

# COBRA

PHASE ENGINE



## USER GUIDE 1.0

## Overview



**COBRA** is a unison phase synthesizer with **4** oscillator engines | **A-B** / **C-D**.

Each engine contains **3** separate waveforms that can be **phase shifted/modulated** to create entirely new **static waveforms** or **organic and moving sounds**.

The layout is optimised for fast access to controls with a simple **modulation grid** for adding **Vibrato**, modulating the **Filter** and **Phase Motion Mod**, plus shaping the **Tone** of each engine.

## Oscillator Modules



### Display

Colored bar display

Displays phase position/movement and unison level.

### Osc Controls

Module select

Selects engine to edit.

Waveform Select

Selects current waveform.

Octave

Sets the octave.

Tune

Sets the fine tune following an exponential curve.

Unison

Adjusts the level of the unison waveforms.

Phase

Adjusts the phase of the waveforms.

Motion

Sets the phase movement of the unison waveforms.

Speed

Sets the speed of the phase movement.



## Modulations



### Selection Buttons

Applies modulation to the selected oscillator engine modules.

#### Vibrato

VBR	A B C D Vibrato amount.
Vibrato Rate	Rate of the Vibrato.
Vibrato CRV	Rotate to the left = Vibrato Decay   To the right: Vibrato Attack

#### Filter

FLTR	A B C D Filter modulation amount.
Filter Rate	Rate of the modulation.
Filter CRV	Rotate to the left = Mod Decay   To the right: Mod Attack

#### Phase Motion

#### Requires Motion enabled on the Oscillators

PHA	A B C D Phase movement modulation.
ATK	Attack of the Phase movement
DEC	Decay of the Phase movement

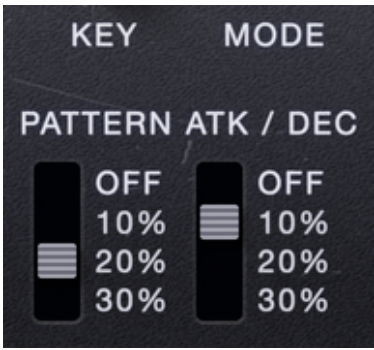
#### Tone

HP	High-pass Filter
LP	Low-pass Filter
SHP	Shaper amount (Pre HP / LP)

Envelope Pattern



Amp Env Pattern Amt      Global Pattern Position



Filter Env Pattern Amt

Envelope Pattern

Applies modulation to the Attack and Decay of the Amp and Filter Envelopes. P-Position offsets a pre-configured control pattern, this allows for a wide range of variations to notes in relation to song position.

Usage cases can be anything from adding groove to a bassline, to emulating player variation in a string.

Amp Env

Amp Pattern Attack Amount	0 - 30%
Amp Pattern Decay Amount	0 - 30%

Filter Env

Amp Pattern Attack Amount	0 – 10 – 20 - 30%
Amp Pattern Decay Amount	0 – 10 – 20 - 30%