# Main Menu

ORBITONE

PRESENTS

IMPRESSOR

# 1. Introduction

**Impressor** is a higly flexible dynamics processing unit, allowing Compresion, Limiting, Expanding and Gating. Designed to be extremly flexible, Impressor can be used in many  signal processing applications, including as a compressor, limiter, de-esser, side chain compressor, Bass maximizer/minimizer, Expander, Gate and more.

Because Impressor can do so much we will use the word "impress" to describe situations that apply on all of the posibilities above.

Impressor has its own punchy, smooth character, full of presence. It can improve your mixes and recordings with correct usage.

## 2. Features

**Sidechain:**
- Impresses audio using a different signal input

**Seperator:**
- Impress the sound with a Bandpassed version of itself (e.g. just the bass drum)

**Lookahead:**
- Delays the impressed signal while leaving the chain in time, allowing a "negative" attack time

**Stereo manipulation:**
- Allows you to compress each side of a stereo audio input by its own, or by the sum of the two or even cross-compress the channels

**Saturation:**
- Gives a warm saturating sound

**Factory Presets:**
- With example audio samples for creative sound im pressing
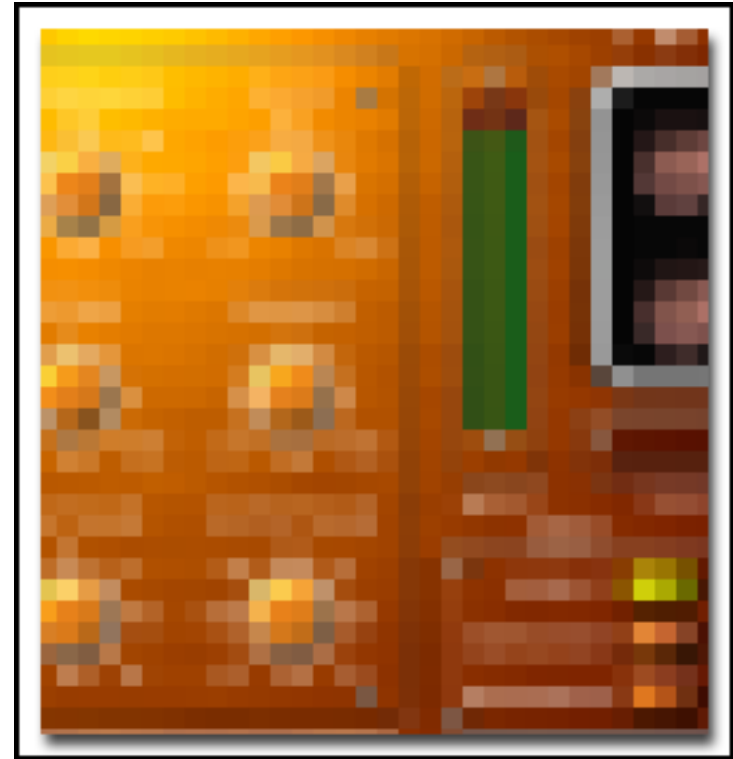
**Midi control:**
- Full midi control of all parameters

**Insert / Standalone:**
- Can be used as an insert effect or as a stand-alone processor

**Mono / Stereo versions:**
- Separate mon and stereo modules are provide to mini mize DSP usage

## 3. Controls

### Center Section

**Input section**

The Input Selectors selects an input source for the impressor signal processing. There are three choices:

1. **Direct**
   Impresses the sound using its own signal
2. **Sidechain**
   Impresses the sound using the sidechain input signal
3. **Seperator**
   Impress the sound using a bandpass filtered version of itself

### Output Section

The Output Selectors selects an which signals will be heard on impressor's outputs. There are three choices:

1. **Direct**
   Impressed sound
2. **Bypass**
   Clean, unprocessed sound
3. **Seperator**
   Allows you to hear the filtered signal for better control                    when using the separator

## Left Section

1. **Threshold**
   Adjusts the point where impression starts. ranged from
   0dB to        -inf dB
2. **Ratio**
   Adjusts the amount of impression aplied on the signal,
   ranged from 1:1 to 1:50 in compression mode, and 1:1
   to 1:inf in expansion mode
3. **Attack**
   Adjusts the attack time of the impression. can be ad
   justed between 1 sample to 500 ms
4. **Release**
   Adjusts the release time of the impression. Ranged
   from 1 sample to 5 seconds. note, if attack and release
   time are both tuned to 0 then ringing will occur
5. **Input gain**
   Adjusts the input gain from -inf dB to 12 dB. good for
   amplifiying weak/quiet signals
6. **Output gain**
   adjusts the output gain from -inf dB to 12 dB. good for
   adjusting the gain while comparing with the bypassed
   signal level, to avoid distortion, or to compensate for
   loss of gain due to extreme impression

Special section

**1. Lookahead**
Delays the compressed signal while leaving the signal chain in place in time. this allows you to shift the compression and create "negative" attack time

**2. Saturation**
Adjust the amount of saturation applied to the signal. saturation adds a nice warm saturated effect to the sound

Seperator section

The band separator allows you to compress the signal with a bandpassed version of its self. In other words, Impressor will use the output of the bandpass filter as its reference, rather than the original signal. This allows you to make interesting and useful compression effects like a de-esser, bass compressor, or you can even compress your whole track just using the snare sound!
The seperator section consists of three knobs:

**1. Frequency**
Adjusts the bandpass filter's center frequency ranging from 20 Hz to 16

**2. Q**
Adjusts the amount of emphas on the filter's center frequency. also known as resonance

**3. Band gain**
adjusts the gain of the bandpass filtered signal, before it enters the impressor

## Extra controls

1. The tiny red LED is a button, when it is luminated then the Tubes will be active, when it is illuminated the tube animation is off to save CPU power.
2. The tiny potentiometer(stereo version only!) is used for stereo manipulation it allows you to compress each side of a stereo audio input by its own, or by the sum of the two or even cross-compress the channels
3. The button switches between two states:
   - **Analog**, more smoother compression
   - **Digital**, sample accurate compression

## 4. Midi

To use an external MIDI controller to control the knobs, select a MIDI channel in the midi channel selector, and then right click on the knob you wish to control; then just move the desired controller so that Pulsar/Scope recognizes it, and you're all set, for more information on configuring midi controllers see the *Pulsar manual*.

## 5. Presets & audio examples

Several example audio files can be downloaded from our
website to assist you in experimenting and exploring some of
Impressor's features. For each audio file, Impressor has a set
of associated built-in presets. These presets should be a good
starting point for you to use with your own audio material.
We made a special page at our website for the "extra" files of
all our products, the location of this page is:
http://www.orbitone.org/users/
Next to each preset name, there is a symbol wich identifies
audio file it is associated with: **<D>** for drums, **<M>** for master-
ing, **<V>** for vocals, **<I>** for instrument (which instrument will
be specified in the preset name) and finally **<S>** for special.

## 6. Enjoy!

While Impressor may a bit difficult to master at first, with experimenting, and careful study of the provided presets, we're sure you'll soon be producing *impressive* recordings.

## 7. Other products

Be sure to check out our other products at our website. We've got several free devices available for download.

Go here:

http://www.orbitone.org