7.0 Keyframing

Open and Initialize the Model

1. open a Blender file containing a fully-rigged model
2. open two new windows (below the 3D View): a Timeline window and a Dope Sheet window.
3. notice the following items in the Timeline window:
   - the boxes for Start and End frames,
   - the current frame counter box (to the right of the End box), initially set to “1”,
   - the “direction controls” (similar to a video player),
   - the Red “Start Recording” button,
   - the green “current frame” bar in the Timeline window also at “Frame 1”, and
   - the arrow keys (or the mouse) move the bar (also changing the value in the current frame box).
4. change the End time to 50, and put the green bar on time 0.

Create an Initial Keyframe

5. in the 3D View window, select Object Mode
6. RMB select the Armature (all bones)
7. select Pose Mode
8. in the Toolshelf left sidebar, under Pose Tools, note the buttons for Keyframe Insert and Remove
9. select all bones (press the A-key until all the bones are highlighted)
10. press the “Insert Keyframe” button, and select LocRot (“location and rotation”) in the popup menu. This should add a keyframe at time 0 for all bones.
11. drag up/down with MMB in the Dope Sheet window to verify there are start points on all bones

Create a Second (or Final) Keyframe

12. enter another value (such as 50) in the “Current Time” box (to the right of the “End” box)
13. move the bones to place the model in a different keyframe pose
14. A-key, A-key (again) to insure ALL BONES are again selected
15. select Insert Keyframe and again choose Loc/Rot
16. repeat the steps until all of the desired poses are reflected as keyframes in the dopesheet
17. press the PLAY button to Start/Stop the animation.

Notes:

- when moving bones, it may be useful to do it in Front/Side/Top ORTHO View, or to use X/Y/Z keys to constrain the movement in the desired plane(s).
- animations should typically loop; that is, finish back where they started. This means the LAST keyframe needs to be the same as the FIRST keyframe. This is easy to do: in the DopeSheet, select all the components of the first keyframe (e.g. using B-key box-select), then press Shift-D to Duplicate the keyframe components; drag the copy with the mouse to the ending location and deposit with LMB.