BASSLANE

PRO

Plugin Manual

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TONE PROJECTS

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INTRODUCTION

Basslane Pro is the definitive tool for controlling low-end stereo width and crafting impactful bass that translates across formats and playback systems. Basslane Pro combines transparent and precise manipulation of stereo width with unique features for impressive low-end weight, dimension, and punch.

As a mix tool, Basslane Pro helps you regain tightness in your mix by keeping fundamental bass frequencies firmly centered in the stereo field. The unique Stereo Harmonics feature allows you to inject upper bass harmonics to add definition and controlled low-end width without adding problematic stereo information in the subs. You can also add width to specific frequencies while using the helpful metering and monitoring options to make sure you're not going overboard. The easy-to-use multi-band dynamics (powered by our acclaimed Unisum Mastering Compressor) makes it effortless to tame transients or enhance low-end punch and density.

In the mastering stage, Basslane Pro allows you to transparently clean up correlation issues and prevent excessive low-end stereo content that would be problematic when cutting to vinyl or loose impact when played in clubs or on mono systems. Basslane Pro uses high-fidelity linear phase processing for an uncompromised stereo image, and offers unique solutions to preserve valuable

musical content affected by width correction. You can compensate for lost dimensionality by adding pseudo-bass harmonics generated from the mono'ed bass with full control over stereo width, and recover important anti-phase content (such as wide synth basses) that would otherwise be lost when summed to mono.

Whether used for problem solving or creative sound design, Basslane Pro offers impeccable sonics and a focussed workflow that will help you make informed decisions and achieve great sounding bass.

Features

- Variable width manipulation of low- or bandpassed frequency areas
- Transparent linear phase or zero latency mode
- Adjustable curve-matched gain for filtered frequency range
- Mono Recovery feature to dynamically recover anti-phase signals that would otherwise be lost when summed to mono (Linear phase mode only)
- Unique Stereo Harmonics for creating upper bass harmonics based on the filtered low-end with full control over stereo width
- 3 different harmonic algorithms with control over mid/side mix, damping, and dynamics
- Dynamic width compression or expansion with a Unisum-powered multi-band dynamics processor tailored for transient sensitive control of the side channel
- Unisum-powered dynamic EQ capable of either compression or expansion for gorgeous low-end punch and density
- Flexible Pre/Post filtering of sub frequencies, including an analog inspired resonant highpass filter for a tight bass boost
- Bass focussed output limiter to keep peaks in range
- 5 band stereo balance and correlation metering with adjustable crossover frequencies
- Flexible monitoring of delta, mid, side, and filter solo of both dry and wet signals
- A/B preset switching
- Integrated reference level system to automatically adjust input level to match loaded presets
- Presets by experienced artists and engineers
- Native support for both Intel and Apple Silicon processors

GETTING STARTED

Install and Authorise

Unzip and double-click the downloaded installer and follow the on-screen instructions. Once installed restart your DAW (or refresh its list of plug-ins) and insert the plugin on a track. The controls will be hidden and audio output will be disabled until you have activated the plug-in.

To activate, simply copy and paste the license information you received after purchasing the plug-in and click **Activate**. Once the activation is successful, the plugin interface will appear and audio output will be enabled.

Basic Operation

Knobs can be controlled either by dragging or scrolling up and down, or by double clicking to enter values directly. Switches can be dragged or set directly by left clicking on the desired position.

Shortcuts

- Reset to default: **Right Click (or Alt+Click)**
  You can use this to toggle back and forth between the default and your last setting.
- Reset to default of loaded preset: **Shift+Right Click (or Alt+Shift+Click)**
- Fine control when dragging knob: **Ctrl+Drag**
- Some parameters can be linked when dragging by holding: **Shift**
- Clicking a switch position again toggles between that and the previous setting.
  You can use this to quickly A/B between different options or on/off.

Tool Tips

A good way to learn about the plug-in is to enable tool tips. When enabled you get a small explanation for any parameter when you hover the mouse cursor over the control. Enable tool tips by clicking on the question mark icon in the lower left corner of the interface.

User Interface Scaling

Basslane Pro allows you to adjust the size of the user interface. Click the small “i” in the bottom left corner of the user interface to open the info screen. Use the “UI 100%” dropdown menu to select different levels of scaling.

THE MENU BAR

Presets

Basslane Pro ships with a collection of carefully crafted factory presets. However, to get the most out of Basslane Pro it is strongly recommended that you experiment with the controls to find your own preferred settings.

A preset stores the state of all parameters into one of the two available A and B slots. Loading a preset into one slot does not change the preset stored in the other slot. You can toggle between the presets stored in the A and B slot by clicking the **A/B** button, and the **Copy** button allows you to copy the preset in the currently active slot to the opposite slot.

Mac Preset Locations

Factory Presets: */Library/Audio/Presets/Tone Projects/Basslane Pro*
User Presets: */Users/YOUR USER/Library/Audio/Presets/Tone Projects/Basslane Pro*

Windows Preset Locations

Factory Presets: *C:\Program Files\Tone Projects\Basslane Pro\Presets*
User Presets: *C:\Users\YOUR USER\Documents\Tone Projects\Basslane Pro*

Preset Reference Level

Since Basslane Pro includes dynamic and harmonic processing it is sensitive to input level. Therefore Basslane Pro employs a system to ensure that presets translate well to other tracks with different levels. Every preset is automatically stored with a reference level indicating the peak level expected by the preset in order to sound as intended. When loading a preset Basslane Pro compares the current signal level to the preset reference level, and adjusts the Input/Output parameters accordingly so that the gain staging of the preset is preserved.

If you prefer exact predictability when loading presets, you can disable the reference level system by going to the Info screen and selecting "**Ref. Off**".

Mode

Basslane Pro offers two operating modes: the default Linear Phase mode and a Real-Time Mode.

The default **Linear Phase** mode is the recommended mode for most applications, especially mastering. This mode uses transparent linear phase filters for an uncompromised stereo image, but adds 4140 samples of latency at 44.1kHz (~94ms). When engaging the optional Sub Filter in Side mode, Basslane Pro will add an additional 4096 samples of latency.

The **Real-Time** mode uses minimum phase filters instead of the default linear phase ones. While this offers zero latency performance it's important to be aware that width and side manipulations in Real-Time mode can alter the stereo image in unexpected ways, especially with filter slopes steeper than 6 dB/oct. This may be acceptable, or even used creatively in a production or mixing context, but for mastering applications it's recommended to use the default Linear Phase mode.

The Mono Recovery feature relies on linear phase filters and is not available in Real-Time mode. For more details, see the "Mid/Side and Phase" section of this manual.

NOTE: *The internal processing structures of the Linear Phase and Real-Time modes are actually very different. Although settings are usually very comparable it's worth keeping in mind that there can be subtle differences beyond phase response when trying to use the modes interchangeably.*

Power

Works as a global on/off switch allowing you to smoothly bypass processing for "in/out" comparisons. Basslane Pro also offers a separate **Monitor** section allowing flexible monitoring options which may be preferable to use for most comparisons.

Input/Output/Limit

Positioned in the lower left and right corners of the interface, **Input** and **Output** provides clean level calibration in and out of Basslane Pro. By adjusting Input you can scale the overall processing intensity applied in the harmonic and dynamic sections.

The Input and Output parameters are also used when loading presets to calibrate the signal level to the level expected by the preset. You can read more about that under under Preset Reference Level.

TIP: *Hold **SHIFT** when adjusting Input to inversely link the Output control and maintain an even loudness.*

Basslane Pro features an output limiter which can be controlled with the **Limit** parameter. You can read more about this feature under Output Limiter.

FIXING ISSUES WITH WIDE BASS

What's Wrong With Wide Bass?

Broadly speaking there are two reasons to worry about the mono status of the low frequencies in your music: 1) vinyl, and 2) single-channel subwoofer playback systems (e.g. many club systems, along with 2.1, 5.1, and 5.1.2 etc. Atmos home entertainment systems).

First, vinyl. Let's get something out of the way right off the bat: yes, low frequencies with a negative correlation (a.k.a. out of phase, in anti-phase, decorrelated, etc.) can be problematic when cutting vinyl. However, a little low frequency width is not nearly as problematic as many would lead you to believe, especially if it is reasonably well controlled, dynamically speaking. Still, if you're working on music that is eventually destined for vinyl it's a good idea to at least be aware of what kind of width you've got going on below about 200 Hz. If it's on the subtle side and not overly dynamic you can probably get away with it, whereas sudden bursts of low frequency width are more likely to be problematic.

Next up, single-channel subwoofer systems. Note that this doesn't necessarily mean there's only one subwoofer, but rather that all subwoofers are being fed the same signal. In fact, in many clubs the entire sound system is mono to provide a more consistent experience for club goers as they move around, but that's another matter. Regardless, the number of playback systems out there with true stereo sub-bass reproduction is fairly limited, so if low frequencies are going to be reproduced in a predominantly mono fashion anyhow, why not take control of them at the source and ensure they're mono-ed effectively before they leave the studio?

How To Fix It?

If the goal when mono-ing a signal is to remove any differences between the left and right channels, then a good place to start is to filter out any information we want to eliminate from the difference channel (a.k.a. the "side" channel). Said another way, since we're interested in removing low frequency differences, that means using a high-pass filter on the side channel. As a brief aside, this is what's often known as an elliptical filter, or elliptical EQ, so called due to its original use in vinyl cutting where stereo signals would cause the cutter head to trace a roughly elliptical path.

Technically speaking, Basslane Pro isn't highpass filtering in the traditional sense, but the overall principle is the same.

Mid/Side and Phase

Here's the rub: all analog filters, and many digital ones, induce phase shift. In a 6dB/octave highpass filter the maximal phase shift is 90°. However as filter order increases and the rolloff becomes steeper, so does the maximal phase shift. "What," you might ask, "does all this have to do with mid/side?" A good question. In mid/side, the difference between a signal that's hard-panned left and hard-panned right is a flip in polarity of the side channel. While phase and polarity aren't exactly the same, they're certainly related. The implication here is that if you alter the phase response of the side channel, you necessarily alter the stereo placement of any sounds at the frequencies where phase-shift occurs.

The upshot of all this is that by using a minimum phase high-pass filter on the side channel you will be compromising the stereo image at and around the cutoff frequency of the filter. With a 1st-order (a.k.a. 6dB/octave) filter you can just about get away with this. The maximal phase shift of 90° means that while the stereo image won't flip on you at any point, it will get smeared near the cutoff frequency, and stereo separation will suffer substantially above that. By moving to higher order filters though, image-flip, or even scrambling, around the cutoff frequency becomes inevitable.

Many low frequency mono-ing plug-ins use minimum phase filters and suffer from various degrees of stereo image warping. The free version of Basslane also uses a minimum phase filter but defaults to a gentle 6dB/octave filter. You might choose to use the image-scrambling properties of the higher-order filters creatively, or you could ameliorate their effect by keeping the Width setting above roughly 20%.

However, the best solution here is to use **linear phase** filtering, which is exactly what the default mode in Basslane Pro is doing. This means that removing low-end stereo information using Basslane Pro does not cause any additional, unexpected alteration of the stereo image. There's a possibility that if something in the frequency range you're mono-ing is hard-panned, it'll lose a little level, but Basslane Pro makes it very easy to compensate for this with its curve-matched **Gain** parameter. Not only that, Basslane Pro also has another trick up its sleeve for maintaining the level of hard-panned sounds.

Anti-Phase Content

There is one scenario in which standard linear phase filtering will fail, and that's when a signal is predominantly or entirely in the difference channel. It's not something that can happen through standard panning alone, and it's not something you should ever see with a naturally recorded acoustic source, but with synthesized bass, highly processed tracks, or stereo recording faults it occurs often enough to care about.

When it happens and a simple side channel highpass filter is used, whether minimum or linear phase, bass content can be lost entirely. The **Mono Recovery** feature in Basslane Pro allows you to effectively recover anti-phase signals that would otherwise be lost when summed to mono, while also giving you an easy method for maintaining the level of panned sounds which have been mono-ed.

The Lost Dimension

When mono-ing the bass to fix problematic low-end you sometimes lose subtle dimensionality or stereo presentation in the process. Here too, Basslane Pro gives you two techniques to deal with this. In some cases you might get better results from dynamically reducing just the widest peaks in the low-end. The **Dynamics** section in Basslane Pro features an easy to use multi-band version of our acclaimed Unisum Mastering Compressor focussed on taming transients and overly dynamic low-end in the side channel. In other cases, the **Stereo Harmonics** feature can help you re-create lost dimensionality by generating upper harmonics in stereo to add bass related width without actually widening the low-end. And of course, there's nothing to stop you from using both in conjunction with one another

CREATIVE USES FOR BASSLANE PRO

Basslane Pro is great at fixing problems in a mastering context, but can do much more than just that. Here are a few examples of how to use it as a creative production and mixing tool.

A Tighter Mix

Most producers and mixers already keep their kick drums and bass lines centered. Still, sometimes a mix will sound a lot tighter when the low-end from other tracks and effect returns is also kept narrow in the stereo field. Cleaning up "spatial mud" can help create a punchy low-end with space for other elements and with most low-end kept narrow around the center, chances are you'll get even more impact from those few elements you decide to keep wide. With Basslane Pro on a group or stereo bus you'll be able to dial in exactly how much you'd like to tuck in the low-end.

Creating Dimension with Stereo Harmonics

The Stereo Harmonics section in Basslane Pro offers a powerful way to add character, definition, and width to low-end material without creating problematic stereo information in the subs. This can be used to to enrich bass with harmonics to make it translate to smaller speakers, but the creative uses go way beyond just that. Add subtle stereo cues to a kick drum, or drive it hard on a synth bass for crunchy harmonic coloration that you can automate from mono to super wide. The continuously variable control over harmonic width, intensity, tone, and dynamics, makes this a unique approach to shaping character and dimension of tracks.

Adding Controlled Width

Beyond using the Stereo Harmonics to add width where it wasn't before, Basslane Pro offers other ways to enhance the stereo width of tracks and mixes. Using the **Width** parameter you can increase the side information in a specific frequency region. Often this could be using the bandpass filter to target the low-mids. The **Dynamics** section can also be used, either alone or in combination with the static Width control, to either compress or expand the side content in the selected frequency range.

Unisum-Powered Dynamics

When setting the Dynamics feature to Stereo mode, you engage a dynamic EQ powered by the mighty Unisum Mastering Compressor fine-tuned to add punch and density to the low-end. With a few basic controls it's remarkably simple to use, yet sounds beautiful and helps the low-end sit just right.

THE MAIN SECTION

The main section consists of controls for filter type and slope, frequency selection, width control, and make-up gain. It's important to note that these controls affect several other sections in Basslane Pro, and so they may also be relevant to visit while adjusting other parameters.

The filter type, slope and frequency selected here will be used throughout Basslane Pro. These parameters control the frequency range that width and gain manipulations are applied to, but the filtered signal will also be used as the source for generating harmonics and as the band to which dynamic processing will be applied.

Filter Type and Slope

Clicking the LP/BP label allows you to select between using either **lowpass (LP**) or **bandpass (BP)** filtering to isolate the frequency range used for processing.

When LP is selected the Slope switch sets the slope used for the lowpass filter. You can select from 6, 12, 18, 24, 36, and 48 dB/oct. With BP selected, the Slope switch offers 3 different options, setting both the bandwidth and steepness used for the bandpass filter.

Frequency

Sets the frequency for the lowpass/bandpass filter and thus controls the frequency range affected by Width, Harmonics, and Dynamics processing. With LP selected, the frequency is defined as the corner frequency at -6dB. For BP, the frequency is defined as the center frequency.

TIP: *Use the* ***Solo*** *monitoring option to listen to the filtered signal while setting Frequency and Slope.*

Width

Sets the width of the filtered signal. At 100% the signal will remain un-processed. At 0% the signal will be fully mono. Settings above 100% will boost the width.

The visual indicator ring around the Width knob shows the signal level of the side channel within the filtered frequency range.

TIP: *When using settings above 100% to increase width, for example in the low mids, it can be a good idea to either use the BP filter, or to engage the Sub Filter in Side mode. This allows you to prevent very low frequencies from becoming too wide.*

Gain

Sets the make-up gain for the filtered frequency range. This is usually applied to make up for lost level when reducing low-end width or to adjust tonal balance when applying dynamic processing. This can be thought of as a low shelf in LP mode, or a bell in BP mode.

SUB FILTER

The Sub Filter provides an additional highpass filter for further control over low-end width and for cleaning up sub frequencies before feeding the signal into the main processing.

Mode

Enables and sets the mode for the Sub Filter.

The **Side** mode will insert a highpass filter on the side channel only. The phase response of this filter will match the main mode — Linear Phase or Real-Time. In Linear Phase mode this will add extra latency.

The **Stereo** mode engages a minimum phase highpass filter on the stereo signal.

The **Boost** mode adds a tight and punchy bass boost from a resonant highpass filter with an analog inspired curve on the stereo signal.

Freq

Sets the cutoff frequency for sub filter.

Soft

Switches the slope of the filter for Stereo and Side modes from 18dB/oct to a gentle 6dB/oct.

Amount

Adjusts the amount of resonant boost in Boost mode.

Post

By default the Sub Filter is placed first in the processing chain. With **Post** enabled, the sub filter will be placed at the end of the processing, just before the final output limiter (if engaged).

MONO RECOVERY

The Mono Recovery section is a unique feature of Basslane Pro and allows signals that are predominantly, or entirely, in antiphase to be recovered to mono. Normally, when monoing these types of signals they drop in level substantially, or disappear altogether. Mono Recovery circumvents this, allowing them to be blended back in to taste.

Mode

Enables and sets the mode for Mono Recovery. The **Auto** mode will adapt the channel priority dynamically based on signal strength and will often be the best solution. The **Left** and **Right** modes allow you to set the channel priority manually.

If you need to recover antiphase information and, for example, a hard panned low-tom, set the channel priority to the direction the tom is panned. If you need to recover antiphase information *and* left and right panned elements, **Auto** mode is recommended.

Amount

Sets the amount of antiphase signal recovered back to mono. Normally, if needed, this can be used at 100% to retain the original level balance of the recovered signal. However, occasionally you may want to recover less than the full amount.

There is also an inevitable interplay between **Width** and **Amount** when **Left** or **Right** modes are used. In short, as Amount is increased, narrowing or widening will be increased for the prioritized channel, and decreased for the opposite channel.

Delay

Sets the Mono Recovery signal delay. This is a niche use case and should be used with caution (if not being used creatively). If Mono Recovery is being used in **Left** or **Right** mode, hard-panned signals in the non-prioritized channel can be lost or substantially reduced in level. Delaying the Mono Recovery signal can help alleviate this, but has its own set of trade offs.

If using this parameter, try the following process. With the **Amount** set to 100%, listen carefully to the tonal character while dialing in a **Delay** time that works. Once set, you can reduce the **Amount** to lessen the tonal impact, if desired.

Speed

Sets the channel selection speed used for **Auto** mode. The default value of 50% will be suitable for many situations, but if a faster response is needed (e.g. for very short transients) you can increase the **Speed,** or reduce it if you start hearing artifacts.

TIP*: The* ***Solo*** *and* ***Delta*** *monitoring options can be handy when fine-tuning the speed.*

STEREO HARMONICS

The Stereo Harmonics section in Basslane Pro works unlike any other harmonic generator or saturation device you have tried before, and offers a unique set of controls that allows you to use harmonics as a spatial effect.

Much of Basslane Pro is about removing excessive stereo information from the low-end, but what if we could generate upper harmonics based on the mono'ed low-end and pan those wide instead? That would add stereo width that is musically related to the bass without introducing problematic stereo information in the low-end. This is exactly what Stereo Harmonics in Basslane Pro does.

Based on the filtered signal, Basslane Pro creates harmonics with fully variable control over stereo width, from mono to super wide - even when the source signal is mono. With additional controls to fine-tune the tone and dynamics of the added harmonics this feature can be used both subtly to add dimension and creatively to add a distinct spatial coloration.

NOTE: *The harmonics are generated and mixed in parallel with the dry signal before width processing.*

Mode

Enables and sets the mode for Stereo Harmonics. The mode here selects the source input feeding the harmonics generation. For example, the **Side** mode will create harmonics from the filtered side signal only, whereas the **Mid** mode will use the filtered mid channel. Both **Side** and **Mid** modes can create stereo harmonics from a single-channel source.

The **Stereo** mode will use both left and right channels from the filtered signal, with each channel driving it's own harmonic generator. If you would like the harmonics to track the original pan position of their source, try **Stereo** mode.

***TIP**: Use the Side mode combined with a wide Mid/Side setting to add stereo harmonics and recover the sense of dimension that can sometimes get lost when reducing low-end width.*

Amount

Sets the amount and intensity of harmonics generated. The meter around the knob shows the level of the generated harmonics, including the changes made from adjusting **Dampen**, **Compress**, and **Level**.

Type

Select the saturation model used for the harmonics generation. These models change the density of harmonics added, as well as the tonal and spatial character.

Mid/Side

Sets the harmonic mix to mid and side channels. This allows precise control over the stereo width of the generated harmonics. A 50/50 balance equates to hard-panned harmonics.

***NOTE:** When set to 100% SIDE the generated harmonics will only be heard in stereo playback.*

Dampen

Sets the high frequency dampening of the generated harmonics. This has a gentle slope so don't be afraid to go low.

Compress

Sets the amount of compression applied as part of the harmonic generation. The compression is a combination of companding and parallel compression that can be useful to get a more even harmonic response on dynamic material. High settings can also be used for adding subtle movement and energy.

***NOTE:** Similar to Dampen, the compression here will only affect the generated harmonics and not the dry signal.*

Level

Adjusts the level of the generated harmonics as it is mixed with the dry signal.

DYNAMICS

The Dynamics section in Basslane Pro features two easy to use multi-band versions of our acclaimed Unisum Mastering Compressor. Both versions work on the filtered signal only, i.e. similar to the low band on a multi-band compressor, and can be set up for either compression or expansion.

This feature makes it incredibly easy to tame transients and overly dynamic low-end in the side channel, to apply dynamic width expansion, or to add gorgeous sounding punch, glue, and density to the low-end.

Mode

Selects between two available configurations of dynamic processing.

The **Side** mode offers dynamic width compression or expansion with a Unisum-powered multi-band dynamics processor tailored for transient sensitive control of the filtered side channel. The **Stereo** mode uses Unisum to drive a dynamic EQ working on the filtered part of the entire stereo mix. This mode is fine-tuned for a meaty, but controlled and punchy bass.

NOTE: *In Stereo mode a static amount of automatic makeup gain is applied based on the Threshold and Amount settings. You can use the main Gain knob to adjust make-up gain. In Side mode there is no automatic makeup gain applied. The small white indicator around the Amount knob shows the averaged total gain change from the dynamic processing, auto-gain, and manual gain combined.*

Threshold

Sets the threshold for the dynamic processing within the filtered frequency range.

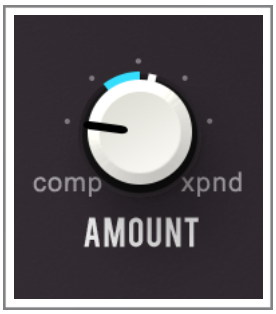
Release

Modifies the release speed of the dynamic processing. Turn counter-clockwise for a fast release, and clockwise for a slower and more relaxed response.

NOTE: *Besides adjusting the actual release time, the Release parameter will also adjust several other internal parameters that affect the overall release response (such as detector speed and transient sensitivity). The adjusted release time may still be overridden by transients and the program dependent nature of the Unisum compressor.*

Amount

Sets the amount and type of dynamic processing applied to the filtered signal. Turn counter-clockwise in the negative range to apply increasing amounts of compression. Set it to a positive value to apply upwards expansion.



The blue meter around the knob shows the amount of gain reduction/ expansion from 0 to -/+12 dB. The small white indicator shows the averaged total gain change from the dynamic processing, auto-gain, and manual gain combined.

TIP: *Try leaving Width above 0%, setting the Dynamics mode to Side, and using compression to move transient toward the center while leaving sustained elements wider. Conversely, try setting the Width fairly low and using expansion to keep transients wide while moving sustained sounds toward the center. Adjust the Release to control the transition time between narrow and wide sounds.*

OUTPUT LIMITER

Basslane Pro features an output limiter designed specifically for the purpose of Basslane Pro.

The limiter employs frequency dependent gain reduction. When used for subtle peak taming the limiter will be focussed on low to mid frequencies, whereas high frequencies will pass-through with little or no limiting applied. This makes it ideal for keeping the low-end under control without affecting the rest of the track. The limiting frequency range is based on the main Frequency setting, but as the limiter is pushed harder the frequency range extends towards full range limiting. When driven hard the limiter can be pushed into low and mid range soft clipping which can be useful for creative coloration.

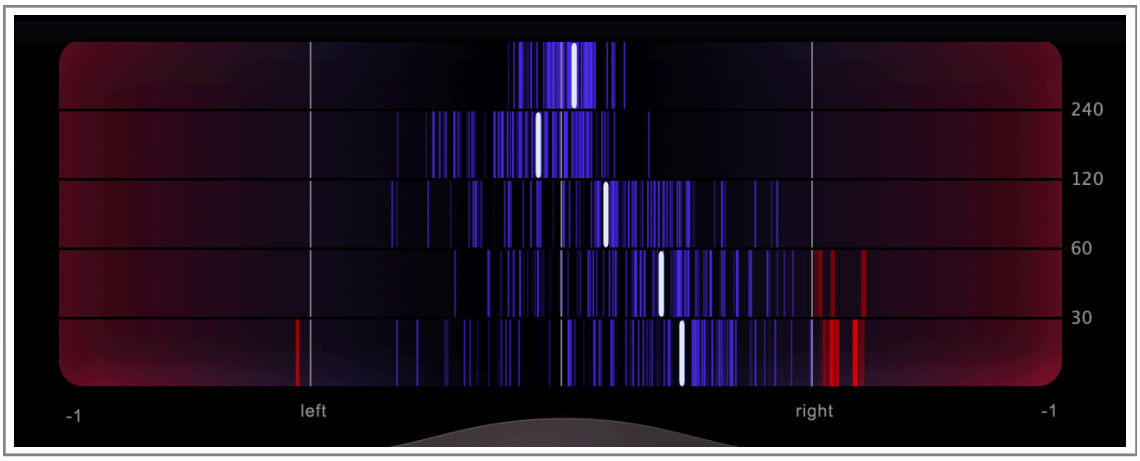
In **Linear Phase** mode, the limiter uses look-ahead to achieve a smooth sounding response. In **Real-Time** mode the limiter works without any look-ahead, which can add bite to percussive sounds but may cause artifacts on clean sub bass sounds.

Limit

The **Limit** slider sets the limiting threshold. The limiter will be disabled when set above 0 dB.

TIP: *Hold* ***SHIFT*** *while dragging to apply linked output gain while adjusting the limiter threshold. You can right-click the value to toggle back and forth between bypass and your last setting. This can also be done by left clicking on the Limit label.*

THE METER



The meter in Basslane Pro is a combined pan and correlation meter that can be useful for determining if and where you have stereo issues in your low end. It is divided into five bands with adjustable crossover frequencies. By default the bands are split evenly into four octaves from 0–240 Hz and the last top band showing from 240 Hz to the remainder of the frequency spectrum. Each band is capable of showing both peak and average positions from fully mono to fully antiphase, and is fed by the Monitor section so you can easily see your signal's low frequency stereo distribution before and after processing.

Crossover Frequencies

The default crossover frequencies will give you a pretty good picture of what's going on in the low end of most signals, but can be adjusted if you need to narrow in on, or broaden, a particular range.

The Display

Each band displays positional information for both peak and average levels. Average position is shown by the thick, white lines, while peak position is shown as a histogram in blue and red. Correlated signals between hard left and hard right are shown in blue, while de-correlated signals are shown in red. When a signal is fully antiphase (i.e. only in the side channel) a thick red bar on both sides of the affected band will illuminate.

TIP: *You can click the meter to reset it.*

Meter Sensitivity

Sets the meter speed and reactivity.

MONITORING

The Monitor section allows you to tap into the the signal flow of Basslane Pro and listen to different facets of the signal. This can be useful for fine-tuning everything from the main filter **Frequency** and **Slope**, to the Mono Recovery **Auto** speed, or the Stereo Harmonics character to the Dynamics **Release** time.

Different monitoring options can be combined to focus in on just the portion of the signal you're interested in, and individual options can be clicked twice to return to the main **Stereo Out**.

Stereo Out

Sets the Monitor section to the main, processed, stereo output.

Pre

Sets the Monitor section to the pre-processed signal, i.e. similar to a bypass function.

Delta

Sets the Monitor section to listen to only the difference between the original and processed signals.

TIP: *Use Delta monitoring to fine tune timing parameters like Mono Recovery* ***Auto*** *speed, or Dynamics* ***Release****.*

M (Mid)

Monitors the Mid (a.k.a. Sum) channel. Can be combined with any other monitor mode except S.

S (Side)

Monitors the Side (a.k.a. Difference) channel. Can be combined with any other monitor mode except M.

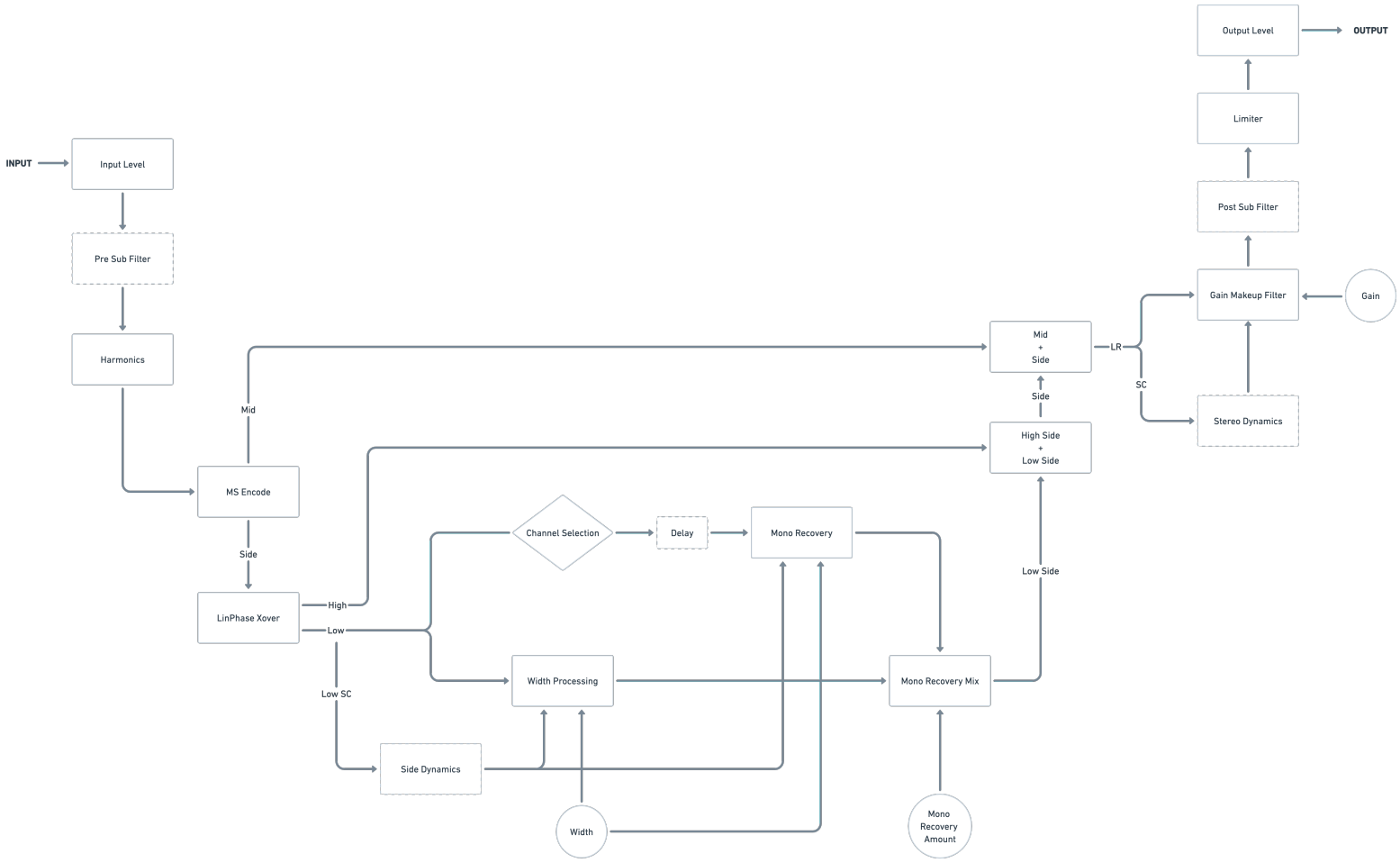
Solo

Monitors the filtered signal as set by the main section.

TIP: *Use Solo monitoring to fine tune the Main Section* ***Frequency*** *and* ***Slope****.*

APPENDIX A: SIGNAL FLOW

This chart shows a simplified version of the signal flow in Basslane Pro (in Linear Phase mode).



CONTACT & SUPPORT

Get in Touch

You're always welcome to get in touch if you have questions, feedback or feature requests. We would love to hear from you!

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If you're experiencing problems or found a bug please do let us know! Drop us an email and we'll try to get back to you within 48 hours - usually within 24 hours.

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