Elka Panther

User Manual

English (US)

Version 1.2.1

MARTINIC

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Introduction

Thank you for purchasing or trying Martinic Elka Panther.

The Martinic Elka Panther is an emulation of the Elka Panther 100 and 300 models, two classic Italian combo organs of the late 1960s.

History

By the mid-1960s, the electric organ had taken over pop music. In Italy, a healthy competition had arisen between Italian electronics companies such as Farfisa, GEM and Eko, who strove to make combo organs that were affordable and compact enough to be played at home. In 1964, Elka joined the party, and began manufacturing organs in the Italian province of Ancona. Available as early as 1966, the Elka Panther was a combo organ designed to have it all. Tweakable and versatile, each note could blend up to four octaves, and the plastic switches that controlled the instrument's sonic parameters were modelled on traditional organ stops.

While other electric organs grew to prominence through being used by major recording artists of their era, the Elka Panther makes for a stealthier presence in music history, like the animal it was named after. The organ's lack of commercial visibility may be down to the short window of time in which it was manufactured, as it was discontinued in 1972. Despite being only commercially available for six years, the Elka Panther was respected among accomplished musicians for its variable tone and futuristic aesthetic.

Features

There are no samples used in the sound of the Martinic Elka Panther; instead the plugin uses physical modelling to reproduce the sonic characteristics of the original models. This makes for a bold, authentic organ sound that has a wide range of tonal variations.

With the ability for a single key to produce notes across up to three octaves, the Martinic Elka Panther has a beautifully rich sound. Each octave can be filtered separately and mixed, giving you flexible and powerful sound design capabilities.

A separate bass voice can be turned on and off, and is denoted by the black keys on the keyboard. This bass voice can be extended into the grey area, which will otherwise play the main organ voice. A Tone Decay switch applies a subtle envelope to the sound with a percussive effect, and there is a flexible vibrato section.

Extra features added by Martinic include an amp simulator, tremolo, and a delay unit in the form of our LEM Echo Music, which is also encapsulated in a separate plugin for Elka Panther owners.

Free Trial

You can try the Elka Panther for 30 days free of charge before purchasing. When running in free trial mode white noise will sound every minute.

Installation

System Requirements

Elka Panther is available as a **VST 2.4** or **AU** (Audio Units) effect plugin, which means it needs to run inside VST or AU hosting software, e.g. Ableton Live, Cubase, GarageBand, Logic Pro, REAPER, Studio One, etc.

Although Elka Panther should be able to run at any sample rate the host provides, a rate of at least 44.1kHz is recommended.

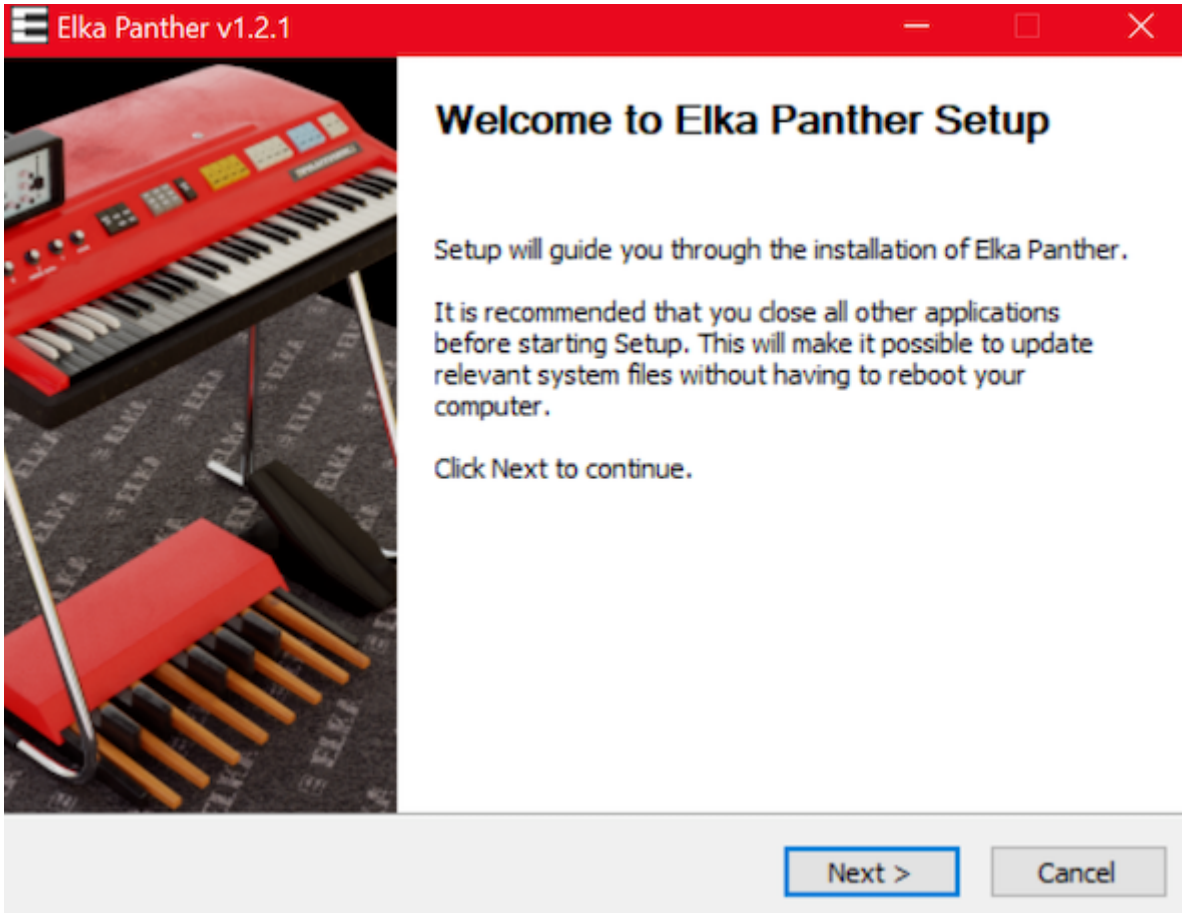
Elka Panther is designed to run on **Windows 7** or newer, or **Mac OS X 10.9** (Mavericks) or newer.

Windows Installation

To install Elka Panther on Windows download the Windows 32/64-bit VST installer, and save it on your computer (e.g. in your Downloads folder).

Navigate to this folder, locate the installer and double-click on it, and then click on the **Next** button to start the installation process. Carefully read the license, and then click on the **I Agree** button to continue.

Next select which versions of the plugin you want to install, optionally select **License Key** if you have purchased a license, and click on the **Next** button.



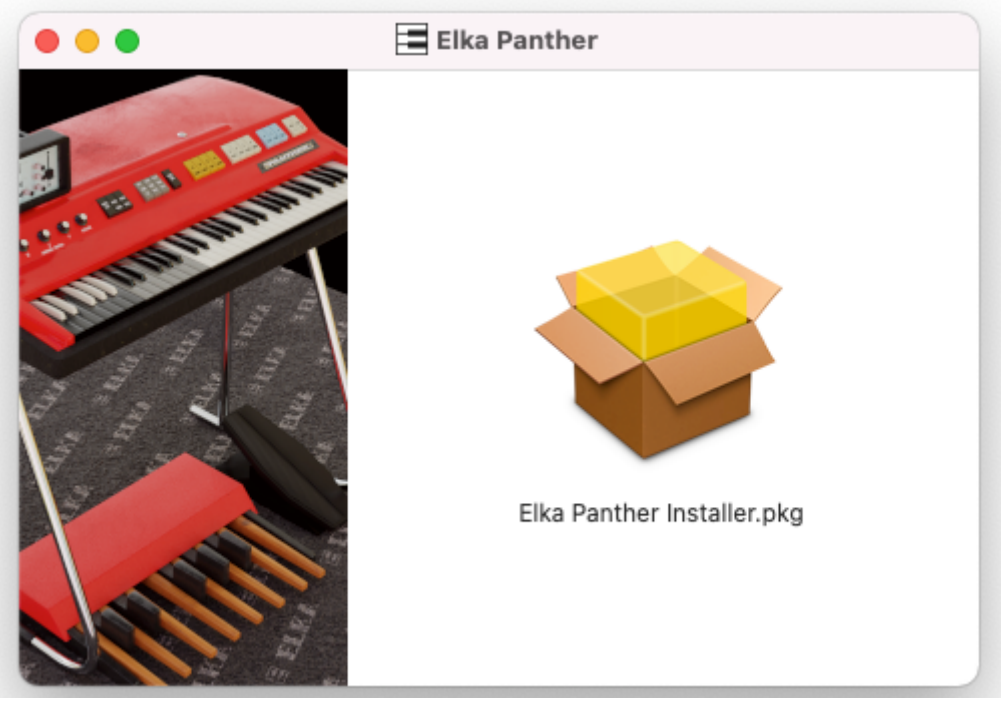
Optionally change the install location, and again click on the **Next** button. Then select your VST2 32-bit and/or 64-bit plugin folder, and optionally select your license key file (if you have purchased a license), confirming each selection by clicking on the **Next** button.

Now wait for the installation to complete (this should take only a few seconds), click on the **Close** button, and you are ready.

Mac Installation

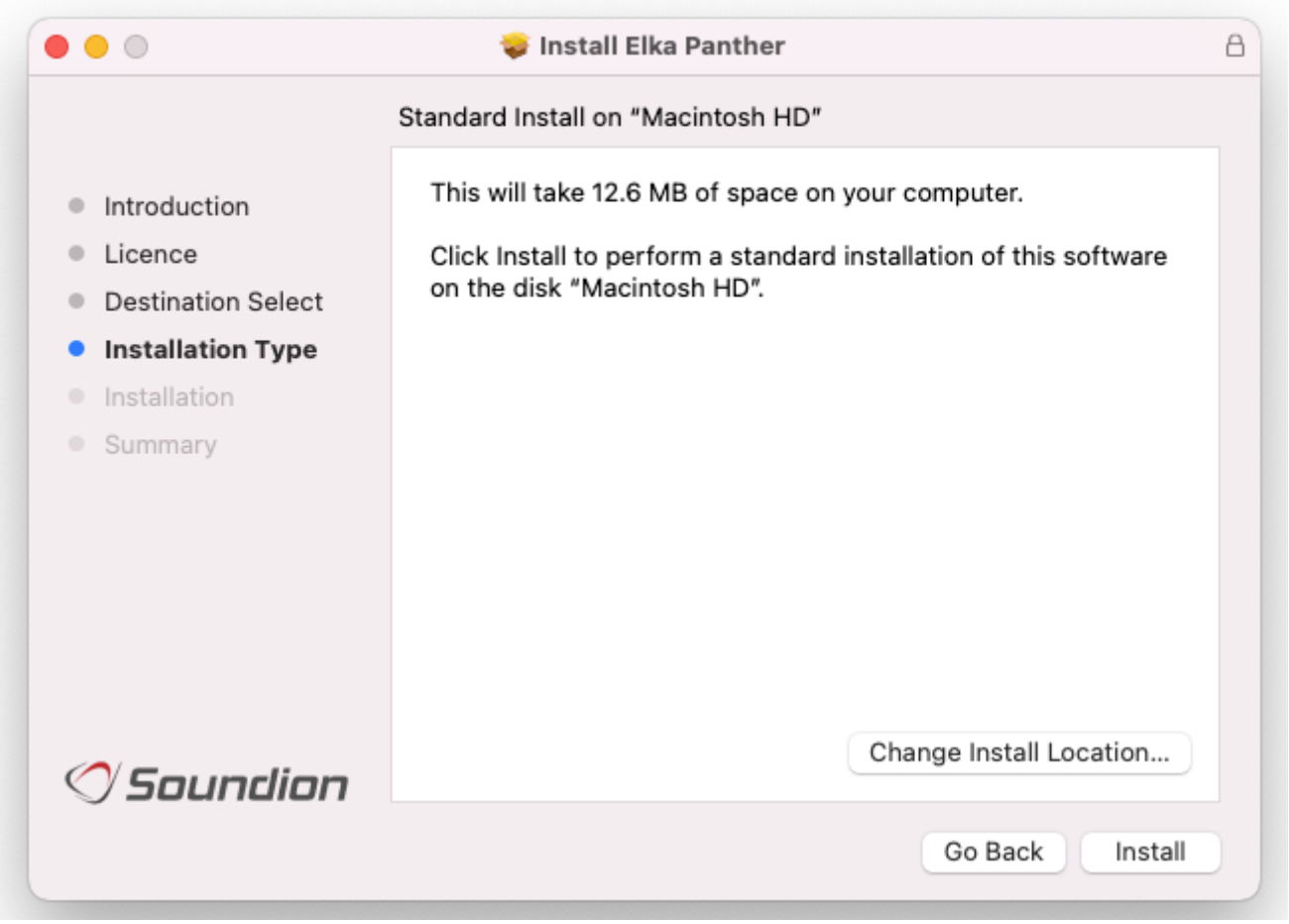
To install LEM Echo Music on Mac OS X or macOS download the Mac 64-bit VST/AU installer disk image (DMG), and save it on your computer (e.g. in your Downloads folder).

If you have purchased a license, then you should copy your license key file to the same folder in which you have saved the installer disk image (DMG), so it can be installed along with the plugin(s).



Navigate to the folder in which you have saved the installer, locate the installer disk image (DMG) and double-click on it, and then double-click on the **LEM Echo Music Installer.pkg** icon. Click on the **Continue** button to confirm that the installation package will run a program, and then click on **Continue** (in the bottom right corner of the installation window) to start the installation process.

Carefully read the license, click on the **Continue** button, and then click on **Agree**. Next select which versions of the plugin you want to install (it is recommended that you install both the VST2 and AU versions, just to be sure), optionally select **License Key** if you have purchased a license, and click on the **Continue** button. Optionally change the install location, and then click on the **Install** button.



Now wait for the installation to complete (this should take only a few seconds), click on the **Close** button, and you are ready.

Loading Elka Panther

To use Elka Panther open your host software and create a new instrument track. Load Elka Panther as you would any other instrument – for instructions on how to do this in your host software please refer to their documentation.

How it Works

The Elka Panther has two voices: a bass voice and an organ voice.

The bass voice is played by the black keys on the left-hand side of the keyboard. Its range can be extended to include the grey keys as well, which are otherwise used for the lowest octave of the organ voice. The tone of the bass sound can be shaped using two of the the

three black switches: **Bass Bour** and **Bass Dulc**.

The organ voice is played by the remaining keys. The Elka Panther boasts three footages per note: 16’, 8’ and 4’. This total increases to four through the use of the Mixture controls (see later). On the original Elka Panther these footages emulate different lengths of pipes in a traditional pipe organ (literally four-foot, eight-foot and sixteen-foot measurements). Halving the length of a pipe shifts the note it produces up by one octave.

Each footage can have several filters applied to it to give unique timbral characteristics, for example the 8’ Flut, Stri, Clar and Oboe switches. You can also shape the sound further with tremolo, vibrato, a guitar amp emulation, reverb, noise, tape delay and more.

100 and 300 modes

The Martinic Elka Panther can operate in 100 and 300 mode thanks to the **100/300** switch in the Settings view. The Panther 100 and 300 were different models within the same range of instruments. They share some features, while others are unique. In general the 300 is the extended model (more keys, more voices, wider frequency range, etc.).

The Panther 100 has a 4-octave F-to-F keyboard; the 300 has a 5-octave C-to-C keyboard. Note that our emulation extends this range to 88 keys C-to-C in 300 mode, and 4½-octave F-to-C in 100 mode.

The bottom octave of the Panther 100 is always mono, both for bass and normal voices. On the Panther 300 only the bass pedals are mono.

The bass pedals won't work in 100 mode, nor will the bass MIDI channel.

In 100 mode the bass output is added to the normal voices on mixer channel 2, while in 300 mode the bass (channel 1) and normal voices (channel 2) are sent to different mixer channels. This is only true if Bass Ext is off. With Bass Ext on the bass is sent to channel 1, even when in 100 mode.

The default mode depends on the preset you are using, but the default preset uses 300 mode. When the tab is black it's in 300 mode, else it's in 100 mode.

Internally there are 2 distinct engines, each with their own tone generators, voice filters, and FX (vibrato, decay, swell pedal). They do share the "external" FX (delay, amp, reverb,

tremolo, cab).

The Panther 100 voices are mapped to the 300 tabs. The mapping is:

Bass Bourdon 16' -> Bass Bourdon 16'
Bass Dulciana 16' -> Bass Bourdon 16'

Bourdon 16' -> Bourdon 16'
Oboe 16' -> Bourdon 16'
Strings 16' -> Strings 16'v
****Open Diapason 16' -> Bourdon 16' + Flute 8 + Diapason 8'**

Flute 8' -> Flute 8'
Strings 8' -> Strings 8'
Clarinet 8' -> Diapason 8'
Oboe 8' -> Trumpet 8'

Note that the original Panther 100 has no 4' or mixture voices. However, the 8' voices on the Panther 100 are actually a mixture of 8' and 4'.

Using the controls

You can adjust controls by dragging them up or down using the mouse, or you can use the mouse wheel while holding down the Ctrl key. You can also right-click on a knob to enter a value using the computer keyboard.

Double-clicking controls to reset

Double-clicking a knob or fader will reset it to its default value.

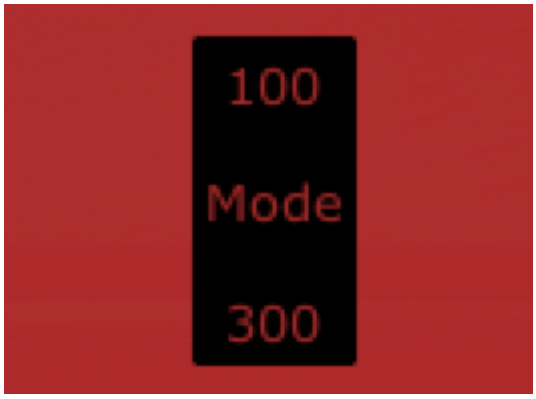
Keys view and Settings view

The Elka Panther interface has two view modes: Keys and Settings. To toggle between the two, click the tabs in the centre of the plugin’s top bar.

In Keys view you can interact with the organ as if you had the physical instrument in front of you. Settings view gives a simplified interface which may be better suited for working on a computer. It also adds a few extra features such as tuning, and the Guitar Amp and Cab sections.

The Settings view has all of the parameter options that appear in the Keys view and more.

100 and 300 Mode switch



The button labelled **100 Mode 300** in the Settings view toggles the instrument between Elka Panther 100 and Elka Panther 300 models. The default model used when loading the plugin is the Elka Panther 300. Different presets will be set to different models.

When this switch is **black**, the selected mode is the Elka Panther 300; when this switch is **red**, the selected mode if the Elka Panther 100.

Bass Controls: Bass Ext, Bass Bour & Bass Dulc

There are three bass switches labelled **Bass Ext**, **Bass Bour** and **Bass Dulc**. These are the three leftmost switches in both the Keys and Settings views.

The bass section normally extends from C1 to B1 (B1 is the top of the black notes in Keys view). Activating **Bass Ext** extends the range to B2 (B2 is the top of the grey notes in Keys View).

Bass Dulc adds more mid-frequency energy to the bass sound when activated. When **Bass Dulc** is activated **Bass Bour** controls the volume of the bass sound. When **Bass Dulc** is not activated **Bass Bour** turns the bass sound on and off.

There is also a master **Bass Vol** knob.

Harmonic Control

The Harmonic Control parameters shape the sound of the main organ voice. Each organ key can be set to play over up to three octaves. These octaves are called footages – the root octave is referred to as **16'** (sixteen foot), the next octave up **8'** and the third octave **4'**. Having these three voices allows you to control the timbre of the organ sound – it's very easy to achieve a thick, rich sound with all three octaves activated.

The Harmonic control section acts as a volume mixer between these three footages; set the volume of each independently with their respective dials. The **Mixture** dial gradually adds more of the higher octaves to the sound as it's turned clockwise, turn it all the way to the left to only hear the 16' footage.

16’, 8’ and 4’ switches

To the right of the Tone Dec switch you will find switches that can alter the sound of each footage. These switches are the equivalent to stops on a traditional pipe organ. There are four switches corresponding to the 16’ footage; four corresponding to the 8’ footage; and three corresponding to the 4’ footage. Turning these switches on and off introduces different characteristics to each footage that help emulate instruments such as strings, oboe and flute.

In detail, the footage filter buttons are:

16’ BOUR – Bourdon (dark tone, strong in fundamental)
16’ OBOE – Contra Oboe
16’ STRI – Strings
16’ DIAP – Open Diapson (tonal grouping of flute pipes)

8’ FLUT – Flute
8’ STRI – Strings
8’ CLAR – Clarinet
8’ OBOE – Oboe

4’ FLUT – Flute
4’ STRI – Strings
4’ SALI – Salicet

Mixture Switches: Mix I & Mix II

To the right of the Footage Switches are two switches labeled **Mix I** and **Mix II**. When engaged, each of these switches gives a different tone to the final sound. These switches are intended to be used in combination with other voices to refine and provide some variation. **Mix I** often leads to a harsher sound whereas **Mix II** tends to be more mellow.

Vibrato Section: Off Vibr On, Lite Vibr Heavy & Slow Vibr Fast

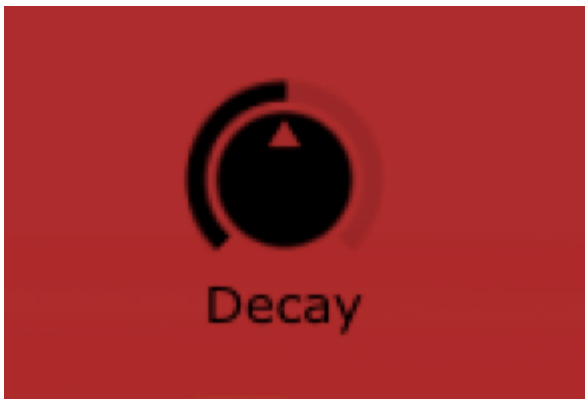
The vibrato section has three switches: **Off Vibr On**, **Lite Vibr Heav** and **Slow Vibr Fast**.

Off Vibr On turns the vibrato section on and off, **Lite Vibr Heav** controls the depth of the vibrato and **Slow Vibr Fast** controls the speed.

In the Settings view, there are also two knobs to fine tune the speed and depth of the vibrato. Find the **Speed** and **Depth** dials in the top row of the settings panel.

Tone Decay

The **Tone Dec** switch when activated applies tone decay to the sound. The length of this can be altered with the **Decay** knob in the top of the settings panel.



As the Tone Dec feature applies an amplitude envelope to the instrument's Mixture voices, the effect may be more or less apparent on different sounds.

Tone Dec is applied mono/legato, so will only trigger on a note that is played when all other notes have been released.

Bass Pedalboard

At the bottom of the Keys interface you will see a bass pedalboard with thirteen pedals, each producing a note and tone equivalent to that of the bass section. The volume of the bass pedal notes can be controlled using the Bass Vol knob.

You can play the pedal notes using a dedicated MIDI controller by selecting it as the input in right-hand channel selector.

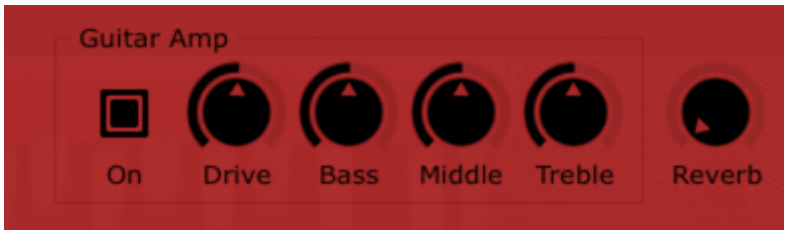
Swell Pedal

The Swell pedal, which controls the volume of notes played outside the bass section, can only be played by clicking and dragging either up or down.

Settings – Further Controls

Guitar Amp and Reverb

The **Guitar Amp** section in the Settings View emulates the sound of running the Elka Panther through a guitar amplifier. You can toggle the amp unit on and off and control the **Drive**, **Bass**, **Middle** and **Treble**.



To the right of the guitar amp you'll also find a knob to add more **Reverb**. This effect is not applied to the Elka Panther's bass voices.

Tremolo

In the settings panel there is a Tremolo effect unit. This tremolo unit was not a part of the original Elka Panther design, it has been added by Martinic to give you further control over your sound design process.

Tremolo modulates the volume of the units output up and down. The unit can be turned on and off and you can control the **Speed** and **Depth** of the volume modulation. Note that this effect is not applied to the Elka Panther's bass voices.

Tuning

To allow access to different tunings and temperaments, the pitch of each note in the chromatic scale can be fine-tuned in this section. Each note in the chromatic scale has a corresponding knob that tunes its fundamental pitch in cents (100ths of a semitone). Hold shift to adjust the tuning of every note simultaneously.

Key Contacts

Every key on the original Elka Panther hardware had four electrical contacts, corresponding to its four footages (16', 8', 4' and Mixture). When a key was pressed, these contacts would activate their corresponding sounds to play back at slightly different times.

The **Click** dial makes the transitions of each activated note more or less apparent.

Here, the **Attack** and **Release** control how much time passes between making (Attack) and breaking (Release) the individual simulated contacts. The velocity of any given played note will also influence the time taken, combined with the Attack and Release settings.

Note: The footages play back in a different orders on the Elka Panther 300 and 100 models, and are also ordered differently from key to key.

LEM Echo Music Tape Delay

The Elka Panther plugin comes with our LEM Echo Music delay unit built in, and by buying the Elka Panther plugin, you also get a license for our separate dedicated LEM Echo Music plugin.

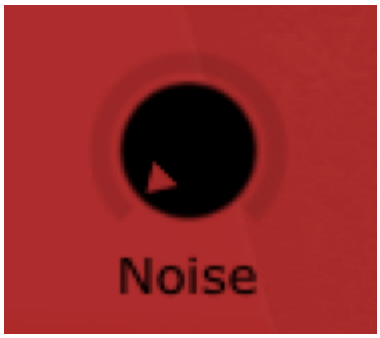
The LEM Echo Music is a classic tape delay from the 60s and was one of the first pieces of

studio equipment created by the Electro Music Library, a subdivision of the GEM instrument brand. There are three fixed delay time options: short, medium and long; and you'll get plenty of character in the sound as the plugin faithfully emulates the imperfect nature of a tape delay unit. Control the amount of echoes and the intensity of the effect with the **Echo** and **Repeat** knobs.

We have a separate manual on how to use the LEM Echo Music – which also features a two channel mixer for tone shaping – and you can find it here. The version in the Elka Panther plugin is fully featured and almost identical to the standalone LEM Echo Music plugin. The only difference is the **Reverb** and **Master** dials are located elsewhere within the interface of Elka Panther.

Noise

In the top right of the Settings view is a **Noise** dial. Turning this adds noise to the signal that sounds even when no keys are being played.

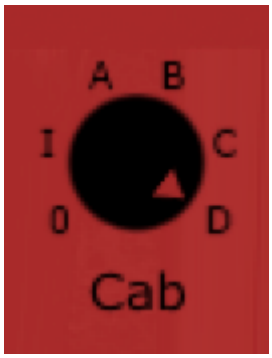


Even if no notes are playing. the noise signal will be affected by moving the Swell pedal or by setting the Cab to Intern (see below).

Cab

To the right of the tremolo section is the **Cab** dial. Use this to emulate running the Elka

Panther through various cabinet configurations. A cabinet is a speaker which is used to transmit the signal coming from a guitar amp into audible sound. The style and configuration can change the tone of your audio considerably.



Cabinet options include **Intern** (two 5.5-inch loudspeakers from the Elka Panther 100), **2x12 A** and **2x12 B** (two 12-inch loudspeakers), **4x10** (four 10-inch loudspeakers) and **4x12** (four 12-inch loudspeakers) configurations..

Swell Knob

The **Swell** knob in the Settings View controls the floor pedal in Keys view. Turning this knob clockwise (or in Keys view depressing the pedal by clicking it and dragging either up or down), increases the volume of notes played outside of the bass section. This way you can add expression to chords or melodies while maintaining consistent bass tones underneath.

MIDI Learn

The **MIDI Learn** button is on the top right panel, and resembles a MIDI input. Pressing it enables MIDI learn mode, which allows you to map a parameter on the Elka Panther (or LEM Echo) to your MIDI keyboard or controller. Parameters that can be mapped on the plugin will turn purple when MIDI Learn is enabled, and when you click them they will turn red. After a parameter on the interface has turned red, you can link it to your MIDI keyboard or controller by simply pressing or moving a control. After you have done this, the parameter that you have assigned your MIDI device to will return to its usual colour.

End-User License Agreement

Elka Panther is **not** freeware. You should purchase a license via www.martinic.com to use this software.

Before purchasing a license you are allowed to try this software free of charge for up to 30 days for testing purposes and in non-published work.

One license purchase permits you to use this software concurrently on up to two computers.

If you have purchased a license you are entitled to free updates until the next major version number. Note that there is no guarantee that this software will be maintained indefinitely.

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