

Dubstation 2 Manual

Audio Damage, Inc.

Release 2.4



11 May 2026

© 2005, 2008, 2017, 2026 Audio Damage, Inc. All rights reserved.

The information in this document is subject to change without notice and does not represent a commitment on the part of Audio Damage, Inc. The software described by this document is subject to a License Agreement and may not be copied to other media except as specifically allowed in the License Agreement. No part of this publication may be copied, reproduced, or otherwise transmitted or recorded, for any purpose, without prior written permission by Audio Damage, Inc.

Credits

Software Design and Construction, Documentation

Chris Randall
Adam Schabtach

Field Testing, Past and Present Versions

Jens Algren
Wade Alin
Eric Beam
Mike Fisher
Chris Hahn
Steve Hamman
Jeff Laity
Matthew Lyon

Mark McKeever
Christian Puffer
Kevin Rose
Joshua Schnable
Donovan Stringer
Tom Whitwell
Kent Williams

Made Possible By

Elle
Tracie

License Agreement

BY INSTALLING THE SOFTWARE, YOU ARE CONSENTING TO BE BOUND BY THIS AGREEMENT. IF YOU DO NOT AGREE TO ALL OF THE TERMS OF THIS AGREEMENT, THEN RETURN THE PRODUCT TO THE PLACE OF PURCHASE FOR A FULL REFUND.

Single User License Grant: Audio Damage, Inc. ("Audio Damage") and its suppliers grant to Customer ("Customer") a nonexclusive and nontransferable license to use the Audio Damage software ("Software") in object code form solely on computers owned or leased by Customer.

Customer may make one (1) archival copy of the Software provided Customer affixes to such copy all copyright, confidentiality, and proprietary notices that appear on the original.

EXCEPT AS EXPRESSLY AUTHORIZED ABOVE, CUSTOMER SHALL NOT: COPY, IN WHOLE OR IN PART, SOFTWARE OR DOCUMENTATION; MODIFY THE SOFTWARE; REVERSE COMPILE OR REVERSE ASSEMBLE ALL OR ANY PORTION OF THE SOFTWARE; OR RENT, LEASE, DISTRIBUTE, SELL, OR CREATE DERIVATIVE WORKS OF THE SOFTWARE.

Customer agrees that aspects of the licensed materials, including the specific design and structure of individual programs, constitute trade secrets and/or copyrighted material of Audio Damage. Customer agrees not to disclose, provide, or otherwise make available such trade secrets or copyrighted material in any form to any third party without the prior written consent of Audio Damage. Customer agrees to implement reasonable security measures to protect such trade secrets and copyrighted material. Title to Software and documentation shall remain solely with Audio Damage.

LIMITED WARRANTY. Audio Damage warrants that for a period of ninety (90) days from the date of shipment from Audio Damage: (i) the media on which the Software is furnished will be free of defects in materials and workmanship under normal use; and (ii) the Software substantially conforms to its published specifications. Except for the foregoing, the Software is provided AS IS. This limited warranty extends only to Customer as the original licensee. Customer's exclusive remedy and the entire liability of Audio Damage and its suppliers under this limited warranty will be, at Audio Damage or its service center's option, repair, replacement, or refund of the Software if reported (or, upon request, returned) to the party supplying the Software to Customer. In no event does Audio Damage warrant that the Software is error free or that Customer will be able to operate the Software without problems or interruptions.

This warranty does not apply if the software (a) has been altered, except by Audio Damage, (b) has not been installed, operated, repaired, or maintained in accordance with instructions supplied by Audio Damage, (c) has been subjected to abnormal physical or electrical stress, misuse, negligence, or accident, or (d) is used in ultrahazardous activities.

DISCLAIMER. EXCEPT AS SPECIFIED IN THIS WARRANTY, ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS, AND WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE, ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW.

IN NO EVENT WILL AUDIO DAMAGE OR ITS SUPPLIERS BE LIABLE FOR ANY LOST REVENUE, PROFIT, OR DATA, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL, OR PUNITIVE DAMAGES HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY ARISING OUT OF THE USE OF OR INABILITY TO USE THE SOFTWARE EVEN IF AUDIO DAMAGE OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. In no event shall Audio Damage's or its

suppliers' liability to Customer, whether in contract, tort (including negligence), or otherwise, exceed the price paid by Customer. The foregoing limitations shall apply even if the above-stated warranty fails of its essential purpose. SOME STATES DO NOT ALLOW LIMITATION OR EXCLUSION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES.

The above warranty DOES NOT apply to any beta software, any software made available for testing or demonstration purposes, any temporary software modules or any software for which Audio Damage does not receive a license fee. All such software products are provided AS IS without any warranty whatsoever.

This License is effective until terminated. Customer may terminate this License at any time by destroying all copies of Software including any documentation. This License will terminate immediately without notice from Audio Damage if Customer fails to comply with any provision of this License. Upon termination, Customer must destroy all copies of Software.

Software, including technical data, is subject to U.S. export control laws, including the U.S. Export Administration Act and its associated regulations, and may be subject to export or import regulations in other countries. Customer agrees to comply strictly with all such regulations and acknowledges that it has the responsibility to obtain licenses to export, re-export, or import Software.

This License shall be governed by and construed in accordance with the laws of the State of Colorado, United States of America, as if performed wholly within the state and without giving effect to the principles of conflict of law. If any portion hereof is found to be void or unenforceable, the remaining provisions of this License shall remain in full force and effect. This License constitutes the entire License between the parties with respect to the use of the Software.

System Requirements

The following table summarizes the operating system requirements and formats provided for Dubstation. Dubstation is a 64-bit plugin.

Operating System	Minimum Version	Formats
macOS	10.13	AAX, AudioUnit, CLAP, VST3; Intel and Apple Silicon
Windows	10.0	AAX, CLAP, VST3
Ubuntu	18.0	CLAP, LV2, VST3
iOS (separate purchase)	iOS 12	AUv3

Demonstration Version

We encourage you to download and try the demonstration version of Dubstation before purchasing it. The demo version of Dubstation is the same as the regular version, but has the following limitations:

- Presets cannot be saved, nor can parameter values or other settings. This includes the information usually stored by your host DAW. If you save a DAW session with an instance of the demo version of Dubstation, the plugin will revert to its default state when you reload the session.
- Dubstation will cease to emit audio altogether 20 minutes after you add it to your DAW session. You can remove it and add it again, but it will revert to its default state.

If you purchase Dubstation after using the demonstration version, simply run the installer provided to you after your purchase to replace the demo version with the full version.

Introduction

Dubstation is the original dub delay plugin. For more than 20 years it has been a studio standard for engineers, producers, and performers chasing that sound: round, saturated repeats and pitch-bending feedback that only a bucket-brigade delay can produce. Dubstation realistically recreates the sound of old analog delay processors, including their unique pitch-changing properties, idiosyncratic frequency responses, and pleasantly warm distortion when overloaded, while adding tricks that analog delays can't manage, such as true stereo processing and loss-free looping with overdubbing and reverse. Independent left and right delay times, analog-style saturation, low- and high-cut filters in the feedback path, an LFO for chorus and pitch sweeps, plus reverse and loop modes give you a deep palette without burying you in menus. Of course you'll find all the features you expect from a contemporary plugin, like full parameter automation and tempo-synced delay times. Dubstation covers everything from short slapback through tape-style modulation to wide ping-pong patterns and runaway dub sirens, and has been used live and in the studio on thousands of commercial productions across dub, reggae, dub techno, ambient, hip hop, electronic, and post-rock records.

Dubstation remains one of our personal favorites. We hope you enjoy using it as much as we do.

Installation

Dubstation uses our custom plugin manager application for installation. Launch it as usual on your operating system of choice and you'll be presented with a window like this:

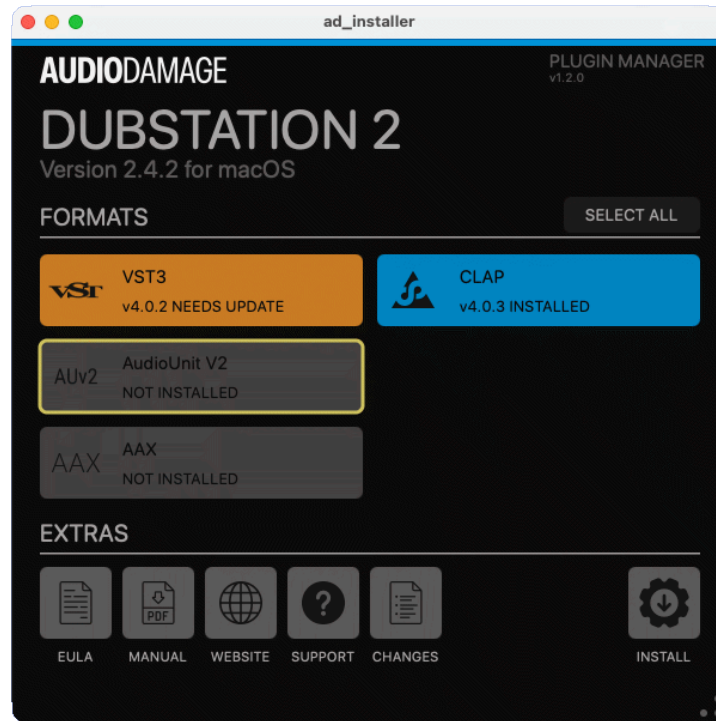


Figure 1: Screenshot of the installer window

Near the top of the window, beneath the name of the plugin, you'll see the version number of the software carried by the installer. This is distinct from the version of the plugin manager itself, which is shown in the upper right and usually not of much interest. (Note that the version numbers in this screenshot are for demonstration purposes only and may not reflect the actual version numbers of the software at the time you read this manual.)

Under the heading FORMATS are large buttons corresponding to the plugin formats which can be installed: AAX, AU, CLAP, LV2 and/or VST3, depending on the operating system. If the plugin is already present on your system in one or more formats (i.e. if you're upgrading from a previous version), the corresponding button is drawn in blue. When possible, the version number of the existing plugin is also shown. If the installer contains a newer version of the plugin than the one(s) already installed, the version number is drawn in orange to alert you to the fact that an update is available. If a format is not present on your system, its button is drawn in gray.

Click a button to select the format for installation. A yellow outline appears around the button to indicate that its format will be installed. In the above screenshot, VST3 and CLAP are installed, AAX and AudioUnit are not installed, VST3 is one revision behind that contained in the installer, and the AudioUnit is selected for installation. Clicking a button a second time removes the yellow outline, and the corresponding format will not be installed. Clicking the SELECT ALL button selects all available formats for installation.

No changes to your system's storage device take place until you click the INSTALL button near the lower-right corner of the window. Click that button and you'll receive visual confirmation that the formats you've selected have been installed. (Yes, it happens quickly. Our products are not encumbered by any DRM or anti-piracy baggage and hence install more quickly than many others.) On Windows and Linux, if you hold down the Shift key on your keyboard, the INSTALL button's label switches to UNINSTALL, and clicking it will remove the selected formats from your system¹. Once you're installed and/or removed the formats you need, simply close the application in the usual manner for your operating system. You're done. There is no license code or other authorization necessary; we'd rather assume we can trust you than burden you with an onerous DRM system.

You'll find some handy buttons under the EXTRAS heading, all of which are pretty self-explanatory:

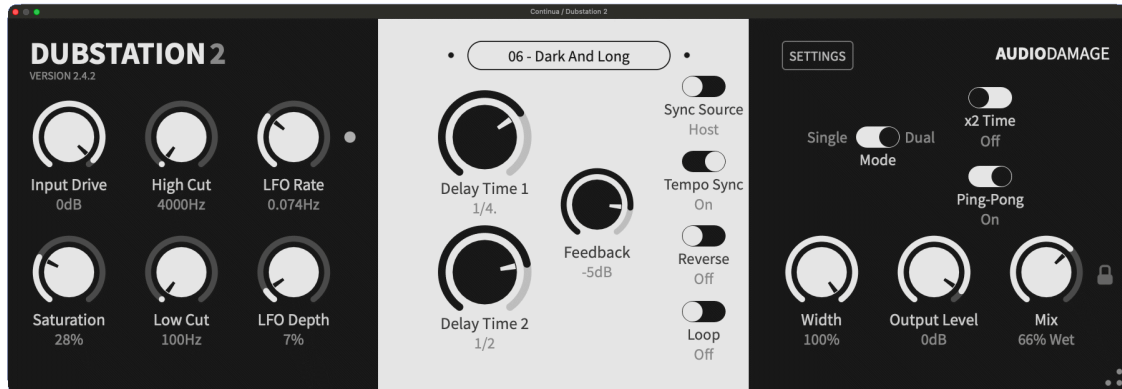
- EULA: presents the End-User License Agreement for our products. By clicking the INSTALL button you're implicitly agreeing to these terms, but we expect that you'll find them reasonable should you take the time to read them.
- MANUAL: opens the current version of this user manual, in PDF form, in your web browser.
- WEBSITE: opens the product's web page in your browser.
- SUPPORT: displays information for contacting us, either via our Discord presence or through email.
- CHANGES: displays a summary of what we've added, changed or improved since the last version of the product.

¹ Blame Apple, not us, for the lack of this feature on macOS. On macOS just manually delete the plugin(s) from your plugin folder(s).

Operation

Dubstation, by design, is fairly simple to use. One of the design goals for Dubstation was to create a plugin that had the same fun factor of old hardware delays. If you're already familiar with either hardware delays or delay-based software effects, you should have no trouble getting started with Dubstation. If you find that you need some explanation about Dubstation's controls, please return to this manual and read on.

Here is a screenshot of Dubstation, followed by detailed descriptions of its controls.



Input Drive

The INPUT DRIVE knob controls the level of the signal as it enters the plugin. The range of the knob is -80dB , which effectively turns the input signal off altogether, to $+3\text{dB}$, which provides a small amount of boost. In most circumstances you can leave it at its default setting of 0dB , which passes the signal without amplifying it. Manipulating this knob with either a hardware MIDI controller or your host sequencer's automation features is useful for creating echo effects on only certain hits in a drum part or the last word in a vocal phrase: keep the knob turned all the way counter-clockwise, then quickly turn it up and back down to let just the desired hit or word enter the delay line.

High and Low Cut

The HIGH CUT knob controls a low-pass filter which attenuates the high frequencies of the signal as it passes through the delay. This filter models the extremely limited high-frequency response of analog delay circuits—a limitation which, ironically, creates much of their warmth and pleasing character. The range of this knob is 4kHz to 8kHz , but that value represents an upper limit. The actual operating frequency of the filter is also determined by the delay time. Analog delays have less high-frequency response at longer delay times, so Dubstation's low-pass filter's frequency also decrease as the delay time increases.

The LOW CUT knob controls a high-pass filter which attenuates the low frequencies of the signal as it passes through the delay. The range of this control is 100Hz to 1.5kHz . This filter emulates the poor bass response of older delays, and is particularly useful for creating the thin-sounding echoes often heard in early Jamaican dub music. Try setting the knob to about 12 o'clock when using Dubstation on your next dub remix.

Low-Frequency Oscillator

Dubstation's delay time can be periodically altered with a low-frequency oscillator, or LFO. This modulation produces changes in both the time between delayed signals and their apparent pitch, thanks to Dubstation's emulation of older delay hardware. Hence the LFO is useful for producing doubling and chorusing effects, pitch swoops, and so on. The LFO Rate knob controls the speed of the LFO, and has a range of 0.01 to 5Hz . The LFO Depth knob controls how much the LFO affects the delay times, and has an arbitrary scale expressed as a percentage.

Mode Switches

There are two switches which control Dubstation's overall operation. The MODE switch chooses one of two options: SINGLE or DUAL. In Single mode, Dubstation operates as a single mono or stereo delay. When used in a stereo context, a separate delay line is used for each channel, but their delay times are always the same and Dubstation presents a single delay-time knob. In Dual mode, the times of the two delays can be controlled independently and a second delay-time knob appears.

When the PING-PONG switch is engaged, the signal routing between the delays is altered. The input signals are added together (if Dubstation is used in a stereo context) and routed to the left delay. The output of this delay is sent out the plugin's left output, and also fed to the right delay. The output of this delay is sent out the right output, and also fed back to the left delay. This configuration produces a delayed signal which bounces back and forth between the two output channels.

Time Controls

The TIME knobs and the X2 TIME switch together control the amount of time that the signal is delayed. If the X2 TIME switch is in its left position, the TIME knob varies the delay time from a minimum of 4 msec to a maximum of 1000 msec (or one second). The right position of the X2 TIME switch multiplies the delay time by two, giving the TIME knob a range of 8 to 2000 msec .

You'll notice that the delayed signal has less high-frequency content than the original signal. At long delay times, the high frequencies are reduced dramatically. This is an accurate recreation of the frequency-response characteristics of delays built with analog bucket-brigade delay circuits, and a fundamental aspect of their sonic personality.

If you turn on the TEMPO SYNC switch Dubstation uses the current tempo reported by your host application to calculate its delay time. When this switch is on, the time knob sets the delay length in metrical units, that is, fractions of a beat. The range of values is $1/32\text{nd}$ to $1/1$ (a whole measure), with dotted and triplet times available. Watch the value displayed below the knob as you rotate it to choose a delay interval—or just do it by ear. Triplet values are denoted with a T after the beat fraction, and dotted values are denoted with a period. For example, " $1/8.$ " indicates a delay time with a dotted eighth note feel. Dubstation will track tempo changes, saving you from having to adjust its delay time by hand when you change the tempo of your song.

Note that Dubstation's maximum delay time of two seconds still applies when the sync switch is engaged. If you attempt to use a combination of tempo and beat fraction that exceeds this limit, Dubstation will still only delay the signal by two seconds.

Also note that your host software must provide appropriate information for Dubstation's tempo synchronization features to work. If your host does not supply tempo information, Dubstation assumes that the tempo of your music is 120BPM.

Tap Tempo

When the SYNC SOURCE is set to Tap, tap on the TAP button three times to set the delay tempo. You can also drive the TAP button remotely from your MIDI controller instead of clicking it with the mouse. Click the SETTINGS button to configure MIDI control. In the Settings panel, TRIGGER TYPE selects whether Dubstation listens for a MIDI Note or a Control Change message. Click Note or CC to choose. The NOTE NUMBER (or CC Number, depending on the Trigger Type) sets which specific message Dubstation responds to, from 0 to 127. The default is 60 (middle C when Note is selected). Click Save to commit your changes. Once configured, sending the chosen MIDI message three times will set the delay tempo, exactly as if you had clicked the TAP button three times. The TAP button continues to display the running BPM once a tempo has been established.

Feedback and Saturation

The FEEDBACK knob controls the amount of delayed signal that is fed back into the delay line. If this knob is rotated fully counter-clockwise, almost none of the delayed signal is fed back and you will hear only a single delayed version of the input signal. As you rotate the knob clockwise, more and more of the delayed signal is fed back, and you will hear a series of echoes diminishing in volume. As the knob approaches its full clockwise position, all of the delayed signal is fed back on itself and the echoes will repeat indefinitely, and even grow louder over time, eventually creating a distorted wash of sound. (Obligatory cautionary note: Be careful to not subject your ears to dangerously loud volume levels when experimenting with runaway feedback.)

The feedback signal in Dubstation's delays passes through an analog-like distortion stage, controlled by the SATURATION knob. If you leave the knob at its full anti-clockwise position, the signal won't be altered by this stage. (This reproduces the signal path of previous versions of Dubstation.) Turning the knob up creates an increasing amount of distortion. The distortion processor necessarily boosts the signal somewhat, so you may find it useful to adjust the FEEDBACK control along with this control.

Loop and Reverse

The LOOP switch, when turned on, causes Dubstation to endlessly play the audio currently in its delay line without alteration. This differs from turning the FEEDBACK knob all the way up because the audio is played without being changed by Dubstation's weird and wonderful emulation of analog delay circuitry. If you use the FEEDBACK knob to create a looping delay effect, the audio will degrade and change over time as happens in a hardware analog delay. The LOOP switch lets you choose between the seamless looping of a digital delay and the murky but warm effects of an analog delay. Note that you can still use the other controls as the audio loops, and you can overdub new audio. However, the FEEDBACK knob is disengaged when the loop switch is on, since providing a feedback path at the same time that the delay loops would cause the signal to increase rapidly in an uncontrollable manner. (If that sounds like fun to you: trust us, it's not. We tried it.)

The REVERSE switch makes Dubstation reverse the current contents of its delay memory and the direction in which it records. This means that any that was in the delay memory before you flip this switch will be played backwards. Any audio that enters the delay after you flip the switch will not sound backwards, because it will be recorded in the same direction relative to the playback direction. Of course, if either the FEEDBACK knob is turned up or the LOOP switch is on, you will hear the backward signal played more than once, since the backward signal is fed back or looped and played again.

Output Controls

The MIX knob controls the relative amounts of the delayed and original ("dry") signals in the plugin's output signal. If the knob is set to its center position, you'll hear equal amounts of the original and delayed signal. This setting, or something close to it, is useful if you're using Dubstation as an insert effect. If you rotate the knob fully clockwise, you'll hear only the delayed signal. This setting is useful if you're using Dubstation as a send/return effect. If you rotate the knob fully counter-clockwise, you'll hear only the original signal, which isn't terribly useful but is sometimes handy if Dubstation is feeding back wildly and you need a reminder of what started it all.

If you click the little lock icon next to the mix knob, the mix setting will not change when you load presets. This is helpful if you're using Dubstation on an effects channel and wish to keep the mix setting at 100% while you audition presets.

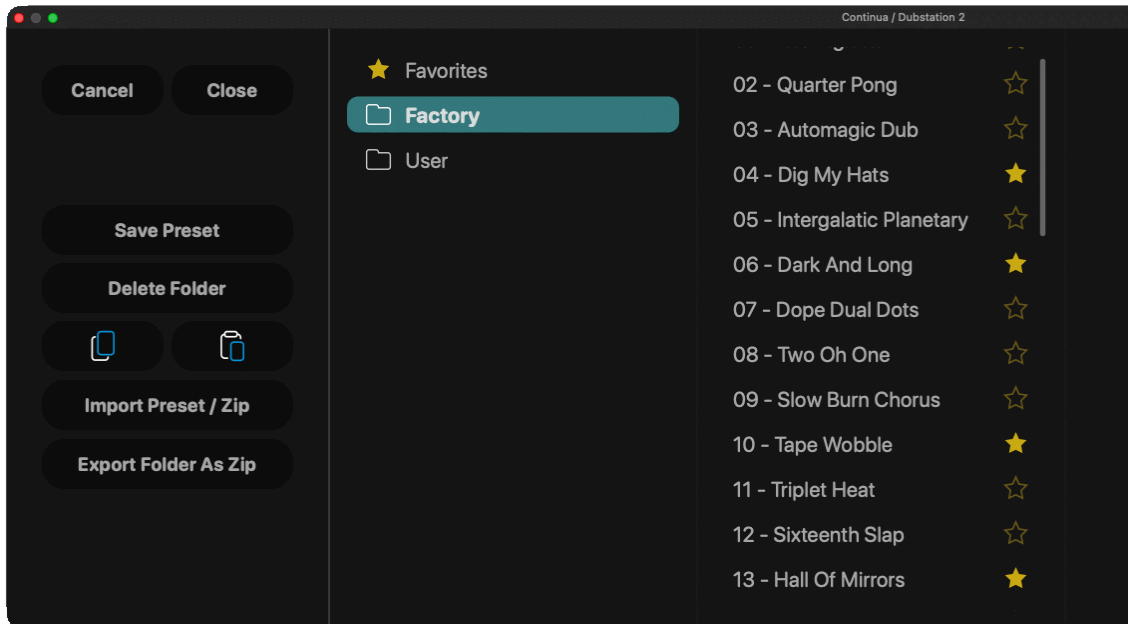
The OUTPUT LEVEL knob sets the loudness of Dubstation's output signal. The range of the knob is -80dB, which effectively turns the plugin's signal off altogether, to +3dB, which provides a small amount of boost. In most circumstances you can leave it at its default setting of 0dB, which passes the signal without amplifying it. Although this control is certainly not flashy, much fun can be had by using a MIDI hardware controller and/or your VST host's automation features to control it, turning the output level up and down to create echoes that ebb and flow.

Presets

Dubstation includes a collection of presets to serve as a demonstration of its capabilities and inspirations for your own creations. There are a few controls at the top of the window associated with presets:



The name of the current preset appears in the center. (You probably figured that out yourself.) Clicking the little dots on the left and right loads presets in alphabetical order. To examine all of the presets, click the name of the current to open the preset browser.



The browser displays presets and folders in scrollable lists, arranged in columns. The leftmost list shows the folders within Dubstation's preset collection, grouped in two categories: Factory and User. Clicking any of these folders reveals its contents in the next list. Clicking on a preset name loads the settings into Dubstation. Click the CLOSE button in the preset browser to dismiss it. If you click the CANCEL button instead, the browser closes and Dubstation's settings revert to their previous state. Double-clicking a preset name loads the preset and dismisses the preset browser. Loading a preset irretrievably erases the current settings, so if you have created something that you want to use again, save it as a new preset before loading another preset.

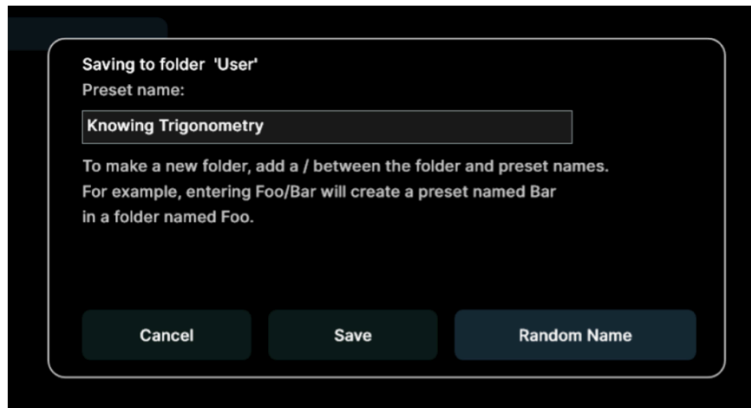
Once you have clicked on any item in the panel, you can navigate within the preset browser with the keys on your keyboard. The left and right arrow keys move the selection between columns, and the up and down arrow keys move it within the list. Tapping the ESC key has the same effect as clicking the Cancel button.

The stars to the right of preset names mark presets as favorites. Clicking a filled star removes the mark from a favorite. Once you've marked at least one favorite, a correspondingly named category appears in the leftmost column. Clicking it shows you all the presets you've marked, and clicking their names loads them as usual.

The folders and presets in the browser correspond to folders and files within Dubstation's own folder on your storage device (i.e. your computer's hard drive or SSD). This folder is located at `C:\ProgramData\Audio Damage\Dubstation\` on Windows, and `~/Music/Audio Damage/Dubstation/` on macOS and Linux. You can store your presets anywhere you like, but for them to show up in the User list they must be placed in the User folder within Dubstation's folder. Also, to avoid possible collisions during future updates, do not store your presets within the Factory folder.

Any folders you create within the User folder will show up as folders in the User list. You can create sub-folders within the User folder, and sub-folders within those folders. You can't nest folders deeper than that because the preset browser has only four lists.

To save your presets, click the SAVE PRESET button at the left edge of the window. This invokes a dialog box with a couple of helpful features. As the text therein describes, you can create a folder within the destination folder (whose name is given at the top of the dialog box) by adding the folder's name to the beginning of the preset's name, separated by a slash mark.



Clicking the RANDOM NAME button replaces the preset's name with a pair of words chosen at random from two lists. While the resulting names won't have any connection with what the plugin is doing, you may find this feature useful for coming up with alternatives to routine names like "My Preset 12".

Potential pitfall: once you've saved a preset, clicking its name in the list loads the preset, overwriting whatever changes you've made since you saved the preset. Hence if you want to save the preset again to preserve the changes you've made, do not click on its name before saving it.

You can delete presets and folders from the lists by clicking their name and then clicking the DELETE PRESET or DELETE FOLDER button. Dubstation will give you a chance to confirm this action or cancel it. If you confirm, the preset/folder will be removed from your storage system and is gone for good.

Importing and Exporting Presets

Preset files are plain-text XML files so that you can exchange them online in forums, copy them between a Windows computer and a Macintosh (and even between an iPad and a regular computer), email them to your friends, etc.

The two buttons with icons representing copying and pasting (copy on the left, paste on the right) copy Dubstation's current settings to the system clipboard and paste settings from the clipboard. You can use the copy and paste commands to transfer settings between two instances of Dubstation or paste the settings into an email message or text editor. When copied to the clipboard, presets are presented in the same XML text as used in preset files.

The IMPORT PRESET/ZIP button provides a way to add presets to Dubstation without manually moving them into the appropriate folders in your file system. Clicking this button produces a file-browser window wherein you can select either a single preset file or a .zip file containing one or more presets. After you select the file, Dubstation copies the preset(s) into whichever folder you have selected in Dubstation's preset list, unzipping the file first if necessary.

Depending on whether you've selected a preset or folder, the EXPORT SINGLE PRESET or EXPORT FOLDER AS ZIP button performs the complementary functions of the Import button. First select either a preset or a folder in Dubstation's list, then click the export button. A file-save window appears; choose a location in your file system, give the file a name, and click SAVE. If you have chosen a folder in Dubstation's preset list, the plugin places it and all of the presets it contains in a .zip file.

Default Preset

If you save a preset with the special name "Default" in the User folder, new instances of Dubstation will load it automatically when you add it to your DAW session. You can use a default preset file to give yourself the same starting point with Dubstation whenever you use it. The plugin installer creates a default preset file for you but feel free to replace it with your own.

And Finally...

Thanks for purchasing Dubstation. We make every effort to ensure your satisfaction with our products and want you to be happy with your purchase. Please write to support@audiodamage.com if you have any questions or comments.

Document Revisions

- 2026-05-11: Updated for version 2.4:
 - Tap-tempo features described.
 - Mix lock control described.
 - New preset management features described.
 - Screenshots updated.
 - Formatting updated while converting to QMD.