

The Acoustical Room Kit 10 is designed to accommodate rooms between 100sq-ft to 200sq-ft and installation is easy. Each kit comes complete with 22 panels, mounting impalers, wall anchors and screws. We even include the drill bit. Fasten the impalers to the wall using a couple of screws and simply hang Acoustical Wall panels in place, just like hanging a picture. No more messy glue or expensive wall clean-up! With your Acoustical Room Kit 10, you can relocate your panels or add to your acoustic control as your needs change.

The Acoustical Room Kit 10 is truly a remarkable kit in that the panel selection provides plenty of set-up options to address most room designs. This page is designed to help you achieve optimal panel placement even if your room has an odd shape.

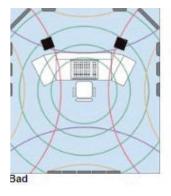
There are however some rules of thumb when it comes to maximizing the acoustic performance of your room. This is a basic check list that will get you 90% there:

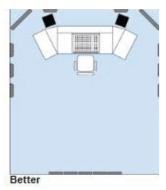
# **ESTABLISHING THE LISTENING POSITION**

The listening position is in fact the most important position in any studio control room. Because you will be spending countless hours in this seat, you really want to make sure it is comfortable and inspiring. For many, the studio is not just a recording studio... it is a creative place where one writes and is inspired. So make it comfortable.

Truth is; a well written song is way more important than a well recorded one! So things like a view window outside may be more important than optimum acoustics. Only you can make this decision based on how you intend to use your room.

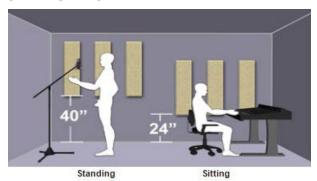
#### AVOID SITTING IN THE CENTER





If at all possible avoid having the listening position in the middle of the room. This is where all of the room modes intersect and will be the worst place to sit. Instead try to move the mix position forward or backwards to stay out of the mode-zone!

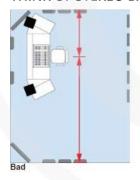
#### SET HEIGHT TO EAR LEVEL

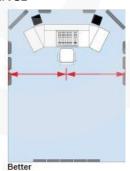


Panels should be positioned so that the center of the panel is roughly at ear height. The Acoustical Room Kit 10 includes 48" (1219mm) tall panels. For rooms with standard height walls, panels are usually placed at roughly 24" (609mm) up from the floor for sitting (control room) and 40" (1016mm) for standing (music studio). For rooms with longer walls, the height of panels will often be staggered in effort to spread out the acoustic treatment on the wall.



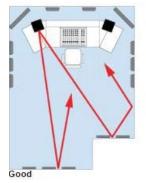
## THINK OF STEREO BALANCE

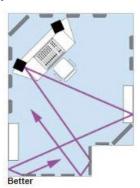




In terms of acoustics, this means distance from nearby wall surfaces. As most recording is performed in stereo or with a stereo image in mind, placing your seating position where left and right walls are at equal distance, equal size, and have equal acoustic treatment will deliver a better stereo image.

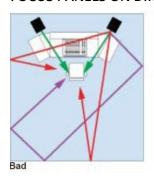
## **USE NATURAL DIFFUSION**

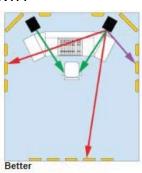




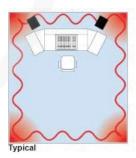
Odd shaped corners and book shelves provide natural diffusion which can help break up sound waves and reduce modal distortion. Try to use the room landscape to your advantage by positioning these behind you as this will aid in creating a LEDE room environment with diffusion at the rear of the room.

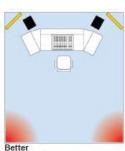
## **FOCUS PANELS ON DIRECTIVITY**





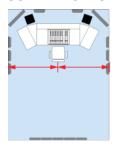
## **BASS MANAGEMENT IS IMPORTANT**

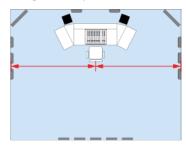




Walls, ceilings and floors act as waveguides. Low frequencies travel along these room boundaries and naturally accumulate in the corners. This is why acousticians tend to use corners to trap bass when ever possible and it is why the Acoustical Wall panels Broadband panels come with corner mounting hardware. If corners are limited, you can stack the two panels on top of each other or use the wall to ceiling joint. Although the Broadband bass traps take out bass, they also remove mid and high frequencies at the same time. Placing the corner traps at the front of the room can help increase the absorption in the 'dead end' for LEDE room designs.

#### SO MANY SIZES WITH ONE KIT?





Yes, the Acoustical Room Kit 10 is truly remarkable in that a single kit can work in so many rooms. One important reason for this is room size. Point being: as rooms get smaller, walls get closer to the listening position and the primary reflections will be louder. By increasing the panel density in the room, you are effectively attenuating their effect on the sweet spot. In larger rooms, sound travels further before it hits a wall boundary and then the sound must travel a distance before it reaches the sweet spot. With sound loosing 6dB every time the distance is doubled, primary reflections become less problematic.

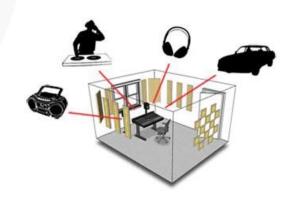


## **TUNING YOUR ROOM**

Florida 33411

As with any studio, you have to get comfortable with your room. This takes time, patience and practice. This is why so many producers and engineers always use the same studios to record. They know what to expect and therefore are comfortable with the choices they make when they record.

The Acoustical Room Kit 10 is a basic room kit that will help solve common room problems. Once it is installed, start by listening to CDs or recordings that you are familiar with. Then record some tracks and listen to them in your car, headphones, living room and in other spaces. You will quickly find out if your mixes translate well. As you test your room, this will no doubt lead you to reconsider the tonal balance of your loudspeakers and how loud you set your sub-woofer. Move around the room and listen. You can always reposition the Acoustical Wall panels panels if you feel the need.



## ADVANCED ROOM TUNING

For most folks, the Acoustical Room Kit 10 will provide more than ideal room acoustics. For others, it may be a starting point. This is the beauty of this design. Think of your Acoustical Room Kit 10 studio kit as a modular system that can be expanded. Primacoustic offers a variety of specialty solutions designed to augment the performance of the room depending on the desired outcome.

The following are typical problems, causes and steps you can take for advanced room tuning.

PROBLEM	CAUSE	SOLUTION
Bass is lacking in mix	Bass too loud in room - Monitor lacks clarity in low end - Room modes causing cancellation	Turn down sub - Add Recoil Stabilizers - Add more bass traps
Mix to dry, lacking ambiance	Room is too lively	Add more acoustic treatment - Consider adding diffusers
Low mids lack punch	Mode causing frequency bump Equalizing it out to compensate	Add low mid treatment – Cumulus MaxTrap or FullTrap
Left right balance seems off	Mix position too lively - Mix position not acoustically centered	Check panel position with mirror - Add more treatment - Consider adding a Stratus Cloud
Bass booms in guest listening area	Modal distortion causing waves to add up	Add more bass trapping - Consider MaxTrap or FullTrap
Bass lacking in guest listening area	Modal distortion causing cancellation	Add more bass trapping - Consider MaxTrap or FullTrap