MELBOURNE INSTRUMENTS

Firmware Release Notes

23 Jun. 2023

NINA v1.3.2

Fixes and improvements

• Fixed issue that caused Nina to not appear correctly as a MIDI device on Windows.

NINA v1.3.1 21 Jun. 2023

Fixes and improvements

• Fixed issue where Morph sometimes incorrectly set to DJ mode on patch load.

NINA v1.3.0 19 Jun. 2023

New Features

MPE

- MPE support added.
- MPE has options for Upper or Lower MPE Zone, Pitch Bend range and MIDI CC Polarity.
- MPE works with the 4 multi-timbral layers, so stacked sounds can be MPE controlled, or multiple MPE zones, controllers or standard MIDI keyboards can be assigned different channels.
- MPE operation has a decay feature for expressive sound control on the MPE axes of Aftertouch and CC74. Hold the KBD Key down for more than 1 second to silence all voices, and stop the arpeggiator and sequencer.

Effects

- Nina now has 3 effects processors, allowing Chorus, Reverb and Delay to all be used together.
- Any order of these effects is possible, they can be chained in series or in parallel in any combination.

Additional New Features

- Added LFO mode to the wavetable oscillator (OSC3). This moves the wavetable frequency down 10 octaves, making it act as a third LFO.
- Added ability to import wavetables created by WaveEdit. These are automatically recognised on import.
- Note Release Velocity is now available as a modulation source. This can be selected via the MIDI MOD SOURCE
 parameter in the LAYER menu.
- LCD Screen color may be changed.
 A selection of colors in available from SYSTEM > GLOBAL PARAMETERS > SYSTEM COLOR.

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Additional New Features cont.

 Global Master Tune function added. Tune the entire instrument up or down up to 200 cents. Access via SYSTEM > GLOBAL PARAMETERS->MASTER TUNE. For 432Hz tuning, use -32 cents.

Please refer to the updated Nina User Manual and/or 1.3.0 Release Notes and Addendum regarding these new features. (included here on Pages 3-4)

Fixes & improvements

- · Internally generated Control Change messages now sent to DIN MIDI (as well as USB).
- · LFO to wavetable position not fully scanning some wavetables.
- Booting a unit that loads a Patch with Hard Sync on resulted in no sound.
- Tempo not loaded from a Preset.
- Toggling A/B could cut-off MIDI notes while playing.
- Some types of USB drive formatting caused drive not to be seen.
- · Soft clicking with VCA Spin in some cases.
- Soft clicking occurring with some sounds when voice stealing.
- Fixed problem In Windows NINA now appears as "Melbourne Instruments NINA USB MIDI".
- Removed unintended delay between knob movement and the effect on sound. This was noticeable in very fast movements.

Effects

Nina has three digital effects processors. The three effects can be placed in any order and each effect has its own wet/dry mix level. The main channel 1 and 2 mix is sampled with a 96kHz, 24 bit ADC, processed in stereo by the effects and then added back to the outputs The Effects menu is displayed when the EFFECT Knob is used (unless LOAD, SAVE, LAYER or MOD is already active).

There are 3 'slots' which are used to set the order of effects processing. The main left and right sound output is fed into slot 1 then slot 2 and finally slot 3. Effects placed in the same slot are processed in parallel and then mixed together. This is shown in the diagram below: In the fig. 1, the analog sound is fed into chorus, delay and reverb all in slot 1,

The effects configuration is saved in the Presets, not in the Layers. In Multi-Timbral Layer the effects are defined by the Preset in Layer 1.

If you switch to layers 2, 3 or 4, you will always be using the effects settings on Layer 1. If you want to save the effects configuration, you will need to save the Preset on Layer 1.



Fig. 2 Slot 1 Slot 2 Slot 3 Level Chorus Analog L Level Level Synth +Reverb ╋ **Output Output** R Delay



Layer Setups & Multi-timbral Operation

MPE

Nina supports MIDI Polyphonic Expression (MPE) to allow the performer to vary the pitch and timbre of notes individually while playing. Nina supports 3 dimensions of control, as defined by the MPE specification. These dimensions are (1) per-note Pitch Bend, (2) per-note Channel Aftertouch, and (3) per-note control using MIDI CC #74. An external MPE controller is required to use MPE on Nina.

MPE works across the normal 16 MIDI channels. You can choose how many MIDI channels you want to use for MPE, and the other channels will operate as standard normal MIDI.

MPE defines two zones, Upper and Lower. The Lower zone has a Master channel on channel 1, and the Upper Zone has the Master Channel on 16.

LAYER SETUP: MPE MODE	E L1 098
Off	
On: Master Ch1	
On: Master Ch16	
BACK EDIT	

MPE on Nina works in conjunction with Multi-timbral operation. Each layer can either be an MPE instrument or a normal instrument. To turn on MPE mode, from the LAYER menu set MPE mode to 'Master Ch 1' or 'Master Ch 16'. Then set the MPE Num Channels to the number of MIDI channels you want to assign to the MPE layer.

NOTE: Nina and the attached MPE controller must have the same settings of master channel and number of channels. For simplest operation, set Nina to 12 voices and 12 MPE Channels, and set your controller to 12 MPE (Member) Channels

For typical operation, you should set the Layer Voices to the same as the MPE Num Channels. If you have a sound with Unison Voices greater than 1, then you should assign more voices, to allow Unison to play notes without voice stealing. For expressive MPE playing, both the MPE CC 74 and Aftertouch can have a decay added to them. These decay times are set in the LAYER menu, and are saved as part of the Preset. The settings are called 'MPE CC74 Decay' and 'MPE After Delay'.

NOTE: Nina's 'MPE System' Settings which relate to the way different MPE controllers work are set in the System->Global Settings menu. The MPE polyphonic pitch bench range, and the 'MPE UZ PB Range' sets the upper zone.

MPE CC polarity is selectable between Bipolar or Unipolar. This setting depends on the attached MPE controller. For typical operation, the Linnstrument, Brae Touch and Seaboard should be set to Bipolar and the Ozmose to Unipolar.

System functions Global Settings



Master Tuning

Master tuning can be used to tune the entire instrument up or down from -200 to 200 cents.

Display Color

The color of Nina's LCD screen can be changed in System > Global Settings with the 'System Color' setting.