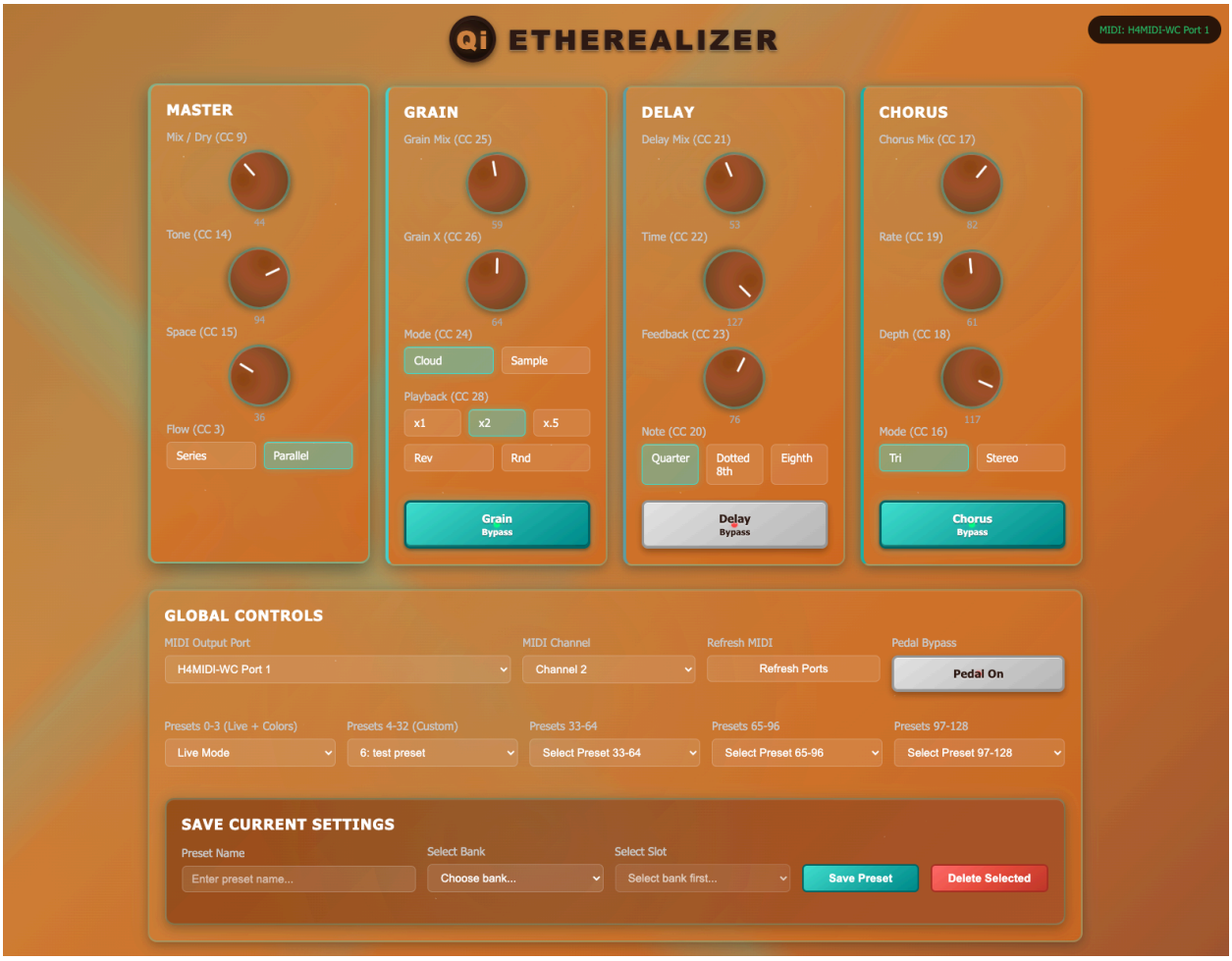
Qi Etherealizer Editor - User Guide



Buy me a coffee!

If you find this editor valuable and would like to show your appreciation, you can buy me a coffee. Thanks so much. https://coff.ee/markdeso

Overview

The Qi Etherealizer Editor is a web-based MIDI control interface for the Walrus Audio Qi Etherealizer pedal. This editor allows you to control all pedal parameters remotely via MIDI, save/load custom presets locally, and provides an intuitive visual interface that mirrors the pedal's aesthetic.

Getting Started

System Requirements

- A modern web browser with Web MIDI API support (Chrome, Edge, or other Chromium-based browsers recommended)
- A MIDI interface connected to your computer
- Qi Etherealizer pedal connected via MIDI cable

Initial Setup

1. **Connect Your Pedal**
    - Connect your Qi Etherealizer to your computer using a MIDI interface
    - The pedal defaults to MIDI Channel 1
2. **Open the Editor**
    - Load the HTML file in a compatible web browser
    - Grant MIDI permissions when prompted
3. **Select MIDI Output**
    - Click the MIDI Output Port dropdown
    - Select your MIDI interface from the list
    - The status indicator will turn green when connected

Interface Overview

Understanding Series vs Parallel Routing

The Qi Etherealizer can operate in two routing modes, fundamentally changing how the effects interact:

Series Mode (Default)

- Signal flow: Input → Chorus → Delay → Grain → Reverb → Tone → Mix/Dry → Output
- Each effect feeds into the next, like traditional pedals in a chain
- Mix knobs blend wet/dry signal at each stage
- Mix/Dry master control blends the final wet and dry signals

Parallel Mode

- All effects (Chorus, Delay, Grain) process the dry signal independently
- Effects don't interact with each other
- Mix knobs act as volume faders for each effect
- Mix/Dry control adjusts the dry signal level

Main Control Sections

Master Section (Top Left)

Mix/Dry (CC 9)

- **Range**: 0-127
- **Series Mode**: Controls the balance between dry (unprocessed) and wet (effected) signal
    - Fully counterclockwise (0): 100% dry signal
    - Center (64): Equal mix of wet and dry
    - Fully clockwise (127): 100% wet signal
- **Parallel Mode**: Controls the dry signal level
    - Fully counterclockwise (0): No dry signal (only effects)
    - Fully clockwise (127): Full dry signal at unity gain

Tone (CC 14)

- **Range**: 0-127
- **Function**: Low-pass filter affecting only the wet signal
- **Effect**: Removes high frequencies as you turn counterclockwise
    - Fully counterclockwise (0): Dark, muffled tone (maximum filtering)
    - Center (64): Moderate high-frequency content
    - Fully clockwise (127): Bright, open tone (no filtering)
- **Tip**: Use lower settings for warmer, vintage tones or to tame harsh frequencies

Space (CC 15)

- **Range**: 0-127
- **Function**: Adds hall-style reverb to the wet effects only
- **Effect**: Controls reverb amount and decay time
    - Fully counterclockwise (0): No reverb
    - Low settings (1-40): Small room ambience

    - Center (64): Medium hall reverb
    - High settings (90-127): Large, ambient spaces with long decay
- **Note**: This reverb is applied after all effects and doesn't affect your dry signal

Flow (CC 3)

- **Options**: Series (0) or Parallel (1)
- **Function**: Switches between routing modes
- **Visual**: Button highlights to show active mode
- **Impact**: Completely changes how effects interact and how mix controls behave

Grain Section (Top Right)

The Grain effect is a granular processor that creates glitchy, textural, and ambient effects by sampling and manipulating small pieces of your input signal.

Grain Mix (CC 25)

- **Range**: 0-127
- **Series Mode**: Wet/dry mix of the grain effect
- **Parallel Mode**: Output volume of the grain effect
- **Tip**: Start with lower values and increase to taste

Grain X (CC 26)

- **Range**: 0-127
- **Function**: Behaves differently based on the mode
- **Cloud Mode**: Controls the time between grain triggers
    - Fully counterclockwise (0): Dense, rapid grain clusters
    - Center (64): Moderate grain density
    - Fully clockwise (127): Sparse, occasional grains
- **Sample Mode**: Controls playback tempo
    - Fully counterclockwise (0): Syncs to delay time for rhythmic effects
    - Higher values: Faster grain playback rates

Mode (CC 24)

- **Cloud (0)**: Random, atmospheric grain triggering
    - Creates unpredictable, evolving textures
    - Great for ambient pads and soundscapes
- **Sample (1)**: Rhythmic grain triggering
    - Triggers grains based on input peaks
    - More musical and predictable

Playback (CC 28)

- **x1 (0)**: Normal speed and pitch
- **x2 (1)**: Double speed, one octave up
- **x.5 (2)**: Half speed, one octave down
- **Rev (3)**: Reverse playback for ethereal effects
- **Rnd (4)**: Randomly cycles through all modes

Grain Bypass (CC 32)

- **Function**: Enables/disables the grain effect
- **Visual**: Button LED turns green when active
- **Tip**: Use bypass for A/B comparisons

Delay Section (Bottom Left)

A pristine digital delay with up to 2 seconds of delay time.

Delay Mix (CC 21)

- **Range**: 0-127
- **Series Mode**: Blend of delayed signal with input
- **Parallel Mode**: Output volume of delay effect
- **Tip**: Higher values create more prominent echoes

Time (CC 22)

- **Range**: 0-127
- **Function**: Sets delay time from minimal to 2 seconds
    - Fully counterclockwise (0): Shortest delay (slap-back)
    - Center (64): Medium delay (~1 second)
    - Fully clockwise (127): Maximum 2-second delay
- **Tip**: Can also be set via tap tempo on the pedal

Feedback (CC 23)

- **Range**: 0-127
- **Function**: Number of delay repeats
    - Fully counterclockwise (0): Single repeat
    - Center (64): Multiple repeats that fade naturally
    - High settings (100+): Near-infinite repeats
    - Maximum (127): Can approach self-oscillation
- **Warning**: High feedback can create loud runaway delays

Note Division (CC 20)

- **Quarter (0)**: Quarter note delays (1:1 with tap)
- **Dotted 8th (1)**: Dotted eighth notes (classic rhythmic delay)

- **Eighth (2)**: Eighth note delays (double-time feel)
- **Tip**: Combines with tap tempo for musical delays

Delay Bypass (CC 33)

- **Function**: Enables/disables the delay effect
- **Note**: In trails mode, delays continue when bypassed

Chorus Section (Bottom Right)

Rich modulation effects for adding movement and dimension.

Chorus Mix (CC 17)

- **Range**: 0-127
- **Series Mode**: Wet/dry blend
- **Parallel Mode**: Output volume
- **Stereo Mode Tip**: At maximum (127), creates vibrato effect

Rate (CC 19)

- **Range**: 0-127
- **Function**: LFO speed controlling pitch modulation
    - Fully counterclockwise (0): Slow, subtle movement
    - Center (64): Classic chorus wobble
    - Fully clockwise (127): Fast, seasick modulation
- **Musical tip**: Slower rates for ballads, faster for psychedelic effects

Depth (CC 18)

- **Range**: 0-127
- **Function**: Amount of pitch modulation
    - Fully counterclockwise (0): No modulation
    - Low settings (20-40): Subtle thickening
    - Center (64): Classic chorus depth
    - High settings (100+): Extreme pitch bending
- **Interaction**: Works with Rate to define character

Mode (CC 16)

- **Tri (0)**: Three-voice chorus
    - Lush, thick modulation
    - Three delay lines with phase-offset LFOs
    - Great for rich pad sounds
- **Stereo (1)**: Classic stereo chorus
    - Left/right modulation 180° out of phase

    - Creates wide stereo image
    - Can produce vibrato at max mix

Chorus Bypass (CC 34)

- **Function**: Enables/disables chorus effect
- **Tip**: Compare wet/dry to dial in subtle effects

Global Controls

MIDI Settings

- **MIDI Channel**: Select channels 1-16
    - Must match pedal's MIDI channel
    - Pedal defaults to channel 1
    - Change on pedal by holding Freeze during power-up
- **Refresh Ports**: Rescan for MIDI devices
    - Use if you connect interface after opening editor
- **Pedal Bypass (CC 31)**: Main bypass control
    - Affects all effects simultaneously
    - Trails mode determines behavior when bypassed

Preset Management

Important: Understanding How Presets Work

The Qi Etherealizer's MIDI implementation is one-way only - the editor can send commands TO the pedal, but the pedal does NOT send any information back. This means:

- ❌ The editor cannot read the current settings from the pedal
- ❌ The editor cannot know which preset is currently loaded on the pedal
- ❌ The editor cannot retrieve presets saved directly on the pedal
- ✅ The editor CAN send preset changes and parameter updates to the pedal
- ✅ The editor CAN store preset names and settings locally for your reference

Two Separate Preset Systems

1. Pedal Presets (Hardware)

- Stores 128 complete presets (0-127) in the pedal's internal memory
- Contains all parameter values but NO preset names
- Saved using the pedal's footswitches (hold Bypass + Freeze)
- These presets exist only on the pedal and cannot be read by the editor

2. Editor Presets (Browser Storage)

- Stores preset names and parameter snapshots in your browser
- Only available for slots 4-32 (the "Custom" bank)
- These are convenience labels to help you remember what's in each slot
- Stored locally using browser localStorage

How Preset Loading Works

When you select a preset in the editor:

1. Editor sends a Program Change message to load that preset number on the pedal
2. For presets 4-32 with saved names, the editor also sends all stored parameter values
3. The pedal loads its internal preset, which may differ from what the editor expects

Critical Understanding: If you've modified a preset directly on the pedal, the editor has no way to know about those changes. The editor will show the last settings IT saved, which may not match what's actually on the pedal.

Saving Presets - A Two-Step Process

Step 1: Save in the Editor (Optional - for naming/reference)

1. Adjust parameters to your liking using the editor
2. Enter a preset name (up to 20 characters)
3. Select a bank and slot (only slots 4-32 support names)
4. Click "Save Preset"
5. This saves the NAME and current parameter snapshot in your browser

Step 2: Save on the Pedal (Required - for actual preset storage)

1. After getting your desired sound
2. On the physical pedal, press and hold both Bypass and Freeze footswitches
3. Hold until the preset LED blinks
4. The preset is now saved in the pedal's memory

Warning: If you only save in the editor but not on the pedal, your settings will be lost when you change presets!

Best Practices

Always Save on Hardware

- The editor's save function is just for naming and reference

- The actual preset MUST be saved on the pedal to persist

Keep Notes

- Since preset names only exist in the editor, consider keeping a written list
- The pedal's screen only shows preset numbers, not names

Understand the Limitations

- Loading a preset from the editor sends the last settings IT knows about
- If you've tweaked the preset on the pedal since, those changes are unknown to the editor
- There's no way to "sync" or "download" presets from the pedal

Browser-Specific Storage

- Preset names are stored per-browser
- Names saved in Chrome won't appear in Firefox
- Clearing browser data will erase all preset names

Preset Banks Breakdown

- **Presets 0-3**: Factory presets (Live Mode, Red, Green, Blue)
  - Cannot store custom names
  - Load via Program Change only
- **Presets 4-32**: Custom presets with editor name support
  - Can save names and parameter snapshots in editor
  - Most useful for your frequently-used sounds
- **Presets 33-128**: Additional presets
  - No name support in editor
  - Load via Program Change only
  - Use for overflow or less-frequently accessed sounds

The Delete Function

The "Delete Selected" button in the editor:

- ONLY removes the preset name and settings from the editor's browser storage
- Does NOT affect the preset stored on the pedal
- The pedal will still have whatever was last saved in that slot
- This is useful for clearing out old names or starting fresh with organization

Tips and Tricks

Creating Ambient Textures

1. Set Flow to Parallel
2. Use Grain in Cloud mode with high X value
3. Add long Delay with moderate feedback
4. Increase Space for wash effect
5. Roll off highs with Tone

Rhythmic Effects

1. Set Flow to Series
2. Use Grain in Sample mode
3. Sync Grain X to minimum (locks to delay)
4. Set Delay to dotted 8th
5. Tap tempo for musical timing

Subtle Enhancement

1. Light Chorus (Tri mode, low depth)
2. Short Delay with single repeat
3. Touch of Space reverb
4. Keep Mix/Dry around 30-40%

Sound Design

1. Grain in Random playback mode
2. High Delay feedback (careful!)
3. Modulate Tone while playing
4. Use Freeze function on pedal to capture moments

Troubleshooting

No MIDI Ports Available

- Ensure MIDI interface is connected before opening editor
- Click "Refresh Ports" after connecting
- Try a different browser if issues persist

Pedal Not Responding

- Verify MIDI channel matches (default is 1)
- Check MIDI cable connections
- Ensure pedal is powered on
- Test with a different MIDI interface

Preset Names Not Saving

- Check browser privacy settings
- localStorage must be enabled
- Try a different browser
- Names are stored per-browser

Parameters Not Updating

- Ensure MIDI output port is selected
- Check MIDI channel setting
- Verify pedal firmware is up to date