

Quick Start Guide

Dionex™ Inuvion™ Core IC system™

Use this quick start guide to get your Thermo Scientific™ Dionex™ Inuvion™ Core IC system™ up and running quickly and easily.

IC tubing connections, priming and system rinse

1. Confirm the pump is turned off.
2. Connect the pump eluent line to a bottle containing 18 MΩ-cm resistivity or better ASTM Type I deionized (DI) water.
3. Prime the pump by opening the priming knob ¼ turn and selecting **Prime** on the Thermo Scientific™ Chromeleon™ Chromatography Data System (CDS) ePanel.
4. Wait until no bubbles are visible and water is flowing at a steady rate out of the pump waste line. Turn off the pump.
5. Close the priming knob to finger tight.
6. Turn on the pump, set the flow rate to 1 mL/min, and flush the system with DI water for an hour. Turn off the pump.
7. Degas the eluent offline, then connect the pump eluent line to the bottle containing degassed eluent. Repeat priming steps 3-5.
8. Turn on the pump, set the flow rate to 1 mL/min, and flush the system for about 30 minutes.
3. If the suppressor is not installed and connected to the system, the suppressor will need to be hydrated before installation.
4. To hydrate the suppressor for Displacement Chemical Regeneration (DCR) Mode, use a disposable plastic syringe to push 3 mL of DI water through the ELUENT IN port. **Caution:** push the syringe slowly to avoid generating excessive backpressure that could damage the suppressor. If running anions, push 5 mL of 200 mM H₂SO₄ through the REGEN IN port. For cation applications, use 100 mM TBAOH. If not using DCR mode, follow the Quick Start instructions provided with the chemical suppressor.
5. Allow the suppressor to sit for approximately 20 minutes to fully hydrate the suppressor resin, screens, and membranes.
6. To deliver regenerant, set up a regen pump (optional), or use a pressurized bottle that delivers the solution at an appropriate flow rate. Connect the tubing from the regen pump or pressurized bottle to the REGEN IN port and the REGEN OUT port to waste.

Suppressor and column installation and conditioning

1. The columns must be placed so that the guard column is before the analytical column, and the flow direction follows the column label arrows.
2. When installing a new IC column, after connecting the inlet of the column, direct the outlet of the column directly to waste. Pump eluent through the column at the standard flow rate for the column for at least 30 minutes before connecting to the suppressor. This prevents any storage solution or column residuals from flowing to the suppressor and expedites system equilibration time.

7. After completion of Steps 1 through 6, commence operation.

Preparing to run the system

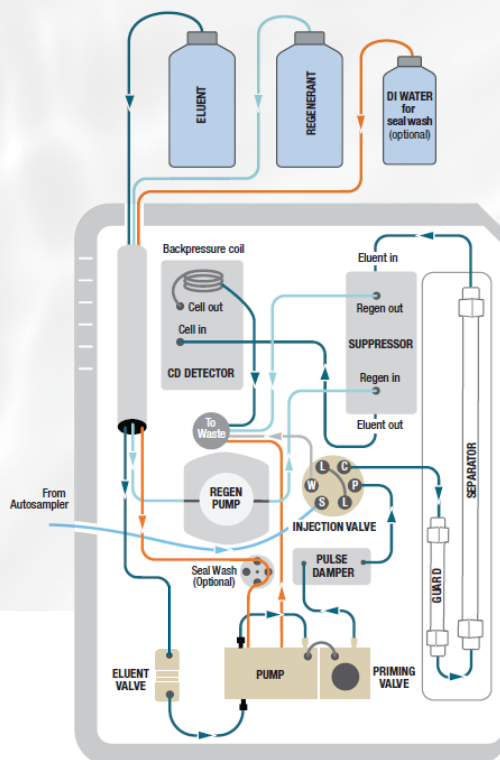
1. Use the eluent indicated for your method. Place the eluent line into the eluent bottle and start the pump at the flow rate prescribed in your method.
2. Equilibrate the system for 30-60 min. Monitor the baseline until the background conductivity is <25 µS/cm on a system set up for anion analysis using carbonate eluent or <2 µS/cm for cation analysis.
3. Start a sample sequence in Chromeleon CDS.

Dionex Inuvion Core Components

- 1 Digital pressure regulator (optional)
- 2 Conductivity cell
- 3 Tubing chase (to waste)
- 4 Tubing chase (to eluent organizer)
- 5 Regen pump (optional)
- 6 Seal wash pump (optional)
- 7 Pump
- 8 Leak sensor
- 9 Injection valve
- 10 Column holder
- 11 Suppressor
- 12 Eluent monitor (optional)



Dionex Inuvion Core Flow schematic



Learn more at thermofisher.com/inuvionsupport