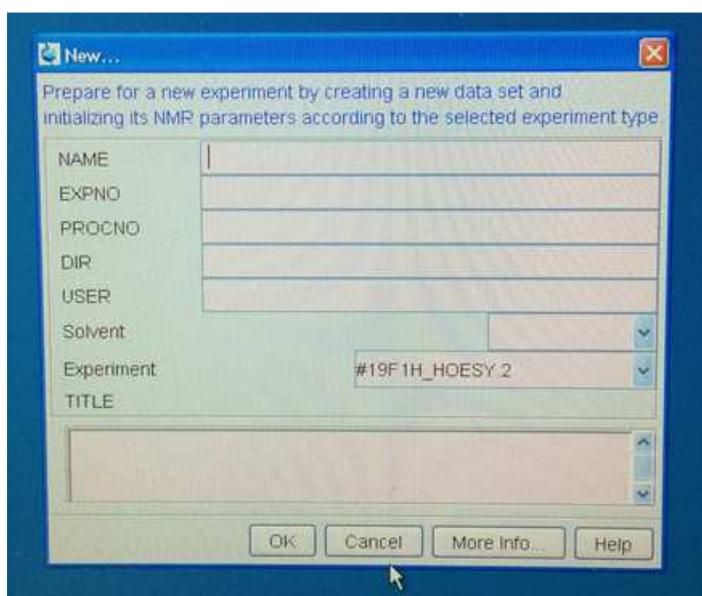


## User manual for 1D experiments on DPX300 and DPX200

There is always a sample inside the NMR-instrument, to get this sample up you have to press button 1 on the control panel (Sample up/down, figure 1). Remove the standard sample and replace it with your sample before you press the same button to lower your sample into the instrument.

Before you start running your experiment, make sure the light over button 2 is lit (figure 1). If not, press the button and wait until the light stops blinking.

1. When your sample is inside the instrument you write the command “new” ↵ in the typing line, this command will open a window where you must fill in the parameters.



Name: Is the name of your sample.

EXPNO: 1

PROCNO: 1

DIR: D:\uio\DPX200-11 for the DPX 200 instrument and

D:\uio\DPX300-09 for the DPX 300 instrument.

USER: Your username.

Solvent: choose the one you have used.

Experiment: Choose the experiment you want to run.

2. Type “getprosol” ↵

Before you type a new command you must wait until the previous task is finished.

3. Type ”ii” ↵

4. Type “lockdisp” ↵. This command will open a new window shown in figure 2.

5. Type “rsh” ↵ and choose the shim file “QNP. 051019.luf” on both instruments. If the QNP probe is not in the magnet select another shim file with the name BBI/TXI/BBO/BBI in the file name.

6. Type “lock” ↵ and choose the solvent that you have dissolved your sample in.

7. Next, you need to shim the instrument. Start by pressing “Z<sup>1</sup>” on the control panel and then turn the wheel. The lines in figure 2 will then move up or down (right picture in figure 2), the purpose is to get the green and red lines as high in this window as possible. If the lines go

over the top of the window you need to press “lock gain” on the control panel, turn the wheel until the lines are approximately in the middle of the window and then press “standby” before you start over again, by pressing “Z<sup>1</sup>”. After you get the lines as high as possible press “Z<sup>2</sup>” and repeat what you have just done by turning the wheel and then finish the shimming process by pressing “standby”.

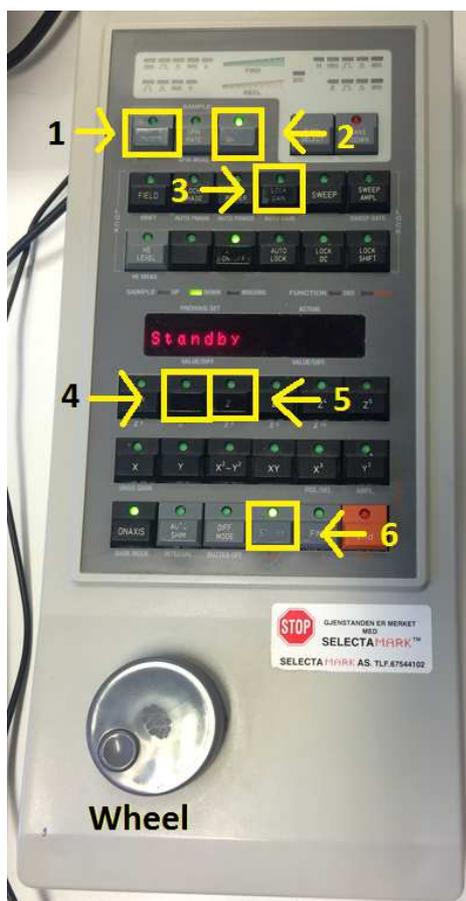
8. Type “rga”↵ and wait until it is finished.

9. Type “zg”.↵ This will start the experiment.

10. When the experiment is done type “efp”↵ followed by “apk”↵ to see the spectra.

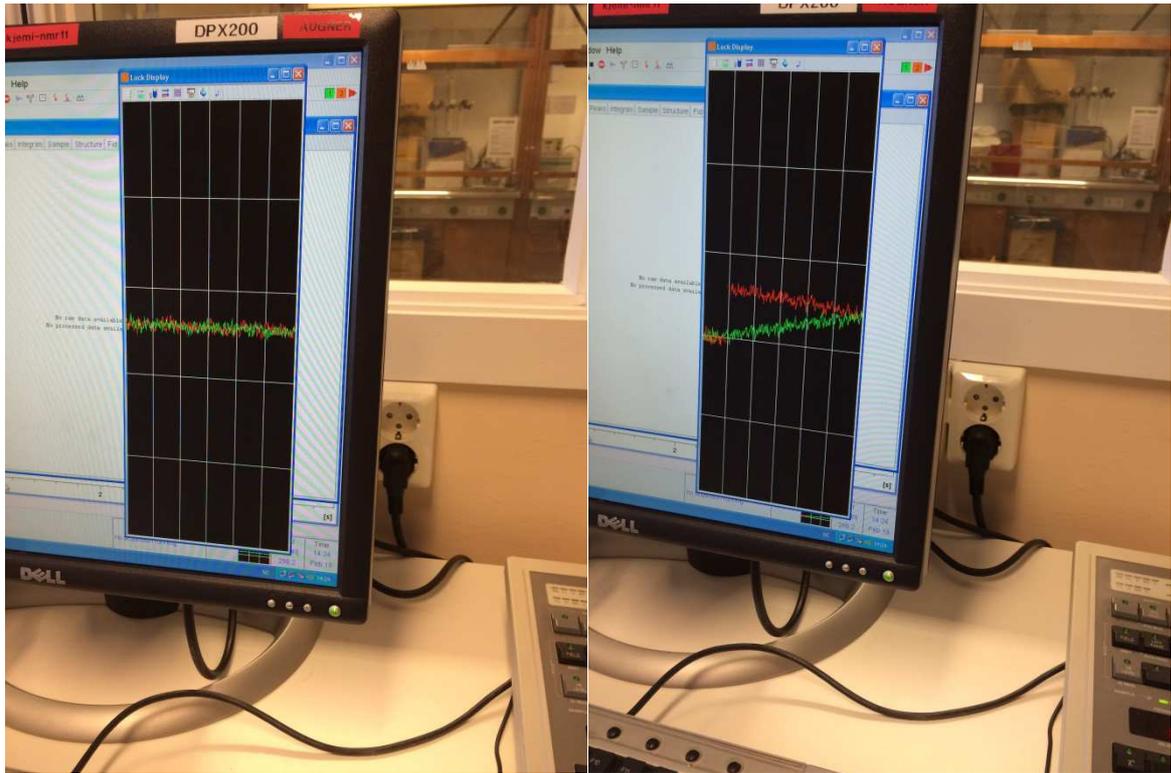
If you want to see the spectra before the experiment is done you can type “tr”↵ followed by “efp”↵ and “apk”↵.

When you are done remove your sample from the instrument and insert the sample you took out in the start and lower it into the instrument by pressing button 1. Type “lock”↵ and wait for it to finish before you close the program.



1. Sample up/down
2. Spinn on/off
3. Lock gain
4. Z<sup>1</sup>
5. Z<sup>2</sup>
6. Standby

**Figure 1. Control panel for the DPX200 instrument (the DPX300 instrument does not have a Z<sup>0</sup>).**



**Figure 2: Shimming window.**