



12.1.42 Editors - Geometry Nodes Editor - Header - Add Menu - Utilities - Rotation

Table of content

| | |
|--------------------------------------|---|
| Detailed table of content..... | 1 |
| Add menu - Utilities - Rotation..... | 3 |
| Align Rotation to Vector..... | 3 |
| Axes to rotation..... | 4 |
| Axis Angle to Rotation..... | 4 |
| Euler to Rotation..... | 5 |
| Invert Rotation..... | 5 |
| Rotate Rotation..... | 6 |
| Rotate Vector..... | 6 |
| Rotate Vector..... | 7 |
| Rotation to Euler..... | 7 |
| Rotation to Quaternion..... | 7 |
| Quaternion..... | 8 |

Detailed table of content

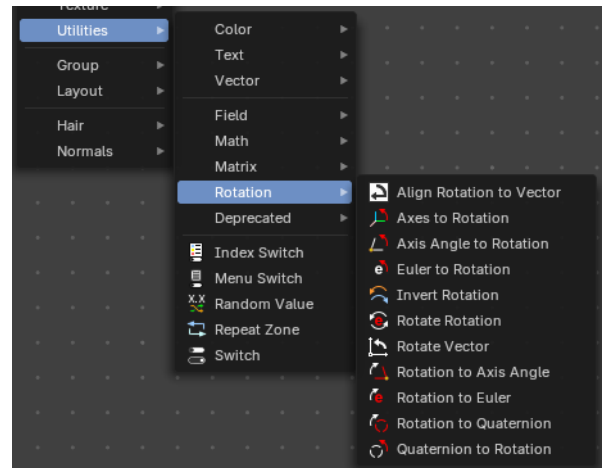
Detailed table of content

| | |
|--------------------------------------|---|
| Detailed table of content..... | 1 |
| Add menu - Utilities - Rotation..... | 3 |
| Align Rotation to Vector..... | 3 |
| Inputs..... | 3 |
| Rotation..... | 3 |
| Factor..... | 3 |
| Vector..... | 3 |
| Properties..... | 3 |
| Align Axis..... | 3 |
| Pivot..... | 3 |
| Output..... | 4 |
| Rotation..... | 4 |
| Axes to rotation..... | 4 |
| Inputs..... | 4 |
| Primary Axis..... | 4 |
| Secondary Axis..... | 4 |
| Properties..... | 4 |
| Primary axis..... | 4 |
| Secondary Axis..... | 4 |
| Output..... | 4 |
| Rotation..... | 4 |
| Axis Angle to Rotation..... | 4 |
| Inputs..... | 4 |
| Axis..... | 4 |
| Angle..... | 5 |
| Output..... | 5 |
| Rotation..... | 5 |

| | |
|-----------------------------|---|
| Euler to Rotation..... | 5 |
| Inputs..... | 5 |
| Euler..... | 5 |
| Output..... | 5 |
| Rotation..... | 5 |
| Invert Rotation..... | 5 |
| Inputs..... | 5 |
| Rotation..... | 5 |
| Output..... | 5 |
| Rotation..... | 5 |
| Rotate Rotation..... | 6 |
| Inputs..... | 6 |
| Rotation..... | 6 |
| Rotate By..... | 6 |
| Properties..... | 6 |
| Rotate Space..... | 6 |
| Global..... | 6 |
| Local..... | 6 |
| Outputs..... | 6 |
| Rotation..... | 6 |
| Rotate Vector..... | 6 |
| Inputs..... | 6 |
| Vector..... | 6 |
| Rotation..... | 6 |
| Output..... | 6 |
| Rotation..... | 6 |
| Rotate Vector..... | 7 |
| Inputs..... | 7 |
| Vector..... | 7 |
| Rotation..... | 7 |
| Output..... | 7 |
| Rotation..... | 7 |
| Rotation to Euler..... | 7 |
| Inputs..... | 7 |
| Rotation..... | 7 |
| Output..... | 7 |
| Euler..... | 7 |
| Rotation to Quaternion..... | 7 |
| Inputs..... | 7 |
| Rotation..... | 7 |
| Output..... | 8 |
| W, X, Y, Z..... | 8 |
| Quaternion..... | 8 |
| Inputs..... | 8 |
| W, X, Y, Z..... | 8 |
| Output..... | 8 |
| Rotation..... | 8 |

Add menu - Utilities - Rotation

Utility nodes are mainly for mathematical operations.



Align Rotation to Vector

Aligns a rotation to a vector.

Inputs

Rotation

The input euler rotation vector.

Factor

The factor to align the euler value to the vector.

Vector

The vector to align to.

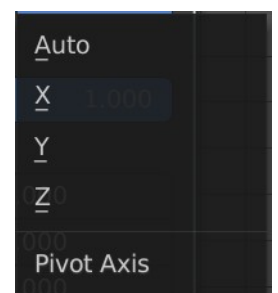
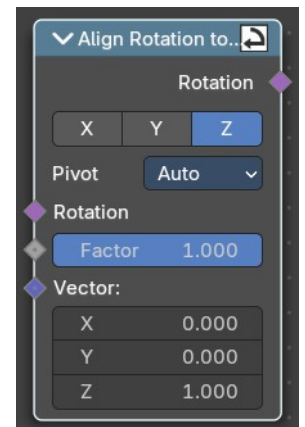
Properties

Align Axis

To which axis to align the vector.

Pivot

The pivot axis.



Output

Rotation

The output rotation euler angle.

Axes to rotation

Creates a rotation from a primary and a secondary axis. The axis should be ideally orthogonal.

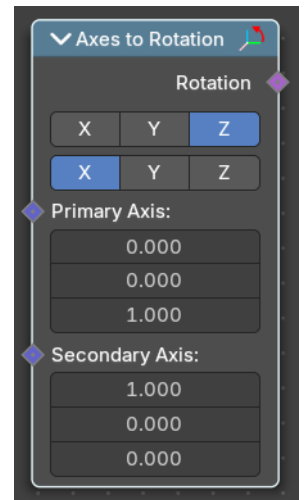
Inputs

Primary Axis

The axis to rotate around.

Secondary Axis

The secondary axis that gives the alignment.



Properties

Primary axis

Which axis to rotate around.

Secondary Axis

Which axis to align to.

Output

Rotation

The output rotation euler angle.

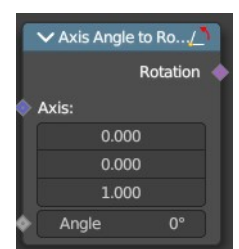
Axis Angle to Rotation

Converts an axis angle to a rotation.

Inputs

Axis

The input axis.



Angle

The input angle.

Output

Rotation

The output rotation value.

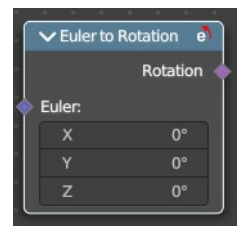
Euler to Rotation

Converts an euler angle to a rotation.

Inputs

Euler

The input euler angle vector.



Output

Rotation

The output rotation value.

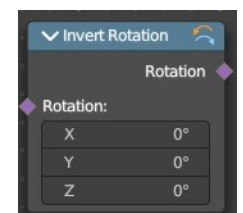
Invert Rotation

Inverts a rotation

Inputs

Rotation

The input rotation vector.



Output

Rotation

The output rotation value.

Rotate Rotation

Rotates an euler rotation by another euler rotation.

Inputs

Rotation

Use the rotation of an existing geometry.

Rotate By

The input rotation.

Properties

Rotate Space

Global

Rotate by the global orientation

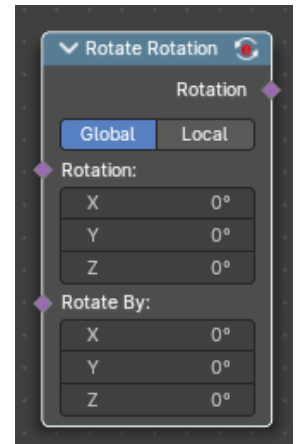
Local

Rotate by the local orientation

Outputs

Rotation

The euler angle output.



Rotate Vector

Rotates a vector

Inputs

Vector

The input vector.

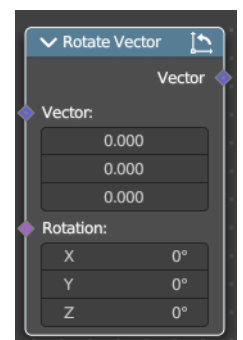
Rotation

The input rotation.

Output

Rotation

The output rotation value.



Rotate Vector

Rotates a vector.

Inputs

Vector

The input vector.

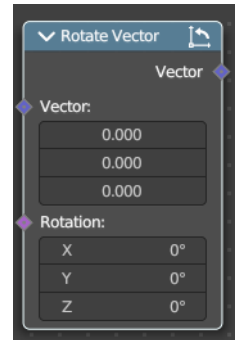
Rotation

The input rotation.

Output

Rotation

The output rotation value.



Rotation to Euler

Converts a rotation vector to euler angle.

Inputs

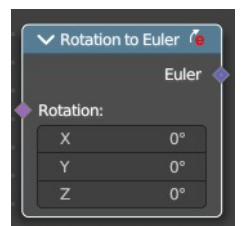
Rotation

The input rotation.

Output

Euler

The output euler angle.



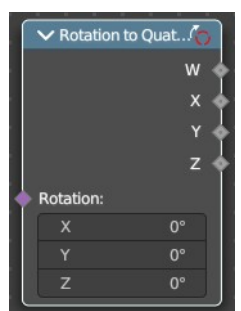
Rotation to Quaternion

Converts a rotation vector to a quaternion.

Inputs

Rotation

The input rotation.



Output

W, X, Y, Z

The single output values of the quaternion.

Quaternion

Converts a rotation vector to a quaternion.

Inputs

W, X, Y, Z

The single input values of the quaternion.

Output

Rotation

The output rotation.

