



## VINTAGE VST

Original virtual synthesizer with powerful oscillators, filters and LFOs, modelled on the analog circuitry of vintage synthesizers

# Installation

The Behringer Vintage VST is designed to work with both Microsoft™ Windows (Minimum version Windows 10), Windows 11 recommended; and Apple™ Mac OS (Minimum version 10.11 (El Capitan), 10.15 (Catalina) or upwards recommended).

To install first download the required version from the [behringer.com](https://www.behringer.com) website. This will usually be found in your download folder once complete.

## Windows

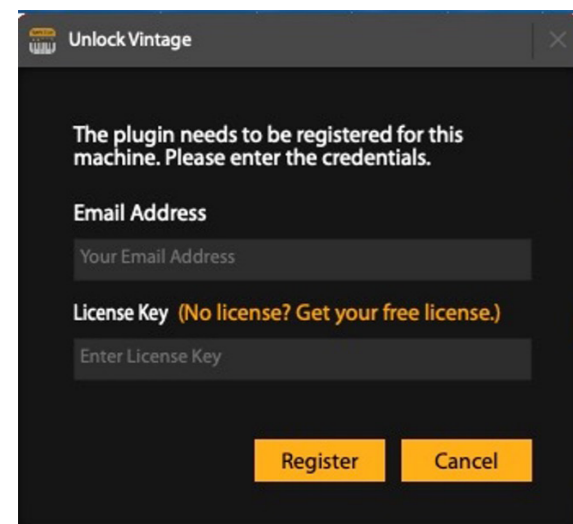
- Double mouse click the downloaded file, which can be found in the Downloads folder
- You may see a warning screen asking if you want to install an app from an unknown publisher. Click Yes.
- You will then see an information screen. Click Next.
- The next screen offers the option to install the Vintage as a VST plugin and/or standalone application (the default is both). Select your requirement and click Next.
- You will then be offered a default location for the VST (if selected) to be installed, which you can change if you wish. Click Next.
- You will then be offered a default location for the standalone app (if selected) to be installed, which you can change if you wish. Click Next.
- The next screen offers you the option of creating a desktop shortcut for the standalone app (if selected). Click Next.
- The next screen shows information about the Installation. Click Install.
- The final screen confirms successful installation. Click End.

## Mac OS

- Double mouse click the downloaded file, which can be found in the Downloads folder.
- On the Introduction screen press Continue.
- On the Destination Select screen select which drive (if you have more than one) you wish to install onto. The default is your Mac OS drive.
- On the Installation Type screen you can select whether you wish to install AU, VST3 and/or Standalone. The default is all three.
- Then press Install.
- At this point you may be asked to enter your password.
- You will be informed of the installation progress, and whether it has been successful.
- At the end of the process you have the option of keeping the download, or moving it to Trash.
- The Vintage VST can now be found in your Applications folder.

# Registration and Donation

- The first time that the Vintage is run, whether as a standalone application or within a DAW, it requires registration to unlock. You will see the following dialogue box:



- First enter your email address, then click on “Get your free license”. This takes you to the MusicTribе website where you can either log into your account, or create one if you do not already have one. Once you have completed the login you will be given the option of obtaining a free license, or making a donation to the charity Playing for Change, which supports music initiatives around the world, if you wish to ([www.playingforchange.com/about](http://www.playingforchange.com/about))
- The license code will be sent to the email address associated with your account
- Once it has been entered into the dialogue box the Vintage will be unlocked and ready to use

# Operation

Depending on the options selected when installing the Vintage VST will appear in your DAW’s list of software instruments and can be selected to be used alongside other instruments and audio tracks as you would normally do.

If you selected Standalone then, depending on your operating system:

## Windows

### Mac OS

The Vintage VST will have been installed in your Applications folder. Double mouse click it to launch. It is recommended that when it has been launched for the first time you pin it to your task bar/dock for easy future access.

## Both Platforms

The virtual controls can be operated by clicking with the mouse button then moving the mouse up to increase the settings, down to decrease. The on/off buttons highlight in yellow when on; where there are multiple selections (waveforms for example) the current selection is highlighted in blue.

Clicking on any control, or control area, changes the display and shows the current parameters and additional information that can be adjusted on the display itself.

# VINTAGE VST Controls



1. **MASTER VOLUME** – use this control to set the overall output level of the Vintage VST.

## NOISE

2. **LEVEL** – use this control to set the noise level.
3. **ON/OFF** – use this button to switch the noise generator on or off.
4. **F1/F2** – use these controls to set the balance of the feeds to VCFs 1 and 2. Counter-clockwise (CCW) biases towards VCF 1, Clockwise (CW) biases towards VCF 2. At 12 o'clock both VCFs get an equal feed.
5. **COLOR** – use this control to set the noise color. CCW is white noise; CW is pink.

## LFOs

- 6 – 9 refer to LFO 1, 10 – 13 to LFO 2
6. & 10. **ON/OFF** – use this button to switch the selected LFO on or off.
7. & 11. **RATE** – use these controls to set the LFO rates, from 0.1 Hz to 17 Hz or 1 to 24 steps (from divide by 4 to 1/32 note).
8. & 12. **HZ** – when these buttons are used the LFO rates are set in Hz.
9. & 13. **BEAT** – when these buttons are used the LFOs are synchronized with the keyboard or sequencer, and the RATE controls (27 & 31) are used to set the note division.

## VCOs

- 14 – 22 refer to VCO 1, 23 – 31 to VCO 2
14. & 28. **ON/OFF** – use this button to switch the selected VCO on or off.
15. & 29. **LEVEL** – use these controls to set the levels of the two VCOs.
16. & 30. **SINE** – use these buttons to select sine waveform.
17. & 31. **SAWTOOTH** – use these buttons to select sawtooth waveform.
18. & 32. **SQUARE** – use these buttons to select square waveform.
19. & 28. **OCTAVE** – use these controls to coarse tune the VCOs across a range of -3 to +3 octaves.
20. & 29. **SEMI** – use these controls to fine tune the VCOs over a range of -12 to +12 semitones.

21. & 30. **DETUNE** – use these controls to detune the VCOs in relation to each other, over a range of -3 to +3 semitones.

22. & 31. **F1/F2** – use these controls to set the balance of the feeds to VCFs 1 and 2. Counter-clockwise (CCW) biases towards VCF 1, clockwise (CW) biases towards VCF 2. At 12 o'clock both VCFs get an equal feed.

## VCFs

- 32 – 40 refer to VCF 1, 41 – 48 to VCF 2
32. & 41. **ON/OFF** – use this button to switch the selected VCF on or off.
33. & 42. **ENV** – use these controls to set the amount of envelope modulation of the VCFs.
34. & 43. **CUTOFF** – used these controls to set the cutoff frequencies of the VCFs.
35. & 44. **RESO** – use these controls to set the VCF resonance, which emphasizes the frequencies around the cutoff frequency. At high levels this causes the VCF to self-oscillate.
36. **TO F2** – use this control to set the amount of VCF 1's output that is fed to VCF 2.
37. & 46. **LP** – use these buttons to select a low pass VCF response.
38. & 47. **BP** – use these buttons to select a band pass VCF response.
39. & 48. **HP** – use these buttons to select a high pass VCF response.
40. & 49. **FRMT** – use these buttons to select a formant VCF response.
45. **SLAVE** – use this button to slave the cutoff frequency of VCF 2 to the settings for VCF 1.

## VCAs

- 50 – 52 refer to VCA 1, 53 – 55 to VCA 2
50. & 53. **ON/OFF** – use this button to switch the selected VCA on or off.
51. & 54. **PAN** – use these controls to position the output of the VCA's in the stereo field. CCW biases to the left; CW to the right.
52. & 55. **LEVEL** – use these controls to set the output level of the VCA's.

## VIBRATO

56. **ON/OFF** – use this button to switch vibrato on or off.
57. **DEPTH** – use this control to set the depth of vibrato.
58. **RATE** – use this control to set the rate of vibrato, from 0.3 Hz to 10 Hz.

## GLIDE

59. **ON/OFF** – use this button to switch glide on or off.
60. **GLIDE** – use this control to set the amount of glide (portamento).

## UNISON

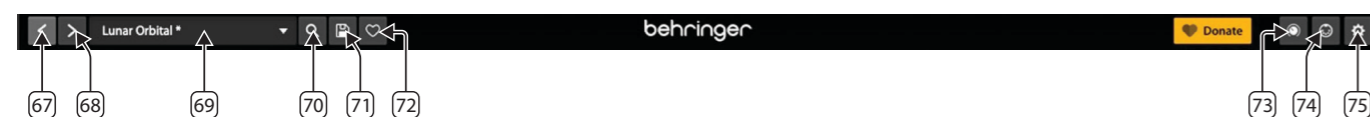
61. **ON/OFF** – use this button to switch unison on or off.
62. **DETUNE** – use this control to set the amount of detuning when in unison mode.
63. **SCREEN** – the screen shows the parameters for whichever sections are selected and allows the adjustment of additional parameters that are not available using the panel controls. See individual sections below.

## PERFORMANCE

64. **PITCH** – use this wheel to bend the pitch of the VCOs. Range is set in the Keyboard menu (see below).
65. **MOD** – use this wheel to introduce pitch modulation to the VCOs.
66. **KEYBOARD** – use this keyboard to control the Vintage VST, and to indicate which note(s) are in use when it is under MIDI control.

**TOOLBAR**

Above the panel controls is a toolbar to control presets, settings etc.



67. **PRESET BACK** – use this button to step back through the presets.

68. **PRESET FORWARD** – use this button to step forward through the presets

69. **PRESET MENU** – this shows the currently loaded preset. Clicking on the arrow to the right opens the menu page:

- Factory Presets
- User Presets
- Save / Save As where presets have been edited
- Browse Favorites Only
- Reveal Preset Folder in Finder (Mac OS) / Explorer (Windows)

70. **PRESETS BROWSER** – use this button to open the Presets Browser page, which provides more information about the available presets, banks, liked etc.

71. **SAVE NEW** – use this button to save a new preset. Options available are:

- Preset Name
- Designer
- Description
- Bank
- Type
- Genre (optional)
- Style (optional)
- Characteristics (optional)

72. **LIKE** – use this button to add the currently selected preset to the Liked group.

73. **MAP** – use this button to open the Map menu, which gives control over:

- Brightness
- Timbre
- Time
- Movement

74. **MIDI** – use this button to set MIDI parameters for each of the virtual controls. Click the button, then click a control to see the associated information, which can be edited if necessary:

- Item (automatically allocated)
- Channel (cannot be edited)
- CC Number
- Parameter Name (cannot be edited)
- Minimum Level
- Swap (swaps minimum and maximum values)
- Maximum Level
- Trash (removes the line from the table)

75. **SETTINGS** – use this button to access the settings menu:

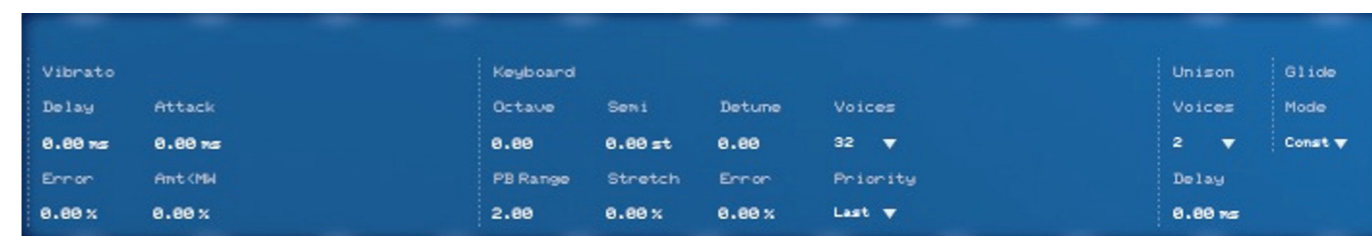
- VST output (shows all available outputs – default is the computer's built in output)
- Sample Rate (44.1 kHz (default), 48 kHz, 88.2 kHz, 96 kHz)

- Audio Buffer Size (Available range is 16 samples to 2048 samples. Default is 512 samples)
- Active MIDI Input (shows available MIDI sources and allows selection of the required source by tickbox)
- Bluetooth MIDI (allows a Bluetooth MIDI source to be used)

Please note that this is based on the Standalone VST. The AU and VST3 versions may have different options according to the DAW used.

**SCREENS**

Each section of the VST has an associated screen, which shows information about the control settings, and allows access to additional ones. Screens are accessed by clicking on a virtual control, or on a control area. If a section is not in use then its area of the display is dimmed. Parameters without drop-down menus are adjusted by mouse movement up to increase the value and down to decrease.

**MASTER/VIBRATO/UNISON/KEYBOARD/GLIDE**

From left to right the screen has four sections:

**Vibrato**

- Delay time (0.00 ms to 5.00 s)
- Attack time (0.00 ms to 5.00 s)
- Error (0.00 to 100.00 %)
- Mod Wheel Amount (0.00 to 100.00 %)

**Keyboard**

- Octave (transposes between –3 octaves and +3 octaves. Default is 0)
- Semitone (transposes between –12 semitones and +12 semitones. Default is 0)
- Detune (detunes between –50 cents and +50 cents. Default is 0)
- Voices (Select from Mono, 2, 4, 8, 12, 16, 20, 24, 28, 32 using drop-down menu)
- Pitchbend range (from 0.00 semitones to 12.00 semitones)
- Stretch (from –10.00 % to +10.00 %. Default is 0.00) which stretches the tuning by flattening low notes and sharpening high ones.
- Error (from 0.00 % to 100.00 %. Default is 0.00) applies a random tuning error to each note.
- Priority (Select from High, Low or Last using drop-down menu)

**Unison**

- Voices (Select from 2 or 4 using drop down menu)
- Delay (0.00 ms to 100.00 ms)

**Glide**

- Select from Constant or Proportional using drop-down menu.

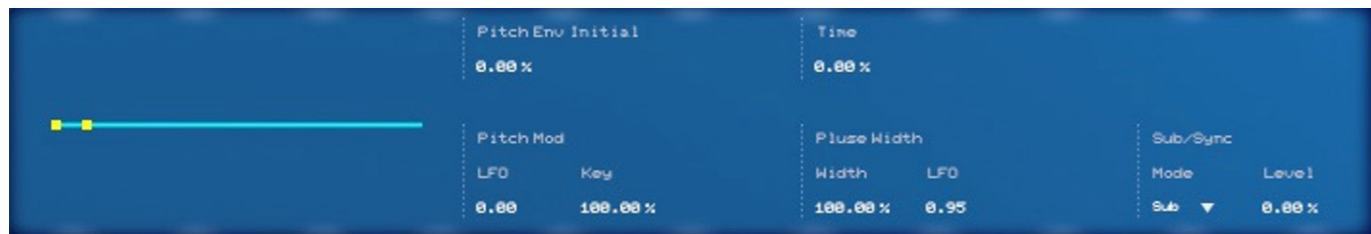
## LFOs



LFO 1 is at the top of the display, LFO 2 at the bottom. From left to right:

- Wave (Select from: sine, triangle, rectangle, noise, noise ramp using the drop-down menu)
- Width (from 1.00 % to 99.00 %)
- Retrigger (on or off)
- Offset (from 0.00 ° to 360.00 °)
- Delay (from 0.00 ms to 5.00 s)
- Attack (from 0.00 ms to 5.00 s)

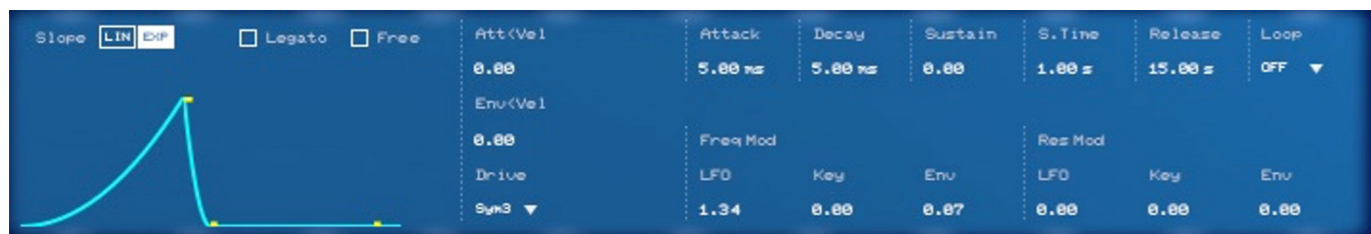
## VCOs



Please note that each VCO has its own screen. From left to right:

- Visual representation of pitch envelope: the Initial and Time can be set by moving the nodes on the visual or by adjusting the values.
- Pitch Env Initial (from -100.00 % to +100.00 %)
- Time (from 0.00 % to 100.00 %)
- Pitch Modulation (LFO) (from -1.00 to +1.00)
- Key (from 0.00 % to 200.00 %)
- Pulse Width (Width) (from 0.00 % to 100.00 %)
- Pulse Width (LFO) (from -1.00 to +1.00)
- Sub/Sync Mode (select from Sub or Sync using drop-down menu)
- Sub/Sync Level (from 0.00 % to 100.00 %)

## VCFs

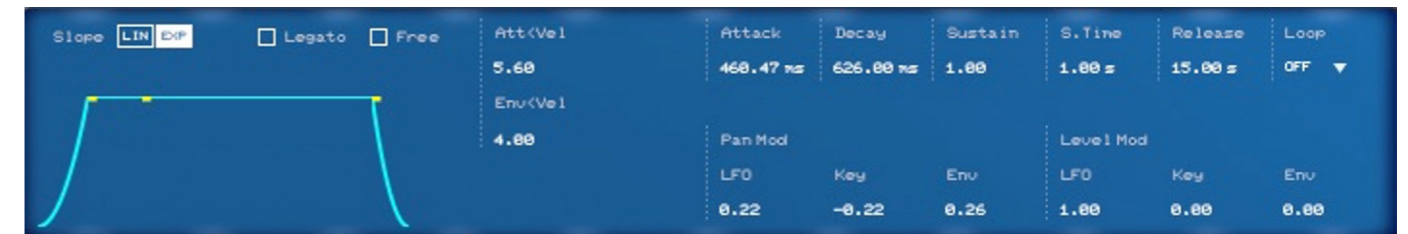


Please note that each VCO has its own screen. From left to right:

- Slope (select Linear or Exponential)
- Legato (on/off)
- Free running (on/off)
- Visual representation of the VCF Envelope. The shape can be drawn by moving the nodes, or by setting the values.

- Attack velocity (from 0.00 to 8.00)
- Envelope velocity (from 0.00 to 8.00)
- Attack (from 5.00 ms to 15.00 s)
- Decay (from 5.00 ms to 15.00 s)
- Sustain (from 0.00 to 1.00)
- S. Time (from 0.00 ms to 1.00 s) which causes a decrease in sustain level, even if a key remains pressed.
- Release (from 5.00 ms to 15.00 s)
- Loop (select from Off, AD-R, ADS-R or ADS-AR from the drop-down menu)
- Frequency Mod (LFO) (from -4.00 to +4.00)
- Frequency Mod (Key) (from -4.00 to +4.00)
- Frequency Mod (Env) (from -16.00 to +16.00)
- Resonance Mod (LFO) (from -4.00 to +4.00)
- Resonance Mod (Key) (from -4.00 to +4.00)
- Resonance Mod (Env) (from -4.00 to +4.00)

## VCAs



Please note that each VCO has its own screen. From left to right:

Please note that each VCA has its own screen. From left to right:

- Slope (select Linear or Exponential)
- Legato (on/off)
- Free Running (on/off)
- Visual representation of the VCF Envelope. The shape can be drawn by moving the nodes, or by setting the values.
- Attack velocity (from 0.00 to 8.00)
- Envelope velocity (from 0.00 to 8.00)
- Attack (from 5.00 ms to 15.00 s)
- Decay (from 5.00 ms to 15.00 s)
- Sustain (from 0.00 to 1.00)
- S. Time (from 0.00 ms to 1.00 s) which causes a decrease in sustain level, even if a key remains pressed.
- Release (from 5.00 ms to 15.00 s)
- Loop (select from Off, AD-R, ADS-R or ADS-AR from the drop-down menu)
- Pan Mod (LFO) (from -1.00 to +1.00)
- Pan Mod (Key) (from -1.00 to +1.00)
- Pan Mod (Env) (from -1.00 to +1.00)
- Level Mod (LFO) (from -1.00 to +1.00)
- Level Mod (Key) (from -1.00 to +1.00)
- Level Mod (Env) (from -4.00 to +4.00)

We Hear You