

shakEQ

ShakEQ™ is a **new kind of signal processor** designed to drastically enhance the output of a tactile transducer a.k.a. a "bass shaker".

A properly calibrated tactile transducer can bring a new, exciting dimension to almost all types of entertainment. ShakEQ™ is a one-stop solution which allows to overcome many challenges that are inherent to this type of devices.



It is now easy to make a new shaker installation which performs better than what was thought possible. Existing installations also benefit from the ShakEQ™ processing: it will act as a huge upgrade to the fidelity and feel of the tactile feedback.

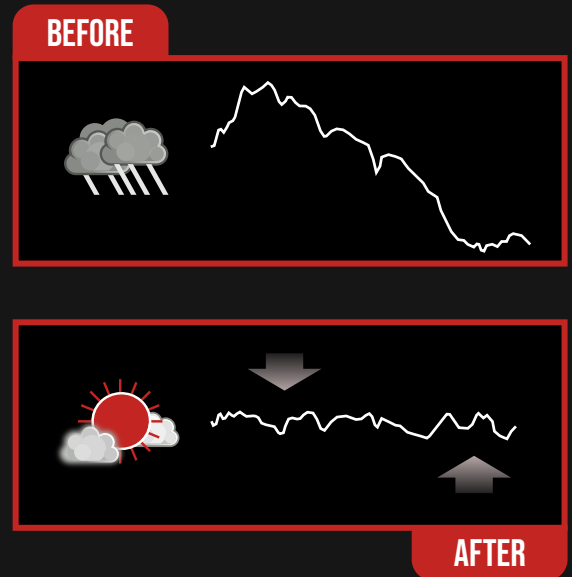
The signal processor takes into account the installed system as a whole, including the sofa or chair which the transducer is mounted to. It can adapt the signal such that the unique properties of the bass shaker are properly accounted for.

ShakEQ™ has built-in presets optimized for movies, video games and music recordings. Enthusiasts will appreciate the option to create custom tactile profiles. Everything can be adjusted to your preference.

AUTOMATIC EQUALIZATION

ShakEQ™ features an automated calibration procedure which will linearize the output and remove any unwanted distortion from the system. The calibration measures and corrects the total system response, taking the listener into account. This process will result in a balanced playback of the transducer.

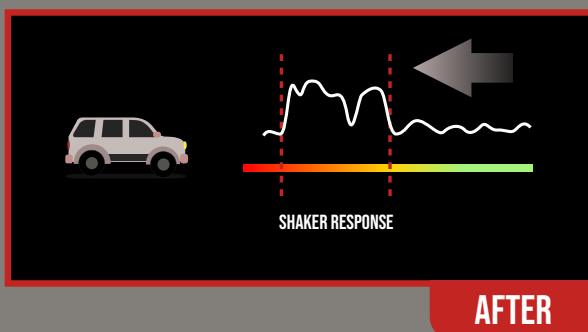
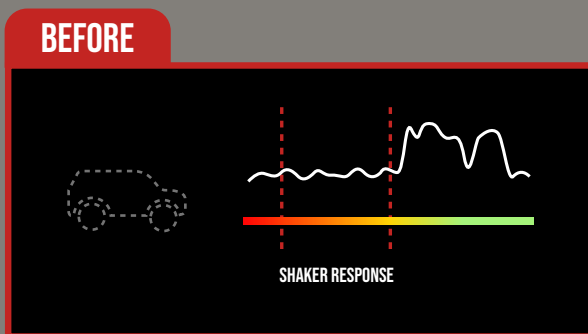
Multiple user-selectable equalizer settings are supported in addition to the automatic calibration.



BASS EXTENDER

Many sound effects have little energy in the frequency band which the transducer covers. ShakEQ™ features a new type of spectral band replication technique which can extend signals towards this region.

The Bass Extender will convert a mid-bass audio cue that is normally outside of the range of a heavy bass shaker to a lower-frequency instance of itself. Now this cue can be felt and heard.



DSPeaker has decades of expertise in automatically equalizing audio systems. Our Anti-Mode™ technology has been honored with many rewards, including the Golden Ear award from the Absolute Sound magazine.

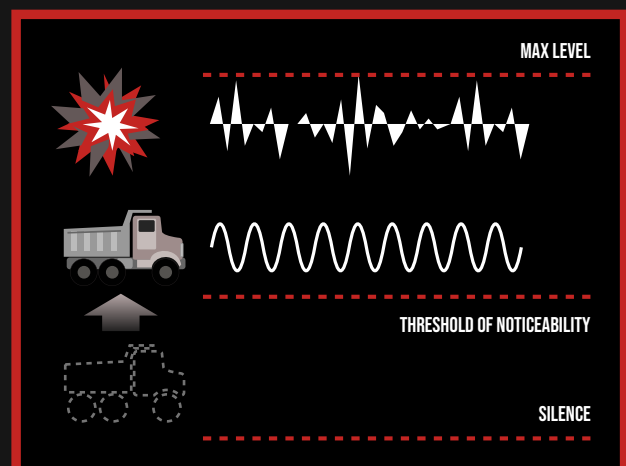
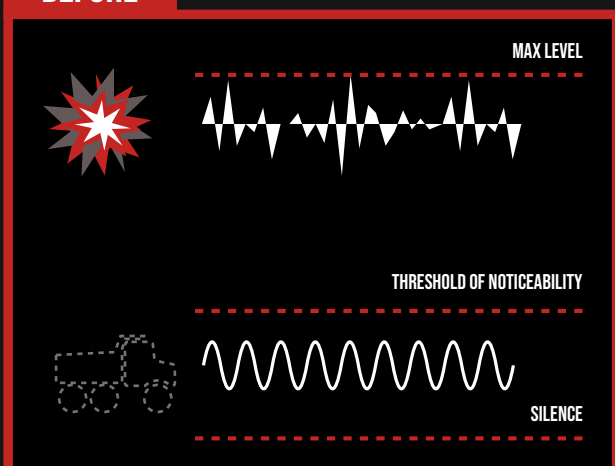
For the first time this feature is now available in the world of tactile transducers!

DYNAMIC RANGE OPTIMIZER

The dynamic range of a tactile transducer is limited. A loud signal will get through, but softer signals and transients are imperceptible. ShakEQ™ will always prioritize true, deep bass when present in the source material, but it can also lift other sound effects above the threshold of noticeability.

Dynamic Range Optimizer improves low-level transient and background sound reproduction. It has multiple user adjustable parameters. This feature can be turned off completely if preferred.

BEFORE



AFTER

FEATURES

1. Automatic equalization

- Automatic calibration of the shaker including the listener as part of the system
- Calibration only takes a few minutes
- The calibration result is permanently stored until changes in the shaker setup require recalibration
- Measurements can be exported to a USB stick

2. Bass extender

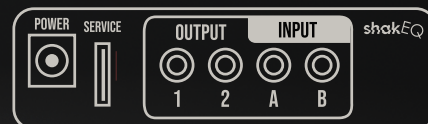
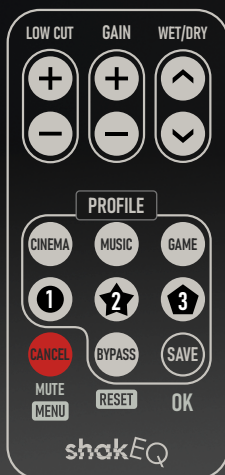
- Adaptively transfers audio to the frequency range of the shaker
- Creates natural "noise" when the signal is weak and sharpens the feeling of smaller details, such as the engine sound of a racing car

3. Dynamic range optimizer

- Emphasizes low-level signals when transients are not present
- Preserves transients when they are present for sharp, undelayed haptic feedback
- Three presets, each with five levels
- The user can choose to cut frequencies that are not reproduced well by the shaker

4. Electrical and mechanical

- Power plug, remote control, and calibration accessories included
- 2 RCA inputs and 2 RCA outputs
- USB port to update the firmware and to export the measured response
- Power: 12 VDC, Typical Power Consumption: 0.5 W
- Unit dimensions: 126 x 80 x 26 mm, weight: 300 g (5" x 3.1" x 1.1", 0.66 lbs)



CONTACT

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<https://www.dspeaker.com/shakeq>