Русская версия

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What is Virtual ANS

Virtual ANS is a software simulator of the unique Russian synthesizer ANS - photoelectronic microtonal/spectral musical instrument created by Russian engineer Evgeny Murzin from 1938 to 1958. Murzin named his invention in honour of the composer Alexander Nikolayevich Scriabin.

The instrument was used by Stanislav Kreichi, Alfred Schnittke, Edison Denisov, Sofia Gubaidulina, Edward Artemiev and other Soviet composers. You can hear the sound of the ANS in Andrei Tarkovsky's movies Solaris, The Mirror, Stalker. In 2004, the British experimental group Coil released CoilANS, a boxed set of experimental drone music performed on the ANS.

While the other similar programs are just fun toys, the Virtual ANS is a full-featured professional tool which allows you to create unusual, deep, atmospheric sounds. With this app you can draw a complete piece of music, or convert sound to image (sonogram) and then make some complex sonogram modifications. Actually the potential of the program has not been explored yet, so it (as well as PixiVisor) is more appropriate for people who are searching for something new, not afraid to experiment with sound.
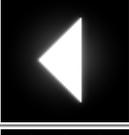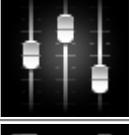
Key features:

- unlimited number of pure tone generators;
- powerful sonogram editor - you can draw the spectrum and play it at the same time;
- any sound (from a WAV file or a Microphone/Line-in) can be converted to image (sonogram) and vice versa;
- MIDI Input (only for Windows, Linux, OSX and iOS);
- supported file formats: WAV (only uncompressed PCM), PNG, JPEG, GIF, VNS (Virtual ANS 1.x);
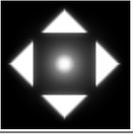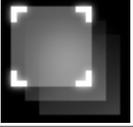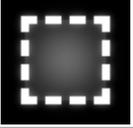- supported sound systems: ASIO, DirectSound, MME, ALSA, OSS, JACK, Audiobus, IAA

Official Virtual ANS page: http://warmplace.ru/soft/ans

Interface description
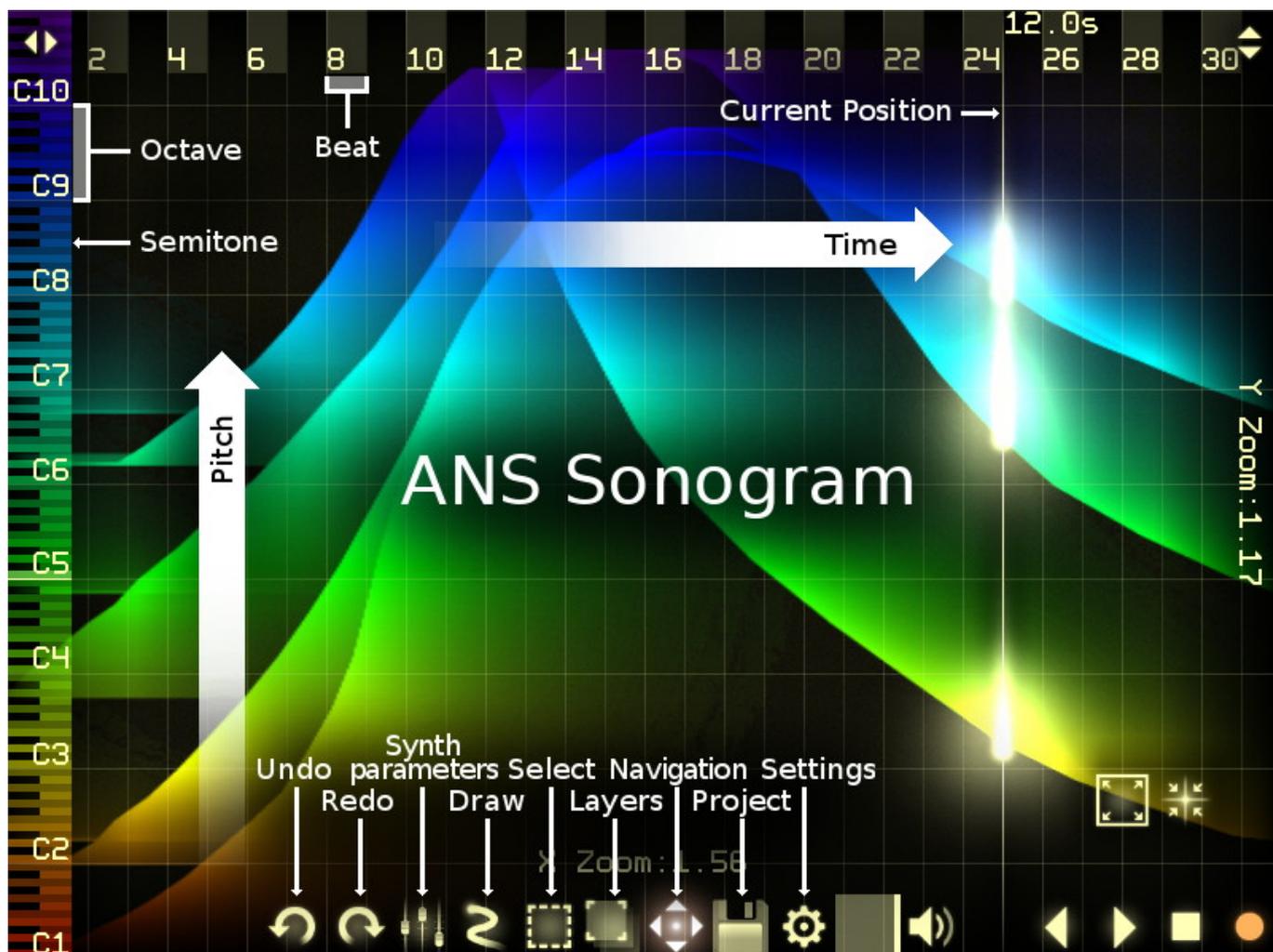
Main window

UI element	Description
	Record from the Keyboard or from the Microphone/Line-In
	Play / Stop
	Play back / Stop
	Settings (project, visualization, audio, …)
	Project (new, load, save, import/export, …)

UI element	Description
	Switch to the Navigation mode (move/zoom the sonogram)
	Switch to the Layers mode
	Switch to the Selection mode (copy, paste and effects)
	Switch to the Drawing mode
	Undo
	Redo

Drawing

Tool

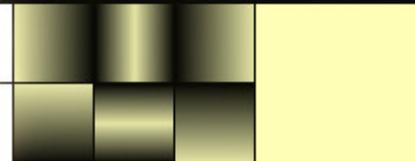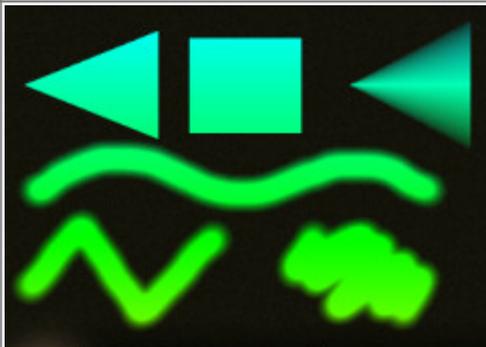| UI element	Description
	Freeform
	Line
	Solid triangle
	Gradient triangle
	Solid rectangle
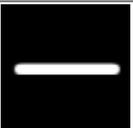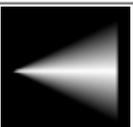
Brush

Brush parameters:

- Scale - scale of the brush;
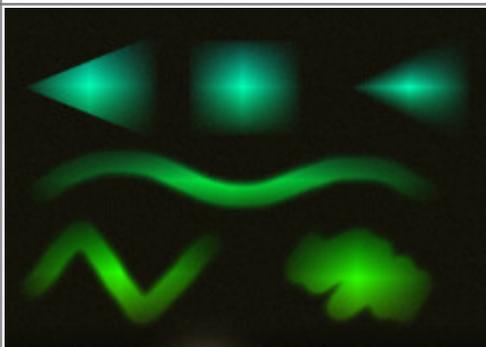- Spacing - space between the brush strokes.

Gradient

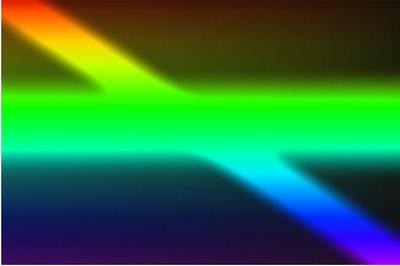| Interface element	Description
	Gradient that will be applied to all drawing operations
Drawing without gradient	
Drawing with gradient	
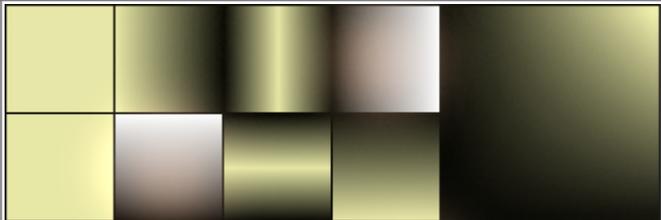
Mode

Mode name	Description	Example
Normal	Normal drawing	
Erase		
Lighten Only		
^	Exclusive OR	
+	Addition without overflow protection	
-	Subtraction without overflow protection	
*	Gain	
/	Attenuation	
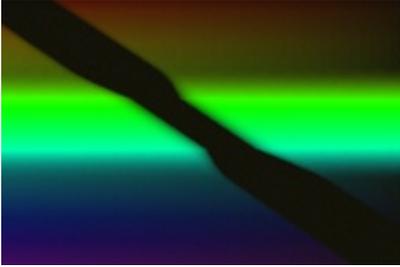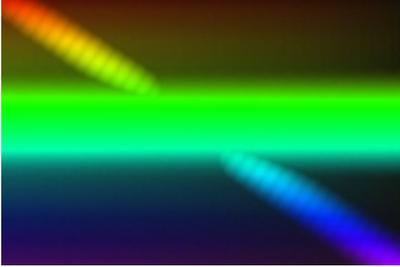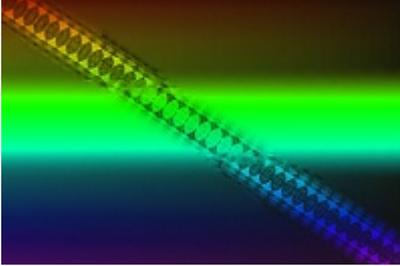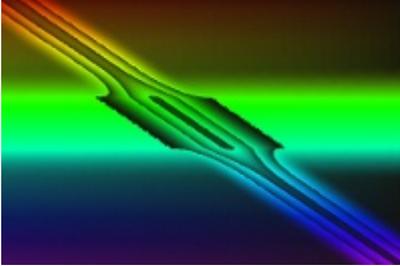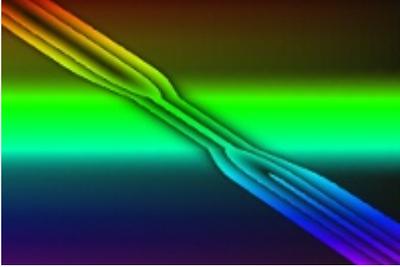
Keyboard shortcuts

Keys	Description
ESCAPE	exit
CTRL + Z	undo
CTRL + Y	redo
CTRL + X / SHIFT + DEL	cut
CTRL + C	copy
CTRL + V / SHIFT + INS	paste
CTRL + D	duplicate
CTRL + A	select/unselect all
CTRL + O	load project
CTRL + N	new project
LEFT / RIGHT	move cursor (or selection) left / right; (press SHIFT to make it move faster)
UP / DOWN	move selection up / down; (press SHIFT to make it move faster)
SPACE	play / stop
SHIFT + SPACE	play backward / stop
ENTER	hold and play current position
Z, S, X, D, C …	notes C, C#, D, D#, E, F …
Q, 2, W, 3, E …	the same notes but one octave upper
F1	octave down
F2	octave up
MOUSE WHEEL UP / DOWN	zoom or scroll up / down
MOUSE MIDDLE KEY	move window content

How it works
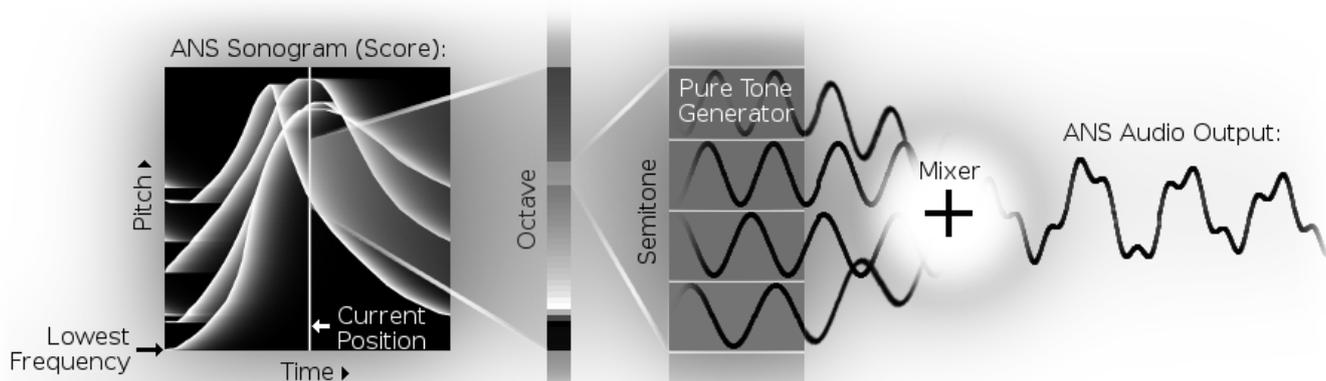
Frequently asked questions (FAQ)

Q: How to load an image or audio file?

A: Please go to the Project (button with diskette) → Load → select an image or audio file through the file browser.

Q: How to load/save images or audio files to/from the iOS version of Virtual ANS?

A: There are two ways:

- Project (button with diskette) → Export/Import → Wi-Fi Export/Import; you will see the web page address; close the app and enter this address in the browser (you can open the browser on the same device);
- iTunes File Sharing.

Q: Every photo i import causes really bad static/crackling during playback.

A:

- For Windows users: default sound system is DirectSound, but it not always work well. I recommend to change it to ASIO in the Virtual ANS Settings → System → Audio.
- For Linux users: if you think that your CPU is too slow for Virtual ANS, try to increase the audio buffer size in the Virtual ANS Settings → System → Audio.
- For all users:
  - Virtual ANS is CPU-hungry synth, so it very dependent on the performance of the device. If your project is too big (sound stutters), you can reduce the Project Height (Settings → Project) or reduce the Sampling Rate (Settings → Sound Quality). Project Width and Number of Octaves do not affect the Virtual ANS performance. Here is the list of normal parameters for different devices:
    - old Android phone (800 MHz): height = 512px; sampling rate: 16000Hz;
    - iPad1: height = 512px; sampling rate = 22050Hz;
    - iPad mini 2: height = 2000px; sampling rate = 44100Hz.
  - Go to the Settings → System Settings → Audio and try to change the Sample rate to 48000 (or some other value if you know the native frequency of your sound card). Sometimes it helps, because the resampling (from 44100 to 48000) algorithms are not always fast enough.
- Also please make sure that the volume (slider at the bottom of the screen) is not too high.

Q: Virtual ANS crashes on WAV loading.

A: Current version can load uncompressed PCM WAV / AIFF files only.

Q: What are the optimal project parameters for the export to PhonoPaper?

A:

- width - not less than 1280;
- height - 720;
- lowest frequency - about 65.4 Hz;
- number of octaves - 8;
- beats per minute - 125;

- pixels per beat - 64.

From:

<https://www.warmplace.ru/wiki/> - **WarmPlace Wiki**

Permanent link:

https://www.warmplace.ru/wiki/doku.php?id=virtualans:manual_en

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