USER MANUAL

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NATIVE INSTRUMENTS

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1 Introduction

Scarbee sample libraries are hailed around the world for capturing not only the classic tone of these vintage instruments, but also their feel. Sampled, mapped, and programmed with great love and slavish attention to detail, the Scarbee MARK I presents a classic electro-mechanical instrument in its ultimate form.

MARK I is the sound of a hot-rodded, wonderful electric piano from the 70s! It has expression and dynamics ranging from warm and mellow to bright and barking, but can also produce a dulcet bell-like tone, which is very suited for jazz, funk and R&B.

How much detail is there in the instrument?

To start with, all samples are full length and un-looped. Each of the 73 keys of the original instrument was sampled at 12 different velocities ranging from 0 to -26 dB, but this is only half the story. In order to capture that magical feel of really playing the original instrument, we also recorded release samples for each of the 12 velocities at the exact same level as the corresponding sustain samples. The release tone—a sound created when a damper bounces against the tine as a key is released—is an intrinsic element of what musicians recognize as

the original sound. In this new edition from Native Instruments, we have added the Horizontal Release Technology to the MARK I, whereby release samples are chosen from the wave pool depending on how long a key has been held, which allows a staccato played note to create a different release tone to a note sustained for a longer period.

1.1 Restoration

In order to guarantee that the keyboard was as close to, or even better than its condition in 1976, an exhaustive process of refurbishment was undertaken prior to the recording process.

All rubber hammer tips were replaced using glue, a Dremel and a scalpel. Damper felts were replaced and different sizes were used as directed by the manual. Hammers, keys and harp were modified for optimal response/action and we also shimmed the bass and treble side to improve it further. The rubber grommets on the tone bars were replaced to improve sustain. Bad sounding tines were replaced and the new tines were carefully selected for ideal timbre and sustain. Tone-bars, dampers, tines and pickups were also carefully adjusted to provide a perfectly balanced sound. The tweaking and tuning took almost nine months! Thomas Hansen Skarbye's wife Anne ran the restauration, and fortunately she just loves doing stuff like this!

During the whole programming phase we even used a proprietary system of sampling in order to ensure that the sound, action and feel of the original were mirrored and maintained. We went through this kind of trouble because a key element in recreating the experience of playing the real electric piano is accurately capturing the response dynamics. As a result of this effort, the action and feel of the Scarbee MARK I exactly duplicates that of a well "hot rodded" instrument.

1.2 The Mark I "Feel"

Why is the feel so important? If you are a composer or a piano player, you will be able to answer this question for yourself. The original classic electric piano we sampled is one of a select few instruments which can honestly claim to be a writers primary compositional workhorse. They're not just a medium for committing already firm ideas to a recording medium,

but an inspirational tool—an instrument which works in a synergistic way with the composer to generate fresh new musical ideas. We believe that this inspirational quality is largely the result of a combination of the basic timbral range of the original electric piano and its very organic dynamic response. We dare to say that the Scarbee MARK I has, for the first time, captured that same tone and feel—the soul of this classic keyboard. The MARK I is an instrument you really look forward to sit down at and to just play.

2 The Instrument

2.1 Programs

There are two programs to choose from: the standard “Scarbee MARK I” and the “Scarbee MARK I - Stretched Tuned.” In stretched tuning, two notes an octave apart are tuned slightly further apart to compensate for an acoustic phenomenon where you perceive the octave as being out of tune.

2.2 Controls

2.2.1 Original Noise adjustment

For the MARK I, we recorded the original noise before we removed the noise from the samples using sophisticated noise-reduction. We made certain that samples were not degraded in quality after the removing the noise, not even the highest frequencies.

The default setting is the exact original level of noise. Noise will play along with other samples when you hit a key and since the noise sample is mapped to 1-note polyphony, you always get the same amount of noise, no matter if you play 1 or 30 keys. Feel the magic when turning down noise to zero!!

- **Instrument Noise Level**: move the knob to set the level of the hum & hiss noise. Original recording level of the noise is middle position.

- **Instrument Noise release**: move the knob to set the release time of the noise. Default setting is middle. If you want the noise to be present the whole time in a song or live, you can turn the knob beyond the middle position.

2.2.2 Effects

In this new edition released by Native Instruments, we have included some cool effects to make the sound even greater!

- **FX Type**: switches between Send and Insert effect pages

- **Effect Preset**: selects between ten FX presets. It is possible to save five user presets.

2.2.3 Tone Control

Most owners of the original keyboard record their instrument by connecting to the socket on the front panel and set the Bass Boost knob to middle position (actually a bass cut!)—this is what we call the "Classic" sound. We decided to record directly from the harp, bypassing the passive tone control on the front panel, in order to capture the full frequency range of the instrument and minimize unwanted noise. Thus, we needed to create the "Classic" sound by simulating the behavior of the passive tone control with use of the EQ. The precise calculation was done by italian frequency wizard Thomas Serafini.

Since the passive tone controls on the real instrument dampens a lot of the high frequencies, you may want to reduce the "sparkle" for that dull old school sound. Feel free to make other EQ settings that suit your own taste!

- **Bass**: Boosts or cuts the level of the lower frequencies. Set the knob to middle position (actually a bass cut!) like on original instrument for the Classic sound.
- **Treble**: Boosts or cuts the level of the higher frequencies. Set the knob a little to the left to get the old school vibe of the original tone control.

2.2.4 Reverb

- **Size**: Determines the room size by setting the length of the reverb. Higher values simulate larger rooms, lower values smaller rooms.
- **Level**: sets the level of the reverb

2.2.5 Delay

- **Time**: Determines the interval in milliseconds between hearing the straight signal and the first delay of the delayed signal. This parameter can be synchronized to an external MIDI clock. Click on the arrow to select the time value from the menu.

- **Feedback**: Sends a portion of the output back into the input of the delay line, which creates repeating echoes. A value of 0 produces only one echo, higher values give multiple echoes.
- **Level**: sets the level of the delay signal

2.2.6 Pan

- **Level**: move the knob to set the modulation intensity. Higher values will pan further to the sides.
- **Speed**: Determines the speed of the panning. This Parameter can be synchronized to an external MIDI clock. Click on arrow to select time value from the menu.

2.2.7 Auto-Wah

- **Speed**: Determines the speed of the modulation of the effect. This Parameter can be synchronized to an external MIDI clock. Click on arrow to select time value from the menu.
- **Tone**: controls the initial frequency of the effect and decides the timbre of the sound.

2.2.8 Compressor

- **Threshold**: Sets a level above which the compressor starts reducing peaks. Only signals above the threshold are affected by the compression ratio, signals below are unaffected.
- **Output**: sets the output of the module

2.2.9 Chorus

- **Depth**: Sets the amount of LFO modulation applied to a signal. Higher amounts result in a stronger chorusing effect.
- **Level**: sets the dry/wet balance of the chorus

2.2.10 Distortion

- **Drive**: Determines the amount of distortion applied to the sound. Higher values increase the distortion effect.
- **Output**: sets the output of the module

2.2.11 Phaser

- **Depth**: sets the amount of LFO modulation applied to a signal. Higher amounts result in a stronger phaser effect.
- **Level**: sets the dry/wet balance of the phaser

2.2.12 Amp

- **Bass**: boosts or cuts the level of the lower frequencies
- **Treble**: boosts or cuts the level of the higher frequencies

3 Credits

Production Credits

Recording, Editing, Programming and FX Presets: Scarbee

Kontakt Script Developer: Nils Liberg

Instrument Graphics: Stefan Kengen

Cover, web content, marketing, testing: Native Instruments

Beta-testers

They were all great! Christian Vinten, Jules Bromley, Ian Stewart Cairns, Rick Chadwick, David Govett, Didier Icart, Nick Manson, Lennie Moore, Alfonso de Prisco, Thomas Serafini, Justin Schwinghamer, Lars Daniel Terkelsen, Larry Thompson and Stefan Kengen.

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