

CRDS Protocol

(Rev 10-1-2014)

1. Open Zero Air gas cylinder valve (top of cylinder). Pressure should be appx. 5 psi.
2. Turn on power to instrument modules:
 - First, turn on vacuum pumps (2)
 - Then, turn on analyzer.
 - SSIM gets power from analyzer
3. Confirm that for Windows boots up and CRDS software loads. "CRDS Data Viewer" window should open automatically.
 - Before proceeding with Ready Test, cavity and warm Box temps should reach 45 C and system alarms should be black.
4. While waiting for warmup (appx 30 minutes), prepare QC check standard, or full set of calibration standards if re-calibrating.
5. Perform the "Ready Test":
 - Open Coordinator Launcher from desktop
 - Choose "Ready Test", then "Launch"
 - Click "OK" to select 10 minutes duration

The Ready test will run and update every 30 seconds until the instrument is ready. IF it is not ready in 10 minutes, the test will terminate, indicating that the system is not yet stable.

6. To start analysis:
 - Open Coordinator Launcher and select SSIM G2101-i
 - Parameters: Use defaults to sample from syringe or bag
 - Select Reference Gas #1 for default parameters which will not sample reference gas. If a reference will be used, update parameters and set gas attributes in <C:\Picarro\G200\AddOns\SSIM\ReferenceGases.ini>
 - Follow instructions at bottom of Coordinator window. These will indicate when to connect syringe, when to open valve, and when to inject sample.
 - After each action select "Resume" from top drop-down menu.

Note:

- QC checks should be analyzed among sample sets (5-10) to validate calibration throughout. The mid-range cal standard should normally be used for this purpose.
- Standard analysis speed is 3 minute pre-measurement + 12 minute measurement
- Window will prompt for next sample/cal standard as scheduled in parameters.
- Sample ID's are not stored so users must log order of sample analysis for subsequent data tracking & processing.

7. To export data:

- Use the "Isotopic Data" shortcut from the desktop to access data files.
- Find the .CSV file corresponding to your run and save to a USB drive or email to yourself via web browser.

8. Shutdown:

- Close Coordinator window
- In the lower left of "CRDS Data Viewer" window click the "Shutdown" button (note - window needs to be maximized to see button)
- If the instrument will not be used within the next day, select "Turn Off Analyzer in Current State". If it will be used, turn off software only.
- After Windows shuts down, turn off power to analyzer (big box) and then pumps (2).
- **Close all gasses at tank valves!!**
- **Log the total number of injections on your appointment record.**