SONUUS®



Version 1.5.0



Introduction

The **sonuus Voluum** is an analogue volume effects stomp box for guitar, bass, and other musical instruments.

The design of the **Voluum** is very flexible and powerful. To enable you to make full use of this, we have provided a Desktop Editor Software application that runs on both Microsoft Windows and Apple osx. You can run this beside your other audio applications to give you quick and simple access to any configuration parameters you want to adjust on the **Voluum**.

The full operation of the **Voluum** is not described in this manual. Please refer to the Owner's Manual that came with your **Voluum** for instructions on the detailed operation and features of this product.

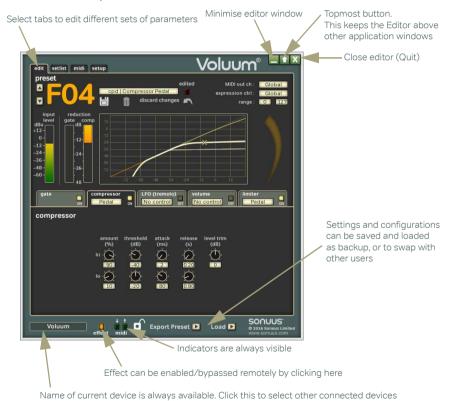


Figure 1: Overview of the Voluum Desktop Editor window.





Application Overview

When you run the Desktop Editor Software, you will see the window in Figure 1.

The window has standard buttons similar to other applications to minimise the window, and to close the application. There is also a "topmost" button, which keeps the window floating above other applications even when the other application has focus. This feature makes it easy to run the Desktop Editor Software alongside other applications, such as sequencers, so it appears much like any other "floating palette" of your main application.

There are multiple pages of information and parameters that you can configure. These are selected by clicking on the tabs at the top of the window.

Buttons and switches can be activated by left-clicking the mouse button while other controls such as knobs can be adjusted by left-clicking and dragging the mouse while the button is pressed. Some controls can also be adjusted by moving the mouse wheel when the mouse pointer is above the control.

Any changes you make on the **Voluum** control panel will also be updated on the Desktop Editor, and vice-versa, so it is possible to use both at the same time.

Selecting which Voluum to configure

You can connect several **Voluum** devices to your computer at once, but the Desktop Editor Software can only configure one of these at a time. You can select which device is currently being edited by clicking on the device name box at the bottom-left of the application and choosing the required device from the menu.

So that you can identify which device is which, you can give unique names to each of your devices: see "Device Name" on page 13.

Indicators

Next to the device name box are some indicators to show the status of the Voluum.

The **effect** indicator replicates the behaviour of the main light on the **Voluum** and will illuminate when the effect is enabled. This can also be clicked to toggle the active state of the effect, which can be useful if you are using the **Voluum** remotely.

The MIDI indicators show when the **Voluum** is receiving, or sending MIDI messages. This can be used to verify MIDI routing between the **Voluum** and your software. Note that the receiving indicator only responds to MIDI that the **Voluum** is able to respond to, such as controller messages used for effect control.

The lock indicator shows when the **lock** switch on the **Voluum** is enabled. When locked, you can still select presets, but you won't be able to edit them using the Desktop Editor, or the control panel on the **Voluum**.

Loading and Saving

The **Voluum** allows you to save 100 user presets to its internal memory. Presets can also be saved to a file with a "voluum" file extension using the "Export Preset" button when the **edit** tab is active. This lets you create vast libraries of presets beyond the 100 slots





available on the **Voluum** and also lets you exchange your presets with other **Voluum** users

To allow you to easily backup all of your presets and settings, or to transfer them to another device, all user presets and settings of the **Voluum** can be saved to a file with a "voluum_all" file extension. This can be done by clicking the "Save All" button when the **setup** tab is active.

The "Load" button lets you load these files.

Top Tip: To ensure you don't loose your presets you have created, we recommend that you regularly back up all your presets using Save All.

Edit—Editing and selecting presets

Figure 2 shows how the edit page is divided into functional regions. The next section describes in more detail how to use these features.

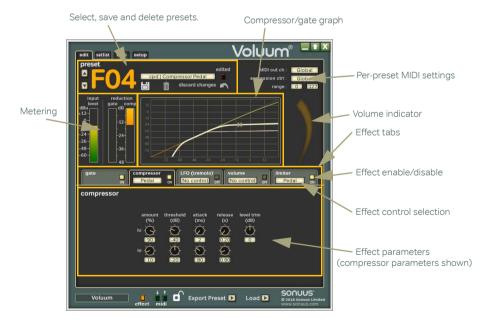


Figure 2: Overview of the edit page.



Edit—preset selection

Figure 3 shows the detail of the **preset** region. The current preset can be selected using the up and down buttons (in the same way as can be done on the **Voluum** itself) and also by clicking on the menu which gives an overview of all the presets to make selection faster.

When a preset has been modified, the **edited** indicator illuminates. This duplicates the behaviour of the **save** light on the **Voluum** itself. To abandon any changes you have made, and restore the preset to its original state click **discard changes**.

User presets (**P00 – P99**) can also be deleted by clicking on the delete icon. Once deleted, the preset is reverted to a default volume pedal preset. Delete cannot be undone, so you are given a warning before deletion is done in case you click this by mistake.

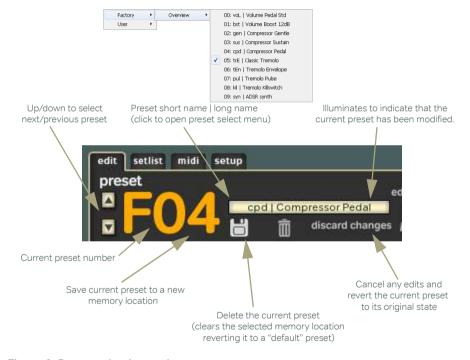


Figure 3: Preset selection and management.

To store edited presets, or to simply copy existing presets to new locations, use the save icon. This opens the save popup, as shown in Figure 4. Presets can be given a short name which is also shown on the **Voluum** to help identify presets, and also a long name which





makes presets easier to identify when using the Desktop Editor. The selected destination preset will be overwritten by the preset being saved.

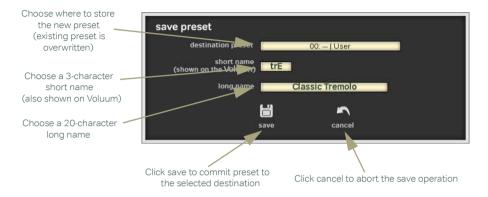


Figure 4: Saving a preset to internal memory.

Edit—per-preset MIDI



The MIDI configuration applies to all presets but sometimes it can be useful to have presets that have different MIDI behaviour: for example send a different MIDI controller when the expression pedal is used. The parameters on the right-hand side allow you to do this. For each preset, you can use a different MIDI channel, MIDI controller, or even limit the range of values that are sent by the expression pedal.

Edit—Metering

The section of the edit page directly below the preset selection displays meters for the input signal level in dBu, and the amount of compression and expansion (gate) being applied to the signal in dB. These displays are updated in real time.



Edit—Compressor/Gate Graph

This graph shows the combined effect of the compressor and gate. The plot is of output signal (y-axis) vs input signal (x-axis), and the moving cross shows the position on the curve of your current input signal. This is updated in real time. If you have selected or configured a preset to have different amounts of compression at the **hi** and **lo** positions, then you will see the curve morph between these two values as the control (pedal or MIDI controller) moves between the **hi** and **lo** positions.

Edit—Volume Level

The large curved orange indicator on the right of the edit page shows the output volume when the volume effect is enabled.

Edit—Effect Tabs

The lower section of the edit page contains five tabs— one for each of the effects.



Figure 5: Effect tabs. Click on the tab to select the effect to be edited.

For detailed editing of each effect, click on its tab, as shown in Figure 5. However, at the top of each tab are properties that you can change without clicking on the tab to select it. You can enable/disable an effect by clicking its **ON/OFF** button, and you can select its control method from the drop down box. Note that not all control methods are available for all effects, and each tab displays only the valid ones for that effect.

Click on each tab to edit the effect parameters and consult the **Voluum** Owner's Manual for a full description of the properties of each parameter. Note that enabling some parameters will cause new parameters to be displayed—the Desktop Editor hides invalid selections and shows only valid parameters.



Setlist



Figure 6: The setlist tab lets you create setlists: a list of only those presets that you want to be available when you lock the **Voluum** — perfect for playing live.

The **setlist** tab (shown in Figure 7) lets you select and configure setlists. A setlist is simply a list of presets that you want to use for your "set" during a performance. By limiting your choice of presets to only those you need, preset selection during a performance becomes much easier.





setlist

active setlist

This lets you select which setlist you want to be active (note that it only becomes active when the **Voluum** is locked). You can only edit and view the active setlist. The "demo" setlist is factory-defined and cannot be edited.

description

Each setlist can have a short description. Use this to help you remember the purpose of each of your setlists.

display slot "Lnn"

When presets are displayed on the **Voluum**, the preset number is shown (*e.g.*, **F05**, or **P16**). Sometimes it is easier if the presets are numbered to match the position in the setlist, and this is what this option allows. When enabled, presets will be shown as **L01**, **L02**, ... corresponding to their position in the setlist.

MIDI program change | preset

prog

Presets can be selected by MIDI program change messages, where the program change number matches the preset number. In setlist mode, you have more control over this and can select whatever program change numbers you want to use for each of your presets. This also controls the program change messages sent when you select presets on the **Voluum**

preset

This selects which preset you want in each slot of the setlist. You can leave empty slots: these will be skipped when setlist is activated.



MIDI

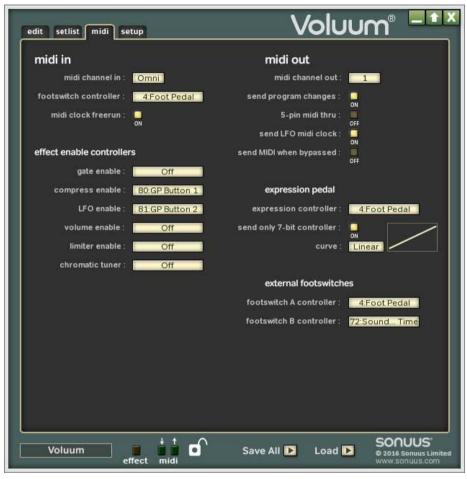


Figure 7: The **midi** tab lets you configure how MIDI is sent and received over the USB and 5-pin MIDI DIN connection of the **Voluum**.

The **midi** tab (shown in Figure 7) lets you change the MIDI configuration of the **Voluum** and thus how it sends and receives MIDI over its USB connection and through its 5-pin MIDI DIN connections. Only **midi channel in** and **midi channel out** can be changed on both the **Voluum**'s control panel and the Desktop Editor Software; the other MIDI options can be modified using only the Desktop Editor Software.





midi in

This configures how the **Voluum** receives MIDI messages.

midi channel in

The **Voluum** can respond to MIDI messages received on any MIDI channel (Omni) or a single channel (1–16). This affects program/bank changes and the **footswitch controller**. Similarly, it doesn't affect MIDI messages which are not channelised, such as MIDI clock.

footswitch controller

To allow fully remote operation of the **Voluum**, a MIDI controller can be used to remotely enable/disable the effect. This sets the controller used for this. It operates in the same way as the physical footswitch on the **Voluum**.

midi clock freerun

MIDI clock requires a MIDI continue message before synchronisation is started. But sometimes the equipment you are using doesn't send a MIDI continue message. Enabling the freerun option allows the **Voluum** LFO to synchronise with the MIDI clock without waiting for a MIDI continue message.

effect enable controllers

Each of the effects can be independently enabled/disabled via MIDI controllers. This allows the **Voluum** effects to act as if they were separate effect pedals.

midi out

This configures how the **Voluum** sends MIDI messages.

midi channel out

By default, the **Voluum** sends MIDI messages on MIDI channel 1, but this can be changed with this option. If it is preferred that no MIDI messages are sent this can be set to **off** and the **Voluum** will not send any MIDI messages.

send program changes

The **Voluum** responds to MIDI program change messages. You can also configure the **Voluum** to send MIDI program change and bank select messages when a preset is selected. This can be useful when you have other MIDI equipment that needs to be reconfigured at the same time as the **Voluum**, for example, when changing songs.

5-pin midi thru

When using MIDI to control multiple effects you often want to create a chain of MIDI devices. This is typically done by using a MIDI-THRU, which resends any MIDI data received via the MIDI-IN connector. The **Voluum** doesn't have a separate MIDI-THRU, but by enabling **5-pin midi thru** the MIDI-OUT connector will act as a MIDI-THRU. Unlike a conventional MIDI-THRU, the **Voluum** will also merge any MIDI data that would normally be sent on the MIDI-OUT (such as the expression pedal) with the MIDI data received via MIDI-IN.





send LFO MIDI clock

The LFO can send MIDI clock allowing you to control and synchronise other time-based effects, such as delays. The MIDI clock tempo is based on the real-time tempo of the LFO (LFO division has no effect on the MIDI clock).

send MIDI when bypassed

Usually the **Voluum** will send MIDI messages regardless of whether the effect is enabled or bypassed. This option lets you restrict sending of MIDI to when the effect is enabled. Note that this doesn't prevent program change messages being sent when the effect is bypassed.

expression pedal—expression controller

The footpedal is configured to send MIDI expression messages. You can change the MIDI controller used with this option. If a 14-bit (Coarse) controller is selected, the **Voluum** will send 14-bit data for the controller, using both the Coarse controller selected, and its Fine partner. If other controllers are selected, only 7-bit data will be sent.

expression pedal—send only 7-bit controller

Sometimes you don't want to send 14-bit MIDI controllers, but want to use one of the controllers designed for 14-bit messages, for example when sending to equipment that only supports 7-bit messages. When this option is enabled, only 7-bit controller messages will be sent, regardless of which controller you have selected to use.

expression pedal—curve

You can change the response curve, or taper, of the MIDI data sent using the expression pedal. Select one of the many available curves to tailor the feel of the pedal.

external footswitches

The **Voluum** has an option to add two external footswitches. By default these let you select presets, but these settings lets you extend this functionality. For example you can configure the footswitches to send MIDI controllers to control other equipment or use a footswitch as a convenient way to enable the built-in tuner.





Setup—manage



Figure 8: The setup tab lets you change global settings, manage your device and gives information on the version of hardware and firmware in your **Voluum**.

The **setup** tab (shown in Figure 8) contains various global options and information about the currently connected **Voluum**. The options available in the **manage** section are described below.

Device Name

To allow you to personalise your **Voluum** and to make identification of it simpler, you can give it a Device Name. This can be useful when you have several **Voluum**s connected to





the same computer. The Device Name can be anything you choose provided it is 16 characters or less in size.

The Device Name is shown in the **manage** section of the **setup** tab . Clicking the name field will let you edit it.

Reset to Factory Settings

The **Voluum** has several global settings which you can customise. However, you may want to restore these to the default factory settings. This can be done easily by selecting the **reset to factory settings** option. Any presets which you have created are not affected by resetting the factory settings

NOTE: these settings are stored in a "voluum_all" file on your computer when you perform a Save All operation, and will be restored when you load this file.

Update Firmware

The firmware (internal software) of the **Voluum** can be upgraded with new versions which fix problems or add new features. You can do this using the **sonuus** Firmware Loader application, and the **update firmware** option gives you an easy way to access this utility.

Simply select this option and choose the firmware update file that you have downloaded from the **sonuus** web site. The Firmware Loader will then launch automatically and perform the firmware upgrade. When complete, the Desktop Editor Software will reactivate and you can continue as before, with the new firmware running on your **Voluum**

For more details on the upgrade process, there is a separate manual available for the Firmware Loader application.

Pot Control Method

This is an editor option (it is not stored on the device) which lets you set the method used for controlling pots (knobs) with the mouse. This can be rotary (where the pot position follows the position of the mouse) or x–y (where left-right movement gives fine position control, and up-down movement gives coarse position control). You can set this to the method you find most intuitive.

Setup—settings

Instrument

The **instrument** option allows the **Voluum**'s envelope follower to be optimised for the note range, or other characteristics, of a particular instrument. This therefore affects the behaviour of presets using **envelope** mode, or effects which implicitly use the envelope such as the compressor. Presets themselves are not modified by changing this.





The available instruments are shown in the table below.

Instrument	Note Range	Description
Guitar	E1-C7	General guitar (electric and acoustic). This works well with most instruments, including 4-string bass guitar, but is optimised for the note range of 6- and 7- string electric guitars.
4-String Bass	C#1-A6	Similar to "Guitar", but the note range is optimised for 4-string bass guitar.
5-String Bass	A0-F6	Optimised to detect the lowest bass notes of a 5- string bass guitar.

Pedal Effect Enable

Sometimes it is not convenient to have to press the footswitch to enable the effect. For example, when using a volume pedal preset it is often preferable to have the effect activate when the footpedal is pressed to the toe-down position so that the effect is instantly accessible when you need it. **pedal effect enable** lets you do this.

When set to "On only", the effect is enabled when the footpedal is pressed to the toedown position. The effect must be turned off using the footswitch.

When set to "On/off (heel)", the effect is enabled when the footpedal is pressed to the heel-down position, and is also deactivated when the footpedal returns to this position (after a time set by **effect off time**).

When set to "On/off (toe)", the effect is enabled when the footpedal is pressed to the toe-down position, and is also deactivated when the footpedal returns to this position (after a time set by **effect off time**).

Effect Off Time

When pedal effect enable is set to "On/off (heel)", or "On/off (toe)" this sets the time (in seconds) that the footpedal must be in the "off" position before the effect is turned off. This lets you adjust the time for your personal preference to ensure that the effect isn't turned off unexpectedly when you are using it.

Bypass

Selects the bypass type: either true bypass or buffered bypass.

Footswitch Preset Select Time

Selects how long the footswitch must be held to enter and exit foot-operated preset selection mode.

Show Pedal Position

When this is enabled, the position of the footpedal is shown briefly on the **Voluum**'s display whenever the footpedal is moved. The position range is from 00 (heel-down) to 99 (toe-down) and it is displayed preceded by "=": **=00** to **=99**. This feature can be useful to help you judge how the start and stop of your playing relates to the range of your





effects: for example you may want to start playing at a specific point in the volume range that you have configured.

Sensitivity Adjust

Different instruments can have quite different output levels. For envelope-controlled effects, this means you may have to adjust the sensitivity parameter to get the desired response when using different instruments. Needless to say, with lots of presets that's a problem. **sensitivity adjust** lets you apply an offset to envelope sensitivity that applies across all presets. The range of adjustment is ±24 dB.

LED Brightness

LED brightness can be adjusted from a minimum (1) to a maximum (100). High brightness can be useful in bright conditions, and low brightness works better in dark settings and also increases battery life.

NOTE: If the brightness has been set to 100 for a long time, then set to minimum, it may take a few minutes for the display to stabilise to the new setting.

Power-Save Timeout

Sets the time in seconds after which the **Voluum** will enter a low-power state to conserve battery power. Power-save mode will not be entered while the **Voluum** is active, it only takes effect in the bypassed (off) state. When set to 0, this feature is not active.





Setup—info

The **info** section gives you various pieces of information about your **Voluum** and the Desktop Editor Software. This is read-only and cannot be edited.

Firmware Version

This shows the version number of the currently installed firmware. This can be updated using the **sonuus** Firmware Loader application, using **Voluum** firmware updates available from the **sonuus** web site.

Hardware Version

This shows which version of **Voluum** hardware you have.

Desktop Version

This shows the version number of the Desktop Editor Software you are using.

Device ID

The Device ID is stored on the hardware of the **Voluum** and allows your computer to uniquely identify each device.

<u>NOTE</u>: This is not the same number as the product serial number printed on the serial number sticker on the back of your **Voluum**.