

Set Curve Normal Node

The *Set Curve Normal* controls the method used to calculate curve normals for every curve.

The node doesn't set the normals directly, those are calculated later as necessary. Combined with the [tilt](#) attribute value at each control point, this will define the final normals accessible with the [Normal Node](#).

Internally this node adjusts the values of the `normal_mode` attribute on each curve.

Inputs

Curve

Standard geometry input, containing curves.

Selection

Whether or not to change the value on each curve.

Normal

Input for the custom normal attribute (`custom_normal`) when using *Free* mode.

Properties

Mode

The method for evaluation of the curve's normals

Minimum Twist:

The final normals are calculated to have the smallest twist around the curve tangent across the whole curve.

Z-Up:

The final normals are calculated so that they are perpendicular to the Z axis and the tangent. If a series of points is vertical, the X axis is used.

Free:

Use the stored custom normal attribute (`custom_normal`) as the final normals.

This mode adds a *Normal* input that can be used to set the value of the custom normal.

Note

Custom normals are not rotation invariant, meaning normals must be set **after** any rotation transformations; i.e. at the end of the node tree or at the bottom of the modifier stack.

Outputs

Curve

Standard geometry output.