Cast Modifier

The *Cast* modifier shifts the shape of a mesh, curve, surface or lattice, towards any of a few predefined shapes (sphere, cylinder, cuboid).

It is equivalent to the To Sphere tool in Edit Mode, and what other programs call "Spherify" or "Spherize", but, as written above, it is not limited to casti to a sphere.

> Tip
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> The Smooth Modifier is a good companion to *Cast*, since the cast shape sometimes needs smoothing to look nicer or even to fix shading artifacts.

> Note
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> For performance reasons, this modifier only works with local coordinates. If the modified object looks wrong, you may need to apply its transformations, especially when casting to a cylinder.

Options

Shape

Menu to choose target shape of the projection: *Sphere*, *Cylinder* or *Cuboid*.

Axis

Toggle buttons to enable/disable the modifier in the X, Y, Z axes directions (X and Y only for *Cylinder* cast type, since the Z axis remains unaffected).

Factor

The factor to control blending between original and cast vertex positions.

It is a linear interpolation: 0.0 gives original coordinates (i.e. modifier has no effect), 1.0 casts to the target shape.

Values below 0.0 or above 1.0 exaggerate the deformation, sometimes in interesting ways.
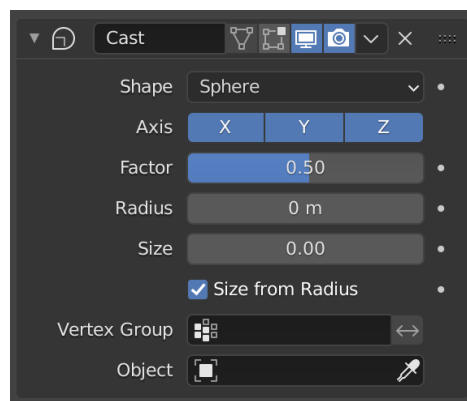
The Cast modifier.

Radius

If nonzero, this radius defines a sphere of influence. Vertices outside it are not affected by the modifier.

Size

Alternative size for the projected shape. If zero, it is defined by the initial shape and the control object, if any.

Size from Radius

If activated, calculate *Size* from *Radius*, for smoother results.

Vertex Group

If set, restrict the effect to the only vertices in that vertex group. This allows selective, real-time casting, by painting vertex weights.

Invert <->

Inverts the influence of the selected vertex group, meaning that the group now represents vertices that will not be deformed by the modifier.

The setting reverses the weight values of the group.

Object

The name of an object to control the effect. The location of this object's origin defines the center of the projection. Also, its size and rotation transform the projected vertices.

> Hint
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> Animating (keyframing) this control object also animates the modified object's casting deformation.

Example

Top: Suzanne without modifiers. Middle: Suzanne with each type of Cast Modifier (Sphere, Cylinder and Cuboid). Bottom: Same as above, but now on X axis is enabled. Sample blend-file.