Electric 200 Piano
USER GUIDE

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

Welcome

Thank you for choosing Waves! In order to get the most out of your Waves processor, please take the time to read through this manual. We also suggest that you become familiar with www.waves.com/support. There you will find an extensive **answer base**, the latest **tech specs**, detailed installation guides, new **software updates**, and current information on licensing and **registration**. Sign up at the support site and you'll receive personalized information about your registered products, reminders when updates are available, and information on your authorization status.

Acknowledgement

The Electric 200 Piano samples library was recorded and produced by Yoad Nevo at Nevo Sound Studios in London, UK. Visit www.yoadnevo.com/.

1.1 Product Overview

The unmistakable sound of the electric piano has shaped our musical landscape since the 70s. This sound changed the way we think about the piano, and it opened up many new musical possibilities. Now the sound, feel, and personality of this unique piano is available from Waves.

Waves painstakingly sampled two well-used electric pianos to capture the nuance and detail of the original sound. The result is the Electric 200 Piano plugin and standalone application. Every element of the instrument's sound—down to its beautiful imperfections—is captured to recreate the magic realism of the original. We've gone a few steps further by integrating our high-quality studio effects and by adding unique features for tone shaping. And there's a mix section that enables you to use these tools to put your own personal stamp on this era-defining sound.

Made famous by music giants like Queen, Supertramp and Steely Dan, the timeless reed tone has been featured on countless classic hits. For this instrument, we have painstakingly sampled two distinct vintage pianos. With precise tone controls and '70s inspired effects, Electric 200 brings that punchy reed tone to life – twice.

1.2 Concepts and Terminology

The type of electric piano that became a pop, rock, and jazz favorite in the '70s was manufactured by the Rudolph Wurlitzer company starting in the 1950s.

The technology behind the instrument consists of a hammer, similar to the ones in acoustic pianos. The hammer strikes a small metal reed, which is, in essence, a tone generator. Once struck, this tone generator vibrates, emitting a certain pitch. This vibration is turned into an electronic signal using a pickup. The overall structure is somewhat similar to a tuning fork.

Electric 200 Piano is powered by WSE, the Waves Sampler Engine, a state-of-the-art multi-sample engine designed to deliver solid, high-quality performance.

1.3 Components

The Electric 200 Piano has one component: Electric 200 Piano Stereo

Electric 200 Piano is a virtual instrument plugin and will appear under the related selection menus for virtual instruments under all supported DAW host applications.

Waves Electric 200 Piano works also as a standalone application. It uses ASIO (Windows) or Core Audio (Mac) drivers to play through your audio device of choice. Electric 200 Piano receives MIDI data to trigger notes and control changes.

1.4 Functional block/flow diagram
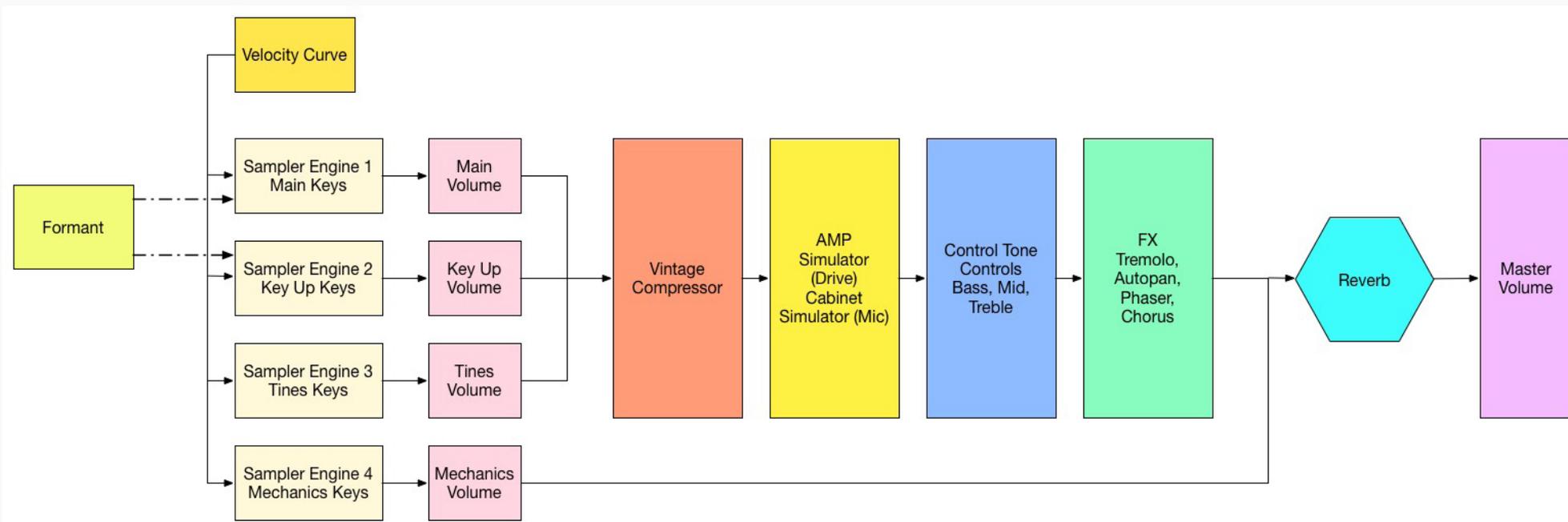
CHAPTER 2: QUICK START GUIDE

Insert Electric 200 Piano on an instrument track in your DAW or launch the standalone application. Start to play and you will quickly understand how to get the sound you want. There are two modules with which to control the behavior and sound of the instrument.

1 Use the top module to create and control effects such as tremolo, phasing, stereo imaging, chorus, and reverb.

2 Use the bottom module to control the characteristics of the keyboard and the amplifier.

Navigating the presets

Electric 88 Piano presets are managed with the WaveSystem Toolbar at the top of the window.

Use the Next/Previous preset arrow controls on the toolbar to scroll through presets. Click the **Load** button to reveal all presets. To learn about saving, loading, and using presets, please refer to the WaveSystem User Guide.

CHAPTER 3: INTERFACE AND CONTROLS

3.1 Interface

The ELECTRIC 200 Piano interface is arranged into two sections.

Bottom: The Piano module includes tone controls, a vintage style compressor, and an amplified cabinet that was sampled with both a condenser mic and a dynamic mic.

Top: The **Multi-Effect** processor provides modulation effects and reverb.

3.2 Controls

3.2.1 Keyboard Control

At the very bottom there's a virtual keyboard designed to preview the sound of a note when a keyboard controller is not available.

Use a mouse or similar input device to play a note. This control cannot be automated, but it will follow any MIDI input device.

3.2.2 Piano Module

Keys Section

Vel Curve

This control changes the curve of the velocity response from logarithmic to exponential.

When the control is set to 0, the curve is linear.

Range: -50% to +50%

Initial Value: 0

Reset Value: 0

Continuous control

Formant

The formant control changes the sound character but not the pitch. Each step equals a half-tone.

This means that when set to -12, the piano sound character will be lower by one octave, but the pitch will not change.

Range: -12 to +12

Initial Value: 0

Reset Value: 0

Discrete control, 25 steps.

Mix Section

Instrument

The Instrument control provides a choice between the two sampled electric pianos.

Range: 1, 2

Initial Value: Instrument 2

Main

The Main control is the sampled sound of the electric piano, without the mechanics and the release keys sounds.

It controls the Main samples level in the overall mix.

Range: 0–100 %

Initial Value: 100%

Reset Value: 100%

Continuous control

Hammer

Hammer is the sampled sound of the mechanical hammer hit. It controls the Hammer samples level in the overall mix.

Range: 0–100 %

Initial Value: 35%

Reset Value: 0

Continuous control

Key Up

Key Up is the sound of the keys while releasing. It controls the Key Up samples level in the overall mix.

Range: 0 – 100%

Initial Value: 25%

Reset Value: 0

Continuous control

Mechanics

The Mechanics control is the sampled sound of the electric piano mechanics without the Main and the Key Up sounds. It controls the Mechanics (thump) samples level in the overall mix.

Range: 0 – 100%

Initial Value: 25%

Reset Value: 0

Continuous control

Comp

The Comp control influences the mix of the internal compressor. Turning the knob clockwise increases the level.

Range: 0 – 100%

Initial Value: 50%

Reset Value: 0

Continuous control

Amp Section

Amp On/Off

The Amp button turns the Amp section on or off.

Range: Off, On

Initial Value: On

Switch: On/Off

No Reset Value: Alt+click does not affect the current mode of this switch.

Drive

Controls the level of the amplifier overdrive.

Range: 0–100

Initial Value: 0

Reset Value: 0

Continuous control

Type

There are two microphone options in front of the amplifier: Condenser and Dynamic.

Range: A or B

Initial Value: A

Reset Value: A

Two-state switch

Tone Section

Bass

The Bass control is a low shelf filter at 203 Hz, which can be decreased or increased by +/-18 dB.

Range: -50 to +50

Initial Value: 0

Reset Value: 0

Continuous control

Mid

The Mid control is a bell filter at 900 Hz, which can be increased or decreased by +/-18 dB.

Range: -50 to +50

Initial Value: 0

Reset Value: 0

Continuous control

Treble

The Treble control is a high-shelf filter at 1.875 kHz, which can be increased or decreased by +/-18 dB.

Range: -50 to +50

Initial Value: 0

Reset Value: 0

Continuous control

Volume

Controls the output gain level after plugin processing.

Range: 0–10

Initial Value: 7

Reset Value: 7

Continuous control

3.2.3 Effects Module

FX In/Out

> The FX In/Out switch toggles all effect module sections on and off. When the FX module is again turned on, each section will return to its previous state.

Tremolo Section

> **Tremolo On/Off**
>
> The Tremolo button turns the Tremolo section on or off.
>
> Range: Off, On
>
> Initial Value: On
>
> Switch On/Off
>
> No reset value: Alt+click does not affect the current mode of this switch.

Tremolo Rate

Tremolo Rate provides control over Sync rates (such as ¼) or Free rates (in Hz), using the same knob.

The middle position,12 o'clock, is the slowest Free value. Turning the knob clockwise from this position increases the rate from 0.25Hz to 28Hz.

When the knob setting is less than 12 o'clock, values are defined with respect to the host. Turning the knob counterclockwise increases the Tremolo rate through music note duration values related to the host's BPM: 1/32T, 1/32, 1/32D, 1/16T, 1/16, 1/16D, 1/8T, 1/8, 1/8D, 1/4T, 1/4, 1/4D, 1/2, 1/2D, 1, 2/1.

2/1 equals one cycle in 2 bars.

Scaling: Custom.

Range: Sync 1/32T-2/1; Free 0.25Hz-28Hz

Initial Value: 1/16D sync rate

Reset Value: 1/16D sync rate

Continuous control

Tremolo Depth

The Depth control increases or decreases the amplitude level.

Range: 0–100

Initial Value: 60

Reset Value: 0

Continuous control

AutoPan Section

AutoPan On/Off

The AutoPan button turns the Autopan section On or Off.

Range: Off, On

Initial Value: On

Switch On/Off

No reset value: Alt+click does not affect the current mode of this switch.

Autopan Rate

Autopan Rate provides control over **Sync** rates that relate to the host (such as ¼), or **Free** rates (in Hz) that can be set independently of the host BPM, using the same knob.

The middle position,12 o'clock, is the slowest Free value. Turning the knob clockwise from this position increases the rate from 0.25 Hz to 28 Hz.

When the knob setting is less than 12 o'clock, values are defined with respect to the host. Turning the knob counterclockwise increases the Autopan rate through music note duration values related to the host's BPM: 1/32T, 1/32, 1/32D, 1/16T, 1/16, 1/16D, 1/8T, 1/8, 1/8D, 1/4T, 1/4, 1/4D, 1/2, 1/2D, 1, 2/1.

2/1 equals one cycle in 2 bars.

Scaling: Custom.

Range: Sync 1/32T-2/1 ; Free 0.25–28 Hz

Initial Value: 1/2 sync rate

Reset Value: 1/2 sync rate

Continuous control

Pan Depth

Controls how far the panning extends from the center.

Range: 0–100

Initial Value: 33

Reset Value: 0

Continuous control

Phaser Section

Phaser On/Off

The Phaser button turns the Phaser section on or off.

Range: Off, On

Initial Value: On

No Reset Value: Alt+click does not affect the current mode of this switch.

Phaser Mix

Controls the level of the Phaser effect.

Range: 0–100%

Initial Value: 25%

Reset Value: 0

Continuous control

Phaser Rate

Phaser Rate provides control over **Sync** rates that relate to the host (such as ¼), or **Free** rates (in Hz) that can be set independently of the host BPM, using the same knob. The middle position, 12 o'clock, is the slowest Free value. Turning the knob clockwise from this position increases the rate from 0.01 Hz to 22 Hz.

When the knob setting is less than 12 o'clock, values are defined with respect to the host. Turning the knob counterclockwise increases the Phaser Rate through music note duration values related to the host's BPM:

1/32T, 1/32, 1/32D, 1/16T, 1/16, 1/16D, 1/8T, 1/8, 1/8D, 1/4T, 1/4, 1/4D, 1/2, 1/2D, 1, 2/1.

2/1 equals one cycle in 2 bars.

Scaling: Custom.

Range: Sync 1/32T-2/1 / Free 0.01–22Hz

Initial Value: 0.03 Hz free rate

Reset Value: 0.07 Hz free rate

Continuous control.

Phaser Depth

The Depth control controls the Phaser feedback.

Range: 0–100

Initial Value: 53.5

Reset Value: 0

Continuous control

Chorus Section

Chorus On/Off

The Chorus button turns the Chorus section on or off.

Range: Off, On

No reset value: Alt+click does not affect the current mode of this switch

Depth

The Depth control influences the dry/wet mix of the signal into the chorus and determines how much the module oscillator will influence the delay. The chorus engine contains four delays and four oscillators.

Range: 0–100

Initial Value: 25

Reset Value: 0

Continuous control

Reverb Section

Reverb Mix

Controls the balance between the dry and wet signal, and also controls the amount of reverb added.

Range: 0% (dry) to 100% (wet)

Default: 30%

Reset Value: 0% (dry)

Continuous control

Reverb Predelay

Controls the amount of the delay between the dry and wet signals.

Range: 20 ms–400 ms (milliseconds)

Initial Value: 55 ms

Reset Value: 55 ms

Continuous control

Reverb Time

Control the reverb time, up to 6 seconds.

Range: 0.4 sec–6 sec

Default: 2 sec

Reset Value: 2 sec

Continuous control

Reverb Damp

Increases the level of the high frequencies during the decay as a factor of the reverb time.

Range 0.1 – 2.0

Default: 0.8

Reset Value: 0.8

Continuous control

Meters

Meter Scale

Peak meter: -30 dB–0 dB, showing a VU meter scale calibrated for 18 dB of headroom (0 dBVU = -18 dBFS).

Split Meters

Separate left and right meter indicators.

Black: Left

Green: Right

CHAPTER 4 ELECTRIC 200 PIANO STANDALONE APPLICATION

The ELECTRIC 200 Piano application can be used as a standalone instrument. It requires ASIO drivers for Windows or Core Audio for Mac OS X. Opening ELECTRIC 200.exe (Win) or ELECTRIC 200.app (MAC) loads the ELECTRIC 200 Piano instrument and configuration preferences dialogs.

The standalone application's menu file contains three items:

• **All Notes Off** Sends an All-Notes-Off MIDI command to the ELECTRIC 200 Piano synthesizer. Useful in cases of "stuck" sustaining notes.

• **Preferences** Displays the preferences dialog for Audio, MIDI, and User Choices configurations.

• **Exit** Quits the application.

THE PREFERENCES DIALOG

The preferences dialog allows configuration of Audio, MIDI, and User choices.
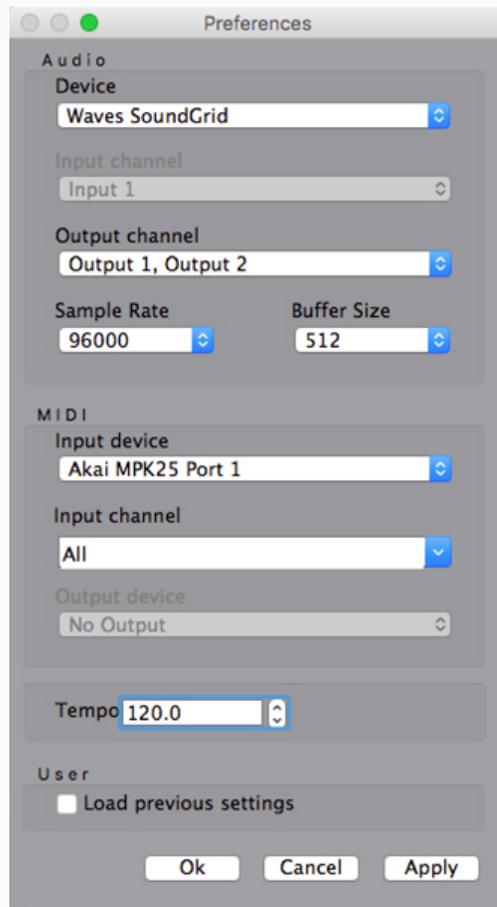
Audio provides control over the following parameters:

• **Device** displays the audio devices available on the system.

• **Output Channels** allows selection of audio outputs from the selected device.

• **Sample Rate** is used to select sample rate.

• **Control Panel** (Windows) launches the selected ASIO device's control panel for selection

of buffer size and latency.

• **Buffer Size** (Mac) is used to select buffer size, which determines latency.

MIDI provides control over the following parameters:

• **MIDI Input devic**e displays a list of available MIDI input devices on the current system.

Select the MIDI device for receiving MIDI data.

• **Input Channe**l: Electric 200 Piano standalone is ready to receive MIDI in OMNI mode from all

channels. The MIDI channel control allows the selected MIDI device to receive MIDI input only

from certain channels, as selected in the checkboxes.

User > Load Previous Settings: When checked, the Electric 200 Piano application loads with the last settings used. Unchecked, Default

settings load.