

III. Primer on Bruker EP Mode – Most Common Uses

by *cg fry*: revised 22-Sep-00

Enter by typing **EP** <RET> at DISR 1. 2. or 3. prompt. Note in EP mode that the region of text has changed from the top of the screen to the bottom. EP mode is now ready to accept a variety of single letter commands, used *without* pressing <RET>. The <RET> key will back you out of command levels in EP: e.g., in phasing <RET> will back out to top EP level, and another <RET> backs out to DISR. The following five commands are the most common:

- ☛ **E** - toggles between three different cursor display modes
- ☛ **:** - toggles between Hz and ppm display
- ☛ **P** - phase adjust:
 - A-knob moves spectrum horizontally
 - B-knob expands/contracts region on screen
 - C-knob performs 0-order phase correction (<CNTL>C reverses)
 - D-knob performs 1st-order phase correction (<CNTL>D reverses)
 - i. expand using B-knob onto a large peak on one side of the spectrum
 - ii. enter phase mode by pressing **P** (do not press <RET>)
 - iii. phase 0-order with C-knob (if hit end of knob, press <CNTL>-C to continue phasing in same direction)
 - iv. move to large peak furthest away using A-knob; correct 1st-order with D-knob
 - v. use **M** to save

M will memorize phase adjustment and return to EP mode
 <RET> will ignore phase adjustments and return to EP mode
- ☛ **G** - set reference
 - i. use A- and B-knobs to center and expand about reference peak
 - ii. use C-knob (course) and D-knob (fine) to set cursor on reference peak
 - iii. press key **G** and enter reference (e.g., 0P for TMS, 7.24P for CDCl₃)
- ☛ <CNTL>**O** - automatic SW and O1 redefinition
 - i. expand using B-knob to region you want as full spectrum
 - ii. move cursor to center of screen using C,D-knobs
 - iii. press <CNTL>**O**. The computer will set new SW and O1 values (check AQ is SW is substantially changed!).
- 8** - estimate signal-to-noise (S/N); make sure cursor is on peak of interest, and if possible have that peak be the only one on the display (use A — A command)
- 9** - toggle between points connected or points only display