MusePlayer Manual



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Thank You!

Congratulations for your purchase of MuseBox[™], featuring built-in sounds from Ultimate Sound Bank. We hope your new instrument will become a valuable music-making partner for you and for your musical endeavors.

We are proud to feature MusePlayer in MuseBox. MusePlayer is a software-based virtual instrument that is based on the UVI Engine, and is a high-quality sampling synthesizer that is versatile and expandable. MusePlayer features a huge range of sounds, simple access to the presets and great sound shaping tools so you can create your own custom sounds quickly and easily.

Thanks to the dual-layer architecture, you can mix and match all the included sounds to create your own unique sounds. This is the easiest way to create a fat bass sound, a rich pad, etc. Each layer is complete with a great arsenal of synthesis tools: multimode filter, LFOs, envelopes... And a global section with more filters and LFOs.

- MusePlayer is Built-in and preauthorized.
- Two layers delivering amazing sonic capabilities
- Hundreds of high-quality presets
- Nearly 4 GB of sounds on the built-in solid state drive
- Next-Generation UVI-Engine
- Over-driven "analog" filters available on each layer
- Dual effect section with 29 algorithms
- New LFO waveforms
- LFOs & FX all have host tempo sync
- Ability to create and save your own presets
- Expandable with new sample sets on CF cards

UVIengine

Award winning technology

MusePlayer is powered by the UVI Engine[™], a modern tool that runs MusePlayer but is invisible to you. The main asset of the UVI-Engine is the sound quality, thanks to the use of 32-bit floating point proessing throughout its architecture. Lots of virtual instruments say they sound great, but by simply doing some critical listening on your own, you'll find in the case of the UVI Engine, its actually true!

1 Quick Start Guide.....4-5

Powering up your MuseBox

Selecting a TAG Selecting a PRESET Creating your own custom Layer Saving your new Sounds

- 4 Using MusePlayer6-7
 - A Selecting Sounds
 - B Dual Layer Architecture
 - C MusePlayer 's Parameters
 - **D-Optimization**
 - E- A few more tips...
- 6 Interface Overview14 20
- 7 MIDI Continuous Controllers Table . . 21
- 9 General FAQ 22 23
- 10Troubleshooting & Support 24 25
- 11 Credits & Thanks 26

MusePlayer is a virtual instrument powered by the UVI engine that is built-in and pre-authorized on your MuseBox, ready to make music immediately. MusePlayer features a comprehensive set of preset sounds that cover nearly any musical situation. By exploring some of the programming capabilities of this powerful piece of software, you can take these preset sounds and customize them further to your liking, or come up with completely new sounds of your own.

The MusePlayer automatically loads when you power on your MuseBox. The sounds appear as PRESETS organized under different TAGs, which are definable categories that let you organize your sounds and presets however you wish.

The Factory Presets can easily be navigated by pressing the PLAY button on the front panel, and then selecting a TAG of interest using the top knob, and then selecting the PRESET of interest by turning the bottom knob. Presets load when selected by pressing the buttom knob to load.

Factory Presets are permanently stored in your MuseBox, but each preset can be individually edited and stored as USER presets using the EDIT functions on your MuseBox. The EDIT functions make the eight most common parameters in MusePlayer available for adjustment from the front panel, such as Envelope Attack, Decay, Sustain, and Release, or changing the Filter characteristics. This gives you basic control over the sounds without requiring you to view the Graphical User Interface (GUI) of MusePlayer.

However, by connecting a computer monitor or networking your MuseBox to a computer and running the MuseTools software to view the GUI remotely, you have COMPLETE access to the extensive editing capabilities within the MusePlayer instrument.

Once you've edited or created a new sound inside MusePlayer, you can store the sound by Saving it in MusePlayer, then "tagging" it so it can be viewed for instant selection in the PLAY mode of MuseBox.

MusePlayer features a diverse set of presets that are ready to conquer any musical challenge you face. Pianos, guitars, drums, synths, pads, strings.... they're all here, categorized in a straight-forward manner that will make it easy to find the sound that is just right for your musical needs. This manual tells you about the MusePlayer functionality and how to program the sounds you have pre-installed on your MuseBox. . For more information about using MuseBox, consult the MuseBox manual. The remainder of this document focusses on using the MusePlayer GUI and the functionality of this powerful virtual instrument.

Getting Started with MusePlayer

MusePlayer is remarkably easy to use. Built on the UVI sample synthesis engine that is used in virtual instruments like MOTU Mach V, Spectasonics Atmosphere and Trilogy, and more, the MusePlayer virtual instrument sounds great and is very efficient. Once you are familiar with the basic layout of the instrument, you'll be able to modify and make your own sounds to your heart's content. Here's how to achieve immediate gratification with your MuseBox using MusePlayer:

1. Connect your MIDI controller

Connect your controller to the MIDI input or to a USB input on the back of your MuseBox.

2. Turn on your MuseBox

Turning on the power is done by pressing the button in the top-right hand corner once. The unit will power on and load the patch that was saved the last time it was shut down.

3. Press the PLAY button to enter PLAY mode.

Play mode gets MuseBox ready to play preests instantly. MuseBox powers up into PLAY mode, but if you are using any of the other functions, press the PLAY button to enter the PLAY mode.

4. Select a TAG of interest

There are a large number of TAGS pre-defined in your MuseBox. To browse through the TAGs, simply turn the bottom knob until you see a category of interest.

5. Select a Preset from the TAG

Once you've selected a TAG of interest, then turn the top knob to select a preset in that particular TAG. Press the bottom knob to load the sound and enjoy!

6. Start Playing

You will now hear the preset you have selected if you have attached a MIDI or USB keyboard to your MuseBox!

If you don't hear any sound, check the following:

• Verify you have connected your MIDI keyboard to the MIDI input on the back of your Musebox, or into a USB port on the back of your Musebox you are using a USB keyboard with your MuseBox. Note that MuseBox will ONLY work with devicecompliant USB MIDI devices; not all USB MIDI devices are device-compliant, so you might need to connect using a standard 5-Pin DIN MIDI cable with some equipment.

• Make sure your keyboard or controller is powered up.

• Verify that MuseBox is receiving MIDI from your keyboard. This is easily done by looking for the "eighth note" on the front panel LCD next to the Left and Right level meters. If you see the note appear, but still don't hear a sound, you can verify what channel the keyboard is sending on by pressing the SETUP button. This will display the MIDI Monitor, and you will see the message "Listening..." until a MIDI message is received. Once a MIDI message is received, it will display the channel, the note number, and the velocity value. MuseBox is setup to receive MIDI in OMNI mode which means it listens on all channels, but you can over-ride this setting and make it listen only to one channel. If you have changed the factory settings for MIDI reception, then make sure you are sending MIDI on the channel that MuseBox is expecting to receive.

• Verify that there is audio activity by viewing the front panel VU meters on your MuseBox LCD. If you don't see any meter action, then it is possible that the individual channel volume is turned down inside your MuseBox.

• Check that the master volume control on MuseBox is turned all the way up, and you have either a pair of headphones connected to the front panel, or a mixer or a pair of amplified speakers are connected to the LINE OUTPUTS of the MuseBox.

• Verify that the amp or mixer is turned on and configured to receive audio, and the input level is set to a nominal listening level.

Important Information About Presets.

It is important to relalize that MuseBox has two different "levels" of presets, and two different "types" of presets.

When you turn on your MuseBox and press the PLAY button, you are accessing the PLAY level presets. Those presets include all of the sounds available in the MusePlayer virtual instrument, ASWELLAS ALLTHE OTHERVIRTUAL INSTRUMENTS AND EFFECTS IN YOUR MUSEBOX. In some cases, a PLAY level preset might consist of MusePlayer only. Sometimes it has both MusePlayer and a separate effect loaded for an enhanced sound. Sometimes a PLAY preset might have MuseBox running in parallel with aneffect processing an audio input so that you can sing and play keyboards at the same time.

This manual covers only the editing and creation of MusePlayer presets, and PLAY level presets. Please keep in mind that there are several different virtual instruments inside your MuseBox, and you might have to open up the GUI of a different virtual instrument to create or modify some PLAY level presets. For more information on creating and editing PLAY level presets, please see your MuseBox Owners Manual.

Presets and TAGS in MusePlayer

Another important thing to understand is that MusePlayer Factory Presets can are organized in two ways: in Factory BANK preset mode, and in TAG preset mode. The Factory BANK of presets are available when you open up the Graphical User Interface of MusePlayer and select presets with your Mouse. You can also select presets with MusePlayer loaded on one of the two synth channels, and then use your mouse to select presets using the drop-down preset selector and the BANK button selected. And finally, you can access the Factory BANK presets from the front panel of your MuseBox when you have MusePlayer loaded on one of the synth channels and the EDIT mode is selected.

The Factory Presets are also TAGGED in MuseBox, so you can use your mouse to select presets using the drop-down preset selector and the TAG button selected when MusePlayer loaded on one of the two synth channels.

Although this sounds complicated, it isn't: This function simply allows you to select presets alphabetically (using BANK mode) or by sound category (using TAG mode).



A - Selecting Sounds

Selecting sounds is very easy : click on the Preset name display and a pop-up directory will appear with the full listing of MusePlayer 's sounds organized by category and sub category. Click on the preset name to load the sound.

You can also use the left and right arrow buttons to select sounds incrementally, moving up and down in the directory list. This is useful when you are already in the desired subdirectory and want to listen to the next available preset.

The two smaller displays to the right of the preset name display are the Program (or layer) displays. Clicking these displays opens the same directory as the presets, but also shows the individual layer names that make up each preset, allowing you to quickly select and build your own presets.

You'll also find left and right arrows buttons there to select programs incrementally.

Please take a look at the Sounds listing for an in-depth look at the presets.

B - Dual Layer Architecture

One of the major features of MusePlayer is the dual layer architecture. Instead of playing and controlling only one mul-

tisampled preset, you have access to two "layers" that you can control either individually or grouped. We've called the layers "programs" because in each layer you may load what sounds like a full-featured instrument. The large A and B buttons switch the interface panel to control each program (layer) independently. For each program you may set the filters, modulations and other parameters independently. You can also use the "link" switch to allow editing of two programs at once, which saves time when editing layered sounds.

C - MusePlayer: Parameters

Some Parameters are independent in each layer, while some other are common to both. To simplify things the background shade of gray is slightly different for the common parameters. This will be visible on your computer screen.

A- Parameters that can be independent in each layer:

• Each layer has its own Level, Pan, Pitch coarse and Pitch Fine knob. This allows you to re-balance the sound, try variations in the mix and the sound.

• Filters : you can apply one filter to each layer selecting it from three LPF (Low pass Filter) and one HPF (High Pass Filter)

• LFO : four LFOs (Low Frequency Oscillators) can be used as modulation sources for four destinations : Pitch, Filter, Amplifier, Drive and Pan. Two are specific to each layer and two are common, although the settings can be different.

• Two ADSR envelopes :

1. Amplifier Envelope: Controls the nature of the volume of the sound (Attack, Decay, Sustain, Release).

2. Filter Envelope: Controls the nature of the tone of the sound by changing how the filter acts on the sound through time. .

Both envelopes feature a "V-time" knob (applicable to Attack or Decay) and a "SENS" knob, the Amplifier envelope adds "START" time knob that changes when the sound starts playing in the sample itself.

• Pitch envelope with two parameters : DEPTH and TIME.

B- Common parameters to both layers :

•Velocity curve, POLY(phony) setting, OCT(ave), BEND & 32 -bit mode.

• The Master Filter and its resonance slider are common to both layers.

 \bullet The effects settings (FX1 and FX2) are also common to both layers.

• Each layer has a MUTE button, that mutes the corresponding layer and "solos" other one. When mute is selected, the LINK function is disabled and the position of the switch beside it is set on the other layer.

• Two screens are dedicated to displaying values:

EDIT: shows the value of the editing currently applied to a parameter or if no editing has been done it shows the mode MusePlayer is in : Dual (two layers) or Single (one layer)

MEM: shows the amount of RAM memory used by the preset.

• MIDI indicator: the round logo gets animated whenever the plug-in receives MIDI.

D - Optimization

Using these tips can cut in two the CPU load of your plugin!

1. Disable the effects

Like all good sounding software effects, ours make the CPU work harder. If you don't need them on the preset you've loaded, turn it off. To do this, turn the ON/OFF knob next to the FX Sync switch to 0FF.

2 Reduce the polyphony

Unused voices do use a little CPU, especially at higher settings. A manual setting of 40 voices for a part that really uses 16 voices wastes a lot of CPU. Evaluate how many voices your MIDI part uses, and set the polyphony settings accordingly. Another great way of setting it is to lower the setting and listen to missing notes: when you hear some, go back up a bit and you're set!

3. Enable 32-bit mode

This feature allows you to save about 15% of CPU power by using more RAM. Depending on how many sounds you have loaded up in your MuseBox, this can provide the benefit of better sound with less CPU usage.

4. Disable the unused filters

Disable the multimode filter when not in use. Do this by clicking on "off" in the filter section of each layer. Do the same with the Master Filter by placing the cutoff at its center detent position. (Command-click or control-click on Mac, alt click on PC)

5. Lower the release time of the amplitude Envelope

Make sure that notes don't continue playing because of a long release time. This is especially effective for parts played with sustain pedal, as it may be that many notes continue playing almost inaudibly, if you've changed the ADSR shape.

E - A few more tips...

<u>1. Link</u>

Use the link function to quickly adjust the overall attack and release : turn the link on and change the Amp envelope attack and release parameters.

2. Modwheel Morphing & Layering

Feel free to experiment with modulation to create "crossfade morph" between two layers using mod wheel or other controlers assigned to full amp modulation (just set one layer mod positive and the other layer mod negative)

Try using the mod wheel to add a second layer to a sound by assigning it to positive amp mod; this is very useful to add bass range, filter, ... sound to a preset or to add warmth at your convenience.

Interface Overview

General controls

A1. Preset selection arrows A2. Preset selection Menu A3. Program selection Arrows/Menus A4. Link & layer display switches A5. The edit display A6. Memory use display A7. Save Switch Effects

B1.Modulation

- Pitch modulation
- Filter modulation
- Drive modulation
- Amp. modulation
- Pan modulation

B2. Pitch Envelope

- Pitch Env. Depth
- Pitch Env. Time

B3. LFOs section

- LFO selection switch - Sync Switch - LFO Waveform Display
- /Selection Menu
- LFO Depth/Rate Knobs

Filters

C1. Multimode filter C2. Timbre modulation C3. Master filter

D1- Filter Envelope.

Filter envelope (Attack, Decay, Sustain, Release)
Velocity time knob & A/D switch
Velocity Sensitivity

D2- Amplitude Envelope.

- Amp envelope (Attack, Decay, Sustain, Release)

- Velocity time knob & A/D switch
- Velocity Sensitivity

D3. Sample Start -Adjusts the start point of a sample F1. FX#1 ON/OFF and Sync switches F2. FX#1 Parameter knobs +Parameter names G1. - Glide Slider/Solo Switch/Velocity Curves G2. - Polyphony Setting / Octave

Transposition / Pitch Bend Range / CC# / 32-Bit switch

Museplayer



H1. Mixer (Level/Pan/Mute)

H2. Coarse and Fine Pitch Knobs

I1. UVI Engine Logo

General controls

A1. Midi Indicator/Preset selection menu



The MIDI indictaor will light when MusePlayer receives MIDI data. If no sounds is coming out of MusePlayer, check whether this lights up. If it doesn't, check the MIDI source or the MIDI settings in MuseBox. If it does light but you don't hear anything, check your amplifer or mixer to ensure its working. Click on the name and a menu appears with the whole preset list. Submenus are there for easier selection. If you release the menu without making a selection, the current preset is kept.

A2. Preset selection area



The two arrows allow you to change preset, moving in the preset list. The preset number is displayed above, you can click on it to have direct access to the presets by number.

A3. Program Selection Menus

The upper display shows the name of the program selected.

You can change these programs individually by cliking on their name, a menu appears with the whole preset list. Submenus are there for easier selection. If you release the menu without making a selection, the current program is kept. The two arrows allow you to change program for each layer, moving in the program list.

A4. Link & Layer display switches



When activated, the LINK button applies any edits to both layers at the same time.

When the link mode is off, the Layer display switch allows you to toggle between the two layers in order to display the one you wish to edit. All parameters are then updated visually.

A5. The edit display



This diplays the editing mode set by the link mode switch. After any edits the display shows the value of the parameter currently edited. MusePlayer will display the value in dB, Hertz or percent of the current slider.

<u>A6. Memory display</u>



Memory display: indicates the RAM usage of the currently opened preset. This display takes 32-bit Mode into account.

A7. Save switch

When you click on the "SAVE" switch, MusePlayer allows you to save you own preset with the desired name.You can either overwrite the preset by using the same name or change the preset name to create a brand new preset.

B1. Modulations

Use this section to modulate the pitch, filter, drive, amp. or/ and Pan of the selected layer. (Refer to the next page for a complete list of the available modulation sources.)



Pitch modulation knob, source menu



The Modulation Depth knob is bipolar meaning the 0 position is at 12 o'clock, and going to the left or right gives negative or positive values.

This section allows to modulate the pitch of the selected layer. Depth knob: controls the Amount of the modulation. (Vibrato effects are possible using a LFO as a modulation source, for example.)

Filter modulation knob, source menu



The Modulation Depth knob is bipolar meaning the 0 position is at 12 o'clock, and going to the left or right gives negative or positive values.

This section allows to modulate the cutoff value of the selected layer. Negative settings will decrease the filter frequency while positive values will increase it (depending on the filter type).

Drive modulation knob, source menu



The Modulation Depth knob is bipolar meaning the 0 position is at 12 o'clock, and going to the left or right gives negative or positive values.

This section allows to modulate the drive amount of the selected layer. Depending on the settings, this section can increase or decrease the drive amount using the modwheel or whatever modulation source.

Amp. modulation knob, source menu



The Modulation Depth knob is bipolar meaning the 0 position is at 12 o'clock, and going to the left or right gives negative or positive values.

This section allows to modulate the audio volume of the selected layer. Tremolo effect can be achieved with this section, for example, using a LFO as a source.

Pan modulation knob, source menu



The Modulation Depth knob is bipolar meaning the 0 position is at 12 o'clock, and going to the left or right gives negative or positive values.

List of available modulation sources

Internal sources

- Pitch Envelope
- Filter Envelope
- Amplitude Envelope
- LFO 1
- LFO 2
- LFO 3
- LFO 4

MIDI sources

• Key : note number. Higher notes mean more modulation amount.

- Bender: the pitch wheel on your keyboard.
- · Aftertouch: also know as pressure or Channel AT

• Velocity: the velocity value is used: higher velocities mean more modulation.

 $\,$ $\,$ CC: the MIDI continuous controller you've selected in section G3.

MIDI+Internal sources

• Wheel->LFO1 : the parameter is modulated by LFO 1, the amount of modulation applied is set by the mod wheel.

• Wheel->LFO2: the parameter is modulated by LFO 2, the amount of modulation applied is set by the mod wheel.

• Wheel->LFO3: the parameter is modulated by LFO 3, the amount of modulation applied is set by the mod wheel.

• Wheel->LFO4: the parameter is modulated by LFO 4, the amount of modulation applied is set by the mod wheel.

• Wheel : the modulation wheel position sets the amount of modulation

Other sources

• Alternate: will alternate between large and small modulation values, changing after each note.

Random: completely random values are generated

• Organ Pan: values are generated matching the pipes order on an organ.

This section allows to modulate the position of the selected layer in the whole stereo field. Perfect to create autopan effects.

B2. Pitch Envelope



<u>Depth</u>: This sets the depth of the pitch envelope, or envelope amount.

Rate: This sets the speed at which the sound will be affected

(transposed) by the pitch envelope.

B3. LFOs Section



Allows you to select one of the LFO you want to edit.

<u>Important note</u>: LFOs 1&2 are independent for each layer. they can share the same value when in link mode, or be set totally differently from one layer to the other. LFOs 3&4 are common to both layers.

Sync Switch



Activates the LFO synchronization (It means that the LFO is synchronized to the host tempo from 1/32 of this tempo to 8x depending on the rate knob setting)

Waveform Display/Selection Menu



Displays the selected waveform of the current LFO. Click on it and a menu appears allowing you to choose the waveform.

LFO Depth and LFO Rate knobs



<u>Depth</u>: Defines the intensity of the modulation created by the LFO.(MIDI CC #95)

<u>Rate :</u> Defines the speed of the modulating oscillator (MIDI CC #96).

Note: MIDI CC# control the displayed (selected) LFO only.

C. Filter Section

C1. Multimode filter

This is the main filter for each layer. The switches at the left select the filter type. You get to choose between one HPF and three kinds of Low-pass filters, with different characteristics:



• CUTOFF sets the filter frequency. Turn clockwise to open.

• RESO (resonance): is the amount of boost provided at the cutoff frequency. It provides extra gain so be careful with the overall volume at high resonance settings. Turn the volume or the sustain level down to avoid distortion.

• DRIVE: sets the amount of drive (distorsion) applied to the filter output.

• KEY (keyboard tracking) modifies the filter frequency based on the note played on the the keyboard. Higher keys will have a higher cutoff value than lower key.

• ENV (Envelope Amount) lets you choose how much the filter envelope settings affect the filter cutoff frequency. Turning clockwise gives positive env. values (i.e. a longer attack will slowly open the filter), whereas turning to the left allow you to use the inverted envelope (longer attack times will close the filter).

Interface Overview

C2. TIMBRE



Timbre parameter "detunes" the sound without affecting the reference note making strange tuning-filter effects. This is a setting that encourages experimentation...

C3. Master filter & Resonance



The Master Filter is common to both layers. The cutoff slider is neutral at the center position. This allows you to choose between a Hi-pass filter (when sliding towards the right) and a Lo-pass filter (when sliding to the left). Resonance controls the amount of resonance of the filter. The MASTER Cutoff responds to MIDI CC#74 and Resonance responds to CC#71

D1. Filter Envelope



Filter envelope

This envelope affects the multimode filter, depending on the envelope setting. Turn the envelope knob fully to the right before experimenting with it.

The envelope is made of four stages: Attack, Decay, Sustain and Release. It is usually more difficult to set this envelope because of the relationship with the filter. Long attack times will provide you with slowly opening filters.

Often neglected, this great tool can change a preset completely. However, there are no hard and fast rules for filter envelope settings: feel free to experiment, and you're likely to discover new sounds.

Velocity time knob & A/D switch



This knob allows you to set how much the attack (A) or the decay (D) time will be modified by velocity. Both envelope stages can be modulated simultaneously.

Velocity Sensitivity



This knob allows the velocity to modulate the envelope settings.

D2. Amplitude Envelope

Amplitude envelope



The classic ADSR sliders (Attack, Decay, Sustain and Release) help you define the evolution of the audio volume of the sound over a period of time.

Attack, Decay and Release are TIME settings (i.e. long attack time or short attack time). The sustain time is infinite by nature: it lasts for as long as you hold a key. The Sustain is therefore a VOLUME setting for adjusting how soft or loud the note is while it is held down.

V-time knob- A/D switch



This knob allows you to set how much the attack (A) or the decay (D) time will be modified by velocity. Both envelope stages can be modulated simultaneously.

Sensitivity



This allows the velocity to modulate the envelope settings.

Sample Start



which may be desirable for some sounds..

UVI Drive Bad Radio Out da club

Effects & presets included in MusePlayer

Effects

MusePlayer features a comprehensive effects engine built into it to provide reverb, delay and other effects for the sounds inside MusePlayer. There are two effects slots, and the amount of the effect can be adjusted and syncronized to MIDI clock.

F1. FX#1/2 On/Off and Sync Switches & Name Display

FX01 ON OFF ISTRE No Effect

This allows activation (ON) or deactivation (OFF) of each effect. Use the Sync option to synchronize the speed of the effect to the host tempo MIDI clock (useful for keeping delays in tempo). Click on the window and a list of all available effects will be displayed, release the mouse on the name of the effect you want to use.

F3.FX#1/2 Parameter knobs & names display



Once an effect is selected, all its parameters are displayed here (up to five parameters depending on the kind of effect selected). The name of each parameter is displayed below the corresponding knob (used to change this parameter's value).

Simple Delay	Phaser
So simple	My Phase
Sixteen	My Tron
Old School	Nono
Stereo Delay Everywhere Cycle Xperiment	Sync Me Cross Phase Stereo Phase Whistle Low Phase
Wanna Fight	Synchro
Dreamland	Tremolo
Delayverb	1-16 Deep
FX Delay	Fast Tremolo
Shake it Nice One One bar pan PingPong Delay	FX Tremolo Autopan Sync Rhodes Slowly Tremo Pan
Sixteen Springly 8 Miles Doubling	Full Like it Gouda Organ
Large Hall	Rotary Simple
Warm Room	Make big
Big Room	Try it
Short VErb	For fun
Predelay Verb	JK Organ
Perc Room	Auto Wah
Madness	Metro Wha
Subtle	Orange
Room 2	Bubble
Gate Reverb	Copter
Drum Gate	3 band EQ
Radical	Phone
1/16 Hi Hats	Medium Air
Chorus	No Flat !
Deep Chorus	Vocal
Ensemble	Bass
Mild Chorus	Percussion
Deep Slow	2 hand FO
Dimension	Hi-Fi
FX Chorus	Telephonic
Flanger	Boost Bass
Boolart Cool Flange Extreme FX Flange	High Guitar Punchy UVI Filter HP EQ Da Filter Low Pass Very High

Color Bass Drive Electric **Double Drive** Tinny Digital X Da Dist Hi Drive Hammer HP & LF Filter Subtle F In da Box HP Reso LP Reso Mouth **UVI** Limiter Hardcore Mix Instrument Too much Compressor Pump me up Bass Medium Attack Percomp Gate Gate Beat Cut me Slow Attack Shortly **UVI** Destructor Mirage S900 Crushy Prodige Insect Abuse

Ring Modulator Pure Ring Parasite Useless

Robotizer Brotomoto Cricket Ulysse Vocalise

Common parameters

G1. Glide Slider/Solo Switch - Velocity curve switches



The Solo Mode lets you play convincing bass and lead parts, and includes a glide time setting. Glide sets the transition time between two notes. Solo Mode is the same as a polyphony setting of 1.

The velocity curves switches allows you to adapt MusePlayer to your MIDI controller: Linear velocity, no velocity (trigger mode), exaggerated velocity (for softer keyboards), de-emphasized velocity for heavier or weighted action keyboards.

G2. Polyphony setting



Use the arrows to set precisely the polyphony you need. Most presets have their own poly settings, for your convenience.

Tip: This setting is the principal way of preventing clicks and pops from occurring due to CPU overload. Example: a 6 notes part will use less CPU if MusePlayer is set to six voices than if it is set to 16 voices.



Allows to transpose the incoming MIDI notes. Setting is in Octaves, with values from -2 to +2.

G2. Bend Range

This sets how the pitch bend will transpose the sound: values from 0 to 24 semi tones.



The display indicates which MIDI continuous controller is currently selected for the active Layer. This controller is available in the list of modulation sources.



When OFF, MusePlayer loads sounds in 16-bit format to use less RAM, but it will use a little more CPU power when converting the samples to 32-bit on the fly. When ON, all samples in the preset are immediately loaded in 32-bit mode. This uses twice the RAM but means the engine doesn't have to convert on the flv.

H1. Mixer



Here you can set each layer's level using the corresponding slider and each layer's pan using the corresponding knob. (Volume:CC#7 Pan: CC#10)

Two MUTE switches below the sliders disable the sound of a laver. Once muted, the link function is automatically disabled. PAN controls move the output audio to the left or right.





The Pitch and Fine settings are transposing the audio.(as opposed to the Octave setting in section G that acts as a MIDI transposition). The pitch's scaling is in semi-tones when the fine setting is set in cents (100 cents for one semi-tone).

11. UVI engine Logo

Clicking on the Logo will display (in the edit-info window) the currrent software version of the plug-in.



MIDI Continuous Controller Table

Note: for layer parameters, MIDI CC will only automate the layer that is visible. In a similar way, it will automate the selected LFO. N° Description 07 Master volume N° Description 20 FX1 On/Off 89 Pitch Mod Amount * 90 Filt Mod Amount * 21 FX1 Parm Knob #1 22 FX1 Parm Knob #2 91 Amp Mod Amount * 23 FX1 Parm Knob #3 92 Pan Mod Amount, * 24 FX1 Parm Knob #4 25 FX1 Parm Knob #5 93 Pitch Env Depth, * 94 Pitch Env Time 30 FX2 On/Off 31 FX2 Parm Knob #1 95 Selected LFO Depth 96 Selected LFO Rate 32 FX2 Parm Knob #2 33 FX2 Parm Knob #3 34 FX2 Parm Knob #4 97 Filter Envelope Attack 35 FX2 Parm Knob #5 98 Filter Envelope Decay 99 FilterEnvelope Sustain 70 Multimode Filter: filter type selection. 100FilterEnvelope Release 71 Master filter cut frequency 101 Filter Envelope Vel. Time 74 Master filter resonance 102FilterEnvelope Vel. Sens 103AmpEnvelopeVel. Time 73 Amp. Envelope Attack 104AmpEnvelope Vel. Sens 75 Amp. Envelope Decay 76 Amp.Envelope Sustain 105Sample Start 72 Amp.Env. Release 106Layer A Mute 77 Filter Cutoff 107Layer B Mute 78 Filter Resonance 108Layer select 79 Filter Env Depth* 109Link On/Off 80 Filter Key Follow 110Drive (0=MIDI value 64) 111Drive Mode 112Timbre 81 Layer A level * Note bipolar parameters: MIDI value of zero will switch the 82 Layer B level 83 Layer A Pan polarity of this parameter. 84 Layer B Pan 85 Pitch coarse Layer A 86 Pitch coarse Layer B 87 Pitch fine Layer A 88 Pitch fine Layer B

Multitimbral Use

If you want to use MusePlayer in a multitimbral way, open up a second copy of it in the MuseBox play rack. Alternatively, you can add a secondary instrument to a solo instrument inside the MusePlayer instrument, giving you up to four separate sounds at once.

Expanded polyphony

On MuseBox you should be able to get more than 48 voices per instance. If using MuseBox with a computer sequencer, you can always record the MuseBox's output to an audio track, as you would with any other instrument.

Can I import my own samples in MusePlayer?

MusePlayer was created to give you access to an exclusive sound library that covers the basic needs of most keyboardists. You can add additional sounds via the CF card slot in the back of your MuseBox, but you cannot add your own sampled sounds to MusePlayer.

Managing Program Changes

MusePlayer is a sample player. It has to load in RAM each sound you call up. Loading samples is really fast, but not instantaneous. MuseBox features several key technologies that minimize the amount of time it takes to load a sound, or switch from one sound to another. Additionally, you can have two completely separate copies of MusePlayer running in MuseBox's mixer, making it possible to always switch between the two sounds instantly using MIDI program changes. Please refer to the MuseBox manual or on-line tutorials.

Are any sounds included with MusePlayer available in another form?

No, the sample library used in MusePlayer is only available with and was only created for this virtual instrument.

Can I make my own original sounds with MusePlayer?

To deliver the most powerful and flexible synth sound collection ever made, MusePlayer depends on sampling, augmented by a killer synthesis engine. A the end of the chain is a powerful multi-effect allowing very precise tailoring of your sound. All of this has been engineered to help you create your very unique sounds. You can use the samples that are in MusePlayer along with the Synthesis and Effects engine in MusePlayer to make sounds that are uniquely yours. Just remember to save them!

Why use samples instead of conventional waveforms?

It's always surprising to discover how faithful sampling can be. The unique character and the power of each synth is immediately heard.Our sound designers used the best hardware equipment to capture every detail of the synth sounds. Esoteric preamps and converters were used to capture the samples. The synth audio signal was also massaged with tube or class A compressors and equalizers, depending on what sounded best. Sampling is really the best technology available today for sounds that are larger than life.

How big are the sounds inside MusePlayer?

MusePlayer has nearly 4GB of sounds inside, and some of the individual sounds, like the Acoustic Grand Piano (Big) is nearly 800MB in size, which completely swamps (by a factor of 10!!) the size of the sampled pianos you are likely to find in a modern hardware synth that would cost far more than MuseBox!

Is it as programmable as another software synth?

MusePlayer is HIGHLy programmable. The UVI-Engine is one of the best sounding and most versatile software instruments ever designed. Listen to the filters or the mono legato, for example: the difference with other instruments is staggering, even for seasoned session players. So the sampled library is just the beginning of your journey through synthesis. Think of MusePlayer as a huge collection of hardware synths, used as building blocks of your own mega-synth!

Legal/Copyright "Frequently Asked Questions"

<u>1. Are there any legal limitations to how I can use MusePlayer?</u>

MusePlayer is meant for composing and performing music only. You may not use it to create your own sample library or another kind of sample-based product from the sounds contained within your MuseBox. You are also restricted from selling or sharing online any samples created using MuseBox alone, although sharing of Presets is not only allowed but encouraged.

2. Can I use the sounds in MusePlayer on a commercial music project, like a soundtrack or radio commercial?

Yes. You are free to use MusePlayer however you wish to create your own works; it doesn't matter what scale of project you are working on. MuseBox can be used without restraints within a musical composition and there are no license fees associated with using any of the sounds when used to create your own compositions.

3. Can I copy expansion sound sets and give them to my friends, or sell them on the Internet?

No. Copying or selling sounds and content is strictly prohibited and is a felony that carries with it immense fines. Soundsets are creative works just like your musical compositions, please respect the rights of the creators by protecting their works from being copied, pirated, or re-distributed without their consent.

Can I resell MusePlayer to someone else, second hand?

No, the sounds included in MusePlayer are sold with a nontransferable license and as such the MusePlayer can only be used in a MuseBox. You cannot remove the sounds or software and sell them separately.

How do I remote control MusePlayer using a controller keyboard ?

It is possible to automate almost every knob in the MusePlayer interface by sending the appropriate MIDI continuous controllers data your MuseBox. The easiest way to do this is to use the MIDI Learn function in Musebox. Additionally, the most common 8 parameters are available from the front panel of MuseBox by simply pressing the EDIT button. MusePlayer supports more than 25 different Continuous Controller messages to remotely control the instrument.

Can I run MusePlayer in my computer?

MusePlayer is exclusive to the MuseBox software instrument, and although it can be integrated with your computer system, it cannot be run separately on your computer. MusePlayer is available to run on Muse Research's RECEPTOR hardware plug-in player if you require it to run there. Universons has an extensive line of virtual instruments available, we recommend you check with them if you'd like to run similar sounds on your computer system.

Will MusePlayer run better if I add more RAM?

Pretty much every computer-based product on earth runs better with more RAM. Please visit the Muse Research website for information on the appropriate RAM to install in your system if you wish to do so. Please note that RAM installation should be done only by qualified personnel, as it is possible to damage the product if you don't know what your doing, and any such damage is not covered by the product warranty.

How can I get more notes to play at once? And how can I make MusePlayer respond more quickly to MIDI?

When playing MusePlayer presets directly from your master keyboard you might notice a little delay between hitting the key, and the sound coming out. MuseBox is designed so that this delay minimal and barely noticeable. If you want to experiment with faster performance, at the possible expense of the number of notes you can play at once, you can set the latency in the SETUP menu of the MuseBox. As you DECREASE the latency of your MuseBox, it makes everything run faster, which increases the load on the CPU and thus may reduce the total number of notes you can play at once. INCREASING the latency setting subsequently decreases the load on the CPU, and increases the number of notes you can play at once. MuseBox supports the following latency settings for running MusePlayer:

Lowest: 48 samples of latency. Fastest MIDI response but delivers the lowest voice count capability.

Normal: 128 samples of latency. Normal performance and average voice count capability.

Medium: 256 samples of latency: Reasonable performance with high voice count capability.

Highest: 512 samples of latency. Slowest MIDI response time but delivers the highest voice count capability.

Your MuseBox detaults to 128 samples of latency, which is very near real-time and gives you a large amount of polyphony from your MuseBox. It is better than most digital synths made in the 1980's. Anything between 48 and 256 is pleasing and usually very acceptable, and of course the higher the latency setting the more voices your system can produce.

Support

We've done our best to provide a product that is reliable and easy to use. However, if you experience problems, you may contact us by sending email to us. The email links can be found on our website www.museplayer.com, or by contacting Muse Research directly at support@museresearch.com.

Please do not contact Universons or Ultimate Sound Bank for support. They do not support MusePlayer directly and will not respond to emails, phone calls, or letters, unless of course you enclose a 100-euro bill with your letter, in which case you might receive support and a small tin of Foie Gras. Just kidding. Really, the only support is available through Muse Research.

<u>Note:</u> always include your full name and serial in emails sent to Muse Research.

Updates

MusePlayer shipped to you in MuseBox as the latest version, and because it has been thoroughly tested before its release, it is unlikely that new versions will be required. However, should an update be necessary, that information will be made avaialble in the Support section for MuseBox on the Muse Research website.

CREDITS

Produced by Ultimate Sound Bank for Muse Research and Development, Inc. and provided under license.

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THANKS / MERCI

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Classic synth photos thanks to RL Music.

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A - Analog (or Subtractive) synthesis

Called "Analog" because it was the synthesis you could find on most of the first analog synthesizers, Analog synthesis starts out with a waveform rich in harmonics, such as a saw or square wave, and uses filters to make the finished sound subtracting harmonics, which is why it is accurately referred to has Subtractive synthesis.



Here are the main substractive synthesis components :

Oscillators: The device creating a waveform is usually called an oscillator. The first synthesizers used analog electronic oscillator circuits to create waveforms. These

units are called VCO's (Voltage Controlled Oscillator). More modern digital synthesizers use DCO's instead (Digitally Controlled Oscillators). A simple oscillator can create one or two basic waveforms - most often a sawtooth-wave - and a squarewave. Most synthesizers can also create a completely random waveform - or "noise". These waveforms are very simple and completely artificial - they hardly ever appear in the nature. But you would be surprised to know how many different sounds can be achieved by only using and combining these waves.

Filters: To be able to vary the basic waveforms to some extent, most synthesizers use filters. A filter is an electronic circuit that removes harmonics fromthe original waveform. The Filter section of a synthesizer may be a VCF (Voltage Controlled Filter) or DCF (Digitally Controlled Filter). If you remove all the harmonics from a complex waveform, you end up with a pure sine wave. Filters come in the following types:



·Low-Pass Filters allow low frequencies to pass through unaf-



fected and filters out (or blocks out) the higher frequencies. This is controlled by a parameter labelled as "Cut-Off Frequency" (or "Cutoff" or "Frequency"). • High-Pass Filters (or HPF). A HPF does the opposite of a LPF. A High-Pass Filter allows the higher frequencies to pass through unaffected and filters out (blocks-out) the lower frequencies.



The Cutoff Frequency determines the position in the harmonic spectrum where the filter will begin to filter (or cutoff) the higher overtones (ie frequencies) : some overtones will be removed - and the waveform will become more "rounded". If the Cutoff is set to

a high position, then the timbre will be bright. If the Cutoff is set to a low position, then the timbre will be dull. In other words the filter controls the brightness of the sound.

Resonance is where the frequencies at the Cutoff position are boosted (made louder). When a little resonance is introduced, the frequencies around the Cutoff are boosted and the filter begins to exaggerate the frequencies around the cutoff point. With a lot of resonance, the frequencies around the Cutoff are emphasized to the point where the filter will produce a distinct tone, or it will start to "sing" with a pronounced tone at the cutoff frequency.

Amplifiers and Envelopes: The amplifier section on a synthesizer may be labeled as VCA (Voltage Controlled Amplifier) or DCA (Digitally Controlled Amplifier). An Amplifier will control the volume of the waveform in real-time, or give it an "Envelope" so the sound is controlled in amplitube over time.

Nowadays, there are many variations of envelopes available. However, the most common envelope has 4 parameters: (1) Attack time, (2) Decay time, (3) Sustain level, and (4) Release time. This is usually called ADSR Envelope.Envelopes can also be used to control other sections of a synthesizer.

LFOs: LFOs, or Low Frequency Oscillators are separate oscillators in a synthesizer that can be used to control things like the Filter or Amplitube Enveloped. Tremolo is a common example of an LFO controlling volume, where as Vibrato is a good example of an LFO controlling the pitch of a sound.

The MiniMoog is a great example of an Analog Synth.

B - Frequency Modulation (FM) synthesis

Invented at Stanford University, FM synthesis produces an output signal by oscillating the frequency of a source oscillator's signal at such a high frequency that it starts to "modulate" and produce new tones in the process. This process can generate fairly complex waveforms containing multiple frequencies/sidebands with only two oscillators, requiring minimal computations. FM Synthsis is particularly good at creating synthesized version of vibrating bars, hence its popularity as a sound for use in Electric Pianos. The YAMAHA DX7 is the best example of a popular FM synth.

C - Wavetable synthesis

This is a synthesis technique where the waveform of the oscillator is stored as a table of values in a digital manner, and then "read back" and processed in real-time by the synthesis engine. As a result, quite complex and harmonically rich waveforms can be stored in the synthesizer for combining with subtractive synthesis techniques to make very expressive sounds. One common addition to wavetable synthesis is that each instrument waveform contains a loop region. This region starts after the attack segment of the digital audio has played and repeats while the instrument's note is sustained (i.e. while a note is held). Then the release segment of digital audio finishes off the note. Wavetable synthesis is a more limited form of the more generalized Sampling synthesis, explained later.

D -"Vector" synthesis

Vector synthesis was pioneered by the SCI Prophet VS and made popular by the Korg Wavestation family. Vector Synthesis was loosely based on substractive synthesis but with the example of german PPG in mind, they created an instrument able to crossfade waveforms in real time on a two dimensional pattern in real-time with a joystick. The user had access to 128 different digitally stored waveforms, 4 waveforms ("voices") could be mixed in real time. Then the result went through a classical analog path with two LFOs per voice, VCF, VCAs and enveloppes (loopable envelopes to create really interesting soundscapes). The resulting sound had the life and motion of rich and complex digital textures combined with the warmth of analog filters and amps to finalize the picture.

E - Additive synthesis

Additive synthesis can be found in different instruments, the first one being the famous tonewheel organ and its equally famous drawbars used to add or withdraw harmonics from the overall sound. A rotating shaft with electromagnetic pickups created different harmonics that were added together in varying proportion using the organ "stops" to create the desired timbre.

The idea of Additive Synthesis is to build a complex waveform from its basic elements. It works by mixing (summing) one or more simple waveforms, such as sine waves at different frequencies together to create a more complex waveform. Theoretically, it is possible create any sound by adding enough sine waves of different frequencies together using someting called the Fourier series. In real life however, sounds evolve and change in subtle ways making the creation of complex sounds using simple elements a huge technological challenge. However, Additive Synthesis has made an impact on the world of synthesis as the computations necessary tomake complex sounds have become less burdensome thanks to faster CPUs. Perhaps the most famous Additive Synths came from Kawai in their K series and the PPG Waveterm.

F - PCM or "Sampling" synthesis

As digital technology became more afforable, digital audio became more and more prevalent. This also helped create a new class of synthesis employing the storage of digital "snapshots" of sound using PCM (pulse code modulation), but more commonly known as "sampling" synthesizers. A sampling synthesizer captures a real sound by digitizing the sound and storing it as a waveform, much like a camera stores an image on a memory card. These waveforms are then used as the oscillators in the synthesizer would with envelopes and filters.

Many sampling synthesizers store these waveforms in Read Only Memory or ROM and then "reads" these samples back in real -time, which is the main technology used in "sound modules" like the E-mu Proteus. Sampling synthesis is arguably the best way to recreate acoustic instruments such as pianos and orchestral instruments, providing realism and high definition, but at the cost of requiring large amounts of memory to store the sample data. And since the harmonics of an acoustic instruments vary greatly as they play through their range, for best realism it is necessary to create a large number of samples to make up a playable range in an instrument (called Multi-sampling) thus further increasing the memory requirements. That being said, samplers are used on nearly every film and TV soundtrack and the technology remains the premier technology in keyboards to produce acoustic instruments that are big, expensive, or both. Examples of famous samplers include The Fairlight CMI, E-mu Systems Emulator, and Akai S series products. These hardware synthesizers have since been replaced by software versions such as Native Intruments Kontakt.

G - "Modeling" synthesis

There are two types of Modeling synthesis: analog modeling that is used to create the sounds of analog oscillators but using mathemetical routines to simulate the behavior (especially the non-linearities) of analog synthesizers, and physical modelling that uses mathematical descriptions of the physical properties of a particular element of an instrument, say a string, a pipe, or a struck metal bar, and then using digital signal processing to manipulate the behavior of the model over time. Clavia Nordlead & Nordmodular are examples of analog modeling synths, and physical modelling technology has found the most success in virtual instrument form in products like Lounge Lizard and Pianoteq.

F - Miscellaneous

Phase distortion Synthesis

This is a synthesis method popularised by Casio synths back in the 1980s, but is still found in some synthesizers today Phase Distortion synthesis relies on reproducing the digital waveform in a non-linear way. Normally, when you play a digitized waveform, the digital synth reproduces the data at the intended rate (eg 44.1kHz). A Phase Distorted system means part of the data is read at one rate and the remainder at another rate (eg first half at 22kHz and the second half at 66.2kHz [average = 44.1kHz]). This varied data-reading changes the waveform. In theory, you get a brand new waveform, and PD synthesis gives timbres that sound similar to FM.

Tape Sampler (Chamberlain/Mellotron)

The forerunners of digital samplers, tape-based keyboards used analog magnetic tapes to reproduce sounds that were recorded on continuous loops stored in a large bin. These devices, like the Chamberlain and the Mellotron basically had a central captstan and a bunch of play heads. Pressing a key pushed the head against the tape so you would hear the sound. Each strip of tape had a finite length, so after a few seconds (7 was typical) the sound would stop as the tape quickly re-wound to the beginning. Made famous by the Beatles and embraced enthusiastically by prog rock bands, Mellotrons that aren't in museums are treasured by collectors although digital sampling recreations are far more practical and don't require maintenance!

A - Concept



We started the MusePlayer project by surveying the market of keyboards to determine the most important "meat and potatoes" sounds required by most keyboardist. We then searched the massive UVI sample libary for suitable instruments, and if they weren't there, we captured

them using various synthesizers, sample libraries, and live players. The result is a mighty sound set that dwarfs what you find in a typcial workstation keyboard, with over 2 Gigabytes of the best synths sounds available. That's what makes MusePlayer unique.

B- Sampling gear

It's always surprising to discover how faithful sampling can be. The unique character and the power of each synth is immediately heard. Our sound designers used the best hardware equipment to capture every detail of the synth sounds. Esoteric preamps and converters were used to cap-



ture the samples. The synth audio signal was also massaged with tube or class A compressors and equalizers, depending on what sounded best. Sampling is really the best technology available today for sounds that are larger than life.

All our expensive outboard gear will improve anything, it's not just for million-dollar vocal sessions. The ultimate signal chain employed has produced incredibly dynamic and lively synth sounds, turning the heads of everyone who has heard them. We've devoted about 4 GB to the vast array of instruments that MusePlayer covers, from stellar Acoustic Pianos to searing lead synths, to pop brass and electronic drums. Sampling allows MusePlayer to cover an amazingly diverse panel of synthesis technique and unite them in just one instrument. Synthesisers used to create sounds in MusePlayer Roland: Jupiter 4 & Jupiter 8, SH-101, JD800 & JD990 / Yamaha: CS80, CS60, CS15, CS40-M & CS70M. DX1, DX100, TX816, FS1R / Oberheim: X-Pander, Matrix 6, 4 Voices, OBXa / Sequential Circuits : Prophet VS, Prophet 5, Prophet One, T8 / PPG : Wave 2.0, Wave 2.3, Waveterm B, PRK FD, EVU, HDU & Commander / Korg : PS3200, Trident MK2, MS20, M1, O1W, DW8000 / Casio : CZ1, CZ100, VZ1 & VZ10M / Moog: Minimoog & Memorymoog / ARP: Odissey, ARP2600, Chroma / Waldorf: Pulse, Wave, Microwave XT, Q & Micro Q / Misc: Synclavier II, Technos Acxel, Mellotron M400, Acces Virus, Kawai K5000... and more !

Recording gear & software used for MusePlayer

Manley Massive Passive and SLAM with 192 kHz converters, Langevin Dual Combo, Apogee Big Ben & Roseta 800, Lexicon 300, Focusrite ISA430mkll with 192 kHz converters, Publison Infernal Machine 90, SPL Transient Designer & Tube Vitaliser, Pro Tools, Digital Performer, MachFive, Bias Peak, WaveLab, Infinity, Izotope RX2... and more !

The Result

MusePlayer is primarily a Wavetable synthesizer that utilizes waveforms that have come from all types of synthesizers, which are then combined with Analog synthesizer envelopes, filters, and advanced effects. As such, MusePlayer is the "best of all worlds" synthesizer that gives you immense amounts of creative freedom without the drawbacks of having to create complex waveforms from scratch. As a result, the soundset covers all styles of instruments, from Analog Basses, digital leads, FM pianos, additive organs, vector pads, and of course remarkably detailed sampled instruments for pianos, strings, horns, and other acoustic instruments.