

sound*bathe* Application Guide

Introduction

sound *bathe* is a sensory-audio system designed to deliver high quality audio across a range of architectural and structural applications, simply and discreetly. sound *bathe* works by transforming the surfaces it is attached to, which then........... 'become the speakers'.

Simply pair your smartphone or other bluetooth enabled device, and start listening. Installation is quick and simple, everything is hidden and safely out of sight, leaving you to hear and feel an amazing sensory-audio experience. Perfect in wet and humid areas, sound *bathe* is a rugged system that copes with harsh conditions. sound *bathe* delivers fantastic quality sensory-audio without any visible speakers, all from your smartphone.

Loudspeakers have been with us for nearly a century, but there are times where a conventional loudspeaker is not possible, practical or desirable. This is when sensory-audio speakers can solve these problems, as they transfer the sound energy into solid surfaces making the surface the speaker. This makes them extremely versatile, delivering sound where ordinary speakers can not go, where they would be vandalised, damaged, soaked, or where the speaker needs to remain hidden.

Unlike a normal speaker where the cone is in sync with the voice coil, sound *bathe* excites the surface at a single point. Therefore placement of the speakers can effect the sound delivery. The material used can also have a significant effect, however installation on nearly any surface will give acceptable results.

Material

In many situations the surface will be decided in advance. The best materials will have medium to high compressive strength and moderate to high bending strength, though as mentioned above nearly any surface will give acceptable results. The compressive strength has most effect on the treble and the bending strength has most effect on the midrange and the bass.

The output sound will be determined by the weight of the panel and the output of the speaker. Thicker and heavier materials may require sound *bathe plus* for enhanced audio output.

Some examples of materials that work well with sound bathe include;

Foam sandwich composite panels, Fibreglass reinforced panels, Corrugated/ honeycomb cardboard sheets, Corrugated plastic panels, Laminate faced honeycomb sandwich composite panels, Thin steel or aluminium honeycomb sandwich composite panels. Other suitable materials include;

Solid unreinforced acrylic/plastic sheets, Plexiglas sheets, Plywood, MDF, OSB, Plasterboard/drywall, Laminate wallboards, Furniture panelling, Acoustic ceiling tiles, Mirrors, Glass windows.

Materials that might not deliver acceptable results;

Thick structural metal panels, Solid concrete floor slabs, Solid high mass construction beams, soil.

Speaker Location

It is always desirable to test and arrange the speaker placement to optimise the sound experience.

A common installation situation is on a rectangular panel or board, like a wall panel, shower panel or plasterboard/drywall sheet.

Once the material shape and size have been established it is advisable to place the speakers near the centre of the surface. They should be offset from each edge, vertical and horizontal, so the distance to the edges is not equidistant. This will mean the speakers are offset in the vertical and horizontal planes.

If both speakers are placed on the same panel it is often better that they are placed together to enhance bass frequencies. If they are spread out it will exacerbate the mid and treble frequencies. Group them to your preference, while observing the offset previously suggested.

If mounting to a bath, fix onto a clean solid surface high up on the bath at either side of where your head will be when relaxing. This can enhance the stereo effect allowing you to hear and feel the music on both sides.

Installation

Installation is simple. The mounting plate should be secured onto a solid clean substrate using suitable fixings and/or epoxy resin or glue suitable for plastics and the substrate. If this is not stable and secure it will not allow the speaker to effectively transfer its energy to the surface.

When the glue has fully dried, screw the transducer speakers to the mounting plate. Ensure a snug fit but do not over tighten. Allow clear space around the speakers so they can transmit their sound directly into the chosen material (and not the background material). It will also allow for some ventilation.

Silicone is not the preferred glue as it allows a little movement which will have a small negative effect on sound transference.

As a general rule, fitting the speakers on a larger panel or surface will enhance a deeper bass response.

The surface should be non-magnetic, as a magnetic material may interfere with the speaker and impair performance.

If connecting the amplifier to mains electric; Red is live, Black is neutral and Yellow is earth. Electrical connections must be carried out by a person qualified to do so. Any socket should be located in a safe and suitable zone, and should be located in a dry area, i.e., adjacent room, loft space, etc. If installed under the bath, the panel must be mechanically fixed for sound *bathe 2*.

If installing the speakers into the back of the amplifier yourself then there is no polarity, but it is advisable that the green wires go into the red spring clips and the green and white wires go into the black spring clips.

The speaker wire should not rest on the surface of the panel where the speaker is installed if possible. If it is attached it may be helpful to add a foam or felt pad to separate the surface and wire to avoid any possible buzzing of the wire on the surface.

sound*bathe* is compatible with any bluetooth device from bluetooth v2 onwards. The amplifier should be located for the best bluetooth signal, free from interference. Turn on your bluetooth device (smartphone, tablet etc.) and SEARCH for bluetooth devices. You can now pair to the sound*bathe* amplifier.

As with every bluetooth system only one device can connect with sound *bathe* at any one time. The initial bluetooth device would need to be switched off, unpaired, or be out of range for another device to connect.

You only need to connect once, and after this your device should recognise and pair with sound *bathe* automatically.

All controls; volume, music selection, etc, is via your bluetooth device. If the sound becomes distorted, reduce the volume.

The speakers and amplifier for sound *bathe 3* are rated to IP67. The speakers for sound *bathe 2* are rated to IP67 and the amplifier IP44.

sound *bathe 3* is designed to withstand outdoor environments, including incidental exposure to water. It is not designed to withstand constant immersion in water.

Recommended Applications

sound*bathe* can deliver high quality audio in many problematic areas. In areas where traditional speakers would be exposed to extreme environmental conditions, abuse, wear and tear, or when a concealed audio solution is required sound*bathe* is the perfect solution. It also solves the problem in high end design environments where a visible speaker would be unsightly. As sound*bathe* delivers sensory-audio it also has applications for the visually impaired and less abled. The full range allows you to use sound*bathe* in almost any setting, the only limitation is your imagination.

Residential Applications; Concealed design for Whole House Audio, Home Cinema, Kitchens, Bathrooms, Bathroom Tubs & Showers, Bedroom Audio, Baby/Toddler Therapy, Hot Tubs & Spas, Steam/Sauna Wellness, Vanity Mirror TV's, Decking, Outdoor Furniture, Windows, Gaming

Residential Applications; Health Club/Wellness, Cruise Ships, Marine/Yacht, Health Care, Sound Concealment & Masking, Security Speakers, Public Address Systems, Conferencing, Boardroom Audio, Office Audio, Audio for Retail, Education, Healthcare, Military, Holiday/Theme Parks, Restaurants, Hotel & Hospitality, Housing Development, Signage, Emergency Notification, Transport & Automotive, Advertising Signage, Multimedia Exhibits, Point of Sale Audio, Multimedia Exhibits

You Tube animation for soundbathe







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