



## 16.1.1 Editors - Dope Sheet - Header tools and options

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## Introduction

The header contains various menus and tools. This chapter here is about the tools, modes and options elements in the header.

The text menus are covered in an own chapter each. They vary too much, dependent of mode and object type.



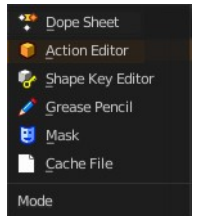
## Header Tabs

The tabs at the very left allows you to switch between the four most important editor types by one click. Dope sheet Editor, Graph Editor, Driver Editor, NLA Editor.



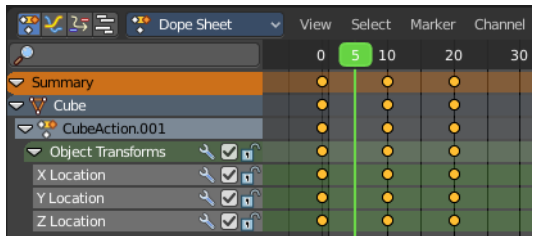
## Dope Sheet Modes

The Dope sheet has different modes. Each mode has its own purpose. In Mask mode you can for example see and edit the keyframes for mask animations, from the movie clip editor for example.



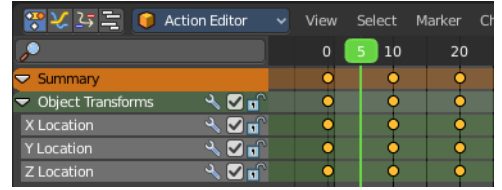
### Dope Sheet

Display the keyframe animation of all currently selected object in the 3d view.



## Action Editor

Display and edit the Action part of a keyframe animation of the currently active object in the 3d view. Just the data for this one object is displayed.



*Actions* are a generic containers for F-Curves. Actions can contain any number of F-Curves, and can be attached to any data block. For example, an action that modifies the 'X location' and 'Y location' properties can be shared across multiple objects, since both objects have 'X location' and 'Y location' properties available.

The Action editor allows you to edit the animation in various ways. For example also turn a keyframe animation into a clip for the NLA editor.

The animation data is build in a hierarchical way. From top to bottom.

Actions - Record and contain animation data.

Groups - Are groups of channels.

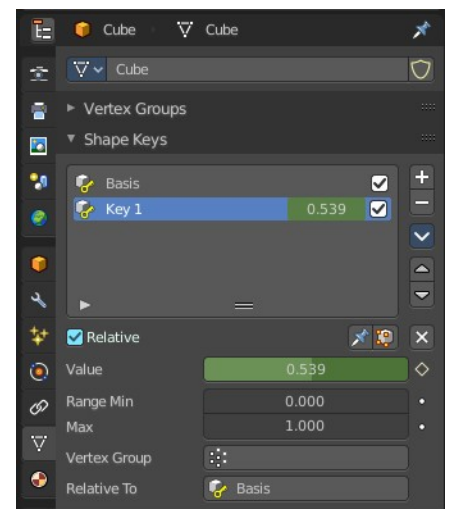
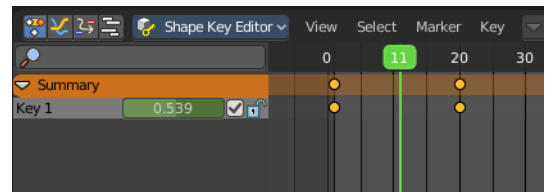
Channels - Contains record properties.

F-Curves - F-Curves are used to interpolate the difference between the keyframes.

Keyframes - Keyframes are used to set the values of properties bound to a point in time.

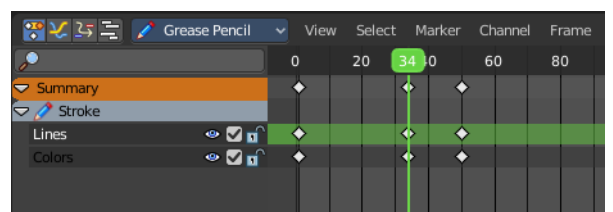
## Shape Key Editor

Display and and edit the keyframes for shape key animations. Shape keys is vertex animation.



## Grease Pencil

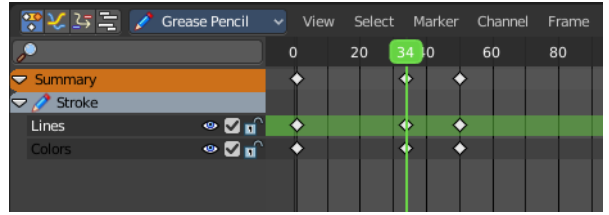
Display and and edit the keyframes for animated grease pencil strokes. This mode is for when you animate grease pencil strokes and colors at a vertex level. When you record



keyframes at an object level then those keyframes gets displayed in the Dope sheet and Action mode.

## Mask

Display and edit the keyframes for animated mask curves. Like from the movie clip editor.



## Cache File

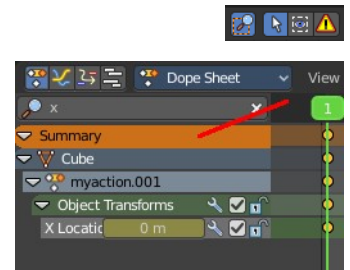
NOT DOCUMENTED BY BLENDER. NOT TO FIND OUT HOW TO USE.

From the Blender Manual: Cache File: Alembic Todo 2.78.

# Show Hide elements

## Summary

Display the Summary label above the list of elements.



## Only Show Selected

Display only the data for the selected object in the list of elements. If off it displays all available animation data of the whole scene.

## Show Hidden

Include channels from objects / bones that are not visible. This feature just works with Only Selected off.

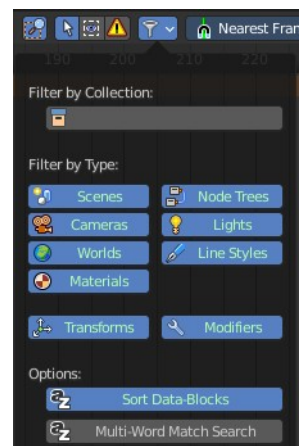
## Only Show Errors

Only display F-Curves and Drivers that have errors or are disabled.

# Dope Sheet Mode - Filters

The show hide elements allows you to filter out the general elements. The Filters panel allows you to filter out further elements.

Note that this filter methods just exists for the dope sheet mode. In other modes the panel does not show.



## Filter by Collection

Just display the content from the chosen collection in the list of elements.

## Filter by Type

In this section you can choose what type of animation data should be displayed. The names should be self explaining.



## Options

### Sort Data Blocks

Alphabetically sort the data in the list of elements.

### Multi Word Match Search

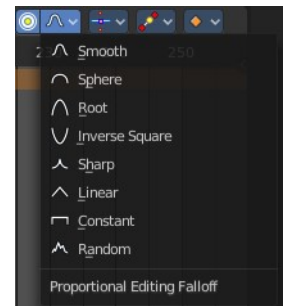
Enable Multi Word matching for the search in the list of elements.

## All Modes - Proportional Editing

Enable proportional editing.

Proportional editing allows you for example to scale two keyframes and influence the not selected neighbour keyframes in a proportional way. Or the proportional editing of fcurve points.

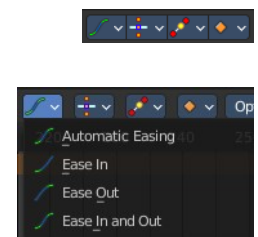
The dropdown menu to choose the proportional editing falloff method is just available when the proportional tool is active.



## All Modes - Keyframe Easing, Handle Type, Keyframe Interpolation, Keyframe Type

### Easing Mode

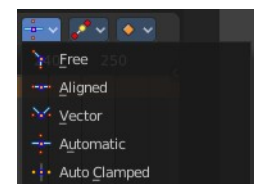
Choose between different easing modes for the selected keyframes. Easing is a method to fade in and out curves.



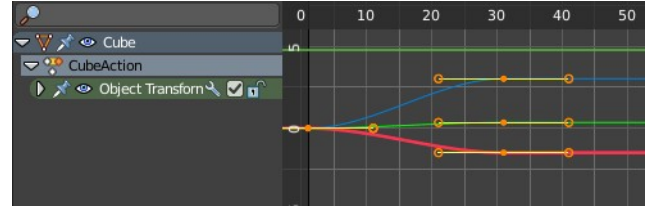
### Handle Type

Set the handle type for the currently selected keyframes.

This is a feature for the Graph editor, where each curve point has its own handler with which you can influence the curve behaviour. But the handler type also influences how the animation curve acts at the chosen keyframes. So it has its use in the dopesheet editor

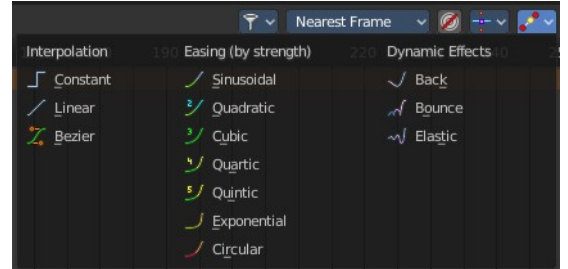


too.



## Interpolation Mode

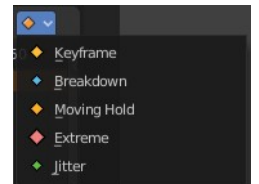
The Interpolation mode defines how the curve acts from keyframe to keyframe. You can have a linear curve between two keyframes instead of a bent one for example.



The easing methods here in the interpolation mode menu are for the easing shape. There is also an easing menu where you can choose an easing method.

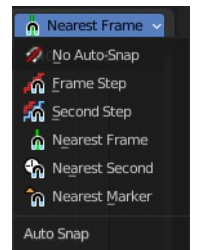
## Keyframe Type

Recolor the currently selected keyframes. Or create the next keyframe with this chosen keyframe color.



## All Modes but Grease Pencil - Auto Snap

Adjust how the selected keyframe or fcurve point snaps to other elements.



## Action & Shape Key mode tools



## Next Layer / Previous Layer

When there is more than one animated object in the scene then you have most probably more than one action in the scene too. Switch to previous or next actions to use them in the current object.

## Push Down

Adds the active action on to the NLA stack as a contributing strip. The same can be done by pressing the Push Down button in the NLA Editor.

## Stash

Stashes the active action on to the NLA stack. This means it is added as a non-contributing stack in the same way that it would if you were creating a new action instead.

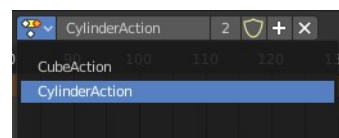
### Note

Push down and Stash adds the action to the NLA stack. It is cleared / unassigned from the active action slot.

This means that the action cannot be edited anymore from the Action or Graph Editors, unless you enter “Tweak Mode” on the corresponding strips later.

## Action Data Browser prop

When there is more than one animated object in the scene then you have most probably more than one action in the scene too. The Action Data Browser allows you to display, select and rename the available actions in the scene.



## Action Data Browser

The list of available actions in the scene.

## Number of Fake Users

Displays the current number of fake users for the active action.

## Fake User

Assign a fake user to this action. Fake users is a odd concept to keep data in the scene even if it has no user somewhere. The fake user is then a dummy user so that the object is not deleted when saving the scene.

## New Action

Add a new blank action.

## Unlink Action

Delete the current active action.

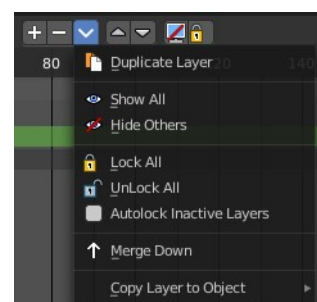
## Grease Pencil mode tools

### Add new Layer

Adds a new blank grease pencil layer.

### Remove Layer

Removes the currently selected grease pencil layer.



## **Layer Specials**

A menu with grease pencil functionality.

### **Duplicate layer**

Duplicates the currently selected grease pencil layer.

### **Show All**

Shows all hidden grease pencil layers.

### **Hide Others**

Hides all grease pencil layers but the selected.

### **Lock All**

Locks all grease pencil layers.

### **Unlock All**

Unlocks all grease pencil layers.

### **Autolock inactive Layers**

Lock automatically all layers except active one.

### **Merge Down**

Merge the current layer with the layer below.

### **Copy Layer to object**

Copies the grease pencil layer to another object.

### **Move Grease Pencil Layer upwards**

Moves the grease pencil layer upwards in the hierarchy.

### **Move Grease Pencil Layer downwards**

Moves the grease pencil layer downwards in the hierarchy.

### **Isolate Layer with visibility**

Locks and hides the currently active grease pencil layer.

### **Isolate Layer without visibility**

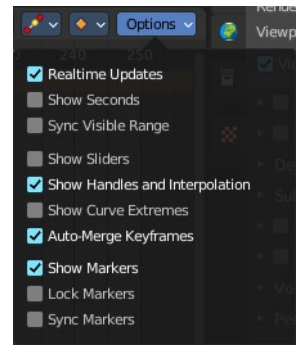
Locks the currently active grease pencil layer.



# Options

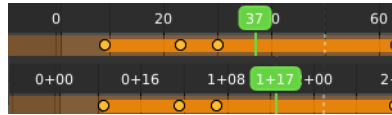
## Real-time Updates

When transforming keyframes then this transformation is also immediately visible in other editors.



## Show Seconds

Show the timing in the timeline area in seconds instead of frames.



## Sync visible range

Synchronize the visible timeline range with other visible time based editors. When you zoom in or out in the one editor, then it zooms in or out in the other editor too. Each editor to sync needs to have Sync Visible Range ticked.

## Show Sliders

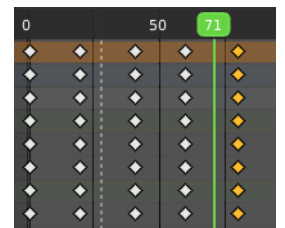
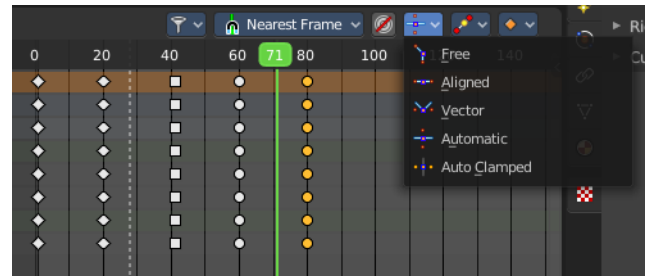
Shows the value sliders for f-curve channels in the channel list.



## Show Handles and Interpolation

With this option on the keyframes shows different shapes that depends of their handle type.

With this option off all keyframes shows as diamond shape.



## Show Curve Extremes

Shows the curve extremes at the keyframe icons.



## AutoMerge Keyframes

Automatically merge nearby keyframes.

## **Show Markers**

Display the markers row at the bottom of the view.

## **Lock Markers**

Make the markers uneditable.

## **Sync Markers**

Sync markers with keyframe edits. When you move the keyframes, then the markers will move too.