

The Inferno

Overview

Effects

Filter

Connections



[Return To Main Table Of Contents](#)

Overview

The **Inferno** has one oscillator with suboscillator, one filter, and effects (chorus, ring modulator, distortion). The suboscillator has a fixed square-wave waveform and is always tuned one octave below the main oscillator.

The animated **flaming INFERNO label** consumes a bit of computing time. By clicking on it, you can deactivate the animation.

The **Volume** knob controls the overall synth volume. When the Inferno is used polyphonically, and especially if the distortion effect is also used, the synthesizer output can overload. The Volume control can be used to correct this problem.

Tune adjusts oscillator pitch up to two octaves up or down. Double-clicking on this control sets it back to its center position (no detune).

The **MIDI channel** is selected via the small text fader window at bottom left on the surface.

The **Waveform** slide switch selects the main oscillator waveform (sine, triangle, sawtooth down, sawtooth up and square).



The **Amp Envelope** is a simple ADSR envelope which affects both oscillators in common. The yellow **Vel** (velocity) control adjusts the effect of note velocity on amplitude.

The **Mod Wheel** is an onscreen version of the control found on practically every keyboard and/or controller. Use it when you can't (or don't want to) use an external one. Just like them, it's assigned to **MIDI controller 1** – and correspondingly, **it will move on its own** to follow incoming MIDI Mod Wheel messages, if you *are* using an external one. The Mod Wheel **affects oscillator pitch** via an LFO whose speed is set by the **Freq** control. **Depth** adjusts the amount of modulation.

The **PW Range** control sets the range of oscillator pitch response to incoming MIDI Pitch Bend messages. You can adjust the knob or enter values directly into the text field.

SubOsc Level controls the level of the suboscillator.

The **Ring Modulator** multiplies the oscillator and suboscillator signals. **RingMod Level** controls the amount of this signal product which is fed to the output of the Inferno.



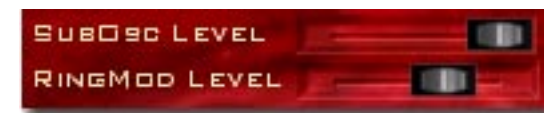
Amp envelope



Pitch modulation

Mod wheel

Suboscillator level



Ring modulator level

Effects

When the pulse waveform is selected for the oscillator, the **Man/LFO** switch selects whether the pulse width is set manually via the **Width** knob (switch up, “Man” LED lit) or varies automatically with time under control of the oscillator **LFO** (down, “LFO” LED lit). The oscillator LFO is in turn controlled via the **Speed** and **Gain** (LFO depth) knobs.

The **Chorus** is a stereo-out effect, which is why Inferno has two outputs. The amount of chorus effect is adjusted by the **Level** control. The **Depth** control adjusts the amount of modulation of the effect, while the **Speed** knob adjusts the rate at which the modulation occurs.

The **Distortion** fader controls the amount of distortion applied to the overall sound. Turning up the distortion will also raise the overall signal level. At extreme settings, you may need to turn the Inferno main volume control down to avoid output overloading.



Pulse-width modulation controls



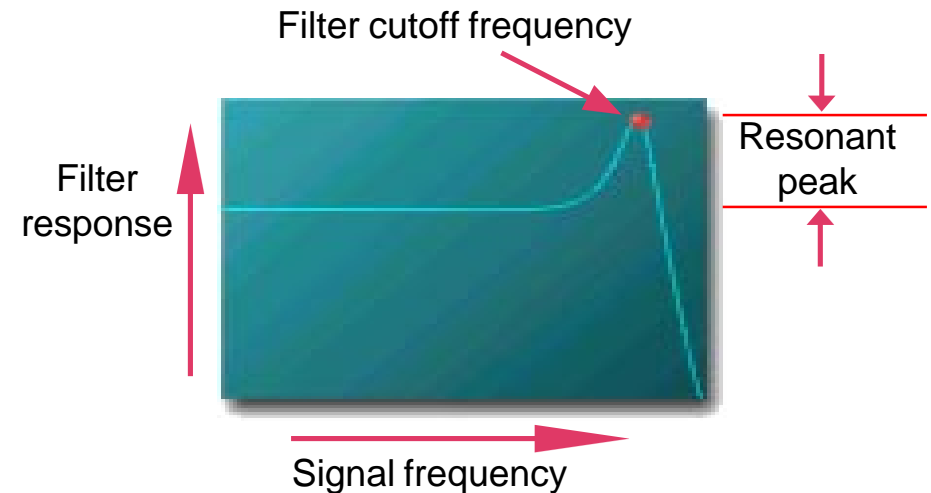
Filter

The **Filter** is a low-pass resonant type. Its response has a “peak” around the cutoff frequency (**CF**) which becomes stronger as the resonance (**Res**) setting is increased. The filter envelope is triggered every time a note is played. The **Env** knob adjusts the amount of effect it has on the filter cutoff frequency.

The filter envelope is an ADSR type with its own set of controls. The **Vel** (velocity) control adjusts the effect of note velocity on filter envelope depth.



Filter envelope controls



Connections



Project window (module) representation



Minimized (icon) representation