

SELECTIONS

(This is all covered in Chapter 21 of the Lightwave PDF manual and should not be considered a substitute for reading that material! Chapter 21 begins on page 631 of the pdf document.)

There are four selection modes in Modeler: Points, Polygons, Volume (exclude) and Volume (include). You can use the buttons on the bottom of the Modeler interface to set/see the current mode, you can use the space bar to cycle through the different modes, or you can use hotkeys to select a specific mode.



The current mode in this screenshot is "Points" and there are 0 points currently selected (see the box directly above the Points button).

Remember: with nothing selected, your transformation tools modify the ENTIRE model. This is handy for gross positioning, orienting, and re-sizing.

Clearing out a selection

To select a subset of the model, first pick the model you want to work in (Points or Polygons). There may already be a selection even if you can't see it on the window - be sure to check the numerical count of selected items! To empty out a selection, click once in the numerical count box (or any other "idle" part of the interface).

Selecting when there is nothing currently selected

Select by holding down the mouse button and dragging over those points/polys you want to select. You may unwittingly select points that aren't visible, particularly when selecting in orthographic views. To de-select the unwanted points, use a different view of the object.

You can also "lasso" select a bunch of points by right-clicking and dragging out an area (on the Mac, this is holding down the apple key, clicking, and dragging).

Changing an existing selection

Once you have a selection (check the count!), you cannot select points in the way just described. To add more points, you have to hold down shift and either click or RMB click as described above. To remove points, simply click on them.

It is often handy to invert the current selection, namely, select everything that is currently not selected (and de-selected what is selected). You can do this by hitting " (the double quote).

It is also very handy to be able to select all the geometry connected to the current selection. Do this by hitting] (the right square bracket).

MAKING PRIMITIVES

(refer to Chapter 22 of the Lightwave manual, which begins on page 649 of the pdf file.)

Choose the Create tab, located at the top of the modeler interface.



Along the left you will see tool choices. Note box (cube), ball (sphere), disc (cylinder), and cone.

With any of these tools selected, you can pop-up the numeric options panel (n) to set the parameters of the tool by hand. This is very useful if you want to make sure your shapes are proportionally scaled, have a particular number of spans/edges, etc.

Hitting enter will drop the tool, leaving you with your box, ball, or whatever.

MODIFYING THE MODEL

(You guessed it! Chapter 23, which starts on page 684)

The transformation tools we've seen are: translation/move (t), rotation (y), size (H), and stretch (h). The paradigm for modifying an object in Modeler is to make a selection, choose the appropriate tool, use it, then hit enter to "drop" the tool. Your selection will be preserved for most tools, so you can do a translation, then rotation, then translate again without having to re-select.

Unlike Lightwave, when you've changed something in modeler you don't have to set a keyframe.

Remember that it matters where you click the mouse button for the scale, size, and rotation tools! The pivot of the operation in question is set where you click, so it's generally smart to click in an orthographic window.

To find out more about your current model, use the statistics window (w).

Remember cut, copy and paste. Hit "c" to copy the entire model (or current selection) into memory. Then move the stuff you just copied so that when you paste with "v" you don't paste right on top of the original. To delete parts of a model, select them and hit "x" to cut.

HOT KEY/MOUSE SUMMARY

<space>	toggle between selection modes
LMB	(with no selection) adds to the selection (with a selection) will de-select
RMB	(with no selection) lasso add to selection (with a selection) lasso de-select
Shift-LMB	(with any selection) adds to the selection
Shift-RMB	(with any selection) lasso-adds to the selection
"	invert the selection
]	select all connected geometry
t	choose the move tool
y	choose the rotate tool
H	choose the size tool
h	choose the stretch tool
<enter>	drop the current tool
n	open/close the numeric options panel
w	open/close the statistics panel
c	copy current selection (or all)
v	paste
S	save as (don't forget to change the name each time you save)
-	hide the selected geometry
\	unhide