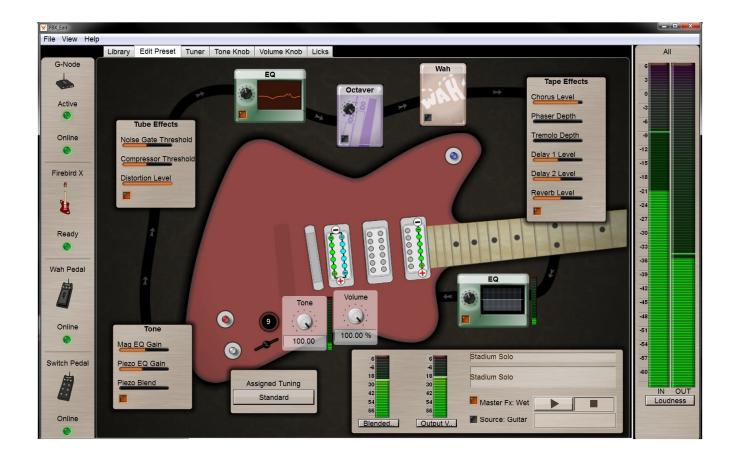
Gibson Firebird X

FBX Editor Quickstart



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Important Safety and Warranty Information

We value you as a customer—and want our products to give you an inspiring, and gratifying, experience. So, to insure your safety and protect your investment in Gibson's Firebird X guitar, please read and follow all safety warnings and operating instructions before using this product, and keep all documentation for future reference.

Environmental Factors

Heat and moisture can harm your Gibson Firebird X. Please do not install or operate this guitar near sources of moisture, such as sinks, damp basements, leaky roofs, etc. and never store it near heat sources, such as heaters or radiators. Both you and your Firebird X will be much happier if you store and operate this product under safe conditions.

Power Sources

Use only the power sources included in the Firebird X package. Make sure any power supply cords are not located where they are likely to be safety hazards, such as on the floor where people might walk, or in locations where they may receive pressure from items placed upon or against them. Also, be very careful with any power source connections, such as where the AC adapter connects to the wall outlet. If this is jostled loose, the G-Node USB 2.0 audio interface included with Firebird X may experience extreme power differentials, which can potentially harm you and the product.

Service

Please do not attempt to service Firebird X or any of its accessories yourself—let our expert technicians handle any repairs for you.

Speaking of experts, always send the Firebird X or G-Node USB 2.0 audio interface to the factory for servicing if any of the following occurs:

- x Any foreign object (especially liquid) has gotten inside Firebird X or its accessories
- x Firebird X or its accessories have been exposed to water, dropped, or otherwise damaged
- x A marked change in Firebird X's performance
- x You hear anything rattling around inside if you shake the Firebird X gently

Warranty Protection

It is extremely important to us that you are satisfied with Firebird X. Register it and activate your warranty protection by mailing the warranty card included with Firebird X to Gibson USA, Department W, P.O. Box 100087, Nashville, TN 37210-0087. If you encounter any kind of problem, contact us as soon as possible so we can make things right.

Once you your warranty protection is active, Firebird X's electronic components are warranted to be free from defects in materials and workmanship for a period of one (1) year from the date of original purchase. Your warranty covers the cost of both labor and materials on any repair deemed necessary by our Customer Service Representative for the warranty period, subject to the limitations below. Please note that our warranty belongs to the original retail purchaser only, and may not be transferred or assigned to subsequent owners.

If Firebird X malfunctions as a result of faulty materials or workmanship, Gibson will determine whether repair or replacement is more appropriate. In case the original materials are no longer available for repair, Gibson reserves the right to use materials regularly utilized at the time of repair.

If we determine that replacing Firebird X best serves your interests, or in the unlikely event that it is destroyed, lost, or damaged beyond repair while in our possession for repairs, we will replace the product. If it is no longer available, it will be replaced with the most similar product whose value does not exceed your original product's purchase price.

Remember—as a necessary condition to the warranty coverage described in this section, you must activate your warranty by mailing the warranty card included with Firebird X to Gibson USA, Department W, P.O. Box 100087, Nashville, TN 37210-0087.

Warranty Limitations

Unfortunately, your product warranty cannot cover:

- x Any product that has been altered or modified in any way, or upon which any serial or registration number has been tampered with or altered in any way.
- x Any product whose warranty card has been altered or contains false information.
- x Any product that has been damaged due to misuse, negligence, accident or improper operation or storage.
- x Any product damaged during shipment. Inspect the package immediately upon receipt, and notify the carrier immediately if there is damage.
- x Any product damaged as a result of extreme temperature, humidity, or the use of an improper power source.
- x Any product not purchased through an authorized dealer, or any product that has had

- repairs, modifications or alterations made by an unauthorized service technician.
- x Wear and tear based on normal usage.
- x Factory installed electronics after more than one year following the original date of purchase.

Gibson makes no other express warranty of any kind. All implied warranties, including warranties of merchantability and fitness for a particular purpose that exceed the specific provisions of the warranty, are expressly and specifically disclaimed and excluded from the warranty. Note, however, that some states and/or countries do not allow the exclusion or limitation of implied warranties, so this paragraph may not apply to you. In particular, if you purchased your product outside of the United States, contact your local distributor for the handling and resolution of all warranty issues, as the warranty described here is not always applicable.

And of course, Gibson shall not be liable for any special, indirect, consequential, incidental or other similar damages to you or to any third party, including, without limitation, damages for loss of profits or business, or damages resulting from use or performance of the product, whether in contract or tort, even if Gibson or its authorized representative has been advised of the possibility of such damages, and Gibson shall not be liable for any expenses, claims or suits arising from or relating to any of the foregoing.

To obtain warranty service, please contact Gibson directly:

US (Toll Free) 1-800-4GIBSON US (Local) 1-615-871-4500 Email - service@gibson.com

Never send a unit in for repair before contacting Gibson. You will be advised of the proper procedure for a quick and efficient repair, as well as provide information on where and how to send your Firebird X.

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Chapter 1: Introduction

The FBX Editor for Mac and Windows provides an environment for programming virtually all aspects of the Firebird X's operation. You can:

- x Edit existing presets
- x Create new presets using a wide variety of effects
- x Save an unlimited number of presets to a Library
- x Transfer presets from the Library into Firebird X to create custom collections of guitar patches
- x Create custom tunings and assign tunings to patches
- x Customize the Digital Varitone tone knob response
- x Customize the Volume knob response.
- x Play back licks so you can tweak effects without having to use your hands to play guitar

...and much more.

Minimum System Requirements

FBX Editor requires a desktop or laptop computer with:

- x Installed and working G-Node interface. Please see the G-Node manual for information on installing and using the G-Node.
- x At least 1GB RAM (more RAM is *highly* recommended for audio applications)
- x Mac: Mac OS X Snow Leopard 10.6.4 or higher (when available, Mac Lion compatibility will be announced to registered users).
- *x* **Windows:** Windows 7, 32- or 64-bit version. (Other Windows versions may work, but Gibson cannot provide support for them.)

STOP! Read the G-Node Manual First

This manual assumes you have downloaded the FBX Editor, installed the software necessary to run the G-Node interface, have a working G-Node interface, and have updated all your system software to the latest version. If you have not done these steps yet, please refer to the G-Node manual and follow the instructions for how to do this.

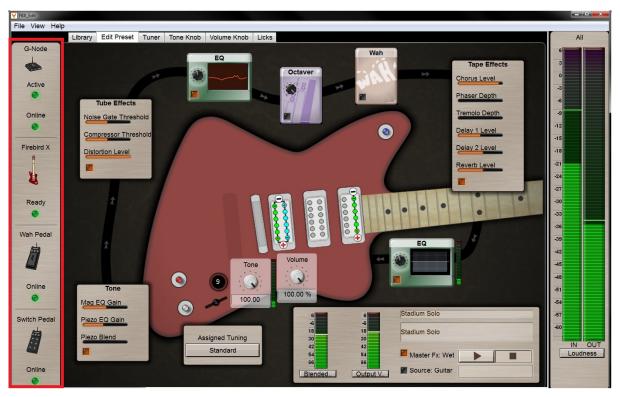
Setup

- 1. Make sure the G-Node is connected to your computer and functioning.
- 2. Connect the supplied TRS audio cable from your Firebird X to the G-Node guitar input.
- **3.** Turn on Firebird X by pulling up on the Gear Shift knob.
- 4. Open the FBX Editor program.
- **5.** The program will check the G-Node and Firebird X firmware. If new firmware is available, you will be asked if you want to update. Gibson *strongly* recommends updating; see the G-Node manual for information on updating your system.
- **6.** If your firmware is up to date, FBX Editor will open and a window will appear that lets you select a preset for editing. Double-click on a preset to load it into FBX Editor (or click on it to highlight it, then click on OK). If you don't know which preset you want to edit, click on Cancel.

Important! If FBX Editor can't read the firmware version, hangs on the firmware check screen, or won't open, there may be a G-Node connection issue. With Firebird X still turned on, close the dialog box and let the Editor open. Then unplug the TRS cable from Firebird X, wait a few seconds, and plug it back in. This resolves most connectivity issues.

The FBX Editor Dashboard

The Dashboard is toward the left of the FBX Editor, and is always visible regardless of what tab of function is selected. It's outlined in red in the screen shot below.



G-Node Active: Blinks green to indicate it is communicating with Firebird X.

G-Node Online: The G-Node is connected to your computer and communicating via USB 2.0. **Firebird X:** This indicator alternates between Offline and Connecting if the Firebird X is unplugged. Once connection is complete, the indicator lights green, stays lit, and says Ready.

Wah Pedal (Pedalboard): If this is on and linked via Bluetooth, the Online indicator will be lit green.

Switch Pedal (Switchboard): If this is on and linked via Bluetooth, the Online indicator will be lit green.

Change FBX Editor Size

You can change the amount of space the FBX Editor takes up on screen to accommodate lower- or higher-resolution monitors.

- x For lower-resolution monitors (up to approximately 1280 x 1024 pixels): Go View > uncheck Large Fonts.
- x For higher-resolution monitors: Go View > check Large Fonts.

If you change from one font size to another, you will need to close and re-open FBX Editor.

Chapter 2: Loading, Saving, and Managing Presets

As soon as you open FBX Editor, a window opens to let you load a preset for editing. If you cancel the loading process, you will need to click on any other tab (Library, Tuner, Tone Knob, etc.) and then click on Edit Preset again to select a preset to edit.

Once you've edited a preset as described in Chapter 7, you have three options. After doing any of these, the window to select a preset to edit opens.

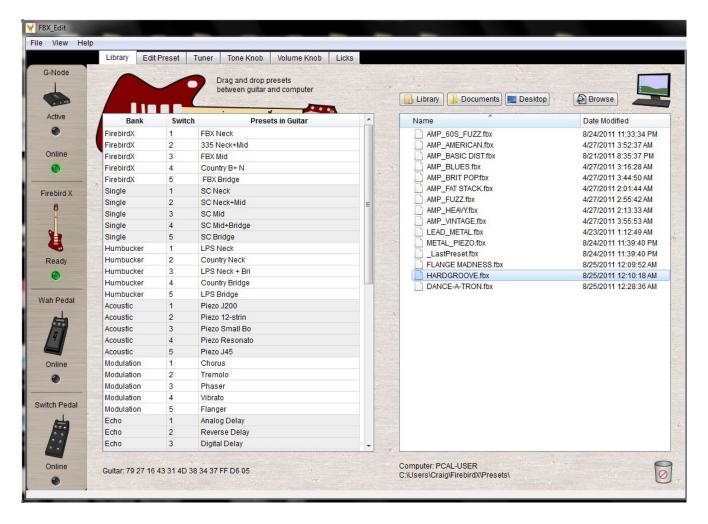
- X Go File > Save to Disk. This saves the edited Preset to your Preset library (with Windows 7, located at C:\Users\[user name]\Firebird X\Presets; with the Mac, at Home\Firebird X\Presets). You can create other files for presets, and navigate to them if desired. Individual files have a .FBX suffix
- x Go File > Save to Guitar. This overwrites the file you loaded with the edited version. Note: This will always overwrite its original location, regardless of what preset is selected on the guitar. For example, if Firebird X's Gear Shift is set to Bank 1 and the Preset Selector to position 2, you open a patch from Bank 4, Position 3, edit it, and save it to guitar, it will save to Bank 4, Position 3.
- x Go File > Cancel Edit. This discards any edits you made without saving them.

Backup and Restore Guitar

- Backup Firebird X's entire contents. Go File > Backup Guitar. You can create multiple backups with, for example, presets for different musical styles. Backing up can take up to two minutes as all presets have to be read, saved, verified, and combined into a single file. These files have the suffix .GBAK to indicate they are backup files.
- **Restore a backup.** Go File > Restore Guitar and choose the desired .GBAK file to restore. After restoring, refresh the listing of names by clicking on a tab other than the currently selected one. For example, if you do a restore operation with the Library tab selected, click on the Tuner tab and when you click on the Library tab, the software will read the restored names in the guitar.

Preset Management in the Library

The Library tab shows the presets in Firebird X toward the left, and a Browser widow to the right.



The Browser has buttons to select the Firebird X Library, your Documents, or the Desktop. An additional Browse button opens up a traditional browser so you can browse anywhere on your computer or on any external drives (including USB memory sticks, hard drives, a network, etc.).

Drag Presets into Firebird X

You can drag any preset from any of these locations, as well as from *any* location in your computer (the desktop, a folder on the desktop, an external hard drive, etc.) into a Firebird X preset location. For example, you could drag a preset from the Library window into Bank 1, Switch Position 3 in the left window; selecting that preset with the Gear Shift and Preset Selector will now load the preset you transferred over from the Library.

Drag Presets out of Firebird X

You can also drag a preset from Firebird X into the Browser window on the right, regardless of whether it shows the Library or some other location in your computer (e.g., Documents,

Desktop, or someplace chosen with the Browse button). However, you cannot drag a preset from Firebird X to the desktop. A preset must be dragged into the Browser window.

Presets dragged from the guitar are identified only by a number, so you will likely want to rename them (see next).

Rename Banks and Presets

You can rename Firebird X Banks or Presets, or the names of any presets that appear in the Browser window, by right-clicking (Mac: Ctrl-click) on the name, selecting Rename, then entering a new name in the pop-up window. Preset names are limited to 14 characters.

Delete Presets

You can delete presets from the Browser window by dragging them to the trash can icon in the lower right. You cannot delete any other kind of file, nor can you delete presets from Firebird X directly.

Chapter 3: Tuner Tab

The tuner tab lets you:

- x Associate a particular tuning with a preset
- x Create new alternate tunings
- x Save tunings to disk
- x Replace the stock Firebird X tunings with custom tunings, or re-assign their order

There are four main workspaces in the Tuner page.

- x The Preset Assigned Tuning list (upper left) shows the presets in Firebird X, and the tuning associated with each preset.
- x The Guitar Tunings list (upper right) shows the presets stored in Firebird X. These are the tunings you access by moving the Silver tog-pot to the down position, then selecting a tuning with the Gear Shift knob.
- x The Saved Tunings list (lower right) shows tunings saved to disk.
- x The Current Tuning section (lower left) lets you name and save custom tunings.



Associate a Tuning with a Preset

Drag a tuning from the Guitar Tunings list to the desired Preset's Tuning column in the Preset Assigned Tuning list.

When you call up a Firebird X preset with an assigned tuning, Firebird X does not tune automatically. You need to push the Silver togpot down, then strum to tune to the assigned tuning (it is not necessary to select it with the Gear Shift knob first).

This tuning will remain until you re-tune the guitar, either by selecting a tuning, or selecting a preset with an assigned tuning and initiating tuning.

Create a New Tuning

There are two views, Basic and Advanced.

- 1. With Basic tuning, click on the string "tuner" and choose a note from the pop-up menu from the list of allowable notes.
- 2. Repeat as desired with each string to create the custom tuning.
- **3.** When done, name the tuning in the Current Tuning section. You can also choose what will be displayed in the Gear Shift knob when you call up this tuning.
- **4.** To save this tuning to disk, drag the tuning head icon from the Current Tuning section to the Saved Tunings list.
- **5.** To save this tuning to Firebird X, drag the tuning head icon from the Current Tuning section to one of the slots in the Guitar Tunings list. This will replace whatever tuning is already in the guitar at that slot.

For the Advanced option, check Advanced View.



Now when you click on a string "tuner," you see a visual representation of the range of possible notes, as well as a slider that lets you "stretch" string tunings in one-cent increments. For example, in the tuning shown in the screen shot, the D string has been tuned up to E and the G string has been tuned down to E, but the G string is tuned 4 cents sharper than E to produce a chorusing effect when played at the same time as the "D" string.

Delete a Tuning

You can delete only tunings that are saved to disk. Drag the tuning from the Saved Tunings list to the trash can icon located toward the bottom left of the list.

Transfer Tunings

You can drag a tuning from the Guitar Tunings list to the Saved Tunings list, and vice-versa.

Chapter 4: Digital Varitone Tone Knob Tab

The Digital Varitone Tone knob quantizes the tone knob into 10 zones, each of which can have its own frequency response and level (as determined by a six band parametric EQ). You can create subtle changes among zones to "morph" through tones as you change the tone knob, emulate the response of a standard tone control, or "switch" among different responses. For example, to make it easy to find a particular tone, you could create the same response for zones 0 and 1, 2 and 3, 4 and 5, 6 and 7, and 8 and 9 to create five different responses instead of 10.

Each zone can also have its own gain, so you could have a standard tone control response from zones 0 through 8, but then if you turn the knob to position 9, have a frequency and volume boost for leads.

Whatever response you create on this page will be transferred to Firebird X in real time, so it's easy to try out different responses. Note that sometimes creating a notch response can be as useful, if not more so, than a boost.

Create a Digital Varitone Preset



- 1. Move the 10-position knob on the left to the zone you want to edit.
- 2. Edit the response with the six-band parameter EQ.
- 3. Balance the levels among zones with the EQ input and output controls.

Manage Digital Varitone Presets

Save a preset: Click on the + sign in the lower right. Enter a name, then click on OK. **Load a preset:** Click on the rectangle to the left of the + sign, and choose a response from the pop-up menu.

Delete a preset: Open the preset you want to delete, then click on the - sign.

Chapter 5: Volume Knob Tab

Like the Digital Varitone, the Volume knob is quantized into nine zones, each of which can have its own level setting. This lets you emulate any type of volume control taper, including custom tapers for players who like to use their pinky to create "swells" at the beginning of notes.



There are three ways to create a taper.

- x Select a zone with the left knob, then set its level with the fader.
- x Click on a node in the graph, and drag to the desired level.
- x Click on a node in the graph, and set its level with the fader.

Manage Volume Knob Presets

Save a preset: Click on the + sign in the lower right. Enter a name, then click on OK.

Load a preset: Click on the rectangle to the left of the + sign, and choose a taper from the pop-up menu.

Delete a preset: Open the preset you want to delete, then click on the - sign.

Chapter 6: Licks Tab

The Licks tab lets you choose one of 37 factory licks, as well as record your own licks, that you can then play through the effects as you edit them. This can be extremely helpful when you want to tweak a sound, but don't want to play the same riff over and over again. Once you play a lick, it will loop until stopped.

Select and Play a Lick

- 1. Click on the lick name or number, then click on the Play button.
- **2.** Click on the Edit Preset tab, and either cancel to use the existing preset, or select a preset to edit.
- **3.** Edit the preset while the lick plays.
- **4.** You can also play and stop the lick with the transport buttons toward the lower right of the Edit Preset window.

Record a Lick

- 1. Click on the record button and start playing. Recording begins as soon as you click on record.
- 2. Click on stop when you've recorded your lick.
- 3. Name the lick.
- 4. Your new lick will be at the bottom of the list.

Delete a Lick

- 1. Click on the lick name or number.
- 2. Click on the trash can icon.
- 3. A window appears that gives you the option to remove the clip. Click on Yes.

Chapter 7: Edit Preset Tab

Here is where you can modify existing sounds, or create entirely new ones. The effects are laid out very much like a pedalboard.



Editing Protocols

There are two types of processors, single effects (parametric EQ, Octaver, Wah, 31-band graphic EQ) and effects blocks with multiple processors (for example, the Tube Effects block includes Noise Gate, Compressor, Distortion, and Cabinet effects).

- x To open a single effect for editing, click on the effect name.
- x To open an effects block for editing, click anywhere on the block. This reveals single effects that you open by clicking on the effect name.
- x To bypass a single effect or tone block, click on the square bypass/enable button in the effect or effect block's lower left (red is enabled). If the effect has a "footswitch," you can click on that as well.
- If an effect has a visible knob, it is adjustable.
- x There are two ways to change a knob setting: Click on it, and move your mouse in a

- circular motion to "turn" the knob; or click on it, and a slider appears toward the left. Move the slider up or down to change the knob setting.
- When you open an effect or effects block, you can close its by clicking on the X button in the upper right. Click on the blue button in the upper left to "float" the window, allowing you to move it outside the editor screen. This is very useful for dual monitor setups, as you can have the main FBX Editor in one window, and move the effects to the other monitor.

Edit Pickup Wiring

Right-click on a pickup, then choose the desired wiring. This switches wirings within the pickups via analog switching, not digital modeling, to preserve the pure pickup tone.

Effects Signal Path

The effects are arranged in the following signal path:

Tone Block

- x Separate nine-band parametric EQs for the piezo and magnetic pickups
- x Piezo blend control for adding in piezo sound
- x Prefilter that affects low-frequency response

Tube Effects Block

- x Noise Gate
- x Compressor
- x Distortion
- x Cabinet Emulator

Six-Band Parametric EQ Single Effect, Octave Divider Single Effect, Wah Single Effect (located between the Tremolo and Delay 1 in the Tape Effects block)

Tape Effects Block

- x Phaser
- x Chorus/Flanger/Vibrato
- *x* Tremolo
- x Delay 1
- x Delay 2
- x Reverb

31-Band Output Graphic EQ

Chapter 8: Metering

The Edit Preset section has extensive metering to make it easy to avoid distortion in the effects signal path, as well as match levels at the output.

When you select an effect for editing, the two smaller meters toward the middle show the input level coming into an effect from the previous effect, and the output from the selected effect. For example, if you're editing the Compressor, the left meter shows the input signal coming from the Noise Gate output, while the right meter shows the Compressor output level.

Clicking on these meters bring up eight-band meters that show the levels in various bands of the spectrum.

The large meters on the right show the input to the effects block (i.e., the output from the pickups) and the output coming out of the effects block. Use the output meter to match levels. The meter response can choose between Peak, Loudness, and RMS. For matching levels, RMS gives a mathematical average, while Loudness takes into account some psychoacoustic aspects. Most patches reach a nominal -27dB RMS at full volume, but of course, this varies depending on the effects that are used, whether the part is intended for rhythm or lead, and the like.

This Quickstart presents the highlights of the FBX Editor. Please download the full version of the manual from the Firebird X Visionaries Club when it becomes available to find out everything the FBX Editor can do, as well as pick up tips and tricks on programming presets so you can create your own signature sound.