

MEMO – Super Metallic Effect

Problem / Task

Create a material that has super high reflection which is controlled by Metallicity colour.

Solution

1. Create an object. Give it a *Diffuse* colour and set *Specular* colour to black. Set a dot for *Metallicity* and *Reflection*. Modify random texture to the Noise Type *Distance Squared* and the Mode *Minimum*; then set Frequency to -1, Octaves to 1 and 3D. Use Alpha only.
2. Copy component 1 into component 2 and set Noise Type to *Nothing*. Use the Sine filter with $a=0.08$ and $b=-4.2$ (approximate values) to make component 1 output positive. Combine component 1 and 2 using *Difference*.
3. Copy component 2 into component 3 with *Multiply*. Adjust Sine filter to approx. $a=-0.013$ and $b=-0.49657$. This controls the power.
4. Set Reflection to 100% and carefully move up Metallicity to get a black eye in the material preview (example at right).
5. With sky black and global Ambient at full white, set Ambience to 1 or 2%.



Adjustments

- More output power if combination shows one colour only: carefully adjust Sine filter parameter b (see above). Compensate more Reflection with more Metallicity.
- Adjust overall brightness with Ambience.

