# Overbridge 1.15.0 Release Information

Elektron Music Machines

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## Introduction to Overbridge

Elektron Overbridge is a software suite for Mac OS X and Windows that offers a tight integration between your Elektron hardware and your software music production setup.

## **Key Features**

- Fully-featured GUI kit/sound/preset editing on computer screen.
- Multi-track audio streaming over USB cable.
- Seamless integration of Elektron hardware in DAW environments supporting VST2 or Audio Unit plugin formats.
- Seamless synchronization of the Elektron sequencers to DAW sequencer, without using MIDI clock.
- Sequencing via DAW, or mixture between DAW and Elektron sequencers.
- Plugin automation of all Elektron kit/sound/preset parameters, without using MIDI.
- Total recall of Elektron machine state together with DAW project.

Please refer to the Elektron website and also make sure you read the full Overbridge User Manual to get more information about this technology and how to use it in your environment. https://www.elektron.se/overbridge/

## **System Requirements**

## **Computer Operating System**

Overbridge 1.15.0 supports the following computer Operating systems.

- Apple macOS 10.8 or higher. Versions newer than macOS Sierra 10.12 are untested and may require updated Overbridge software.
- Windows 7 SP1 or higher. Versions newer than Windows 10.1 Anniversary Update are untested and may require updated Overbridge software.

### **Computer Hardware Requirements**

Overbridge 1.15.0 requires a modern, high performance computer equipped with a professional audio interface. Elektron recommends at least the following hardware specifications. Your mileage may vary if you run Overbridge on under-specified hardware.

- At least 4GB or RAM.
- At least Intel Core i5 CPU.
- OpenGL 3.2 capable graphics.
- Professional, low-latency audio interface with low jitter.
- Dedicated USB controller for each Overbridge device. USB hubs are generally not supported. If you must use a USB hub, you should use a Multi-TT USB hub.
- A DAW host environment that supports VST2 or Audio Units.

### **Supported Elektron Machines**

Overbridge 1.15.0 requires one (or more) of the following Elektron hardware, running at least the listed OS version.

- Analog Four running OS 1.24
- Analog Keys running OS 1.24
- Analog Rytm running OS 1.31
- Analog Heat running OS 1.02

## **Compatibility Notes**

Newer OS versions than those listed above may also be compatible with Overbridge 1.15.0 if they are minor updates, but it may often be the case that you also have to update your Overbridge installation to the latest version after you have updated the Elektron OS in your machine.

The release notes for your Elektron OS will always state which Overbridge version is required for that OS release. And similarly, this release notes document for Overbridge will always state which minimum Elektron OS version is required. So please read the release notes carefully before updating either Overbridge or Elektron OS:es.

Check the Elektron website regularly for new versions of either software.

The latest Overbridge release can be found here: http://www.elektron.se/overbridge/

The latest Elektron OS for your machine can be found here: https://www.elektron.se/support/

## **Machine Preparations**

If you need to upgrade the Elektron OS in your machine, please follow the instructions found in the Release Notes document shipping together with the Elektron OS.

#### USB Mode

After the Elektron OS has been upgraded, make sure you enable the Overbridge functionality in your machine, via the USB CONFIG menu, located in GLOBAL > SYSTEM (Analog Four/Keys/Rytm) or SETTINGS > SYSTEM (Analog Heat). Should you want to disable Overbridge functionality again, you can simply do so from this menu (by choosing USB-MIDI mode). Never attempt to downgrade the device operating system as this is an unsupported operation that may sometimes lead to data loss!



## **Installing Overbridge**

## Windows

Unzip the installation software to its own folder.

Make sure your Elektron units are disconnected from the computer.

Run the installer software *Elektron Overbridge Installer 1.15.0 64bit.msi* if you are using a 64 bit operating system or *Elektron Overbridge Installer 1.15.0 32bit.msi* if you are using a 32 bit operating system.

This will install ASIO drivers, Windows WDM drivers as well as VST2 plugins.

VST2 plugins are installed to your VST2 folder of choice. The installer will attempt to find your 64bit and 32bit folders by searching the Windows registry. If this information is not found, the installer will install to the default folders listed below.

Should you prefer a different folder, it is important that you change this during the installation process. Note that the Elektron sub folder name is automatically appended to whatever VST folder you choose.

#### Default VST2 Folders (64 bit Operating System)

64 bit VST plugins:

C:\Program Files\Steinberg\VstPlugins\Elektron (32bit)

32 bit VST plugins:

C:\Program Files(x86)\Steinberg\VstPlugins\Elektron (64bit)

#### Default VST2 Folders (32 bit Operating System)

C:\Program Files\Steinberg\VstPlugins\Elektron (32bit)

## Mac OS X

Make sure your Elektron units are disconnected from the computer.

Mount the DMG file by double clicking it from Finder.

Then run the installer software Elektron Overbridge Installer 1.15.0.pkg

This will install Core Audio drivers, HAL drivers as well as VST2 and Audio Unit plugins.

Plugins are installed to the pre-defined locations, and are installed such that they are accessed by all users of your Mac. Your host applications should automatically discover the plugins after installation has finished.

Note that you will need to restart your Mac after the installer wizard has finished.

## **Uninstalling Overbridge**

## Windows

You can use the Add/Remove programs menu in the Windows Start Menu to uninstall Overbridge.

Make sure your Elektron devices are disconnected from the computer during the uninstall process.

You may need to restart your computer after uninstallation before all installed files disappear.

## Mac OS X

An uninstall application is contained inside the same DMG file that you used to install Overbridge. If you not longer have this file, simply download it again from Elektron. By running the uninstall app, all Overbridge files and drivers are removed from your Mac.

You can use an Uninstaller app from a later Overbridge release to remove also an earlier version of Overbridge. So if you want to perform a clean install while upgrading, for example from 1.10.1 to 1.15.0, you can use the Uninstaller app from 1.15.0 to uninstall the older 1.10.1 software.

Make sure your Elektron devices are disconnected from the computer during the uninstall process.

Note that you will need to restart your Mac after the uninstaller application has finished running.

## Support and bug reporting

Should you have problems or find any bugs and/or unexpected behavior, it is very important that you report this to Elektron. Please use the support section on our webside: <a href="https://www.elektron.se/customer/login/">https://www.elektron.se/customer/login/</a>

## Locate diagnostic data

In the very unlikely situation that your computer should crash or freeze, please help Elektron troubleshoot your specific problem by sending diagnostic data together with your support ticket.

You can follow the instructions below to extract relevant diagnostic data from your specific computer operating system.

## Windows

Open windows explorer and go to this folder: C:\Windows \Minidump\

Locate the latest minidump file (\*.dmp) and send this to Elektron.

## Mac OS X

### Method 1

Press the following 5 keys simultaneously: [CTRL] + [Shift] + [CMD] + [Option/Alt] + [.] (dot)

The screen will flicker, and after a couple of minutes, a diagnostic file called sysdiagnose\_2016.(xxxx).tar.gz is presented in finder. Send this file to Elektron.

## Method 2

Open the terminal application: /Applications/Utilities/Terminal.app

Type: sudo sysdiagnose

After a couple of minutes, a diagnostic file called sysdiagnose\_2016.(xxxx).tar.gz is presented in finder. Send this file to Elektron.

## **Detailed Change Log**

## Version 1.15.0

### General

**Change:** A new plugin is available, Analog Heat. This allows the Elektron Analog Heat product (Stereo Analog Sound Processor) to be used from within your DAW. In contrast to the Analog Rytm/Four/Keys plugins, which are synthesizer plugins, the Analog Heat is an insert effect plugin. This means you can use it as an insert effect on your existing (stereo) audio tracks.

**Change:** There is now a light color theme available, improving usability in bright environments. A new global option sets the theme for all Overbridge software and Plugins.

**Change:** Overbridge now requires a system supporting OpenGL graphics (OpenGL 3.2). This allows the plugins to render their GUIs in the GPU, freeing up more CPU power for audio tasks. Should you experience problems with corrupted graphics and/or performance on Windows systems, it is highly likely that you need to update your graphics drivers.

Change: macOS 10.7 is no longer supported. Minimum requirement is now macOS 10.8.

#### **Overbridge Plugins**

**Change:** CPU performance of the Overbridge engine has been improved in all Plugins, now using considerably less CPU in the realtime audio threads.

**Change:** Optimized and further improved the audio- and sequencer synchronization in the Overbridge engine, yielding better sequencer sync and audio alignment in almost all use-cases.

**Change:** Improved support for Logic Pro X host (version 10.2.4 or higher recommended). Don't forget to re-scan all the Overbridge plugins if upgrading from a previous installation.

**Change:** The Song Pos sequencer sync mechanism has been improved, doing a better job when host is looping a section.

Change: Improved compatibility with Renoise host.

Change: Improved compatibility with Bitwig Studio host.

Change: Improved compatibility with Studio One host.

**Change:** Improved support for individual outputs and sidechain inputs on Analog Four/Keys/Rytm plugins in various host applications.

**Change:** The Analog Four/Keys/Rytm plugins have a new MIDI keyboard/pad that can be popped out in the bottom of the GUI and help triggering notes / drums with the computer mouse.

**Change:** The Analog Four/Keys/Rytm plugins now have the Total Recall functionality relocated to a dedicated sidebar section.

**Change:** The Analog Rytm sound browser page has a new row of buttons allowing you to filter/search sounds by track compatibility.

Bug Fix: Many improvements and usability improvements in the user interface.

**Bug Fix:** The Song Pos sequencer sync mechanism did not always send out song position correctly.

#### **Overbridge Control Panel**

**Change:** There is a new page available; Overbridge Products Overview. Here, you can see a very short overview of all Overbridge-enabled products from Elektron.

**Change:** When changing name of your Overbridge Devices, the new name is now applied immediately. Changing channel configuration still requires you to press Apply / Discard.

**Change:** On Windows, all operations that require administrative privileges now ask for this in a separate child process, improving the experience when deleting devices and/or changing system audio devices.

**Bug Fix:** Administrative privileges were not always obtained when needed, even if user gave permission successfully.

#### **Audio Drivers**

Change: macOS Sierra (10.12.x) is now a supported computer Operating System.

**Change:** The Windows driver has a new performance mode, "highest speed", which reduces latency further compared to the "highspeed" mode. You can change this mode in the Overbridge Control Panel.

**Bug Fix:** Various stability and performance improvements have been done both on macOS and on Windows.

## Version 1.10.1

#### **Overbridge Plugins**

**Bug Fix:** Individual audio output channels are now available in Cubase again (they were disabled in 1.10.0).

**Bug Fix:** Individual audio output channels did not show up in Ableton Live when running the Audio Unit versions of the plugins.

**Bug Fix:** The modulation selection popup windows in the Analog Rytm plugin showed several invalid parameter entries for certain synth machine types.

**Bug Fix:** Adding new scene/performance destinations in the kit editors could temporarily result in unexpected results in the machine until the values were changed.

Bug Fix: Fixed some minor appearance- and usability problems in the GUI.

**Change:** The Save button on the track sound pages now allow saving both to sound pool and to +DRIVE sound library, as well as adjusting the tags prior to saving.

#### **Audio Drivers**

**Bug Fix:** Both Windows and OS X drivers would configure the channel configurations incorrectly the first time a machine was connected via USB. This could cause high-pitched noise on certain USB audio channels.

## Version 1.10.0

### **Overbridge Plugins**

**Change:** The synchronization mechanism between the plugins and the machines has been re-engineered for more robust timing performance. Both note triggering and sequencer synchronization gets improved by this change, and should now give more consistent results for all users.

**Change:** The Elektron sequencer on the machine can now be manually started while host is stopped, regardless of the selected synchronization mode.

**Change:** The plugins now expose multiple output buses rather than just multiple output channels. This improves compatibility with many hosts. <sup>1</sup>

**Change:** The plugins now have sidechain audio inputs (4 stereo pairs), which can be routed freely to any of the available audio inputs on the machine. This allows you to process audio through the analog circuits directly via the plugin.<sup>2</sup>

**Change:** Audio Unit plugin format is now supported. Note that in certain hosts like Logic Pro X, you need to re-scan the plugins each time a new version is installed, just in case the bus I/O configuration has changed in the plugin. Otherwise, Logic may fail to load the plugin into your project.

**Change:** Improved support for other VST host applications than Ableton Live. There may still be various minor incompatibilities and/or unexpected behavior in your DAW of choice.

**Change:** Improved support for small buffer sizes. On high performance computers, Overbridge should now work well with buffer sizes down to 64 samples in both your host audio setup as well as in your Overbridge device setup.

Change: Host sample rate 32kHz is now supported.

**Change:** The user interface has received a massive overhaul, with a more refined look and improved usability. Scrolling in the columns is no longer necessary. Instead, the detailed parameters in each section have been relocated into tabs.

Change: All plugin settings have been moved from the popup dialog into a sidebar section.

**Change:** A new audio engine setting for Latency Safety Margin has been added. This allows you to lower (or higher) the latency from the plugins on high performance systems by changing the internal safety margin used inside the Overbridge audio engine.

**Change:** There is a new notification system that shows popup notification messages when warnings or errors need to be shown. They are also used for getting user input from inside the plugins.

Change: It is now possible to enable tooltip help texts for all controls in the plugin.

**Change:** It is now possible to enable scroll wheel functionality, for changing parameter values with the mouse scroll wheel.

**Change:** All plugin parameters have received better names, so that it is clear which section (for example Oscillator 1 / 2) the parameter corresponds to.

<sup>&</sup>lt;sup>1</sup>Individual outputs may not be exposed in all hosts in the VST2 plugin format, due to compatibility problems.

<sup>&</sup>lt;sup>2</sup>Sidechain inputs may not be exposed in all hosts when using the VST2 plugin format, due to compatibility problems.

**Change:** In Analog Rytm plugin, the compressor and distortion effects have improved graphical representations of how the parameters affect the characteristics.

**Change:** The graphical filter response curves in the plugins now implement a true emulation of the actual filter response, rather than showing idealized filter response curves.

**Change:** Track mute (and solo) settings are now automatable via the plugin. They are visible as toggle buttons on the kit page.

**Change:** Notes played from the DAW are no longer affected by track mutes / solos on the machine, for improved flexibility when combining Elektron sequencer with the host sequencer.

Bug Fix: Editing modulations (like Aftertouch) from the plugins did not work properly.

Bug Fix: The plugins could loose communication with the machine in certain situations.

Bug Fix: Several stability improvements in the plugins, preventing some crash situations.

#### **Control Panel**

**Change:** All options and settings have been moved from the different views into a sidebar section, similar to what is also available in the plugins.

**Change:** On Windows, the sound card device for each product type is now selected from the sidebar instead of from the device information box.

#### Audio Drivers

**Change:** Mac OS X El Capitan (10.11.x) is now supported. Buffer size 64 may still be problematic on this OS X version, depending on your setup.

Bug Fix: Some rare Kernel Panic situations have been resolved in the Mac OS X driver.

Bug Fix: On some systems, the OS X driver would sporadically stop sending automation data.

Bug Fix: The OS X driver would stop sending automation data if OS X System menu bar was open.

## Version 1.0.0

First public release of Overbridge.

Host support is limited to Ableton Live, on both Mac and Windows.

Only VST2 plugin format supported.

## **Known Issues**

The following list summarizes the currently known issues or compatibility problems in Overbridge 1.15.0. Elektron is constantly working on resolve all remaining problems together with DAW manufacturers and plugin developer community.

**Known Issue:** Overbridge plugins do not support offline (non-realtime) rendering / freezing of the arrangement. Only realtime rendering is supported. Examples of DAWs that support realtime rendering well are Cubase and Renoise. Most other DAWs only support offline rendering. Sometimes Overbridge cannot successfully detect that user attempts to do non-realtime bouncing, and therefore may produce unpleasent audio artifacts and completely loose sync.

**Known Issue:** The total recall option "Sync automatically on save" in Analog Four/Keys/Rytm plugins may cause your host to freeze its GUI for up to 10 seconds each time your project is saved. Therefore, the automatic sync feature is to be considered experimental, and Elektron recommends that you do manual re-sync of the total recall state instead. This will be addressed in a coming Overbridge update.

**Known Issue:** If the device is re-connected or restarted during a plugin session where total recall is enabled, you need to interact with the Total Recall menu in the machine LCD display after each re-connection, to let the machine know if you want to keep the working copy of the project that is stored in the machine, or if you want to revert to what is stored in the plugin.

**Known Issue:** Logic Pro does not support sidechain inputs to synthesizer plugins well. Latency compensation is not performed on the source audio track. Overbridge therefore disables the audio processing functinality in synthesizer plugins in Logic Pro host.

**Known Issue:** Several VST2 hosts have problems supporting the sidechain inputs on synthesizer plugins, so routing audio through Analog Rytm/Four/Keys machines may only work in certain hosts. Ableton Live is an example of a host that has excellent support for this feature. Analog Heat plugin is not a synthesizer plugin, and is not affected by this limitation (it can process audio in most host applications).

**Known Issue:** Several DAWs have internal limitations regarding how many automation parameters you can use at the same time. For example, in Ableton Live 9.x, the maximum number of parameters will be 128. This may cause problems with Analog Rytm/Four/Keys plugins, which expose a large number of parameters.

**Known Issue:** In Cubase 7 and above, the ASIO Guard mechanism must be turned off. Otherwise, the Overbridge Engine can not operate well. The plugins will show a warning message if such mechanism is detected.

**Known Issue:** In Max and Studio One, the Audio Unit plugins are known not to work well. Please use the VST versions instead.

**Known Issue:** Renoise does not support sidechain inputs to synthesizer plugins well. Overbridge plugins therefore disable the audio processing functinality when hosted by Renoise.

**Known Issue:** If you experience USB communication problems, slow response in the plugins, or artifacts in the audio streams from the device, please try to reduce the number of audio channels for that device in the Overbridge Control Panel. Depending on your computer OS, as well as the drivers for your USB Host Controller port (on Windows), you may experience bandwith-related limitations and problems. This is especially true if using a USB hub.

**Known Issue:** Mac OS X El Capitan (10.11.x) introduced a new USB stack. There is no guarantee that you will be able to use and allocate as many audio channels with this Overbridge version as

you previously could (in 10.10.x or earlier), even if your hardware configuration is identical. This problem seems to be solved again in MacOS Sierra (10.12.x), and Elektron recommends all El Capitan users to upgrade to Sierra.