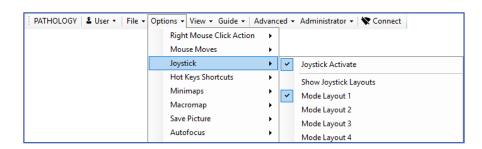
#### HOW TO MOVE WITHIN THE SLIDE?

To move withing the slide click and drag the mouse pointer inside the field of view by moving it towards the desired direction; alternatively, it is possible to use the buttons in the «Menu XY Moves Side Bar».





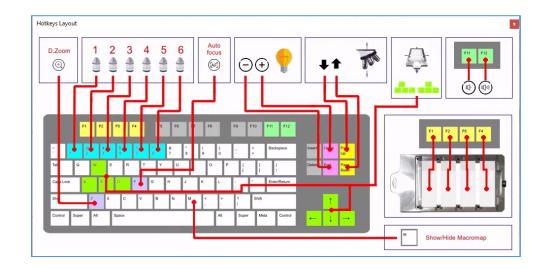
Other possible options are available, after activation: the keyboard (arrow keys or «A-S-D-W» buttons), the joystick, or the external keypad.

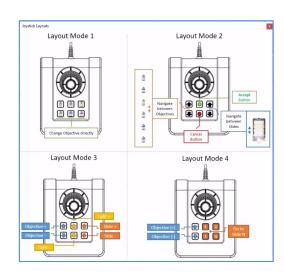


#### HOW TO CHANGE SLIDE?

Move the mouse pointer on the minimap of the desired slide and click; alternatively, after activation, it is possible to use keyboard shortcuts («F1-F2-F3-F4»), the buttons of the joystick eventually associated to this function, or the specific buttons of the external keypad.

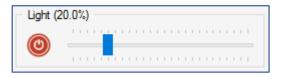






### HOW TO CONTROL THE LED INTENSITY?

Click the mouse on a particular point of the bar of the «Menu Light Side Bar» or by click on the blue cursor and move the marker in the desired position.









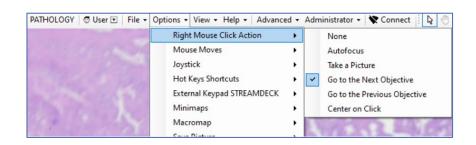
- (j) Other possible methods are:
  - select the bar and use the mousewheel;
  - the keyboard (using buttons «Home» and «END»);
  - the joystick;
  - the external keypad.

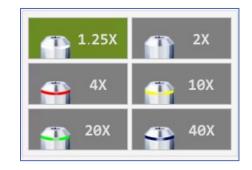
#### HOW TO CHANGE THE OBJECTIVE?

Click on the button of the desired objective in the «Menu Objectives Side Bar».

If activated, it is possible also to use the keyboard (buttons from 1 to 6) or the joystick.

Moreover, if activated, it is also possible to change the objective with a right click of the mouse.







j When clicking the same objective already selected the focusing speed will change from fine (green) to coarse (red).

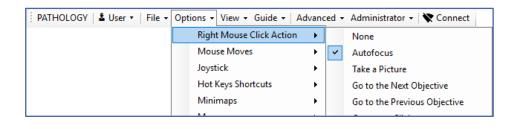
#### HOW TO FOCUS THE IMAGE?

It is possible to change the focus through the mousewheel when the mouse pointer is placed within the field of view; alternatively, it is possible to use the «up» and «down» arrows button in the menu focus.





It is also possible to focus automatically by clicking on the button «Auto Focus».



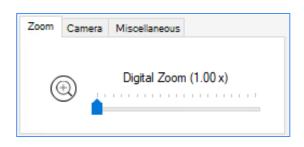
- Other methods to change the focus can be activated:
   the keyboard (buttons «Page Up» e «Page Down»);
  - the joystick (rotating the knob);
  - the corresponding arrow buttons in the external keypad.

The autofocus can be activated with the keyboard button «F», with the right mouse button (if activated), or with the corresponding button of the external keypad.

### HOW TO ACTIVATE THE DIGITAL ZOOM?

Click on the icon "Digital Zoom", and move the cursor in the bar to choose the magnification factor.

Once the "Digital Zoom" is activated when the mouse pointer is within the field of view just click the left mouse button to apply it in a circular region around the pointer.





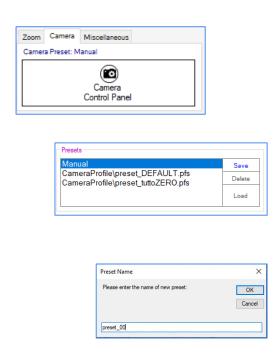
i When releasing the mouse button the digital zoom is not visible anymore but it is still activated. To deactivate permanently click again on the icon in the bar.



#### **HOW TO EDIT IMAGE PARAMETERS?**

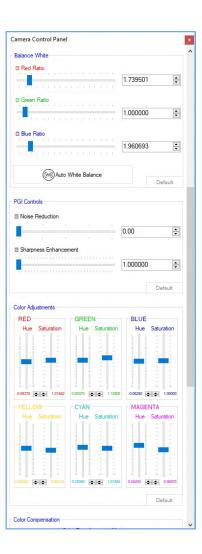
To open the interface of camera parameters control, click in the tab «Camera» and after in the icon «Camera Control Panel»

In the interface it is possible to load existing presets; they can be also modified, saved, or deleted. Or it is possible modify several image parameters, such as brightness, contrast, hue, saturation, sharpness, etc.



When the camera parameters are adjusted the image is updated in realtime allowing the user to evaluate the effect on the image.

In the panel «Camera» it is possible to see the active preset.

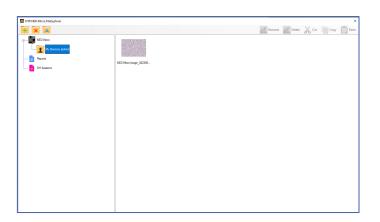


#### **MISCELLANEOUS**

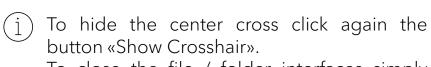
When clicking the button «Show Crosshair» a cross is displayed in the center position of the Real-Time image.

The button «*Picture Explorer*» opens the window to manage saved files and destination folders.

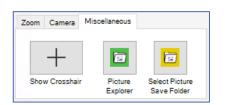
The button «Select Picture Save Folder» opens the window to select the folder where images are saved (if necessary a new folder can be created) when the automatic option is active.





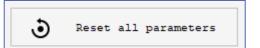


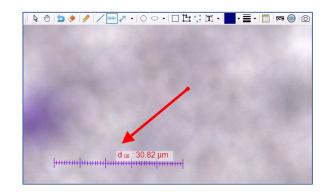
To close the file / folder interfaces simply close the window.



#### HOW TO RESET TO DEFAULT PARAMETERS?

Clicking the button «Reset all parameters» in the right side menu, focus position, LED intensity, and camera parameters are set to default values, thus leaving the image in its initial condition.





#### HOW TO ADD DRAWINGS AND ANNOTATIONS?

Activate the desired function from the «Menu Drawing Top Bar». Click and drop the mouse to insert text and/or drawings.

The user can deactivate this function and erase all drawings and annotations, returning to standard conditions by clicking the button «*Pointer*». While the function is active it is not possible to move the slide.

#### HOW TO TAKE A PICTURE AND SAVE IT?

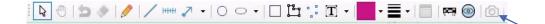
To take a picture click on the button «Take a Picture», placed in the middle of the right side menu.

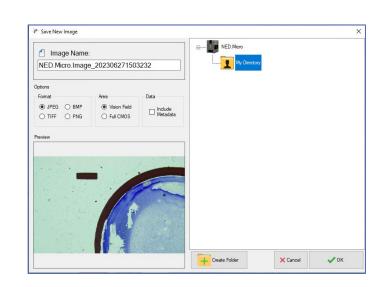


If the automatic option is active the image will be saved in the selected folder.

Otherwise, after image acquisition a new window will be displayed and the user can:

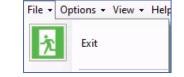
- choose format, size, and name of the image file;
- choose the destination folder (eventually after creating it);
- save the image.
- i It is also possible to save the image with drawings and annotations; in this specific case it is necessary to click the icon in the drawings bar menu.



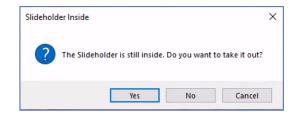


#### HOW TO CLOSE THE SOFTWARE?

To close the software select the menu «File» in the top bar andh click on the button «Exit».



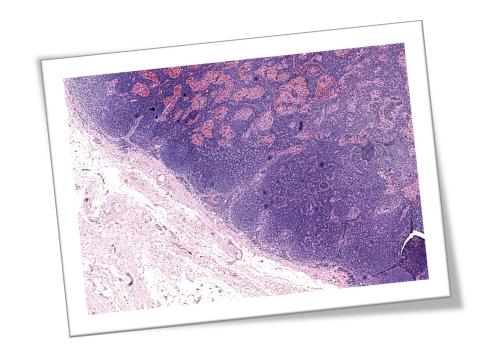
If the slideholder is in place inside the instrument, a warning message will be displayed, asking if it should been taken out.





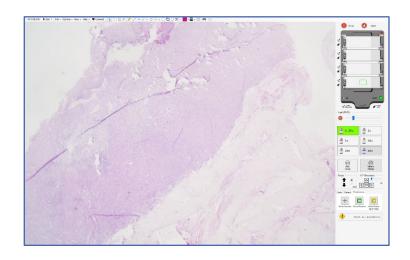
#### (i) The user can:

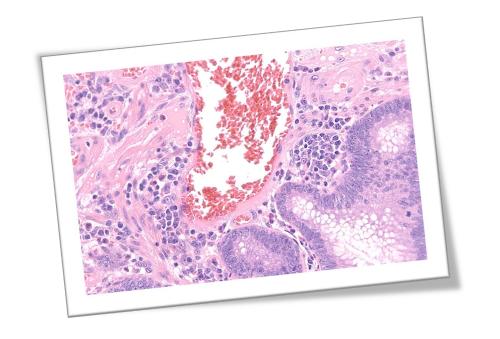
- Click the button «Cancel», canceling the software closure.
- Click the button «No», going back to main interface.
- Click the button «Yes»; a waiting window will display before the software is closed (eventually after removing the slideholder).



# NED.MICRO.DP REMOTE SYSTEM







#### MASTER OR VIEWER?

It is possible to choose among Master and Viewer in the appropriate window. If a Master already exists the name is displayed e the user, if authorized, can access the interface as a Viewer.

If you log in as a Master you can, for each user, choose whether to enable it as a Viewer.





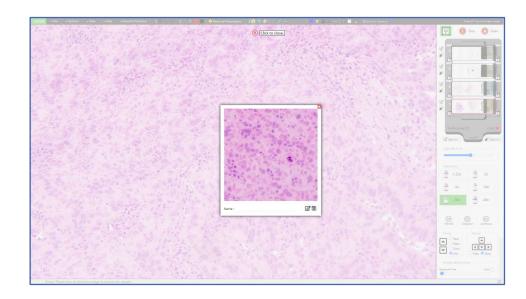
To access the remote system you need to use a compatible browser (Chrome, Edge, Mozilla, Vivaldi, Opera, Brave, Torch, etc ...)

If you log in as Master you can control the machine remotely otherwise, as Viewer, you can only see the image and annotations.

#### HOW TO SAVE A PART OF THE IMAGE IN HD?

If you want to see the uncompressed image, click on the "download HD image" button in the upper area of the right side menu.

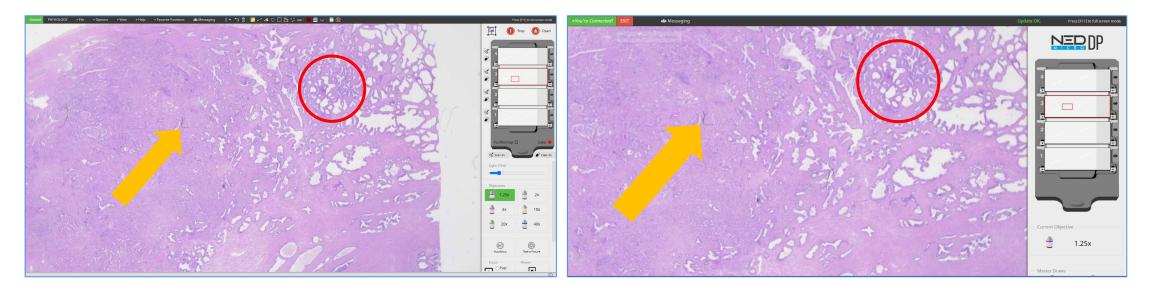




Once a real-time area of the image is selected, it is shown without compression in a painting. You can insert marks in the image, decide to save it, or close the window.

### HOW TO SHARE DRAWINGS BETWEEN MASTER AND VIEWERS?

All the drawings made by the Master are shared in real time with the Viewers.



MASTER VIEWERS

in addition to the drawings shared by the master, Viewers see the position of the master in real time, the magnification currently in use and the slide under observation.





# NED PRODUCTS

Nano Eye Device









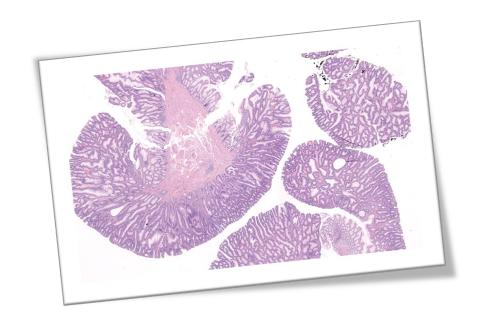
Digital Hematology



Virus Detector

...multiple products for multiple applications...

Visit <u>www.ntpsrl.biz</u> and you will find all the information you need.



## **ACCESSORIES**

#### Optional



External keypad
Up to 15 interactive buttons

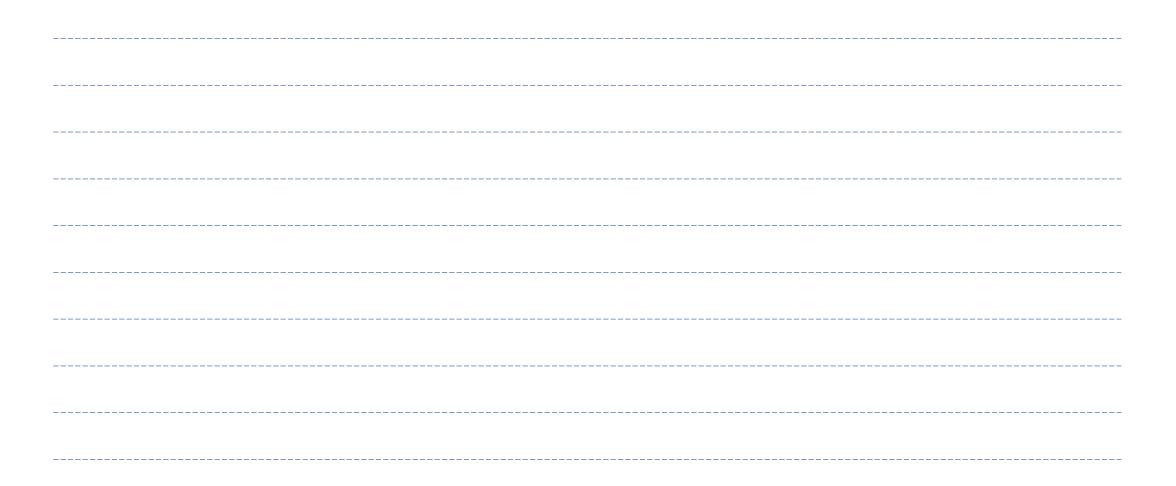


Joystick XYZ axes 6 buttons



Monitor FHD (24"-42") DICOM Ready

## **ANNOTATIONS**



## **ANNOTATIONS**








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