

# Processing Sound (v.01)

## Class Structure

### I. Abstract SuperClass

Class Name	Type	Methods	Arguments
SoundObject	void	new	()

### II. Sound Server Object

Class Name	Type	Methods	Arguments
Sound	void	new	SampleRate (int) BufferSize (int)
	int	sampleRate	()

### III. SoundFile Support

Class Name	Type	Methods	Arguments
SoundFile	void	new	Path (str)
	void	play	Rate (float) Cue (int) Amplitude (float) Add (float) Pan (float)
	void	loop	Rate (float) Cue (int) Amplitude (float) Add (float) Pan (float)
	void	stop	()
	int	frames	()
	int	samplerate	()
	int	channels	()
	float	duration	()
	void	set	Rate (float) Cue (int) Amplitude (float) Add (mul)
	void	rate	Rate(float)
	void	cue	Seconds (float)

	void	amp	Amplitude(float)
	void	add	Add (float)

#### IV. Oscillator Super Class

Class Name	Type	Methods	Arguments
Oscillator	void	new	()
	void	play	Frequency (float) Amplitude (float) Add (float) Pan (float)
	void	set	Frequency (float) Amplitude (float) Add (float) Pan (float)
	void	freq	Frequency (float)
	void	amp	Amplitude (float)
	void	add	Add (float)
	void	pan	Pan (float)
	void	stop	()

#### IV.1 Inheriting Classes

Class Name	Type	Methods	Arguments
Sin0sc	void	new	()

Class Name	Type	Methods	Arguments
Sqr0sc	void	new	()

Class Name	Type	Methods	Arguments
Saw0sc	void	new	()

Class Name	Type	Methods	Arguments
Tri0sc	void	new	()

Class Name	Type	Methods	Arguments
Pulse	void	new	()
	void	play	Frequency (float) Width (Float) Amplitude (float) Add (float) Pan (float)
	void	width	Width(float)

## V Noise

Class Name	Type	Methods	Arguments
WhiteNoise	void	new	()
	void	play	Amplitude (float) Type (string)
	void	set	Amplitude (float) Add (float) Pan (float)
	void	amp	Amplitude (float)
	void	add	Add (float)
	void	pan	Pan (float)

## VI Envelopes

Class Name	Type	Methods	Arguments
Envelope	void	new	()
	void	play	Attack (float) Decay (float) Sustain (float) Release(float)

## VI I/O Objects

Class Name	Type	Methods	Arguments
AudioIn	void	new	()
	void	play	Channel (int) Amplitude (float)

VII Descriptors

Class	Type	Methods	Arguments
FFT	void	new	fft_bins (int) Input (SndObject)
	void	process	bands (float array)

Class	Type	Methods	Arguments
Amplitude	void	new	Input (SndObject)
	float	process	()

# Processing Sound (v.1.0)

New general Features:

1. Windows + Linux Versions of the Library
2. Rewrite of the Pan methods for MultiChannel Audio
3. MP3 support
4. Rewrite the Envelope Function to generate ADSR
5. Bugfixing v.01

New Classes + extensions:

## IV. Oscillator Super Class

Class Name	Type	Methods	Arguments
Oscillator			
	void	set etc.	Input (SoundObject)

## VII Descriptors

Class	Type	Methods	Arguments
PitchTracker	void	new	()
	float	process	Input (SndObject)

## VIII. Effects

Class Name	Type	Methods	Arguments
Reverb	void	new	()
	void	play	Input (SoundObject)
	void	set	Parameter..

Class Name	Type	Methods	Arguments
Delay	void	new	
	void	play	(SoundObject)
	void	set	Parameter..

## IX. Utility

Class Name	Type	Methods	Arguments
Mix	void	new	
	void	play	Input (SoundObject[])
	void	amp	Volumes (float[])