

# INSTRUCTION FOR USE

In this document the setup and the use of the AiDx NTDx is explained. For a visual quick-start video, scan the QR code below.



## **AiDx NTDx: Contents of package**

1. AiDx NTDx
2. Dedicated Laptop
3. USB-C to USB micro-B cable
4. USB-A to USB A Cable
5. AC Power cable
6. Laptop charger

# AiDx NTDx: User Manual

## Set up

1. Use a desk with two available sockets.
2. Plug the *power cable* into the socket and the AiDx NTDx.
3. Plug the *laptop charger* into the socket and the laptop.
4. Connect the *USB-C to USB micro-B* and *USB-A to USB A Cable* to the AiDx NTDx and the laptop

## Starting sample analysis

1. Prepare your *sample* on a microscopic glass slide (3x1 inch)
  - a. Malaria: use Giemsa staining thick smear
  - b. Lymphatic Filariasis: use Giemsa staining thin or thick
  - c. Schistosomiasis Urine: use
  - d. Schistosomiasis Stool: use
2. Press the *power button* at the front of the AiDx NTDx.
3. Start the *AiDx Software*, using the icon on the desktop.
4. Press the *eject* button; the slide holder will protrude.
5. Open the *front cover* by rotating the two knobs until the *front cover* can be flipped over.
6. Slide the prepared glass slide into the slide holder.  
**BE AWARE:** do not push or try to force the entire glass slide into the slide holder. Gently push the slide in the slide holder until it can not be pushed deeper. The sample will protrude 5mm out of the slider. This 5 mm will assure easy removal of the sample after the analysis.  
**Pushing too hard may lead to damage of the glass slide or slide holder.**
7. Release the *front cover* so it closes
8. Press *insert* button in the software; the sample comes into focus

## Using the software

The software allows you to 3 different tasks:

1. Manually examine your sample
  - a. Positioning/moving the sample
    - Use the *Arrow-shaped buttons* in the software to explore the sample.
    - Select the *Move* button and you will be able to direct yourself to the '*center of the X-axis*' and the '*center of the Y-axis*'
    - Select the *coordinate* button to insert x, y and z-coordinates

- b. Focussing of the camera
  - Use the *+ and -* keys to manually adjust the focus plane of the microscope.
  - Click on the *Autofocus button* to find the focus plane automatically.
- c. Capture images
  - Click on *Capture* to save the current field of view. This image is saved automatically in the data folder.
  - You can access captured images by clicking on the *data button* in the left top corner

## 2. Automatically scan your sample

- Optional: Navigate to the center of the sample, or any other part of interest where you want to start the scan (see *1a Positioning/moving the sample*).
- Click on *Scan* to start a sample scan.
- Enter a *Sample ID*, a data folder will be created to store the scanned data, the Sample ID will be used as the name of this folder.
- If a sample should be analyzed using our AI, select the disease from the dropdown menu. Skip the following step.
- In case a custom scan should be created, select the area to be scanned. This can be done in the amount of *images* or *metric dimensions*.
- Click on *Begin* to start the scan. The duration of the scan varies depending on the size of the scan
- The captured images will directly be shown in the software.
- The captured images are saved in the data folder. Upon completion of the scan a dialog will appear with the results of the scan when the integrated AI is used.
- To return to the microscope, click on the blue *microscope* button in the left top corner.

## 3. Examine and manage the captured images

- After you have used either *Capture* or *Scan*, the images are stored on the laptop.
- Click on the *data* button in the left top corner to access the stored images
- To return to the microscope, click on the blue *microscope* button in the left top corner.

Data access without opening the software:

- Access the stored images of scans by browsing to:  
*home/documents/aidx assist/scanned data*
- Access individual captured images by browsing to:  
*home/documents/aidx assist/captured*
- Access the CSV of the AI results by browsing to:  
*home/documents/aidx assist/screened results*

## After use

1. Exit the *AiDx Software* by clicking the 'cross button' at the top right corner
2. Confirm that you want to close the application
3. Shut down the *laptop*
4. Press the main power button at the front of the AiDx NTDx device
5. Remove the *power* and *USB cables*