

Manual Tune for Mass Spectrometer

1. In the **Top Window**, and **Tune MS Menu**, choose **Manual Tune.**, then choose **atune 2.0.**
2. In **Adj Param**, choose **Temperatures**, to check if the source temperature is at the set temperature. This must be equilibrated for a good tune.
3. In **Adj Param**, choose **Edit MS Param.**
4. Click **Prof** (profile) in lower left hand corner.
5. Check to counts for the 69 peak. They should be between 70K-150K. If they are outside that range, adjust by changing the EMvolts. More volts, more counts.
6. You want the three single peaks for 69, 219 and 502 to be tall and thin, with peak widths (PW) around 0.5. The peak shape can be adjusted with the AMU Gain and the AMU Offset.
7. You want the 219 peak around 40-80%, and the 502 peak around 1-3% (of the 69 peak). If these numbers are not in the appropriate range that can be adjust with the EI modes in this window. To change any of the values in the window, you can type in new values, or highlight the value and adjust the sliding scale on the lower right of the screen. You can also adjust these values through the Ramp Parameters. (See below.)
8. In the Ramp Parameters, Repeller, Ion and X-ray are useful for tuning. Choose one, and wait for the curves of the three ions to appear. Then you can move the line with the cursor to a position that is more in line with the %'s you want for the three peak. Click OK. Do this for all three Repeller Parameters mentioned.
9. Go back to Edit MS Parameters to see the result of the tuning and adjust if necessary.
10. In the **File Menu**, choose **Save**; click **OK**.