MOD SET

SINS

XSI TO SINS: COMMANDS & SHORTCUTS

Ironclad
GAMES

I. Commonly Used Basic Modeling Commands and Shortcuts in XSI:

Section A: The Main Control Panel

(See Fig. 1.1 for a quick visual overview)

Section B: Object Creation

Basic objects in xsi are called primitives. To start off a polymesh model, under the "Get" section of the Model Menu, go Primitive > Polygon Mesh > (then pick the appropriate geometry).

Section C: The Middle Mouse Button

Previous commands can be repeated by middle-clicking on that command's top-level menu (e.g. if you had previously issued the command Model > Get > Primitive > Polygon Mesh > Cube, you can build another cube by simply middle-clicking on the "Model" menu header instead of navigating all the way to the "Cube" command).

Section D: Selection

Note: Softimage|XSI uses several Selection Models, meaning there are different set-ups by which you can select/deselect objects and components. This guide assumes that you are using the Softimage|XSI Selection Model. For additional info on this, go Help > XSI Guides > Scene Elements > Selecting Objects.
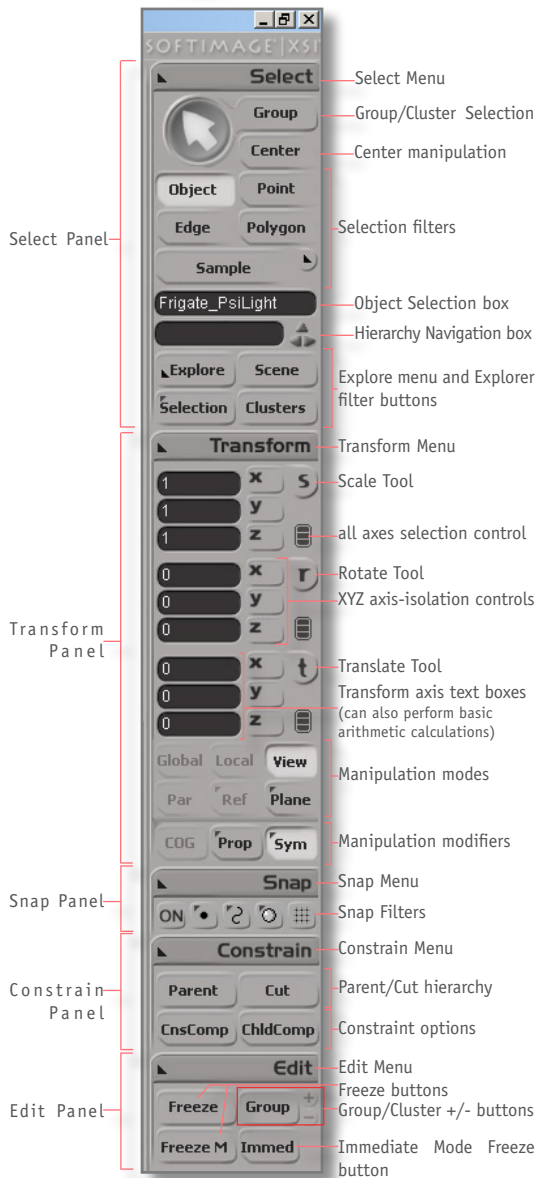
Select Panel

Transform Panel

Snap Panel

Constrain Panel

Edit Panel

Select Menu
Group/Cluster Selection
Center manipulation
Selection filters
Object Selection box
Hierarchy Navigation box
Explore menu and Explorer filter buttons
Transform Menu
Scale Tool
all axes selection control
Rotate Tool
XYZ axis-isolation controls
Translate Tool
Transform axis text boxes (can also perform basic arithmetic calculations)
Manipulation modes
Manipulation modifiers
Snap Menu
Snap Filters
Constrain Menu
Parent/Cut hierarchy
Constraint options
Edit Menu
Freeze buttons
Group/Cluster +/- buttons
Immediate Mode Freeze button

Fig. 1.1: The Main Control Panel

Object Selection Mode:

`Space Bar` - activate Object Selection mode (then click or marquee/bandbox object to select it).

Component Selection Modes:

`t` - Rectangle Point mode (select points using mouse-clicks or rectangular marquee/bandbox selection).

`e` - Rectangle Edge mode (select edges using a rectangular marquee/bandbox selection).

`i` - Raycast Edge mode (select edges using mouse-clicks, or "painting" a selection).

`y` - Rectangle Polygon mode (select polygons using a rectangular marquee/bandbox selection).

`u` - Raycast Polygon mode (select polygons using mouse-clicks or "painting" a selection).

Component Selection Mode modifier keys:

`Shift` - add to the selection

`Ctrl` - subtract from the selection

`Alt+LMB` - select range of components. (LMB first component, then `Alt+LMB` last component).

`Alt+MMB` - select loops of components. (`Alt+MMB` first component then drag over to second component. For edges, Alt+MMB on first edge only, as direction of loop is already implied, unless you mean to select a loop of *parallel* edges).

Misc Auto-selection commands:

`Ctrl+A` - select all objects or select all components

`Shift`+`Ctrl` + `A` - deselect all

`Shift`+"`+`" - grow selection

`Shift`+"`-`" - shrink selection

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Fig. 1.2: Viewport tool bar

Legend:
a - Hide/solo/show all
b - Views menu (display specialized windows in viewport)
c - Memo Cams buttons (save and recall camera positions)
d - Camera icon Menu (commands for navigations/selection)
e - Eye icon Menu (hide/show scene elements)
f - XYZ Buttons (view standard plane views in 3D)
g - Display Type Menu (control how items are displayed)
h - Resize Viewport icon

Section E: Camera Manipulation

(See Fig. 1.2 for a quick overview of the Viewport tool bar.)

Note: Of the Main Camera Manipulation Tools, the Navigation Tool is the most commonly used. It is the equivalent of Maya's `Alt` key.

Main Camera Manipulation Tools:

`s` - toggle the Navigation Tool

    +LMB   -pan

    +MMB   -dolly

    +RMB   -orbit

`o` - toggle the Orbit Tool

    +LMB   -orbit

    +MMB   -orbit around y-axis of current camera focus

    +RMB   -orbit around x-axis of current camera focus

`z` - toggle the Pan and Zoom Tool

    +LMB   -pan

    +MMB   -zoom in

    +RMB   -zoom out

`p` - toggle the Dolly Tool

    +LMB   -dolly

    +MMB   -dolly in smaller increments

    +RMB   -dolly in larger increments

Auto-adjust based on selection:

`a` - frame all objects

`f` - frame selected objects/components

`Shift+a` - frame visible objects

`Alt+C` - center selection

Camera History:

`Alt+z` - undo last camera navigation command

`Alt+y` - recall last camera navigation command

`r` - resets current viewport to default camera position

Section F: Transform Tools

Note: Be mindful of the Manipulation Modes and Manipulation Modifier Buttons (see Fig. 1.1 under `Transform` Panel). If a transform does not work predictably, try turning these buttons on/off until you get the desired effect.

Main Transform Tools:

  `x` - toggle the Scale Tool

  `c` - toggle the Rotate Tool (+`Shift` rotates in 15-degree increments)

  `v` - toggle the Translate Tool

  Note: Hover and click on the colored axis controls on the manipulator itself to isolate transforms along a certain axis. For Scale and Translation, Hover and click in-between two axes controls on the manipulator to isolate along a certain plane. The active axis or plane will turn yellow.

Section G: Modify Component Tools

Note: (See Note for Section F).

Main Poly-modeling Tools:

  `Ctrl+D` - duplicates the selected component for extrusion (transform via x,c,v to extrude)

  `m` - toggles the Tweak Component Tool (press `l` to toggle weld-to-point tool; press `j` to toggle sliding)

  `n` - add polygon tool

  `\` - add edge tool (modifier: `Ctrl` snaps to center of edge)

  `]` - split edge tool (modifier: `Ctrl` snaps to center of edge)

     +`LMB` splits selected edge by adding a vertex;

     +`MMB` splits applicable edges in a loop or in a row

Deletion:

Delete - delete components (does not work on components along boundary edge)

Alt + **Delete** - delete components along boundary edge

Ctrl + **Delete** - collapse components

Proportional Modelling:

- also called soft-selection modeling or magnet modeling
- activated by the button labelled "Prop" on the bottom of the Transform Panel, right above the Snap Panel
- use the mouse wheel to adjust the radius of this tool
- **RMB-click** the button to edit options for this tool
- for additional info: Help > XSI Guides > Modeling and Deformation Basics > Manipulating Components > Using Proportional Modeling.

Model > Create > Poly. Mesh Menu:

Issuing commands from this menu CREATES a new object. In most cases, the object(s) from which the new object is based on still exists. The new object is still dependent on the original object(s) and will remain so until the new object is frozen. For example applying the command Model > Create > Poly. Mesh > Merge on objects A and B will create a new object C. Changing either A or B will thereby change object C until the time C is frozen (See Section H "The Freeze Button").

Model > Modify > Poly. Mesh Menu:

Issuing commands from this menu does not create a new object but instead merely edits the existing object. Contrast this with the Model > Create > Poly. Mesh menu which actually creates a new object.

Section H: The Freeze Button

The `Freeze` button, located on the `Edit` Panel, deletes all construction history on polymeshes and other objects. As a result, it severs dependencies as well as frees up system resources.

Section I: Floating Views

`7` - Render Tree
`8` - Explorer
`Alt` + `7` - Texture Editor

Section J: The Model and Render Tool Bars

`1` - Model
`3` - Render

Section K: Triangle Counter

To turn on the triangle counter, access the "`Eye`" icon Menu (see Fig. 1.2-e, page 3) located on the bar at the top of the viewport. Click on "`Selection Info`".

Section L: The Texture Editor

Note: Basic navigation, transform, and selection command shortcut keys merely mirror the shortcut keys for their modeling counterparts, with the exception of the "i" key.

Navigation:

   s - toggle the Navigation Tool

       +LMB   -pan

       +MMB   -dolly/zoom

Transform:

  x - scale (**LMB**: normal; **MMB**: isolate Y; **RMB**: isolate X)

  c - rotate (**LMB**: normal; **MMB**: 2x iterations; **RMB**: 4x iterations)

  v - translate (**LMB**: normal; **MMB**: isolate Y;   : isolate X)

Note: the Proportional Tool functionality also extends onto the UV Editor so be careful when turning it on.

Selection:

  t - point selection mode

  e - edge selection mode

  y or **u** - polygon selection mode

  Ctrl+a - select all

  Shift+Ctrl+a - deselect all

  i - toggles island selection mode

  Ctrl + T - tearing mode (allows you to separate vertices from each other)

Misc:

  Ctrl - hold down to snap to points and simultaneously weld (be careful of using this too fast, can sometimes cause XSI to crash)

  Ctrl+. - toggles pivot

  . - moves the pivot (hold **Ctrl** while dragging to snap to points or grid)

Half-Maps:

The Texture Editor's `Edit > Transform UVs` command creates a mesh operator that allows for precise scaling of the UVs along the U and V axes. This is useful for when texture space is optimized for 1:2 (U:V) proportions (e.g. 512x1024, 1024x2048, etc).

Section M: Reminders

- **Ctrl+S** is your friend.
- Freeze constantly.
- When in doubt, press **F1.** =)

HAVE FUN!
MORE TO COME...

— IRONCLAD