

PROCESS

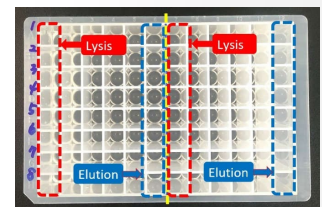
1. MACHINE SETUP

- Switch on the NC-15 at back, and then press the power button on the front. The machine will then run through start-up procedures.
 - Checks RS-232 interface status
 - Checks temperature
 - Checks temperature sensor
- Load comb strips into the machine. Place them into the guide and push back fully until you here a click. Make sure you do not touch the tips of the combs.



2. PREPARE PLATE

- Plates must always be stored and handled the 'right way up'
- Reconstitute 1 vial of Proteinase K by mixing it with storage buffer. Use within 12 hours or store in freezer for 7 days for longer term storage.
- Grip plate firmly and carefully and firmly peel back foil on reagent plate.
- Place plate onto white magnetic base. This has 2 blue lines to show the 1st and 7th column on the plate, and 2 red lines for the 6th and 12th columns.
- Pipette 20ul of constituted Proteinase K into each well of the 1st and 7th column
- If an internal extraction control is in use add this to each well in 1st and 7th column
- Pipette 200ul of sample into each well of the 1st and 7th column



3. LOAD MACHINE

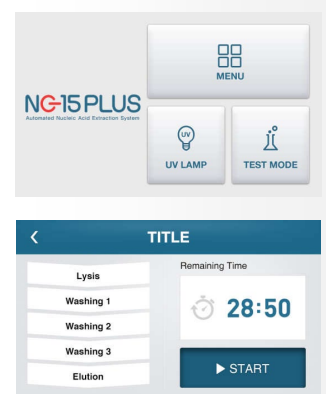
- Open the door of the machine and pull out the heating tray.
- Load plate onto the heating tray. Ensure that you have orientated this the correct way, by paying careful attention to aligning the cut-out corner of the plate to the cut-out corner in the heating tray.
- Push back the heating tray fully into the machine and close the door. If the tray has not been pushed back fully, the door will not be able to close and the test will not run.



4. RUN

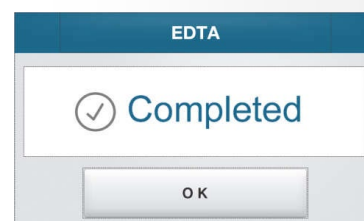
- On the home screen on the LCD touch screen, select 'Menu'.
- Select 'COVID' profile.
- Press 'Start'.
- The instrument may display a "PRE-HEATING" warning if it has not been used for some time but this will only remain for a very short time.
- The machine will then show a reminder to check that the comb strips have been inserted.
- Now press 'START' again. The machine will start the extraction process.

Please note, if for any reason the test must be paused or abandoned, the batch must be abandoned and a new plate prepared.



5. UNLOAD MACHINE

- Once the machine has finished the run, it will sound an alert signalling the end of the procedure.
- Open the door and pull out the heating tray.
- Remove the plate from the heating tray.
- Once the plate has been removed, remove and dispose of the comb strips in accordance with your hazardous waste disposal policy. Make sure you do this after having removed the plate to prevent potential contamination of the eluates.



6. TRANSFER ELUATE

- Place the plate back onto the metal plate holder. The magnets on this will trap any residual magnetic beads remaining from the extraction process.
- Transfer 20ul of eluate from each well of the 6th and 12th row of the plate to PCR tubes. Again, use a new filter tip for each sample and remove and dispose of filter tips in accordance with your hazardous waste disposal policy.

CLEANING AND MAINTENANCE

The machine comes with a built in UV lamp to sterilise the inside of the machine. The machine door cuts out this UV light so that there is no exposure to the operator.

Wipe down internal surfaces daily with 70% ethanol and a DNA degradation solution, for example DNase Away.

External surfaces should also be wiped down with 70% alcohol wipe or mild detergent.

If the machine has not been used for an extended period of time, or has been transported, the test mode should be run. This is an accelerated version of the standard procedure.

CAUTIONS

- Be cautious when handling reagent plate, as it contains hazardous chemicals.
- If any part of the body comes in contact with these hazardous chemicals, rinse with water and seek medical help immediately.
- Heating tray may still be warm when the machine extraction process has been completed. Make sure not to touch the heating strips.
- When using the UV light, make sure the door is closed. This will cut out the UV light and prevent exposure to the operator.
- Ensure you do not touch the UV lamp inside the machine.

For further information, please refer to the MSDS.

TROUBLESHOOTING

If the comb strips have not been inserted prior to running the machine, the magnetic beads will stick to the rods. In this case, you should turn off the machine, before cleaning with a 70% ethanol and a DNA degradation solution such as DNase Away.

For the full troubleshooting guide, please refer to the user manual.