NEWFANGLED AUDIO

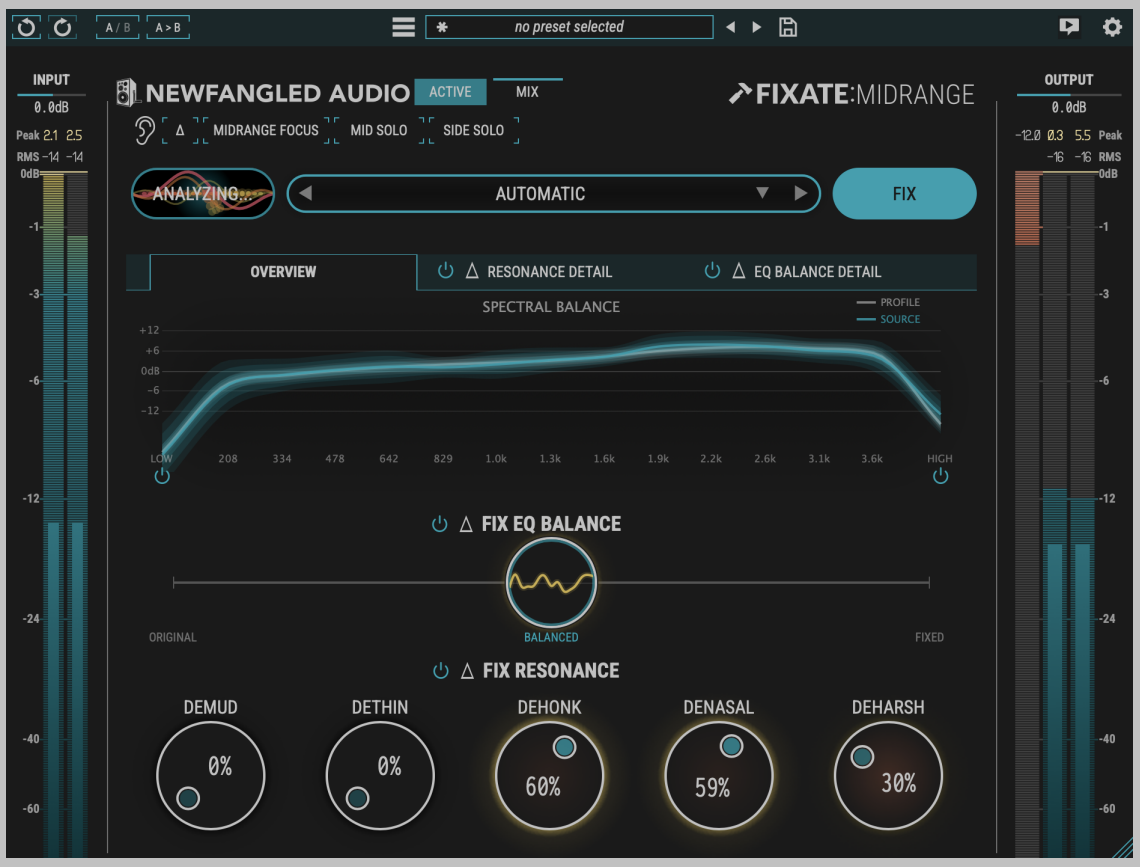
P/N: 1269-000, Rev 3

Newfangled Audio
www.newfangledaudio.com

Contents

Chapter 1

Newfangled Audio Fixate:Midrange



Midrange is the most sensitive part of human hearing, the most important part of a good mix, and the hardest thing to get right. Mud builds

up when the bass and rhythm section hit together, honk appears on certain chords, nasality and harshness come and go with a vocalist's phrasing. A fixed EQ can trade one problem for another, and properly tuning a dynamic EQ is frankly difficult. What the midrange really needs is a tool that watches the entire range in real time, applying corrections only when and where they're actually needed.

Fixate:Midrange is that tool: a dynamic spectral balancer specifically for the midrange. It splits the midrange into the critical frequency bands of human hearing and applies intelligent, signal-dependent processing to fix five common midrange problems without touching the parts of your sound that are already working.

In its default Automatic mode, the plug-in identifies and corrects midrange problems on its own. No reference material, no calibration, no setup. Insert it, play your audio, press FIX, and the plug-in does the work. For situations where you want to match a specific tonal reference, the Match Profile system lets you load saved profiles learned from reference material, targeting a specific sound rather than general correction.

The five dynamic effects are organized into two groups. The **Low Mids** section offers **Demud** (cuts muddy buildup around 200 Hz), **Dethin** (restores low-mid body in the same 200 Hz region), and **Dehonk** (tames boxy honk in the 500 Hz to 1 kHz octave). The **High Mids** section provides **Denasal** (reduces nasal character around 2.5 kHz) and **Deharsh** (smooths harshness around 3.5 kHz).

Beyond resonance correction, the plug-in includes a **Balance** section that corrects overall tonal balance across the full frequency range.

The plug-in centers around a unique Mid/Side spectral display with an integrated HINTMAP which shows you which mix problems you may have, when and where they happen. A suite of listening tools helps you drive with your ears. The interface is organized into four views: an **OVERVIEW** page showing the most important controls at a glance, plus dedicated **RESONANCE**, **BALANCE**, and **PROFILE** pages.

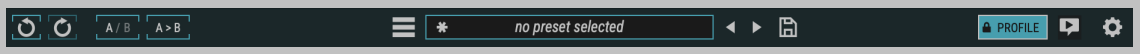
1.1 Getting Started

1. Insert Fixate:Midrange on your track or bus. **ANALYZE** is on by default and begins working as soon as audio plays.
2. Press **FIX**. The plug-in sets all five resonance controls and the balance correction for you, targeting detected midrange problems.
3. Fine-tune individual controls to taste. Your ears always have the final say.
4. To match a specific reference instead, load a Match Profile from the Mode Dropdown.

Chapter 2

Navigation Bar

At the very top of the plug-in is a navigation bar which allows you to undo and redo changes, access the preset librarian, settings, and manage several other global features of the plug-in.



2.1 UNDO/REDO

On the far left is an UNDO and REDO button. After changing any plug-in parameter in the plug-in interface the UNDO button will activate. Pressing it at this point will undo this action. At this point the REDO button will become active, and pressing it will redo this action. Multiple levels of undo are available and you can move back through several changes to reach an earlier state.

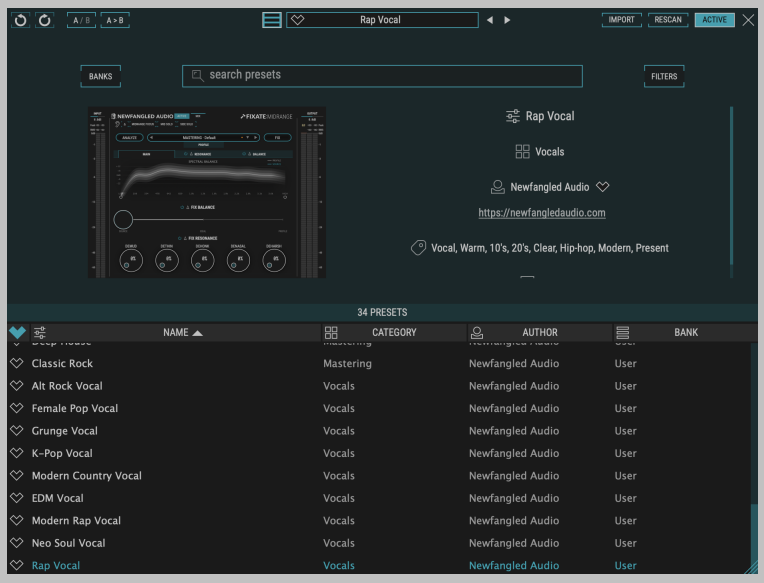
2.2 A/B COMPARE

Next you'll find buttons labeled A/B and A>B. These two buttons allow you to easily toggle between two states of the plug-in and compare the sounds. By default the plug-in is in the A state and you'll notice that the "A" is highlighted. In this state pressing the A>B button will copy the A state to the B state. Toggling the A/B button will switch to the B state, highlighting the "B" and switching the A>B button to B>A (allowing you to copy the B state to the A state).

Any changes you make in the plug-in interface will update the highlighted state. In this way, you can copy the A state of the plug-in to the B state, make changes to the A state, and use the A/B button to compare these two states.

2.3 LIBRARY

The Library button launches the Preset Librarian which can be used to explore the plug-ins presets based on any combination of category, author, tags, or favorites.



The Preset Librarian is split into four main sections.

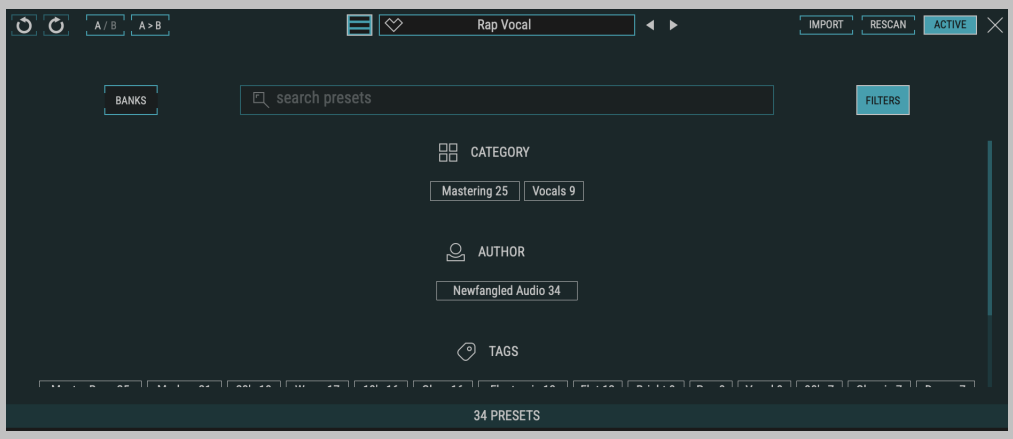
2.3.1 SEARCH and FILTERS

The top of the Preset Librarian shows the BANKS, SEARCH BAR, and FILTERS.

Typing a phrase into the search bar will allow you to search all the presets by a given phrase. You can further restrict this search by selecting a BANK or FILTERS.

Pressing the BANKS button opens a screen which allows you to restrict your search to the presets in either the FACTORY or USER bank. Or additional preset banks if you have any installed.

Pressing the FILTERS button opens a screen which allows you to restrict your search to presets matching a specific CATEGORY, AUTHOR, or one of several TAGS. Additionally, you can restrict your search to FAVORITES if desired.



2.3.2 PRESET LIST

The bottom of the Preset Librarian shows the list of presets which match the current criteria. It displays the FAVORITE status using a heart icon, the preset NAME, the preset CATEGORY, the preset AUTHOR, and the preset BANK. You can sort the list by any of these. The up and down arrows on your keyboard will allow you to toggle through the presets.

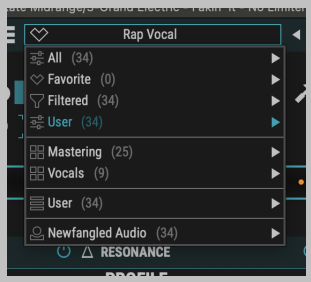
2.3.3 PRESET INFO

The center right of the Preset Librarian displays information about the currently loaded preset. This area shows the preset name, a short description if available, the category, the preset author - including a link to their work, the preset's tags, and its bank.

2.3.4 PLUGIN UI

The center left of the Preset Librarian displays a miniature version of the plug-in UI. This plug-in UI is not editable, but it is live and will show you the current settings of the plug-in, as well as any meters. We've found it incredibly useful to see this display as we've toggled through presets to get a sense of what each preset does.

2.4 PRESET SELECTOR



In the center of the navigation bar is a dropdown preset selector. Clicking on this preset selector will show you the plug-ins presets in several views.

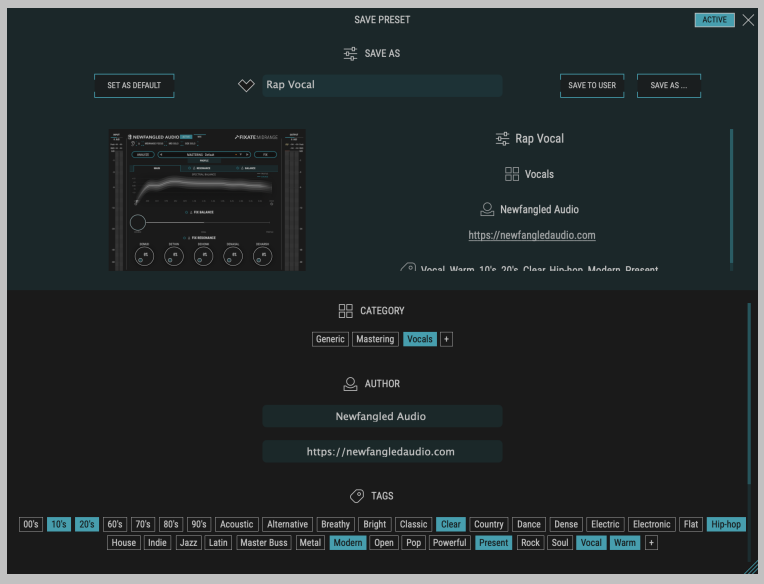
1. All will show you all the presets in alphabetical order.
2. Favorite will show you all your favorite presets in alphabetical order.
3. Filtered will show you all the presets which correspond to the current filter in alphabetical order. This filter is set up in the preset librarian.
4. Underneath these the presets are displayed according to their Category, as assigned when a preset is saved.

Once you load a preset from this dropdown list the Left and Right arrow buttons allow you to toggle through the selected subgroup in order. For more advanced preset selection click the LIBRARY button to enter the preset librarian.

Additionally, if you like the sound of the current preset you can click the heart icon to set the loaded preset as a favorite. If a loaded preset is modified the heart icon will become an asterisk and the preset name is italicized, indicating that the current sate no longer matches that of the saved preset.

2.5 SAVE

The SAVE button launches the preset save screen where you can save a preset and assign categories, tags, and descriptions, as well as set the default state of the plug-in.



2.5.1 PRESET NAME

This field sets the preset name. There can only be one preset with a given name.

2.5.2 SET AS DEFAULT

This button will set the current state of the plug-in as a plug-ins default. This means when you load the plug-in the it will default to these settings.

2.5.3 HEART ICON

This will mark this preset as a favorite when you save it.

2.5.4 SAVE BUTTON

This button saves the preset

2.5.5 EXPORT BUTTON

In order to be browsed by the plug-in the presets are saved in a particular folder. However, if you want to save the preset elsewhere on your computer you can use the EXPORT button to export it as a file.

2.5.6 PLUGIN UI and DESCRIPTION

This section shows the current settings of the plug-in, and how it will appear in the preset librarian.

2.5.7 CATEGORY

Set the category for the preset you are saving. A preset can have only one category. If the preset doesn't fit into any of the existing categories you can use the (+) button to create a new one.

The existing categories are based on those that are found in the existing presets. If you create a new one it will appear in this list with an "X" on it. If you decide not to use the newly created CATEGORY you can remove it by clicking on the "X". However, once the preset is saved this category will be permanent and available to all newly saved presets, unless you delete all presets which use it.

2.5.8 AUTHOR

The AUTHOR section allows you to add your name and a url if you maintain a presence on the web. This will be automatically populated with the information from the last saved preset, so you will only likely need to enter it once.

2.5.9 TAGS

You can add any number of TAGS to a saved preset. These TAGS will allow your preset to be found in the preset librarian. It's best to add the tags that apply to the preset, and don't add the ones that don't. You can create a new tag using the (+) button.

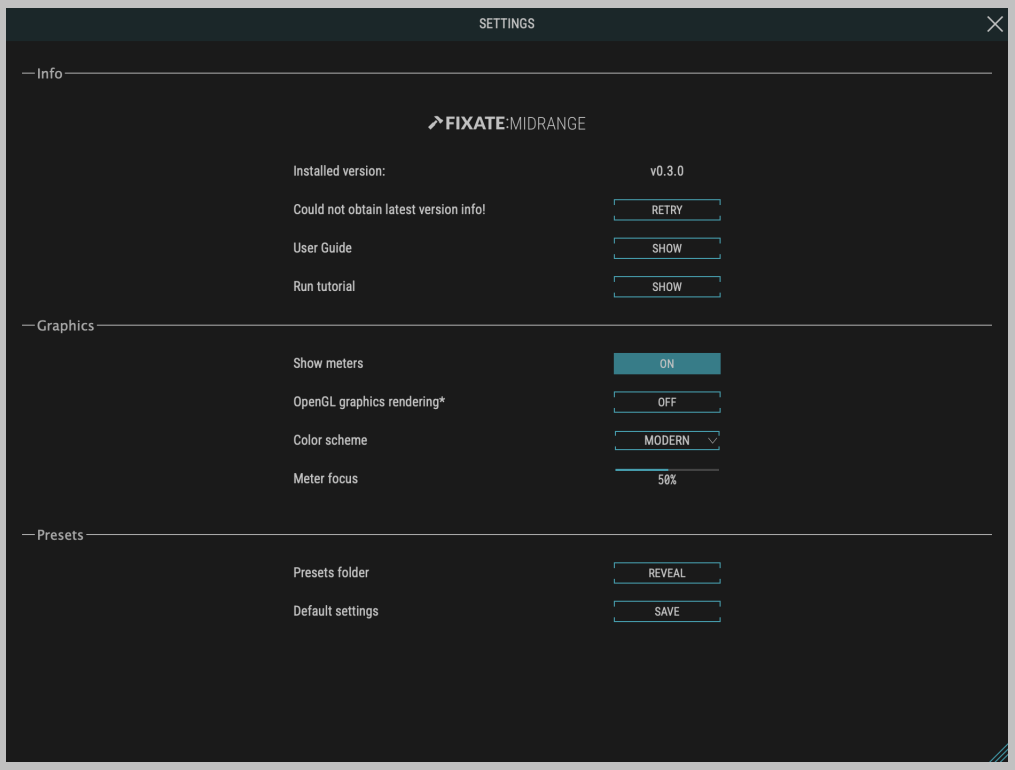
The existing tags are based on those that are found in the existing presets. If you create a new one it will appear in this list with an "X" on it. If you decide not to use the newly created TAG you can remove it by clicking on the "X". However, once the preset is saved this tag will be permanent and available to all newly saved presets, unless you delete all presets which use it.

2.5.10 DESCRIPTION

If desired you can add a short description to the preset. It's best to use this field to add information about what a preset is for, or any hints for a user about how to use it.

2.6 SETTINGS

The SETTINGS button pops down a settings page which contains additional options.



2.6.1 INSTALLED VERSION

This displays the version number that is currently installed. If you are running the latest version it will tell you. If there is an update an UPDATE button will appear. Clicking this button will bring you to the downloads page where you can get the latest version.

2.6.2 USER GUIDE

Pressing the SHOW button will launch this user guide.

2.6.3 SHOW METERS

The SHOW METERS button will show or hide the resonance meter glow visualization in the center of the plug-in.

2.6.4 OPENGL GRAPHICS RENDERING

The USE OPENGL button will enable OpenGL rendering of the UI. For this setting to take effect you must close and reopen the UI. If you find that the plug-in UI renders better with OpenGL on or off on your computer you can save this as the default setting and new instantiations will always load using this setting.

2.6.5 COLOR SCHEME

The COLOR SCHEME dropdown will allow you to choose one of several different color schemes for your viewing pleasure.

2.6.6 PRESETS FOLDER

Clicking the REVEAL button will bring you to the presets folder. This is only necessary if you want to share your presets with someone else, or access these files for another reason.

2.6.7 DEFAULT SETTINGS

Pressing the SAVE button will save all the current settings as the default for the plug-in. This is useful if you'd like a different starting point than the one we've provided.

2.7 Resize

The bottom right corner of the UI will allow you to resize the plug-in. To change the default plug-in size drag the plug-in to the desired size and save over the default preset.

Chapter 3

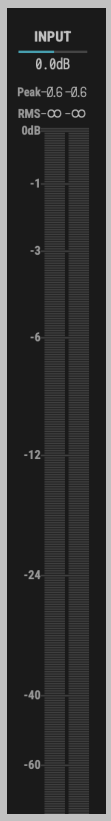
Global Controls

3.1 Controls

Fixate:Midrange uses several control types, including rotary knobs, vertical sliders, and toggle buttons, all of which have tool-tips which will give you more information about their function if you hover your mouse above them.

In general, all knobs and sliders can be double-clicked to type in a specific value, option-clicked to return them to their default value, or command-clicked (control-clicked on Windows) to enter a vernier mode for fine tuning.

3.2 Input/Output Levels and Meters



The left and right hand sides of the plug-in have matching vertical tick meters which display the INPUT (on the left) and OUTPUT (on the right) levels in Peak (horizontal ticks) and RMS (solid bar and numerical display) formats. Clicking the peak hold section or bypassing the plug-in will clear the held peak value.

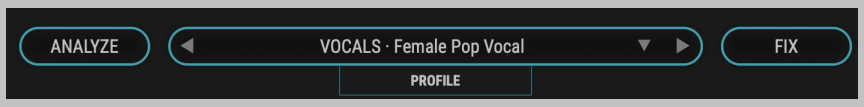
Above the INPUT meter is a knob for the INPUT LEVEL, and above the OUTPUT meter is the OUTPUT LEVEL. Use these for proper gain staging and compensation of the level changes made by the plug-in. The plug-in automatically compensates for gain changes introduced by the dynamic effects.

3.3 Active and Mix

The **ACTIVE** button is located near the top left of the plug-in UI. It activates or bypasses all the processing in the plug-in.

The **MIX** knob allows you to blend the dry and wet audio to dial in just the right amount of processing.

3.4 The Profile Strip



Below the header row is the Profile Strip, which contains three elements arranged left to right: the **ANALYZE** button, the **Mode Dropdown**, and the **FIX** button.

3.4.1 Mode Dropdown

The Mode Dropdown in the center of the strip shows the current mode. By default it displays "AUTOMATIC," indicating the plug-in is automatically fixing detected problems.

The dropdown is divided into three clickable zones:

- **Left arrow** cycles to the previous profile. Cycling past the first profile returns to AUTOMATIC.
- **Right arrow** cycles to the next profile.
- **Center area** opens a popup menu. AUTOMATIC appears at the top for automatic fix mode. Below it, saved Match Profiles are organized by category. At the bottom, "Manage Profiles..." opens the Profile page for creating, editing, and learning new profiles.

When a Match Profile is loaded, the dropdown shows the category and profile name (e.g. "MASTERING · Rock Reference"). An orange dot appears when the current settings differ from the loaded profile.

3.4.2 The ANALYZE Button

The **ANALYZE** button sits to the left of the Mode Dropdown. When active, the plug-in analyzes the incoming audio, building the information it needs to apply corrections. ANALYZE defaults to on when the plug-in is first instantiated, so the plug-in begins working as soon as audio plays. Toggling ANALYZE off stops the analysis; toggling it back on starts fresh. When prior analysis data exists, the button text reads REANALYZE.

3.4.3 The FIX Button

The **FIX** button sits to the right of the Mode Dropdown. Pressing it applies corrections to all five resonance effects and sets the Balance correction to the BALANCED position. In Automatic mode, FIX targets de-

tected midrange problems. With a Match Profile loaded, FIX targets that profile's specific tonal reference. If ANALYZE is already running when you press FIX, the accumulated analysis data is kept and FIX promotes seamlessly from analyze-only mode to full correction mode. The button illuminates while active.

FIX is designed to give you a quick starting point. After pressing FIX, fine-tune individual controls to taste. If you manually adjust any of the resonance knobs after FIX, those manual settings will be preserved when you switch profiles; the plug-in only recalculates resonance knob positions on profile load if they were last set by a FIX operation.

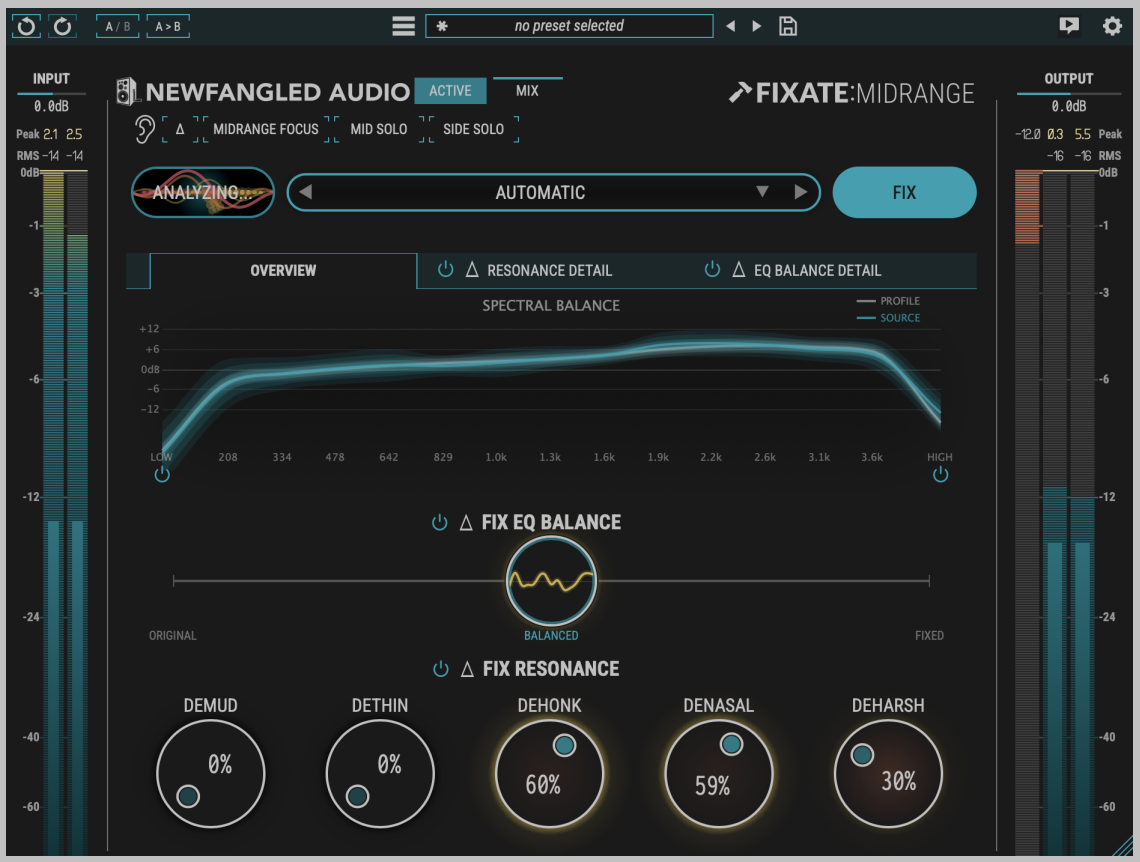
3.5 OVERVIEW, RESONANCE, and BALANCE Tabs

Below the Profile Strip is a tab bar with three tabs: **OVERVIEW**, **RESONANCE**, and **BALANCE**. Selecting a tab displays the corresponding page. The OVERVIEW tab is selected by default. The Profile page is accessible via "Manage Profiles..." in the Mode Dropdown.

Each of the RESONANCE and BALANCE sections has an independent on/off power toggle, visible on the Overview page. Turning off the RESONANCE toggle disables all five dynamic resonance effects. Turning off the BALANCE toggle disables spectral balance correction. The two sections can be used independently or together.

Chapter 4

Overview Page



The Overview page is the default view when you open Fixate:Midrange. It provides a consolidated overview of both the Balance and Resonance sections, giving you quick access to the most important controls without switching tabs.

4.1 Spectral Balance Chart

The top of the Main page shows a Spectral Balance chart identical to the one on the Balance page. It displays the PROFILE reference curve (gray) and the SOURCE curve (control color) across 15 frequency bands: LOW, 13 midrange bands, and HIGH. A legend in the upper-right corner identifies the two curves.

The chart only displays the SOURCE curve once real audio has been analyzed. On a fresh instance with ANALYZE active, the chart shows only the PROFILE reference until audio plays.

4.1.1 LOW and HIGH Enable Buttons

Small power-icon toggle buttons appear directly below the LOW and HIGH frequency labels on the chart. These enable or disable balance correction for the lowest and highest bands, the same controls available on the Balance page. The 13 midrange bands are always corrected when balance processing is active.

When a band is disabled, the corresponding region of the chart fades out to indicate it is not being corrected.

4.2 EQ BALANCE

Below the chart is the **EQ BALANCE** section with a label, on/off power toggle, and delta button. In Automatic mode the heading reads "FIX EQ BALANCE" and the slider endpoint reads "FIXED." When a Match Profile is loaded, these change to "MATCH EQ BALANCE" and "MATCHED." The horizontal slider has three reference positions: ORIGINAL (left, 0%), BALANCED (center, 50%), and FIXED or MATCHED (right, 100%).

The delta button lets you hear only what the balance section is changing, useful for evaluating the spectral correction in isolation.

4.3 RESONANCE

Below the balance section is the **RESONANCE** section with a label, on/off power toggle, and delta button. In Automatic mode the heading reads "FIX RESONANCE"; with a Match Profile loaded it reads "MATCH RESONANCE." Five knobs provide direct access to the resonance controls: **DEMUD**, **DETHIN**, **DEHONK**, **DENASAL**, and **DEHARSH**. These are the same controls available on the Resonance page. Each knob shows activity glow when the effect is actively correcting, and hint glow when potential problems are detected.

The delta button lets you hear only what the resonance section is changing.

Chapter 5

Resonance

5.1 The Resonance Meter

The resonance meter is the large visualization in the center of the plug-in. Two meter modes are available: the Spectrum Meter and the Res-

onance Meter. Both show mid and side channel activity and integrate with the Hintmap and cure visualizations.

5.1.1 Spectrum Meter

The Spectrum Meter is the default visualization on the Resonance page. It shows the frequency content of your audio as a continuous spectrum covering roughly 130 Hz to 10 kHz.

The mid channel grows upward from the center of the display and the side channel grows downward. Spectral peaks that stand out from their surroundings glow brighter, making it easy to spot resonances and problem frequencies at a glance.

When the Hintmap is enabled, the hint color highlights detected problems at the specific frequencies where they occur. Where corrections are actively being applied, the cure color replaces the hint color, giving you immediate visual confirmation that the plug-in is working on a problem. This lets you see exactly which frequencies within a problem region are contributing most, helping you decide whether to adjust a threshold or change the mid/side balance for a particular effect.

When no audio is playing, the meter shows a subtle static pattern.

5.1.2 Meter Toggle

Two toggle buttons above the meter let you switch between the Spectrum Meter and the Resonance Meter. The Spectrum Meter is shown by default. Your choice is remembered across sessions.

The Spectrum Meter gives you fine frequency detail, which is especially helpful for pinpointing exactly where a resonance sits within a band; for example, distinguishing a 700 Hz box from a 900 Hz honk. The Resonance Meter provides a quick overview of how energy is distributed across the midrange bands.

5.1.3 Resonance Meter

The Resonance Meter displays real-time energy with a focus on the midrange, shown as 16 visual columns. The meter displays the relative energy for 14 midrange bands, for both the mid and side channels. The resonance meter glow visualization can be toggled on or off using the SHOW METERS option in the settings page.

5.1.4 Meter Structure

The meter is organized into three regions. The first column covers the **Lows**, the frequency range below the midrange. In the center are 14 columns covering the expanded **Mids** region; these are the critical bands where Fixate:Midrange's dynamic effects operate, and they receive the

most visual detail on the meter. The last column covers the **Highs**, the frequency range above the midrange.

5.1.5 Energy and the Neighborhood Ratio

Each section on the meter displays the energy level of that frequency region in real time. What matters for midrange correction isn't the absolute energy in a band, but how that energy compares to its immediate neighbors. A band that is significantly brighter than the bands around it indicates a potential spectral imbalance, a peak or resonance that may need attention.

5.1.6 Mid and Side Channels

The resonance meter shows both the mid and side channels of your audio. Mid/side (often called MS) encoding splits a stereo signal into two components: the **mid** channel contains everything that is common to both left and right (the center of the stereo image), while the **side** channel contains everything that differs between left and right (the stereo width). This separation is useful because midrange problems often behave differently in the center and sides of a mix. For example, mud from a centered bass guitar versus honk from a panned rhythm section.

5.1.7 Five Midrange Problems

Fixate:Midrange focuses on five specific midrange problems, each associated with a particular frequency region:

- **Mud**, centered around 200 Hz. Mud is a low-mid buildup that makes a mix sound thick, cloudy, or undefined. It typically appears when bass instruments and low-mid rhythm parts stack up in the same region.
- **Thinness**, the complement of mud, also centered around 200 Hz. When the low mids are too thin, the mix loses warmth and body. Dethin restores what overzealous cutting or naturally lean source material takes away.
- **Honk / Box**, in the range of 500 Hz to 1 kHz. Boxy or honky resonances in this octave give audio a "cupped hands" or "speaking into a tube" quality. They often come from room modes, cabinet resonances, or instrument body resonances.
- **Nasal**, centered in the area of 2.5 kHz. Nasal character gives audio a pinched, vowel-like quality. It is especially noticeable on vocals, brass, and some string instruments.
- **Harsh**, centered at approximately 3.5 kHz. Harshness in this upper-mid region creates a fatiguing, edgy quality that makes a mix tiring to listen to over time. It is common in dense arrangements and on sources with strong transient content.

5.1.8 The Hintmap

When the **Hintmap** toggle on the Resonance page is enabled, a colored glow overlay appears on the resonance meter. Each color corresponds to one of the five dynamic effects, and the glow intensity reflects how strongly a problem is detected in that band. This gives you immediate visual feedback about where midrange issues are occurring, even before you engage any processing.

When the plug-in is actively correcting a detected problem, the cure color replaces the hint color on the affected bands. This gives you a clear visual distinction between problems the plug-in has detected (hint color) and problems it is currently fixing (cure color). If you see persistent hint color without cure color, the effect's amount may be set to zero or the threshold may be too high for the correction to engage.

The Hintmap is a guide, not a verdict. Use your ears to confirm what you see. If the Hintmap highlights a problem area but your ears tell you it sounds fine, trust your ears. The sensitivity of each Hintmap color can be tuned in the Profile Page (see the Profiles chapter for details).

5.2 The Resonance Controls

The five main controls address the five midrange problems described in the previous chapter. Each one is a dynamic effect that listens for a specific spectral imbalance and corrects it only when the problem is actually present, leaving the rest of your signal untouched.

Each effect has three controls. The main knob sets the maximum amount of correction. The **TOLERANCE** slider sets the minimum spectral imbalance threshold (in dB, range 0–6 dB) that a band must exceed before any correction is applied; a higher threshold makes the effect more conservative, ignoring subtle imbalances, while a lower threshold lets it react to smaller deviations. Each effect has a different default threshold, chosen to match how perceptible each type of midrange problem is. The **MID/SIDE** knob controls how the processing is distributed between the mid and side channels.

5.3 Demud

The **DEMUD** knob controls the amount of dynamic mud reduction applied to the band centered at approximately 200 Hz. Demud listens for excess energy in this band relative to its neighbors and dynamically reduces it, cleaning up low-mid muddiness without permanently removing warmth from your signal. At full, it can apply up to 12 dB of cut.

The **DEMUD TOLERANCE** sets the spectral-ratio threshold for this effect. The default is 1.5 dB.

The **DEMUD MID/SIDE** knob controls how this processing is distributed between the mid and side channels. At the **MID** position, Demud processes only the center channel. At the **SIDE** position, it processes only the stereo difference. Intermediate positions blend between the two, letting you target mud that lives in the center of the mix differently from mud in the sides.

5.4 Dethin

The **DETHIN** knob is the complement to Demud. It operates on the same 200 Hz region and can apply up to 6 dB of dynamic boost, restoring body and fullness when the low mids are too thin.

The **DETHIN TOLERANCE** sets the spectral-ratio threshold for this effect. The default is 2.0 dB, the highest of the five effects, reflecting that some low-mid variation is natural and only larger dips should trigger a boost.

The **DETHIN MID/SIDE** knob works identically to the Demud MID/SIDE; it sets the mid/side distribution, letting you add body to the center of your mix without affecting the sides, or vice versa.

5.5 Demud/Dethin Link

A link button sits between the Demud and Dethin knobs. When enabled, adjusting either knob adjusts the other by the same amount. This is useful when you want to coordinate mud reduction and fullness restoration together, keeping the two effects in proportion as you dial in the right balance of low-mid correction.

5.6 Dehonk

The **DEHONK** knob controls dynamic honk reduction in the 500 Hz to 1 kHz region. At full, it can apply up to 12 dB of cut. Dehonk monitors this range and reduces any areas that are sticking out, taming boxy or honky resonances.

The **DEHONK TOLERANCE** sets the spectral-ratio threshold for this effect. The default is 1.5 dB.

The **DEHONK MID/SIDE** knob sets the mid/side balance for this effect, so you can treat boxy resonances in the center and sides of your stereo image independently.

5.7 Denasal

The **DENASAL** knob controls dynamic nasal reduction centered in the area of 2.5 kHz. At full, it can apply up to 18 dB of cut in the appropriate

area while adding additional compensation to preserve overall tonal balance. Denasal dynamically reduces nasal character only when it detects excess energy in this region.

The **DENASAL TOLERANCE** sets the spectral-ratio threshold for this effect. The default is 1.0 dB, lower than the Low Mids effects because nasal character can be noticeable even at small levels of spectral excess.

The **DENASAL MID/SIDE** knob controls the mid/side distribution. Nasal character often differs between the center and sides of a mix, so adjusting this knob lets you target the problem where it actually lives.

5.8 Deharsh

The **DEHARSH** knob controls dynamic harshness reduction in the area of 3.5 kHz. At full, it can apply up to 24 dB of total cut, while compensating to maintain spectral balance. Deharsh dynamically smooths harsh, fatiguing upper-midrange content.

The **DEHARSH TOLERANCE** sets the spectral-ratio threshold for this effect. The default is 0.5 dB, the lowest of the five effects because harshness is fatiguing even at small levels of spectral excess.

The **DEHARSH MID/SIDE** knob sets the mid/side balance. Harshness can come from both centered sources and panned elements, so having independent control over where the smoothing is applied gives you precise stereo control.

5.9 Algorithm

Three radio buttons below the resonance meter select the spectral analysis algorithm used for both the meter display and the dynamic processing:

- **TRANSPARENT** shows spectral peaks relative to local RMS energy. This is the most literal view of how energy is distributed across the midrange.
- **NATURAL** highlights peaks while excluding self-energy from the reference, giving a more perceptually weighted picture of spectral imbalances.
- **CONTROLLED** shows spectral curvature via a second-derivative analysis. This mode emphasizes sharp peaks and dips rather than broad tonal shifts.

The algorithm choice affects what the resonance meter shows and how the dynamic processing detects problems. Try each mode on your material to see which gives you the most useful feedback.

5.10 HINTMAP Toggle

The **HINTMAP** button on the Resonance page enables or disables the colored hint overlay on the resonance meter. When enabled, colored glows appear on the meter columns to indicate where potential midrange problems are detected. Each of the five effects has its own color. The intensity of the glow reflects the severity of the detected imbalance. See the Hintmap subsection in the Resonance Meter section for more details.

5.11 FIXMAP Toggle

The **FIXMAP** button on the Resonance page shows active corrections on the spectrum meter. When enabled, the meter highlights the frequency regions where the plug-in is currently applying corrections, giving you visual feedback about where processing is active. This complements the HINTMAP, which shows detected problems, by showing what is actually being corrected.

5.12 Per-Band Enable, Solo, and Delta

Each of the five dynamic effects has a set of per-band controls that appear when you hover over the effect's knob area.

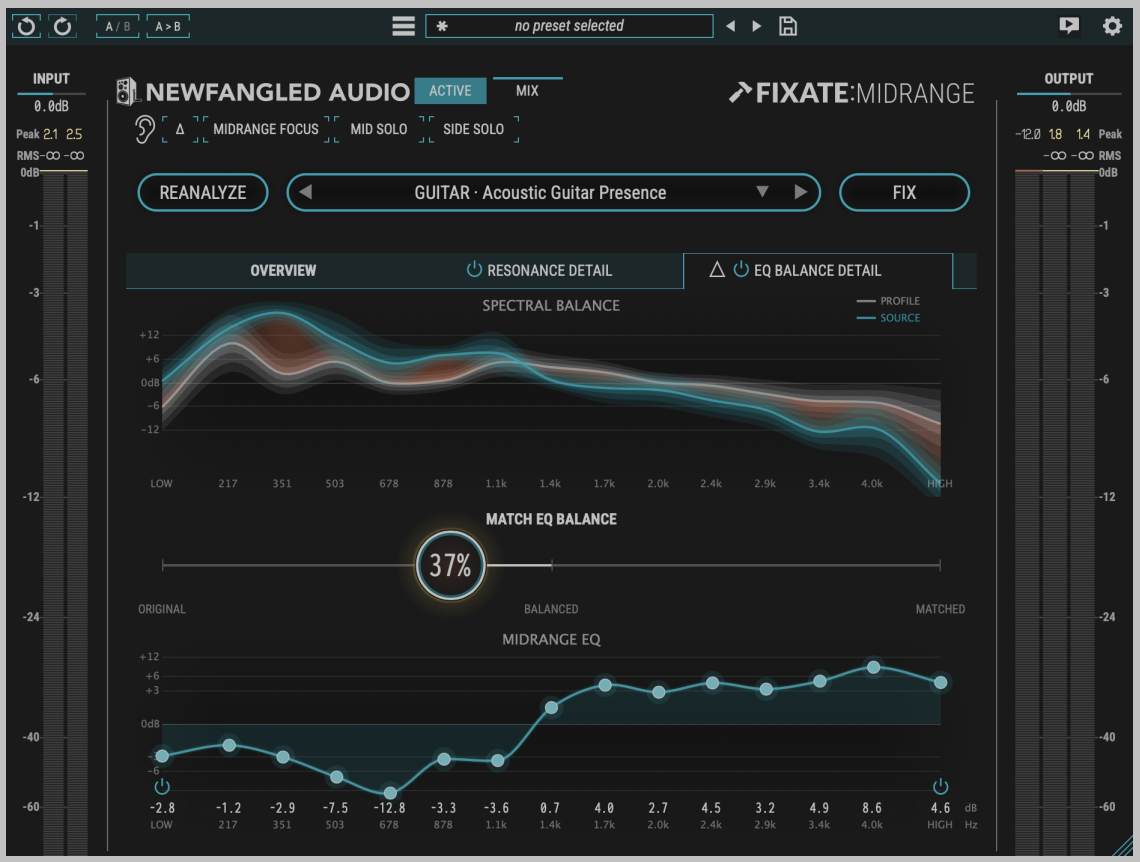
Enable toggles the individual effect on or off without affecting the other effects.

Solo (S) isolates the frequency band(s) that the effect operates on. When soloed, you hear only the audio in that effect's frequency region. Solo buttons are mutually exclusive; engaging one disengages any other active solo.

Delta (Δ) combines solo with delta mode, allowing you to hear only what the effect is changing. This is invaluable for understanding exactly what each effect is doing to your audio and for dialing in the right amount of processing. Delta buttons are also mutually exclusive.

Chapter 6

Balance



The Balance section matches the spectral balance of your audio to a learned reference. It is accessible via the **BALANCE** tab on the main page and has its own on/off power toggle that can enable or disable balance correction independently of the resonance effects.

While the Resonance controls address specific midrange problems (mud, thinness, honk, nasality, harshness), the Balance section works across the entire frequency range to correct broader tonal imbalances. Together they provide both targeted problem-solving and overall spectral shaping.

6.1 The Balance Curve Chart

The top of the Balance page displays a spectral balance chart covering 15 frequency bands: a LOW band, 13 midrange bands, and a HIGH band. The chart shows:

- The **PROFILE** reference curve (gray) representing the learned target spectral balance, drawn as a mean line with variance shading above and below.
- The **SOURCE** curve (displayed in the control color when audio is playing) representing the current audio's spectral balance, also with variance shading.
- Colored gradient regions between the two curves that indicate the direction and probability of spectral mismatch.

Horizontal grid lines mark -12, -6, 0, $+6$, and $+12$ dB. Frequency labels appear along the bottom of the chart, and a legend in the upper-right corner identifies the PROFILE and SOURCE curves.

6.2 Balance Learning

The **LEARN** button appears in the top-right area of the chart. Click it to begin learning the spectral balance from incoming audio. The plug-in captures the mean energy and variance of each frequency band as audio plays. Click the button again to stop learning. The learned result becomes the PROFILE reference curve that balance correction targets.

On a fresh plug-in instance, ANALYZE is active by default, so the plug-in immediately begins building a spectral model of your source material. This is separate from the LEARN button; ANALYZE builds the source curve used for balance correction, while LEARN captures a reference profile from known-good audio.

6.3 CORRECT BALANCE Slider

Below the chart is a horizontal slider labeled **FIX EQ BALANCE** (or **MATCH EQ BALANCE** when a Match Profile is loaded), with three reference positions:

- **ORIGINAL** (left, 0%) applies no spectral correction.

- **BALANCED** (center, 50%) applies a balanced correction.
- **FIXED** or **MATCHED** (right, 100%) applies full correction.

In most cases, a setting near the BALANCED position provides the most natural result. The FIX button automatically sets this slider to the BALANCED position.

6.4 Per-Band Offset Knobs

Below the slider, 15 small knobs are aligned with the chart's frequency bands. Each knob displays the automatic correction amount and allows you to add a manual offset in dB. Use these to fine-tune individual band corrections after setting the overall balance amount. Values are displayed in dB.

6.5 LOW and HIGH Enable Toggles

Power icon buttons appear above the LOW and HIGH offset knobs. These toggles enable or disable balance correction for the lowest and highest frequency bands independently. The same toggles are available below the Spectral Balance chart on the Main page. The 13 midrange bands are always corrected when balance processing is active. This lets you focus balance correction on the midrange while leaving the extremes untouched, or include them as needed.

When a band is disabled, the corresponding region of the Spectral Balance chart fades out to indicate that no correction is being applied there.

Chapter 7

Profiles

Fixate:Midrange's default Automatic mode identifies and fixes midrange problems on its own. The Match Profile system serves a different purpose: it lets you match your audio to a specific tonal reference. A profile captures threshold, sensitivity, and tonal balance values learned from reference material, and when loaded, the plug-in works to make your audio match that reference rather than simply fixing what it detects.

This is useful when you have a specific sound in mind: a reference track, a previous mix, or a genre-standard tonal target. Profiles can be saved and recalled for different workflows: one for mastering rock, another for vocal mixing, another for acoustic instruments.

7.1 Automatic Mode

In Automatic mode, Fixate:Midrange identifies and fixes midrange problems without a reference. The plug-in analyzes your audio, determines what corrections are needed, and applies them.

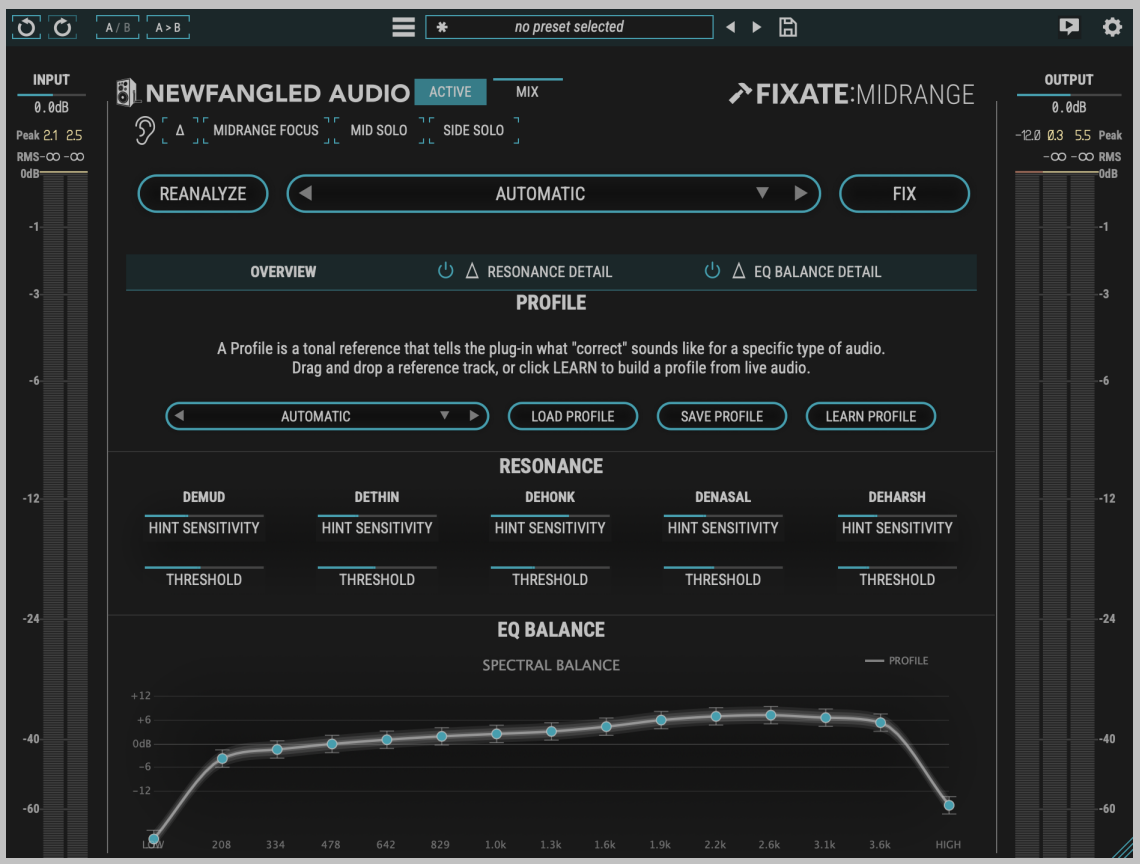
7.2 The Mode Dropdown

The Mode Dropdown is the center element of the Profile Strip, between the ANALYZE and FIX buttons. By default it displays "AUTOMATIC" for automatic fix mode. When a Match Profile is loaded, it displays the category and profile name, for example "MASTERING · Rock Reference."

Clicking the left or right arrows cycles through available profiles. Cycling past the first profile returns to AUTOMATIC. Clicking the center area opens a popup menu with AUTOMATIC at the top, Match Profiles organized by category below, and "Manage Profiles..." at the bottom.

When the current settings differ from the loaded profile, an orange modified dot appears next to the name.

7.3 The Profile Page



Selecting "Manage Profiles..." from the Mode Dropdown opens the Profile Page, which replaces the current page in the display area. The Profile Page is organized into three sections from top to bottom:

7.3.1 PROFILE Section

The top of the page contains a brief explanation of the profile system, a Profile Display bar showing the current profile (with the same navigation arrows and menu as the main page's Profile Bar), and three action buttons:

- **LOAD PROFILE** opens the Load Profile overlay to browse and select a saved profile.
- **SAVE PROFILE** opens the Save Profile overlay to save your current settings as a named profile.
- **LEARN PROFILE** starts or stops profile learning from incoming audio.

You can also drag and drop audio files onto the Profile Page to learn a profile offline (see "Learn Profile" below).

7.3.2 RESONANCE Section

The middle section displays two rows of five knobs, one column per effect (Demud, Dethin, Dehonk, Denasal, Deharsh):

The **top row** contains the five Hint Sensitivity knobs (labeled DEMUD HINT, DETHIN HINT, DEHONK HINT, DENASAL HINT, and DEHARSH HINT). These control how aggressively each effect's hints appear on the resonance meter hintmap. Higher sensitivity means hints appear for smaller deviations from the expected spectral balance; lower sensitivity means only more pronounced problems are flagged. The Hint Sensitivity knobs do **not** affect the audio processing; they only change the visual hintmap display.

The **bottom row** contains the same five Threshold knobs available on the Resonance page. Adjusting them here or on the Resonance page updates the same underlying value.

7.3.3 BALANCE Section

The bottom section displays a Balance Curve Chart showing the learned spectral reference. In this view, the chart is interactive:

- Drag the **mean dots** vertically to adjust individual band reference values in dB.
- Drag the **sigma brackets** (the error-bar serifs above and below each dot) to adjust the expected variance for each band.
- Double-click a dot or bracket to reset it to its default value.

This gives you precise manual control over the balance reference shape, complementing what the automatic learning captures.

7.4 Why Tuning the Hintmap Matters

Humans instinctively trust their eyes more than their ears. A brightly glowing hint on the resonance meter can make you reach for a control even when your ears aren't telling you there's a problem. By tuning the hintmap sensitivities to match your material, you ensure the visual display reflects what you're actually hearing, rather than distracting you with false positives.

Think of the hintmap as a guide that directs your attention to areas worth listening to, not a diagnosis that tells you what to fix. What your ears tell you always takes precedence over what the hintmap shows.

7.5 Learn Profile

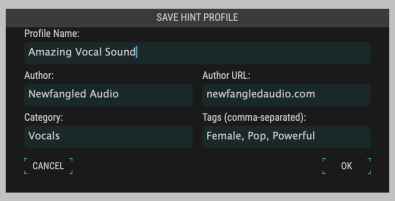
The **LEARN PROFILE** button lets the plug-in automatically calibrate hint sensitivity and threshold values to your source material.

Online learning: Play a section of known-good reference audio, material that represents the tonal balance you're aiming for, and click LEARN PROFILE. The plug-in listens to the incoming audio and adjusts the five sensitivity knobs and five threshold knobs so that normal, well-balanced audio does not trigger hints or corrections. Click the button again to stop learning. While learning is active, you can watch the ten knobs adjust in real time as the plug-in accumulates statistics from the reference audio.

Offline learning: You can also drag and drop audio files directly onto the Profile Page. Supported formats include WAV, AIF, AIFF, FLAC, MP3, OGG, and CAF. A progress indicator shows "Learning... X%" while the plug-in analyzes the file. When analysis completes, the resulting profile is automatically named "Learned from (filename)." This is useful when you have a reference track on disk but don't want to play it through the plug-in in real time.

Once calibrated, the hintmap will only highlight deviations from your reference material's spectral profile, and the thresholds will be set so that corrections engage only when the detected ratio exceeds what was observed in the reference material.

7.6 Saving Profiles

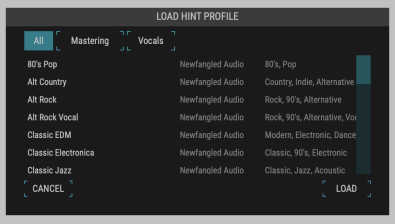


Clicking the **SAVE PROFILE** button opens a Save Profile overlay dialog with five fields:

- **Profile Name**, a name for this profile.
- **Author**, your name. This is auto-filled from the last profile you saved (or from your system username if no previous save exists).
- **Author URL**, an optional web link for the profile author.
- **Category**, a category for organizing the profile (e.g., "Mastering," "Vocal," "Drums Buss").
- **Tags**, comma-separated tags for further classification.

The dialog has **CANCEL** and **OK** buttons. Pressing OK saves your current sensitivity, threshold, and balance reference settings as a `.nfaprofile` file. This is useful for building a library of profiles tailored to different workflows, genres, or source types; for example, one profile for vocal mixing and another for dense rock arrangements.

7.7 Loading Profiles



There are two ways to load a saved profile:

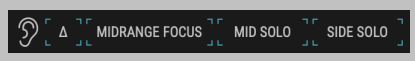
Quick selection: Use the Mode Dropdown on the main page. Click the center area to open the popup menu and select a profile by category. You can also use the left and right arrows to cycle through profiles.

Browse and load: Click the **LOAD PROFILE** button on the Profile Page to open the Load Profile overlay. Category filter buttons across the top let you narrow the list to a specific category. Below is a scrollable profile list displaying each profile's name, author, and tags. Single-click a profile to select it, then press the **LOAD** button to apply it, or double-click a profile to load it immediately. A **CANCEL** button closes the overlay without changes.

Loading a profile restores all sensitivity, threshold, and balance reference values to their saved state. Profiles are stored alongside your other Newfangled Audio settings so they persist across sessions.

Chapter 8

Listening Tools



Your ears always take precedence over any visual display or preset suggestion. To help your ears make the best decisions, Fixate:Midrange includes a comprehensive set of listening tools that let you isolate, compare, and examine exactly what the processing is doing.

8.1 Delta

The Δ (Delta) button activates global delta mode, which outputs only the difference between the processed and unprocessed signal. This allows you to hear exactly what the processing is adding or removing from your audio.

8.2 Midrange Focus

MIDRANGE FOCUS is a toggle button that enables auditory weighting emphasis on the mid frequencies. When engaged, the monitoring path is filtered to focus on the midrange, making it easier to hear and evaluate the spectral content that Fixate:Midrange's dynamic effects are acting on.

8.3 Mid Solo and Side Solo

MID SOLO solos the mid (center) channel of the stereo signal, allowing you to hear only the mono content of your audio.

SIDE SOLO solos the side channel, allowing you to hear only the stereo difference content.

These two modes are mutually exclusive; enabling one disables the other.

Chapter 9

Installation and Instantiation

Newfangled Audio plug-ins are distributed by Eventide and like other plug-ins Eventide distributes, Fixate:Midrange uses PACE's ilok.com licensing system, with or without an iLok hardware dongle. Each license provides two activations which can reside on either your computer or on an iLok license dongle. Once you've purchased your plug-in, you'll need to register it on Eventide's website, activate your license, and install the plug-in on to your computer.

9.1 Registering Your Plug-in

When you purchase Fixate:Midrange, you'll receive a License Key which will be 3 sets of 4 characters, a letter or a number, each; like XXXX-XXXX-XXXX.

Once you receive this code, you can register your plug-in on the Eventide website. To do so, please log in to http://www.eventideaudio.com, navigate to My Account in the top right corner, and select Register a New Product. Then, fill out the form by selecting Native Plug-in (VST, AU, AAX) in the Product Category field, select Fixate:Midrange in the Product list, and enter your License Key, and iLok.com account name. If you don't yet have an ilok.com account, you can create one for free at http://www.ilok.com.

Once you've done so, press Register. Once you've entered this information and pressed the Register button, Eventide will send the applicable plug-in license to your ilok.com account, which you will need to activate to your computer or iLok dongle.

9.2 Activating Your License

To activate and manage your plug-in licenses you'll need to install PACE's iLok License Manager software which you can download from `http://www.ilok.com`. If you don't have this software installed, please download and install it now.

Once you have installed and launched iLok License Manager you should be able to log in to your account by clicking the large "Sign In" button in the upper left hand corner of the application. Once you have, you should be able to see available licenses by choosing the Available tab at the top of the iLok License Manager application. If you have successfully registered your plugin, your Fixate:Midrange Native license will be available in this list. Please activate this license by dragging it to either your computer or iLok dongle listed on the left. When you do so, you will be asked to confirm the activation, and you will be able to see it by clicking on the location you have chosen. At this point your license is activated.

9.3 Installing Your Plug-In

You should have been given a link to the Fixate:Midrange plug-in installer when you purchased your plug-in, but if you haven't, you can find downloads for all of our plug-ins at `http://www.newfangledaudio.com/downloads`. Please download and launch the correct installer for your system.

Once you've launched the plug-in installer, it will take you through several pages of options. We have tried to choose defaults for these options which will best serve the majority of users, but it is worth a minute to make sure you understand these options before clicking through to the next page. A common issue with Windows VST plug-ins is choosing the correct VST directory, which can be different on each system. Please pay special attention to this setting. Once you have followed through the installer, your plug-ins and presets should be in your chosen locations, and you can hit finish to end the installer application.

At this point, you should be ready to use your Fixate:Midrange Plug-In.

9.4 Moving or Removing an Activation

If at any point, you decide to move your plug-in activation, you can do so in iLok License Manager. To move an activation between an iLok dongle and your computer, simply plug in the iLok, locate the license in its current location, and drag it to its new location. To deactivate a license, find it in its current location, right click on it, and choose deactivate.

Remember that each Fixate:Midrange Plug-In License comes with two activations, which can be used on either a computer or iLok dongle, meaning you can use Fixate:Midrange in two locations at the same time.

9.5 Removing or Uninstalling your Plug-In

We're sure you'll love your Newfangled Audio plug-ins, but if you ever want to remove them from your machine it's as easy as removing the following files.

For Mac:

- Macintosh HD/Library/Audio/Plug-Ins/Components/<Plug-In Name>.component
- Macintosh HD/Library/Audio/Plug-Ins/VST/Newfangled Audio/<Plug-In Name>.vst
- Macintosh HD/Library/Audio/Plug-Ins/VST3/Newfangled Audio/<Plug-In Name>.vst3
- Macintosh HD/Library/Application Support/Avid/Audio/Plug-Ins/Newfangled Audio/<Plug-In Name>.aaxplugin
- /Music/Newfangled Audio/<Plug-In Name>/

For Windows:

- c:\Program Files\Common\Steinberg\VST2\Newfangled Audio\<Plug-In Name>.dll
- c:\Program Files\Common\VST3\Newfangled Audio\<Plug-In Name>.vst3
- c:\Program Files\Common\Avid\Audio\Plug-Ins\Newfangled Audio
  <Plug-In Name>.aaxplugin
- My Documents\Newfangled Audio\<Plug-In Name>\

Chapter 10

Conclusion

We hope you enjoy Newfangled Audio's Fixate:Midrange Midrange Repair Tool plug-in. If you have any questions, comments, or concerns please write us at support@newfangledaudio.com

Chapter 11

About Newfangled Audio

The Oxford English Dictionary defines Newfangled as "objectionably new".

Music technology can sometimes be a backward looking pursuit. This is understandable, the purpose of music technology should be to help musicians make great music. There have been many great pieces of gear in the past and we should seek to keep these pieces and make them available to people who want to use them, and the time and dedication required to master a musical instrument means that changes in their design are often evolutionary rather than revolutionary.

However, the great pieces of gear from yesteryear are more often than not those that contained new ideas in their time. The reverence we have for these pieces can sometimes turn into fetishism, and mindless re-creation of classic gear can fail to inspire musicians and artists to take new risks. It's important to make sure artists and engineers have access to good tools that inspire them and don't stand in their way, but these tools should never be used as a security blanket to stand in the way of an artist or engineers ears and taste.

Newfangled Audio seeks to only make gear that incorporates new ideas. We want to make gear that is great, but only using ideas that others are not. We realize that deviation from the norm might sometimes be objectionable. The Oxford English Dictionary defines Newfangled as "objectionably new".