

The Viewing Tools

The viewing tools, consisting of the Hand and the Magnifying Glass tools, are used for panning and zooming within the three Orthogonal View Windows, and rotating, banking, and panning within the 3-D angled Window.

The Hand Tool

The Hand tool scrolls or pans the drawing scene inside the Orthogonal Viewing windows. Simply grab an area of the scene in the window and move it to a new location.



Note: The Hand tool can be selected directly by typing "h".

In the Angled View window, the Hand tool acts to rotate the viewing scene like a virtual trackball. The cursor turns from a hand to a four-way arrow cursor when moved into the Angled view window to indicate this unique feature. Simply grab an area of the scene in the window and rotate it to a new viewing angle.

In the Angled View, if you hold the CONTROL key while dragging the Hand tool, this will cause the view to "bank" to the left or right. That is, the view will rotate about an axis that comes straight out of the screen.

Also in the Angled View, if you hold the OPTION key while dragging the Hand tool, this will change the cursor back to the Hand icon and the 3-D scene will pan or scroll across the view window.

Also in the Angled View, if you holding the COMMAND key while dragging up or down will cause the screen to zoom in or out, respectively.

The Space Bar can be used at any time while in another tool to temporarily invoke the Hand tool. This is a short cut for using the Hand tool from the keyboard at any time without having to choose the tool from the Tool Palette.



Note: The location of the Magnifying Glass cursor when you click the mouse becomes the center of the view after the zoom is complete.

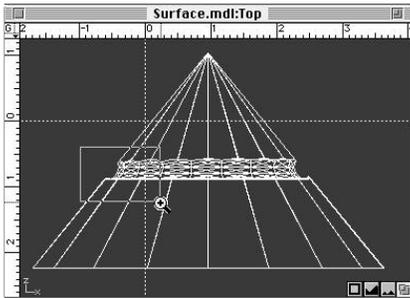
The Magnifying Glass

The Magnifying Glass is used for **Zooming In** and **Zooming Out** on portions of your design to see things more clearly and in order to have more accuracy when working.

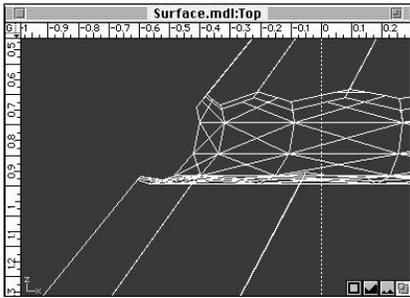
The Magnifying Glass only works in the orthogonal views. It has no effect in the Angled View window.

Using the Magnifying Glass

- 1) Select the Magnifying Glass tool from the tool palette.
- 2) Move the cursor into one of the Orthogonal view windows
- 3) **To Zoom In**
 - a) Click on a point of the scene to zoom in by the percentage indicated in the Tool Info bar.
 - b) Drag the Magnifying Glass cursor in a diagonal direction to create a zoom-in frame. The area enclosed in the zoom-in frame will be enlarged to fill the current window when the mouse is released. The zoom factor will be arbitrary using this method.
- 4) **To Zoom Out**
 - a) Hold the OPTION key together with the SPACE BAR (notice that the cursor changes to show a minus sign rather than a plus sign) and click at a location on the scene to zoom out by the percentage indicated on the Tool Info bar.



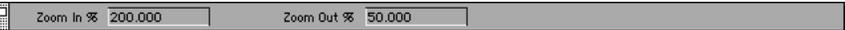
Select area to magnify.



Release to display magnified area.

Note: The double-click for “Fit-to-Window” will work in the Angled View, even though the cursor doesn't appear as a Magnifying Glass in that view. (It shows as an arrow cursor.)

If you want to change the percentage amount of **Zoom-In** or **Zoom-Out** that is used when clicking with the Magnifying Glass, just enter a new value in the appropriate data field in the Tool Info bar.



Then, every time you click, the scene will **Zoom-in** or **Zoom-out** by the percentage you have specified.

Other Magnifying Glass Functions

Double-clicking in any of the view windows is the same as a “Fit-to-Window” command. The view will be automatically adjusted so that all of the current objects will fit as large as possible into that window.

All of the **Standard Keyboard Modifiers** are in effect. See the description of these functions earlier in this chapter.