



INTRODUCTION

EnSight provides various modes that control global viewing behavior. Three of these modes are discussed here: perspective/orthographic projection, bounding box display modes, and static lighting.

EnSight can display viewports in either *perspective* or *orthographic* projection. A perspective projection is how we normally view the world: objects that are farther away appear smaller. An orthographic projection removes this effect: objects appear the same size regardless of distance. The projection setting can be specified on a per-viewport basis.

By default EnSight draws every point, line, and polygon for every visible part *each* time the Graphics Window updates. For very large models (or slow graphics hardware), this behavior leads to unresponsive manipulations since the update lags behind the corresponding mouse motion. Fortunately, EnSight provides other display modes that improve responsiveness. *Dynamic Box* mode displays bounding boxes around all visible parts during interactive manipulations. When the mouse button is released, parts are drawn normally. *Static Box* mode is like Dynamic Box, except that bounding boxes are displayed until the mode is changed (independent of mouse actions).

Surface shading operations are expensive for very large models. Since the shading is dependent on the orientation of the model with respect to the light sources, the surface colors must be recalculated each time the model moves. Static lighting mode precalculates surface colors for a given orientation and then uses these colors during subsequent transformations, resulting in improved interactive response.

BASIC OPERATION

Perspective/Orthographic Projection

The projection mode can be toggled either from a menu (View > Perspective) or in the VPort icon bar. To set the projection from the icon bar:

1. Select VPort in the Mode Selection area.
2. Select (click in) the desired viewport in the Graphics Window.
3. Click View Settings... to open the Viewport Special Attributes dialog.
4. Click the Perspective button to toggle the projection type in the current viewport.

Note that a viewport will only display a perspective projection if the global toggle (as set with View > Perspective) is on as well.





Detail Mode

The Detail Mode can be set either from a menu (View > Detail Mode >) or in the View Mode icon bar. To set the Detail Mode from the icon bar:

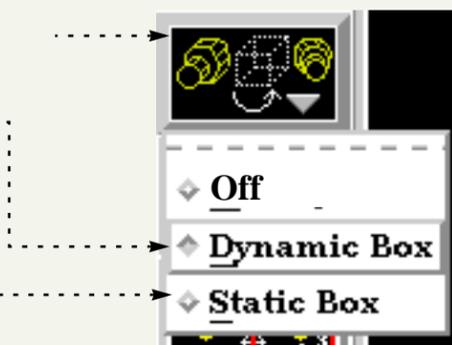
1. Select the View icon in the Mode Selection area.

2. Click the Detail Mode Pulldown.

3. Select Dynamic Box.

or

3. Select Static Box.



Select Off to return to standard display mode.

Static Lighting

The Static Lighting setting is only available from the View menu. Select View > Static Lighting to enable or disable static lighting. Although interaction speed is improved in static lighting mode, note that the light source appears to rotate *with* the object. This is often an acceptable tradeoff.

SEE ALSO

User Manual: [See “Part Mode”](#) and [Static Lighting](#)