

How do I increase 'nt' once the experiment has started? (Varian Unity, Mercury, and Inova)

All written in **bold type** are directly input at the prompt

This is actually quite simple and can be done as follows:

- If the experiment has not yet completed type **sa** (stop acquisition).
 - If the experiment has completed proceed to the next section
- Type **gain?** This queries the instrument for the gain setting. You should see something like *gain = Not Used (36)* in the text window. This indicates that the autogain routine had automatically set the receiver gain to 36.
- Set the gain to the value in parentheses. Type **gain=36**.
- Change the value of nt. If you wish to take 1024 scans type **nt=1024**.
- Type **ra** (resume acquisition).

The next section... Adding scans after the acquisition has completed. (Varian Unity, Mercury, and Inova)

This trick allows you to add scans to a completed experiment by adding two fids together.

- Type **jexp1** and load the file to which you would like to 'add' scans.
- Type **nt?** If this is a standard parameters ^{13}C then $\text{nt}=256$. Remember this number.
- Type **mp(2) jexp2 nt=512**. This moves the current experimental parameters (experiment 1) to experiment 2, joins experiment 2, and changes nt in experiment 2 to 512. You are not limited (up to 10^6) and may change nt in experiment 2 to any number of additional transients you wish to acquire.
- Type **ga**.

Once the experiment is complete, or when you have accumulated enough extra signal

- Type **clradd**. This clears the add/subtract experiment (exp5).
- Type **jexp1 add jexp2 add**. This adds the contents of both experiment 1 and experiment 2 to the add/subtract experiment (exp5).
- Type **jexp5**.
- Type **setvalue('nt',768,'processed')**. This sets the value of the parameter nt in the experiment tree. Note that 768 is the total number of 'nt' from experiments 1 and 2 in the example above.
- Type **setvalue('ct',768,'processed')**. This sets the value of the parameter 'ct' in the experiment tree.
- Type **svf** to save your new and improved spectrum.
- Type **wft**. Done!