MultiSim7 Basic Instructions

Placing Virtual Components

Use the **Virtual Toolbar** to place virtual components on your workspace.

To place a virtual component:

1. Click on the desired button in the **Virtual Toolbar**.
2. From the toolbar that displays, click on the desired virtual component. The cursor changes to a “ghost” image of the component you wish to place.
3. Click on the workspace in the desired location to place the virtual component.

Moving a Placed Component

You can move a placed component to another location by doing one of the following:

1. Selecting the component and pressing the arrow keys on your keyboard to move it up, down, or to either side in increments of one grid space.

Copying a Placed Component

To copy a placed component:

1. Select the desired component and choose **Edit/Copy**. Or Right-click on the desired component, and, from the pop up menu that appears, choose **Copy**.
2. From the **Edit** menu, choose **Paste**. Or Right-click anywhere on the circuit window and, from the pop-up menu that appears, choose **Paste**.
**Wiring Components Automatically**

To wire two components together automatically:

1. Click on a pin from the first component to start the connection (your pointer turns into a crosshair) and roll the mouse. A wire appears, attached to your cursor.
2. Click on a pin on the second component to finish the connection. Multisim automatically places the wire, which snaps to an appropriate configuration. After a wire is connected between two pins the cursor returns to its normal mode and is ready for your next command.

**Wiring Components Manually**

To wire two components together:

1. Click on a pin from the first component to start the connection (your pointer turns into a crosshair) and drag. A wire appears, attached to your cursor.
2. Control the flow of the wire by clicking on points as you roll the mouse. Each click “fixes” the wire to that point.

**Modifying the Wire Path**

To alter the shape of the wire once it is placed:

1. Click on the wire. A number of drag points appear on the wire: Click any of these and drag to modify the shape.
2. Or, more commonly, Move your cursor anywhere on the wire. When your cursor changes to a double arrow, click and drag, in the direction of the arrows, to modify the shape. You can add or remove drag points to give you even more control over the wire shape.

To add or remove drag points, press CTRL on your keyboard and click on the wire at the location where you want the drag point added or removed.
**Moving a Wire**
To disconnect a wire and move it to another location in your schematic:

1. Place your cursor at the point where you wish to disconnect the wire. The cursor changes to an “x” with two parallel lines, as shown below.
2. Click once. The cursor changes to a crosshair.
3. Move the cursor to where you wish to reconnect the wire and click once. The wire is now connected to the new location.

**Rotating/Flipping Components**
You can rotate or flip a component by either using the pop-up menu or selecting the component and using commands from the Edit menu. The instructions below describe the pop-up menu method only, but the commands for rotating/flipping components that are found in the Edit menu are the same.

To rotate a component:

1. Right-click on the component.
2. From the pop-up menu that appears, choose 90 Clockwise to rotate the component 90 degrees clockwise. Or Choose 90 CounterCW to rotate the component 90 degrees counter clockwise.

**Modifying Component Labels and Attributes**
To assign a label to a placed component:

1. Double-click on the component. The component’s “properties” dialog box appears.
2. Click the Label tab:
3. Enter or modify the label text (which must be composed of letters or numbers only — no special characters or spaces).
4. Enter or modify the component attributes (which can be any name or value you choose to give them). For example, you could give the component the manufacturer name or a name that is meaningful to you such as “new resistor”
5. Select the component attributes to display by clicking in the Show column. Attributes will be displayed with the component.
6. To cancel your changes, click **Cancel**. To save your changes, click **OK**.

**Adding an Instrument to a Circuit**

To add an instrument to a circuit:

1. From the Instruments toolbar, click the button of the instrument you want to use.
2. Move the cursor to the location on the circuit window where you want to place the instrument and click. The instrument is placed with the connections landing on the grid. The instrument icon and the instrument identifier appear. The instrument identifier identifies the type of instrument and its instance.
3. To wire the instrument into the circuit, click on a terminal on the instrument’s icon and drag a wire to the desired location in the circuit (a pin, wire, or junction).