OKMOG GYRATOR X

User Manual

Version 2.0

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Contents

Introduction

Gyrator X is a distinctive audio equalizer built around a specialized concept in electronics: the gyrator. A gyrator is an analog circuit that emulates the impedance of an inductor. While perhaps less familiar than resistors or capacitors, gyrators are powerful building blocks in audio circuit design. They excel at producing the kind of complex, musical filter behaviors often associated with high-quality analog equalizers.

Gyrator X is the result of ongoing research into capturing the unique responsiveness of analog circuits through state-of-the-art mathematical methods. The topology-preserving, physics-based approach emulates the actual circuit in real time, following the fundamental electrical laws. This method reproduces the circuit's interactive behavior between components - giving each EQ band a natural, musical feel.

Every band in Gyrator X is built around a gyrator circuit. This includes a rediscovered gyrator-based low-shelf filter from the 1970s, three peaking EQ filters for low, mid, and high band, and the entirely new, proprietary Sky Band. Together, they expand the palette of tonal shaping possibilities - delivering a responsive and unique EQ experience.

> "My experience with digital emulations often left me wanting more. Curve accuracy alone couldn't capture the subtle responsiveness of great analog designs. Gyrator X is the result of my passion, technical expertise, and years of reseach - built to deliver that missing responsiveness in the digital world."
> *— Oliver Gretz, PhD*

In addition to its gyrator-based equalizer bands, Gyrator X includes high-pass and low-pass filters that are modeled using the same topology-preserving, circuit-based approach. These stages emulate real analog circuits, reproducing their characteristic behavior, and dynamic interaction within the signal path.

Multiple circuit topologies are available for both filter types, including Multiple Feedback, Sallen-Key, and State Variable Filter designs with a true four-pole implementation. Gyrator X also offers a proprietary gyrator-based low-pass filter and a passive, component-modeled high-pass filter. Each topology provides a distinct dynamic response and musical character, allowing precise adaptation to different sources and mixing requirements.

The signal path is further enhanced by two dedicated saturation stages with different models using anti-derivative anti-aliasing (ADAA). The nonlinear models are derived from detailed measurements of real circuits, ensuring accurate harmonic behavior without digital artifacts. Available models include modern and vintage vacuum tube stages, silicon and germanium class A transistor stages, silicon and germanium diode saturation circuits, and a JFET class A stage.

Plugin features:

- **Low, Mid, and High Bands** – Three circuit emulated gyrator-based peaking equalizer bands including a classic low-shelf
- **Sky Band** – A proprietary high-frequency shaping design delivering exceptionally smooth, musical air extension without harshness or unmusical shifts in mix balance
- **High-Pass and Low-Pass Filters** – Circuit-emulated filtering stages with multiple selectable analog topologies, including Multiple Feedback, Sallen-Key, State Variable designs with a true four-pole implementation, a gyrator-based low-pass filter, and a passive circuit high-pass filter
- **Saturation Stages** – Two independent anti-derivative anti-aliasing (ADAA) based nonlinear stages derived from measurements of real circuits. Each freely placeable at different positions within the signal chain for flexible harmonic shaping
- **Saturation Models** – Modern high-grade vacuum tube, vintage new old stock (NOS) vacuum tube from a classic German manufacturer of the nineteen-sixties, silicon and germanium class A transistor stages, silicon and germanium diode saturation circuits, and a JFET transistor class A stage

System Requirements / Formats

- Supported Operating Systems: Windows 10/11 (64-bit), macOS 10.14+ (Intel & Apple Silicon compatible)
- Supported Plugin Formats: VST3, AU, AAX
- Processor Requirements: Multi-core processor with AVX2 extension (AMD/Intel PC & Mac) or Neon (Apple Silicon Mac)
- Graphics Requirement: GPU-accelerated graphics for UI rendering

- Connectivity: Internet connection for online activation (license refresh at least once every 14 days)

Installation

PC

To install Gyrator X on your PC, please follow these steps:

1. **Launch the Installer:** Double-click the Gyrator X Installer.exe file.
2. **Prerequisite Checks:** The installer will automatically check for the presence of two essential components:
   - **Microsoft Visual C++ 2015-2022 Redistributable (x64)**
   - **Microsoft Edge WebView2 Runtime**
   - *If either of these components is not detected on your system, the installer will automatically initiate their installation.*
   - **Important:** The installation of "Microsoft Edge WebView2 Runtime" requires an active internet connection.
3. **Select Plugin Formats and Directory:** The installer will then prompt you to select your desired plugin formats (VST3 and/or AAX) and offer the option to customize the installation directories.
4. **Complete Installation:** Follow the on-screen instructions. The installer will then automatically proceed with the installation of Gyrator X.

Mac

To install Gyrator X on your Mac:

1. **Mount the Disk Image:** Double-click the downloaded Gyrator X.dmg file to open it.
2. **Run the Installer:** A new window will appear. Double-click the Gyrator X Installer.pkg icon to begin the installation.
3. **Follow the Prompts:** The official macOS installer will guide you. Click "Continue," "Agree" to the license, and then "Install." You will need to enter your Mac's password to authorize the installation.

4. **Customize (Optional):** On the Installation Type screen, you can click the "Customize" button to choose which plugin formats (e.g., AU, VST3, AAX) you want to install.
5. **Finish:** Once the installation is successful, you can close the installer and eject the disk image. Gyrator X is now ready to use in your DAW.

Plugin Licensing System

Gyrator X features a simple and convenient online activation system. You won't need any hardware license dongles, special drivers, or serial numbers.

Activation and license management are handled entirely within the *Gyrator X* plugin interface. When you purchase a license or start a trial, the plugin will connect online to quickly update your license status, which is stored securely in a single file on your computer. This ensures your license is always current and easily managed.

The first time you launch *Gyrator X*, a browser window will automatically open to the activation management website. On this page, you can choose to:

- Start a free trial
- Activate an existing license
- Purchase a license

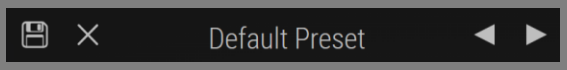
You will need to provide an email address if you are starting a free trial or registering your plugin license for the first time. Please note: If your trial period expires or the plugin is not activated, the audio signal will be randomly muted during use.

To ensure seamless and continuous operation of *Gyrator X*, your computer must connect to the internet at least once every 14 days to validate your license status.

Each single user license permits activation on up to 3 computers.

Top Bar Controls

Preset Management



The top bar contains the following preset management controls, from left to right:

- **Save Preset:** Saves your current settings as a new preset.
- **Delete Preset:** Deletes the currently loaded preset
- **Preset Dropdown:** Click to select and load from a list of available presets.
- **Previous / Next:** Use the left/right arrows to quickly cycle through presets in the list.

A/B State Management

The A/B button lets you quickly switch between two independent states of parameter settings, labeled State A and State B. Use this to compare different adjustments you've made.

Remarks:

- **Loading Presets**: When you load a new preset, the settings from that preset are applied to *both* State A and State B. This ensures both states start from the same point when you begin experimenting.

The “A > B / B > A” button allows you to quickly copy the parameters from the *currently active* state (A or B) to the *inactive* state.

- When State A is active, the button will show “A > B” and clicking it copies A's settings to B.
- When State B is active, the button will show “B > A” and clicking it copies B's settings to A.

Use this feature to make State B identical to State A (or vice versa), allowing you to start from the same baseline when comparing further adjustments.

Undo / Redo

Gyrator X includes standard Undo and Redo functionality to help you experiment with settings.

Undo Button Click this button to revert the plugin parameters to their state before the last adjustment you made. You can click Undo repeatedly to step backward through your editing history.

Redo Button After using Undo, click this button to move forward through your history and reapply the adjustments you previously undid.

Remarks:

- **Making New Adjustments:** If you make any new adjustment after using Undo (i.e., when you are not at the very end of your history), all potential Redo steps *after* that point are cleared.
- **Clearing History:** The Undo/Redo history is cleared whenever you load a new preset.

Bypass

The Bypass button allows you to quickly switch the plugin's audio processing on or off. Use this to compare the effect of Gyrator X with the original, unprocessed audio.

When the button appears as shown on the left, the plugin is active.

In this mode the plugin is bypassed, and the audio signal passes through unaffected.

Auto Gain

When enabled, Auto Gain continuously matches the output level to the input level, compensating for level changes introduced by equalization and saturation. This ensures consistent perceived loudness, allowing tonal adjustments to be evaluated without being influenced by volume differences.

Auto gain enabled. The output level is automatically adjusted to match the input level in real time.

Auto gain disabled. The output level is not compensated and reflects the direct result of the applied processing.

Critical Notice

Auto Gain remains active during offline and real-time rendering and will alter the rendered signal if enabled. Always disable Auto Gain before rendering to ensure a fixed and predictable output level.

Volume Control

This control adjusts the final output level of the plugin *after* all processing has been applied.

- **Adjusting:** Click and drag the control to adjust the level in fine steps of **0.1 dB**
- **Coarse Adjustment:** Hold down the *Shift* key while clicking and dragging to adjust the level in larger steps of **1 dB**
- **Reset:** Double-click the control to instantly reset the output level to **0 dB**

Oversampling

This option controls the internal processing sample rate relative to your DAW's project sample rate. When enabled, Gyrator X processes audio internally at 4x your project's sample rate.

The saturation stages in Gyrator X always operate at 4x oversampling and employ anti-derivative anti-aliasing, ensuring extremely low aliasing already at 4x oversampling.

When Oversampling is disabled, only the saturation stages are oversampled, while the equalizer bands and filters operate at the project sample rate. When Oversampling is enabled, the entire signal chain is processed internally at 4x the project sample rate.

Higher internal sample rates improve the accuracy of the circuit emulation, particularly at high frequencies and when working at project sample rates of 48 kHz or lower, resulting in a more precise circuit reproduction, and smoother overall sound.

Options:

- **OS off:** Oversampling is disabled
- **OS on:** Oversampling is always enabled.
- **OS Ren (OS on rendering only):** Oversampling is disabled during real-time playback but automatically enabled when you perform an offline render (export/bounce) in your DAW.

Settings Menu

Click the gear icon button in the upper right corner to open the plugin's settings menu. This menu provides access to options like spectrum analyzer settings, UI settings, and license activation. The settings are described in detail after the next chapter.

Main Controls

Main Controls: Interaction Logic

To provide immediate access to stereo or mid/side adjustments without the need for constant switching between views, Gyrator X utilizes a dual-control system for its rotary dials and the radio buttons. Depending on the processing mode selected (M/S or L/R), a single dial can represent both channels simultaneously.

Visual Indicators

To help you identify the settings for each channel at a glance, the dials feature two distinct indicators:

- Yellow Indicator: Represents the value for the Left or Mid channel.
- White Striped Indicator: Represents the value for the Right or Side channel.

Mouse Interaction Modes

You can choose between two interaction behaviors in the Settings menu (see chapter X.X) to best suit your hardware (mouse, trackpad, or 3-button mouse).

Mouse Mode A (Adaptive Link)

This mode is designed for maximum compatibility with 1-button trackpads, 2-button mice, and 3-button mice.

- Left Mouse Button + Drag:
    - If Link is active: Adjusts both channels (Left/Mid + Right/Side) together.
    - If Link is inactive: Adjusts the Left or Mid channel only.
- Right Mouse Button OR Ctrl/Cmd + Left Click: Adjusts the Right or Side channel only.
- Middle Mouse Button (if available): Adjusts both channels together (regardless of Link state).

Mouse Mode B (Discrete Hardware Control)

This mode is optimized for users with a 3-button mouse. In this mode, the Link button on the interface is grayed out, as linking is handled directly by your choice of mouse button.

- Left Mouse Button + Drag: Adjusts both channels together (Link).
- Middle Mouse Button + Drag: Adjusts the Left or Mid channel only.
- Right Mouse Button + Drag: Adjusts the Right or Side channel only.

Additional Interaction Shortcuts

- Fine Adjustment: Hold Shift while dragging any control to adjust parameters in smaller increments.
- Value Entry Dialog: Ctrl/Cmd + Double-Click (Left Mouse Button) on any dial to open a input field. This allows you to type in exact values via your keyboard.
- Reset to Default: Double-Click any control to instantly reset it to its default (0 dB or neutral) position.

Main Controls: Description

1-4 Band Gain Controls (Low, Mid, High, Sky)

The Band Gain controls determine the level of the respective shelf or peak filters. By default, the Low, Mid, and High bands offer a range of -15 dB to +15 dB, while the Sky Band provides a range of -10 dB to +10 dB:

- **Boost and Cut:** Turn the control clockwise (right) to boost frequencies and counter-clockwise (left) to cut them.
- **Reset to Zero:** The center position represents 0 dB; double-click any gain dial to instantly reset it to this neutral value.
- **Band Bypass:** Click the text labels located directly below the gain controls to enable or disable that specific band.
- **Precision Control:** Hold down the **Shift** key while dragging or scrolling a dial to use the fine adjustment rate.

When the **5 dB mode** is active (located at position (5) in the screenshot), the gain range for every band is automatically restricted to **±5 dB**. This mode is designed for critical mixing and mastering applications, as it maps the dial's rotation to a smaller range for extreme precision. Disabling a band via its label bypasses that stage entirely, which is useful for comparing the signal with and without specific tonal adjustments.

5, 7, 9 Low Band Filter Mode / Q Value (Low, Mid, High)

These selectors determine the filter shape and bandwidth (Q) for their respective bands. Each band allows for independent settings for the Left/Mid and Right/Side channels, providing five distinct options to choose from:

- **Q: 3.0 (Peak):** A narrow peak filter for targeted, surgical frequency adjustments.
- **Q: 1.9 (Peak):** A peak setting with increased focus.
- **Q: 1.2 (Peak):** A broad peak filter designed for musical tonal shaping.
- **Q: 0.8 (Peak):** A wide, gentle peak for broad enhancement.
- **Shelf / Q: 0.5:** For the **Low Band (5)**, this option selects a classic Low Shelf filter. For the **Mid (7)** and **High (9)** bands, this selects a very broad, gentle peak filter with a Q value of 0.5.

Channel settings are indicated visually on each control: the **yellow indicator** represents the Left/Mid value, and the **white striped indicator** represents the Right/Side value. These independent values are controlled using the Mouse Interaction Modes (Mode A or Mode B) described at the beginning of this chapter. By setting different Q values for Mid and Side channels, you can achieve sophisticated spatial shaping, such as using a narrow cut on the Mid channel while applying a broad boost on the Sides.

6, 8, 10 Band Frequency (Low, Mid, High)

These controls set the center frequency for the respective band filters. To provide high flexibility for stereo imaging and mid/side balancing, the frequency for each channel can be adjusted independently:

- **Frequency Selection:** Turn the dial to set the desired center frequency for the band's peak or shelf response.
- **Channel Indicators:** The yellow indicator represents the Left/Mid channel frequency, while the white striped indicator represents the Right/Side frequency.

- **Interaction:** Adjust individual channels or both simultaneously using the Mouse Interaction Modes and modifier keys established at the beginning of this chapter.

Providing independent control over left/mid and right/side frequencies allows for advanced spatial techniques. For example, you can center a boost at one frequency in the Mid channel while placing a corresponding adjustment at a slightly different frequency in the Side channel to create a more natural and expansive stereo field.

11 Global Mode Toggles (M/S, Link, 5 dB)

These switches determine the plugin's internal processing configuration, control behavior, and adjustment resolution. They allow you to shift the operational focus of the entire EQ with a single click:

- **M/S / L/R:** Switches the processing mode between standard Stereo (Left/Right) and Mid/Side. Changing this mode reassigns the dual indicators on the dials: yellow for Mid and white striped for Side.
- **Link:** Toggles the linking state between the two channels. When enabled (and using Mouse Mode A), moving a control will adjust both channels simultaneously while maintaining any existing offsets.
- **5 dB:** Restricts the gain range of all equalizer bands from their default range to ±5 dB. This mode provides high-precision required for mastering.

12 Sky Band Mode

This control allows you to select the character and response type of the Sky Band's high-frequency shaping.

- **XN:** X Normal
- **XS:** X Soft
- **ZN:** Z Normal
- **ZS:** Z Soft

The Sky Band boosts or cuts high frequencies proportionally to the applied gain, operating across the full frequency spectrum to achieve a very musical

effect. The Z modes extend their shaping influence further into the low frequencies compared to the X modes. Conversely, the 'Soft' modes apply the high-frequency shaping with a proportionally reduced intensity at the very highest frequencies, resulting in a more subtle or less pushed high-end response compared to their 'Normal' counterparts.

The Sky Band Mode also supports independent channel processing for both **L/R** and **M/S** configurations. The **yellow indicator** represents the Left/Mid channel setting, while the **white striped indicator** represents the Right/Side channel setting. These can be adjusted independently using the Mouse Interaction Modes described at the beginning of this chapter, allowing you to apply different high-frequency characters (e.g., "X Soft" on the Mid and "Z Normal" on the Sides) to shape the stereo image and air extension.

13, 14 High-Pass filter / Low-Pass Filter

The **High-Pass Filter (13)** is positioned directly at the input of the signal chain, while the **Low-Pass Filter (14)** is located at the very end. Both filters are designed with the same commitment to physical circuit accuracy as the gyrator-based EQ bands.

Filter topologies:

- **MFB (Multiple Feedback):** The versatile "go-to" filter for most applications. It offers excellent stability and high flexibility, with available slopes of 12, 24, 36, and 48 dB/octave.
- **SK (Sallen-Key):** A character-focused filter that is less stable than the MFB. This results in a more raw or "rough" overall sound, which becomes most audible and expressive when using resonant (peaked) low-cuts.
- **SVF (State-Variable):** The most stable topology available. It provides very smooth dynamics and gentle-sounding cuts. The 24 dB/octave option is a true 4-pole SVF circuit model modeled after rare circuit design, rather than a common cascade of two 12 dB filters.

- **PAS (Passive - High-Pass Only):** A circuit model of a passive filter consisting of physical inductors and capacitors. It brings a characteristic roughness to the sound that is unique to passive designs.
- **GYR (Gyrator - Low-Pass Only):** A proprietary gyrator-based low-pass model. In the analog world, such a circuit is nearly impossible to control with independent frequency and Q; however, through complex mathematical models, Gyrator X offers this unique filter. It provides very pleasant dynamic behavior and fine high-frequency shaping with high Q values.

High-Pass, Low-Pass Filter Controls:

- **HP/LP label:** Click the label to enable or disable the high-pass filter processing stage.
- **Filter Type:** Selects the modeled analog topology: MFB (Multiple Feedback), SK (Sallen-Key), SVF (State Variable), or PAS (Passive for High-Pass) or GYR (Gyrator based for Low-Pass).
- **Filter Slope:** Sets the steepness of the filter curve (e.g., 12 dB/octave).
- **Frequency**: Sets the cutoff frequency for the filter.
- **Q (Resonance):** Adjusts the resonance at the cutoff frequency. Select Highest (5.300) for a resonant peak, Default (0.707) for a flat response (Butterworth for MFB and SK), or Lowest (0.577) for a shallow response (linear phase – Bessel – for MFB and SK).

The modeling of different filter topologies arose from the exploration of the specific "sound" inherent to different circuit designs. While filter topologies with identical slopes share identical transfer curves (static frequency response), their dynamic response and stability differ. Since these filters are typically used for small cuts at the top or bottom of the spectrum, the majority of the frequency range still passes through the filter circuit. These different topologies allow for precise fine-tuning of the filter’s dynamic character and frequency response.

The Frequency and Q dials use the **yellow** indicator for the Left/Mid channel and the **white striped** indicator for the Right/Side channel, following the Mouse Interaction Modes defined at the start of this chapter. Note that the **Filter Type** and **Slope** are fixed to both channels.

15, 16 Saturation Stages 1 & 2

Gyrator X features two independent saturation stages built on Anti-Derivative Anti-Aliasing (ADAA) technology to achieve exceptionally low aliasing artifacts. To ensure maximum signal integrity, these stages always operate at 4x oversampling, regardless of the global Oversampling setting. Every model is derived from meticulous measurements of custom-built analog circuits and PCBs, where components were selected for their unique harmonic character and tuned to their "sweet spot" before being captured.

Saturation Types:

- **TubeNew:** Modern produced high-grade triode tube
- **TubeOld:** New old stock (NOS) triode from a classic German manufacturer
- **TransSi:** Silicon transistor-based class A stage
- **TransGe:** New old stock (NOS) germanium transistor-based Class A stage
- **DiodeSi:** Silicon diode-based overdrive circuit
- **DiodeGe:** New old stock (NOS) germanium diode-based overdrive circuit
- **JFET:** JFET transistor-based class A stage

Saturation Stage Controls:

- **Drive (On / Off):** Enables or disables the saturation processing for the selected stage.
- **Saturation Model:** Selects the specific circuit model (TubeNew, TubeOld, TransSi, TransGe, DiodeSi, DiodeGe, or JFET) to determine the saturation character.

- **Drive:** Adjusts the amount of saturation applied to the signal. Higher values increase the harmonic density and compression.
- **Position:** Sets where the stage is inserted in the signal chain. Options include **IN->** (Input), **HP->** (after High-Pass), **LB->** (after Low Band), **MB->** (after Mid Band), **HB->** (after High Band), **SB->** (after Sky Band), and **LP->** (after Low-Pass/Output). The signal processing is in this order.
- **Vol Trim:** Adjusts the output volume trim for the stage to compensate for level changes introduced by the Drive control.

The **Drive** and **Vol Trim** dials feature independent control for each channel. The **yellow indicator** represents the Left/Mid channel, and the **white striped indicator** represents the Right/Side channel. These are managed via the Mouse Interaction Modes described at the beginning of this chapter. By utilizing the **Position** selector, you can strategically place saturation before or after specific EQ bands—for example, saturating the signal *before* a Low Band to avoid extensive low-frequency saturation, or *after* to increase low-frequency saturation.

17 Spectrum Analyzer: Range (dB)

This control sets the vertical display range (in decibels) for the spectrum analyzer. Options:

- 120 dB
- 90 dB
- 60 dB
- 45 dB

More spectrum analyzer options are available in the settings (see next chapter).

18, 23 Spectrum Analyzer (On/Off)

This control enables or disables the visual display of the integrated spectrum analyzer (23).

- **On:** Activates the spectrum analyzer.

- **Off:** Deactivates the spectrum analyzer display.
- **Solid Yellow Line (23):** Represents the spectrum for the Left or Mid channel.
- **White Dashed Line (23):** Represents the spectrum for the Right or Side channel.

19 EQ Graph (On/Off)

This control enables or disables the visual display of the active EQ curve and frequency spectrum.

- **On:** Activates the EQ graph display.
- **Off:** Deactivates the EQ graph display.

Tip: Consider switching the EQ graph off occasionally and relying solely on your ears. This can help to make more musical decisions.

20 EQ Graph Range

This control allows you to manually set the vertical display range (in dB) of the EQ graph.
This control is only active when the **Auto EQ Range** setting is Off (see settings next chapter). If Auto EQ Range is On (which means the graph range is controlled automatically), this control will appear grayed out and be inactive.

21 Mouse Control Hint / Quick Reference

The Mouse Control Hint icon provides a compact visual reference for the current mouse interaction configuration. It displays a stylized three-button mouse, with each button labeled to indicate the function assigned to it under the current control mode.
The labels reflect the active channel context:

- **L / M** = Left or Mid
- **R / S** = Right or Side
- **&** = Both channels simultaneously (Linked operation)

The displayed assignments automatically adapt to the current **Left/Right or Mid/Side mode**, as well as to the selected **Mouse Mode (A or B)**.

Clicking the Mouse Control Hint opens a concise reference overlay that explains the two mouse modes and its button assignments in detail. This allows quick verification of control behavior without navigating away from the main interface or consulting the full manual.

22 Logo

Opens the Credits screen, showing version information and contributors.

Settings

1 Spectrum Speed

This control determines how quickly the spectrum analyzer graph reacts to changes in the audio signal. Choosing a faster speed will result in a more reactive display that shows transient peaks clearly, while choosing a slower speed will

average the signal over a longer period, providing a smoother view of the overall frequency balance.

Options:

- **Low**
- **Medium**
- **Slow**

2 Spectrum Tilt

This control allows you to apply a tilt to the displayed spectrum analyzer graph. Applying a tilt compensates for the typical energy distribution of specific program material, making it easier to visually assess the relative levels across different frequencies.

Options:

- **0 dB:** No tilt is applied.
- **3 dB:** Applies a +3 dB per octave tilt. This is a common setting used to analyze signals relative to pink noise. With this tilt, pink noise will appear approximately flat on the spectrum analyzer, making deviations from a pink noise curve more apparent.
- **4.5 dB:** Applies a +4.5 dB per octave tilt. This is another standard weighting sometimes used for specific analysis preferences. It provides an even greater emphasis on higher frequencies in the graph.

3 Auto EQ Range

This setting determines whether the vertical scale (the decibel range) of the main EQ graph is set automatically or manually controlled.

Options:

- **On:** The plugin automatically adjusts the vertical range of the EQ graph based on applied EQ boosts/cuts. This helps keep the important details of the curve visible and centered. The EQ Range control on the user interface will be grayed out.
- **Off:** The vertical range of the EQ graph can be manually set using the dedicated EQ Range control. The EQ Range control will be active (not

grayed out). Use this mode when you want to fix the graph scale for consistent visual reference, regardless of the EQ gain settings.

4 Tooltips

This setting enables or disables helpful pop-up text labels (tooltips) that appear when you hover your mouse cursor over controls and elements within the user interface. Options:

- **On:** Tooltips are enabled.
- **Off:** Tooltips are disabled.

5 Show Values

This setting enables the numerical display of Left/Mid and Right/Side values for accurate monitoring and adjustment.

- **Display:** Values appear in the interface when you hover over or drag a control.
- **Manual Entry:** Ctrl/Cmd + Double-Click on any dial opens an input field for precise manual value entry.

6 UI Style & Contrast

This control allows you to customize the visual appearance of the Gyrator X user interface by selecting from different background styles and contrast levels. Options:

- **BLK (Black):** A sleek, dark theme with a soft, reduced contrast. This style is designed for comfortable viewing in dark environments or during late-night sessions.
- **BLK+ (Black, increased contrast):** Same theme as BLK but with enhanced visual contrast.
- **VTG (Vintage):** A classic, vintage-inspired theme with a soft, reduced contrast.
- **VTG+ (Vintage, increased contrast):** Same theme as VTG but with enhanced visual contrast.

7 UI Scaling

This dropdown menu allows you to adjust the size of the plugin interface to better fit your screen resolution and preferences. Click the dropdown menu and select a scaling factor from the following options: **50%, 75%, 100%, 125%, 150%, 200%.** The default scaling option can be saved with the button ‘Save Default Settings’ (see 10).

8 Mouse Mode

This setting allows you to choose the interaction logic for the rotary dials to match your hardware setup.

- **Mode A:** Optimized for standard 1 or 2-button mice and trackpads.
- **Mode B:** Optimized for 3-button mice, providing discrete hardware control for each channel.

For a detailed breakdown of how each mode handles channel linking and modifier keys, please refer to the Main Controls: Interaction Logic section at the beginning of that chapter.

9 Save Default Preset

This button saves the sound-shaping parameters (gain settings, frequency settings, etc.) as the default state when the plugin is loaded. The Default Preset can also be access by the Preset Menu.

10 Save Default Settings

This button saves all plugin specific settings (UI style, analyzer settings, tooltip settings, EQ graph setting, Mouse Mode, etc.) as the default plugin settings when a new instance of the plugin is loaded.

11 License State Indicator

This field shows the current license state of the plugin:

- **Activated:** The plugin is fully licensed and operational. No action is required.

- **Trial (X days remaining):** The plugin is currently running in trial mode. The text indicates also the number of trial days remaining. Clicking on this status text will open the purchase page for Gyrator X in your default web browser.
- **Not Activated:** The plugin is not yet licensed and requires activation. Clicking on this status text will initiate the online license activation process.
- **Blocked:** The plugin's license requires online validation but has not been able to connect to the validation server within the required period (typically 14 days). Ensure your computer has an active internet connection and then reload the plugin instance in your DAW to allow it to validate the license.

12 Open Manual

Use this button to access the Gyrator X user manual. It will open in your web browser via an online link.

Troubleshooting

Should you encounter any issues while using Gyrator X, please follow these steps:

1. **Review Setup and Installation:** Many common problems are related to incorrect installation or system requirements. Please start by re-reading the **Setup/Installation** section of this manual to ensure everything was done correctly.
2. **Contact Support:** If reviewing the installation steps does not resolve the issue, please contact our support team at support@okmog.de To help us diagnose and resolve the problem as quickly as possible, please include the following information in your email:
    - Your plugin version (visible in the plugin credits).
    - Your operating system (e.g., Windows 10, macOS Sonoma) and its version.
    - Your Digital Audio Workstation (DAW) and its version.
    - A detailed description of the issue you are experiencing.

- The exact steps you take that lead to the issue, so we can attempt to reproduce it.

Support & Contact Information

For technical assistance or any questions regarding Gyrator X, please visit our website for an updated FAQ, or contact our support team directly.

Website: www.okmog.com

Support Email: support@okmog.de

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ADAA

This software utilizes Antiderivative Anti-Aliasing (ADAA) techniques based on the research of Julian Parker, Vadim Zavalishin, and Efflam Le Bivic.

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