## Sound Input - preliminary unformatted. Rev 1.20Feb2004

Designed to show sound input waveforms and phase vector diagrams as layers in Pixelmad d14 and Catalyst d56.

You can show Waveforms



You can show phase vector-scope type images



And because the Sound input display is active on a single layer. you can alter its colour, size, transparency and use it as an overlay or underlay with other layers.



## Setting Up Sound Input

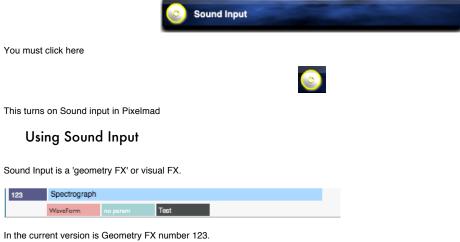
You must use the 'Audio Midi Setup' application - this is normally in the Utilities folder inside the Applications folder - to check that the default sound input is set to 'Built-in Audio'.

The current version only works with the analogue built-in sound input, or a microphone built-in to a laptop.

$\Theta \Theta$		Audio MIDI Setup							
		Audio Dev	vices	MIDI Devic	es				
System Settings									
Default Input:	Built-in Audio			Default Output: System Output:		Built-in Audio			
						Built-in Audio			
Properties For:	Built-in Audio		•						
Clock Source:	Internal Clock		+						
Audio Input				Audio Outp	ut —				-
				Configure Speakers					
- Master Strea	im ;	) ———		- Master	Strear	n	A		
Source: Line In				Source:	Inte	ternal speakers 🛟			
Format: 441	100.0Hz 🔽 20	ch-16bit		Format:	4410	00.0Hz	<ul> <li>2ch</li> </ul>	-16bit	+
Ch Volume	dB V	alue Mute Thr	u	Ch Volume			dB	Value	Mute
M	n/a	n/a		Μ		0	-6.5	0.82	
1		0.50		1 💮			n/a	n/a	
2		0.50		2 💮			— n/a	n/a	

This is the only thing you have to do in Apple's software.

To use the sound input in Pixelmad you need to turn 'Sound Input' On. Sound Input is turned OFF by default.



So it is turned on by setting the Visual FX channel to 123.

123

The Param 1 channel is used to access different sound waveform types.

0 -Mono sound input - drawn as a waveform with a solid outline.



1 -Mono sound input - drawn as a envelope with a solid outline.



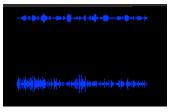
2 -Mono sound input - drawn as a single waveform with a solid outline.



3 -Mono sound input - drawn as a single waveform with a dashed outline.



4 -Stereo sound input - drawn as a dual envelope with a solid outline.



5- Spectral analysis by frequency.



6,7,8- Phase vector-scope from stereo input drawn as solid lines.

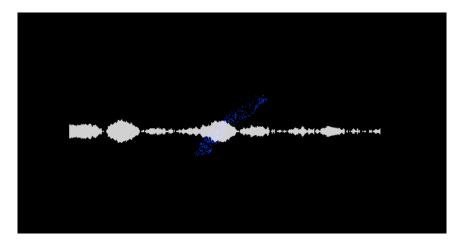


6,7,8- Phase vector-scope from stereo input drawn as dots.



Special FX.

You can use multiple sound graphs at the same time on different layers. Shown here is a phase vectorscope on one layer and a waveform on another.



You can do this with visual images as well.

