

# bx\_boom!



native  
version

PC & MAC



TDM  
version

PC & MAC

TDM



brainworx 

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Install and activate your new plugin.

Check the Activation Manual PDF for details, or visit:

[www.plugin-alliance.com/activation](http://www.plugin-alliance.com/activation).

The Activation Manual has been installed into the same folder as this Plugin Manual.

Alternatively, please check the online version, see link above.



# bx\_boom! - QUICK REFERENCE GUIDE

bx\_boom! can boost and attenuate the impact of your bass drum sound in a final mix or in any stereo drum loop and drum sub group.

- 1. Insert bx\_boom! into any stereo master channel or drum group
- 2. Use the **bass drum knob** to BOOST (turn right) or ATTENUATE (turn left) the impact of your bass drum.  
→Try to keep the bass drum FLASHING, not constantly glowing.



- 3. Use the **bass-drum-pedal** to select the center frequency of the bx\_boom! process.



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## Suggested settings:

### BOOSTING bass-drum boom....:

Mode: LO  
boom! factor: +40 to +50 (turn right!)

### ATTENUATING bass-drum boom....:

Mode: HI  
boom! factor: -40 to -60 (turn left!)

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## 1. What is the bx\_boom! plug-in ??

bx\_boom! is the first dynamic M/S EQ using band pass - filters and was specifically designed for bass-drum processing in stereo files and final mixes(!).

bx\_dynEQ and bx\_boom! belong to a **bundle of some well-thought-out (M/S) dynamic tools**. For details about the (bigger) bx\_dynEQ plug-in please refer to chapter 8 of this manual – or read the separate bx\_dynEQ manual for ALL of its details.

bx\_boom! is ONE setting of the bx\_dynEQ, with most parameters preset by BX to give you fast and easy access to ONE of the cool features of our dynamic EQ / dynamics tool: “tuning” your bass-drum in a final mix(!) or a drum sub mix, and determining the “impact” of that bass-drum.

bx\_boom! can be used to achieve one or several results out of this list:

- **boosting** lowest end of your bass-drum sound in a final mix(!) or a drum sub mix (drum loop)
- “**tuning**” this low end punch
- **increasing / decreasing** the “punch” of your bass drum

But unlike many dynamic tools that aim at certain peaks (transients) in your signal bx\_boom! actually **FILTERS** the bass-drum “punch” with “**bandpass-filters**” – with a totally different result than normal “peak-bands” would give you.

Finally it is important to stress that bx\_boom! is **NOT** just boosting low end frequencies all the time, but it is an “**dynamic EQ process**” that is being “triggered” by (internal) **compressors with heavy side chaining features**.

### So, what’s an “dynamic EQ” then?

A “dynamic EQ” is a filter that is not limited to being set to a specific gain level, but which **changes its gain settings dynamically** – following the dynamics of a certain trigger signal. This trigger signal in bx\_boom!’s algorithm is just a heavily M/S-filtered part of the original input signal.

Although there are quite some basic dynamic EQs out in the market already we have designed bx\_dynEQ and bx\_boom! to be a set of serious tools for the pro-engineer in mixing, mastering and sound-design.

While bx\_dynEQ is a quite complex tool to really “dig into” your music bx\_boom! is a true “one-knob solution”... even with 2 knobs! :-)

**bx\_boom!** is a **TRUE STEREO** tool, which means that there is **NO** mono version available. This is due to **its internal M/S (stereo) concept**.

**bx\_dynEQ** however will come in a **stereo version (L/R and M/S modes)** and in a **mono version**.

## 2. What is M/S technology ???

Most people who are into recording music know about the M/S microphone technique where one uses 2 different microphones for mid and side signals. Recording a signal with M/S microphone technique means to create a stereo (L/R) signal by mixing the M and the S signal together in a special way that will create a very mono-compatible stereo signal.

In mixing and mastering situations M/S technology can be used to individually process the mids and sides of a stereo signal, or to control the overall stereo width of a stereo signal / stereo group / stereo sum.

bx\_boom! and bx\_dynEQ both make use of the fantastic possibilities of the M/S separation and are good examples of how deep you can actually dig into your (2-channel) music with M/S technology.

For additional details about the M/S technique you may have a look into any decent book about recording basics. Especially if you want to learn more about this method to create very mono-compatible stereo-signals, e.g. when recording classical music, choirs or acoustic instruments in general.

## 3. Which M/S features are there in bx\_boom! ?

bx\_boom! has a **built-in M/S matrix** that will allow for **bass-drum tuning and adjusting** using the M/S technology heavily. Due to this there is **no specific M/S knowledge** needed to adjust the M/S features – but we do **RECOMMEND learning a bit** about M/S when you intend to use it anyway...

You can use our **FREE M/S plug-in bx\_solo** (available for TDM / RTAS / VST / AU) to play some stereo files through it and **LEARN** what M/S is by pressing the **SOLO BUTTONS!** This will make M/S understandable very easy!

*Please see chapter 7 for all details about bx\_boom!*

Check [www.brainworx-music.de](http://www.brainworx-music.de) for more info on the other plug-ins mentioned (and for the download of our FREE M/S plug-in bx\_solo)

#### 4. But what's so NEW about the bx\_boom! plug-in then???

Well, it's hard to believe... but we came up with an **EASY** plug-in... :-)

bx\_boom! is the first dynamic M/S EQ using band pass - filters and was specifically designed for bass-drum processing in stereo files and final mixes(!).

#### 5. Features of the bx\_boom! plug-in:

- **3 different modes** (lo / mid / hi)
- hi-end **BRAINWORX** band pass-filters
- **boost and attenuate** your bass-drum in a **final mix(!)** or an individual drum loop
- **taken from bx\_dynEQ**, our new hi-end dynamic EQ & compression system
- fully automatable
- **dedicated BYPASS** switch (cymbal sign) in the plug-in GUI
- **mouse wheel feature**: adjust the parameters by holding the mouse over the bass-drum or the pedal and simply turn your mouse wheel.
- **direct access**: just type in any valid number into the text fields for direct access to the exact value

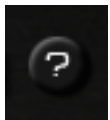
#### 6. How do I get started with bx\_boom! in a typical session?

... it's very easy!...

Please check the  
**QUICK REFERENCE GUIDE (page2)**

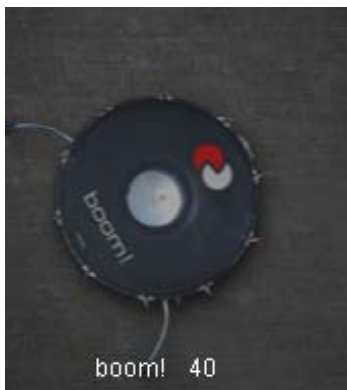
Please see chapter 7 for all the details!

## 7. Overview and details



click here to **get detailed info** (version no etc) about bx\_boom!

### Adjusting the boom! factor



Adjust the amount of boost or cut of your bass-drum sound. This will work in either a final mix or in any stereo drum loop / drum sub group etc.

#### **Range: (-10 dB) to (+10 dB)**

Limited by the (internal) MAX GAIN M/S feature, which will prevent bx\_boom! from boosting the low-end frequencies more than 10 dB no matter how far you crank up the (internal) threshold by turning the bass-drum knob.

The bass-drum will “glow” whenever the internal band pass EQ is triggered hard enough to make bx\_boom! filter more than +/- 4dB !

Avoid permanent glowing of the bass drum!



## Mode (lo / mid / hi)



By adjusting the bass-drum-pedal to either lo/mid or hi you select the FREQUENCY that bx\_boom! will operate (filter) at for both, boosting and attenuating.

LO: 32 Hz  
MID: 48 Hz  
HI: 64 Hz

It's the nature of this new beast that even **boosting quite a lot** of ultra-low-end will **NOT** result in "rumbling" or muddy low-end as bx\_boom! will always boost the low frequency for only about 50 ms!

The same goes for attenuation of bass-drums in a final mix: only the bass-drum will "disappear" - without audible loss in keyboards or guitars or bass...

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### Suggested settings:

#### **BOOSTING** bass-drum boom...:

Mode: LO  
boom! factor: +40 to +50 (turn right!)

#### **ATTENUATING** bass-drum boom...:

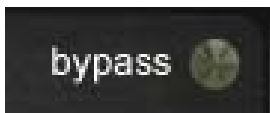
Mode: HI  
boom! factor: -40 to -60 (turn left!)

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>> The "boom! factor" settings heavily depend on the overall volume of your mix / drum loops, as the processing EQ gets "triggered" from a certain threshold on (which you control via the bass-drum knob!). <<

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## BYPASS switch



This **BYPASS** is independent from the bypass feature in your host software and is automatable in the plug-in automation itself. The audible result is the **SAME** though as using your host plug-in bypass.

## 8. Features of the (bigger) bx\_dynEQ EQ system

As you can easily see below there are FAR too many features in the fully editable version of bx\_dynEQ to be mentioned here. Please see the dedicated manual for bx\_dynEQ or our website for the details.

BUT:

# bx\_boom! = bx\_dynEQ

When using bx\_boom! think of a pre-adjusted bx\_dynEQ with only 2 features that you can "tune":

- THRESHOLD and
- f (filter) M-section



=



## 9. TROUBLESHOOTING

→ NO sound

Do you feed any sound into the plug-in / channel EQ at all??? ☺

→ PERMANENT low end noise... turn DOWN the bass-drum control (boom factor) until the bass-drum picture in the plug-in FLASHES on BD accents.

**ENJOY WORKING WITH bx\_boom!**

For more information please visit:

[www.brainworx-music.de](http://www.brainworx-music.de)

[www.brainworx-usa.com](http://www.brainworx-usa.com)

**PLEASE CHECK THE NEXT PAGES FOR  
OTHER BRAINWORX PRODUCTS!**

All BRAINWORX products can be downloaded and tested.  
14-days fully functional demo versions available for FREE at  
[www.brainworx-music.de](http://www.brainworx-music.de) & [www.brainworx-usa.com](http://www.brainworx-usa.com)

# THE bx\_SNEAK\_PREVIEW...

## bx\_hybrid Mod 2.0 (stereo)



**bx\_hybrid** – our monster EQ – a set of a mono- (below) and a stereo-version (above). 11 band EQs, matching the DIGIDESIGN ICON 101%, joystick EQs, individual bypass switches per band, switchable GUI, correlation meters, internal M/S stereo width and Mono Maker (stereo version).

## bx\_hybrid Mod 1.0 (mono)



next page: bx\_digital and bx\_control



**bx\_digital** – our critically acclaimed M/S recording and M/S mastering software with built-in de-esser, Mono Maker, Solo buttons (M/S/L/R) and shifter EQs.



**bx\_control** – a nice and easy M/S matrix and latency-free M/S recording processor, plus a great control listening tool. Chain ANY stereo or multi mono plug-in into the BRAINWORX M/S circuit, extract M & S signals individually. Built-in M/S stereo width control, Mono Maker & Solo buttons (M/S/L/R).

info & free trials: [www.brainworx-music.de](http://www.brainworx-music.de)  
[www.brainworx-usa.com](http://www.brainworx-usa.com)