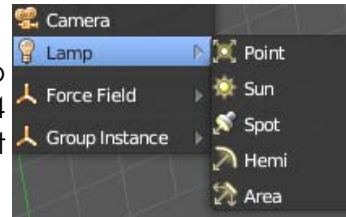


## Chapter 6- Lighting and Cameras

### Lighting Types and Settings

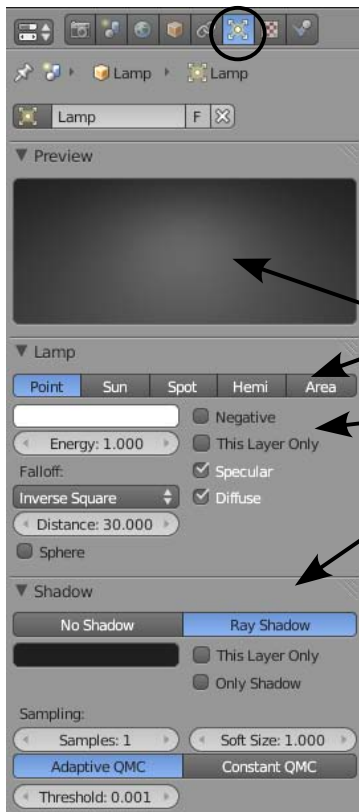
When you create a scene in Blender, you start with a few basic elements that will include a camera, but may or may not include a light. Remember that what the camera sees is what will render out as a picture or movie depending on what you tell the program you want as a final output. To get a simple rendered view, press the "**F12**" key. If the picture is black, you do not have a lamp or the lamp settings or placement is incorrect. To exit the render window, press the "**Esc**" key.

In most cases, you will need more than one lamp in order to properly illuminate your scene. Most scenes usually require 3-4 lamps. *Be careful not to use too many lamps!* The different types of lamps available for you to use are as follows:



Point-	Basic Blender Lamp- shines all directions.
Sun-	Provides even angle of light, regardless of placement from objects.
Spot-	Shines a direct angle of light.
Hemi-	A wider light, much like area lights.
Area-	Provides large area lighting (like a classroom). Can be scaled.

In traditional Blender rendering, only spotlights are able to cast shadows. However, with Ray-tracing (discussed in a later chapter) all lamps can cast shadows.



#### Lamp Settings:

To create a lamp, position the 3D cursor in a desired location and press "**Shift-A**" and select **Lamp**, then **type**. The lamp will be placed on the screen. You now have several options to select. With the lamp selected, click the **Lamp** button to bring up the adjusting options. Here's what you see:

Preview Window: Sample of your lamp settings.

Lamp Type: Can be changed any time. You will get different options depending on the lamp selected.

General Settings: This is where you select the color of the lamp, it's energy (brightness), the distance it shines, and a few other options.

Shadow Options: Shadow style, color and quality. Ray-shadow will be discussed in a later chapter.

These are your basic settings. *Sun* and *Spot* give you some different options. The *Sun* can actually be used to simulate sky and atmosphere variations. The spotlight will be discussed on the next page.



**RoboDude Says:** Instead of adding too many lights, experiment with the Energy and Distance settings first. In a large scene, the default distance setting may not light the entire scene!