# bx_boom!



native version — PC & MAC
RTAS — Real-Time AudioSuite — Audio Units — VST

TDM version — PC & MAC
TDM — RTAS — Real-Time AudioSuite — Audio Units — VST

brainworx

# 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.
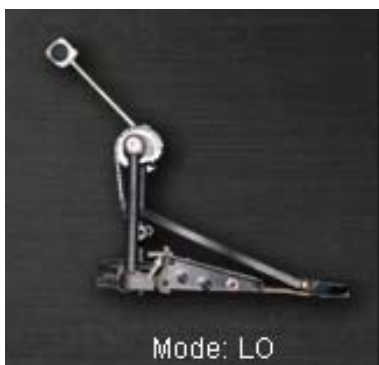


Suggested settings:

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!)

# INDEX

## 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 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
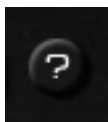
## 6. How do I get started with bx_boom! in a typical session?

… it´s very easy!…

# Please check the
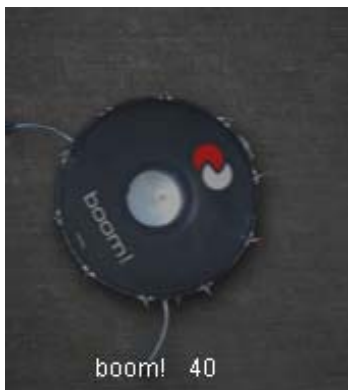# QUICK REFERENCE GUIDE (page2)

# 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 <u>permanent</u> 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:

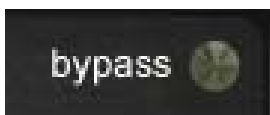BOOSTING bass-drum boom…:
Mode:               LO
boom! factor:       +40 to +50 (turn right!)

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



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## 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
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  &  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)

**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
                              www.brainworx-usa.com