Kasina BeatMaker

A MuLab preset for the creation of SpectraStrobe sessions

Introduction

Kasina BeatMaker (KBM) is a preset/plugin created using MuLab Mux. Mux is a modular development system allowing MuLab users to create their own instruments and effects.

KBM perfroms several distinct functions:

1. Generation of SpectraStrobe Reference signals.

2. Creation of independent left/right isochronic beats using instrument/effect Racks.

4. Creation of left/right/R/G/B SS light control signals using instrument/effect Racks (light flashing).

Multiple copies of KBM can be loaded, permitting extremely complex color rendering (note that the Reference must be turned OFF on all but one KBM).

Installation

Download the appropriate version of MuLab Free from mutools.com (Windows 32- or 64-bit, Mac).

Unzip the download package to a suitable location - C:/MuLab is a good choice.

Download KBM1.mux and KBM.wav from mindplacesupport.com and move them to [Your MuLab Folder]/User/Library/Mux/Instruments/Devices.

Quick Start

With Kasina connected and set to USB, launch MuLab and click New.

Click MuLab/Audio Setup (stop audio engine) and ensure that Kasina is selected.

Click the + to the right of the Basic Synth track to add a new Rack - right-click on the top empty slot of the new Rack and select Insert Module. Navigate to User Presets/Instruments/Devices and select KBM.

If everything is set up correctly there should immediately be a complex beat consisting of three instruments. To stop the sound, click the greem “power” button at the top left of KBM.

Change the frequency of the beat by adjusting Beat Rate. Note that MuLab will overload if long sounds are played at a fast rate.

KBM provides access to three instrument/effect Racks, the same as those which appear at the bottom of the MuLab screen. Each Rack can (basically) hold an instrument and effects. Each Rack has independent Delay (effects), Volume (Sound) and Brightness (Light). The color of the light is mixed using the RGB controls for each Rack.

Kasina Connection

Kasina can be connected to MuLab either as a USB audio device or using the Aux Audio input - just ensure that MuLab Audio Setup points to the right device.

MuLab Basics

MuLab functions by directing output from Tracks to the Instruments and/or Effects in Racks.

An audio file can be imported into a track by using Session/Import Audio File or a new audio track created by clicking the + below the last Track. That will create a new Track and an associated Rack.

A sequence can be played through an Instrument, such as the Basic Synth. The Instrument can also be played directly with the Virtual Keyboard.

A Track is added by clicking the + button below the last existing Track. A Sequence or Audio File is created by double-clicking/dragging in the Track area. Double-clicking the Track content enters either the Composer or Audio Editor depending on Track type.

Any Track can have its Target Module (Rack or other MuLab component) changed by right-clicking the Track's name at the left of the track itself.

Instruments and Effects have their control panels opened by double-clicking the device in the Rack or clicking the arrow alongside the name.

Any Rack can have Sends. Sends allow part of a Rack's signal to be directed to another Rack. This can be useful for placing a single copy of TKE and having multiple Tracks feeding it.

The settings of almost any MuLab control, including any Preset control or Deep Editor Module can be automated. This is achieved by using Automation Tracks. An Automation Track is added to a Track by right-clicking its name and selecting Add Automation Sub Track. You will be asked for an Automation Parameter. The first few offered relate to the target Rack, with all other parameters relating to the Devices in the Rack able to be expanded out below. For example, drag the KBM Rack to the Track list at the left, underneath Basic Synth Track, right-click on the new KBM and select Add Automation Subtrack - the first automation parameters will be Gain, Stereo Panning, Stereo Width and Mute. Below that KBM itself can be expanded to expose, first, all of the control panel controls, and then access to all other modules. The Automation Track is created just the same as an Audio or Instrument Track - double-click/drag to create the Track content then double-click that to enter the Automation Editor. Clicking, double-clicking and dragging allow nodes to be placed/moved. The node in the centre of each line segment accesses a curve control whereby the shape of each transition can be extensively modified.

Many Instruments and Effects are included with MuLab.

There are also many VST plugins available to further extend functionality.

Note that MuLab Free supports 4 Tracks (MuLab UL is unlimited).

For full documentation click the MuLab button and choose Info.

KBM Controls

The controls are arranged into the three separate channels, or voices, that will make up the beat..

Each has a Delay control which facilitates some interesting phase and interference effects in the lightshow. The Sound and Light controls adjust volume and brightness respectively. The RGB controls are used to mix the color for that channel.

Above each of these sets of controls there are two buttons. Use Transpose under Beat Note to change the pitch of that voice. Beat Sound opens a Rack into which any intruments and effects can be placed (beware of using slow sound, such as pads or swells, as MuLab will overload with too many incomplete events). Each Rack has its own fader, which will affect sound and light, a pan control for left/right positioning and mute/solo options.

At the top left, below the “power” button is a button marked Ref On/Off. SpectraStrobe requires a specific reference signal in order to operate. In its absence the Kasina will act as an AudioStrobe decoder. Only one such signal is permissable. In order to use multiple copies of TKE, maybe in different racks applying different colors to different instruments or suchlike, all but one Reference must be turned Off. Right click the button and select Toggle Process Off as required.

The easiest way to become familiar with KBM is to just play around - no harm can be done and some surprising effects can be found.

For further information, visit the Kasina forum at mindplacesupport.com.

Enjoy!