

# HB Modelling Bundle detailed Documentation

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## HB\_DefaultCamera (ALT + TAB)

Enables Default Viewport Camera and makes some other things (Details in Script)

### THIS SCRIPT DOES FOLLOWING:

- 1.Changes the Viewport Camera to the Default Editor Camera
- 2.Sets Model Mode.
- 3.Activate Move Tool
- 4.Delete the HB\_ModellingCamera if it exists and resets the Work-plane.
- 5.Align Workplane to Y if HB\_ModellingCamera is active

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## HB\_Paste (CTRL + SHIFT + V)

Paste Objects at Mouse position and Aligns to Surface normal (more details in Script)

### USAGE:

You should always use HB\_Paste with a Shortcut. I set CTRL + SHIFT + V as the default.

If you have copied an Object HB\_Paste will paste it at the Position of your Mouse and aligns it to the Surface.

The new Pasted Object will be a child of the selected Object.

!!!! So it is important to take care about which object you select before pasting.!!!

If you have nothing selected the pasted object will be inserted at the beginning of you object hierarchy.

If you have your Mouse in empty Space the Object will be pasted at its original Position.

If you have a Spline Selected HB\_Paste will make a Mograph Setup and aligns the Pasted Object to the Spline

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## HB\_ModelMode (ALT + 1)

Enters Modelmode and does some other Settings

### THIS SCRIPT DOES FOLLOWING THINGS:

1. Change mode to Model-mode
2. Show Axis if hidden
3. Activate Movetool
4. Disable Axis mode if enabled
5. Disable Xray Display

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## HB\_ToggleMode (ALT + 2)

Toggles Components Mode and does some other nifty things. (Details in Script)

### THIS SCRIPT DOES FOLLOWING THINGS:

1. Toggle Components Mode (Points/Edges/Polygons)
2. Selects all non parametric Objects that are child of selected Objects (eg. If you have selected a SubdivisionSurface the Script will  
select all Polygon objects that are children)
2. Enables Displayfilter Splines (Only If splines are selected)
3. Enables Xray Display if Splines are Selected and keeps Generators like Sweep selected so you can see through them.
4. Selects and Frames Instance Referenz if Instance is selected and creates a temporal Modeling Camera

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## HB\_Delete

Deletes or Dissolves Components or Objects [SHIFT: Delete Connected/Delete Children, CTRL: Dissolve/Delete without Children, CTRL + SHIFT: Delete Object]

### THIS SCRIPT DOES FOLLOWING THINGS:

In Components Mode (Polygon/Edge/Point):

- Deletes selected Components and removes unused Points (which remain when you usually delete Polygons)
- SHIFT: Removes all connected components
- CTRL: Dissolves selected Components
- CTRL + SHIFT: Removes Object even when you are in Components mode

In Object Mode:

- Deletes Objects.
- SHIFT: Deletes all Children of selected Objects.
- CTRL: Deletes Current selected Objects without the Children.

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## HB\_Move ( E )

Move Tool [SHIFT-CLICK: Enable Quantize Snapping]

### THIS SCRIPT DOES FOLLOWING THINGS:

- Enables the Move tool
- Show Axis if hidden
- Disable Quantize Snapping if enabled
- Shift-Click: Enable Quantize Snapping and set it to 100 Units

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## HB\_Scale ( T )

Scale Tool [SHIFT-CLICK: Enable Quantize Snapping]

### THIS SCRIPT DOES FOLLOWING THINGS:

- Enables the Scale tool
- Show Axis if hidden
- Disable Quantize Snapping if enabled
- Shift-Click: Enable Quantize Snapping and set it to 100% for Scaling

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## HB\_Rotate ( R )

Rotate Tool [SHIFT-CLICK: Enable Quantize Snapping]

### THIS SCRIPT DOES FOLLOWING THINGS:

- Enables the Rotate Tool
- Show Axis if hidden
- Disable Quantize Snapping if enabled
- Shift-Click: Enable Quantize Snapping and set it to 45 Degree for Rotation

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## HB\_Rotator

Rotates Objects 90 Degree or Resets PSR [SHIFT-CLICK: Rotate Pitch, CTRL-CLICK: Rotate Banking, CTRL+SHIFT: Reset Rotations, CTRL+SHIFT+ALT: Reset Position and Rotations]

### USAGE:

Select one or more Objects. When you run the Script all Objects will locally rotate 90 Degree in Heading (H-Axis).

Use Shift or Ctrl modifiers to Rotate P and B Axis. The ALT-Key in combination will always reverse the Rotation to the Negative direction.

CTRL+SHIFT Click will reset all Rotations to Zero. CTRL+SHIFT+ALT will reset Position and Rotation to Zero.

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## 8 HB\_Snapping Scripte (Vertexsnap: ALT + 4, Polygonsnap: ALT + 5)

Enables a Snapmode and disables all other Snapping Modes. [SHIFT-CLICK: Add Snap mode, CTRL-Click: Disable Snap mode]

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## HB\_ModellingCamera (ALT + M)

Sets Workplane to current selected and makes a Orthographic Camera [SHIFT-Click: Make a Perspective Modeling Camera]

### **USAGE:**

Sets Work plane to current selected Polygons or Object and makes a Orthographic Camera which is aligned to the selection. With HB\_DefaultCamera you will exit this mode again.

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## HB\_GuidesColor

Changes Color of all Guide Objects

### **USAGE:**

This Script opens a Color chooser to select a Color. All Guides in the Project will receive this Color to be better Seen in the Viewport.

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## HB\_CleanView (ALT + <)

Changes Displayfilters to show only stuff that is relevant for modeling [SHIFT-Click: Cleans up the View even more]

### **USAGE:**

Click once to activate CleanView. A Null will be Created to indicate that CleanView is active. (Please dont delete this Object). Clicking once again will turn off Cleanview and delete this Null and restore all Settings you had before. If you Shift-Click the Script will only show Geometry and nothing else. This is especially good for making hardware renderings.

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## HB\_FastViewport

Changes several Settings to speed up the Viewport [SHIFT: Speeds up Viewport even more]

### **USAGE:**

Click once to turn on FastViewport mode. Click again to disable Fastviewport mode and restore old settings.

This Script changes following Settings:

- OGL Antialiasing
- QuickShading
- Use LayerColor
- EOGL: Shadows
- EOGL: Noises
- EOGL: Transparency
- EOGL: Posteffects
- Linear Workflow
- Selected Wireframe
- ObjectHighlighting
- Camera Clipping
- Level of Detail
- Execution of Expressions off when SHIFT-Modifier is used.

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## HB\_Divider

Divide/Undivide any kind of parametric Objects [SHIFT: Divide stronger, ALT: Undivide, CTRL: Reset default Subdivisions]

### USAGE:

This Script works on Single Objects as well as on multiple different Objects. It increases/decreases subdivisions of any selected Parametric Objects.

Also you can reset Parameters to default settings if you CTRL-Click on the Script.

Works on Following Objects:

- All kind of Parametric Objects
- Spline Objects (Increase/Decrease Spline Interpolation)
- Nurbs
- Generators (Mograph, Array, Metaball etc.)
- Polygonselections (subdivide Polygonselections if Polygon Mode is active [SHIFT: Subdivide in Smooth Subdivisions Mode])
- Also Works with Lights (Increase/Decrease Light intensity)

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## HB\_PhongSelection (ALT + Q)

Activates Polygon-mode and Phongbreakselection Tool

Activates Polygon- mode and sets up the Phongbreakselection tool to Values I think are most useful.

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## HB\_LoopSelection (ALT + E)

Activates Polygon mode and Loop Selection Tool [SHIFT: Edge mode , CTRL: Boundary Loop ]

### USAGE:

Activates Polygon- mode and sets up the Loop Selection Tool. SHIFT-Click will change to Edgemode instead of Polygon-Mode. CTRL-Click will enable Boundary Loop

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## HB\_PathSelection (ALT + W)

Activates Edge mode and Path Selection Tool

### USAGE:

Activates Edge-mode and selects Polygonobjects that are children of the current Object. Also sets up the Path Selection Tool.

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## HB\_SelectionMaker (CTRL + SHIFT + F)

Makes Polygon Selections and assigns a material

### USAGE:

First make a Polygon selection. If you run this script you will be asked to choose a Name for this selection. When you hit enter the Script will do following:

- Create a new Material with a Random Color (if no Material is selected in Material Manager)
- Assign the Material to the current Selected Polygons
- Name the Selection Tag and the new Material properly.

This happens only if you have no Material Selected in the Material Manager. If you select a Material first it will use this Material instead of creating a new one.

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## HB\_LoopCut (ALT + Y)

Activates Edge-mode and sets up Knife-Tool to do loopcuts

### USAGE:

Activates Edge-mode and sets up Knife-Tool to do loopcuts. Also Snapping will be disabled.

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## HB\_CenterCut (ALT + SHIFT + Y)

Activates Edge-mode and sets up Knife-Tool to do loop cuts with Midpoint snapping

### **USAGE:**

Activates Edge-mode and sets up Knife-Tool to do loop cuts. Also Midpoint-Snapping will be activated. This way you can make cuts at the center of Edges easily.

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## HB\_KifeLine

Activates Edge-mode and sets up Knife-Tool to do line cuts

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## HB\_KnifePath

Activates Polygon-mode and sets up Knife-Tool to do path cuts

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## HB\_Clone (ALT + C)

Clones the current selected Polygons on place and enables Move-Tool

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## HB\_Clone X

Clones the current selected Polygons and Moves Polygons along a Axis

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## HB\_ToggleSoftselection

Toggles Soft selection

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## HB\_RoundEdge

Smooth current Edge-Selection [SHIFT: Smooth Stronger, CTRL: Input Influence Radius, CTRL+SHIFT: Influence Radius and Stronger Smooth]

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## HB\_LineUp

Lines Up current Edge-Selection [SHIFT: Line Up with even Point distribution, CTRL: Input Influence Radius]

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## HB\_EvenDistribution

Distributes Points along Edge selection evenly [CTRL: Input Influence Radius]

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## HB\_SnapToSpline

Snaps selected Edges to selected Spline [SHIFT: Clone Edges with subdivisions, CTRL: Input Influence Radius]

### **USAGE:**

You need to select a Polygon object and a Spline. Also make an Edge selection on the Polygon object. Run the Script. The Selected Edges will be snapped to the Selected Spline.

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## HB\_SmoothEdge

Converts current Edge selection to a Parametric Spline-Deformer Setup

### USAGE:

Make an Edge selection and run the Script. In the Dialog you have following Settings:

- CurvePoints: Sets the amount of Points for the modifying Spline
- Radius Factor: Sets the default Influence Radius in relation to the Spline length
- Spline type: Here you define which kind of Spline the Modifier Spline is.
- Precise Spine: If on the Modifier Spline will be exactly on the Edge selection. Careful: this will already deform the Mesh a bit as the Interpolation will be changed. If this option is off the mesh will not change initially but the Modifier spline will not be precisely on the Edges.
- Restrict to Point selection: If you have Points selected this option will restrict the Deformations to the selected Points.
- Max Handles: this will place a ModifierPoint on each selected Edge-Point. Also it will automatically choose the Magnet-Tool

When you are done with your Modifications you need to run the SmoothEdge\_Enter Script to convert everything to a Mesh again.

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## HB\_SmoothEdgeEnter

Converts the SmoothEdge Setup into a Polygonal Mesh

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## HB\_SmoothEdgeCancel

Cancels the SmoothEdge Script if you want to exit without changes to the Mesh.

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## HB\_BrushRadius

Increase/Decrease the Brush radius of Tools and Objects

### USAGE:

This Script works with several Tools and Objects. You can use it also to influence the Radius of SmoothEdge-Script

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## HB\_SelectSame

Selects same type of Objects as the current selected [SHIFT: Select Same type and same Point count, CTRL: Select all objects with same Point count]

### USAGE:

Select one or more Objects. When you run the script the Object and its Childs will be isolated. Also the Camera frames the Object. The same works for Polygon selections.

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## HB\_Group (SHIFT + ALT + G)

Group each selected Object under a Null

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## HB\_ToggleVisibility (ALT + 3)

Toggle the Visibility of selected Objects

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## HB\_SymmetryMaker

Deletes half of the Objects Points and Creates a Symmetry Object

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## HB\_SymmetryFix

Centers Points near the YZ-Plane to fix gaps in Symmetry

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## HB\_GroupSymmetry

Groups selected Objects and make them Symmetrical [SHIFT: Make Symmetry in Global Space]

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## HB\_Instance

Converts selected Objects to Renderinstances while the last selected is the Reference

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## HB\_SetPhong

Sets Phong angle of selected Objects

If no Object is selected the Script will apply phong angle on all Objects of the Scene!

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## HB\_PipeIt

Makes a Sweep setup out of any selected Spline or Edge selection

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## HB\_RetopoInitialize

Sets up everything to start retopologize the current Object

### **USAGE:**

Select any Kind of Polygonobject. If you run the Script you will be asked if the Object is symmetrical and if you want to start with an empty Object.

If you choose not to start with an empty object the current Object will be used. This is good if you just want to change some parts of the topology without changing the Shape of the Object.

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## HB\_RetopoRemesh

Remesh the current Retopoobject

### **USAGE:**

Use this Script frequently when you do retopo. This will help to avoid any unwanted deforming of the geometry.

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## HB\_TransformRepeat

Repeats the last Modelling Command

### **USAGE:**

If you have used extrude or Bevel for instance this Script will repeat the last action.