

Creating On/Off cycle using Material modifier

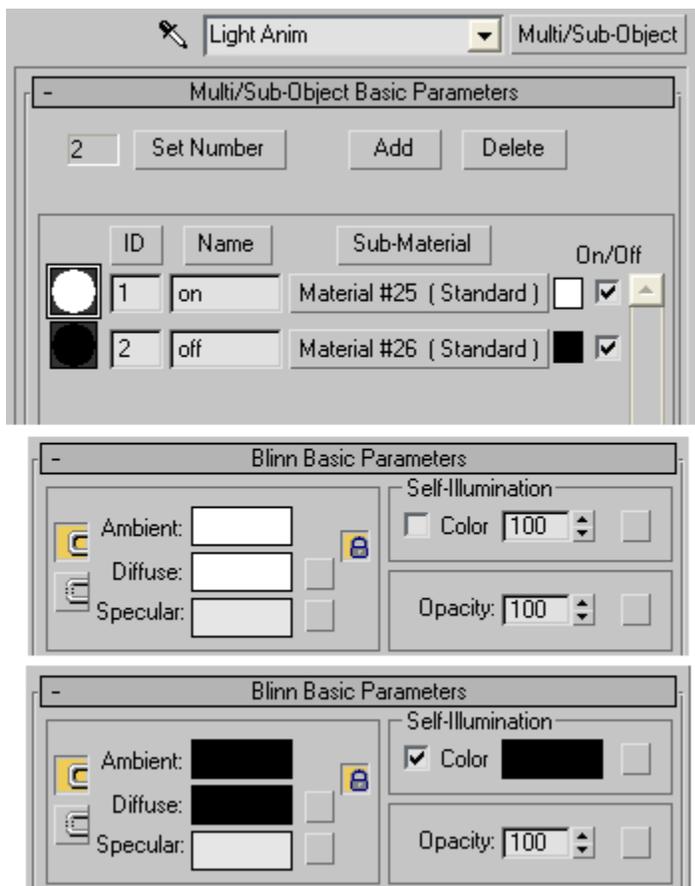
There is a scene projects in which we want to work with multiple lights but this requires a lot of system resources. In these cases is better to replace the lights with textured objects to simulate them (fake lights), at least where it is possible (lights with short range).

In this tutorial I will show you how to make **switch cycle** (on/off) using **Material modifier**. Of course, you can use any object for the purpose, from geometrical or extruded shape spline to mesh or poly. I will use a Plane, also I will use materials without texture maps, to can catch the idea only.

This is all:

1. Create Multi/Sub-Object material
2. Create a Plane and adding Material modifier
3. Animate Material ID

1. Create Multi/Sub-Object material

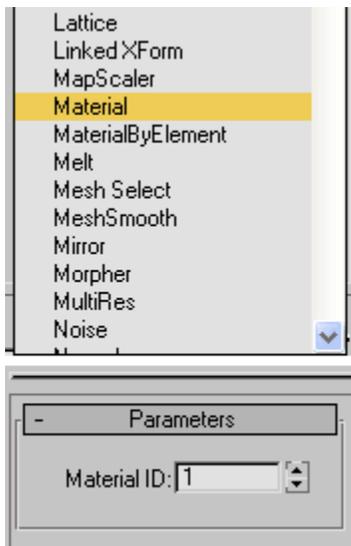


In empty slot in *Material Editor* press on *Standard*

end select **Multi/Sub-Object** material.
Set *Number* to **2** and change *Diffuse* and *Ambient* color for both sub-materials.
For first to pure *white* (RGB: 255 255 255), and pure *black* (0 0 0) to second one.
Also change *Self-Illumination* to **100** for 1st and check *Color* box for 2nd.
The material is ready.

2. Create a Plane and adding Material modifier

- [*] Create a Plane
- [*] Assign material to the plane
- [*] Add Material modifier to it



3. Animate Material ID

As you can see, the *Material modifier* has only one parameters - **Material ID**, but **animateable** and it's enough for our task.
Now we can setup your keys using **ID 1** for **on** and **ID 2** for **off** event.
We can do it manually or we can expedite the task using a script.
But if you plan to use some script, first you must rename *Material modifier*, because it default name "*Material*" will create conflict in MAXScript.

So I renamed it to "*MaterialMod*" and here's some example:

```
animate on
for t in 110 to 300 by 3 do
(
  at time t
  ($.modifiers[#MaterialMod].materialID = random 1 2)
)
animate off
```

Well, that's all.

Demo video (example):

<http://www.youtube.com/watch?v=rDK2fBf-120>

Tutorial online:

<http://3dmyths.blogspot.com/2009/04/switch-cycle-using-material-modifier.html>