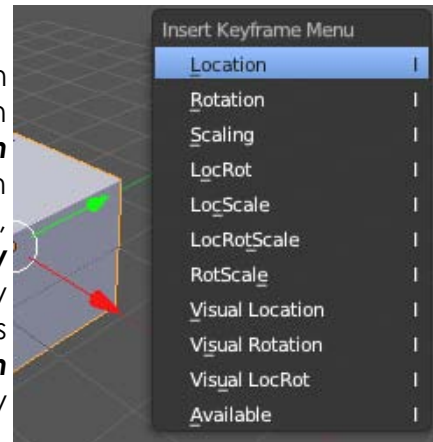


Chapter 9- Animation Basics

Moving, Rotating and Scaling:

These are the 3 basic modifiers to use on an object in animation. When you create key-frames in Blender with these modifiers, Blender will figure out all the **in between** locations on the other frames. To insert a key on an object, go to the frame where you wish to place the key, move, rotate or scale the object, then press the **"I" key** to **"Insert Key"**. Make sure your cursor is in the 3D window when you push the "I" key. The menu to the right pops up. You have 3 main options for now- **Location, Rotation and Scaling** and combinations of these. Select the key option of what you've done to the object. Now, advance to the next frame where you want to put a key (i.e. frame 25 if you want a movement to occur after 1 second), move, rotate or size the object, then press **"I" to insert another key**. Remember, you can change frames quickly with the arrow keys.



Continue placing keys along your timeline to create your animation. For the most part, location and size keys work flawlessly, **but care needs to be given to rotation keys**. If you try to rotate an object too far in one set of keys, the object may not rotate in the exact direction you want it to. It may rotate oddly. Try small angular steps while animating rotation keys. There are ways to control this better and tools to simplify this process that will be discussed later.



RoboDude Says:

If an object doesn't seem like it rotates properly with animation keys, try pressing Ctrl-A to reset the object's scale and rotation.

Automatic Key-Framing:

Typing "I" to insert keys is the traditional way of entering key frames, but it can become annoying when you have a lot of items to insert key frames for (for example, bones in a skeleton). This is where automatic key framing becomes a useful feature. To turn on automatic key framing, press the *small red circle button* in the playback buttons on the *time line window*. This will "record" any motion you do on a given frame and insert the necessary key frames needed. Don't forget to set a key on your initial frame. Auto key framing won't do that unless you change something on that frame.



Key Frames:

At any frame where you insert a key, a yellow line will display in the timeline.

Auto Key Frame Button:

Eliminates the need to press "I" to insert keys.



RoboDude Says:

Don't forget to turn off automatic key framing when not needed! You may end up animating things accidentally when you don't want to!