bx_masterdesk Pro

Plugin Manual

Developed by Brainworx Audio and distributed by Plugin Alliance

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About

The simple, fast, high-end mastering chain from Brainworx is now more flexible than ever The ultimate all-in-one mastering solution, with new features added by popular demand You asked, we listened: The bx_masterdesk Pro expands on its predecessors by adding new functionality and greater control to this incredibly popular and easy-to-use mastering system.

More powerful dynamics control
In the Pro version, both the compressor and limiter are upgraded with variable release times and linking options. The limiter also gains a new modern/classic switch, while the compressor now features variable ratio control, a CLIPPER option, and new "GLUE" feature for analog-style compression that gels the mix together before it reaches the final mastering chain.

More tonal options
The simple tone stack of the original bx_masterdesk is now complemented by a fully featured 3-band parametric EQ in the Pro version. Also present are high pass, low pass and dual resonance filters, as well as an onboard De-Esser—all of which feature expanded frequency ranges. Want even more tonal control? Take advantage of the newly included XL section for additional saturation, harmonics and color.

An even more impressive stereo field
In addition to the Mono-Maker, which centers low-frequency content for focused and punchy bass, and the Stereo Width control, which can expand the stereo spread for a more immersive feel, the Pro version of Masterdesk adds new stereo enhancements not seen in prior plugins. The new M/S features include the Mid Signal Panorama option and the new Stereo Enhance knob to provide even greater control over stereo imaging and balance.

The same high-end tone and minimal learning curve, with expanded controls that more sophisticated users will love.

One thing hasn't changed: The upgraded bx_masterdesk Pro is still so easy to learn that even inexperienced producers can quickly dial in great-sounding masters in under a minute. It's still just a matter of toggling through the carefully crafted presets to get you into the right ballpark, and then sweetening things further with 3 key dials: "Volume", "Foundation" and "Tone". The only difference is that you can now refine these starting points even further with the option of greater control over your dynamics, EQ curve, saturation and stereo field when you want it. Try it for mastering, mix bus and even instrument subgroups.

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Version Differences

	bx_masterdesk True Peak	bx_masterdesk Pro
Glue	○	✓
Clipper	○	✓
Switchable Compressor Ratio	○	✓
Switchable Compressor Release times	○	✓
Tunable Compressor Link	2 fixed settings	✓
XL Saturaion	○	✓
Limiter Gain	2 fixed settings	✓
Limiter Modes	○	✓
Limiter Release times	○	✓
Tunable Limiter Link	○	✓
Tunable De-Esser frequencies	fixed frequency	✓
Different Stereo Enhance	1 setting	4 settings
PAN M	○	✓
Stereo Width	○	✓
Tunable Resonance Filters	4 fixed frequencies	✓
3 Band EQ	○	✓
HP & LP Filters	○	✓
EQ Auto Solo	○	✓
Gain Reduction Meter De-Esser	✓	✓
Gain Reduction Meter Limiter	○	✓
Gain Reduction Meter Compressor	✓	✓
LUFS Meter	○	✓
LUFS Target	○	✓
Dynamic Range Meter	Mono	✓
RMS + True Peak Meter	✓	✓
Balance Meter	○	✓
Correlation Meter	○	✓

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Get started

❶ Power

Use this parameter to turn the plugin on and off.

❷ Preset Bank

The bx_masterdesk Pro plugin offers four internal settings (A/B/C/D) that will be stored with every preset. So, one preset can contain up to 4 effects settings.

❸ Solo M

Listen to only the mono information of the processed signal.

❹ Solo S

Listen to only the stereo information of the processed signal.

❺ Volume

Adjust how hard your music will hit the processing chain of bx_masterdesk with the Volume control. Watch the Dynamic Range VU meter while you adjust your loudness and target a Dynamic Range of between 8dB (rough target for music delivered to streaming services) and 6dB (really loud CD master).

❻ Foundation

With the Foundation control you adjust the overall tonality of your mix (Low End vs Treble), and set a nice bass foundation which you will build your master upon. Higher values give you a more bass heavy foundation which sounds pretty BIG for most genres.

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❶ TMT Compressor Channel

The bx_masterdesk Pro offers 10 TMT Channels for the Compressor, which shape the frequency response as well as the sound of the compressor, with the different tolerances. Every channel gives you a different set of stereo channels which are handpicked by the developer.

❷ Comp Link

This knob controls the sidechain of the compresser so it either compresses both channels left and right independently or the sidechain just takes the highest peak from one of the channels, which makes the stereo image more even.

❸ Comp Mix

This knob adjusts the blend between your compressed signal and the uncompressed mix. A mix of 100% gives you only compressed signal, but for a vivid master that still breathes we recommend a setting

around 93%. Turning the knob all the way to the left disengages the compressor (switches it OFF).

❹ XL

The Brainworx XL feature adds warmth by the application of smooth third and fifth order harmonics without critically increasing your signals level.

❺ XL On/Off

Activates/Deactivates the XL-Effect to your process.

❻ THD

THD (Total Harmonic Distortion) is a kind of distortion that is present in all analog audio equipment (in varying degrees), and that can actually sound pleasant to the human ear while glueing your music together in a really desirable way.

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❶ Compressor Ratio

Ratio is the relative amount of gain reduction applied to an incoming signal. The Ratio's range is a relative measure between in- and output of a dynamic processing unit: a ratio of e.g. 4:1 will result in a -1dB lower signal if it passes the set threshold by 4dB.

A low ratio has less audible characteristics than higher settings. Suitable settings vary with the material's density, your personal taste, and the surrounding setup of your chain.

❷ Compressor Release

The Compressor Release (-time) sets the timing in which the gain reduction returns to its normal state after applying any gain change to surpassing audio.

❸ Glue On/Off

ON enables the GLUE-Compressor to your process.

❹ Glue

GLUE sets the headroom of an emulated classic VCA-type bus-compressor, found in famous analog consoles. This type of compression is best for "gluing your mix together" in a punchy but elegant way.

❺ Clipper On/Off

Enables the CLIPPER-Function to your process.

❻ Clipper

The Clipper stops signals from being louder than the set threshold of 0 dBFS. It is very effective to shave off loud transients to achieve a much louder signal. The threshold is set to 0dBFS and engaging the clipper will already push the signal. Turning this knob up, will push your signal into the clipping unit, while remaining its smooth knee, to reduce transients and win loudness.

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❶ Limiter Turbo

At the very end of the processing you can boost or cut the gain before the signal is running into the limiter. So you have another option for gainstaging your signal in the plug-in processing.

❷ Limiter Attack Mode

Based on its technical architecture, dynamic processors react more [Modern] or less [Classic] faster. You can decide which character suites your mix.

❸ Limiter Release

The Limiter Release(-time) sets the timing in which the gain limiting amplifier returns to its normal state. Minimal release-times can result in audible distortion, whereas a slow timing will create the feeling of pumping.

❹ Limiter Link

This knob controls the sidechain of the limiter so it either compresses both channels left and right independently (relocation of stereo-sources could occur) or the sidechain just takes the highest peak from one of the channels, which makes the stereo image more even (at 100%, relocation is prevented).

❺ True Peak

Enables/Disables protection of "inter-sample peaks" which can result in heavy clicks and distortion when converted to analog. With True Peak enabled, following converters are protected from creating such artifacts during loud passages of your masters.

❻ Output Trim

This control is the last stage in the audio chain and can be used to export masters that hit slightly lower than 0dB at max. It´s a common practice to deliver masters at -0.2dB for safety reasons (no clipping etc.).

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❶ De-Esser Frequency

The De-Esser frequency adjusts the filters frequency which is attenuated dynamically.

❷ De-Esser Solo

Engaging the De-Esser Solo will enable you to listen to only the part of the signal that bx_masterdesk Pro gets rid of in the De-Esser.

❸ De-Esser

The Mastering De-Esser sits at the end of the processing chain and is a great tool to tame sibilance and harsh cymbals in your master. The more you turn up your master in volume, the more some artifacts will become audible that may have been buried in the mix before. You can dial in some beautiful Presence with bx_masterdesk, but it´s a good idea to make sure that the master doesn´t get too harsh, and the De-Esser is the tool to use for that application.

❹ Bass

You may use the tone stack to adjust the overall sound of your recording to your liking, and you should try to make it sound similar to reference mixes of music that is similar to what you are mastering. If you master a rock tune it is a good idea to check back with a professional CD mix of (for example) a Foo Fighters song. If you mix a pop song you may want to compare to a Rihanna CD, etc.

With the Bass control you can make the low end of your music softer or tighter, by boosting or cutting certain frequencies in the bass spectrum. The values -30 to +30 represent a dB range of -3dB to +3dB, so even at maximum settings you are not using a crazy amount of EQ between the two channels in AVG mode. The latter can prevent loud peaks on only one channel to disproportionally affect the overall compression.

❺ Mid

With the Mids control you can determine if your music is supposed to sound more in-your-face (boosting the Mids) or more mellow (by cutting) in the vocal and instrument range.

The values -30 to +30 represent a dB range of -3dB to +3dB, so even at maximum settings you are not using a crazy amount of EQ.

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❶ Treble

Adding Treble is a nice way of achieving more perceived volume for your music, without actually turning it up. You should not make it sound too aggressive, but a little edgy touch can really make your music jump out of the speakers.

The values -30 to +30 represent a dB range of -3dB to +3dB, so even at maximum settings you are not using a crazy amount of EQ.

❷ Presence

Presence controls the highest frequency spectrum. You can boost pleasant high frequencies and reduce the more nasty sounding tone range at the same time with this control. Listen to your cymbals and hi-hats when you adjust Presence and notice how smooth they start to sound.

The values -30 to +30 represent a dB range of -6dB to +6dB, so even at maximum settings you are not using a crazy amount of EQ.

❸ Stereo Enhance Mode

You can select between four different Stereo Enhance Modes, which changes the style of the side-signal processing.

Choose your Stereo Enhance Mode to shape your stereo-image how you like it.

❹ Stereo Enhance

Unlike in many Brainworx plugins, this is NOT a simple M/S width control. Instead it will aim specifically at music instruments in your stereo field and enhance them with a cleverly automated EQ system. Using the Stereo Enhancer it´s possible to get that extra boost and width for your synths or guitars without boosting unwanted boomy room sounds of your drums or raise the muddy parts of your reverb tails too much.

Stereo Enhance is a new Brainworx design and the most musical way to increase width and depth we know of.

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❶ Mono Maker

A staple in the Brainworx line of processors, the Mono Maker will make your stereo recording Mono all the way from 20Hz up to the selected cut-off frequency. Which can be a great enhancement for your sound if played back in clubs or via big subwoofer systems (cars, home theaters, etc.). Using the Mono Maker at too high frequencies can result in less stereo width for low guitars and synths, but a setting of around 100Hz will certainly not harm your music and is recommended. Mono Maker is a clever algorithm which will actually compensate for what it is cutting away in the stereo information, so you are not losing anything using Mono Maker.

In fact, your music will sound tighter and punchier in the low end once you have engaged Mono Maker. Your bass drum and bass will thank you.

❷ Stereo Width

Stereo Width enables controlling how wide the stereo image is going to be. Besides the Stereo Enhancement feature, with the Stereo Width parameter you also have the option to increase or decrease the side-channel level.

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❶ Resonance Filter LF

The "Resonance Filters" are the same notch filters as available in the bx_digital V3, with the option of two fixed Q-Settings. Sweep through the low range to shadow resonant, ringing or disturbing frequencies using the LF pot.

❷ Resonance Filter LF On/Off

Activates/Deactivates the low frequency resonance filter. Having no gain-setting available for notch-filters, toggling these switches in combination with the Auto-Solo Feature to solo your dial's frequency results in a vast improvements of filter setting.

❸ Resonance Filter LF Q

You can select between a STEEP and a WIDE Q-Factor. Set to STEEP by default benefits in having a more audible setting from start on. Once the frequency is set, the wider setting will shade the filter's existence.

❹ Resonance Filter HF On/Off

Activates/Deactivates the low frequency resonance filter. Having no gain-setting available for Notch filters, toggling these switches will help a lot to find correct filter settings.

❺ Resonance Filter HF

The "Resonance Filters" are the same notch filters as available in the bx_digital V3, with the option of two fixed Q-Settings. Sweep through the high range to shadow distorting, sizzling or disturbing high frequencies between 1 and 20 kHz using the HF pot.

❻ Resonance Filter HF Q

You can select between a STEEP and a WIDE Q-Factor. Set to STEEP by default benefits in having a more audible setting from start on. Once the frequency is set, the wider setting will shade the filter's existence.

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❶ Equalizer LF Frequency

The LOW FREQ fully parametric band has a range from 20 to 2000 Hz.

❷ Equalizer [LF/MF/HF] Gain

Each of the three bands has a 6 dB range of gain addition or reduction.

❸ Equalizer [LF/MF/HF] Q

All three bands feature a Quality range of between 0.3 and 15, additional the LF and HF Band, which switch to a Low Shelf and respectively High Shelf type Filter, when the Q is turned all down to zero. A small light to the pan pot's lower left indicates active shelving filters.

❹ Equalizer MF Frequency

The MID FREQ fully parametric band operates at full range from 20 Hz to 22 kHz, meaning the complete spectrum of audible audio is available for this band.

❺ Equalizer On/Off

Activates/Deactivates the complete 3 band parametric EQUALIZER section.

❻ Equalizer HF Frequency

The HIGH FREQ fully parametric band has a range from 2 to 22 kHz.

❼ High Pass Filter / Low Pass Filter

The **HIGH PASS FILTER** (also known as Low Cut Filter) continuous knob sets the low range cutoff frequency. The filters slope is equal to the bx_digital V3's 6dB/oct setting.

The **LOW PASS FILTER** (also known as High Cut Filter) continuous knob sets the high range cutoff frequency. The filters slope is equal to the bx_digital V3's 6dB/oct setting.

❽ High Pass Filter On/Off

Activates/Deactivates the high pass filter.

❾ Low Pass Filter On/Off

Activates/Deactivates the low pass filter.

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Metering

❶ True Peak L+R

Shows Peak values as True Peak measurement in dBTP according to EBU/ITU standards. The readout will hold the maximum True Peak value that occurred in the signal until the meter is manually reset. Switches between input or output signal with Meter Position control. Click anywhere on the metering area to reset the meters, including the maximum True Peak and maximum Momentary Loudness value. The True Peak (dBTP) measurement is a standard specified by EBU R 128 and ITU BS.1770 resolutions. It is used to anticipate real world Intersample Peaks (ISPs) that can occur when converting back from the digital to analog domain. As the technical of True Peak detection is not rigidly defined, there will be some variance between dBTP values in meters by different manufacturers.

❷ RMS L+R

Shows RMS value of the signal selected with the Meter Position Control (input/output).

❸ Gain Reduction L+R

Shows the amount of gain reduction in dB that the limiter is causing.

❹ Dynamic Range L+R

Displays the dynamic range or crest factor of the signal at the selected position (input or output). This is a helpful tool to determine the density and dynamics of the material in addition to the newer standardized loudness measurement.

❺ RMS L+R

Displays the percieved loudness of the selected source signal (input/output) in LUFS (Loudness Units Full Scale) according to EBU/ITU recommendations. The selected Loudness Target determines a white "safe zone" and red overshoot range to monitor the real time loudness. The time scale can also be switched between momentary with a window of 400ms or short term, averaging over 3 seconds. With momentary selected, the readout will hold the maximum momentary value that occurred in the signal until the meter is manually reset.

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❶ Balance

This meter shows the position of the signal in the stereo field.

❷ Correlation

This meter shows the correlation of the left and right channel.

+1 means both sides are completely in phase and there is no difference between listening in mono and stereo. The Track has no stereo width.

0 means there is the same amount of „In-phase" signal and „Out-of-phase" signal in the left and right channel. The track fills the complete stereo field, while still being mono-compatible.

-1 means the left and right channel have opposite phase and would cancel each other out when listening in mono so in other words the track would not be mono compatible at all. The material is positioned outside of the stereo field.

❸ Loudness Time Scale

This menu provides the option to switch between the 2 EBU recommended scales for real time loudness measurement.

❹ Loudness Target

The Loudness Target menu offers different options to add a visual guideline to the LUFS meter depending on the purpose and destination of your material. The custom option lets you specify a target loudness to aim for.

❺ Meter Position

Switches the position of the metering section (naturally excluding Gain Reduction) in the signal chain. This determines whether you are viewing the corresponding values for the input signal before the limiter section (In) or the output signal after the limiter section (Out).

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❶ Compressor Gain Reduction

Shows the amount of "Compressor Gain Reduction" in dB.
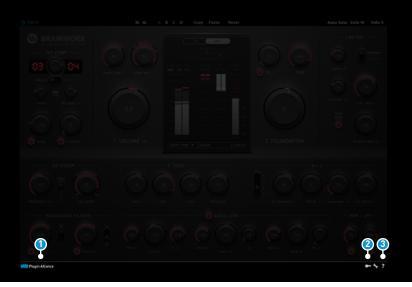
Compressor Gain Reduction Hold

The "Compressor Gain Reduction Hold" bar shows the highest Gain Reduction applied by the compressor of the Masterdesk Pro.

❷ De-Esser Gain Reduction

Shows the amount of "De-Esser Gain Reduction" in dB.

De-Esser Gain Reduction Hold

The "De-Esser Gain Reduction Hold" bar shows the highest Gain Reduction applied by the De-Esser at the end of the chain.

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Bottom Toolbar

❶ PA Logo

Clicking the Plugin Alliance logo takes you to the Plugin Alliance website via your web browser, that´s if your computer is online.

❷ Key (Icon)

Clicking on the key icon brings up the activation dialog, allowing you to manually reauthorize a device in the event of a license upgrade or addition. You can also use this feature to activate additional computers or USB ash drives.

❸ ? (Icon)

Clicking the ? icon opens up a context menu that links to the product manual PDF, as well as other helpful links, e.g. to check for product updates online. You must have a PDF reader installed on your computer to be able to read the manual.

Modifier Keys

Tested with Logic Pro X, Protools, Cubase and Presonus Studio One Mac/Win.

AU

Fine Control	= Shift
Jump between Default / Last Setting	= Option
Output Link	= Command

VST / VST3

Fine Control	= Shift
Jump between Default / Last Setting	= Command (Mac), Ctrl (Win)
Output Link	= Option (Mac) / Alt (Win)

AAX

Fine Control	= Command (Mac), Ctrl (Win)
Jump between Default / Last Setting	= Option (Mac), Alt (Win)
Output Link	= Shift

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System Requirements & FAQ (Links)

For latest System Requirements & Supported Platforms

https://www.plugin-alliance.com/en/systemrequirements.html

Particular details for your product

https://www.plugin-alliance.com/en/products.html

Installation, Activation, Authorisation and FAQ´s

https://www.plugin-alliance.com/en/support.html