

BLENDER SHORTCUTS

General

Change view (perspective/orthogonal) - Numpad 5

Front view – Numpad 1

Back view – Ctrl + Numpad 1

Side view (right) - Numpad 3

Side view (left) – Ctrl + Numpad 3

Top view – Numpad 7

Bottom view – Ctrl + Numpad 7

Local View – Numpad /

Isolates the selected objects, allowing you to work separately from the rest of the scene.

Wireframe view – Z

Brush Selection – C

Mouse wheel to change brush dimension

Box Selection – B

Select all – A

Open the Tool Shelf – T

Open the Properties – N

NOTE: Most of the functions you can find in the Tool Shelf are described in this document, so they're easily accessible using shortcuts. In the properties tab you can find some options for the visualization of the 3D view and its objects.

Object mode

“Add object” menu – Shift + A

Move – G

Scale – S

Rotate – R

NOTE: After you entered in one of the previous modes (move, scale, rotate), you can constrain it on one axis using x, y, z, and and set a numeric value from your keyboard (you can read it in the bottom left of the 3D view).

Duplicate object – Shift + D

*NOTE: After duplication, the copy automatically enters in “move” mode.
It’s better than ctrl+C/V (that works anyway) because it’s “cleaner” inside the blender workspace.*

“Snap” Menu – Shift + S

Allows you to snap the 3D cursor or an object on a certain position. In particular the following are useful: “selection to cursor” to snap the selected object on the cursor, and “cursor to selected” to snap the cursor on the selected object.

“Set origin to” Menu – Ctrl + Shift + Alt + C

Allows you to change the position of the origin of the selected object.

Join – J

Joins two or more different objects in one single mesh.

Edit Mode

Enter Edit Mode - tab

Create face – F

With at least two selected vertices, makes a face between them (if the vertices are just two, it makes an edge).

NOTE: YOU SHOULD NEVER HAVE FACES WITH 5 OR MORE EDGES.

Also, try to avoid triangles: the less tringles you have, the better it is. Triangles in fact are good for real time graphics (game engines) but they’re not for the modeling phase (quads can be easily managed and you cannot create a loop cut through triangles), plus they may cause strange artifacts and shading errors in rendering phase.

“Separate” Menu - P

It separates the selected vertex from their mesh, making a new different object.

NOTE: Use “Separate: selection”

“Merge” Menu – Alt + M

Merges the selected vertices in one single vertex. You can merge all the vertex to the first you have selected, to the last one or at the center.

Loop Selection – Alt + Click

Extrude – E

NOTE: Extrusion duplicates the selected vertices (or edges, or faces), automatically bringing them into “move” mode, so you can use again x,y,z to constrain them, type a numeric value, Scale (S) and rotate (R). If you extrude a face it will automatically be extruded along its normal.

NOTE: Pay attention to doubles! Using extrusions may cause sometimes to have double vertices! (for example, if you extrude some vertices, but nullify the move mode (right click before confirm with left click), the new vertices will snap again to their original location, overlapping to the extruded ones. Those have to be deleted: select your entire mesh in edit mode (with “A”), go to the Tool Shelf menu on the left of 3D view (you can open/close it using “T”) and click “Remove Doubles” (under “Remove” section, in the Tool tab).

(“Remove doubles” tool should be frequently used during the modeling phase).

If you need to extrude different faces at once, you may find useful the “Extrude individual” function; You can access it through the Tool Shelf (T). Every face selected will be extruded along its normal, even if these are not parallel. Note that if you use “Extrude Individual” on adjacent faces, you’ll have some doubles, so you’ll have to use the “Remove Doubles” function already described.

Bevel – Ctrl + B

“Splits” one or more edges. Moving the mouse you can increase or decrease the distance between the two new edges, but obviously you can also type a numeric value. Left click to confirm.

Make loop cut – Ctrl + R

First you can choose the direction (which faces to cut) placing the mouse near the edges, and you can also choose how many loops to add using the mouse wheel. Confirm with left click, then you can move the new cuts along the faces. Another left click makes the loop(s) effective.

NOTE: Loop cuts can only be created on faces with 4 vertices! Triangles cannot be cut.

Inset – I

With a face selected, the Inset makes a new face inside the first one. You can scale it moving the mouse (or typing a value) before to confirm it (left click).

Knife – K

You can freely create edges on every face, just drawing it with the mouse. You have to confirm the position of every vertex you draw, using left click. Once you have finished to draw, confirm everything with Enter.

“Faces” Menu – Ctrl + F

It may happen that some faces have wrong normals (you can notice a darker shading on those faces in object mode), so it’s necessary to fix them. Just select the faces, press CTRL+F and the Faces Menu will pop up, here you can find “Flip Normals”.

NOTE: In this menu you can find some other functions we’ve already talked about, like the “Inset” (I) or “Make Face/Edge” (F). You can find “Flip Normals” also in the Special Menu (read the following).

Special Menu – W

One of the most useful function here is “Bridge Edge Loops”: select two different loops with the same number of vertices, the Bridge Edge Loops will automatically create faces between them.

“UV Mapping” Menu – U

Here you can find every useful tool to unwrap your mesh.

The simple "Unwrap" is quite difficult to use because it requires you to define the seams. Seams are the edges along which will be "cut" the mesh, to project it on the UV plane, so it can be complex sometimes.

"Smart UV project" is mostly the best solution: Blender will define the seams and cut the mesh on its own, but sometimes this can make you work manually on the generated projection, in order to scale, rotate and move faces.

Cube, Cylinder and Sphere projection are not so frequently used, but maybe can be useful in some cases, like the project from view (rarely used).