

## SENSEI FORMAT HOTKEYS

**NOTE:** This is a list of common shortcuts for using Sensei format. Some shortcuts are the same as standard Blender shortcuts, some have been changed for relevance or to maximize workflow.

# NAVIGATION

(Moving Around In Blender)

**Rotate View:** **MMB Down** (hold middle mouse button down (MMB) and move the mouse)

**Pan View:** **Shift-MMB Down** (hold down shift and MMB and move the mouse)

**Zoom:** **Scroll-MMB** (scroll the MMB up and down to zoom in and out)

**Precise Zoom:** **Ctrl-MMB Down** (hold Ctrl and MMB down and move mouse back and forth)

**View Selected:** **Alt-MMB (or Shift-Alt-MMB)** (hold Alt and click MMB)

**Orbit View:** **Alt + Scroll MMB** (Shift-Alt scroll to orbit vertically) The initial Alt+ Scroll MMB will also convert your view to the closest relevant orthographic view key.

**Orbit View (barrel roll):** **Shift+Ctrl + Scroll MMB** (this can be used to control your camera as well, like when using the Sensei Format “director’s chair” area)

**Auto Align View:** **Hold Alt + Scroll MMB** Just a small flick of your middle mouse button while holding the Alt key will align your current view to the nearest orthographic view (Front, Back etc...). Used correctly, this hotkey can replace most daily use of Blender view hotkeys.

**NOTE:** The number keys below refer to your keyboard's standard top 1-0 keys. The numpad keys (big keys to the far right on a full sized keyboard) are mapped differently so that you can use the arrows on them to rotate your view. An orthographic view is a flat view where depth is removed. This is helpful for precise selections, transformations & editing. Views 1 through 6 are all in orthographic mode. Hitting MMB to rotate automatically pops you back into perspective view. To rotate (orbit) while in an orthographic view use 8 & 9. Hit 7 to change between orthographic and perspective views. To zoom in on to a selection press Alt-MMB (Middle Mouse Button).

**Front/Back:** **1 & 2**

**Left/Right:** **3 & 4**

**Top/Bottom:** **5 & 6**

**Ortho/Perspective:** **7**

**Ortho-Orbit:** **8 & 9**

**Camera View:** **0**

**Convert Camera View:** **Ctrl-Alt-0 (or Numpad 0)** (turns 3D view into camera view)

**Make A Window Full Screen:** **` (found below Esc key)** (or **Ctrl-Up**)

# TRANSFORMATION

(Moving, Rotating and Scaling Objects)

**Move:** **G** Think G for grab (you can also click objects to move them).

**Rotate:** **R** (rotate object or selection)

**Scale:** **S** (scale object or selection)

**Bend:** **Alt-Shift-W** (bend a selection of objects)

**NOTE:** You can constrain to a specific axis (x,y,z) by pressing the MMB and gesturing your mouse towards the direction you want it to go immediately after pressing one of these transform buttons (G, R or S). You can also just hit x, y or z to constrain that axis and enter in specific values such as 90 for 90°. Hold Ctrl to constrain your transformations to the grid.

## OBJECT & EDIT MODES

(These can be done in both Object & Edit mode)

**Switch Object & Edit Mode:** **Tab**

**Toggle/View Object Alone:** **(double) Click Tab**

**Add An Object:** **Shift A** or **(double) Right Click**

**Duplicate:** **D** Duplicates an object.

**Snap Menu:** **Shift-S** Calls snap menu

**Reset 3D Cursor:** **Shift-C** (Puts 3D cursor back to center and helps with zoom issues)

**Set 3D Cursor:** **Right Click** (**Ctrl-Alt-Shift (double) Click** if using tablet)

**Snap Cursor To Mesh:** **Shift-Right Click**

**Place Cursor & Set Object Origin:** **Shift- (double) Right Click**

**Temporarily Disable Cursor Snapping:** **Hold Alt-Right Click**

**Lasso Select:** **Ctrl-Right Click** (keep pressed down while using)

**Select All:** **A** (or **Double click** anywhere on the screen)

**Deselect all:** **Double Click**

**Add to Selection:** **Shift-Click**

**Subtract from Selection:** **Shift-Click**

**Invert Selection:** **Ctrl-I**

**Circle Select:** **Hold C** MMB increases/decreases brush size. Release C to confirm.

**Hide Selection:** **H** Hides a selection. (Alt-H reveal all.)

**Repeat Action:** **Shift-R** Repeats an action. Very useful in Edit Mode.

**Grease Pencil:** **Hold V & Draw** with Mouse

**Erase Grease Pencil:** **Hold V & Right Click** with Mouse

**Wireframe View:** **Z** (while in the 3D View)

**Toggle Render Slot:** **Z** (after rendering)

**Last Tool Options:** **(Double) Tap Space** Calls settings for the current or last tool used.

**Search Menu:** **Ctrl-Space**

**Toggle Pivot Point:** **Shift-Space**

## OBJECT MODE (only)

**Join Objects:** **J** Combines selected objects into one object.

**Separate Objects:** **Alt-J** Create separate objects from one object's parts.

**Place & Set Object Origin Point:** **Shift- (double) Right Click**

**Move To Layer:** **M** Moves selected objects to a new layer.

**Add Subsurface & Smooth:** **W** Adds subsurf modifier and smoothing to an object.

(**Tapping W afterword** will increase subdivision levels or multires levels if using multires)

**Add Array Modifier:** **Shift-D** (like the duplicate "D" button, but with more options)

(**Tapping Shift-D** will increase the count of your array afterword)

(**Tapping Alt-Shift-D** will change the direction of the duplicates)

**Quick Mirror:** **Shift-W** Quick mirror handles a bunch of common mirroring tasks contextually.

A bunch of objects can be mirrored around a single object by selecting one or multiple objects, then shift-selecting the object you want your selections to mirror around. After the initial mirror (when mirroring multiple objects) you can continue to press Shift-W to rotate through the axes being used to mirror all the objects until the desired result is achieved.

If only one object is selected, Shift-W can be used to bisect (cut in half) the object and add a mirror modifier with the appropriate axis setting. When one object is selected, You can tap Shift-W to rotate through the various bisect and mirror options. When a desired result is reached, moving your mouse will finish the operation on your selection. You can disable the auto-bisect portion of this feature in the Builder options menu by unchecking "Quick Mirror Bisect".

**Call Zero Brush Options:** **Q** (mostly for doing things to materials and textures)

**Apply Texture:** **Shift-Q** (applies dragged textures so they can be rendered or painted on)

**Game Mode:** **Shift-F** Walk and jump like in a game (or fly, change in User Preferences)

(**W,A,S,D:** walk/strafe), (**Space:** Jump), (**MMB:** teleport), (**Scroll:** increase/decrease speed)

## EDIT MODE (only)

**Face Select:** **Space**

**Edge Select:** **Shift-MMB Up** (hold Shift and scroll the middle mouse button up)

**Vertex Select:** **Shift-MMB Down** (hold Shift and scroll the middle mouse button down)

**Increase/Decrease Selection:** **Ctrl-Scroll MMB** (hold Ctrl while scrolling up or down)

**NOTE:** You can shift-select all selection types at the bottom of your 3D view window and enable all of them at once. It's almost impossible to work like that though when your objects get complex.

**Extrude:** **E** Extrudes face, edge, or vertex selection (**Shift-Ctrl-E** for edge specials menu).

**Individual Extrude:** **Ctrl-E** Extrudes parts of a mesh selection individually.

**Extrude To Cursor:** **Ctrl-Right-Click** Extrudes mesh selection to the position of your mouse.

**Fill Faces:** **F** Fills empty vertices or edges with faces. (**Ctrl-F** for face specials menu).

**Subdivide:** **W** Subdivides a selection. (**Ctrl-W** for subdivide specials menu).

**Vertex Specials Menu:** **Ctrl-V** Brings up specials menu for vertex operations.

**Delete Specials Menu:** **Ctrl-X** Brings up specials menu for deleting and merging mesh.

**Duplicate:** **D** (duplicates selected mesh)

**New Object From Selection:** **Shift-D** (takes selected mesh and converts it to a new object)

**Bevel:** **Ctrl-B** Bevel a single or multiple vertices or edges.

**Edge Crease:** **Alt-E** Like the bevel modifier but without the added geometry cost

**Inset Faces:** **Shift-E** Insets a selection.

**Loop Cut & Slide:** **Shift-W** MMB increases cuts. Click, slide your cuts, then click to confirm.

**Vertex/Edge Slide:** **GG** Slides an edge/edges or vertex along its geometry.

**Loop Select:** **Alt-Click** (hold Shift-Alt to add more loops to your loop selections)

**Knife Tool:** **K** Hold Ctrl to constrain and press Space to confirm your cut.

**Merge Face Selection:** **F** (merges selected faces into one n-gon face)

**Bridge Edge loops:** **Shift-F** (bridge two edge loops)

**Merge:** **M** Merges vertices, edges and faces into a single point.

**Shrink/Fatten:** **Alt-S** Awesome scaling for making clothes based on character's body.

**Add BSurface Mesh:** **Shift-V** (V for g pencil & Shift-V converts those strokes to mesh).

**Rip:** **Ctrl-C** Unattaches a selection of vertices or edges.

**Rip Fill:** **Shift-Ctrl-C** Detaches a selection of vertices or edges and fills the gap with faces.

## KNIFE TOOL (used in edit mode)

(besides what's listed below, you can rotate, pan or zoom while in knife mode but that's all until you exit)

**Apply Cuts:** **Space** or **Enter** Apply all the cuts you've made and exit knife mode

**Cancel Knife Tool:** **Escape Key** Exit the knife tool without applying your cuts

**New Cut:** **Right Mouse** or **E** or **(double) Left Mouse** Finish your current cut path and start a new one all while staying in knife mode (press Space when Finished making cuts).

**Snap To Midpoints:** **Hold Ctrl** Snap cuts to the center of edges and vertex points.

**Angle Constraint:** **Hold Shift** Constrain cuts vertically, horizontally and diagonally.

**Ignore Snapping:** **Hold S** Temporarily ignore all snapping to make free cuts.

**Cut Through Toggle:** **Z** Make cuts slice through entire object (press again to turn off).

## PAINT, SCULPT, ETC... MODES

**Brush Menu:** **Space**

**Brush Size:** **X**

**Brush Strength:** **Shift-X**

**Brush Rotation:** **Ctrl-X**

**Constrain:** **Ctrl** (Alt when using line)

**Invert Brush:** **Hold Shift** (erase)

**Sample Color:** **Hold I** (paint mode)

**Smooth Brush:** **Hold Ctrl** (sculpt mode)

## ANIMATION, KEYFRAMES, TIMELINE

**Toggle Play/Stop Animation:** **Alt-A**

**Reset Animation:** **Alt-Shift-A**

**Insert Keyframe:** **I** Inserts a keyframe (must be used for animating specific properties)

**Insert Keyframe & Move Ahead:** **F** (Adds keyframe & advances timeline one second unless pressed in Sensei Format Director's Chair area, which adds a keyframe for the camera only)

**Back One Second:** **Ctrl-F** Moves timeline back to last frame.

## SYSTEM COMMANDS

(stuff like Ctrl-Z that you use all over Blender)

**Append File:** **F1**

**Undo:** **Ctrl-Z**

**Redo:** **Shift-Ctrl-Z**

**Duplicate:** **D**

**Delete:** **X**

**Border Select:** **B**

**Add to selection:** **Shift-Click**