



## 10.1.14 Editors - Compositor Editor - Header - Add Menu - Utilities

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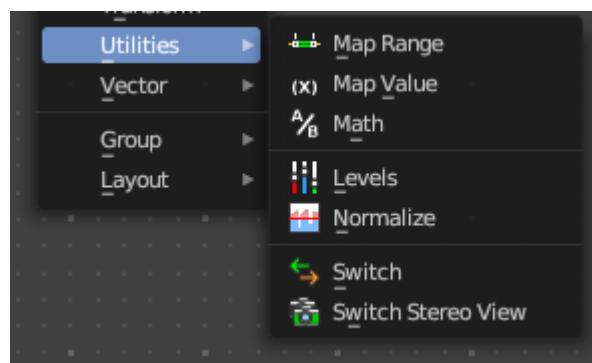
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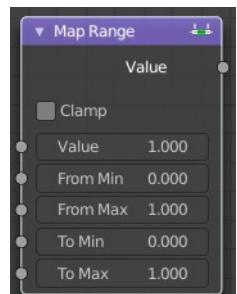
## Add menu - Utilities

Here you find nodes that are used as utilities.



## Map Range

This node allows to convert (map) an input value range into a destination range. By default, values outside the specified input range will be proportionally mapped as well. This node is similar to Map Value node but provides a more intuitive way to specify the desired output range.



## Usage

One important use case is to easily map the original range of the Z-depth channel to a more usable range (i.e: 0.0 - 1.0) for use as a matte for colorization or filtering operations.

## Inputs

### **Value**

Standard value input.

### **From Min/Max**

Start/End of the input value range.

### **To Min/Max**

Start/End of the destination range.

## Properties

### **Clamp**

Clamps values to Min/Max of the destination range.

## Outputs

### **Value**

Standard value output.

## Map Value

Map Value node is used to scale, offset and clamp values.

## Inputs

### **Value**

Standard Value input. (Value refers to each vector in the set.)

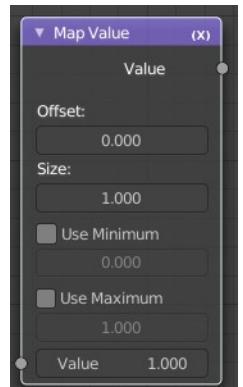
## Properties

### **Offset**

Factor added to the input value.

### **Size**

Scales (multiply) the input value.



## Use Minimum, Maximum

Enable this to activate their related operation.

### Min, Max

Defines a range between minimum and maximum to clamp the input value to.

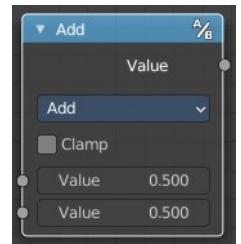
## Outputs

### Value

Standard value output.

## Math

The Math Node performs math operations.



### Inputs

#### Value

First numerical value. The trigonometric functions accept values in radians.

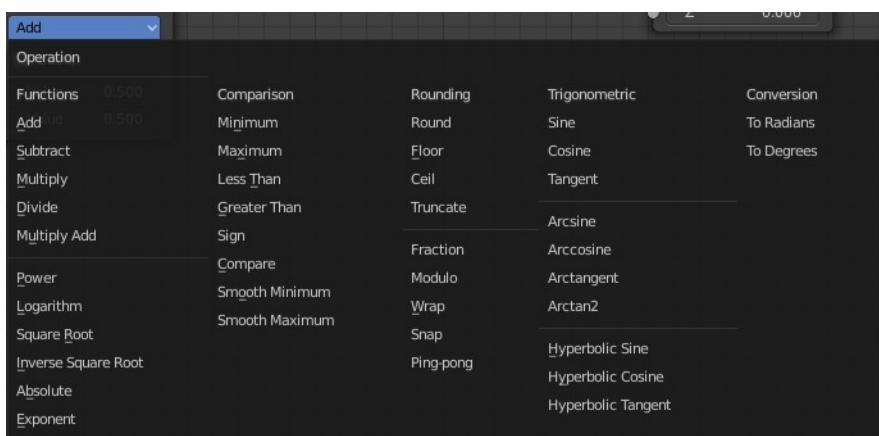
#### Value

Second numerical value. This value is not used in functions that accept only one parameter like the trigonometric functions, Round and Absolute.

## Properties

### Operation

Here you can choose what mathematical operation to perform.



### Clamp

Limits the output to the range (0 to 1). See clamp.

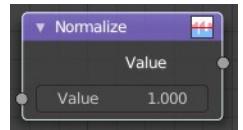
## Outputs

### **Value**

Numerical value output.

## Normalize

Find the minimum and maximum values of a single channel. Then map the values to a range of 0 and 1.



## Inputs

### **Value**

Standard value input.

## Outputs

### **Value**

Standard value output.

## Levels

The Levels Node read the inputs color channels and outputs analytical values.



## Inputs

### **Image**

The image input.

## Properties

### **Channel**

The channels. C (Combined RGB), R (Red), G (Green), B (Blue), L (Luminance)

## Outputs

1D values based on the levels of an image.

### **Mean**

The mean is the average value of all image pixels in specified channel (combined, red, green, blue, luminance). It tells you how dark or bright the image is and can be used as such for setups that depend on how is input “bright” or “dark”.

## **Std Dev (Standard deviation)**

How much those pixel values differ from the mean. A low standard deviation indicates that the pixel values tend to be very close to the mean. A high standard deviation indicates that the values are spread out over a large range of values.

The visualization of such data is just a gray rectangle.

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## **Switch**

The Switch node is akin to a boolean, where you can use a toggle to choose what is shown with on or off.

### **Properties**

#### **Switch**

The toggle that turns the switch on or off resulting in the final output being whatever is in the on or off input.

### **Inputs**

#### **Off**

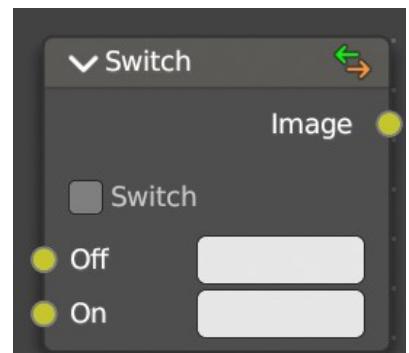
The image that is shown when the toggle is off.

#### **On**

The image that is shown when the toggle is on.

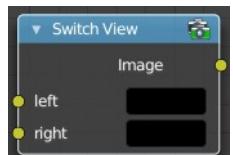
#### **Image**

Standard RGB image output.



## **Switch View**

The Switch View node combines the views (left and right) into a single Stereo 3D output. This can be useful if for example, you need to treat the view as separate images by combining each of the views.



### **Inputs**

#### **Left**

Left-eye image input.

## ***Right***

Right-eye image input.

## **Outputs**

### ***Image***

Stereo 3D image output.