TruePlanos

User Manual

Version 1.0





© 2006-2007 4Front Technologies All rights reserved

Manual version: v1.0 / 24.01.2007

Products of 3rd party companies are mentioned solely for information purposes.

Microsoft, Microsoft Windows © Microsoft Corporation

Ableton Live © Ableton AG Acid © Sony Media Software Audiomulch Interactive Music Studio © Sonic Fritter

Forte © brainspawn

Cantabile © Topten Software

Chainer © Xlutop

CakeWalk Project 5 Version 2, Sonar, Sonar Producer, Sonar Home Studio XL @ Twelve Tone Systems

Console © ART Teknika

Cubase, Cubase Studio, CuBase SL, Cubase SX, Steinberg, VST, ASIO © Steinberg Media Technologies GmbH

energyXT © Jørgen Aase

FL Studio © Image-Line Software

KarSyn © Open Labs Kore © Native Instruments

Logic © Apple

Madtracker © Yannick Delwiche

MiniHost © Tobybear

n-Track Studio 5 Audio Editor © Flavio Antonioli

Orion Platinum © Synapse Audio Software

Renoise © Renoise Phrazor © Sonicbytes Tracktion © Mackie

VST Host © Hermann Seib

All software and hardware terms not specified, as well as brand names, are registered trademarks or trademarks of their respective owners.

LICENSE AGREEMENT

- 1. This End-User License Agreement is a legal agreement between 4Front Technologies and the end-user ("Licensee") for the accompanied products ("Software") and the content material ("Content"), and it is covered by the laws of California.
- 2. The Licensed Software is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The Licensed Software is licensed, not sold.
- 3. The agreement unless entirely satisfactory is a subject for a negotiation and we are willing to provide the reasonably altered agreement on request. Any alterations to the agreement should be explicitly approved by 4Front Technologies.
- 4. However installing or otherwise using the Software indicates the approval of the present agreement.
- 5. This License Agreement also covers, unless stated otherwise, all the software and content updates and supplemental materials, originating from the Software web site.

Software Updates and Technical Support

- 6. The Software updates and technical support is available on a subscription basis. Technical support and the updates for the Software and the Content will only be provided for the subscription term, and after the subscription is due, the right to use the software is restricted to the last available version at the subscription expiration date.
- 7. Subscription can be prolonged automatically or manually within the three months after the subscription expiration date. The exact term of subscription is seen at the time of purchase or renewal at the order page.
- 8. Customers who chose not to prolong the subscription are still entitled to use the version available at the last day of their prior subscription.

Software

9. This agreement provides two possible licensing models of the software, which denote **personal** and **collective** use. The License Model is defined at the time of purchase by the Licensee name, whether individual or a company name. The models are described below.

Personal Licensing Model

10. When TruePianos software is registered on a proper name, this gives the licensee the right to install TruePianos on a reasonable number of personal computers, as long as licensee is the sole user of the software. In this case, the agreement is relating to an individual. It is allowed for the other individual to use the software within the supervision of licensee in the environment of Licensee, provided that it is used by only one person at a time.

Collective Use Licensing Model

11. To use this Licensing Model, the Software has to be registered on a company or a studio name. This allows the Software to be installed only on one computer at a time, but does not limit the number of operators to work with the software.

License Transfers and Licensing Model Changes

- 12. Each case of a License transfer or Licensing Model change is handled individually, and is granted only by the written acknowledgement from 4Front Technologies. However, but not necessarily, 4Front Technologies retains the right to deny the License transfer more frequently than every 6 months.
- 13. After the license is transferred, the prior owner of the license is obliged to uninstall the Software and the Content and destroy all backup copies of it.
- 14. Upon the granted transfer, the subscription account will receive a new title and registration code.

Miscellaneous

- 15. The Licensee is welcome to use the software in a way to create musical scores, performances and tracks, analyze and test the Software output, however is not allowed to disassemble or reverse engineer the Software or the Content.
- 16. The Licensee may not re-sample the sounds or otherwise use the parts of the Software or the Content in a competing product. However in a case of uncertainty, we would encourage Licensee to contact 4Front Technologies.
- 17. The Licensee may not distribute the Software in whole or parts, or the software account information, unless explicitly granted by a written permission from 4Front Technologies.
- 18. If reasonable evidence is found that the License Agreement is violated, 4Front Technologies reserves the right to cancel the account subscription, terminate the License Agreement and possibly take the reasonable legal steps.

Disclaimer

19. In no event shall 4Front Technologies and Third Parties involved in the development of this Software be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of this Software or its Content, even if advised of the possibility of such damage.

NOTE

Please store your TruePianos **reference number** and the **e-mail address** used while purchasing the product in a safe place.

TABLE OF CONTENTS

Introduction	7
System Requirements	8
Subscription	9
Downloads	10
Staying up-to-date	11
Installation	12
Product Activation	13
Online activation	14
Manual activation	15
Using TruePianos	17
Initial Configuration (Options)	18
Keyboard Dynamics	19
Increased Polyphony	19
Multi-CPU Engine	20
Sympathetic Resonance	20
Basic Interface	21
Advanced Interface	22
Module selection	23
Preset Selection	23
Velocity Control Panel	23
Tuning	24
Output Level	24
About	25
VSTi Host compatibility list	26
Supported MIDI Controls	

INTRODUCTION

Musicians becoming one with their instrument, telling lively and sometimes emotional stories through their music can be a reality only when an instrument has the expressive and dynamic qualities, as well as the natural feel to speak the artists' musical language.



TruePianos was developed with the ambition to produce the first virtual piano instrument which allows the user to experience exactly this.

The product offers highly intuitive controls which allow you to painlessly adjust the instruments' behavior to exactly match the combination of your own unique playing style and the characteristics of your MIDI keyboard.

Following our tradition, TruePianos is optimized for real-time performance. The CPU usage is low even with 96 kHz host sampling rates, and for advanced polyphony we support dual-core CPUs, spreading the load symmetrically.

TruePianos' does not meticulously try to replicate existing pianos. Instead it uses a combination of the latest sampler, physical modeling and synthesis techniques to produce our interpretation of great playable pianos.

With the release of TruePianos v1.0, the product has reached a milestone where we feel it reached the point that was needed to deliver, what it was originally intended to do.

Development has not stopped, instead it has just started. We're continually working in further improving the **TruePianos Core** engine and developing additional piano modules.

We hope, that one day in the near future we'll be able to say that TruePianos is the piano plug-in of choice for many musicians, no matter the preferred type of piano sound, no matter the musical style

Gone are the days of the dinosaur sized piano libraries that you might have been used to. We welcome you to the expressive world of TruePianos!

SYSTEM REQUIREMENTS

TruePianos system requirements vary, depending on the TruePiano module used. Future updates to the TruePiano Core engine will most likely, also influence these requirements.

Because of this the system requirements below are estimations based on the current version of TruePianos.

Minimum system requirements

- Windows 2000/ XP or newer
- 1000 MHz Pentium 3 or Athlon CPU
- 128 MB of free RAM for TruePianos to use
- A VSTi host (e.g. Cubase, Sonar, energyXT)
- A soundcard with proper ASIO drivers

Meeting these minimum system requirements should allow you to use TruePianos with 'normal polyphony' and 'sympathetic resonance' activated. Enabling the **Increased Polyphony** option will most likely cause the sound to break up and make TruePianos unsuitable for real-time performance

Optimal system requirements

- Windows 2000/XP or newer
- A 2.5-3 GHz CPU or faster, or at least a 1.5 GHz Multi-CPU/Multi-Core equipped computer
- 128 MB of free RAM for TruePianos to use
- A VSTi host (e.g. Cubase, Sonar, energyXT)
- A soundcard with proper ASIO drivers

Meeting the optimal system requirements allows you to use the full capabilities of TruePianos.

SUBSCRIPTION

The full version of TruePianos includes a one year subscription to software updates and technical support.

Technical support and updates for the software and TruePiano modules will only be provided for the subscription term. After the subscription is due, the right to use the software is restricted to the last available version at the subscription expiration date.

This subscription can be prolonged automatically or manually within three months after the subscription expiration date. The exact term of the subscription can be seen, at the time of purchase or renewal at the order page.

Customers who chose not to prolong the subscription are still entitled to use the version available at the last day of their prior subscription.

One month before the subscription term ends, the customer will be reminded of the expiration of the subscription term by e-mail.

Details on how to prolong the subscription can be found in the **Customers** section of our website at http://www.truepianos.com

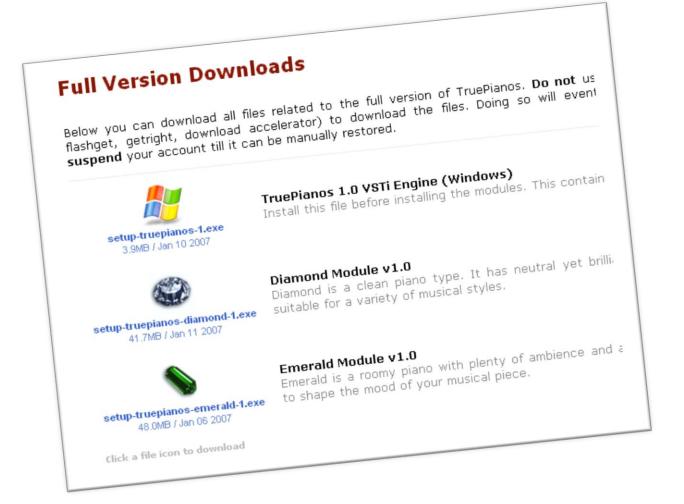


DOWNLOADS

After buying TruePianos you will receive an email which informs you of your **reference code**. You'll need this reference code to download the **full version** and future updates, for activating the product and if this should one day be required, to transfer your TruePianos license to another person.

To download the full version of TruePianos you'll need to login to the special **Customers** section of our website.

Go to http://www.truepianos.com → Customers → Login using the e-mail address you used while purchasing TruePianos as User Name and your reference code as Password



After logging in you can download the latest versions of **TruePianos Core** and all available piano modules.

STAYING UP-TO-DATE

You can expect to see regular updates for TruePianos on our website.

We are continuously doing research on how to further improve the heart of the product, the **TruePianos Core**, to provide you with an even more immersive piano playing experience.

Released **TruePiano modules** may be improved and **new piano modules** will be in development, at least till well into 2008.

If you wish to be informed whenever an update is released, feel free to subscribe to the TruePianos Newsletter.

To subscribe to the TruePianos Newsletter:

Go to $\underline{\text{http://www.truepianos.com}} \rightarrow \text{go}$ to the bottom of the page $\rightarrow \text{Subscribe} \rightarrow \text{Follow}$ the instructions given by the website.

INSTALLATION

After downloading the latest versions of **TruePianos Core** and one or more of the **TruePiano modules**, the product can be installed.



Before any of the TruePiano modules can be installed TruePianos Core has to be installed first.

Run setup-truepianos-'version-number'.exe \rightarrow Next \rightarrow Read the disclaimer \rightarrow 'I accept the agreement' \rightarrow Next \rightarrow Next \rightarrow Install \rightarrow Finish

Once TruePianos Core is installed, any or all available TruePiano **modules** can be installed.

Run 'any module installer' \rightarrow Next \rightarrow Read the disclaimer \rightarrow 'I accept the agreement' \rightarrow Next \rightarrow Install \rightarrow Finish

PRODUCT ACTIVATION

Before TruePianos can be used it needs to be **activated** on any computer on which you install it. If TruePianos is not yet activated, the TruePianos Activation dialog will pop up.

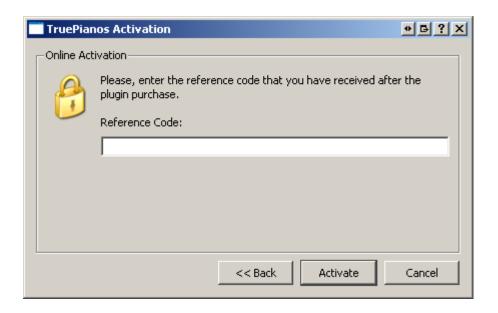
There are two methods to activate the product: Online activation and Manual activation



ONLINE ACTIVATION

Online activation is the fastest method of activation, however it requires an internet connection on the computer TruePianos is installed on.

After selecting **Online activation**, click the **Next** button.



Now enter your reference code in the white input area and click Activate.

If your reference code was entered correctly, the following dialog will appear.



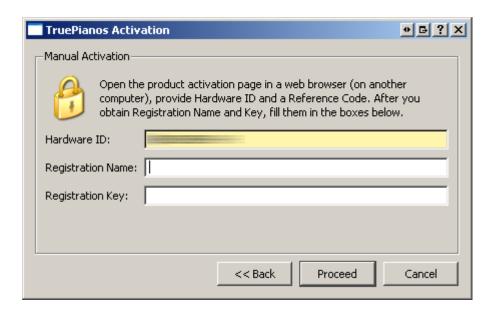
Click **OK** to continue.

TruePianos is now activated and fully functional!

MANUAL ACTIVATION

Manual activation takes slightly longer than 'Online activation' but doesn't require an internet connection on the computer Truepianos is installed on.

After selecting Manual activation, click the Next button.



The yellow row shows the **Hardware ID** of the computer you've installed TruePianos on. You'll need to enter this code as well as your **Reference Key** on our website in the **Activation** page which can be found in the **Customers section** of our website.

Go to http://www.truepianos.com → Customers → Login using the e-mail address you used while purchasing TruePianos as User Name and your reference code as Password → Activation

After following the instructions on the website you'll be shown your **Registration Name** and **Registration Key**. A copy of this information will also be send to your e-mail address for future use.

Manual product activation successful		
The product activation key was successfully acquired. Please use the following information to activate your product.		
A copy of this information has been e-mailed to you. Please store it safely.		
Registration Name:		

Now enter your **Registration Name** and **Registration Key** in the white input areas of the TruePianos Manual Activation dialog screen and click **Proceed**.

Be sure to exactly input this information as it is provided to you by the website or activation will fail!

If your reference code was entered correctly, the following dialog will appear.



Click **OK** to continue.

TruePianos is now activated and fully functional!

USING TRUEPIANOS

Great care was exercised to keep the user interface as intuitive as possible. As a result, the amount of controls is kept at a minimum without sacrificing usability.

TruePianos produces a dry and unprocessed piano sound which won't limit your creative freedom while mastering/mixing your songs.

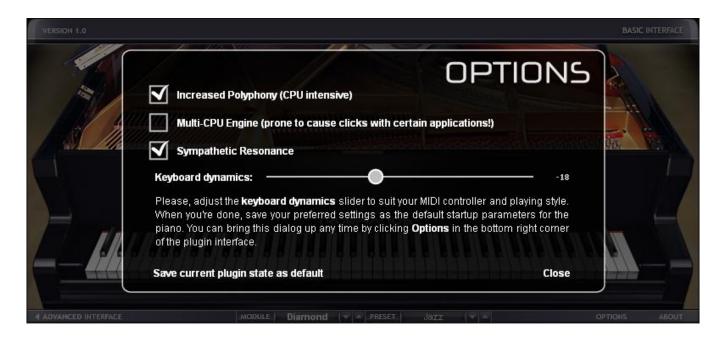
We believe that functionality offered by commonly available VST effects don't belong in the user interface of a virtual piano instrument. Implementations of such effects (e.g. reverb and equalizer) would only complicate the user interface, without offering you the detailed controls and freedom offered by the many excellent free and commercial VST effects out there.

Since TruePianos is optimized for CPU usage, it leaves most computers with more than enough headroom for stacking VST effects on top of it, even during live performances where reliability of the instrument is crucial.



INITIAL CONFIGURATION (OPTIONS)

When using TruePianos for the first time, you'll be shown the **options** screen, which allows to easily adjust and store the most important settings.



To store your settings as the default settings click **Save current plugin state as default**. To close the options screen click **Close.** To access this screen in the future, simply click on **OPTIONS** on the bottom bar of the User Interface.

The settings on the options screen are explained in detail on the following two pages.

KEYBOARD DYNAMICS

The **Keyboard dynamics** slider is the most **important** control within TruePianos, as it is of great influence how you'll experience TruePianos.

This slider affects the velocity sensitivity curve, character of the instrument and many other aspects of the way TruePiano modules will respond and sound. In non-technical language: It enables you to adjust TruePianos to the combination of your playing style and the characteristics of your MIDI controller.

For my CME UF8 keyboard I find values -20...-17 to be close to optimal for my playing style. People with full-weighted Yamaha keyboards will probably prefer the slider a value around zero.

Please, tune it to match your keyboard - just keep playing, and if it plays too difficult - move the slider to the left, otherwise if the notes come too bright, move the slider to the right. When you are finished, click 'Save current plugin state as default' and then 'Close'.

INCREASED POLYPHONY

Activating **Increased Polyphony** removes TruePianos' default limit on the maximum amount of number of active voices at a time (polyphony).

Be sure that your computer has at least a 1.5-2.0 GHz CPU if you plan to use this option during live performances.

Depending on your playing style, especially combined with heavy use of the sustain pedal, the amount of active polyphony can easily surge far above 100 active voices. If your computer's CPU is not powerful enough to handle the increased polyphony in real-time, disable this option, especially when reliability is crucial.

On slower computers, **Increased Polyphony** can still be enabled to render your final composition. When doing so, always realize that a musician, while playing an instrument, will adjust to how the instrument itself behaves. If you play a piece of music at 'normal polyphony' and render the final result with 'increased polyphony', some of this musician-instrument interaction will be missing.

MULTI-CPU ENGINE

If you have a computer with two CPUs, or a dual-core CPU, TruePianos can take full advantage of the additional processing power offered by such a system. By enabling the **Multi-CPU Engine** the CPU load will be equally spread among both CPUs/Cores.

This is particularly useful while using the **Increased Polyphony** mode if your playing style combined with your sustain pedal usage is very polyphony hungry.

If you don't know whether your CPU has multiple cores you might try if enabling the Multi-CPU engine improves TruePianos' performance on your system.

Note, that some applications (such as Cakewalk SONAR) have their own way of handling multi-core processors, which depending on your setup, may not work very well together with TruePianos' Multi-CPU support turned on.

Since nobody has yet defined a standard of how the processor CPU time should be managed on multi-core workstations, we invite you to check these options and find the best balance of quality versus performance on your system.

Examples of multi-core CPUs which are able to take full advantage of the **Multi-CPU** engine are the **Intel Core Duo**, the **Pentium 4 D**(ual) and the **Athlon X2**.

SYMPATHETIC RESONANCE

When playing a real piano, hammers cause strings to vibrate which results in musical notes. This vibration of strings can cause other strings that are not damped to vibrate.

Enabling **Sympathetic Resonance** currently simulates the described behavior while the sustain pedal is down on all notes that are still playing.

Normally Sympathetic Resonance should be activated. In some cases you might want to disable it when you need the pedaled sound to be sharp and free of additional ambience.

The impact of **Sympathetic Resonance** on TruePianos' CPU usage is negligible, even on slow computers.

BASIC INTERFACE

TruePianos has two main user interfaces. One is the **Basic Interface**. This interface offers only the 'basic' controls required for playing the piano after being configured using the **Options** screen.



INTERFACE USAGE

1. Piano Keys

- Click: quickly audit the sound of a module/preset.
- Shows the keys that are currently being played on the MIDI keyboard.

2. Module/Preset name

- Shows the currently active module and preset.
- Click: Select the desired module or preset by name.

3. Up/Down arrow

- Click: Selects the next/previous module or preset.

4. Advanced Interface

- Click: Switches to the advanced user interface.

5. Options

- Click: Displays the 'options' menu.

6. About

- Click: Displays the 'about' menu.

ADVANCED INTERFACE

If you want full control with instant access to all available settings within TruePianos and don't care about seeing an onscreen keyboard the **Advanced Interface** is for you.



INTERFACE USAGE

1. Basic Interface

- Click: Switches to the basic user interface.

2. Options

- Click: Displays the 'options' menu.

3. About

- Click: Displays the 'about' menu.

A. Value boxes

- Click: Allows typing a precise value.
- Enter: Confirm entered value.

B. Sliders

- Click and hold while moving the mouse: Moves the slider to another position.
- Click and hold while moving the mouse: Overrides active 'value box' input.
- Click+Shift and hold while moving the mouse: Moves the slider to another position at greater precision.
- Double-Click: Reset slider to default value.

MODULE SELECTION

The active module name is highlighted while its icon is slightly dimmed. To load a different module, click on the icon of the preferred module.

If more modules are available than fit in the panel, arrows will appear on the sides of the panel. You can click on these arrows to scroll through the available modules.



PRESET SELECTION

This panel shows a list of available presets within the active piano module, as well as a short description of the active module. The currently active preset is highlighted.

To select a preset, click on its name.



VELOCITY CONTROL PANEL

The velocity control panel offers a collection of controls which allows you to adjust how TruePianos behaves to MIDI input.

The Velocity control graph is affected by three sliders: **The Velocity Floor**, **Velocity Threshold** and **Keyboard Dynamics** slider.

Velocity Floor: This slider allows you to bring out the less bright piano sound of playing a piano softly, at much higher velocity levels as normally would be the case. It can be used to make presets darker as well as to compensate for not-so-perfect MIDI keyboards that don't let you play well at lower velocities.

Don't set the position of this slider too high. Doing so can make a piano module sound less expressive or even synthesized!

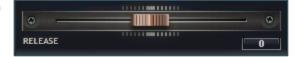
Velocity Threshold: Sets the minimal MIDI input velocity value TruePianos reacts to. This option is meant for people with sensitive non- and semi-weighted keyboards. Moving this slider a bit to the right avoids that you accidentally play a note while resting your hands on the MIDI keyboard.



Keyboard Dynamics: This slider affects the velocity sensitivity curve, character and many other aspects of the way TruePiano modules will respond and sound. See **page 19** for a full description.



Release: Changes the duration of a note going silent after a key on the MIDI keyboard is released while the sustain pedal is up. A negative value shortens the release time while a positive value higher than 0 increases it.



TUNING

The A4 pitch panel allows you to tune TruePianos based on the frequency of the A4 note. By default most software based instruments have their tuning based on A4 being at 440.0 Hz.

This is especially useful for combining TruePianos with acoustic or software instruments that are not tuned to 440.0 Hz.

The left slider changes the tuning frequency in 1 Hz steps, while the right slider works in 0.01 Hz steps (cents).



OUTPUT LEVEL

The **Output Level** displays output levels graphically for both the left and right channel individually and allows you to lower the output level of TruePiano modules.

Moving the slider downwards from its default top position will reduce the sound output level by the amount of dB displayed in the value box.



ABOUT

The **About** screen displays the **licensee name** and provides buttons that bring you directly to a page on the TruePianos website (Internet Connection required).



INTERFACE USAGE

1. Website

- Click: Shows the front page of the TruePianos website (http://www.truepianos.com).

2. Demos

- Click: Let's you listen to music other people have made using TruePianos.

3. Quick Tour

- Click: Shows a quick overview of the product.

4. Update

-Click: Brings you directly to the update page where you need to login using your **e-mail address** as **User Name** and your **reference code** as **Password**

5. Close About screen

-Click on any location within the TruePianos interface where there is no button.

VSTI HOST COMPATIBILITY LIST

TruePianos has been tested with a wide range of VSTi hosts to ensure its compatibility. We've not yet encountered any VSTi host that did not work with TruePianos v1.0.

For your convenience we've compiled a list of tested VSTi hosts as reported to us:

VSTi Host	Version	Normal Engine	Multi-CPU Engine	Website
Ableton Live	v5.0	✓	✓	http://www.ableton.com/
	v6.0	✓	✓	1
Acid	v6.0	✓	✓	http://www.sonymediasoftware.com/
Audiomulch	v1.0	✓	✓	http://www.audiomulch.com/
Forte	v1.6.96	✓	✓	http://www.brainspawn.com/
Cantabile	v1.2	✓	✓	http://www.toptensoftware.com/
Chainer	v1.03	✓	✓	http://www.xlutop.com/
CakeWalk Project 5	v2	✓	✓	http://www.cakewalk.com/
Console	v1.6	✓	✓	http://www.console.jp/
Cubase	SX3	✓	✓	http://www.steinberg.de/
	SL3	✓	✓	
	SX3	✓	✓	
	4	✓	✓	
	Studio 4	✓	✓	
energyXT	v1	✓	✓	http://www.xt-hq.com/
-	v2	✓	✓	
FL Studio	v5	✓	✓	http://www.fl-studio.com/
	v6	✓	✓	•
KarSyn	Current	✓	✓	http://www.openlabs.com/
Kore	v1.0	✓	✓	http://www.native-instruments.com/
	v1.1	✓	✓	_
Logic	v5.5.1	✓	✓	http://www.apple.com/
Madtracker	v2.6.1	✓	✓	http://www.madtracker.org/
MiniHost	v1.6.4	✓	✓	http://www.tobybear.de/
n-Track Studio	v5.02	✓	✓	http://www.ntrack.com/
Orion Platinum	v7.1	✓	✓	http://www.synapse-audio.com/
Renoise	v1.8	Х	Х	http://www.renoise.com
Sonar	Producer v3.11	✓	✓	http://www.cakewalk.com/
	Home Studio 4	✓	✓	•
	v5	✓	✓	
	v6	✓	✓	
SonicBytes Phrazor	v1.03	✓	✓	http://www.sonicbytes.com/
Tracktion	v1.0	✓	✓	http://www.mackie.com/
	v2.1	✓	✓	_
VST Host	v1.42	✓	✓	http://www.hermannseib.com/

You may provide updates to this list using the Contact us form in the Support section of our website.

SUPPORTED MIDI CONTROLS

Patch Change → Change Preset

Control 123 → Reset Engine (all notes off)

Control 64 → Sustain Pedal
Control 67 → Soft Pedal
Control 07 → Volume



