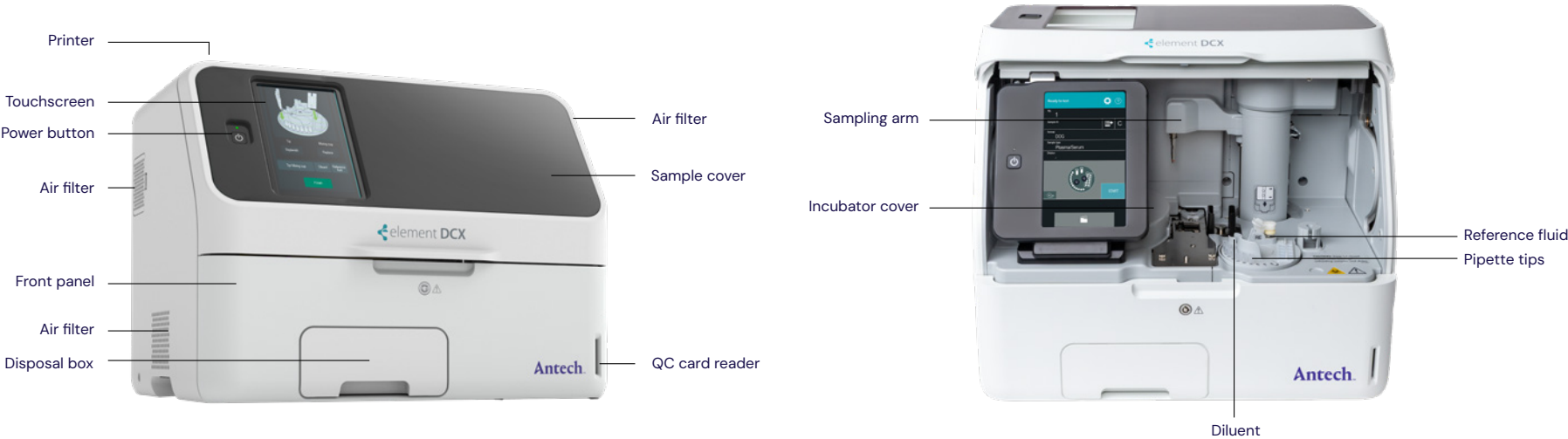


Element DCX™ Quick Steps Guide



Get to Know
THE ELEMENT DCX ANALYZER



POWERING ON THE ANALYZER

- Warm up takes approximately 10 minutes

PREPARING SUPPLIES

Remove the following testing supplies from the refrigerator and warm for five minutes or to room temperature.

Slides

Slides needed for ordered tests.

- Once the foil package with slide(s) is opened, they must be used within 30 minutes.

Note: Slides necessary for the morning appointments can also be set out as they can remain at room temperature for the day.

Electrolyte Reference Fluid

1. Fill new 0.5 mL red top tube to maximum fill line and place in analyzer, do not overfill. Remove any bubbles, if present.
2. Return RE Fluid bottle to the refrigerator.

Calibration (QC) Card

1. Ensure that “Warming Up”, “Lamp Warming Up” or “Ready to Test” is displayed before inserting QC Card.
2. When opening a new box of chemistry slides, insert QC card into the slot with the QR code facing to the left.
3. Keep the QC card in the box until all chemistry slides have been used.

Note:

- QC Card only needs to be used when opening a new box.
- Electrolyte slides do not need a QC card calibration.

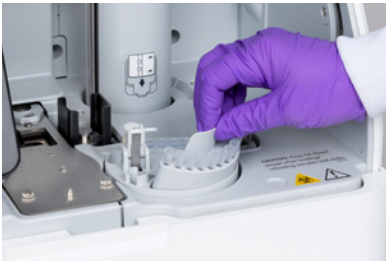
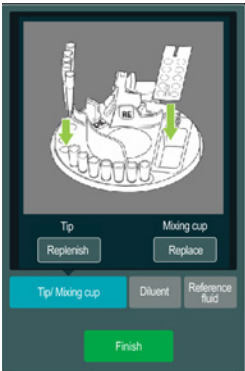
Replacing Consumables

Note: Only replace consumables while analyzer is NOT actively spotting/sampling.

1. First ensure “Warming Up”, “Lamp Warming Up”, or “Ready to Test”, is displayed on the screen.
2. To stop sampling, touch STOP.

Setting Pipette Tips

1. Touch the tip rack image on the display screen to turn carousel.
2. Once carousel stops, remove tip rack.
3. Fill tip rack and replace.
4. Touch REPLENISH ► then touch FINISH.



Replacing Reference Fluid

1. Pipette Reference Fluid into a 0.5 mL or 1.5 mL Red Top non-heparinized sample tube depending on the reference fluid setting.
2. Place the tube in the location labeled "RE".

IMPORTANT: Replace RE fluid after 12 hours. Use new RTT tube each time.



SAMPLE COLLECTION AND HANDLING

Note: Handle all samples and used materials as infectious waste. Wear gloves, glasses, and other protective gear for your safety.

Antech-supplied Green Top Tubes (lithium heparin, GTT)

1. Draw patient sample using a 23-gauge needle or larger to minimize hemolysis.
2. Remove needle from syringe to fill a 0.5 mL or 1.5 mL GTT.

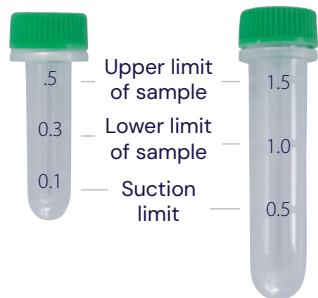
Note: Full 0.5 mL GTT = Adequate volume for six chemistry slides plus electrolytes.
Full 1.5 mL GTT = Adequate volume for all available test profiles.

3. Fill sample tube to proper level:
 - 0.5 mL GTT – volume between 0.3 and 0.5 mL
 - 1.5 mL GTT – volume between 1.0 and 1.5 mL

Note: Do NOT overfill tubes.

4. Spin sample in centrifuge, following manufacturer’s directions for spin speed and duration.

Note: As needed, gently swirl two wooden applicator sticks in the plasma to remove any fibrin, air bubbles, or micro-clots.



COLLECTING PLASMA OR SERUM

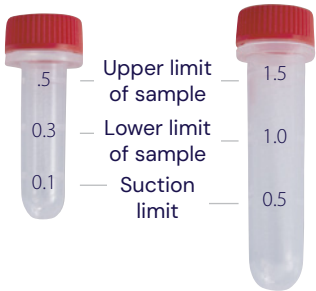
If you are **not** using the Antech-provided GTT sample tubes:

1. Collect sample and separate plasma or serum as you normally would.
2. For serum samples:
 - Allow 20 minutes to clot PRIOR to centrifugation
 - Clot for 45 minutes for equine blood
3. Transfer plasma or serum to a 0.5 mL Antech-supplied Red Top Tube (RTT) for analysis on the Element DCX.

Note:

- Sample filled to the 0.5 mL RTT maximum fill line is adequate volume for all tests.
- The 1.5 mL RTT should only be used if it can be filled to at least the 1 mL mark (second line).

IMPORTANT: It is NOT recommended to centrifuge whole blood in the Antech-supplied RTT. If serum is desired, collect the sample in a standard, non-additive tube, centrifuge according to the manufacturer's recommendations, and then transfer the serum to the Antech-supplied RTT using a pipette prior to analysis on the Element DCX.



Sample Analysis

Note: Only load consumables when the analyzer is not actively spotting/sampling. If analyzer is actively spotting, touch STOP on the display screen to stop sampling.

1. Make sure that “Ready, Warming Up” or “Lamp Warming Up”, is displayed before loading samples and slides.
2. Lift front cover.
3. Remove empty slide cartridge and remove slide weight.
4. Place slides to be tested, barcode facing down, into slide cartridge and place weight on top.
5. When running Electrolytes slide:
 - Place the Lytes slide on top of all other slides or panel to decrease run times
 - Orient Lytes slide with arrows facing up and to the right
6. Handle slides by outside edges only. If using an E-wrap panel, remove the clear plastic wrap after being placed in the slide cartridge.
7. Remove cap from sample tube and place into appropriate sample rack based on tube volume (0.5 mL or 1.5 mL).
8. Check or replace RE fluid, if testing Electrolytes.
9. Close front cover.
10. If **using Worklist**: Touch Worklist icon and select the desired patient ► touch OK.
If **not using Worklist**: Touch SAMPLE ID, input the sample ID ► touch OK to accept, then touch ANIMAL and select desired species.
11. Make sure Sample Type is correct ► touch OK.
12. Touch START.



RUNNING ELECTROLYTES – ION-SELECTIVE ELECTRODE (ISE) SLIDES

1. Orient Lytes slide with arrows facing up and to the right.

Note: When measuring ISE and chemistry slides at the same time, we recommend loading the ISE slide on top.

2. Load reference fluid. (See prior section *Getting Started, Replacing Reference Fluid.*)
3. Check quantity of pipette tips.

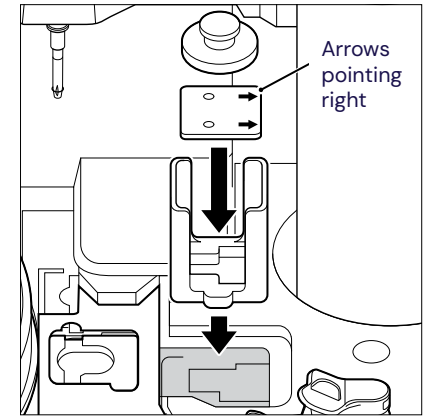
IMPORTANT: Two pipette tips are required to perform electrolyte testing. Three pipette tips are required if performing chemistry slides with electrolytes.

4. Follow Steps 7 through 12 of prior section *Sample Analysis*.

INTERRUPTING SAMPLES

1. Touch STOP to cancel the test. Display will read, "Please wait a moment."
2. The analyzer will finish sampling the current slide, eject the tip, and then stop.

IMPORTANT: Do not open waste disposal drawer during sample processing, as test will be cancelled.



REPLACING MIXING CUPS (USED FOR DILUTIONS)

1. Touch the screen image of mixing cups/tips, the carousel will rotate.
2. Remove used mixing cups from carousel and replace with new mixing cups.
3. Touch REPLACE under Mixing Cup to reset the quantity.



REPLACING DILUENT

1. Put 1.5 mL of distilled or sterile water into a 1.5 mL, Antech non-additive RTT.
2. Place diluent tube in location labeled “DIL”, then touch FINISH.

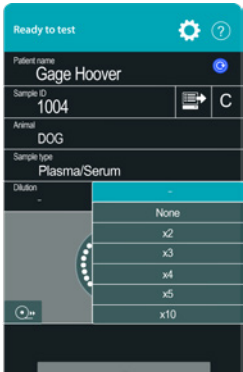
RUNNING A SAMPLE USING AUTO DILUTION

1. Place new slides of the desired analytes to be rerun with dilution into the slide cartridge, barcode down. Then place weight on slides and place cartridge into position.

Note: A maximum of three (3) slides can be loaded for dilution at a time.

2. Load diluent.
3. On test results screen, touch RERUN .
4. Touch DILUTION and select dilution factor.
5. Touch OK to accept ► then touch START to begin testing.

IMPORTANT: Ensure 1.5 mL diluent tube is filled with sterile or distilled water and placed in DIL position.



Analyzer Maintenance

CALIBRATION

Ensure “Ready, Warming Up” or “Lamp Warming Up”, is displayed.

- For new slide lot #, insert the QC card into the slot with the QR code facing to the left.

Note: Test name and lot numbers appear on the display and can be printed. The analyzer will store five lots per analyte or panel.

CHEMISTRY CONTROLS

IMPORTANT:

- Follow package directions for reconstituting controls. If already reconstituted, place control solution into a 0.5 mL RTT and warm for five minutes.
- Always wear gloves when handling Chemistry Control Solution.

1. Run Chemistry Control Solution as you would a patient sample by transferring into a 0.5 mL RTT. Place RTT in sample rack.
2. Place slides in slide cartridge.
 - It is recommended to run Chemistry Control on the largest available panel.
3. Recommend using control lot number for ID field.
4. Select Control for species.
5. Press START.

DAILY MAINTENANCE

1. Keep cover closed except for loading and unloading slides, samples and consumables.
2. Empty waste disposal drawer.
3. Remove sample tubes when testing is complete.
4. Clean spills on the spotting slide transit area.



Best Practices

GENERAL

- Minimize micro-clot formation with swift/atraumatic venipuncture and by immediately transferring blood from syringe into collection tubes in recommended order.
- Use a 23-gauge or larger needle for venipuncture to minimize hemolysis.
- Avoid repositioning and/or excessive suction on the syringe.
- Remove needle from syringe to fill tubes, unless using a closed vacuum/vacutainer blood collection system.
- If using vacutainer, let blood sample flow naturally into tube (do not force).
- All blood collection tubes should be filled to recommended levels to avoid over-dilution of the sample with anticoagulant.
- Use the smallest collection tube needed during specimen collection and fill according to manufacturer's recommendations.
- Serum Separator Tubes (SST aka Tiger Top or Gold Top Tubes) can interfere with some drug or hormone assays on chemistry and immunodiagnostic platforms.

CHEMISTRY

1. Verify the sample tube and sample rack size match.
2. Verify use of the correct spacer on the sample rack for the rack and tube size.
3. Verify the sample tube is not over-filled and does not contain any bubbles.
4. Proactively check sample for fibrin using two wooden applicator sticks prior to running.
5. Spin sample the recommended amount of time for the tube being used (RTT, SST, GTT).
6. Ensure use of Antech-supplied tubes.
7. Do not store pipette tips openly.

Note: Storing pipette tips in an open container increases the chance of dust and debris collection, which can clog the end of the tip.

8. Verify sample rack slot is free of dust and debris.

If all steps have been confirmed and/or corrected and issues persist, please call Antech Technical Support.

Troubleshooting

SYMBOL	WHAT SYMBOL INDICATES	OPERATOR ACTION
¥	Unspotted slides	Check and confirm all Daily Best Practices, then re-run the impacted slides. If issues persist, please contact Technical Support.
#	Slide is expired	Re-run the impacted slide using in-date chemistry slides.
&	Abnormally high value. May need to perform a dilution. If Ca++ result shows this symbol, the slide is unspotted.	If numerical result is needed, re-run the sample as a dilution for the impacted slide.
*	Fluctuation of light source intensity	Please call Antech Technical Support for assistance.

SAMPLE QUALITY



NORMAL

Properly processed plasma and serum samples should appear translucent and straw-colored (pale yellow to clear) without any dark yellow, red, or pink tinge.



LIPEMIC

Samples with a milky or cloudy appearance indicate lipemia, which is caused by a high concentration of lipids (fats) in the blood plasma or serum. This is likely to impact chemistry test results.

Note: Lipemic samples are primarily due to non-fasting. Patient should fast for at least six to eight hours prior to blood collection.



HEMOLYZED

If the sample has a pink/red tint, the red blood cells are damaged. This may impact chemistry test results. Avoid hemolyzed samples by using proper sample collection and handling techniques.



ICTERIC

Blood, plasma, and serum samples that have a yellow color are described as icteric, which results from an excessive amount of bilirubin in the blood. This may impact chemistry test results.

Technical Support and Ordering Supplies

US

For questions regarding the Element DCX, contact Antech Technical Support Services:

Phone: **800-872-1001, option 3** or email: vetsupport@heska.com

To order additional Element DCX supplies:

Phone: **800-872-1001, option 3 ▶ option 1**, or email: orders.lvld@antechdx.com

E-commerce portal: antechvetshop.com

Canada

For questions regarding the Element DCX and individual Element DCX tests, contact Antech Technical Support Services:

Phone: **800-341-3440, option 3** or email: labsupport.ca@antechdx.com

To order additional Element DCX supplies:

Phone: **800-341-3440, option 3** or email: orders.ca@antechdx.com

E-commerce: antechvetshop.com.ca

Scan this QR code for the Customer Resource Library



qrco.de/customer_portal

Notes: