



Lighting Checklist

app: Studio MAX 6.0
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1 What Up

This handout covers only the basic settings for a **target spotlight**. It does not cover lighting theory or how to set up a scene for best results.

A critical part of good lighting is experimentation! Each scene is different, so you should try various lighting settings and solutions -- and render, render, render!

2 Make a light

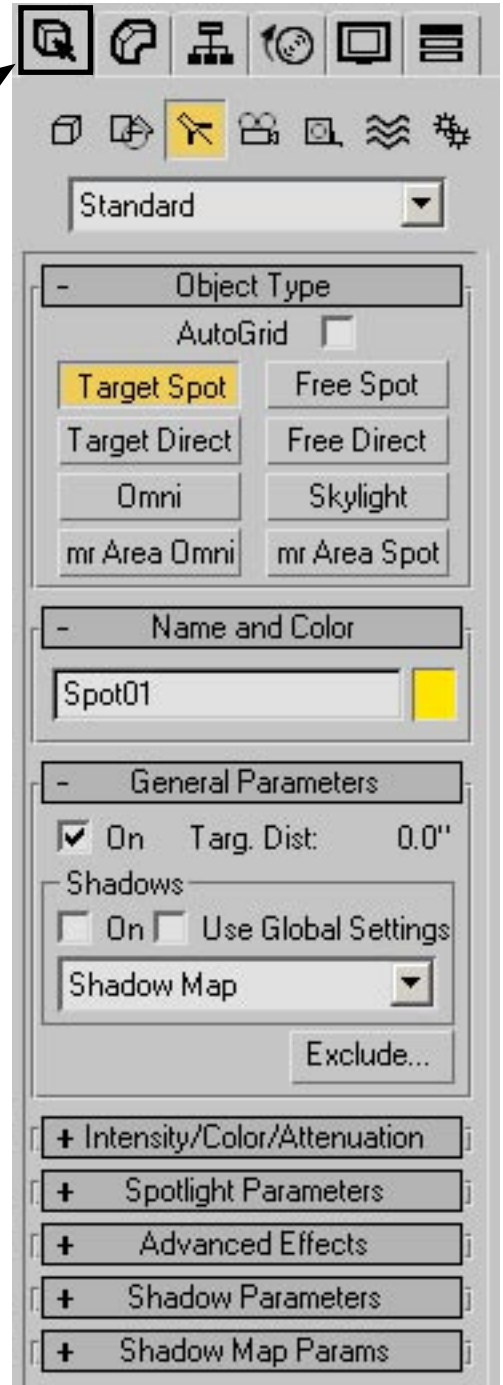
The target spotlight is created under the **create** tab as shown to the right. The best place to start the operation is in the top viewport.

Its a two-step operation, with the first click-and-drag point generating the light position, and the second point the target.

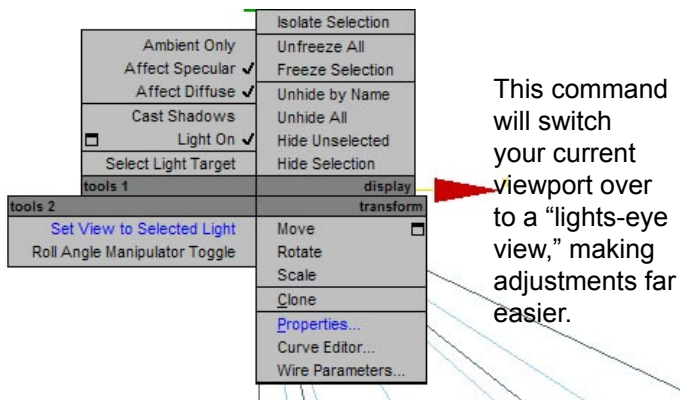
3 Cool Tip

Many of the commands illustrated on the **Modify Tab Panel** on next page are also accessible if you right-click on the light itself. One helpful command which is not available in your tab panel is the "**Set View to Selected Light.**"

This is the **Command Panel**, with tabs for **Create, Modify** and other functions.



These sub-panels are called "rollouts" and have lots more settings. Click the **+** to open or close.



This command will switch your current viewport over to a "lights-eye view," making adjustments far easier.

This toolbar (in the lower right corner) shows all the possible view adjustments, such as pan, zoom, roll, dolly, and more.



This viewport toolbar will change depending on what viewport is selected, such as light, camera, perspective, or ortho views.



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4 Basic assumptions

All adjustments to existing objects such as lights or geometry are accessed via the **modify** tab.



For the following suggested settings, we will assume the **key light** is casting shadows and hitting the floor geometry, while the **fill light(s)** are not.

5 Settings out the ying-yang

a Shadows

key light: checked/on
fill light: unchecked/off

b Shadow Type

both: Shadow Map

c Exclude

key light: include all (no change)
fill light: exclude floor geometry

d Multiplier

key light: full power = 1.0
fill light: lower, 0.3 to 0.75

e Angle Parameters (both)

Adjusts the cone - spread of your beam.
Hotspot/Beam: area inside is 100% illuminated
Falloff/Field: area inside decreases to 0%

f Shadow Color

both: keep black for first few renders

g Shadow Map Parameters

This how we avoid fuzzy shadows!. Never use the default setting of 512!
both: size = 1600 minimum

6 Option for a nice computer

b Shadow Type

Any: Ray Traced Shadows

g Shadow Map Parameters

Will become inactive. The shadow is an exact and more time-consuming calculation and no longer a simulated map-graphic.

