

Orra EQ User Manual

Version 1.0

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1. Introduction

What is Orra EQ?

Orra EQ is a professional 16-band parametric equalizer for music production, mixing, and mastering. It combines transparent equalization with sophisticated saturation processing, dynamic saturation, dynamic EQ capabilities, and vintage analog emulation in an intuitive interface.

Key Features

- 16 fully parametric EQ bands with extended frequency range (10Hz to 22kHz)
- Five processing modes per band: EQ, Orra Tube, Tape, Models (10 saturation types), and Dynamic EQ

- Real-time FFT spectrum analyzer with pre/post visualization
- Dynamic saturation system: Upward compression for adding character to quiet signals
- 100-snapshot history system: Non-destructive experimentation with instant recall
- Professional preset management: Factory presets plus unlimited user presets
- Solo, Bypass, Delta, and Hide Curve modes for surgical EQ work
- Input/Output metering with separate gain controls

2. Getting Started

System Requirements

- macOS: 10.13 or later (VST3, AU)
- Windows: Windows 10 or later (VST3)
- Plugin Formats: VST3, AudioUnit (AU)
- DAW Compatibility: All major DAWs including Ableton Live, Logic Pro, FL Studio, Cubase, Studio One, Reaper and Pro Tools (with Blue Cat Patchwork)

Installation

- Download the Orra EQ installer from orraaudio.com
- Run the installer and follow on-screen instructions
- The plugin will be installed to your system's standard plugin directories
- Restart your DAW if it was running during installation
- Scan for new plugins in your DAW's preferences

Activation

Orra EQ requires activation to use beyond the 14-day demo period.

Option 1: Enter License Key

- If you've purchased Orra EQ, click "Enter License Key" on the overlay
- Enter your license key (format: XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX)
- Your license activates on this machine (3 activations total per license)

Option 2: Start 14-Day Demo

- Click "Start 14-Day Demo" to try Orra EQ with full functionality
- Demo can only be started once per machine
- All features unlocked during demo period

- Days remaining displayed in header

Option 3: Purchase

- Click "Purchase Orra EQ" to visit our website
- After purchase, use Option 1 to activate

3. Interface Overview

Main Layout

Orra EQ's interface consists of:

- Header bar (top) with preset, analyzer, and license controls
- EQ curve display (center) with 16 interactive control points
- Right panel (120px width) with band controls
- Meter panel (far right, 120px width) with input/output meters
- Dynamic settings panels (slide out from center when needed)

Header Bar

Left Side

- License: Click logo to view license status

Center

- Analyzer Controls:
- Pre (green) / Post (blue) toggle buttons
- Individual Bands toggle (orange)
- Peak Hold toggle

Right Side

- Undo Button
- Snapshot History: Access 100-step undo history (folder icon)
- Preset Button: Open preset browser (folder icon)
- Tips Button (?): Toggle tooltips on hover

EQ Curve Display

The central display shows:

- Frequency response curve (white for EQ, gold for saturation modes)
- 16 numbered control points (colored by band)
- Real-time spectrum analyzer (green = input, blue = output)
- Grid lines for frequency (10Hz to 22kHz) and gain (-60dB to +30dB)
- Frequency readout when hovering over curve

Right Panel - Band Controls (120px)

Top Row: State Buttons (Circular toggles)

- S (Solo): Hear only this band's effect
- B (Bypass): Disable this band
- D (Delta): Hear only what the band removes/adds
- H (Hide): Hide this band's curve visualization

Band Selection

- Band Selector: Dropdown showing all active bands

Core Parameters (when band selected)

- Frequency Knob: 10Hz to 22kHz
- Gain Knob: -60dB to +30dB (EQ mode) or 0-100% (saturation modes)
- Quality Knob: 0.1 to 40.0

Filter/Mode Controls

- Filter Type: Bell, High Shelf, Low Shelf (EQ mode only)
- Slope: 12/24/36/48 dB/oct (for shelf filters only)
- Mode: EQ / Orta Tube / Tape Saturation / Models / Dynamic EQ

Settings Buttons (Mode-dependent)

- Appears based on selected mode
- Opens sidebar panel with advanced parameters

Meter Panel (Far Right, 120px)

Input Section

- Input Meter: Stereo L/R peak and RMS display (gold)
- Input Gain Knob: -12dB to +12dB trim control

Output Section

- Output Meter: Stereo L/R peak and RMS display (gold)
- Output Gain Knob: -12dB to +12dB output level

4. Working with EQ Bands

Creating Bands

Double-Click on Curve

- Double-click anywhere on the EQ curve display
- A new band is created at that frequency
- Band automatically selected for editing

Click Existing Control Point

- Click any numbered control point (1-16)
- Band becomes active for editing
- Parameters appear in right panel

Band Selector Dropdown

- Click the band selector dropdown in right panel
- Choose from list of active bands
- Band selected and ready to edit

Editing Bands

Moving Control Points

- Click and drag vertically to adjust gain (-60dB to +30dB)
- Click and drag horizontally to adjust frequency (10Hz to 22kHz)

Adjusting Q (Bandwidth)

- Cmd + drag for Q adjustment
- Wider Q = broader effect, Narrower Q = surgical precision

Multi-Band Selection

- Click and drag on empty curve area to draw selection box
- All bands within box are selected
- Move multiple bands together by dragging any selected point
- Right-click selection for batch operations

Band Right-Click Menu

Right-click any control point to access:

Filter Types (EQ and Dynamic EQ modes only)

- Bell (parametric peak/dip)
- High Shelf
- Low Shelf

Processing Modes

- EQ (traditional equalization)
- Orra Tube (tube saturation)
- Tape (vintage tape emulation)
- Models (10 saturation algorithms)
- Dynamic EQ (frequency-selective compression)

Band Management

- Reset Band (return to defaults)
- Delete Band (remove from processing)

Snap To Note (Musical Note Alignment)

- Snap to C, C#, D, D#, E, F, F#, G, G#, A, A#, B
- Aligns frequency to nearest note in selected key

Snap To Key (Multiband Musical Note Alignment)

- Select scale
- Snap to key
- Aligns frequencies to nearest scale in selected key

Deleting Bands

Context Menu

- Right-click control point
- Select "Delete Band"

Reset

- Right-click control point
- Select "Reset Band" (sets gain to 0dB but keeps frequency)

5. Band Processing Modes

Each of Orra EQ's 16 bands can operate in one of five processing modes. The curve visualization changes color: white for EQ, gold for saturation modes.

Mode 1: EQ (Traditional Equalization)

Description: Transparent, surgical equalization with extended range and precision.

Parameters:

- Frequency: 10Hz to 22kHz
- Gain: -60dB to +30dB
- Q: 0.1 to 40.0
- Type: 3 filter types available
- Slope: 12/24/36/48 dB/oct (shelf filters only)

Use Cases:

- Corrective EQ (removing resonances, rumble, harshness)
- Tonal shaping (brightening, warming, body)
- Mastering EQ (subtle adjustments)
- Surgical frequency removal

Professional Tips:

- Use narrow Q (>5.0) to notch out specific problem frequencies
- Use wide Q (<1.0) for musical tonal shaping
- Stack multiple gentle boosts/cuts instead of extreme single adjustments
- Cut first, boost with saturation second (cleaner results)

Mode 2: Orra Tube (Tube Saturation)

Description: Musical tube saturation with dynamic response. Based on vintage tube preamp characteristics with asymmetric distortion.

Parameters:

- Frequency: Center frequency for bandpass filtering
- Drive: 0-100% (saturation drive amount)
- Q: Bandwidth of effect

Advanced Settings Button:

Click "Dynamic" to access:

- Enable/Disable: Turn dynamic saturation on/off
- Threshold: -60dB to 0dB (level below which saturation is added)
- Attack: 1-100ms (response speed to quiet signals)
- Release: 10-1000ms (how quickly saturation fades when signal gets louder)

How It Works:

- Band isolates selected frequency range using bandpass filter
- Signal processed through tube saturation algorithm
- Saturated band mixed back with dry signal
- Higher gain = more drive = more harmonics
- Dynamic saturation adds extra drive to quiet signals below threshold

Use Cases:

- Adding warmth to vocals (2-5kHz, moderate drive)
- Thickening bass (80-200Hz, subtle drive)
- Enhancing presence (3-8kHz, gentle drive)
- Creating analog character on drums
- Bringing up quiet details dynamically

Professional Tips:

- Start with 20-30% gain and adjust to taste
- Wider Q (0.5-1.5) for musical saturation
- Narrower Q (2.0-5.0) for focused enhancement
- Use dynamic saturation to add detail without muddying louder passages
- Set threshold 10-15dB below average signal level for subtle enhancement
- Set threshold above average signal level for constant saturation that has movement

Mode 3: Tape Saturation (Vintage Tape Emulation)

Description: Authentic analog tape machine emulation with multiple tape formulations, speeds, and noise reduction options.

Parameters:

- Frequency: Center frequency for bandpass filtering
- Drive: 0-100% (tape saturation amount)
- Q: Bandwidth of effect

Advanced Settings Button:

Click "Settings" to access:

Tape Model:

- Studio Reference - Clean, professional studio tape
- Console Master - Mix bus tape with subtle coloration
- Multitrack Wide - Wide stereo imaging characteristics
- Vintage Mono - Classic mono tape sound
- Valve Preamp - Tube-driven tape warmth
- Half-Inch Hi-Fi - High-fidelity tape response

Tape Speed:

- High (Fast) - Cleanest, most transparent
- Medium (Balanced) - Balanced vintage character
- Low (Vintage) - Maximum saturation and coloration

Noise Characteristics:

- None -Raw tape, most hiss
- Light - Moderate reduction
- Medium - Strong reduction
- Clean - No hiss

Dynamic Saturation (same as Orra Tube mode)

Click "Dynamic" for upward compression controls

Use Cases:

- Vintage drum character (Vintage Mono, Low speed)
- Warm vocal treatment (Studio Reference, Medium speed, Light noise)
- Lo-fi/vintage effects (Vintage Mono, Low speed, Medium noise)
- Mix bus glue (Console Master, High speed, Clean noise)
- Tube-colored processing (Valve Preamp, Medium speed)

Professional Tips:

- Low speed = more coloration (good for creative effects)

- High speed = more transparent (good for subtle enhancement)
- Half-Inch Hi-Fi + High speed = cleanest saturation
- Vintage Mono + Low speed = maximum vintage vibe
- Light or Clean noise for realistic tape feel without excessive hiss
- Apply to full frequency range (wide Q) for mix bus glue
- Apply to specific ranges (narrow Q) for targeted vintage color

Mode 4: Models (10 Saturation Algorithms)

Description: Professional saturation toolkit with 10 distinct algorithms ranging from vintage hardware emulation to creative digital processing.

Parameters:

- Frequency: Center frequency for bandpass filtering
- Drive: 0-100% (saturation drive amount)
- Q: Bandwidth of effect

Advanced Settings Button:

Click "Models" to access saturation type dropdown and controls:

Saturation Types (10 models):

- Vintage Preamp
 - Warm, smooth preamp saturation
 - Best for: Vocals, acoustic instruments, smooth character
- Power Tube
 - Aggressive power amp distortion
 - Best for: Electric guitars, bass, aggressive character
- Transistor
 - Solid-state transistor clipping
 - Best for: Modern production, punch, aggression
- Diode (Germanium)
 - Germanium diode clipping (asymmetric)
 - Best for: Bass, creative distortion, vintage vibe

- Diode (Symmetric)
- Silicon diode clipping (symmetric)
- Best for: Modern rock/metal, defined distortion
- Wavefolder
- Complex waveshaping and folding
- Best for: Creative effects, experimental sound design
- Bit Crusher
- Digital bit reduction and sample rate reduction
- Best for: Lo-fi aesthetics, creative degradation
- British Console
- Classic SSL-style console distortion
- Best for: Mix bus glue, professional polish
- VCA Console
- API-style VCA console saturation
- Best for: Drums, mix bus, controlled aggression
- Exciter
- Psychoacoustic harmonic generation
- Best for: Mastering, air, perceived brightness

Common Parameters (all types):

- Tone: -100% to +100% (frequency tilt)
- Bias: -100% to +100% (asymmetry)

Type-Specific Parameters:

- Bit Depth (Bit Crusher only): 1-16 bits
- Sample Rate (Bit Crusher only): 1x to 24x
- Fold Amount (Wavefolder only): 1.0 to 10.0

Dynamic Saturation (same as Orra Tube mode)

Click "Dynamic" for upward compression controls

Professional Tips:

- Tone control is frequency-dependent saturation tilt (use to balance brightness)

- Bias creates asymmetry (try small amounts for subtle character)
- Bit Crusher at 8-bit with 4x sample rate = "vintage sampler" character
- Wavefolder with 2-3 fold amount = harmonic bass enhancement
- Exciter on master = surgical high frequency enhancement (use sparingly)
- VCA Console on drum bus = punchy, controlled aggression
- Stack multiple gentle saturation types for complex character

Mode 5: Dynamic EQ (Frequency-Selective Compression)

Description: Intelligent, frequency-selective dynamic processing. Automatically reduces specific frequency ranges based on their level.

Parameters:

- Frequency: Center frequency to process
- Amount: 0-48dB (maximum gain reduction available)
- Q: Bandwidth of dynamic processing
- Type: Filter shape (use Bell for dynamic EQ)

Advanced Settings Button:

Click "Settings - Dyn" to access:

- Attack: 0.1-1000ms (response speed to level increase)
- Release: 1-5000ms (return speed to rest)
- Threshold: -60dB to 0dB (level where processing begins)
- Ratio: 1.0:1 to 20:1 (amount of processing)

Visualization:

- Input Level Meter (green): Shows current band input level red line for threshold level
- Gain Reduction Meter (red): Shows amount of processing applied
- White EQ curve line moves to show real time level reduction

6. Advanced Features

Solo, Bypass, Delta, and Hide Curve

Each band has four state buttons (circular toggles in right panel):

S - Solo Mode

- Hear ONLY the selected band's effect
- All other bands temporarily disabled
- Multiple bands can be soloed simultaneously
- Perfect for identifying problem frequencies by sweeping with gain boost

B - Bypass Mode

- Disable this band while keeping it in the chain
- Useful for A/B comparison

D - Delta Mode (Difference/Isolation)

- Hear ONLY what the band removes or adds
- Everything else is inverted out
- Extremely powerful for surgical resonance removal and verifying de-essing

H - Hide Curve

- Hides this band's curve visualization
- Band still processes audio
- Useful for decluttering the display when working with many bands

Tips:

- Solo + Gain Boost + Frequency Sweep: Classic method for finding resonances
- Delta Mode: Most powerful for precision work
- Bypass: Always check bypass to verify improvements
- Hide: Hide unused bands for cleaner workspace

Multi-Band Selection and Editing

Selection Box:

- Click and drag on empty curve area
- All bands within rectangle are selected
- Selected bands have enhanced visual highlight

Group Operations:

- Move Together: Drag any selected band to move all
- Batch Context Menu (right-click selection):
- Set Filter Type for all
- Set Processing Mode for all
- Snap to Key for all

- Reset all selected bands
- Delete all selected bands

Clear Selection:

- Click on empty area to deselect

Snap to Note and Snap to Key (Musical Alignment)

Align band frequencies to musical notes and keys for tonal, musical EQ adjustments. Orra EQ provides two different snapping systems depending on whether you have a single band or multiple bands selected.

Single Band: Snap to Note

When you have ONE band selected, you can snap it to the nearest frequency of any musical note.

How to Use:

- Select a single band (click control point)
- Right-click the control point
- Choose "Snap to Note"
- Select any note (C, C#, D, D#, E, F, F#, G, G#, A, A#, B)
- Band snaps to nearest octave of that note

Available Notes: C, C#, D, D#, E, F, F#, G, G#, A, A#, B

Example:

- Band at 250Hz → Snap to A → Moves to 220Hz (A3)
- Band at 800Hz → Snap to G → Moves to 784Hz (G5)

Multiple Bands: Snap to Key

When you have MULTIPLE bands selected, you can snap them all to notes within a specific musical key/scale. This ensures all selected bands align to harmonically related frequencies.

How to Use:

- Select multiple bands (drag selection box over control points)
- Right-click the selection
- Choose "Snap to Key"
- Select scale type, then root note

- All selected bands snap to nearest note within that key/scale

Available Keys/Scales:

- Major: C Major, C# Major, D Major, D# Major, E Major, F Major, F# Major, G Major, G# Major, A Major, A# Major, B Major
- Minor: C Minor, C# Minor, D Minor, D# Minor, E Minor, F Minor, F# Minor, G Minor, G# Minor, A Minor, A# Minor, B Minor
- Major Pentatonic: All 12 root notes (C, C#, D, D#, E, F, F#, G, G#, A, A#, B)
- Minor Pentatonic: All 12 root notes (C, C#, D, D#, E, F, F#, G, G#, A, A#, B)

Example - Song in G Major:

- Select 5 bands across the frequency spectrum
- Right-click selection → Snap to Key → Major → G Major
- Result: All bands snap to notes in G Major scale (G, A, B, C, D, E, F#)
- Creates harmonically coherent EQ adjustments that reinforce the song's key

When to Use:

- Working with tonal material (vocals, instruments)
- Creating harmonic enhancement - boost multiple bands at fundamental + overtones that align to the key
- Removing specific notes - notch filters at problem notes using Snap to Note
- Musical mixing - EQ decisions based on song key using Snap to Key
- Building chord-based EQ curves - use Snap to Key with Major/Minor scales
- Pentatonic enhancement - use Major/Minor Pentatonic for simpler, safer harmonic boosts

Professional Tips:

- Single band precision: Use "Snap to Note" when you know the exact problematic note or want to enhance a specific harmonic
- Multi-band harmony: Use "Snap to Key" when sculpting multiple bands to create harmonically coherent adjustments
- Major vs Minor: Choose based on song key - Major scales for major keys, Minor scales for minor keys
- Pentatonic safety: Pentatonic scales contain fewer notes, making them "safer" choices that avoid dissonance

- Boost fundamentals: In a song's key, boost low/mid frequencies at root, third, and fifth of the key
- Air and presence: Use Snap to Key in upper frequencies (4-10kHz) to add harmonically-aligned air
- Experimental approach: Try snapping to the key, then listen - if it sounds musical, keep it

7. Presets and Snapshots

Preset System

Preset Browser (click Preset button in header):

Categories:

- User: Your saved presets
- Vocal: Presets for voice processing
- Mastering: Final mix EQ presets
- Creative: Experimental and effect presets
- Corrective: Problem-solving presets
- Instruments: Instrument-specific presets

Searching:

- Use category selector dropdown to filter by category
- Type in search box to filter by name or category

Saving Presets:

- Click "Save" button in preset browser
- Enter preset name
- Choose category (or create new)
- Click "Save"

Loading Presets:

- Double-click preset in list

Managing Presets:

- Delete: Select preset, click "Delete" (user presets only)
- Open Folder: Click "Folder" to access preset files

- Import: Drag .orrpreset preset files into preset folder

Snapshot History System (100-Step Undo)

Orra EQ features a professional, non-destructive 100-snapshot history system.

How It Works:

- Almost all single band parameter change gestures create a snapshot automatically
- History stores last 100 snapshots (oldest removed when full)
- Each snapshot shows timestamp and description of changes
- Non-destructive: Restore any snapshot, create new branch

Accessing Snapshot History:

- Click the "Snapshot History" button in header (folder icon)
- Window overlays EQ curve (40% transparent)
- See up to 100 previous states

Using Snapshots:

- Single-Click: Immediately preview that state
- Close Window: Keep the previewed state
- Navigation: Click different snapshots to preview
- No Undo Needed: Just click and explore

Snapshot Descriptions (Auto-Generated):

- Single parameter: "Band 1 Gain"
- Multiple parameters: "Band 3 Freq, Band 5 Type"
- Many parameters: "5 parameters changed"

When Snapshots Are Captured:

- After mouse release on any control
- After completing a drag on EQ curve
- After text entry in parameter fields
- When loading a preset
- NOT during automation playback

Pro Workflow:

- Make aggressive EQ changes
- Doesn't sound right? Click snapshot history
- Preview previous states with single clicks

- Find the sweet spot from earlier
- Close history window - state is kept

8. Metering and Analysis

Spectrum Analyzer

Professional real-time FFT spectrum analyzer with multiple visualization modes.

Analyzer Types:

- Linear FFT: Traditional FFT bin representation
- Octave Bands: 1/3 octave smoothing
- Hybrid: Combines linear detail with octave smoothing

Refresh Rates:

- Slow (~15fps): More stable, less CPU
- Medium (~30fps): Balanced (default)
- Fast (~45fps): Responsive
- Real-time (~60fps): Maximum responsiveness, higher CPU

Analyzer Views (Toggle buttons in header):

- Pre (Green): Shows signal before EQ processing
- Post (Blue): Shows signal after EQ processing
- Peak Hold (Teal): Display both pre and post peak values simultaneously
- Hide All Band Curves (Orange): Hides every band's frequency response curve

Tips:

- Use Pre view when identifying problems
- Use Post view when verifying fixes
- Use both enabled for real-time feedback
- Enable Peak Hold to catch transients

Input/Output Metering (Right Panel)

Input Meters

- Shows signal level BEFORE any EQ processing
- Peak and RMS metering (gold color)
- Range: -60dB to 0dB

- Input gain control (-12dB to +12dB)

Output Meters

- Shows signal level AFTER all EQ processing
- Peak and RMS metering (gold color)
- Range: -60dB to 0dB
- Output gain control (-12dB to +12dB)

Gain Control Knobs:

- Double-click to reset to 0dB (unity gain)
- Command + drag (macOS) Ctrl + drag (Windows) for fine adjustment (all knobs)
- Applied in signal chain: Input Gain → EQ Processing → Output Gain

Professional Gain Staging:

- Set input gain so peaks are around -12dB
- Apply EQ processing
- Adjust output gain to match input level
- Compare input and output meters to verify headroom

9. Licensing and Demo

License Types

Full License:

- Perpetual license (pay once, use forever)
- 3 activations per license
- Includes all future 1.x updates
- Manage activations via License panel

Demo Version:

- Full functionality for 14 days
- Can only be started once per machine
- Days remaining displayed in header
- After demo expires, must purchase to continue

Activation

Activating Your License:

- Open Orra EQ
- Click "Enter License Key" on overlay
- Enter your license key (from purchase email)
- Click "Activate"
- License activates on this machine (counts as 1 of 3 activations)

License Validation:

- Orra EQ validates license online periodically
- If offline for 7+ days, enters "Grace Period"
- Grace period allows 7 days of offline use
- Connect to internet within grace period to continue

Managing Your License

License Status Panel (click logo in header):

Displays:

- License status (Active/Grace Period/Demo)
- Licensed user name and email
- Activation usage (e.g., "2/3" = 2 of 3 activations used)
- Last validation time
- Grace period countdown (if offline)

Actions:

- Check License Now: Force immediate validation
- Deactivate This Machine: Free up an activation slot
- Purchase (if demo): Link to Orra Audio website

Deactivating:

- Open License Status Panel
- Click "Deactivate This Machine"
- Confirm deactivation
- Activation slot freed immediately

Common Scenarios:

Moving to New Computer:

- Deactivate on old computer
- Install on new computer

- Activate with same license key

Reached 3/3 Activations:

- Deactivate on machine you no longer use
- Activate on new machine

Grace Period Active:

- Connect to internet
- Open Orra EQ
- License validates automatically

Demo Mode

Starting Demo:

- Open Orra EQ (unlicensed)
- Click "Start 14-Day Demo"
- Demo begins immediately
- Full functionality for 14 days

During Demo:

- All features unlocked
- "Demo: X days remaining" displayed in header
- Reminder to purchase as expiration approaches

Demo Expiration:

- After 14 days, plugin displays overlay
- Must purchase license to continue
- Can activate license during demo period (demo ends, license begins)

Demo Limitations:

- Can only be started once per machine
- Cannot restart demo after expiration
- No time-based crippling or audio degradation during demo

10. Keyboard Shortcuts

Global

- Double-Click (on curve): Create band at frequency

EQ Control Point Interactions

- Click + Drag: Move band (frequency + gain)
- Cmd + Drag (macOS) Ctrl + Drag (Windows): Fine Q adjustment
- Click + Drag (empty area): Multi-select bands
- Right-Click: Context menu

11. Technical Specifications

Audio

- Processing: 32-bit floating point
- Sample Rates: 44.1kHz to 192kHz (and beyond)
- Latency: Zero samples
- Frequency Range: 10Hz to 22kHz
- Gain Range: -60dB to +30dB (EQ mode)
- Q Range: 0.1 to 40.0
- Dynamic Range: >120dB

EQ Specifications

- Bands: 16 fully parametric
- Filter Types: 10 (Bell, High/Low Shelf)
- Processing Modes: 5 per band (EQ, Orra Tube, Tape Saturation, Models, Dynamic EQ)
- Saturation Algorithms (17 types): Orra Tube, Tape (6 models), Models (Vintage Preamp, Power Tube, Transistor, 2x Diode, Wavefolder, Bit Crusher, 2x Console, Exciter)

Analyzer

- FFT Size: 4096 samples
- Window: Blackman-Harris
- Resolution: 1024 display bins

- Refresh Rates: 15, 30, 45, 60+ fps
- Analysis Types: Linear FFT, 1/3 Octave, Hybrid
- Pre/Post Analysis: Independent input/output analyzers

System

- Preset Storage: Unlimited user presets
- Snapshot History: 100 states
- Plugin Formats: VST3, AudioUnit (AU)
- Platforms: macOS (10.13+), Windows (10+)

12. Troubleshooting

Common Issues

"Orra EQ not showing up in DAW"

- Solution: Rescan plugins in DAW preferences
- macOS: Check AU validation in Audio MIDI Setup
- Windows: Verify VST3 path is scanned
- Try: Restart DAW, restart computer

"License validation failed"

- Solution: Check internet connection
- Verify license key was entered correctly
- If offline >7 days, connect to internet
- Contact support if persistent

"Sound is distorting/clipping"

- Solution: Check input/output meters
- Reduce input gain if input is clipping
- Reduce overall EQ gain (multiple boosts add up)
- Check output gain
- Verify gain structure in DAW

"EQ curve not visible"

- Solution: Check band is not hidden (H button)
- Verify band gain is not at 0dB

- Verify band is enabled (not bypassed)

"Demo period already used"

- Solution: Demo can only be started once per machine
- Purchase license to continue using
- Demo tied to hardware fingerprint

"Grace period expired"

- Solution: Connect to internet
- Open Orra EQ to trigger validation
- License validates automatically when online

Getting Help

Support Resources:

- Email: support@orraaudio.com
- Website: <https://orraaudio.com/support>
- Documentation: <https://orraaudio.com/docs>

Before Contacting Support:

- Check this manual for solution
- Visit FAQ at <https://orraaudio.com/support>
- Try restarting DAW
- Verify system meets requirements
- Check DAW's plugin scanner/validator
- Test in different DAW (if possible)

Quick Reference Card

Most Important Controls

Creating Bands:

- Double-click curve to create band at frequency
- Click any numbered control point to select existing band

Essential Actions:

- Right-click control point: Context menu (filter types, modes, key snapping)

- S/B/D/H buttons: Solo/Bypass/Delta/Hide
- Scroll over point: Adjust Q
- Command + drag (macOS) Ctrl + drag (Windows) any knob: Fine adjustment

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