Bark24 | Dyn version 1.0 User Manual

Welcome to Bark24 | Dyn!

Bark24 | Dyn is an advanced 24-band dynamics processor plug-in. It splits the incoming audio into 24 frequency bands based on the "Bark scale", then applies gain processing to each band to create a huge variety of dynamic frequency sculpting effects, from surgical correction to wild mangled chaos and everything in between.





What Makes it Different?

Frequency Focused Control

• Bark24 | Dyn uses the **Bark scale** - a model of how humans naturally hear. This processor doesn't just analyze audio, it thinks like your ears. That means results feel musical, intuitive, and fast.

More Musical Results

- Because the bands align with how your ears group sound, adjustments feel more natural and musical.
- You can dial into the "sharp", "edgy", or "boomy" region as we hear it, rather than hunting through frequency in Hertz values.

Built for Speed

- Draw and slide threshold and gain curves.
- Swipe across solos or mutes to quickly A/B processing.
- Adjust all bands at once with group controls.
- Adapt to your audio using auto-threshold.

What can you do with this thing?

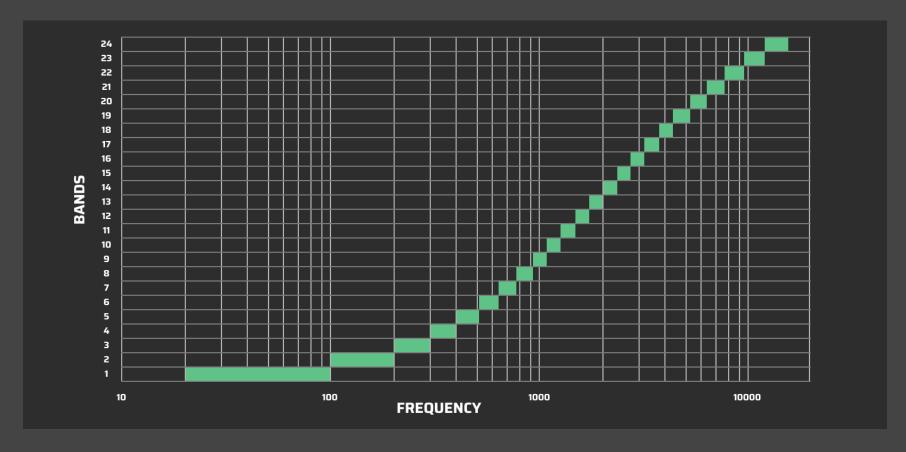
- Transparent limiting thanks to frequency aware processing.
- Transient enhancement or softening only on the frequencies you want.
- Pull up hidden textures and artifacts from your source material.
- Explore everything from subtle mix correction to chaotic sound design!

Visit and follow the <u>FSK Audio YouTube channel</u> for frequently updated tips and tricks. Also take a look at the <u>Tips and Tricks</u> section of this document.



About the Bark Scale

- Bark24 | Dyn's frequency bands are based on the **Bark scale**. The Bark scale is based on **psychoacoustics**, or how the human brain perceives sound, so **Bark24 | Dyn's frequency bands match how our ears naturally hear**.
- The width of each band is based on the concept of **critical bands**, meaning there is minimal masking between adjacent bands, resulting in a cleaner and more direct control over the tone.
- Some parts of the spectrum are more important for perception (like clarity, presence, or warmth). The **Bark** scale gives more resolution in these perceptually critical areas and less in areas we don't hear as distinctly.





Installation & Authorization

- 1. Download the installer from fskaudio.com and run it.
- 2. After the installation, launch your DAW and instantiate a Bark24 | Dyn.
- 3. A prompt for activating Bark24 | Dyn will appear. You will be asked to sign into your iLok account.
 - a. Alternatively, you can authorize Bark24 | Dyn using <u>iLok License Manager</u> prior to opening Bark24 | Dyn on your DAW.

The installer will install the following plug-in formats:

- AAX
- VST3
- AU (Mac only)

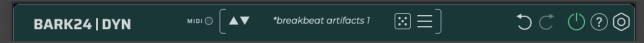
Using Bark24 | Dyn

Keyboard Shortcuts

- Fine control for parameters
 - o Hold the **Command** (Mac) or **Ctrl** (Windows) key while adjusting knobs or sliders.
- Reset continuous parameters to default value
 - o Hold **Option** (Mac) or **Alt** (Windows) and click on knobs or sliders.
- Direct input
 - o **Double-click** on parameters to type in values.
 - o Click directly on numeric readouts for sliders.
- Contextual menus
 - Right-click or Control+click (Mac) to open contextual menus on select items.
- **Do to All** on buttons
 - Hold **Option** (Mac) or **Alt** (Windows) and click on button (Band Solo, Mute, and Power)



The Header



The Header contains preset management, undo/redo, power, help links, and preferences.

Logo

Click on the logo to display production information.

MIDI Input Signal Indicator



This lights up when MIDI signal is received.

Presets Management



Previous/Next Preset (Up/Down buttons)

Use these buttons to load the previous or next preset.

Preset Name Display

Displays the name of the currently loaded preset.

• The preset name will be italicized and display an asterisk (*) if settings have been changed.





Click on the display to open a menu showing other presets.

Select Random Preset

Selects a random preset from your presets folder.

Presets Menu

Provides further options for managing your presets.

- Load
 - o Opens Bark24 | Dyn preset files from any location.
- Import
 - o Copies Bark24 | Dyn preset files into the preset folder.
- Save
 - o Overwrites the currently loaded preset.
 - o If there is no preset loaded, saves a new preset.
- Save As....
 - Saves the current setting as a new preset.
- Initialize Settings
 - o Unloads the current preset, and resets all settings to their default values.
- Delete
 - Deletes the current preset.
- Open Preset Folder
 - Reveals the Bark24 | Dyn Preset folder in the Finder or Explorer.

Undo/Redo

Click on the corresponding button to undo or redo edits.

Power

Toggles processing on/off.



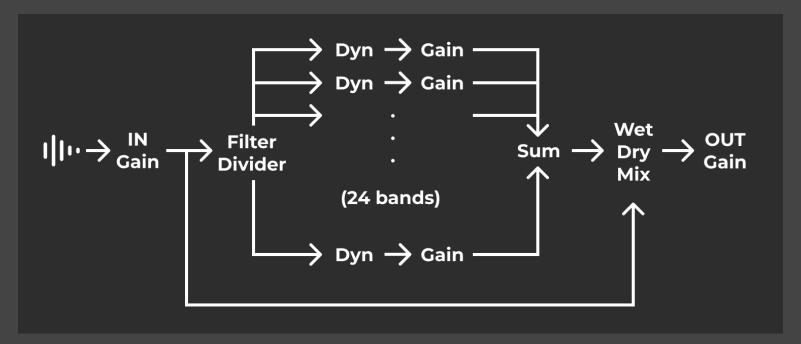
Help

Opens a menu with more help resources.

Preferences

• Window Size - A few zoom settings are provided to resize the plug-in window.

Signal Flow





Input Section



- Input peak level readout
 - o Displays the peak input level.
 - Click to reset.
- Input Meter
 - o Displays the level of the input signal after Input Gain.
- Input Gain
 - o Adjusts the incoming signal level before it is split into frequency bands.
 - o Double-click to directly enter value.
 - Click the numeric readout to directly enter value.



Operation Parameters



Along the top, you'll find global parameters that affect all bands.

Dynamics Modes

Determines the behavior of the gain change relative to threshold.

- **Limit** Gain is **reduced** on signals **above** the threshold.
 - Clamps down on the loud parts.
- **Gate** Gain is **reduced** on signals **below** the threshold.
 - o Silences the quiet parts.
- **Expand** Gain is **increased** on signals **above** the threshold.
 - o Emphasizes the loud parts.
- **UpComp** Gain is **increased** on signals **below** the threshold.
 - o Brings up the quiet parts.

Each Dynamics Mode retains its own threshold settings.

Dynamics Attack and Release

• Sets the attack and release times for the dynamics processor.

Band Contour

Determines the slope of the filters.

- High Q Uses very steep filter slopes to isolate frequencies between bands.
- Medium Q (default) Uses moderate filter slopes with less isolation.
- Low Q Uses gentle filter slopes that are similar to typical graphic EQs.



Threshold Section



Band Thresholds

- Sets the threshold individually for each band.
- Drag across to draw a curve.
- Shortcuts
 - o Command-drag up/down: Fine adjustment.
 - o Option-click: Resets to default value.
 - o Right-click: Opens contextual menu. (see MIDI Learn)
 - o Control-click (Mac): Opens contextual menu.
 - Shift-drag left/right to temporarily group multiple bands. Allows easy creation of a "shelf".
 - o Double-click to directly enter value.
 - o Click the numeric readout to directly enter value.

Threshold Group - Triangular handle on the left side.

- Indicates the average of all the threshold settings.
- Drag up/down to move all thresholds at the same time.
- Drag left/right to slide all thresholds left/right.
- Shortcuts
 - o Command-drag: Fine adjustment.



- o Option-click: Reset all thresholds to default value.
- o Double-click to directly enter value.
- o Click the numeric readout to directly enter value.

Band Meters

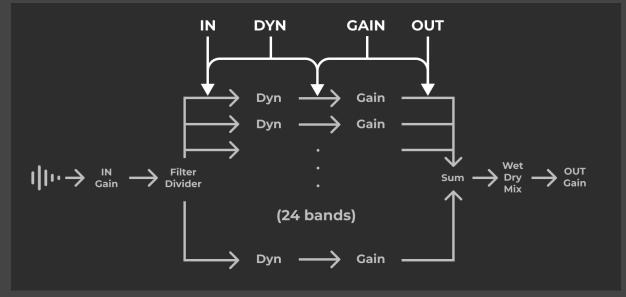
• The central area displays the per-band signal level.

Auto Threshold

• While enabled, Bark24 | Dyn will automatically set the thresholds based on the incoming peaks.

Metering Modes - Selects the metering type for the band meters.

- In Displays the signal level before any processing.
- Dyn Displays the levels before and after dynamics processing.
- Gain Displays the levels before and after gain processing.
- Out Displays the signal level after dynamics and gain processing.



• 3D - Displays the level history as a cascading trail.



Band Control Section



Provides per-band control for the following.

- Solo
- Mute
- Power

Shortcuts & Gestures

- Swipe left/right: Toggles multiple bands at once.
- Option-click: Toggles all bands.
- Right-click: Opens contextual menu. (see MIDI Learn)
- Control-click (Mac): Opens contextual menu.

Gain Section



Band Gain

- Sets the post-dynamics gain for each band.
- Shortcuts
 - o Command-drag: Fine adjustment.
 - o Option-click: Resets to default value.



- o Right-click: Opens contextual menu. (see MIDI Learn)
- o Control-click (Mac): Opens contextual menu.
- Shift-drag left/right to temporarily group multiple bands. Allows easy creation of a "shelf".
- o Double-click to directly enter values.
- o Click the numeric readout to directly enter value.

Gain Group - Triangular handle on the left side.

- Indicates the average of all the gain settings.
- Drag up/down to move all gains at the same time.
- Drag left/right to slide all gain settings left/right.
- Shortcuts
 - o Command-drag: Fine adjustment.
 - o Option-click: Resets all gains to default value.
 - o Double-click to directly enter value.
 - o Click the numeric readout to directly enter value.

Gain change display



• The amount of gain change from the dynamics processing is displayed on each band gain fader.

Wet/Dry Mix





Blends the non-processed signal (dry) with the processed signal (wet).

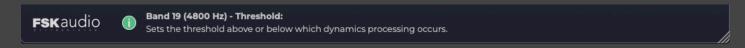
Output Section



- Output peak level readout
 - o Displays the peak output level.
 - o Click to reset.
- Output Meter
 - o Displays the level of the output signal after Output Gain.
- Output Gain
 - o Adjusts the outgoing signal level after Wet/Dry Mix.
 - o Double-click to directly enter value.
 - Click the numeric readout to directly enter value.



The Footer



Tooltips

Hover over different objects in the plug-in to display their names and descriptions.

• Click on the "i" button to enable or disable the tooltips.

Window Resize Handle

Drag the lower right corner to resize the window.

• The windows size can also be changed and reset from the Preferences menu.

MIDI Learn

Many Bark24 | Dyn parameters can be assigned to follow MIDI CC messages. This is useful for controlling parameters from a hardware control surface, or modulating it with LFOs (such as FSK Audio's own ModPlay LFO plug-in).

Right-click menu

Right-clicking on a MIDI mappable parameter opens a menu with the following:

- MIDI Learn
 - Select this to start "listening" for MIDI input. When a MIDI control message is detected, it is assigned to the parameter.
 - o While a parameter is listening, select again to stop.
 - When a parameter is listening, a red "X" button will be displayed:
 - Click on the X button to stop..
- Clear
 - o If a parameter has a MIDI assignment, the assigned MIDI CC number will be displayed.
 - o Select to clear the MIDI assignment of that parameter.



- Clear All
 - Clears all MIDI assignments in the current instance of Bark24 | Dyn.

Multiple Assignements

Multiple parameters can be assigned to the same MIDI CC number.

- For example, multiple bands can be controlled by a single control surface encoder.
- Use the right-click menu to enable MIDI Learn on multiple parameters, or use MIDI learn on one parameter at a time.

Parameters that can be controlled by MIDI

- Power
- Attack & Release
- Band Contour
- Band Thresholds
- Band Gains
- Band Solo, Mute, Power
- Input & Output Gain
- Wet/Dry Mix

Tips and Tricks

Limit mode

The lower the threshold, the stronger the effect.

Focused Control

Limit only certain bands to control them without pulling down other frequencies (e.g. snare can keep more brightness and crack).



Gate mode

Set the threshold to where the signal comes in and out. Too low and nothing will happen. Too high and the gate will be permanently closed.

Transient Softener

Use a slow attack to soften transients.

Frequency Conforming Noise Gate

Set the threshold curve to conform to the noise profile to create a more transparent noise gate. Great for suppressing guitar pickup hum!

Chopping/Dripping Effect

Set the thresholds just around each band's peak level to create chopping/dripping sounds as different frequency bands drop in and out.

Expand mode

The lower the threshold, the stronger the effect. Be careful though! This mode can overload the signal pretty easily.

Focused Enhancement

Gate just one or a few frequency bands to enhance specific characteristics of the source audio (e.g. just the bottom on a kick).

Transient Enhancer

Use a fast attack and release to aggressively emphasize the transients.



UpComp mode

The higher the threshold, the stronger the effect. Be careful with slow attack settings as there will be positive gain remaining as the signal exceeds the threshold, and may cause some overloads.

Weirdness Processor

Set the threshold slightly below the peaks to bring out all kinds of interesting low level sounds in specific frequency ranges.

Transient Enhancer

Use a slow attack to tastefully enhance the transients.

Other

Automate Wet Mix

Fade in/out the crazy (or subtle) effect you've created by automating the Wet/Dry Mix.

Use Auto Threshold

The Auto Threshold function gives you a great starting point for many workflows by auto-setting the thresholds to conform to the incoming signal. Then quickly add more or less dynamics processing by moving the Threshold Group handle.

Use the Band Power buttons

Turn on/off the processing on any band with the Power buttons. Swipe across them to toggle multiple bands at once for quick A/B or as an effect.



Compatibility

Operating Systems

- Mac (Intel, Apple silicon)
- Windows

Plug-in Formats

- AAX
- VST3
- AU

