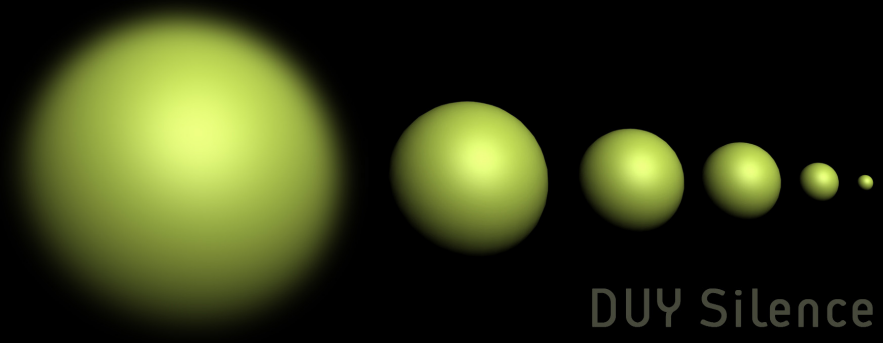


DUY Silence

Users Manual

DUY SOFTWARE

INDEX

1. Quick start

Please read DUY Silence's Installation Guide to install the software. You will find it included both in the Downloaded version or in the CD you purchased, according to the version you chose when you purchased the software.

If you have purchased DUY Silence as an online download, make sure that the software has been downloaded correctly. Once you uncompressed the downloaded file, which is a disk image (.dmg), double-click on it. This will mount a volume/folder. Open it. One of the files it contains is the installer for DUY Silence. It should look like this:

Install DUY silence

If the icon looks different, it means that you may have had some problem during the download and the file may be corrupted. Therefore, please download the file again and repeat the process.

To install the software, double-click on the Install icon. Read the License Agreement very carefully and click on the "Agree" button only if you agree to accept the terms and conditions of the provided license agreement.

You will be asked to enter your serial number. Please enter it. Make sure the serial number is inserted in capital letters, with no spaces and looking similar to this: XXXXX-XXXXX-XXXXX-XXXXX, where "X" can be a capital letter or a number. The serial number will be provided at the top of your registration card, if you have purchased a boxed CD, or in the email we provided if you have purchased the software as an online download.

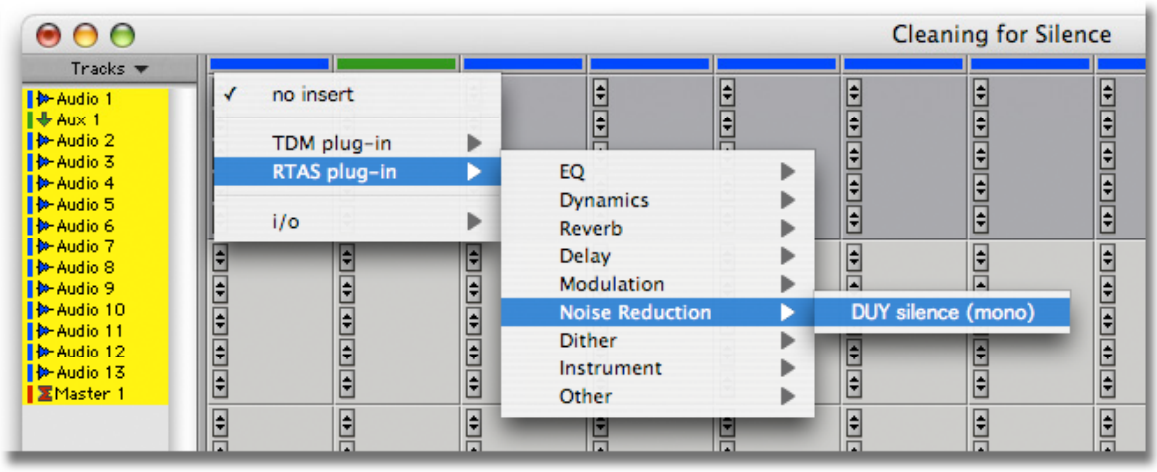
You must also install DUY Silence's settings, included in a separate installer, using the same procedure as detailed above.

2. Inserting DUY Silence in Audio or Aux tracks

DUY Silence is presented as a Noise Reduction plug-in, available as Mono to Mono or Stereo to Stereo.

We will now show an example of the insertion of the plug-in in Digidesign's ProTools.

Depending on the version of ProTools or other DAE-aware application, the process of inserting the plug-in is done in one way or another. Look for DUY Silence either in the list of Mono to Mono or Stereo to Stereo plug-ins or, if they're arranged by categories/families, you will find it in the "Noise Reduction" section:



3. First approach to DUY Silence's interface

This is DUY Silence's edition window in Basic Mode:

DUY Silence is formed by:

- An LCD Display section that provides information and instructions on the operations of the plug-in and its basic use.
- A section to control de Audition mode: Normal and Noise. The first allows you to listen to the final result: the original source with the noise having been removed. The second will let you hear the removed noise alone, for callibration and testing purposes.
- The "Scale" section lets you change the visualization scale on the graph displayed on the central part of the user interface. The nature of the information shown on the interface can be programmed in the Expert Mode.
- The Operation section includes two controls: the Learn button, to be clicked to start capturing your audio source; and the Reset button, to clear all information captured up to that moment.

- The “Basic” Page of DUY Silence includes 4 generic controls, for faster operation, in order to remove noise.
    - “Amount”: Controls the amount of noise removed (100% will remove all the noise programmed according to your controls, 0% will not remove any noise – acting as Bypass – , and usually you will use an intermediate value)
    - “Threshold” allows us to control the level value at which we want the noise gates to open or close. The “Expert” mode allows to freely control each one of the available frequential bands as you like!!
    - “Attack” and “Release”: These controls are extremely important. They determine the period of time for opening and closing the noise gates. You can also change the attack and release times for each individual band if you need a high degree of control over your noise.
- In the “Output” section of the interface, a slider control allows you to control the output level. A set of memory scenes is also provided, for complex projects, with variable noise conditions throughout the material.

4. Quick-use guide

We sincerely recommend reading chapters 5, 6 and 7 of this manual, which include detailed explanations of all sections and tools within DUY Silence.

To “clean” the effect of noise on your audio material with DUY Silence, insert the plug-in in a track and press Play on your host system, locating a portion of isolated noise. However, we don’t always have access to such a section, which is why we’ll often have to select a short and controlled portion of audio and perform several checks throughout the track in Loop mode.

Click on the LEARN button of DUY Silence in order to start your audio analysis. You can stop and restart the analysis at any time by clicking on the same LEARN button.

Once you have started the LEARNING process, you will be able to modify any parameter and also select any of the available settings. When the PROCESS bar is complete, this will mean that DUY Silence has already enough information to clean and reduce the noise in your audio track.

Use the Audition section of the interface to switch to “Noise” mode if you want to hear the signal being removed from your audio source (ideally, this should be the unwanted noise). It’s somewhat normal to hear some audio in the “Noise” mode, since the amount of noise or signal reduction is dependant of the threshold value. To hear the final result of applying DUY Silence to your track, you should switch to the “Normal” audition mode.

5. What is DUY Silence?

DUY Silence is a high-quality tool that allows you to clean certain undesired audio frequencies, classified as noise. Therefore, the software is a Noise Reduction plug-in.

With DUY Silence you'll be able to collect information about your noise using an analysis method, by capturing the track or portion of a track that you'd like to work on. You can visualize the noise on the user interface, in order to edit it according to your needs and criteria, using a complete and intuitive set of tools.

In addition, DUY Silence is not a "standard" Noise Reduction plug-in. It provides additional features, allowing extraordinary control over the lowest level of operation, and gives the possibility to edit the noise partially in order to satisfy the needs of advanced requirements for demanding users.

The simplest or most complex situations can be tackled with DUY Silence, often giving excellent results with the simple tweak of a few controls.

6. How does DUY Silence work?

DUY Silence is a noise reduction system. It analises the audio contents in the frequency domain, by capturing or generating noise for analysing, visualization, edition, comparison with the original signal, isolation and rejection, using an automatic gating system, which can also be configured manually.

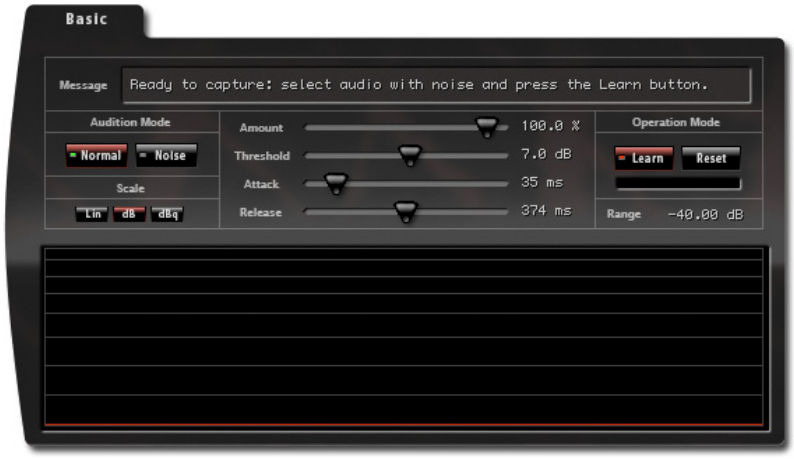
As a tradition, DUY couldn't create a "simple and normal" noise reduction plug-in: DUY Silence allows you to interact with every element present in the system: from the edition of over 1000 noise gates's level gain, to the control over the dynamic behaviour of each one of these gates, individually.

The possibilities of DUY Silence are, therefore, extraordinary. At the same time, however, it's also possible to obtain a great performance on most materials with just a few clicks.

We have divided the interface into 2 sections which can be used complementarily or not, depending on the degree of control you want to achieve. These 2 sections are:

- Basic
- Expert

6.1. Basic mode



Within the BASIC mode, users have access to the indispensable tools to capture the noise which will be analysed. Basic tools are provided to achieve a first approach to the reduction of the present noise.

6.2 How to capture Noise

DUY Silence must collect as much information as possible in order to understand the nature of the noise to be removed. To capture the noise sample, click on the “Learn” button, which can be switched on or off at any time by clicking on it again.

7. DUY Silence sections

DUY Silence's window is formed by several parts in common, which are always visible regardless of the level or the type of edition mode active at the time. The central part is controlled by tabs (Basic/Expert), which allow you to select the edition mode.

The Output section, the Noise Reducion slider section, the Memory section and the Edition Bar, are always visible. The remaining content of the "Tab Pages" varies according to your choice.

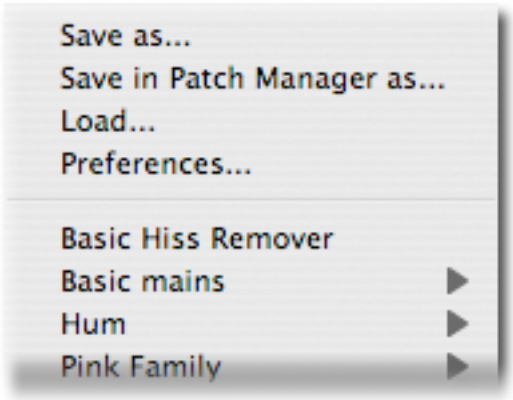
7.1 Edition Bar

The Edition Bar allows to rapidly access the fast-edition functions and the edition, organization and search of settings/presets.

DUY Silence's Edition Bar consists of the following parts:

7.1.1 "Patch Manager" Pop-Up Menu

The Patch Manager arranges the presets/settings documents. During the installation process, the presets will be placed in a folder named "DUY Silence patches" in the Preferences directory. Note that with all DUY products, we also name "presets" as "patches" or "settings".

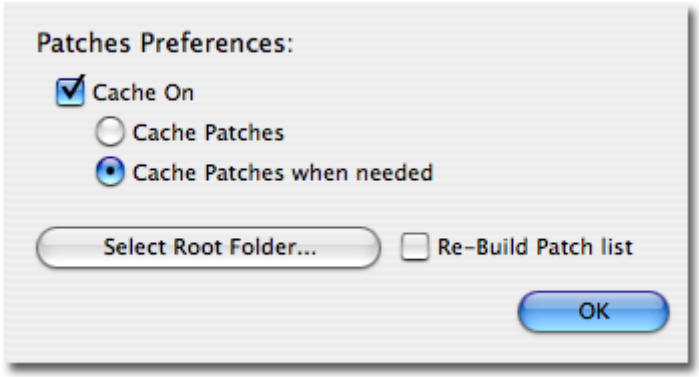


This folder contains a series of subfolders that contain the presets themselves. The subfolders correspond to the categories of presets within the main (root) Settings folder.

The first part of the menu (above a separation line) includes the managing options, such as saving presets. Below the separation line you'll see the list of presets, grouped in families (see image above)

The functions you can use are:

a) **Save as**: saves the active setting . A window will appear, allowing you to change the name you would like to give the preset and where you would like to store it on your drive.
b) **Save in Patch Manager as**: Does exactly the same as the standard "save as" function, but the setting is saved directly into the main folder where the current settings are stored.
c) **Load**: allows you to select a settings document and open it to apply it to your audio.
d) **Preferences**: Shows the options you have within the Patch Manager.



- Cache On: allows you to activate the loading of all the presets in memory, so that the system doesn't have to read from disk each time a setting is used. This is helpful to reduce the time of reading to disk.
- Cache Patches: When the "cache on" is active, if you select this option, all the presets will be loaded when you use DUY Silence for the first time.
- Cache Patches when needed: If you select this option, only the presets that are called or used during a session will be saved in the cache.
- Select Root Folder: allows you to choose the folder that contains the structure of subfolders that holds the presets. You can have an infinite presets folders in your hard disk, but only one can be active at a time. So, if you prefer to change the name of the folder or where it is stored in your hard drive, you can manually move it and then select the position where it's located by using this option. Once you have done this, click on the "Re-build Patches List" when you click OK if you would like the list of presets to be refreshed.

7.1.2 Edit Buttons (Copy, Paste, Undo, Redo)

These buttons allow you to copy, paste, undo or redo. If it's not possible to use a certain function, the button will be tagged in lighter gray. This will occur, for example, if there is nothing to Paste (which would mean you haven't clicked "Copy" first).

"Copy" will copy the state of a whole screen. This information can then be pasted using the "Paste" button in this instance of DUY Silence or in another. The "Undo" and "Redo" buttons allow you to return to the "previous" or "next" state after your last edition. A history of the last 10 editions is stored. Therefore, you have 10 levels of Undo or Redo. If you would like to clean the history or stored states, click on the Copy button while holding the Opt key.

In depth, the "Copy" function acquires data of the plug-in and audio scene: the noise contents and the plug-in's parameters.

7.1.3 Memory Buttons (A, B, C, D, E, F)

The A, B, C, D, E, F buttons are temporary memories which are useful in many cases. For example, if you would like to compare several settings.

To save a screen state to one of these memories, simply click on the memory button (A, B, C, D, E or F). If the memory is empty, the button will be highlighted in gray. Once you click on the button and save the content of the screen, the lettering will turn black. If you want to empty a memory, click on the button while holding the Opt key.

If you would like to load all the memories in a circular way, click on the Rotate button. If you only have memories A and B full, the sequence in rotation from one memory to another will be A, B, A, B...

7.1.4 Help

DUY Silence has Help Balloons and also Spoken Help (you will need the Speech Manager in your system for Spoken Help to function). To use any of these two, click the respective icons.

7.2 Output Section

The output section is formed by the Output control and the output level value box.

DUY Silence also provides an output level control, to allow for fine-tuning of certain fade-out tails' gains, in order to minimize the noise in some mixes. The Output ranges from 0 dB (no gain change applied) to –INF (-∞), corresponding to a total mute of the signal.

7.3 Tab Pages Section: DUY Silence's Modes

DUY Silence contains 2 edition or operation levels: Basic and Expert. These 2 levels are also called "modes", "tabs" or "pages" in this manual. You can switch from one to another by clicking on any of the 2 tabs that correspond to each mode.

Whenever you save your audio session, DUY Silence will remember the mode (also called Page or Tab) you were using, for the next time the session is recalled.

7.3.1 Nature of noise

Noise appears typically on low-quality video and audio tapes. From a frequency point of view, low-frequency noise, originary from the devices used to record the piece of audio, is the most usual type of noise. In the U.S.A., electricity is a sine wave (sinusoid) at a frequency of 60 Hz, while in Europe, for example, it's centered at 50 Hz. These frequencies and their harmonics can damage the overall quality of our sound.

The greatest part of energy in human voice is contained in frequencies between 200Hz and 3 Khz (which is why telephone lines use filters to cut out signals outside this range, and therefore we can't understand the difference between an "s" and an "f" on the phone, since the frequency contents for these consonants are above 3 KHz). The human voice spectrum range is quite problematic, since the human ear has greater sensitivity (in general) throughout those frequencies.

Noise above 7 KHz is usually easier to clear from a track, since it has a certain frequency pattern and morphology which can be traced, similar to white noise, and lowering slopes as frequency increases.

In all cases, having access to the isolated noise is most effective solution to clear it from the audio track. If we don't have access to a noise sample separately, we must –at least- evaluate the level and frequency contents in order to manually draw an approximate curve of how we expect it to be, in the Expert mode.

The plug-in interface shows a graph with the captured Noise curve (or any other analysed signal), as well as a progress bar. The system is optimum when the analyzed noise is stable (which means you have played enough representative information to DUY Silence while in the Learn process, which captures your sample). This is represented by the progress bar below the curve. The bar should be at 100% to consider the analysis finished.

You can always perform additional analysis for greater precision, by using Loop mode in your host sequencer, in the event that you have a very short sample or, if you want to evaluate several sections and accumulate the results, by simply clicking on the “Learn” button again at any time you’re playing through a section you want to analyse.

If you clicked on the Learn button, the learning process will be automatically stopped when DUY Silence understands it has gathered enough information. It’s at this stage that you can use other edition levels and adjustments to your polish your resulting sound, by using the tools in the Expert mode. We insist that you can always click on the Learn button again to gather more information on the characteristics of your Noise , but please remember to stop it yourself once you have played through your section enough. The more information you gather, the more exact the Noise curve will be.

Clicking on the Reset button will erase any Noise data captured

If you load any of the provided presets, the spectrum on the captured Noise will be replaced by the characteristics of the loaded preset. So, if you have captured the frequency characteristics of your noise, you should this information somehow, to avoid losing it, before loading a preset. Once you’re satisfied with the calculations of your Noise, save this as a preset/setting to use it in the future.

7.3.2 Basic Page

Within the BASIC mode, users have access to the indispensable tools to capture the noise which will be analysed. Basic tools are provided to achieve a first approach to the reduction of the present noise. The sections within the Basic mode are the following:

- Message: shows the status of the progress in capturing the noise sample, and displays messages or important suggestions and instructions that the system may need to give you.
- Audition Mode: When set to “Normal”, the plug-in will output the processed sound, that is the original audio with the noise having been removed. When set to “Noise”, you will only hear the noise being removed. This tool allows you to evaluate the quality of your noise reduction according to the values you have set on the available controls. Please note that while set to “Noise” it’s normal to hear some of the original audio signal (the lower levels).
- Scale: Allows you to change the visual scale to 3 available modes: Linear, dB and dBq (square root of the signal power, in dB). This last option is not in most educational noise papers, but it will allow you to compare noise levels with the usual audio levels, and becomes useful when editing the noise curve itself.
- Sliders:
  - The “Amount” value controls the quantity if noise reduction to be applied to the original source. Theoretically, it should be set at 100%, which means that all the noise will be removed. However, this control will allow you to reduce this value in the event that a certain passage includes a low signal that makes it hard to differenciate between noise and a low signal value that you don’t want to remove. For instance, in “crescendos” you may want to lower the amount of noise reduction when you surpass the psychoacoustic noise threshold value, thus leaving the original signal intact.
  - The “Threshold” value sets the level value above which the audio should not be considered noise. This would tantamount to lifting or lowering the noise curve in its entirety.
  - The “Attack” and “Release” values control the time response for each one of the noise gates. These controls act on all gates. The “Expert” mode allows for individual control on each one of the gates, if needed.
- Operation Mode: The “Learn” button is a switch that shifts DUY Silence from a normal processing stage to a capturing stage. When the “Learn” button is on, it will analyse the signal being played, processing it in order to know and understand its frequencial character. It’s important that you have access to some section of the original audio with no other signal than the noise itself. However, DUY Silence also includes tools to generate a reference noise signal by itself. The “Reset” button clears all the captured information.

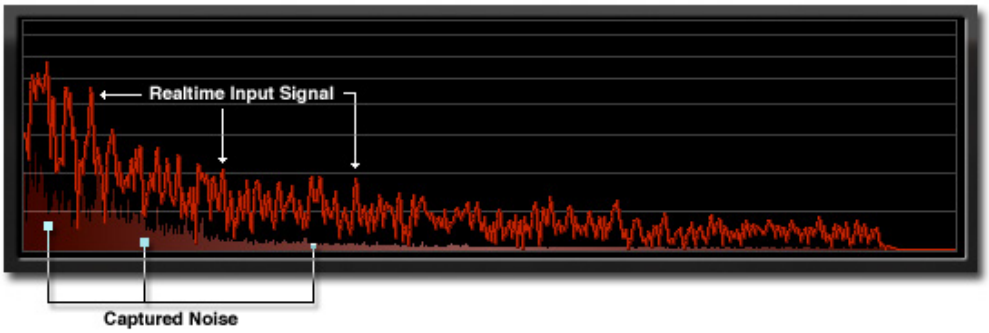
The process of searching for noise depends on the track's own nature. Generally, noise can be found at the beginning or end of a track. If you're removing noise from a solo instruments, the parts where the instrument is not performing are the most useful to obtain a good noise sample. If you're trying to remove noise from old audio tapes (cassettes, magnetic media, reels…), the beginning of the tape, where no sound is recorded, provides an excellent noise sample, inherent to the media itself.

7.3.2.1 LCD Display

The LCD display shows the status of the progress in learning, and the messages or important suggestions/instructions that the system may need to give you.

7.3.2.2 Spectrogram

The Spectrogram is a graph that displays the Noise spectrum and (if set in Expert Page) the Input Signal in realtime.



It's extremely important that you compare the captured (or synthesized) noise with the input signal, in order to make precision adjustments, or simply to be aware of the noise characteristics in comparison to the input signal.

7.3.2.3 Audition Mode

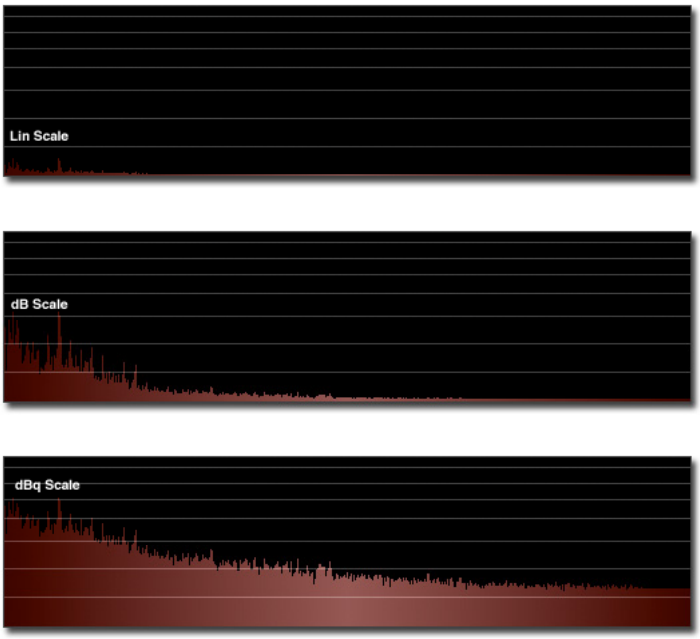
When set to "Normal", the plug-in will output the processed sound, that is the original audio with the noise having been removed. When set to "Noise", you will only hear the noise being removed. This tool allows you to evaluate the quality of your noise reduction according to the values you have set on the available controls. Please note that while set to "Noise" it's normal to hear some of the original audio signal (the lower levels).

7.3.2.4 Scale

It's vital to compare the noise with some form of reference. Observing and analysing the noise can be complex if you don't have some sort of reference that relates it to the overall audio sample. This is where the Scale parameter comes into the game.

If you're just studying the maximum points of a curve, the Linear scale is perfect. For generic audio analysis, the dB scale is the most usual. In the case of noise, we need to analise the minimum levels of the signal. We have created a scale, called "dBq", based on the square root of the standard dB scale. This scale lifts the lower values visually, making it ideal for the study of noise.

Lets's see the same signal using 3 different scales:



7.3.3 Expert Page

The Expert page contains tools that allow you to perform a very powerful manual control and edition of your noise, helping you achieve the desired noise reduction.

These are some of the features of the Expert mode:

- Selection of different editable elements: the captured noise curve, the state of each one of the noise gates, the controls over attack and release for each gate…
- Gate control with Run/Hold mode.
- Zoom display
- Partial edition of each one of the editable elements, not requiring a linear or contiguous criteria. A selection bar is provided to choose the frequency bands you want to work on.
- Size-configurable tools that enable you to edit and actually draw the curve!!.
- Several proprietary display modes.
- All the settings of the Basic mode are retained for greater ease of use.
- Fade control over the last edition to allow for an infinite granularity of the modifiers.
- “Paste” of other noise sources, previously captured, to create complex noise-rejection curves.

7.3.3.1 Edit Curve Selection

A 4-button section allows you to select the curve you'd like to edit:

You have 4 different options: "Noise", "Gates", "Attack Deviation" and "Release Deviation".

Noise: This is the curve that contains the reference of the current noise. It's the reference that you'll use to establish what is noise and what isn't. Therefore, you'll be setting the behaviour for the frequencial gates. A band value above the one you have set, will be considered audio, and not noise. Anything below this value will be considered noise, and something to be rejected.

Gates: This curve represents each band's state, when allowing the flow of audio through it, or not. Theoretically there should be no reason why you'd want to edit these gates, since DUY Silence's algorithm already controls these values according to the criteria set for the noise reduction. Nevertheless, it may be useful in some cases: DUY Silence lets you pause the calculation of the noise reduction, setting the gates to either Hold or Freeze. Once in this state, the gates can be modified at leisure. This means that DUY Silence behaves as a manual frequency control system, letting us choose if we want to bypass each frequency band. This is, somehow, an EQ that lets you lower the sound to "-inf" ("-∞"). In Hold mode you can range from "-∞" to "1.0", where "1.0" is a unity gain (bypass).

Attack Deviation: Contains the values of the deviation due to the generic Attack slider value. It's thought to modify the dynamic behaviour of the algorithm, depending on the band's frequency. For example, on a certain project, you may want the low frequency response bands to have a faster Attack response, given the percussion we're processing. In this particular case we'd edit the Attack Deviation in the lower frequencies using "x0.5" values (half as fast = double slower). The default value is x1.0 (unchanged attack deviation). The possible values range from "x0.1" (10 times slower) to "x10.0" (10 times faster).

Release Deviation: Functions exacly the same as the Attack Deviation parameter. Please note that the deviation curves for attack and release are totally independent.

7.3.3.2 Edition Tools

The available edition tools are the following:
Shaped Tool, FreeHand Pencil Tool and Eraser.

a) Shaped Tool: has 5 different types of available curves: Gaussian Spline, Cosine Spline, Cubic Spline, Linear Spline and Step Spline.

The “Size” control lets you select the size of the edition. The Shaped Tool is always the “soft” edition tool in the outline and edges, so no abrupt changes will occur, unless you use the Step Spline control, which mathematically produces a discontinuity at the edges.

The “Cursor Value” box displays the values of the manual edition: it shows the gain and frequency of the chosen band. If you are working on more than one band at a time, it will display the central frequency.

b) FreeHand Pencil Tool: The FreeHand Pencil Tool is controlled with the movement of your mouse, drawing an arbitrary curve. Due to the nature of the movement of your mouse, the resulting curve you draw may not be precise. For this reason, we provide additional help to compensate for the drawing errors. See the Transform section.

Additional FreeHand Pencil Tool controls:

> **Shift key pressed + drawing**: draws a horizontal line to leave the bands gain constant.
> **Alt key pressed + drawing**: draws a neutral equalization curve (0 dB gain for all the drawn frequencies).
> **Cmd key pressed + drawing**: draws an EQ curve with a -∞ dB (minus infinite dB) gain.

c) Eraser Tool: deletes the frequential contents (-∞ dB gain), for the selected frequencies.

7.3.3.3 Modifier Section

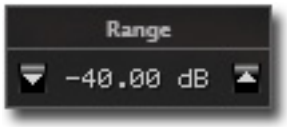
At any time, you can undo the last edition softly with the “Fade” control (Fade Last Edition), located in the Transform section.

This section has 8 Modifier buttons:

Clear: Cleans the curve, replacing all values with zeroes.
-40 dB: Sets the maximum Peak of the curve at -40 dB.
Smooth: Smoothens the transitions between bands, and is especially useful when there are abrupt changes in gains between one band and another.
Random: performs random changes for each frequency band.
Gain Up: increases the gain of all bands in the same proportion.
Gain Down: decreases the gain of all bands in the same proportion.
Pink: Adds a synthetized Pink noise curve to the current state of the curve.
White: Adds a synthetized White noise curve to the current state of the curve.

The scale can be set to Linear, dB or dBq. This will affect all the spectrograms on all the different pages within DUY Silence.

Each spectrogram has an auto-range system to see the entirety of the available curve. However, the edition area within the Expert page has a better control over the range to simplify the change of level. At the top part of the Expert page you can see the current range and 2 arrows (up and down), which allow you to change the visualization and edition range if possible, since showing all the curve on screen is not always possible.



To decrease the edition and visualization range, simply click on the Down Arrow in the Range section. To increase it, click on the Up arrow. If you click outside the arrows, the Auto-Range will select the best possible range, adapted to the existing curve.

7.3.3.4 Spectrogram in depth

The spectrograms used in DUY Silence are a representation of the output gain (vertical axis) in dB, linear or dBq, for each frequency (horizontal axis).

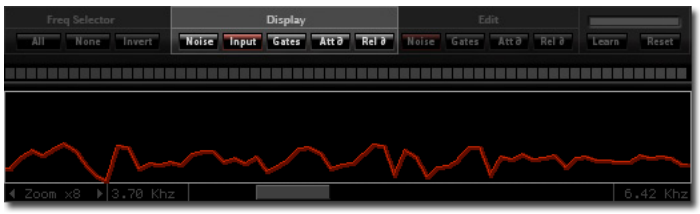
Any signal (noise or not) can be represented in the frequency domain with a bar whose height represents the level in a particular slot of frequency. Lower frequencies on the left, higher frequencies on the right. You can visualize the gain value of the represented signal by just placing the mouse over any position of the spectrogram. The value is shown in a box at the top left of this section.

To see the exact value at any given point of the curve (not just the value according to the mouse position), click on the Shift key. This will show the curve value.

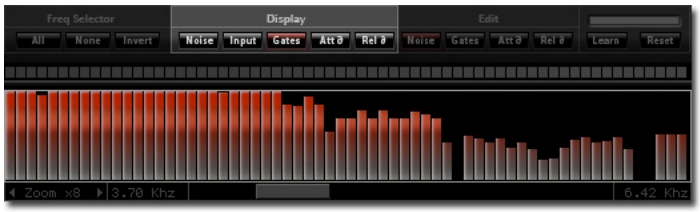
DUY Silence's spectrogram can also display several signals at a time. To do so, simply select the Display options you desire.

The following page shows the display for each one of the curves in the spectrogram, according to the highlighted selection:

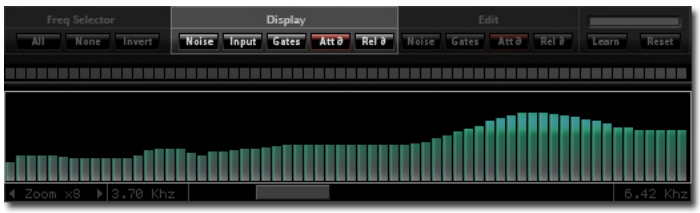
Noise selected



Input signal selected

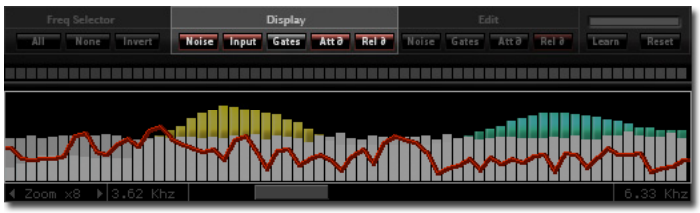


Gates selected



Attack deviation selected

Release deviation seleccted



Noise, Input, Attack and Release deviation

For greater precision, you may also use the Zoom option, which will allow you to control your noise with amazing versatility throughout the horizontal axis.

7.3.3.5 Range and Frequency Selection

DUY Silence lets you select edition intervals in the following way:

- On specific established ranges
- On pre-selected sections of your curve.

These two options allow you to work over independent frequency areas in order to adjust them in different ways, if your project requires you to do so.

The “Frequency Selection” tool consists of 3 buttons and a non-linear selection bar:

The buttons in the Frequency Selector area are:

- All: Selects all frequencies and makes them available for the entire edition.
- None: Unselects all bands. This button can be used to start a selection from scratch.
- Invert: Inverts the state of the selected frequencies, by selecting the unselected frequencies, and unselecting those frequencies which were previously selected. This button can be useful, for example, if you want to balance a previous edition over the frequencies which were previously selecting, by acting on the remaining range.

The “random selection bar” is located above the spectrogram. Its width and position correspond to each one of the system’s bands. Click and drag to select multiple bands at a time. The box showing the values will indicate if the band is selected or not (Edit On, Edit Off)

Hold the Cmd key, followed by Clicking and dragging over the bands to make a continuous inverted selection.

This method allows you to edit modifiers, use the Tools and even collect noise only in the selected frequencies, very useful if you’re working on specifically critical parts of the spectrum.

7.3.3.6 State (Run/Hold)

DUY Silence allows you to pause the reduction algorithm, setting the noise gates to Hold or Freeze state. Once they're in this state, the available controls for the gates can be modified.

This means that DUY Silence behaves as a manual frequency control system, letting us choose if we want to bypass each frequency band. This is, somehow, an EQ that lets you lower the sound to "-inf" ("-∞"). In Hold mode you can range from "-∞" to "1.0", where "1.0" is a unity gain (bypass).

7.3.3.7 Gates (Open/Close)

DUY Silence allows you to manually open or close all the noise gates. This is meant for controlling the response's sensitivity (Attack, Release and both Deviation curves). If you want to evaluate the response time for the gate to open, we force it to Close and observe the behaviour of the processed material, in comparison to the values provided by the algorithm.

7.3.3.8 Pasting in Curve with criteria

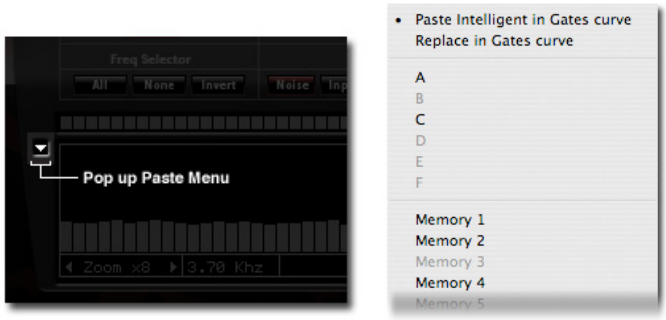
DUY Silence also lets you transfer data from other memory zones into your current scene.

Let's say you have a setting with white noise, captured from a tape reel in our studio, and on the other hand we have a 60 Hz mains noise on a recorded guitar track. How can we combine them?

The plug-in interface has two systems for memorizing states and settings:

- Memories A, B, C… from the Edition Bar (see section 7.1.3)
- Memory scenes from the Memory panel (see section 7.4)

By using the pop-up menu located at the top left of the spectrogram you can see the Paste menu.



The first 2 items determine the type of pasting you want to perform:

- Paste Intelligent in Curve: analyses the source and the final result, and pastes the values that will perform the best noise reduction.
- Paste in Curve: standard Paste, which replaces the current data.

Both "Paste" types follow the frequency selection options, and you can therefore paste data into specific areas of the spectrogram, if necessary.

The "Paste" destination is set with the "Edit curve" buttons.

The source of the information to be pasted can be obtained either from the A, B, C… recalls or from the Memory panel, which has 24 additional memories.

7.4 “Memory” panel

DUY Silence provides a Memory section at the right side of the interface. These 24 scenes, which are meant for complex projects that require different settings for various parts of the material, function as a simple group of memories which can be recalled at any time. To memorize a scene, click on the Store button, followed by the number you’d like to store it on (1 to 24).

Each noise scene stores the Noise, Gates, Attack & Release deviation curves, as well as the slider values (Amount, Threshold, Attack, Release and Output) and the Run/Hold mode.

To delete a memory, simply click on the Clear button, followed by the number you’d like to erase.