

Deuterium NMR

1. Lock and shim a sample with the same solvent (but deuterated) as the sample for you will be using for deuterium NMR.
2. Turn the lock off, (Lock On/Off button on the BOSS keyboard).
3. Turn the lock sweep off, (Sweep On/Off button on the BOSS keyboard).
4. Turn the lock power to the minimum, (Lock Power button, and the dial on the BOSS keyboard).
5. Remove the lock cable from the probe.
6. Remove the deuterium band stop filter from the X cable. (Between the HPPR and the probe).
7. If you are using the BROADBAND probe, make sure that the cable for the **X** channel is connected to the **X** port of the probe. Use the normal values of p1 and pl1.

If you are using the QUAD Nucleus probe, the cable for the **X** channel must be plugged into the **LOCK** port of the probe. Note that **you MUST CHANGE THE VALUES OF p1 and pl1.**

8. Go to eda and change LOCNUC to off. Also set p1, pl1 and de according to the table below.

| Probe | | |
|-------|--------------|---------------|
| | Broadband | Quad Nucleus |
| p1 | 5 μ sec | 100 μ sec |
| pl1 | -6 db | +8 db |
| de | ~6 μ sec | dw / 2 |

9. Go to edasp and
 - (a) change the nucleus (NUC) to 2H.
 - (b) route the 2H signal through the X channel.
10. Start acquisition, rga, zg, etc..