

Bass Traps B500/B600

mbakustik's new idea in modular bass absorption:
one box - two acoustic concepts



Bass Traps B620A and B620B
Control room front wall MWA Sound, Soltau

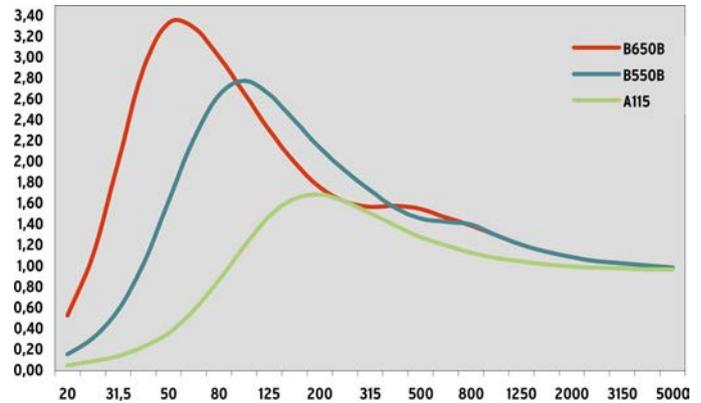
There are two concepts for low frequency bass absorption: resonance absorbers tuned to an individual room resonance and broadband bass traps which treat the whole low frequency area. While the effectivity of tuned resonators against own modes is yet un-

reached if there's certainty of these frequencies it is often needless to measure if using broadband bass traps. As there are good reasons for both concepts we decided to offer the bass traps B500 and B600 in both versions: version A is tuned to a precise resonance

frequency between 20 Hz and 60 Hz and offers maximal small band effectivity while version B is a broadband absorber and allows absorption without accurate knowledge of the dominant room resonances.

Specifications B500/B600

Application	control rooms, HiFi, home theatre
Cabinet	B550 and B650: laminated plastic light grey, grey or custommade B520 and B620: MDF untreated
Dimensions	B550 and B650: 75,4 x 75 cm (W x H) B520 and B620: 75 x 75 cm (W x H)
Width	B520 and B550: 35 cm B620 and B650: 55 cm
Concept	Type A: individually tuned bass trap according to Helmholtz, 20 - 60 Hz Type B: broadband multilayer bass trap, free from mineral fiber
Front	aluminium frame with individually printed fabric cover, easy replacement



Simulation of sound absorption

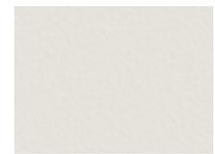
The bass response of a room can not be described precisely using the model of the diffuse sound field, therefore sound absorption coefficients greater than 1,00 are reachable. Please notice the complementary behavior of B550B and B650B bass traps and A115 broadband absorber in the LF range.

In addition to their main modes many studio rooms suffer from further resonances that also need to be treated. In these cases we often combine both versions of bass absorbers: While the dominant own modes are damped with

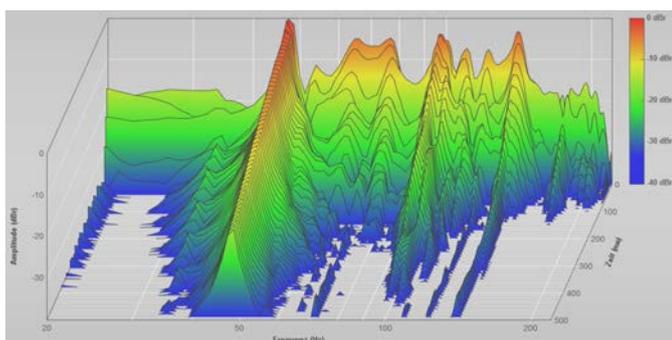
tuned bass traps (version A), additional broadband modules (type B) act throughout the whole frequency range. In addition, the broadband version enables the creation of a reflection free zone around the listening position.



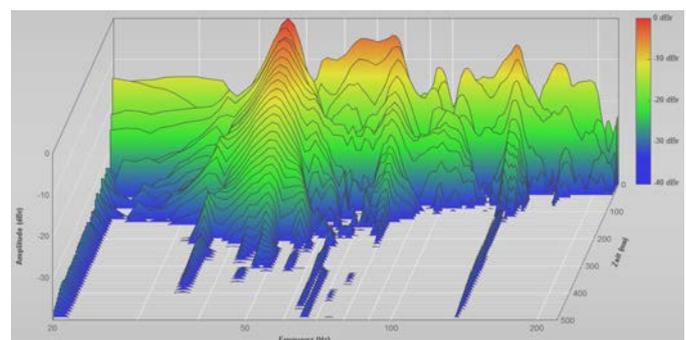
grey



light grey



LF-decay without B650B bass traps



significantly reduced LF-decay using B650B bass traps

The B500/B600 bass traps are particularly effective in correcting the time domain, thus the reduction of low frequency decay of a room. As this be-

haviour is very difficult to be improved by using electronic filters, the correction of the room acoustics itself is especially important here. Moreover, the

frequency response at the listening position is linearized and the dependency on position of the sound field is reduced.