Bump Node

The *Bump* node generates a perturbed normal from a height texture, for bump mapping. The height value will be sampled at the shading point and two nearby points on the surface to determine the local direction of the normal.

Inputs

Strength

Strength of the bump mapping effect, interpolating between no bump mapping and full bump mapping.

Distance

Multiplier for the height value to control the overall distance for bump mapping.

Filter Width

Filter width in pixels, used to compute the bump mapping direction. For most textures the default value of 0.1 enables subpixel filtering for stable results. For stepwise textures a larger filter width can be used to get a bevel like effect on edges

Height

Scalar value giving the height offset from the surface at the shading point; this is where you plug in textures.

Normal

Standard normal input.

Properties

Invert

Invert the bump mapping, to displace into the surface instead of out.
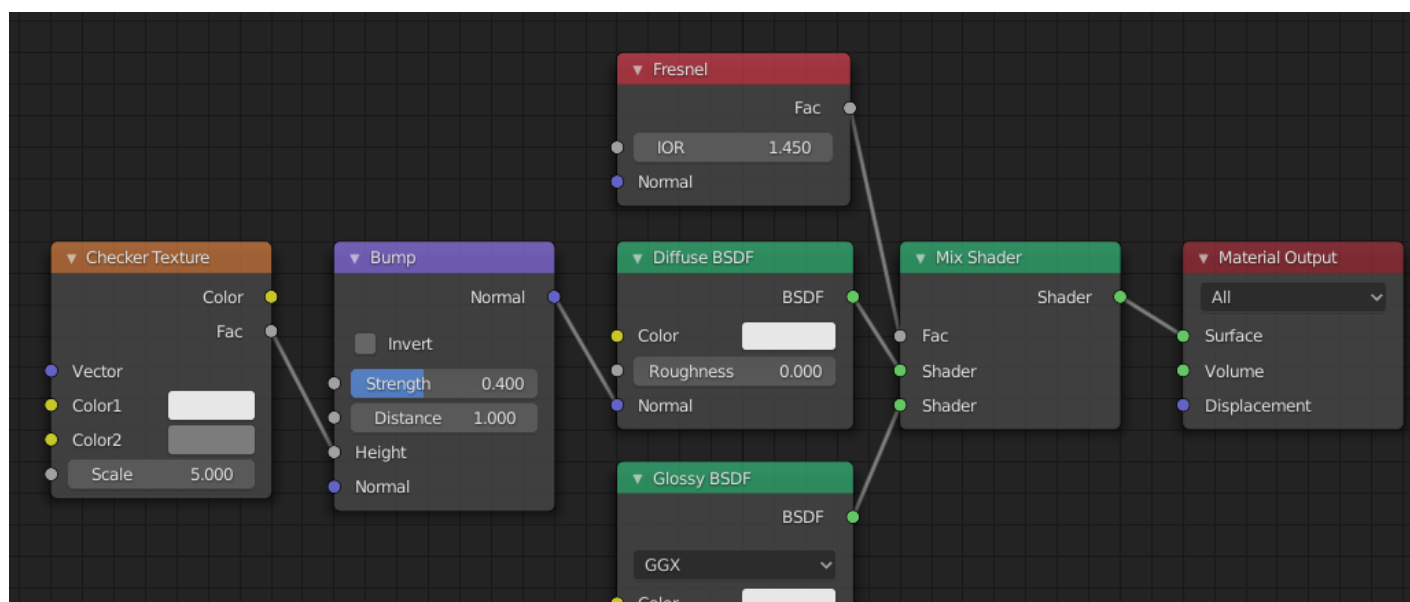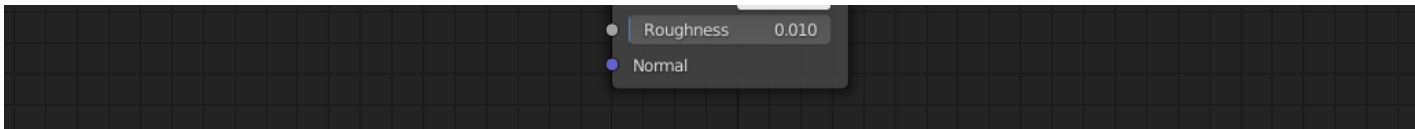
Outputs

Normal

Standard normal output.

> Tip
>
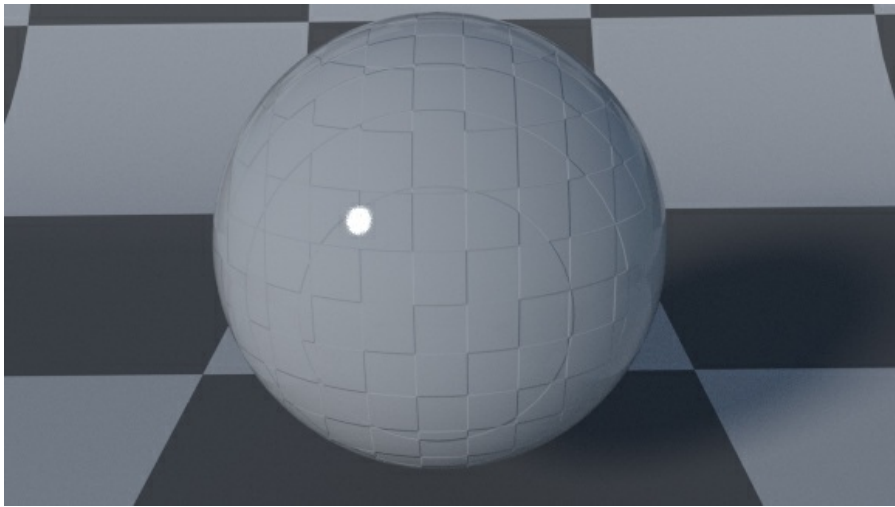> If the *Height* input is not connected, the node becomes a no-op that outputs its *Normal* input as is, or defaults to the geometry normal if not connected Routing a node group input via a no-op Bump node before doing math effectively makes it default to normal.

Examples

The above node setup will only bump the diffuse part of the shader, simulating a bumpy diffuse surface coated with a smooth glossy "glaze" layer.