

# Mercury-3 Solar System Acoustic Treatment Kit Installation Guide

Kit Includes:

- Twenty (20) 600x600x50mm Mercury Wedges
- Four (4) 600mm Mercury Bass Traps
- Two (2) Space Mist Aerosol Adhesive spray

### Step One: Corner Bass Trapping

Low frequencies build up in the corners of your room – so that is the best place to attack them with Mercury Bass Traps! Placing one (1) 600mm Mercury Bass Trap in each vertical corner is recommended – starting at the ceiling.

If you have doors or windows near your vertical corners that prohibit you from placing Mercury Bass Traps as described, simply place them horizontally along the junctures between the walls and the ceiling.

### **Step Two: Early Reflection Treatment**

Reflections that arrive at your ears within 80 milliseconds of the direct sound are summed by your brain and cannot be distinguished as a separate source. This can be problematic during recording or critical listening applications.

While sitting at your listening position, have someone move a mirror along the front wall, side walls and ceiling. Anywhere you see the speaker's reflection is a good location for Mercury Wedges. The halfway point between the speakers and your listening position on the side walls and ceiling will be crucial along with the front wall located behind the speakers.

#### **Step Three: Ambience Control**

The rear portion of the room should be treated as well to control ambience and late reflections. Place Mercury Wedges on the rear wall to absorb the direct sound from the speakers.

The rear portion of the side walls should have staggered treatment – i.e. the pattern that is used for the left wall should be inversed for the right wall. Imagine a checkerboard – red squares on the left wall, black squares on the right wall. Additional panels should be placed on the ceiling in the rear portion of the room.

### Step Four: Welcome to the World of Professional Acoustic Treatment

#### **Installation Tips**

Space Mist is a high strength aerosol adhesive with the advantage of a variable spray width button, formulated to provide the perfect solution for mounting acoustic foam to virtually any type of substrate or material in a professional or domestic environment.

Important - Pay careful attention to the Hazard Warnings on the Space Mist label and only use in a well ventilated room. Wearing a mask is also recommended during the installation process.

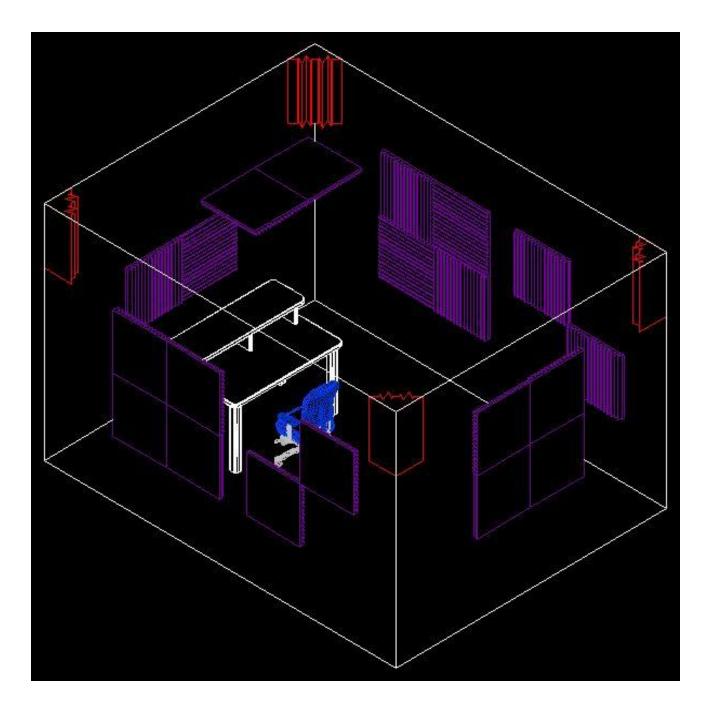
A good technique is to spray Space Mist from an approximate distance of 6" – 10" or 15cm – 25cm to the rear of each panel starting from the centre outwards to avoid contaminating the side edges. Making sure the spray can is held vertical, spray evenly along each of the four lengths of the back of the panel and finish up with an X in the centre section. Allow the adhesive to tack off for 15-30 seconds then offer up the tile to the surface and press the entire tile firmly until bonded. Application to the back panel surface should be generally sufficient but subject to how porous the mounting surface is it might be advantageous to spray Space Mist to the mounting surface for extra adhesion. If in doubt try a quick demo practice before proceeding.

Alternatively the Mercury Wedges and Mercury Bass Traps can be glued to a lightweight substrate (such as thin MDF, plywood or plastic) and then hung from the walls/ceiling with screws or nails or fixed with heavy duty Velcro sets. This allows for a variety of benefits:

**A:** If you ever relocate your studio, the panels are easy to remove with very little cleanup due to the fact that adhesive is not applied directly to the wall/ceiling surface.

**B**: You can space the panels away from the wall with wood blocks or something similar in order to obtain better low frequency absorption for each panel. Typically, an air gap of 50mm or more is recommended.

**C:** If you desire a more "dead" or "lively" room for various recording applications, you can easily add or subtract panels if they are mounted in this way – thus giving you a customised variable acoustic environment.



The pattern shown in this rendering is only one example of the way that the panels and bass traps of your Mercury-3 kit can be oriented in the room. If you desire a different aesthetic pattern, you can rotate the panels however you like as long as the guidelines listed above are followed as this will not detract from the performance of the acoustic treatment.

Universal Acoustics foam materials will not only dramatically improve your acoustics but can also make your workspace look great.

# Q: Will this kit stop sound from leaving or entering my room?

A: No. Acoustical treatment is not designed to stop sound. A construction process is needed to block sound from traveling from one space to another. The Mercury-3 Kit will improve the quality of the sound within the room, but will not block it from entering or leaving.

### Q: What should I expect to hear after the Mercury-3 Kit is installed?

A: You should expect a more accurate sound – more consistent low frequency response, less reflected energy. Your recordings should sound more controlled and professional and your mixes should translate better to other systems.

# Q: I like what I hear. Is there anything else I can do to improve my setup?

A: Yes. The next step would be to place additional Mercury Bass Traps to the vertical and horizontal corners of the room. You cannot have too many bass traps in a small room, so adding bass traps will only improve your low frequency response. If you desire more control, additional Mercury Wedges can be installed.



B: Introduce a set of Universal Acoustics Vibro-Pads to your monitor system – these specially formulated anticompression pads are designed to improve the accuracy and imagery of your Nearfield monitors by isolating and de-coupling them from the surface they are resting on. Each pack contains 2 sets of pads with adjustable angle wedge options and is suitable for virtually every size of Nearfield monitor.

C: Consider adding some Mercury Diffusers or one of our new Mercury Cluster kits to your acoustic arsenal as a low cost solution for creating a more open or lively atmosphere within a small or dull sounding room. Our diffusers can be mounted in clusters, independently or combined with all models of Universal Acoustics absorption tiles and can offer noticeable benefits especially when ceiling mounted over the mix position.

Cut in striking contemporary designs from high density flame retardant polyester foam, Universal Acoustics Solar System Room Kits are perfect for use in recording, post production and broadcast studios, music rehearsal rooms, home cinemas, audio and language labs, boardrooms, offices, staff rooms, gymnasiums - in fact any open space which requires efficient sound absorption to improve the audio integrity, intelligibility and sonic performance.

Thank you for purchasing your Mercury-3 Solar System Acoustic Treatment Kit from Universal Acoustics, designed to provide many years of acoustic control within your audio environment.

### For further technical information please visit www.universal-acoustics.com

### FAQ: