

# BASS DRUM

## Manual



# Bass Drum

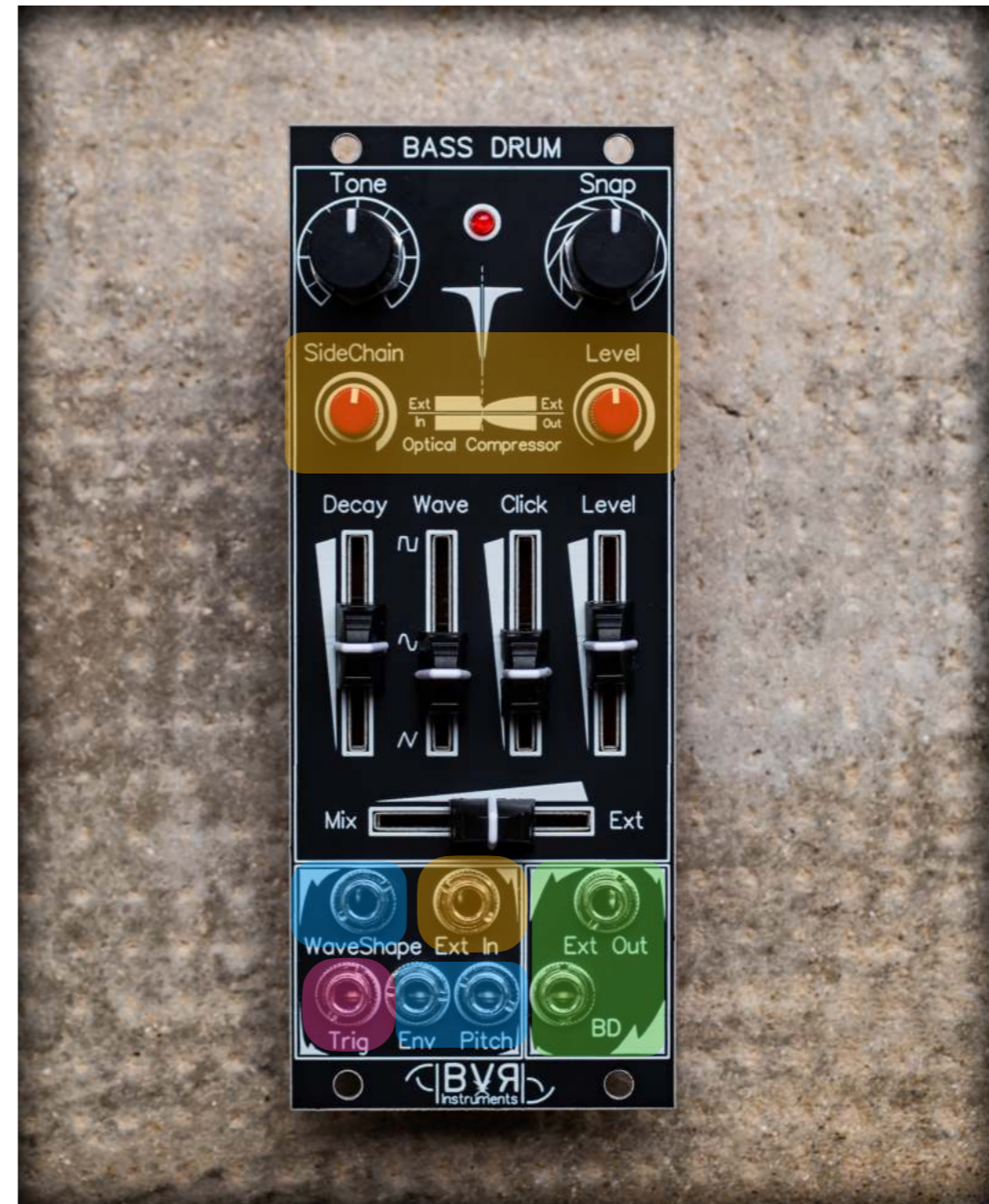
The Bass Drum is a versatile drum module designed to recreate the iconic bass drum sounds of the 808 and 909 drum machines and more.

It includes a side-chain compressor for seamlessly blending external audio sources with the bass drum sound.

This module offers external controls for modulating : Envelop, Pitch, and Waveform.

One input to trig the bass drum.

Two main outputs:  
One for bass drum, with compressed signal.  
Another one for compressed signal alone.



# Drum signal path

The primary triangular oscillator passes through a waveshaper that has a slider for adjusting the triangle waveform gradually to a square wave.

A click generator is also present, featuring a slider to control the intensity of the click.

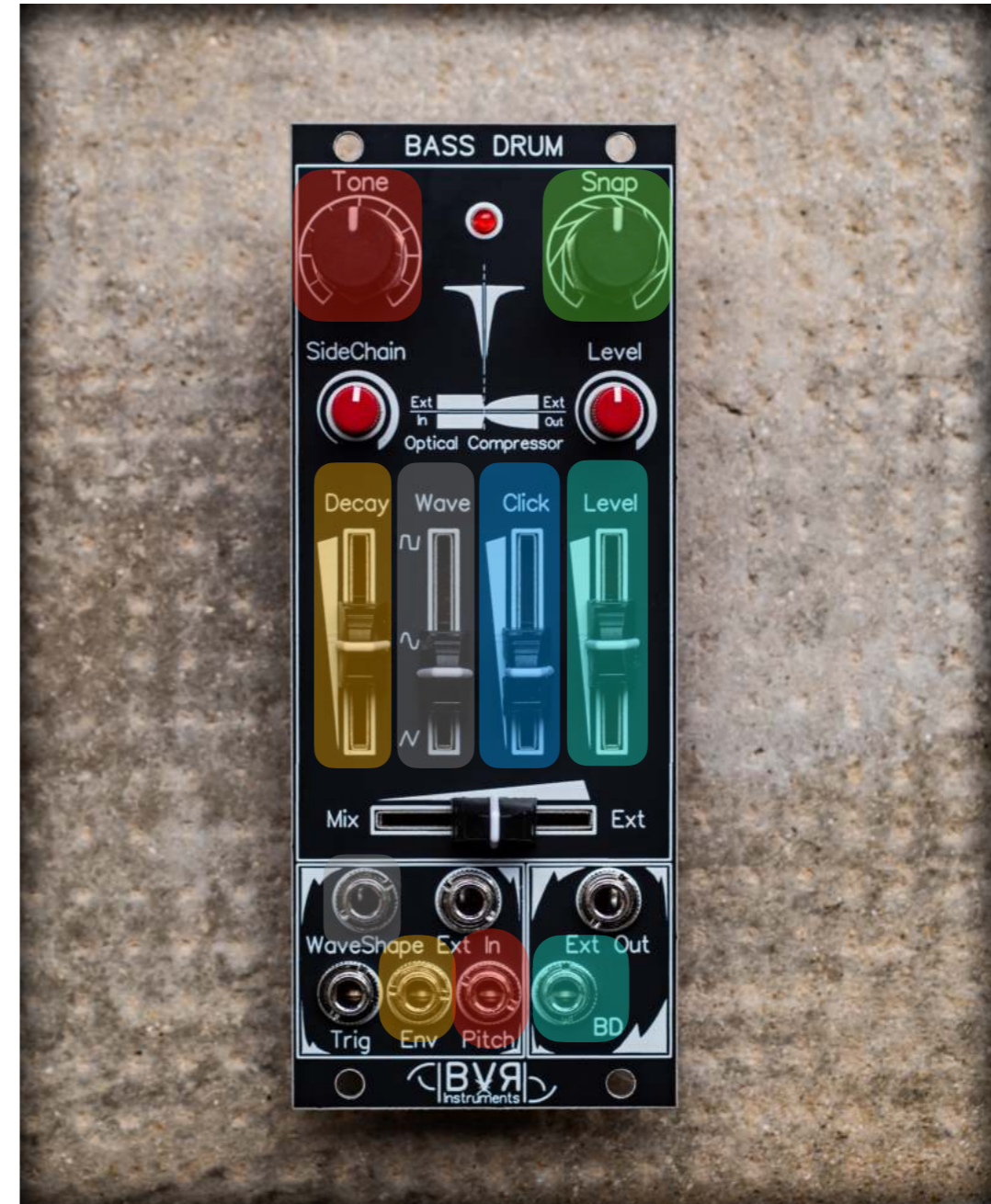
Both Signals are routed to two separate VCA. BD is the main output and controlled by Level Slider

The bass drum includes a « Decay » slider for drum's duration. Additionally, external CV« Env » provide extra control through an external envelope or modulation source.

The main oscillator offers two controls: « Tone » and « Snap ».

« Snap » potentiometer introduces an extra frequency component that decreases with « Decay », creating an impactful waveform characteristic in 909-style sounds.

On the contrary, setting « Snap » to 0 maintains the initial « Tone » setting without altering pitch, resulting in a sound reminiscent of 808-style drums.



# Side-Chain signal path

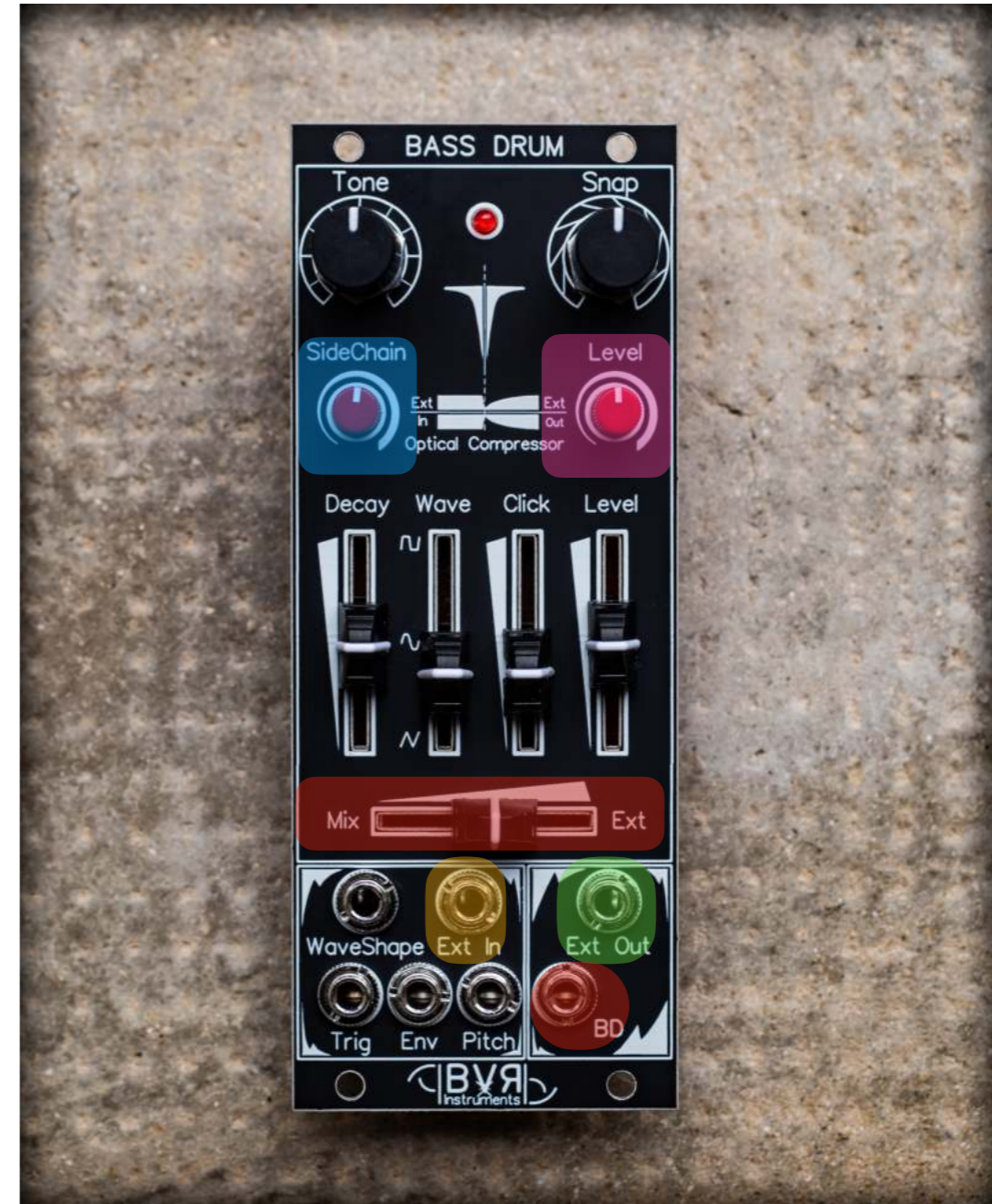
The integrated optical side-chain compressor is fed with an external audio source connected to « Ext In ».

The bass drum envelope signal controls the shape of volume reduction, the « SideChain » potentiometer determines the extent of this reduction.

The « Level » potentiometer is used to adjust the output signal after reduction.

The « Ext Out » provides the full signal without the influence of the drum's sound.

By using « Mix Ext » slider, you can blend the compressed signal with the primary bass drum output « BD ».



# Specifications

## Electrical

Full analogue Eurorack module with OTA based amplifiers for VCO and VCAs.  
Compressor and Wave-shape use RoHS compliant Opto-Transistors.

Voltage-Controlled Oscillator (VCO) has a frequency range from 0 to 108Hz which can be externally controlled with CV.

Voltage-Controlled Amplifier (VCA) features an « Env » (envelop) control voltage input, which can be externally modulated with CV.

The WaveShaper features a WaveShaper control, which can be externally modulated with CV.

Note: Wave slider change gradually the waveform from triangle to square wave with more harmonics.

Note: Wave slider controls the percentage from 0 to 100% of applied external signal on

« WaveShape » CV.

## Controls

2 potentiometers with center positions for Tone and Snap .

2 potentiometers for SideChain amount and Level volume.

5 sliders for Decay, Wave, Click, Level, Mix Ext.

## Inputs

CV inputs: Trig trigger the Bass Drum, Ext In receive Audio signal to be compressed.

CV modulators: WaveShape, Env and Pitch responds to voltage from 0 to 5V.

Note: Pitch CV does not respond to 1V/Octave.

Note: Audio signals can be used as modulation sources to Pitch, Env and WaveShaper.

## Outputs

Ext Out : Outputs compressed signal only.

BD : Main output.

## Size

10HP.

## Front panel

Aluminium, Black.

## Power consumption

16 mA @+12V.

12 mA @-12V.

0 mA @5V.

## Depth

22 mm.

