

COSY 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	Set Experiment Parameters.	H1>cosy<Enter>	
4	Enter file name.	<i>filename<Enter></i> or <i><Enter></i> for default	Enter filename if desired, but it is usually better to use the default (My_cosy) unless one intends to save the data long term.
5	Set relaxation delay.	<i>value<Enter></i>	RD=2 seconds is typical for COSY.
6	Set number of scans.	<i>value<Enter></i>	NS=4 to minimize artifacts. NS=1 to save time.
7	The gain is adjusted		The spectrometer adjusts the receiver gain.
8	Acquire data.		
9	Enter NUTS.	<Alt+Tab>	
10	Process data.	<Ctrl+F5> then [filename][Open] or [Open] for default	Runs aii_cosy.mac. Use mouse to select data file in dialog box.
11	Enter data acquisition parameters.	[OK]	Add name, date and experiment if desired. Macro then shows an intensity plot when done.
12	Add borders.	[border] [Pick top spectrum] [filename] [open]	Open border menu; scroll to pick <u>top</u> spectrum. Repeat the process for the <u>left</u> border.
13	Adjust data display.	>mh	Adjust M inimum H eight for best display. (Hint: Look for off-diagonal peaks. MH value normally is between 0.5 and 3.0 for COSY.)
14	COSY only: Set plot limits.	>zo <f> <Ctrl+E>	Enter start and end of zoom for both dimensions. Exit zoom with <Enter><Enter>
15	Display contour plot.	<c>	Change to contour display before plotting.
16	Print Contour Plot.	>pl	Then <Enter> to exit 2D display mode. To redisplay intensity plot from the base level NUTS prompt, type the command "ip" or "cp".