

Chapter 9- Animation Basics



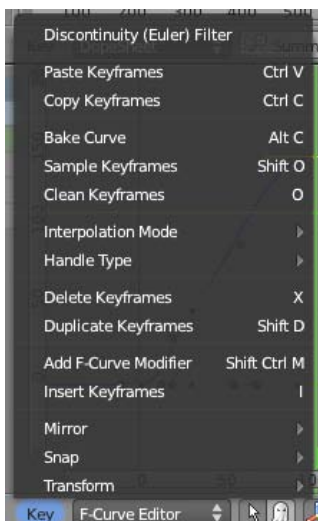
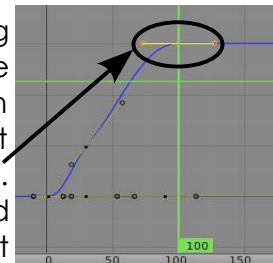
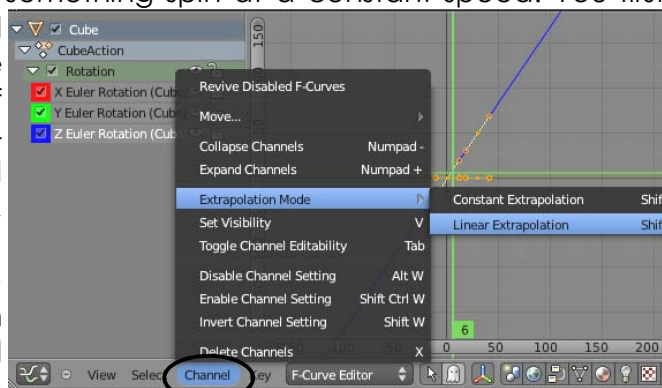
RoboDude Asks: I messed up my animation. How do I start over?

If you ever need to start over with an animation, you can erase all the animation tracks in the Graph Editor window and start over. To select all tracks, hit the “A” key once or twice, then the “Delete” key. Be careful that you only have the keys for the selected object!

Modifying Curves in the Graph Editor:

What else can you do in the Graph Editor? There are some simple features that will allow you to set a constant motion or rotation, mirror a curve, apply noise, and set something to cycle through an animation like walking. These are all features that, with a little practice, will save you a lot of work.

Let's first look at an example of making something spin at a constant speed. You first need to set 2 key frames at frame 1 and something like frame 30. Rotate the object 90 degrees between the 2 keys. If you are running at 30 frames-per-second, this would give you a full revolution in 4 seconds, but right now, your animation would stop after 1 second and only spin 90 degrees. In the Graph Editor window, find the rotation track that shows the rotation curve and select it. In my case, it is the Z Rotation curve. By going into the “**Channel**” menu and selecting “**Extrapolation Mode**” you can choose “**Linear Extrapolation**”. The curve will extend infinitely. To change the speed, move the key on frame 30. To stop it from spinning at a later frame, move to that frame (say, frame 100) and hit “I” to insert a key-frame on the graph. You can now go back into the “**Extrapolation Mode**” menu and choose “**Constant Extrapolation**”. The curve will level out after that frame.



Under the “**Key**” menu, you will find some other useful tools to shape your animations. There is a useful “**Mirror**” option that can flip a curve. This would be useful for objects such as gears and wheels where you need to match the animation of an object, but need to turn in the opposite direction. You will also see a new option in the Key menu called “**Add F-Curve Modifier**”. The classic “**Cycles**” option can be found there (useful for repetitive motion like swinging) along with other useful modifies such as “**Noise**” which will give a “jitter” effect to something's motion.

