



# EASE and WIZZ

## VERSION 2.5.0 – INTRODUCTION

Thanks for downloading **Ease and Wizz**, a set of expressions for After Effects that give you more ways to interpolate between values. The obvious use is in motion, but they can be used on animated properties of any kind. They're applied with an After Effects-ish palette that can be docked, so it's very easy to use.

A while back, Flash guru Robert Penner created a suite of extremely useful easing equations that have been used to build thousands of websites worldwide. I've adapted these equations to work as expressions in After Effects (for an introduction to After Effects expressions, check out [Dan Ebberts' excellent site](#)).

One advantage of using an expression for easing is that the keyframes are editable. You can drag objects in the comp viewer, or move keyframes in the timeline, and the easing will be updated immediately.

## VIDEO OVERVIEW

[Check out this video](#) for a quick introduction.

## INSTALLATION

1. Navigate to the After Effects Scripts folder. On my Mac it's here (this path should be the same for different versions of AE, just the version number will change):

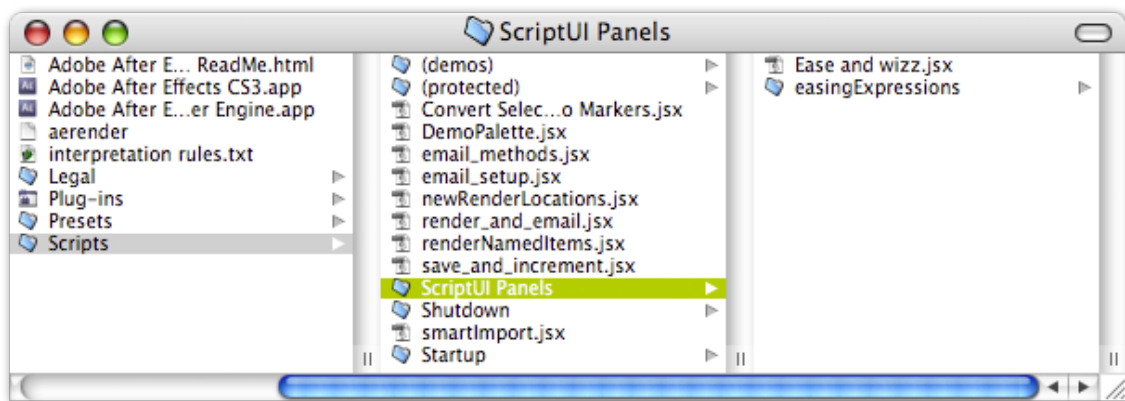
`/Applications/Adobe After Effects CC 2015/Scripts`

On Windows:

`C:\Program Files\Adobe\Adobe After Effects CC 2015\Support Files\Scripts\`

Create a folder in Scripts called "ScriptUI Panels" (if there isn't one already).

2. Extract the zip archive into the ScriptUI Panels folder. It should look something like this:



3. Relaunch After Effects. There should be a new item under the Windows menu: "Ease and Wizz. jsx". When you select this item, a new panel should appear. You can dock it with some other panels, wherever's convenient.
4. Create a new comp and put something in there (shape layer, bitmap, solid etc.). Animate one of its properties, such as position or scale. With at least one keyframe selected, select the "Apply" button on the Ease and Wizz palette.
5. Have fun! For more info and contact details, go to <http://ianinternet.net/ease-and-wizz/>.

Thanks, Ian  
ianhaigh.com

## HISTORY

### 2016-11-16 – Version 2.5.0

**[NEW]** Multi-easing types. You can have two easing types on one property, e.g. Expo Out, then Back Out – in one expression. The easing only applies to the first two and last two keyframes on the property, other keyframes use the values from the timeline. You can use After Effects' built-in easing for these intermediate keys.

The new easing combinations are:

- Expo out, Expo in
- Expo in, Expo out
- Back out, Expo in
- Back out, Back in
- Elastic out, Back in
- Elastic out, Expo in
- Bounce out, Expo in

These are just combinations that I find useful. You can combine any two easing types by manually by editing the expression; see comments in the code for more.

Note that multi-easing types don't work with Curvaceous.

**[FIXED]** Updated templates for Curvaceous "Start & End" and "All Keyframes", which weren't working as they should.

**[CHANGED]** Made the list type a little wider, so it's easier to read with the multi-easing types.

**[CHANGED]** Changed naming convention for expression file names, e.g. "inExpo" to "expo-in", so they're easier to read and more consistent.

**[CHANGED]** Removed reference to "aeExpo" from the source code since we're not using it ... I'll put it in there one day.

**[CHANGED]** Other code fixes and general beautification.

### 2016-08-11 – Version 2.1.2

**[CHANGED]** The expressions now have a "txt" extension, rather than "js", to stop them being identified as potential malware by Microsoft Windows 10.

**[CHANGED]** Added a manifest file, for compatibility with the aescrpts.com installer.

### 2015-11-19 – Version 2.1.1

**[FIXED]** A small jump at the start and end of the inOutExpo could be visible when using very large values. This has been fixed.

### 2015-08-25 – Version 2.1

**[NEW]** Ease and Wizz now remembers what options were selected if you close the palette.

**[NEW]** A warning is displayed if you click "Apply" with no keyframes selected.

**[NEW]** Ease and Wizz displays a message on the info palette describing what it did (e.g. 'Applied "Bounce" to 4 properties').

**[CHANGED]** When activating the Curvaceous feature the script removed menu items that were incompatible. Now they are disabled, rather than removed.

**[CHANGED]** "Bounce" now appears before "Back" in the menu, which looks aesthetically more pleasing when the Curvaceous checkbox is active.

#### **2015-07-16 – Version 2.0.8**

**[REVERTED]** Unfortunately 2.0.7 introduced an error in the inOutExpo behaviour, which could cause a jump halfway through easing. It has been reverted to the previous behaviour.

#### **2015-07-08 – Version 2.0.7**

**[FIXED]** Similar to the fix in version 2.0.6, inExpo and inOutExpo exhibit a small jump at the start when easing between very large values. A magic number has been added to fix it.

**[FIXED]** Some of the Curvaceous expressions were missing default variables, which would cause the expression to throw an error. These have been fixed.

#### **2015-03-25 – Version 2.0.6**

**[FIXED]** Due to a rounding error, outExpo and inOutExpo would display a small “jump” at the end when using very large values. This has been fixed.

#### **2015-01-05 – Version 2.0.5**

**[FIXED]** Changed variable scoping to avoid namespace clashes.

**[NEW]** Added help button with info and version number.

**[CHANGED]** Small interface tweaks.

**[CHANGED]** Link in the comments to Pulp’s live performance of “Sorted for E’s and Wizz” at Glastonbury, for the curious.

#### **2013-07-12 – Version 2.0.4**

**[FIXED]** Reinstated the graceful catch for errors when applying expression to mask path without Curvaceous turned on.

**[FIXED]** Put global variables on a custom object and renamed functions to avoid namespace clashes.

**[FIXED]** Caught a bug that left the easing-type popup blank if selecting Curvaceous when Elastic or Back were selected. Now it defaults to Expo.

**[CHANGED]** Removed the requirement in the documentation to “Allow scripts to write files and access network”.

**[CHANGED]** The default period when using Elastic easing is now 0.81, rather than 0.8 (which may have been related to a rare rounding error).

#### **2012-10-10 – Version 2.0.3**

**[FIXED]** Reverted the type in the popup menus to a black colour, as it was illegible in CS5.

#### **2012-10-10 – Version 2.0.2**

**[FIXED]** The inBounce behaviour was, inexplicably, identical to the outBounce behaviour. It now behaves as advertised.

**[CHANGED]** The type in the popup menus is now white, making it more legible on the default background.

**[NEW]** The popup menus and the “Curvaceous” checkbox now have tooltips for extra information.

#### **2010-10-21 – Version 2.0.1**

**[CHANGED]** Changed function names that were clashing with Expression Toolbox.

**[FIXED]** Added a more graceful catch if you try to add an expression to a mask path without the "Curvaceous" checkbox enabled.

#### **2009-02-11 – Version 2.0**

**[NEW]** Curvaceous. Allows you to apply easing expressions to curved motion paths, and to mask or shape layer paths.

#### **2008-12-01 – Version 1.12**

**[FIXED]** After Effects CS4 compatibility.

#### **2008-03-24 – Version 1.1**

**[NEW]** Tooltips added to the palette

**[NEW]** Popup menu added so you can select which keyframes to affect (all, first two and last two, or just the first two)

**[CHANGED]** Replaced the "type" radio buttons with a popup menu

**[CHANGED]** Eliminated need to choose easingExpressions folder path (thanks to Jeff Almasol)

**[FIXED]** Fixed colour of text in popup menus – thanks to Jeff again

#### **2008-03-21 – Version 1.0**

**[NEW]** Initial release

## LEGALESE

Below is the original BSD License for Robert Penner's easing equations, followed by an identical license for the Ease and Wizz code that I've wrapped around them.

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