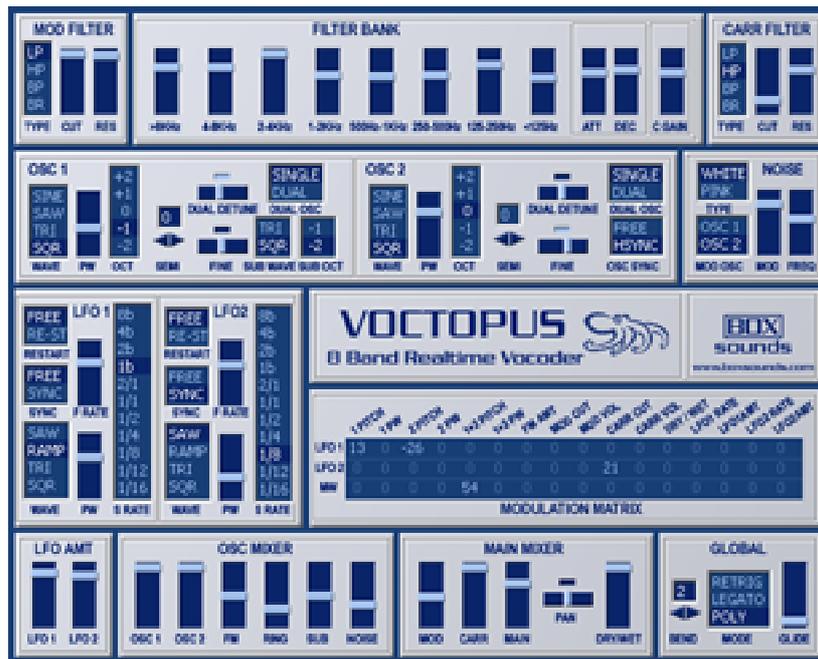# Voctopus Manual

Installation

Just drop the .dll file into your VST folder.

To set up

I use Cubase SX as my host, so I can only give set up instructions for this. I imagine it's similar in others.

First, make the Voctopus an insert effect on an audio channel, like any other effect. This audio channel will be the *modulator*. Drum loops, speech and percussion work well as audio here.

Second, set up a new MIDI track in the main sequencer window and assign its 'out' to the Voctopus. This is now the MIDI track for the on-board synth on the Voctopus, which will provide the *carrier*. The synth can be used just as a normal VSTi is used, including all automation.

Features and Parameters

Just a quick overview, section by section, to what's going on.

MOD FILTER

This is the filter for the modulator (the modulating audio source), which can be mixed into the output if desired.

FILTER BANK

The modulator and the carrier are both split into eight frequency bands, which cover the whole audio spectrum. The gain of each of the modulator frequency bands then controls the output of each of the respective carrier frequency bands, which are then combined and sent to the output.

The gain of each of the modulator frequency bands is measured by an envelope follower. The ATT and DEC control the attack and delay of these envelope followers.

The C GAIN controls the gain of the carrier signal into its filter bank and can be used to a boost to the carrier volume if there is a lot of filtering going on.

CARR FILTER

This is the output filter for the carrier signal.

OSCILLATORS

These are standard virtual analogue oscillators with all the usual parameters. SINGLE/DUAL gives the choice having a dual oscillator, which can be detuned via the DUAL DETUNE.

There is a sub-oscillator, which will always play at the same pitch as OSC 1 either 1 or 2 octaves below (SUB OCT). SUB WAVE chooses the waveform.

OSC 2 can be hard-synced to OSC 1 – this can be chosen from the OSC SYNC option.

NOISE

There are two types of noise that can be chosen – white or pink. The noise can be modulated by either of the two oscillators by using the MOD control. There is also a high pass filter the noise passes through before getting to the output – the cut off of this is controlled by the FREQ control.

LFOs

The RESTART choice controls whether the lfo will restart whenever the synth receives a note-on message. The lfos can be synced to the host tempo or be free running. When synced, the lfo speed is controlled by the S RATE. When free running it is controlled by the F RATE.

MODULATION MATRIX

MW = modulation wheel.

To change a value just click and drag on a number. If you double click on a value, it resets to zero.

The LFO RATE can only be modulated when an lfo is in FREE mode.

LFO AMT

Controls the overall amount of the LFOs.

OSC MIXER

Mixes all the sound outputs.

MAIN MIXER

MOD adjusts the modulator output level. CARR adjusts the carrier output level. MAIN adjusts the total output of these two.

GLOBAL

BEND = pitchbend amount. GLIDE = portamento.

MIDI CC MESSAGES

1	Mod Wheel	27	Osc 2 PW
5	Portamento	28	Noise Mod
7	Main Volume	29	Noise Freq
8	Dry/Wet	30	LFO 1 PW
10	Pan	31	LFO 1 F Rate
14	Mod Cut	80	LFO 2 PW
15	Mod Res	81	LFO 2 F Rate
16	>8KHz	82	LFO 1 Amt
17	4-8KHz	83	LFO 2 Amt
18	2-4KHz	85	Osc 1 Vol
19	1-2KHz	86	Osc 2 Vol
20	500Hz-1KHz	87	FM
21	250-500Hz	88	Ring Mod
22	125-250Hz	89	Sub
23	<125Hz	90	Noise
24	Carr Cut	102	Mod Vol
25	Carr Res	103	Carr Vol
26	Osc 1 PW		