# Texture Channel Mixer Documentation

To open this tool navigate to **Window>Texture Channel Mixer**.

Reference images

To remove or add reference images, use the red "X" and "Add Reference" buttons respectively.
You can set the texture by either drag and dropping them from your project folder or by clicking the "Select" button. In bulk mode just drag and drop your images on the "Drop textures here" box. You can give the reference textures names using the text field above them.
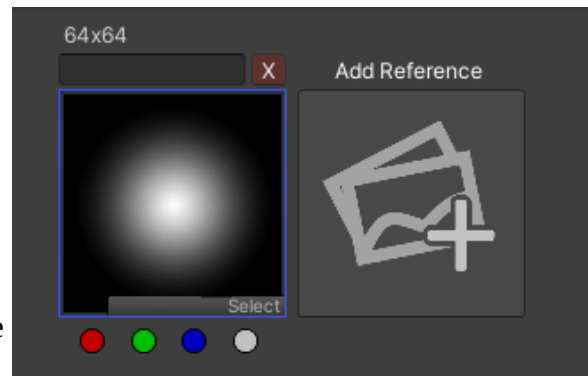

Nodes

The four circles below each reference image represent the RGBA channels of that texture. To connect a channel to the output texture, you simply click and drag from one of the channel nodes and release the mouse button on the desired target node. To remove a connection, right click on a node to clear all of it's connections.
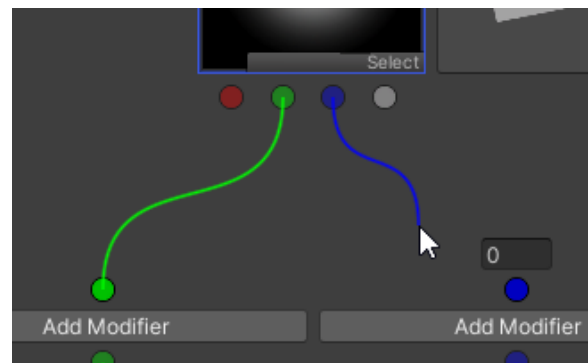

Modifiers

You can use modifiers to adjust the channel value before it gets written to the output texture. To add a modifier, Click on the "Add Modifier" button of the channel you want to modify and select the option in the context menu. A description for each modifier can be found below. To remove a modifier, press the red "X" button. Use the blue arrows to reorder the modifiers as desired
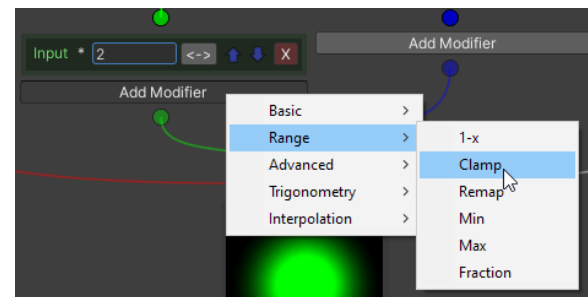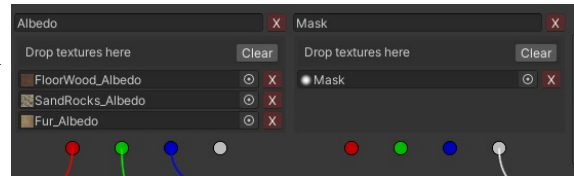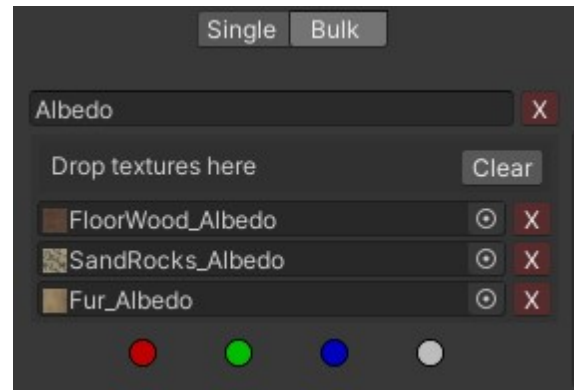

Export

To export the output texture simply press the green "Export" button. By default, the size of the output texture is set automatic, which means it will take the dimensions of the largest used reference texture.
If you want to set the output dimensions manually, uncheck the "Auto Size" checkbox.
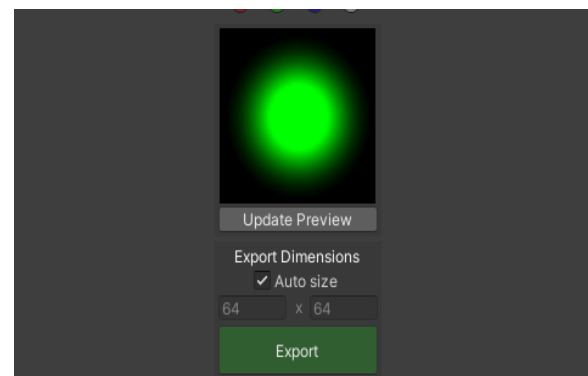
Bulk References

If you want to export multiple images with the same settings, you can set the edit mode to "Bulk". Drop all your textures on the box labelled "Drop textures here". You can remove textures by pressing the "X" button to the left of them, or clear the entire collection with the "Clear" button.

Note that if a reference column has less elements as other used columns, the export will default to the first element in that column if the texture index does not exist, or null if there are no elements in that column.

As an example: You have multiple albedo textures and you want to apply a radial mask to all of them: You can fill one column with all of your textures and another with the mask as the only texture and the bulk export will use the mask for every albedo texture.

Bulk Export

For bulk exporting you will have a few options to define how the exported textures will be named.

**Prefix** gets appended to the front of the name.

Left Remove removes a given amount of characters from the left side of the name before adding the prefix.

Name Column defines what connected color column should be used as the base name.

Right Remove removes a given amount of characters from the right side of the name before adding the postfix.

Postfix gets appended to the back of the name.

In the example image you can see, that e.g. "FloorWood_Albedo" first gets 7 characters removed from the right, thus removing the "_Albedo", then getting a "T_" prefix and a "_Masked" postfix, making the final output name "T_FloorWood_Masked.png".
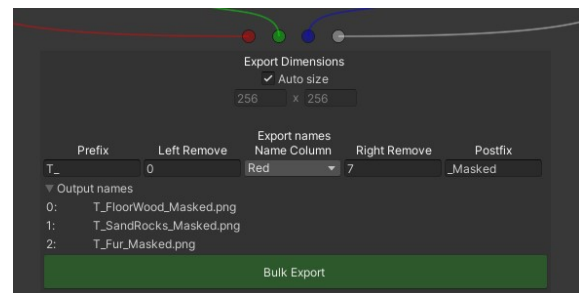
Footer Options

The "Auto Update" toggle changes whether the output texture preview should update every time a change is detected. Disable this if the tool seems to slow down and use the "Update Preview" instead.
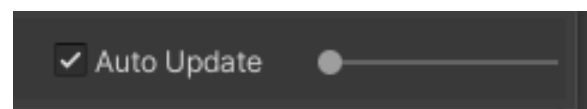
Presets

To save the current configuration (Reference texture count/names, connections, modifiers, auto size), use the "Save as Preset" button. All presets are saved in the "Presets" folder. Loading a preset using the "Load external Preset" button will simply copy that file into the "Presets" folder. To apply a preset click on the desired button following the "Presets" label. To delete a preset, press the red "X" button next to the preset.

The "Clear" button removes all reference textures, connections and modifiers to give you a clean slate.
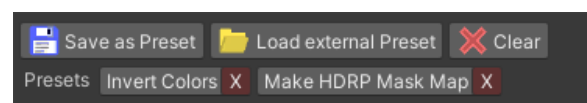
Modifier Documentation

- Basic
  - Add Value — Adds a value to the channel value (the "<->" button swaps the operation)
  - Subtract Value — Subtracts a value from the channel value
  - Multiply Value — Multiplies a value with the channel value
  - Divide Value — Divides a value with the channel value
  - Power — Raises the channel value to the desired power
  - Square root — Returns the square root of the input
- Range
  - 1-x — Returns 1-Input – useful for inverting colors
  - Clamp — Clamps the value between the entered values
  - Remap — Remaps the value to a new range
  - Min — Selects the smaller of the two values
  - Max — Selects the larger of the two values
  - Fraction — Returns the fraction of the value
- Advanced
  - Negate — Returns Input * -1
  - Absolute — When the input is negative, it will be negated
  - Modulo — Returns the modulo of the input and the entered value
  - Gamma to Linear — Will convert the input from gamma to linear
  - Linear to Gamma — Will convert the input from linear to gamma
- Trigonometry
  - Sin — Returns the sine of the input
  - Cos — Returns the cosine of the input
  - Tan — Returns the tangent of the input
- Interpolation
  - Lerp — Interpolates between the input and the entered value by the alpha value