

SonicProjects  
**OP-X Player**

**MANUAL**



[www.sonicprojects.ch](http://www.sonicprojects.ch)

## Introduction

Congratulations on the purchase of OP-X Player!

The OP-X Player has got the same basic engine and sound as the full OP-X while there's a reduced graphical user interface that only gives access to a few parameters. The OP-X Player however is fully compatible to the big brother OP-X, it can load every OP-X patch and comes with the full OP-X patches library containing more than 500 of the finest sounds.

If you want to get access to all parameters and create your own sounds from scratch, then you can upgrade for a cheap price to the full OP-X, which gives instant access to all 83 parameters on a huge and classy GUI. All of these parameters can be automated and remote controlled with midi CC.

Separate Voice Design (SVD):

The technical structure of this synth is quite unique. The engine is based on six totally independent voices which correspond to the voice boards of the original godfather. There's no voice cloning to achieve polyphony as it is normally the case in VST instruments. Each voice is a separate mono synth with completely independent signal path and slightly different sound as it is the case too in real analog polysynths. These imperfections are one of the main reasons for the organic and lively character of the old faithful original.

The original only offered an „Auto Tune“ function which tuned the oscillators of the voice boards. The warm up drift again did detune the oscillators after some time and the „Auto Tune“ had to be repeated. When filters and envelopes were detuned, then they had to be tuned with a screwdriver in the inside of the device by tweaking a lot of trim pots on the voice boards.

The OP-X makes this easier. It offers four global buttons which let you tune or again detune oscillators, filters, filter envelopes and portamento times on the fly. The oscillators' tuning additionally can be altered continuously with the „spread“ knob which also works in polyphonic mode. Everything can be mixed up in any combination of course. So there are a lot of options to achieve the right sound with the wished amount of analog dirt.

The filters of OP-X are meticulously modeled after the legendary analog counterparts which never sound thin even in high resonance settings. Those filters are unbeatable for lively and fat sweeps and pads.

More infos on the OP-X engine:

<http://www.sonicprojects.ch/obx/separatevoicedesign.html>

## Installation



Doubleclick the installer and follow the instructions.

The installer will search for the shared vst plugins folder. You can also browse your computer for the vst plugins folder manually. The plugin will be installed in a subfolder named „SonicProjects“. The installer will also create a folder named „SonicProjects“ in your start menu. You will find here the pdf manual and the uninstaller.

Note: You will need a vst host to run the plugin. Have a look at the „Hosting“ section right below for further information.

After first loading in your host you have to enter your personal id and key data to unlock the plugin. **After unlocking you have to reload the plugin.** Be sure to enter the whole line containing name AND number in the “User ID” field:

User ID:

Remove the plugin:

Use the uninstaller in the „SonicProjects“ folder in the start menu.



## License and copyright

The plugins are bound to the registered user. It's not allowed to pass them on to third persons. Each plugin contains a irreversible name printing and a hidden serial that allows to identify the original user in case of irregular distribution.

## Hosting

The OP-X Player can't be run in standalone mode. It needs a vst host to run. If you don't have a one then have a look at our dedicated site where we have listed some tested and recommended free vst hosts including short guides and a lot of additional information:

<http://www.sonicprojects.ch/obx/freevsthost.html>

## The voice LEDs



These LEDs indicate voice activity. Each voice has its appropriate LED. That means, when a voice is receiving trigger data to play, its appropriate LED shines. In unisono mode, all six LEDs are glowing at the same time. The original has these LEDs too, but mounted on the individual voice boards in the inside of the device. With their help, you could see that a voice was working correctly.

## The TUNER section:



### **VOLUME**

Master volume. Its setting is stored with the preset.

### **TUNER**

The individually and slightly detuned voices can be tuned here. Read the intro for comprehensive info on the voice tuning.

### **OSC**

Tunes the oscillators. In released state, each voice is slightly and individually detuned as it would be on startup in the original.

### **FILT**

Tunes the filters. In released state, the filter cutoff of every voice is slightly different, as it is the case in every original device that is not freshly serviced.

### **ENV**

Tunes the attack and decay times of the filter envelopes. In released mode, the attack and release time of every voices' filter envelope is slightly different. This gives organic life to pad and sweep sounds.

A further tunable parameter are the portamento times. The portamento times can be tuned in the „CONTROL“ section, see below.

## The CONTROL section



### PORTAMENTO

Also called "glide" sometimes. Makes the pitch change continuously between the notes. Short settings in unisono sounds makes the sound "squeak". The function also works in polyphonic mode. The portamento can be detuned with "Porta DET" in the additional functions section (beyond filters section). In released "Porta DET" mode, the portamento times of each voice are equal. In pushed mode, the times vary from voice to voice which was typical for the original. The sonic result in solo sound is a special sort of "depth" while gliding.

### DET

Portamento tuner. In released mode, the portamento times of each voice are equal for snappy "squeek". In pressed mode, the times vary slightly from voice to voice which was typical in the original. The sonic result in solo sound is a special sort of "depth" or „smear“ while gliding.

## The FILTER / MANUAL section



A specially designed 12db Filter tries to do its best to emulate the famous SEM sound. The SEM filters got famous with the beige SEM-Modules and the SEM based Four- and Eightvoice. The OB-X was the last Ob. synth that was equipped with this discrete design. Later models, beginning with the OB-Xa, got the standard Curtis Chips. One of the special things of the SEM filters is that in high resonance settings the sound remains as fat as in zero resonance settings. This is a wonderful thing for pads and sweeps. The old SEM filters had no self oscillation, so you won't find it here too.

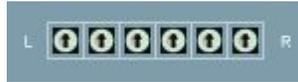
### CUTOFF

Regulates the filter cutoff frequency.

### SPREAD

Spreads the oscillator tuning of the voices - good for fattening up unisono sounds, but it also works in polyphonic mode for continuously controlled detuning of the oscillators to emulate slightly „pissed-off“ tuning.

## The VOICE PANS section



### The voice pans:

This was a very popular feature amongst old analog synths. In contrast to many old synths, the controls can be accessed on the surface and also can be stored with the preset. The panpots also can be automated. In the original device, these pots were on a board in the inner device. The voice pans allow to place each voice independently in the stereo field.

The individual pan trimpots from the left to the right correspond to the voices 1 to 6 whose activity is shown in the corresponding voice LEDs (see above).

## The LEVERS section



### A - Animation

The keyboard and the levers of the OP-X react to the computer mouse. They also react to midi data. The keyboard response to midi data can be switched off with the A (Animation) button.

The midi data response of the keyboard can cause interference noises in some situations, especially in stacked solo sounds. Switch off the keyboard midi response (top button) in that case.

### L - Legato

The lower L button switches on and off legato mode for unisino patches. In legato mode the pitch returns to the hold note and notes are only retriggered when all keys are released like in old analog polysynths. In released mode notes are retriggered everytime which can be more suitable for bass sounds in unisino mode.



A speciality of old ob synths was that they had two vertically working levers instead of the popular wheels invented by moog. The **modulation lever** is on the left side. In the original it only worked downwise. In the OP-X, it can be used up- or downwise. Upwise, the modulation is inverted (hearable only in a realtive time context). The **pitch lever** is on the right side. It reacts vice versa than a popular wheel. Downwise movement highers pitch, upwise movement lowers pich.

### **Os2**

Oscillator 2 only. When switched on, the pitchwheel (or whatever it is called) does change the pitch of oscillator 2 only. This is great for controlling sync sounds. Try the preset "SyncSolo Wheel" to explore this.

### **+12**

This button serves for switching the pitchwheel interval from a third (standard) to an octave (12 semitones).

### **Oct.**

Switches the keyboard octave (three octave range). Be careful handling it in vst automation mode because of the "radio button" switch mode.

### **Tun.**

Master tune. This trimpot lets you adjust the master tuning of the synth to fit acoustic instruments with deviating tuning.

## **Why six voices?**

The original godfather of this project has six voices too. The original could be purchased with 4, 6 or 8 voices. Every device had sockets for eight voice boards. So the voices could be expanded by mounting further voiceboards.

The OP-X Player is built almost exactly the same as the real analog original, so there's a limited number of individual and completely independent voices with slightly different but tunable sound instead of a lot of digitally cloned ones. The result is a rich and orgainic sound.

## VST automation

The available parameters of OP-X Player can be vst automated as you know it from other vstis. How this is done depends on your vst sequencer. Example Cubase: Push the write button on top of the vst plugin window (R), start the sequencer and tweak the controls you want to automate. To read the written data, go back to the zero position, push the read button on top (R) and start the sequencer. The automated controls will move now according to the written data which itself also can be edited.

While knob automation always works fine, some sequencers have problems with button automation (not only with the op-x). They only react to changes and don't write down the buttons beginning state. You can tweak the written curves manually to fix the problem.

The full OP-X has got 83 parameters which are present too in saved mode in the background in OP-X Free and OP-X Player. Only a small selection of them can be tweaked, saved and automated in the OP-X Player.

## MIDI CC Implementation

The OP-X Player lets you remote control the available parameter via Midi Continuous Controller Data (Midi CC). This is mostly handled by a knobs and button equipped midi keyboard.

While the OP-X Player only gives access to a few chosen parameters, the full version OP-X allows Midi Remote Control for all 83 parameters with CC numbers leant on the popular Pro53 standard.

Available in Player (sorted by function group):

### tuner

011	Volume	Pro53: Delay Effect Midi Sync (not cont.)
022	OscTune	Pro53: PolyMod Dest Freq A
023	FiltTune	Pro53: PolyMod Destb PWidth A
024	EnvTune	Pro53: PolyMod Dest Filter

### control

005	Portamento	Pro53: compatible
025	Port Detune	Pro53: LFO Midi Sync

### filter / manual

070	Cutoff	Pro53: compatible
087	Spread	Pro53: Analog

## **pans**

111	Pan1	Pro53: Delay Effect Low Cut
112	Pan2	Pro53: Delay Effect High Cut
113	Pan3	Pro53: Delay Effect Invert (not cont.)
114	Pan4	
115	Pan5	Pro53: Delay Effect On (not cont.)
116	Pan6	Pro53: Delay Effect Wet

## **levers section**

001	Modulation Lever	Pro53: compatible
068	Legato	
053	Osc2 only	Pro53: Oscillator B Triangle
084	+12	Pro53: Amplifier Hold
088	Master Tune	Pro53: compatible
016	Oct Low	
017	Oct Mid	
018	Oct High	

Available in the full OP-X:

**sorted by cc number**

Pitch Lever	Arp On
Modulation Lever	Velocity
Portamento	Spread
Oct Low	Master Tune
Oct Mid	ENV
Oct High	O2o
LFO Freq Depth	OM neg.
LFO PW Depth	P1o
OscTune	PM neg.
FiltTune	LFO Osc Phase
EnvTune	PW-FILT Phase
Port Detune	Pulse Osc1
LFO Rate	Pulse Width
LFO Sine	Sync
LFO Square	Osc1 On
LFO S/H	Osc2 Full
LFO Sync	Noise Full
III Arp LFO	Arp Speed
Arp Sync	Arp Steps
PM	Pitch Osc2
OM	Osc2 Detune
LFO to Osc1	Saw Osc2
LFO to Osc2	Osc2 only
LFO to PW1	Pulse Osc2
LFO to PW2	X-Mod Depth
LFO to Filter	X-Mod
Pitch Osc1	Ring
Saw Osc1	Unisono
Resonance	Cutoff
Env Amt	W-LFO 1/2
Key Track	Key Ani
Osc2 Half	Lever Ani
A Filter	W-LFO Rate
D Filter	A.Touch Vib.
S Filter	A.Touch Filt.
R Filter	Pan1
Noise Half	Pan2
A Amp	Pan3
D Amp	Pan4
S Amp	Pan5
R Amp	Pan6
+12	Volume

more infos on:

<http://www.sonicprojects.ch/>

## GET FULL VERSION

GET FULL VERSION

This button opens your browser and directly leads you to the upgrade site.

Upgrade options:

OP-X Player ⇒ OP-X

Upgrade to the full version and get access to all parameters on a huge graphical user interface with all options for automation and midi cc remote control.

OP-X ⇒ OP-X PRO

Not enough? Then have a look at the OP-X PRO. Continuously controllable multimode filters, tuning trimpots for custom tunings and a lot of added modulation routings make this a super OP-X!

More infos on all products here:

<http://www.sonicprojects.ch/>

## LOAD AND SAVE SOUNDS

The OP-X Player comes with the full OP-X patches library. It's the same library which is delivered with the big brother OP-X. That's why all the banks have the prefix "opx". OP-X and OP-X Player are fully compatible, which means that they both can load each others patches and they will also sound the same. If you want to create your own custom sounds from scratch or access all parameters, then upgrade to OP-X.

The banks are in the standard (steinberg) fxb format.  
Almost all existing vst hosts are able to load and save fxb banks.

The banks collection is included in the download package. Put it to a place that suits you best. The banks folder contains an text info file where the contents of the banks are briefly described.

Now you can browse and load the banks from your host.

Cubase/Nuendo:

File -> Load bank (on top of the plugin window)

Herman Seib VSTHost:

Plugin -> Load bank

Orion Platinum:

Click on folder icon on the right of the presets chooser

Other vst hosts: see manual

(Topic: load fxb banks / load preset banks)

Create your sounds:

1. Tweak an existing preset or set up a new sound from scratch
2. Save the preset as fxp to a place you like and give it a name

Load the fxps:

You can load the fxps (presets) into any location of an existing bank by file -> load preset or plugin -> load program

Create your own banks:

1. Load the opx\_empty bank
2. Load your saved presets (see above) into this bank
3. Save the bank to a place you like and give it a name

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