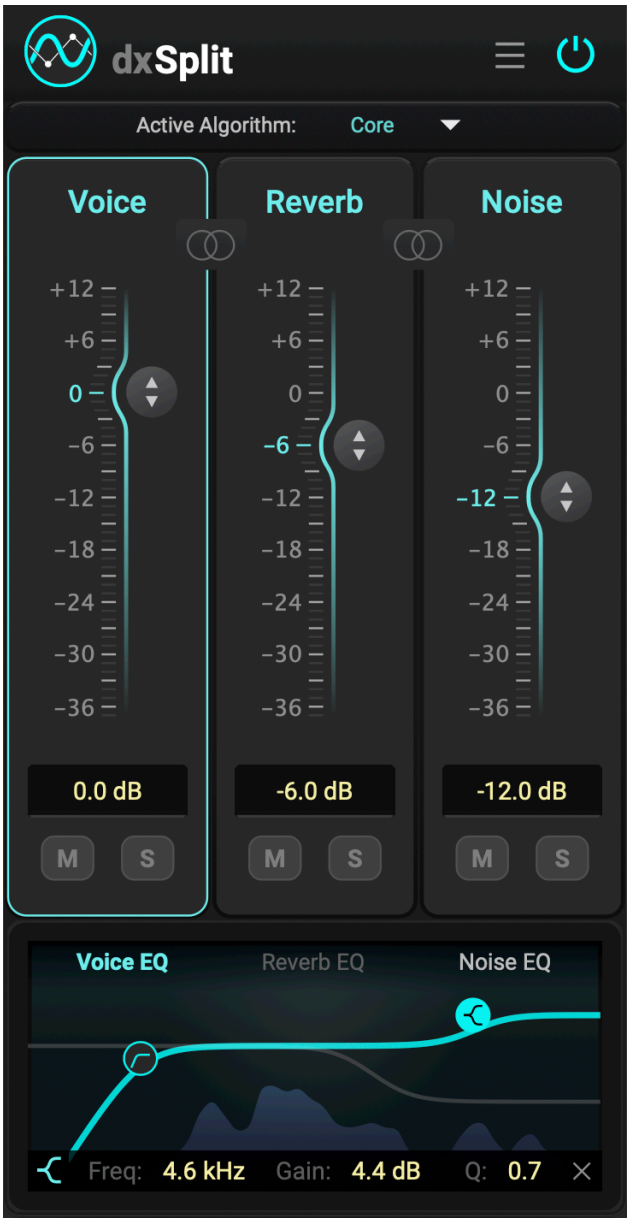
dxSplit

User Manual



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Introduction

dxSplit is an intelligent stem separation plugin that uses advanced machine learning algorithms to separate audio recordings into three distinct components: Voice, Reverb, and Noise. This powerful tool enables precise control over each element of your audio, making it ideal for dialogue editing, ADR work, podcast production, and audio restoration.

Unlike traditional noise reduction tools that simply remove unwanted elements, dxSplit separates the audio into distinct stems that can be individually processed, mixed, and routed. Each stem can be controlled independently with dedicated gain, mute, and solo controls, as well as professional-grade parametric EQ.

The Voice stem contains speech and dialogue, making it perfect for isolating and enhancing spoken content. The Reverb stem captures room acoustics and reverberation, allowing you to adjust the ambience of your recording. The Noise stem isolates background noise and unwanted artifacts, giving you precise control over what to keep or remove.

dxSplit features two powerful stem separation algorithms: Core for real-time processing with minimal latency, and Extended (macOS only) for maximum quality in offline rendering scenarios. The plugin also includes per-stem parametric EQs, the ability to load the dxRevive plugin into the Voice stem (when dxRevive VST3 is installed), and flexible routing with auxiliary outputs for each stem.

Whether you're cleaning up dialogue for film, preparing podcasts for broadcast, or restoring vintage recordings, dxSplit provides the surgical precision and flexibility needed for professional audio post-production.

Specifications and System Requirements

Supported sample rates: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 192kHz

Supported channel layout: Mono, Stereo

Plugin formats: AAX, VST3, AU, Standalone

The plugin should work with most plugin host software. It has been tested and is officially compatible with: Reaper, ProTools, Nuendo, and Cubase.

Minimum System Requirements:

- Windows 10 (64-bit), 8 GB RAM, Dual-Core CPU 2.5GHz
- Mac OS X 13.1 (Ventura), 8 GB RAM, Apple Silicon (M-series)

Note: The Extended algorithm (macOS only) requires more CPU resources and is optimized for offline rendering in AudioSuite or bounce operations.

Installation and Activation

3.1 Installation

The dxSplit plugin is distributed with an easy-to-use installer. During the installation process, the default audio plugin paths are automatically set. If you do not use any custom paths for your plugins, you can simply proceed with the default settings and let the installer complete the setup. After the installation is complete, dxSplit should appear in the list of available plugins within your Digital Audio Workstation (DAW).

3.2 Activation

To activate and use dxSplit, you will need to create a free iLok account and install the iLok License Manager.

Steps for activation:

1. Open the iLok License Manager application and log in to your iLok account.
2. Navigate to the Licenses tab and click on "Redeem Activation Code."
3. Enter the activation code provided when you purchased the Accentize plugin.

If you launch the plugin without activating it, you will be prompted to use a 7-day free trial version. To start the free trial please press the TRY button at the bottom of the iLok licensing screen. A code for starting the trial is not required!

The plugin license can be stored on a physical iLok USB dongle (2nd generation or higher) or directly on your computer.

Interface Overview

The dxSplit interface is organized into several key areas, each designed for efficient workflow and intuitive control over your audio stems.

4.1 Main Interface Layout

The plugin window is divided into four main sections:

- **Header Section** – Contains the settings menu button, about information, and global controls
- **Mixer Section** – Houses the individual stem channel strips with gain sliders, mute, solo, and FX controls
- **Spectral Display / EQ** – Visual representation of the audio spectrum for each stem with a parametric EQ each

Stem Mixing

The mixer section provides comprehensive control over each of the three stems: Voice, Reverb, and Noise. Each stem has its own channel strip with dedicated controls.

5.1 Stem Controls

Each stem channel includes:

- **Gain Slider** – Controls the output level of the stem from silence to +18 dB (or +36 dB in extended range mode)
- **Gain Value Display** – Shows the current gain value in dB
- **Mute Button (M)** – Silences the stem
- **Solo Button (S)** – Isolates the stem, muting all others
- **EQ Slot** – Toggle for enabling/disabling the parametric EQ for this stem
- **Revive** – (Voice stem only) Toggle for loading the dxRevive plugin. Has to be activated in the settings menu.

5.2 Linked Controls

dxSplit features intelligent parameter linking between stems, allowing you to control multiple stems simultaneously:

- **Voice-Reverb Link** – Links the gain, mute, solo, and EQ controls between Voice and Reverb stems
- **Reverb-Noise Link** – Links the gain, mute, solo, and EQ controls between Reverb and Noise stems

When stems are linked, adjusting one stem's controls will automatically adjust the linked stem's controls by the same amount. The link buttons appear between the corresponding stem channels.

Note: The EQ parameters themselves are linked as well

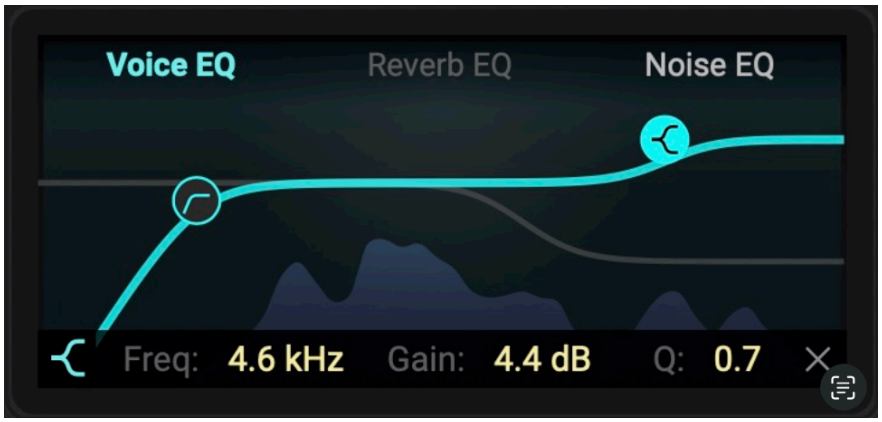
5.3 Gain Range Modes

dxSplit offers three gain range modes that can be selected in the Settings:

- **Adaptive** – Starts with a short range (±18 dB). When a slider is moved below -15 dB, an expand button appears inside the slider, allowing you to switch to the long range (±36 dB). The plugin automatically collapses back to short range when all sliders are above -9 dB.
- **Short Range** – Fixed ±18 dB range with no expand button
- **Long Range** – Fixed ±36 dB range with no expand button

Parametric EQ

Each stem in dxSplit can be enhanced with a professional parametric EQ.



6.1 EQ Controls

The parametric EQ provides comprehensive control over the frequency spectrum:

- **Visual EQ Display** – Interactive frequency response curve showing all active bands
- **Gain Control** – Boost or cut the selected frequency band
- **Frequency Control** – Set the center frequency of the band
- **Q Control** – Adjust the width of the frequency band

6.1.1 Adding EQ Bands

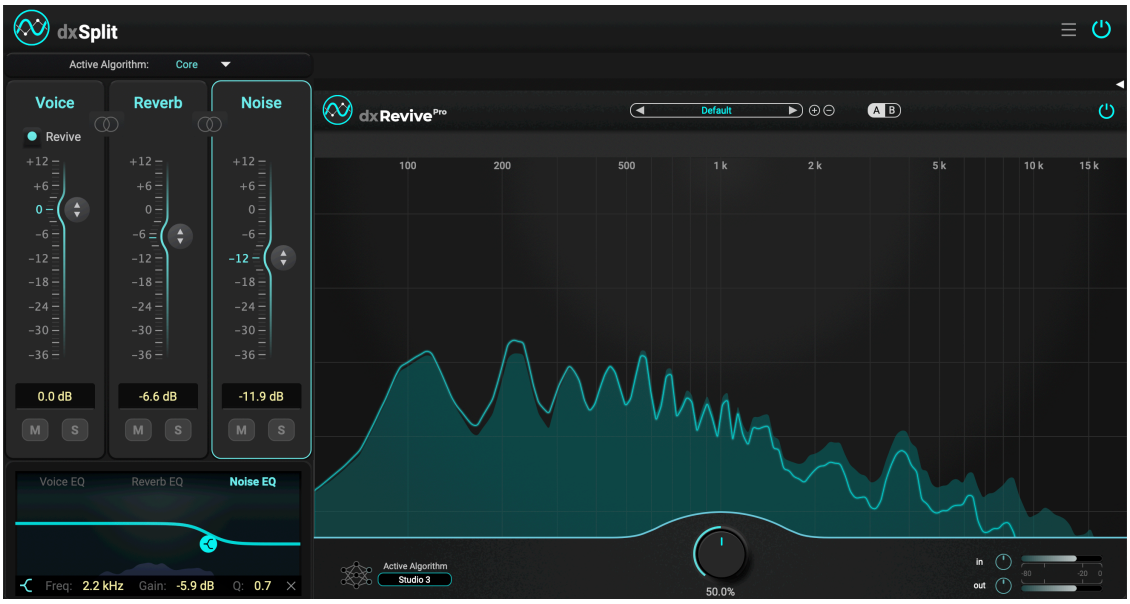
Click anywhere on the EQ curve to add a band and drag it to the desired gain or attennuation level and frequency position. Depending on where you add a band it will default to either lowcut, low-shelf, peak, highshelf, highcut.

6.1.2 Editing EQ Bands

Click and drag directly on an EQ band in the visual display to adjust gain and frequency simultaneously. Use the mouse wheel while hovering over a band to adjust the Q value.

Revive (dxRevive Integration)

The Voice stem in dxSplit includes a unique feature that allows you to load the dxRevive plugin directly within dxSplit. dxRevive is Accentize's professional speech enhancement plugin that uses an advanced synthesis engine to improve the separated voice by adding missing frequencies back into the recording, removing artifacts, and restoring natural speech characteristics. It can add missing high frequencies or low end, resulting in fuller, more natural sounding dialogue.



Note: To use this feature, you must have the dxRevive plugin installed as a VST3 plugin on your system. dxRevive is available separately from Accentize.

Note: When dxRevive is activated, the output will always be mono, even if the input signal is stereo.

7.1 Enabling Revive

To load dxRevive into the Voice stem:

1. Ensure Revive is set to "show" in the Settings (it's hidden by default)
2. Ensure dxRevive is installed as a VST3 plugin on your system
3. Locate the Revive control in the Voice stem channel

4. Click the power button to enable dxRevive
5. Click the expandable label or tab button to show the dxRevive interface

7.2 Using dxRevive

Once enabled, the dxRevive interface will be displayed within dxSplit, allowing you to access all of dxRevive's speech enhancement capabilities directly on the separated Voice stem. This integration provides a powerful workflow for dialogue processing:

1. dxSplit separates the speech from reverb and noise
2. dxRevive adds missing frequencies back to the speech and removes artifacts
3. The result is fuller, more natural, broadcast-quality dialogue

7.3 State Management

The state of dxRevive, including all parameter settings, is automatically saved with your DAW project. When you reopen the session, dxSplit will restore dxRevive and all its settings.

About dxRevive: dxRevive is a professional speech enhancement plugin from Accentize that uses an advanced synthesis engine and machine learning to add missing frequencies to speech recordings, remove artifacts, and restore natural vocal characteristics. It can intelligently add high frequencies or low end that may have been lost during recording or separation. For more information about dxRevive and its features, please visit www.accentize.com.

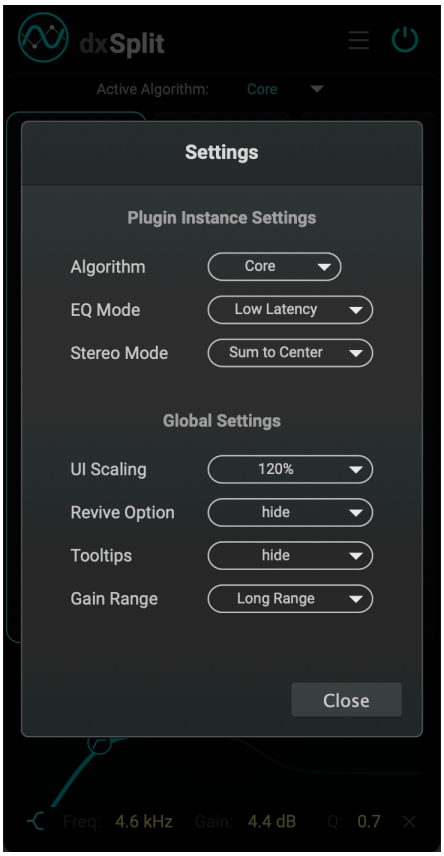
Auxiliary Outputs

dxSplit provides auxiliary outputs for each stem, allowing you to route the individual stems to separate tracks in your DAW for further processing or to create stems for mixing.

- **Main Output** – The mixed output of all enabled and unmuted stems
- **Voice Output** – The isolated voice stem (Auxiliary Output 1)
- **Reverb Output** – The isolated reverb stem (Auxiliary Output 2)
- **Noise Output** – The isolated noise stem (Auxiliary Output 3)

Settings

You can access the settings menu by clicking the **burger icon** (three horizontal lines) located at the top right of the plugin interface. This opens a panel with two categories of settings: **Plugin Instance Settings** and **Global Settings**.



9.1 Plugin Instance Settings

These settings are saved per plugin instance and can be different for each instance of dxSplit in your project:

9.1.1 Algorithm

Choose between different stem separation algorithms:

- **Core** – Standard algorithm optimized for real-time processing with minimal latency. Suitable for all use cases including live monitoring and real-time playback.
- **Extended** (macOS only) – High-quality algorithm optimized for offline rendering. Provides superior separation quality at the cost of increased CPU usage. Automatically selected when using AudioSuite in Pro Tools.

Important: When the Extended algorithm is selected during real-time playback, a warning icon appears. This algorithm is designed for offline rendering (bouncing or AudioSuite) and may cause high CPU usage during playback.

9.1.2 EQ Mode

Choose the EQ processing mode for all stem EQs:

- **Low Latency** – Uses minimum-phase filters for minimal delay and natural phase response. Recommended for real-time monitoring and mixing.
- **Linear Phase** – Uses linear-phase filters that introduce no phase distortion, at the cost of higher latency. Ideal for offline rendering and situations where phase coherence is critical. Automatically selected in AudioSuite mode.

9.1.3 Stereo Mode

Available only for stereo instances of the plugin:

- **Sum to Center** – Sums the left and right channels before processing. Ensures mono-compatible output and is ideal when stereo information is not critical to preserve.
- **Mid-Side** – Processes mid and side information separately, preserving stereo width. Use this when maintaining the stereo field is important.

9.2 Global Settings

These settings apply to all instances of dxSplit and are saved globally:

9.2.1 UI Scaling

Scales the entire plugin interface to fit your screen and preferences:

- **80%** – Compact view for smaller screens

- **100%** – Default size
- **120%** – Enlarged view for high-resolution displays

9.2.2 Revive Option

Controls the visibility of the Revive (dxRevive integration) feature:

- **Hide** – The Revive FX slot is hidden from the interface (default)
- **Show** – The Revive FX slot is visible in the Voice stem channel

This option is hidden by default to keep the interface clean for users who don't have dxRevive installed or don't need the additional speech enhancement.

9.2.3 Tooltips

Enable or disable helpful tooltips that appear when hovering over controls:

- **Show** – Tooltips are enabled (default)
- **Hide** – Tooltips are disabled

9.2.4 Gain Range

Controls the behavior of the stem gain sliders:

- **Adaptive** – Sliders start with ±18 dB range. An expand button appears inside sliders when they go below -15 dB, allowing manual expansion to ±36 dB range. The plugin automatically collapses back to short range when all sliders are above -9 dB.
- **Short Range** – Fixed ±18 dB range with no expand button
- **Long Range** – Fixed ±36 dB range with no expand button (default)

Keyboard Shortcuts

dxSplit supports several keyboard shortcuts for efficient workflow:

10.1 Gain Slider Shortcuts

When clicking on a gain slider:

- **Double-click** – Reset to 0 dB (unity gain)
- **Shift + drag** – Fine adjustment mode (slower, more precise control)
- **Command/Ctrl + click** – Enter exact value via text input

10.2 EQ Shortcuts

When interacting with the EQ display:

- **Mouse wheel** – Adjust Q value of selected band
- **Double-click on band** – Reset band to default settings
- **Shift + drag** – Fine adjustment mode for gain and frequency

Troubleshooting

11.1 Common Issues and Solutions

11.1.1 High CPU Usage During Playback

Symptoms: Audio dropouts, crackling, or system slowdown during playback.
Solutions:

- Switch to the Core algorithm in Settings
- Use Low Latency EQ mode instead of Linear Phase
- Increase your DAW's buffer size for higher latency tolerance
- Use the Extended algorithm only during offline rendering/bounce

11.1.2 Plugin Not Appearing in DAW

Symptoms: dxSplit doesn't show up in your plugin list.
Solutions:

- Ensure the plugin was installed to the correct location
- Rescan your plugin folders in your DAW
- Check that you're using a compatible plugin format (AAX, VST3, AU)
- Verify that your DAW version is up to date
- On Windows, ensure you installed the 64-bit version for 64-bit DAWs

11.1.3 iLok License Issues

Symptoms: Plugin won't activate or shows license error.
Solutions:

- Ensure the iLok License Manager is installed and up to date
- Log in to your iLok account in the License Manager
- Check that your license is activated to your computer or iLok dongle

- If using an iLok dongle, ensure it's connected before launching your DAW
- Try reactivating the license through the iLok License Manager

11.1.4 Revive Not Loading

Symptoms: dxRevive doesn't load in the Revive section, or the Revive option shows an error.
Solutions:

- Ensure dxRevive is installed as a VST3 plugin on your system
- Check that dxRevive is installed to the standard VST3 location:
  - **macOS:** `/Library/Audio/Plug-Ins/VST3/`
  - **Windows:** `C:\Program Files\Common Files\VST3\`
- Restart dxSplit after installing dxRevive
- Verify your dxRevive license is activated in the iLok License Manager
- Contact Accentize support if dxRevive fails to load after proper installation

11.2 Getting Support

If you encounter issues not covered in this manual, please contact Accentize support: support@accentize.com
When contacting support, please provide:

- Your operating system and version
- Your DAW name and version
- The plugin format you're using (AAX, VST3, AU)
- A detailed description of the issue
- Any error messages you've received

Technical Details

12.1 Algorithms

12.1.1 Core Algorithm

The Core algorithm uses a streamlined neural network model optimized for real-time performance. It provides excellent stem separation quality with minimal CPU overhead, making it suitable for:

- Real-time mixing and monitoring
- Live sound applications
- Systems with limited CPU resources

12.1.2 Extended Algorithm (macOS only)

The Extended algorithm uses a more complex neural network with additional processing stages. It offers superior separation quality at the cost of increased CPU usage. This algorithm is ideal for:

- Offline rendering and bouncing
- AudioSuite processing in Pro Tools
- Final deliverables requiring maximum quality
- Situations where CPU usage is not a concern

12.2 Latency

dxSplit introduces latency due to the stem separation processing:

- **Core algorithm:** Optimized for minimal latency
- **Extended algorithm:** Higher latency due to deeper processing
- **EQ processing (Low Latency mode):** Negligible additional latency
- **EQ processing (Linear Phase mode):** Additional latency proportional to buffer size

All DAWs with proper plugin delay compensation will automatically compensate for this latency. In offline rendering scenarios (bouncing, AudioSuite), latency is not a factor.

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