

Phlebotomy Mini-Indexor Instruction Sheet

Introduction

Indexor is a system designed to organise blood sample handling and provide an audit trail for samples ordered on tQuest from the point of collection from the patient to Central Specimen Reception. The samples will be 'registered' onto the system by scanning the sample barcode and 'checked' into the iRack.

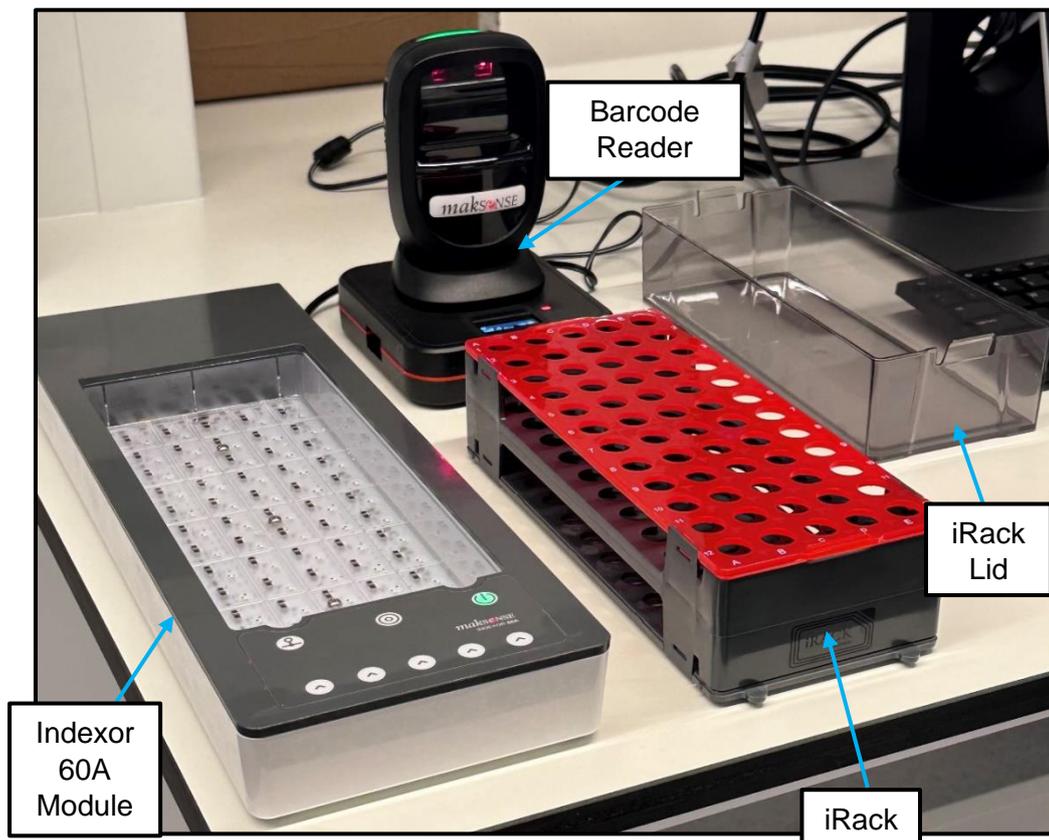
Note: ADULT GP BLOOD SAMPLES ONLY – No paediatric samples or hospital patient samples should be loaded onto Indexor.

To ensure this is a smooth and seamless process, the samples must be:

- Labelled with the correct barcode for the sample type, each label states which colour vial to use
- Have the label running down the length of the vial; the label must not be wrapped around the bottle
- Use all labels printed, i.e. if there are 2 labels printed for purple EDTA, 2 purple top bottles must be collected, labelled and sent to the laboratory.
- Ensure the date and time of collection are on the form and sample labels.

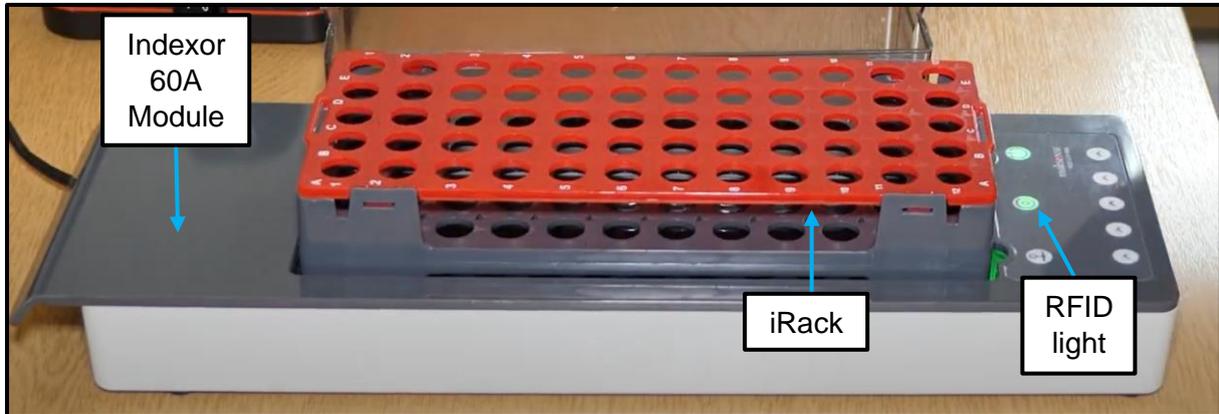
Mini-Indexor Equipment

The Mini-Indexor system consists of the following components:

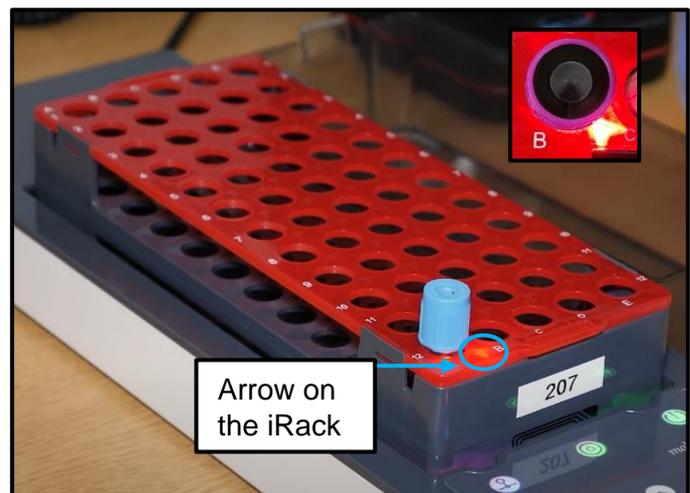


How to Use the Mini-Indexor for Blood Samples

1. Insert the iRack into the Indexor 60A module, inserting the back first and then the front. Ensure space A1 is in the top left corner. The system will then check itself, indicated by a series of lights running down column by column.



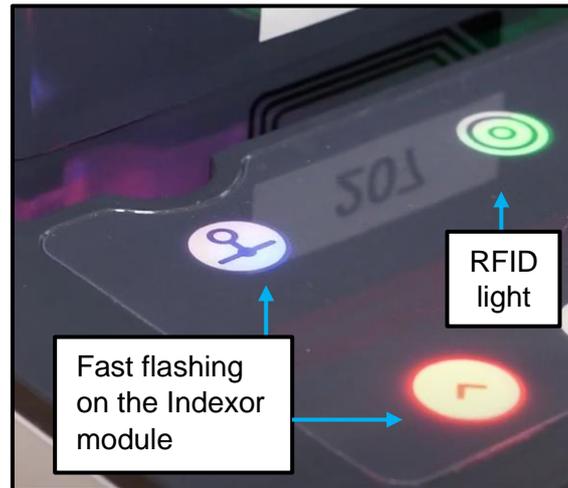
2. Once the checking process has taken place, check the RFID light. A **green** light indicates the rack is connected successfully, whereas a **red** light indicates the rack is not connected. If a **red** light appears, attempt to re-rack the iRack into the Indexor module.
3. Having confirmed the patient's identity, collect the blood sample from the patient and label each vial with the barcode for that sample type found on the tQuest form.
4. Scan the labelled blood sample vial with the barcode reader until a "Beep" sound is heard and place the vial in the next available space in the iRack.



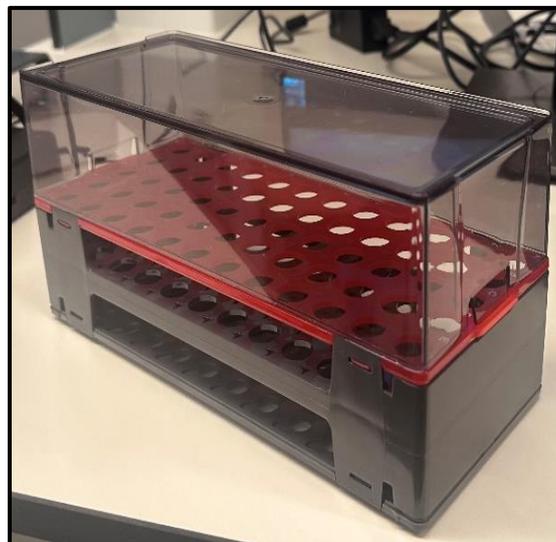
5. You have **2-3 seconds** to place the sample tube into the iRack. The arrow on the rack shows the marked tube.

Note: Where the request requires more than one sample, scan each vial. Start loading in the top left-hand corner of the rack (**1A**) and work left to right (i.e. **1B, 1C, 1D, 1E, 2 A-E**, etc.).

6. If the arrow flashes once, this indicates that the sample vial has been correctly inserted and recorded into the RFID of the iRack. **If the sample has been successfully scanned and inserted into the iRack, phlebotomy staff are no longer required to log the sample collection date and time into Epic as Indexor will automatically populate this information.**
7. Fast flashing of the arrow light and Indexor module indicates an unidentified tube (a tube has not been scanned correctly) or the vial has not been inserted in time. Remove the vial **and try again.**



8. As the vials are placed in the rack, place the corresponding tQuest forms, face down, to create a pile where the forms will be in the same order as the patient's samples are loaded.
9. If the barcode does not read or there is no barcode available to label the vial, refer to your current manual processes.
10. When loading is complete and the samples are ready for collection, remove the iRack from the Indexor module and place the lid on the iRack securely.



11. Write the iRack number (found below QR code) onto the bundle of forms associated with the samples on each rack.



12. Take the iRack and the tQuest forms to the porter/driver collection area. The iRack will be placed inside a temperature-monitoring bag, ready for transportation. Ensure that any samples in clear bags that could not be racked into the iRack are handed over to the porter.
13. The courier/porter will provide empty replacement iRacks.

Appendix

How to Clean the Mini-Indexor System

In the event of a spillage, please follow these instructions to clean the system. Ensure that the power supply is off before cleaning.

Indexor 60A Module:

This unit can be cleaned with a soft cloth slightly moistened with ethyl alcohol (70%).

iRack and Lid:

- 1) Either use a detergent solution diluted in water, or use a soft cloth slightly moistened with ethyl alcohol (70%).
- 2) Keep the iRack and lid submerged for a maximum of 5 minutes in the cleaning solution chosen in step 1, followed by rinsing with tap water.
- 3) Leave the iRack and lid to dry. If needed, the iRack and lid can be dried in an oven at 50°C for a maximum of 10 minutes.

Safety Precautions

The Mini-Indexor system has been designed with the highest concern for safety. However, in order to ensure safe operation, be sure to follow the guidelines below:

- Ensure the Mini-Indexor System is placed on a stable surface and avoid shaking the system.
- Avoid exposing the Mini-Indexor system to high temperatures.
- Avoid exposing the Mini-Indexor system to direct sunlight and very intense artificial light sources.
- Avoid exposing the Mini-Indexor system to humidity as the system is an electrical appliance.
- Avoid handling the Mini-Indexor system components with wet hands.
- Do not look directly into the LED lamp inside the Mini-Indexor module.

Installing the Mini-Indexor System

If the Mini-Indexor system needs to be moved and re-installed, please follow the instructions below:

1. Ensure that the Mini-Indexor remains connected to the barcode reader.
2. Using the supplied RJ45 type cable, connect the Indexor 60A module to the Mini-Indexor on port 60A (please refer to the port identification that is engraved at the bottom part of the Mini-Indexor).
3. Connect the Mini-Indexor power supply to a power outlet. The on/off switch is located on the side of the component.

Replacing the Barcode Scanner Clock Battery

The barcode scanner is equipped with a long-lasting cell battery that powers the internal clock, which has a typical duration of two years. When the clock battery requires replacement, the barcode scanner will display a 'Clock Error' message on the screen. The Mini-Indexor system can still be used at this stage, however, the sample collection date and time will no longer be valid until the cell battery has been replaced and the clock has been adjusted.

1. Before replacing the cell battery, ensure the Mini-Indexor is turned off.
2. To access and replace the cell battery, the small cover on the bottom of the Mini-Indexor can be opened by removing the two screws.
3. The recommended replacement battery model is Energizer CR2032, 3V
4. Once the battery is replaced, the clock must be adjusted. To adjust the clock, visit <https://www.maksense.com/miniindexor/> and scan the barcode on the website with the Mini-Indexor barcode reader. The clock will be immediately adjusted.

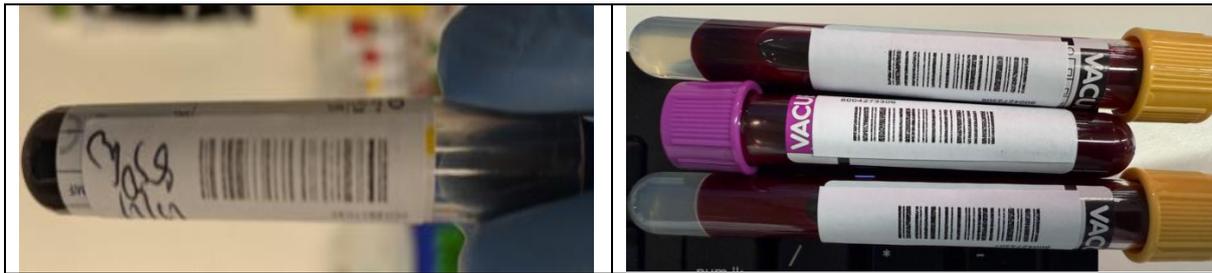
Troubleshooting Guide

This section outlines frequent issues encountered during rack handling and sample labelling, along with tips to ensure smooth operation and accurate identification. Refer to the images where available for visual guidance.

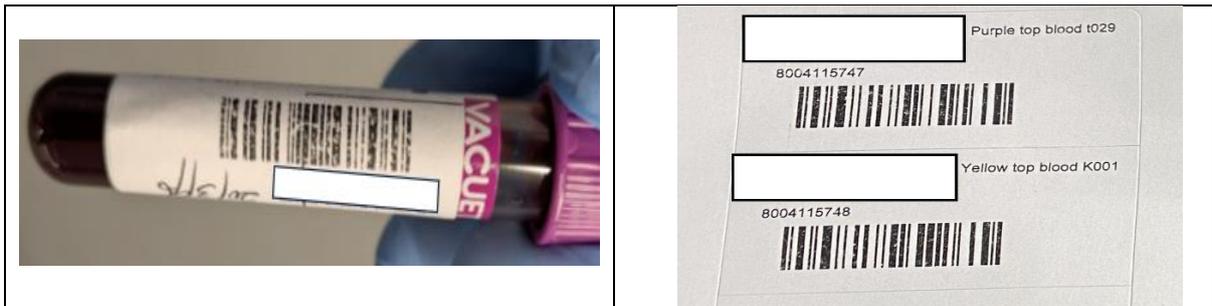
Topics covered include:

- Correcting faded (1), grainy (2), misaligned (3) labels:

(1)



(2)



(3)



- Ensuring racks are clean and sticker-free on the bottom (4). The complete visibility of the tracking QR code is essential (5):

(4)



(5)



- Ensure the tubes are fully inserted into the rack, making contact with the bottom of the rack. Correct (6), Incorrect (7). Improperly inserted tubes may not be recognised by the system.

(6)



(7)



- If the racks are dropped and come apart, please make an effort to reassemble them following the guidelines in the picture below. If you believe the plastic has been damaged, please report this to on the customer service portal/manager and return the empty racks to the Hub.

