DEPT Experiment Guide

Step	Function or Dialog Box	<Keystroke>/[Select]/<*Data Entry*>	Comment
1	Sample		See Sample Preparation Guide. Position sample spinner using the depth gauge, place in probe.
2	Enter PNMR program.	<Alt+Tab>	(If necessary.)
3	Select ^{13}C observe.	**H1>**nu C13<Enter>	Required only if the prompt is not **C13>.**
	Optional: Shim sample.	**C13>**shim<Enter>	Follow on-screen directions. Shims are optimized.
4	Acquire ^{1}H spectrum.	**C13>**zgh<Enter>	
5	Enter NUTS and process data.	<Alt+Tab> **>**a2	Process ^{1}H spectrum with a2 link. Trim phase as required. Use cursor to determine TMS peak position in ppm, including sign.
6	Enter PNMR program.	<Alt+Tab>	
7	Enter TMS peak position.	**C13>**fo<Enter> *value*<Enter> 0<Enter>	In the first dialog box enter the current position (in ppm) of the TMS peak. In the second dialog box enter 0 (zero). Repeat to confirm.
8	Verify parameters.		Verify that parameters make sense; for neat samples NS=12, for 1M samples NS=60.
9	Run DEPT program.	**C13>**dept<Enter> then *filename*<Enter> or <Enter> for default	The program requests a file name while providing the default name My_dept. Use the default unless planning to save the data long term.
10	Acquire data.		The pulse program runs DEPT45, DEPT90,and DEPT135, requiring about 3 min using the parameters specified in step 8.
11	Enter NUTS**.**	<Alt+Tab>	
12	Process data.	<Ctrl+F11> then **[filename][Open]** to select a file or **[Open]** for default	Data is processed with macro aii_dept.mac. Use mouse to select default data file [my_dept] or named data file [filename].
13	Enter line broadening.	*value*<Enter>	LB = 0.5 Hz is a typical value.
14	Display Stacked Plot.	↑ and/or ↓	Macro applies an approximate chemical shift scale, sets display for 220 to -10 ppm window, and displays a stacked plot of the DEPT45, DEPT90, and DEPT135 spectra. Adjust amplitude with Page Up/Page Down, arrow keys or vertical slider
15	Print Stacked Plot.	<p>	
16	Exit Stacked Plot.	<Enter>	To redisplay stacked plot from the base level NUTS prompt, use the command "sp".