


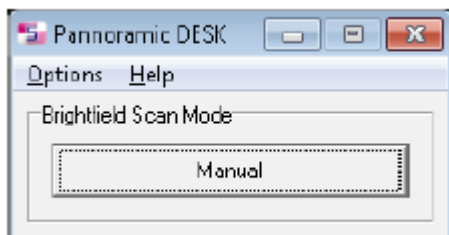
# Pannoramic DESK Slide Scanner

## User Guide for PITHIA Trial

### 1. Turning On and Getting Started

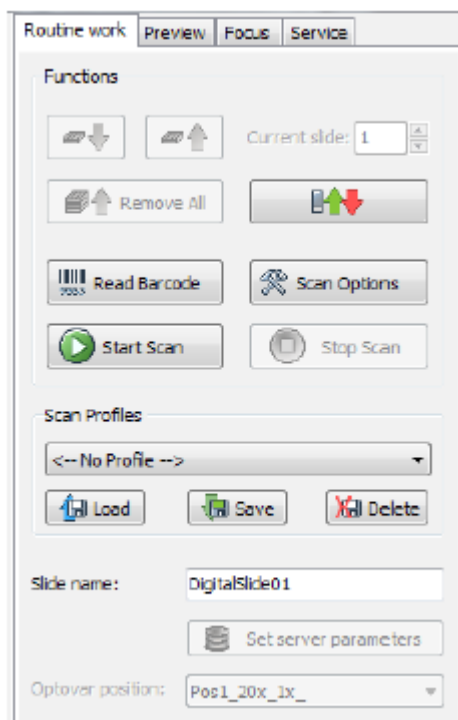
If the system is switched off then switch on by first turning on the power unit adapter of the DESK slide scanner followed by the control PC

Once the PC has powered up, double-click on the Pannoramic Software icon (pink ) on the main display. The DESK slide scanner will go through a start-up routine and then present the main menu display:



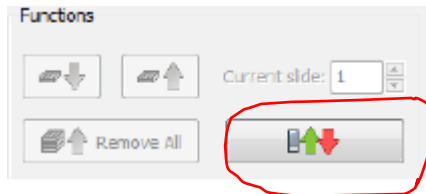
Click on 'Manual' to enable access to the slide scanning menu

This will open up the Routine Work tab (below)

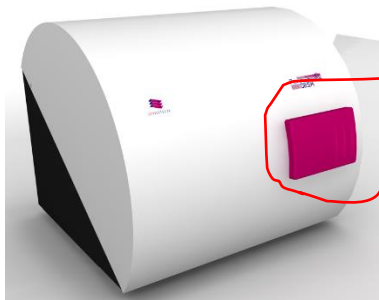


## 2. Scanning a Slide

To scan a slide, click on the Insert/Remove slide button:



Follow the instructions on the screen and then slide open the pink door from right to left



Insert the slide (must be coverslipped) ensuring that the tissue is on the upward-facing surface of the slide and the frosted end of the slide is nearest to the sliding door.

Please also ensure that the coverslip is central and not overhanging at any point (this can cause a slide to jam) and also ensure that there is no excess mountant on the edge of the coverslip

Keep the slide level and push it until it is fully in to the scanning stage

Close the sliding door again. The slide will then be automatically moved to the scanning stage under the objective

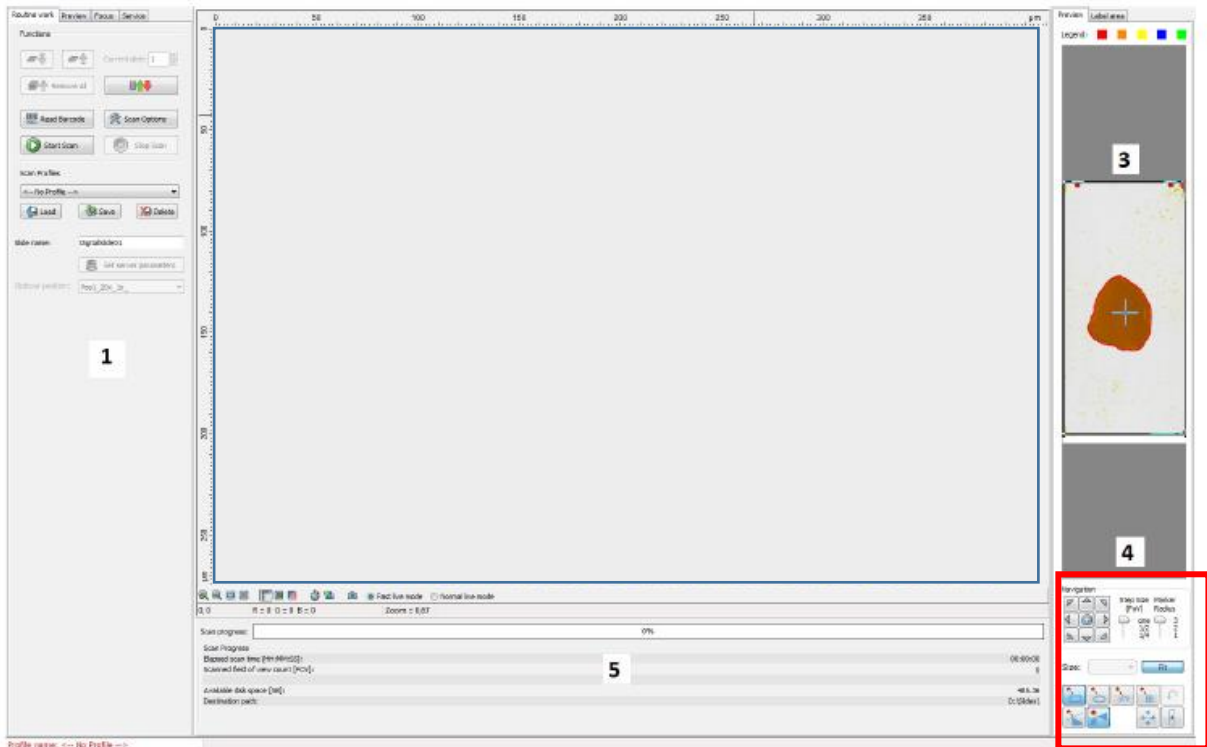
This will produce a preview image (see below)

The preview image can be enlarged by clicking on the border of the image and dragging to the left

It is possible to view the native slide by clicking on the small slide icon on the bottom left of the screen

The tissue will be highlighted in orange (i.e. this has been detected and will be scanned) if no further changes are made. Additional areas for scanning can be created or deleted by using the editing tools in the bottom right corner of the display

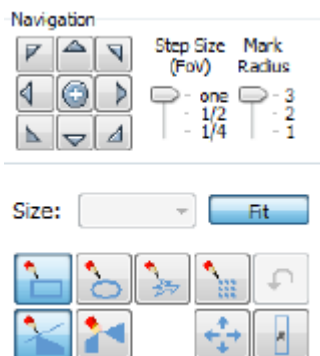
To see the label area of the slide click on the Label Area tab at the top right of the display



If you are happy that the tissue has been detected then name the slide and then click on **Start Scan**. You will be notified when the scan is complete but during the scanning process you will see progress of completion in a bar at the foot of the display and you will also notice that the orange colour on the detected tissue becomes green once it is scanned. If you are scanning the slide to the server then follow the instructions in 'Set Destination for Scanned Slides'

**If you need to add or remove scanning area: (see 4 above)**

Use the adjustment tools at the bottom right corner of the main display (see below)



**To add additional area for scanning:** Select the 'rectangle' tool. Also select the 'draw' tool (bottom right in this cluster of buttons). Then click and drag across the area that you want to scan in addition to the tissue that has been detected. This will create an area that is red; this means that this area will be scanned

**To remove an area to prevent scanning:** Select the 'rectangle' tool. Also select the 'erase' tool (next to the draw button). Then click and drag across an area of detected tissue to remove it from the scannable area. This will create an area that is yellow and will not be scanned. This is useful if you want to avoid scanning bubbles or mountant or other artefact

### 3. Adjusting the settings (see below)

#### **If all of the tissue hasn't been detected:**

Go to USE THRESHOLD and click on 'Scan specimen with user set threshold'. Adjusting this value downwards will make the detection more sensitive and more tissue will be detected. Adjusting the value upwards will mean that less tissue (and artefact) will be detected.

The screenshot shows a software interface with tabs for 'Routine work', 'Preview', 'Focus', and 'Service'. The 'Preview' tab is active. Under 'Scan area selection', the 'Preview Type' is set to 'Brightfield Preview'. The 'Use threshold' section is highlighted with a red box and contains the following options:

- Use threshold
  - Scan specimen with auto threshold
  - Scan specimen with user set threshold
- Scan area inside the marker
  - Marker threshold level: 150
  - Specimen threshold level: 35
  - Scan everything within marked area

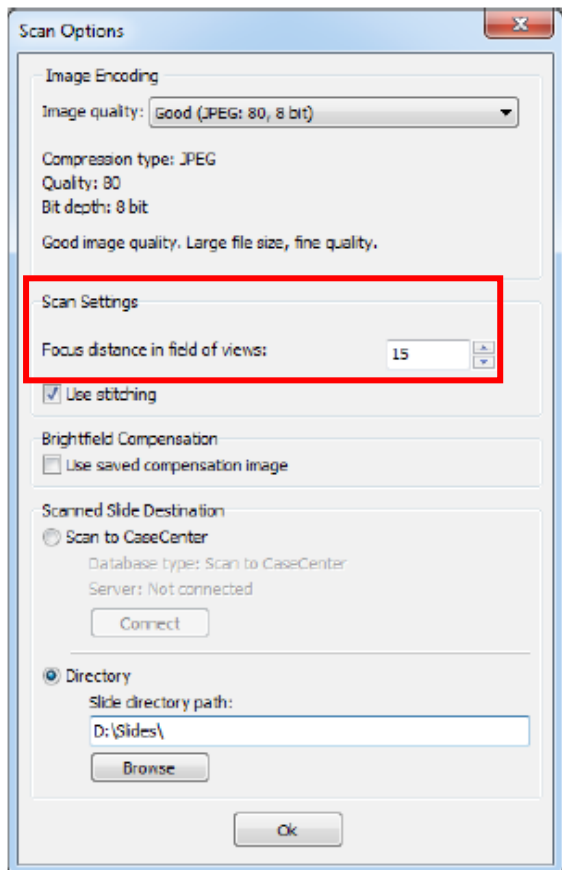
Below these are 'General threshold options':

- Remove coverslip
- Fill holes in scan area
- Remove specks
- Speck size: 0.503 mm<sup>2</sup>
- Scan area dilation: 200 µm

At the bottom, there is an option for 'Use saved scan area' with a 'Path:' field and 'Load' and 'Save' buttons. A 'Use selection box' checkbox is checked.

#### **Detection of Feint or Small Tissue**

If the tissue section is small (i.e. less than 0.5cm sq) then you may need to adjust the settings in order for the slide scanner to detect the tissue and achieve a good number of focus points on the tissue.



This can manifest as too many out-of-focus areas on the scanned image.

To adjust the number of focus points for small tissue go to SCAN OPTIONS.

In Scan Settings on this pop-up you will be able to adjust FOCUS DISTANCE IN FIELD OF VIEWS. The higher this value, the less focus points will be created when the instrument creates a focus map across the scannable tissue.

12 is an optimal setting for most tissue sections. If you have small or faint tissue and you need to adjust this value downwards then choose a value of 5. This will create more focus points and ensure that the tissue will all be in focus when it is scanned.

*Please note that the lower this value, the longer the scan will take as the scanner will need more time to set additional focus points*

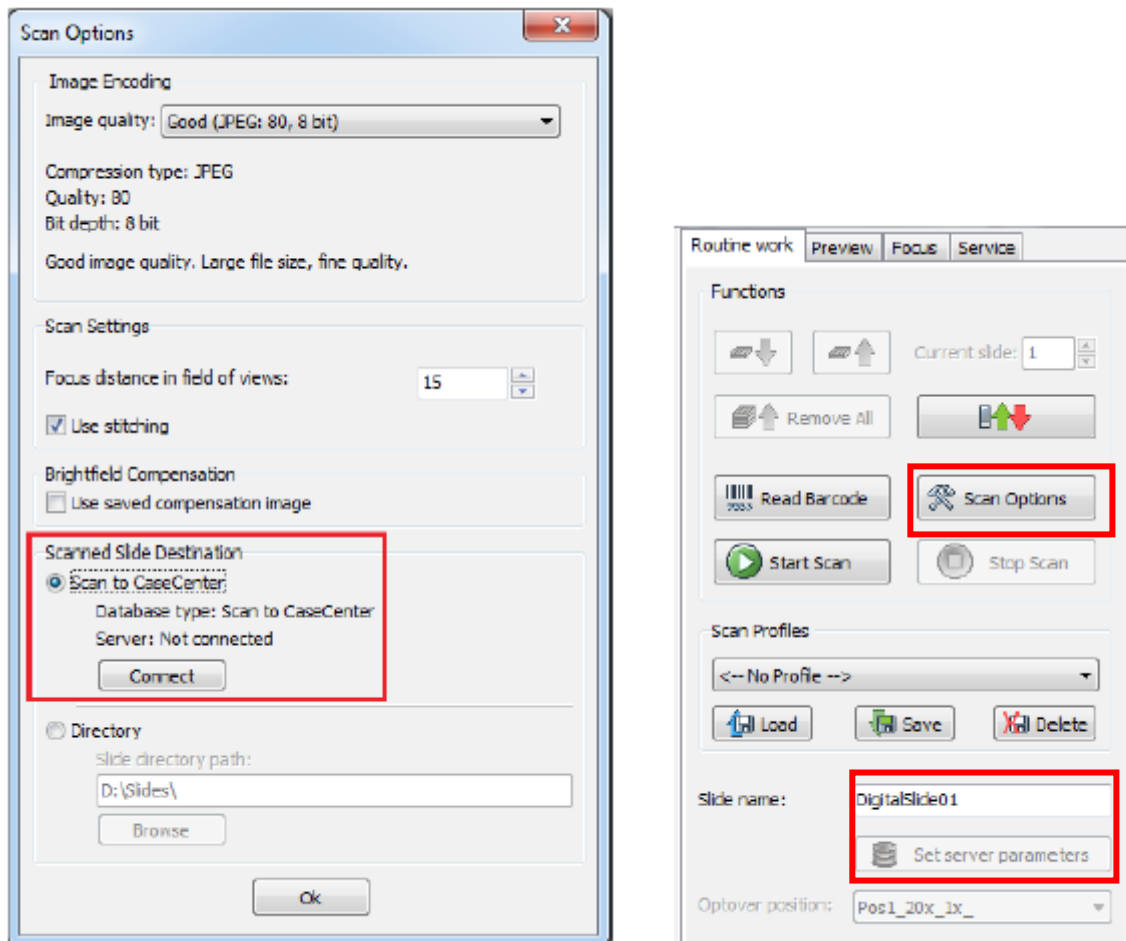
#### 4. To set Destination for Scanned Slide:

Go to SCAN OPTIONS on the Routine Work display

You have 2 options: Scan to CaseCenter (this is the server that is located at Sysmex UK that will enable remote access) and Directory (This is the hard drive on the scanner PC)

If you scan to CaseCenter then you will only be able to view the scanned image if you login to the CaseCenter and select the slide you have scanned

To scan to CaseCenter you will need to click on this option (see below) and then CONNECT by using the Username and Password that you have been given



Once 'Scan to CaseCenter' has been selected then go back to the Routine Work tab and click on SET SERVER PARAMETERS which will now be available and not greyed out.

Please note that the slide identification/number and destination folder will now be input via the SET SERVER PARAMETERS screen that pops up

Slide number/ID – click in the SLIDE NAME field and manually input slide ID

Destination Folder – Click in FOLDER field and choose ROOT DIRECTORY/PITHIA Trial/Not Yet Reported

Once these are set then click on DONE at the bottom right of this window

**You will need to complete these steps before you scan your slides**

CaseCenter - 10.130.131.184

Magazine 01

First slide:  Last slide:

Mask:  Use mask

	Status	Barcode	Slide Name	Profile	Folder	Case	Block
1	Waiting...		123456789	<- No Profile ->	Root directory\SLIDES	01	01

Multi fill:

Server side barcode parsing  
 Generate name if no name was defined  Read barcode if no name is defined on the list