Reminder Sheet for Gemini-200 NMR Operation

**KEYBOARD COMMANDS**

**FUNCTION KEYS** (KNOBS)

*lower case* and # stand for your specific values

1. Type **LOGIN <enter>**, **name <enter>**, **password <enter>**


3. **LK**: interactive lock. **PF3** - Lock off. Set (LGAIN) and (LPOWER) to card values for lock solvent, adjust field (Z0) for zero frequency signal, **PF4** to lock.

4. **SHIMI**: interactive shim. **PF5** and adjust (LPHASE) for maximum lock level, then **PF1** and adjust (Z1) and (Z2) for maximum lock level.

5. **SETUP(nucleus, solvent)** Nucleus: **H** or **C** Solvent: **CDCL₃, D₂O, ACETON, or DMSO**


8. If phasing is still not right: **QP** - quick phase: Put cursor (CR) on rightmost peak, adjust (RP) to phase rightmost and (LP) to phase leftmost peak, then **DS** to apply correction.

9. Expand region of reference peak: **PF3** toggles among one cursor (CR), two cursors (LCR) and (RCR), and no cursor. **PF4** expands the region defined by two cursors. (SP) - move display window right / left. (WP) - expand and contract display window.


11. Integration: **CZ** - clears integration markers **PF1** - displays integral. Use (CR) and **PF7** to mark beginning and end of each integral region, **PF10** to blank. Adjust (IS) - integral scale. **INS = 1** **DLI** - display list of peak areas. To normalize integral, **INS = #**, where # = (peak area) / (number of H's) and (peak area) is taken from the list for a peak of known number of H's. **DLI** to verify that selected integral has desired value. **DS PF1** – to redisplay spectrum and integrals

12. Peak List: **PF6** - adjust (TH) to set threshold for peak lists. **DPF** - display ppm values on screen. **LL** - print a peak list on the printer.

13. Add title: **TEXT('title')** where **title** describes your sample, your name, etc. **DS PF1**

14. Plot Spectrum: Make sure paper is loaded in plotter. Repeat step 9 above to expand desired region of spectrum, (VS) to adjust vertical scale (or use **VSADJ**).

   To plot typical spectrum: **PL PSCALE PIRN PPF PAP PAGE <return>**

   **PL** - plots spectrum and integrals (if displayed); **PSCALE** - plots ppm scale; **PIRN** - plots normalized integration areas; **PPF** - plots peak ppm values on plot; **PAP** - prints parameters with title or **PLTEXT** - prints title only; **PAGE** – sends plot data to the printer

15. **E** - eject sample. **I** - insert standard (CHCl₃ in CDCl₃).

   Repeat step 3 above with standard sample so lock is stable and on-scale.

16. Type **LOGOUT <enter>**

Other Options:

*Retrieve Shims:* **RTS** (filename) **SU** (see corkboard for most recent shim file)

*Abort Acquisition:* **/A** - abort acquisition. Largest completed multiple of **BS** is available.

*Floppy Disk:* **FORMAT(DSK5)** - format a new 5 1/4" floppy disk. **SVF(DSK5.filnam)** - save FID to floppy disk as "FILNAM". **RT(DSK5.filename)** - retrieve FID.