

2H NMR on the Avance 300 spectrometer using a QNP-type probe

General instructions for a ^2H measurement:

(1) create a file to store the data, type “new”

optional: 1H NMR to lock (calibrate) and shim the sample

(2) create a new file for the deuterium experiment, type “new” and choose deut-si
OR just read in the parameter set, type: rpar deut-si

(3) on the BSMS keypad: turn off the lock and set lock power to -60dB

(4) make sure the sweep button is NOT lit (BSMS keypad)

(5) change the cables:

From the **back** of the preamp, remove the 2H transmitter cable and leave it on the floor. Take the X cable going into the preamplifier (N-type connector) – disconnect it from the preamp and connect it to the 2H preamplifier input.

(6) Don't rga, try setting rg to 1024 and then zg (adjust the rg if needed).

Returning the spectrometer setup to normal acquisition:

(1) reconnect the cables at the back of the preamp X-->X and 2H-->2H

(2) open any 1H experiment and type **ii** <enter> to turn the lock back on for the next user.