EPIK4

synth refill based on the sounds of
KAWAI K4 synthesizer

PINKNOISE STUDIO

REFILL

EPIK4 user guide

refill version

Description

EPIK4 is a synth refill based on the sounds of KAWAI K4 synthesizer from the late 80s.

The **KAWAI K4** was released in 1989 as a competitor to the Roland D-50. In this point of view, EPIK4 can be considered as a sister of DEEPFLIGHT, but while the Roland D-50 has a warm analogue character, the K4's digital filter gives you fuzzy, but still warm sounds.

Please note that **EPIK4** is not a software emulation of the KAWAI K4 synthesizer!
It is a sample based library. The synthesizer we used was only a raw material: the recorded samples were the starting points. We have exploited the specific features of REASON and created a vivid, live sounding library.

Most of the patches are velocity sensitive and have been designed to live performers, so a good remote compatible midi keyboard (with modwheel, control knobs and aftertouch) is higly recommended.

Refill features

Contents

- K4 Combinator bank: 128 patches (for instant inspiration)
- K4 NN-XT Bank: 288 patches (for everyday use)
- K4 NN-19 Bank: 226 patches
- Rex Loops: 14 Octo Rex sets & 112 rx2 melodic loops (for KLP)
- samples: 1138 wav files in 24 bit resolution (1.3 GB in total)

Categories in NN-XT bank

- [All Layers]*
- K4 Arp & Short Key
- K4 Atmosphere & Pad
- K4 Bass [poly]
- K4 Experimental & FX
- K4 Key & PolySynth
- K4 Lead [poly]
- K4 Monosynth
- String & Orchestral

Categories in Combinator bank

- K4 Arp & Rhythmic Sequence
- K4 Atmosphere & Pad
- K4 Bass
- K4 Experimental & FX
- K4 Key & PolySynth
- K4 Lead
- K4 String & Orchestral
- templates

* The *[All Layers]* is a special folder for sound designers. It contains all of the instrument layers separately. The patches are "clean", without any filter effect and with default envelope settings. They can be useful if you want to create new sounds from scratch.

Extensive editing techniques

We used multiple velocity layers, multi-layering, alternate triggering and sample start offset to achieve fat and responsive synth sounds. In general, the modwheel controls the filter modulations and aftertouch adds vibrato effect.

Requirements

EPIK4 requires Reason 6 or more recent version.

The NN-XT bank will work both in Reason Essential and in the previous versions of Reason, but most of the Combinator patches won't be loaded.

Combinator templates

The Combinator templates can be found in the "K4 Combinator Bank/templates" folder.
Since most of the patches are based on these templates, a guide for these devices might be useful to understand how the Combinators work in EPIK4. You can use the templates as a starting point to create new patches from scratch - as we did.
The big advantage of Combinator is that you can use multiple instruments and control them in realtime. It's very similar to the "multi mode" of K4, but REASON offers a lot more possibilities. We focused on this feature to create inspirational instruments, even if the Combinator's "4 knobs + 4 encoders" design can be a strong limitation sometimes.

Combi template [Alligator]

The "Alligator filter gate" provides a tempo synced rhythmic effect. You can load two NN-XT instruments, and pressing Button 2 will switch between them.
Rotary 1 sets the balance in between the original and the effected sound.

Combi template [Dirty Cab]

This setup contains a Pulveriser and a Scream4 unit.
Rotary 1 & 2 tweaks the NN-XT's internal filter cutoff/resonance
Rotary 3 controls the "dirt" parameter of the Pulveriser (and also applies volume reduction)
Button 1 switches between NN-XT1 and NN-XT2 (commonly used as a poly/mono switch)
Button 2 enables the speaker cabinet of Scream4 ("body" parameter)
Button 3 adds "tremor to volume" in Pulveriser

Combi template [LP Filter]

This setup was created for bright sustained sounds in order to create filtered bass, leads or arp sounds. It uses the internal LP filter of the NN-XT.
Please note that in order for Rotary 3 to properly work (Filter Env Decay) you need to tweak the NN-XTs: the "Mod Env to Filter" and "Mod Env Decay" parameters must be set according to the following picture:

Button 1 switches between outputs 1/2 and 3/4 of the NN-XT sampler.

Combi template [NN-20]

As opposed to the NN-XT advanced sampler, the old NN-19 has a useful feature: almost all parameters can be automated. The NN-20 template tries to exploit this.
NN-20 contains 2x2 NN-19 instruments, as two pairs.
Button 1 switches between pair 1-2 and 3-4.
Button 2 slightly detunes the two pairs to get a chorus-like fat stereo effect.
Rotary 1 adds sample start offset: very useful for sounds altering with time, like a punchy bass, bell or filter sweeps.

Combi template [Quartet]

It's quite similar to the multi mode of the Kawai K4: you can load up to 4 instruments and mix them together.
Tip: you can transpose each instrument and set the keymap layout in the programmer panel if needed (see the picture).

Combi template [Simple Synth]

As the name suggests, it's a simple instrument setup using a controllable delay and a reverb effect.
Button 1 switches the midi input between NN-XT 1 and NN-XT 2
Button 2 switches between output 1/2 and 3/4 of the NN-XTs.

Combi template [Vocoder]

We are the robots - by using a BV512 Vocoder effect. Toying with this setup is useful for creating interesting effects. Feel free to try different percussive or FX sounds as modulator!

Combi template [Xfade 4x2]

It's a complex multi instrument, allowing you to mix and control 4x2 layers in realtime, by using one rotary encoder and 3 buttons:
Rotary 1 crossfades the volume of OSC1 and OSC2, based on Peff's original "equal power crossfade" concept.
Button 1 switches between the two variations of OSC 1 *(i.e. NN-XT 1 and NN-XT 2)*
Button 2 switches between the two variations of OSC 2 *(i.e. NN-XT 3 and NN-XT 4)*
Button 3 switches between the outputs 1/2 and 3/4 of all NN-XT modules.
Please note that Button 1 and 2 only takes effect when a new key is pressed, while Button 3 switches between them immediately.

Combi template [Xfade 2xKP]

This setup was created for mixing piano or plucked type sounds with slow pads or strings.
Rotary 1 sets the volume balance between the key and the pad sounds.

Combi template [Xfade Arp]

It's an arpegiator setup using the RPG-8. You can use 2 different NN-XT instruments and morph between them.
Rotary 1 controls Peff's crossfader
Rotary 2 controls the velocity converter of the arpeggiator. At its highest position it is disabled and manual velocity will be applied.
Button 1 switches off the arpeggiator and enables the midi input of NN-XTs.

Combi template [Xfade Split]

When you play live, sometimes you need to split your keyboard: for example your left hand plays pad chords while your right hand plays solo. The key mapping panel of Combinator offers an easy way to do it.
By default the splitting point is set to F3. You can modify this on the programmer panel if needed.
Please note that NN-XT 1-2 and 3-4 are identical: Button 1 switches among the split and full keyrange versions.

Combi template - KLP [RUN]

KLP is short for "keyboard loop player", our concept developed several years ago. KLP is a loop based sequence player that allows you to play melodic REX loops on your midi keyboard. At first it looks like an arpeggiator, but it works and sounds differently: it plays rex loops in sync with tempo, whilst the midi keyboard controls the loop's pitch.
If you're interested in the details, you may read our "KLP concept.pdf", however: the two really important things that you have to keep in mind are:

1) the "RUN pattern device" knob in the top-left corner must be set to "ON", otherwise KLP won't work.
2) playing chords in KLP is a fool's errand: it just plays rex loops, that's why KLP is monophonic.

Some tips & tricks for the KLP

Tweak the loop in the Dr. Octo Rex player

You can adjust the volume, pan and pitch of each slice of the loops in Dr. Octo Rex player. This feature is a lovely option to create totally new sequences using the existing rex files. If you want to change the rhythm of the loop, you can mute certain slices by setting the slice volume to 0. You can create chord arpeggio by changing the pitch of certain slices.

Offset the loop

In some cases you may want to shift the start of the loop in question. You can do it in the matrix sequencer: by default the starting point has been set to the beginning of the bar, but you can modify this by moving the D2 note (which triggers the loop) to the second, third, etc. grid.

Please note: each loop slot has its own Matrix slot, it changes as well when you switch to another loop slot!

Play staccato

When you play a bass or arp run, don't hold the key pressed all the time – it's so boring! Try to play staccato, with a little practice you will be able to invent very interesting new melodies.

Be creative!

Bear in mind that the keyboard loop player is just a tool that is designed to give you inspirations. But it is always the creative composer that gives birth to music; you will have to bravely apply this magnificent tool to fully exploit all its features!

More tips and tricks...

Insert additional effects to Combinator instruments

If you unfold the combinator, you will see a bypassed DDL-1 module on the top. It has no function other than being a placeholder: if you want to add an additional insert effect (like a distortion fx, amp simulator, chorus, etc.), just right-click on this placeholder, choose an effect from the drop-down list and it will be placed properly in the chain.

Feel free to tweak the NN-XT patches

Use the main encoders of NN-XT to modify its sound instantly! We paid close attention in order to make all rotary encoders usable. The sustain level of layers has been set to 0, so the main **Amp Env Decay** will work as well.

main rotary controls

layer's envelope

Credits

Andras Haasz: main concept, artwork, recording & editing, sound design

Samuel Haasz: consulting editor

All samples were recorded and processed, all patches were created by PinkNoise Studio in 2016.

For more info, support and updates please visit our homepage: **reasonbanks.com**