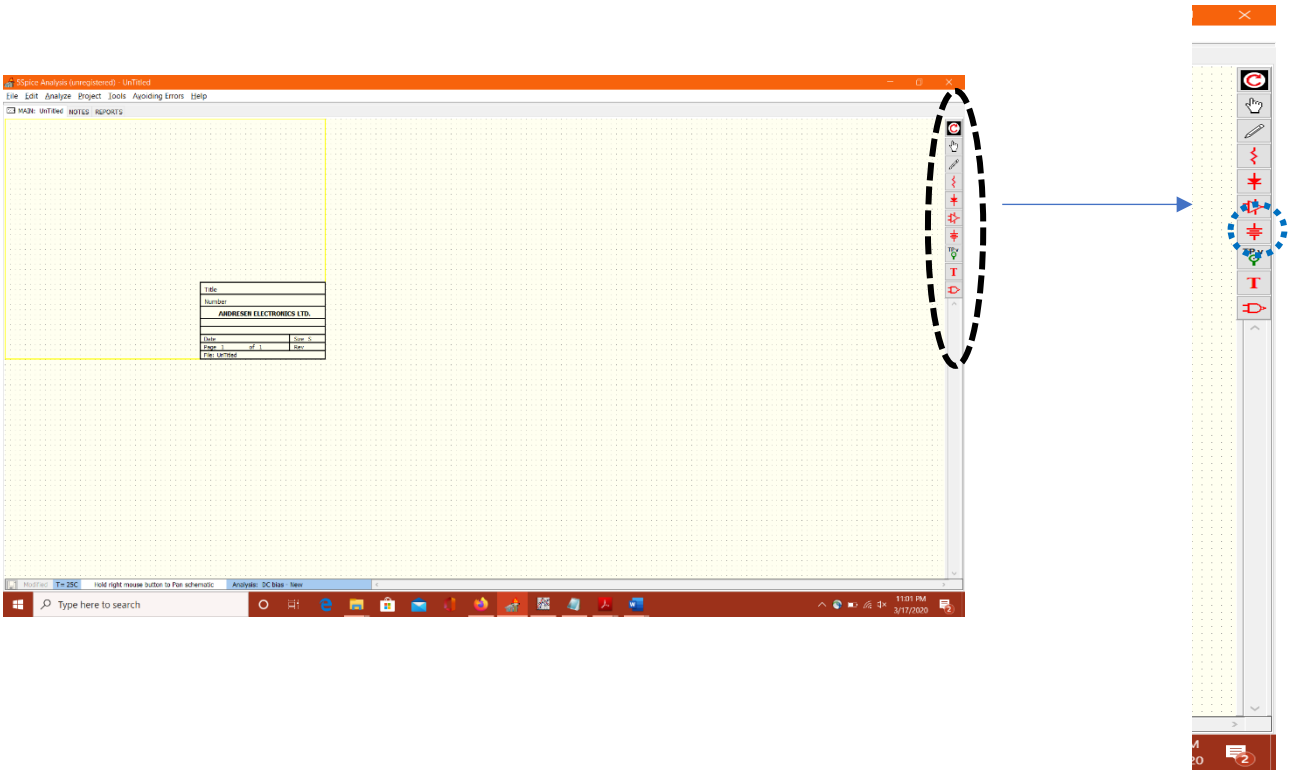
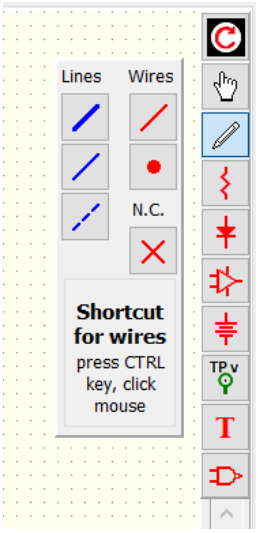
5Spice Tutorial

Building a circuit:

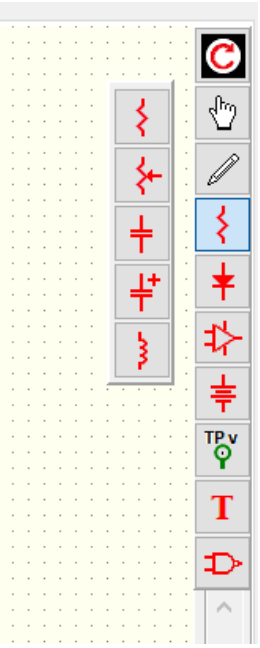
- To add a component to the design sheet, add the components from the panel on the right hand side of the 5Spice page.



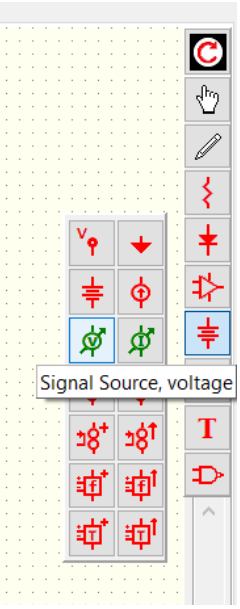
- You can add many components by using the different options available.



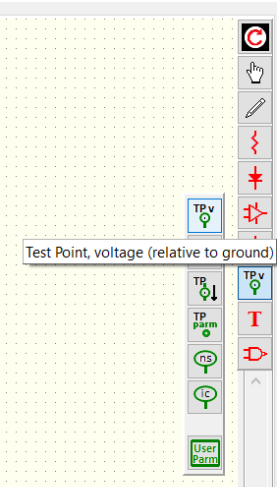
Use this panel to select the connector wires



Select passive components



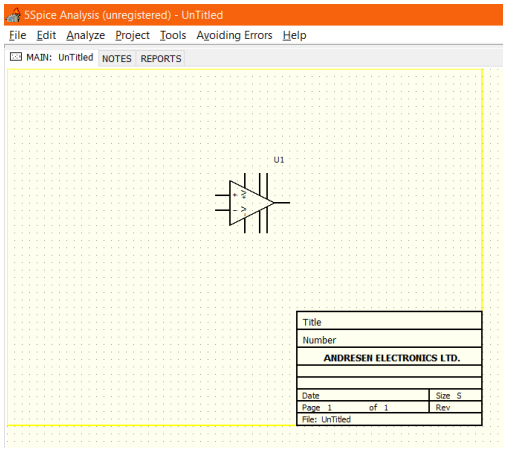
Select signal generator/power supply

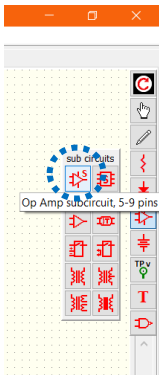


Select test point for plotting AC or transient analysis output

- For components like, diode, transistors, OPAMPs, we need to select the type of component to be used.
- After you place the component on the design sheet, right click on the component and select the edit parameter option.
- Search for the component you are looking by writing the component in the search.
- Then select the component and press ok.

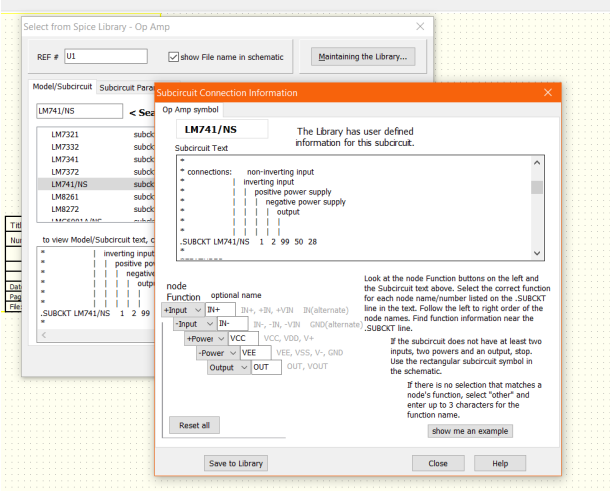
Here is an example for adding OPAMP on the circuit which a slightly complicated process for adding a component to the circuit. A similar process can be followed to add transistors as well.

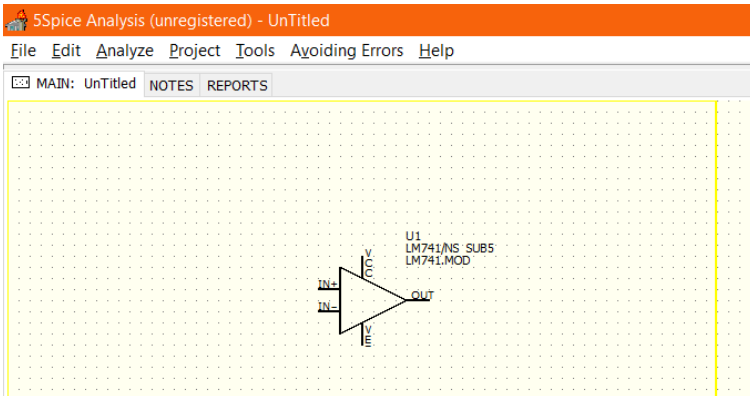




From the op-amp sub circuit, select the one with 5 – 9 pins, so you can control the 'Turn ON' voltage for the IC741

- Right click on the op-amp and click on edit parameters. Search for 'LM741'. By selecting on LM741, click on 'Add Connection Information'.





Pick the model for IC 741 and add the connection information as shown in the left figure. Once you save it to the library and close the window, it should show the IC as shown in the right picture.

Simulation:

- Once you have test points setup for input and output, you can use the Analyze menu and Select/Edit command to setup the type of analysis – AC, DC or Transient Analysis.
- The following figures explain how to select your analysis and setup the graphs.