

## Kerbal Space Program - Feedback #9434

### Volume sliders shouldn't be linear

04/23/2016 12:00 AM - nand

<b>Status:</b>	Needs Clarification		
<b>Severity:</b>	Low		
<b>Assignee:</b>			
<b>Category:</b>	Audio		
<b>Target version:</b>			
<b>Version:</b>	1.1.0	<b>Language:</b>	English (US)
<b>Platform:</b>	Linux	<b>Mod Related:</b>	No
<b>Expansion:</b>			

#### Description

The human psychoacoustic system does not perceive sounds linearly, which makes the current volume sliders a bit awkward to deal with. (I basically have to make all my adjustments around the lower 10%-20% range)

ââ Ideaââ volume adjustments are logarithmic, but for games it's generally desirable to preserve the property of 0% mapping onto a signal level of 0, so an easy approximation you can use is to take the squared or cubed slider level. (A more sophisticated slider could be exponential with a linear slope near zero, which is how most hardware volume knobs on mixing devices etc. work)

For more information see e.g. <http://www.dr-lex.be/info-stuff/volumecontrols.html>

(e.g. a slider level of 50% would translate to a signal level of  $0.5^2 = 0.25$  or  $0.5^3 = 0.125$  instead)

#### History

#1 - 07/17/2016 09:47 AM - TriggerAu

- Status changed from New to Needs Clarification