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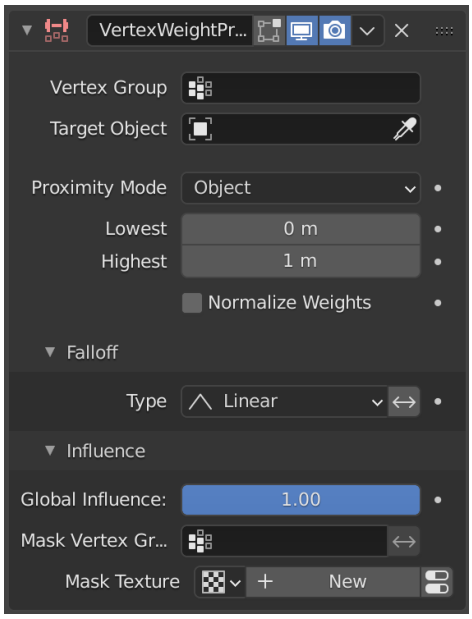
Vertex Weight Proximity Modifier

This modifier sets the weights of the given vertex group, based on the distance between the object (or its vertices), and another target object (or its geometry).

> Warning
>
> This modifier does implicit clamping of weight values in the standard (0.0 to 1.0) range. All values below 0.0 will be set to 0.0, and all values above 1.0 will be set to 1.0.

> Note
>
> You can view the modified weights in Weight Paint Mode. This also implies that you will have to disable the *Vertex Weight Proximity* modifier if you want to see the original weights of the vertex group you are editing.

Options



The Vertex Weight Proximity modifier panel.

Vertex Group
: The vertex group to affect.

Target Object
: The object from which to compute distances.

Proximity Mode

Object Distance
: Use the distance between the modified mesh object and the target object as weight for all vertices in the affected vertex group.

Geometry Distance
: Use the distance between each vertex and the target object, or its geometry.

Vertex
: This will set each vertex's weight from its distance to the nearest vertex of the target object.

Edge
: This will set each vertex's weight from its distance to the nearest edge of the target object.

Face
: This will set each vertex's weight from its distance to the nearest face of the target object.

> Note
>
> If you enable more than one of them, the shortest distance will be used. If the target object has no geometry (e.g. an empty or camera), it will use the location of the object itself.

Lowest
: Distance mapping to 0.0 weight.

Highest
: Distance mapping to 1.0 weight.

> Tip
>
> *Lowest* can be set above *Highest* to reverse the mapping.

Normalize Weights
: Scale the weights in the vertex group to keep the relative weight but the lowest and highest values follow the full 0 - 1 range.

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Falloff

Type

Type of mapping.

Linear

No mapping.

Custom Curve

Allows you to manually define the mapping using a curve.

Sharp, Smooth, Root and Sphere

These are classical mapping functions, from spikiest to roundest.

Random

Uses a random value for each vertex.

Median Step

Creates binary weights (0.0 or 1.0), with 0.5 as cutting value.

Invert `<-->`

Inverts the falloff.

Influence

Those settings are the same for the three *Vertex Weight* modifiers, see the Vertex Weight Edit modifier page.

Example

This example shows the usage of distance from a target object to dynamically control a Wave modifier with a modified vertex group:

The blend-file, TEST_1 scene.