

## Primacoustic London 12 Room Kit

By Adam Gallant



Up for review in this issue is the Primacoustic London 12 Room Kit. This acoustic treatment kit consists of 22 panels that are designed to convert a small room into a workable recording, mixing, and/or listening environment with a live-end, dead-end (LEDE) room configuration. The kit comes with two 24 x 48-in. Broadway Broadband Absorbers, eight 12 x 48-in. Broadway Control Columns, a dozen 12 x 12-in. Broadway Scatter Blocks, and all of the proprietary Impalers and fasteners needed to hang the panels.

### Preparation & Installation

The kit arrived at our studio in two sizable boxes that were easily maneuverable with two people. We requested the Paintable version of the kit as opposed to the fabric-covered line. Each paintable panel consists of a formed, high-density glass wool board with a

textured, re-paintable latex covering. Painting the panels was quick and painless for us. We were able to set up all of the panels on a big tarp outside. I opted for a heavy coat of latex spray paint for the larger panels and left the smaller Scatter Blocks unpainted. The specifications on the product page include a graph that plots the absorption coefficient against the paint level applied. I enjoy seeing that depth of detail for such a specialized product – a sign of good research and development.

The true benefit of the Paintables range is that we're no longer stuck with the greys, beiges, and whites that standard panels tend to lean towards. For reference, there are some great images on the Primacoustic site that show panels painted to match various wall colours that look particularly good.

When it came time to hang our panels, we opted to treat our studio B room. This space hosts a variety of work, from voiceover and

foley recording applications to full-on commercial music production. Primarily, though, the space is used for sound editing and dialogue recording.

To give you some context, the room is 14 x 13 ft. with 9.5-ft. tall ceilings. Before the London 12 kit arrived, I had a very basic vocal booth and four DIY acoustic panels opposite the booth to reduce early reflections. The booth was eating up valuable floor space and the minimal panelling left flutter echoes outside the booth. Once we cleared the old panelling (and pretty much everything else) out of the room, I took an acoustical measurement using a Behringer ECM8000 Linear Measurement Condenser microphone and Room EQ Wizard, which is a great piece of room acoustics analysis software available for download online. The room reading was scattered with a sharp -20dB (approx.) dip around 300 Hz.

I hung the Broadband Absorbers first. These are the largest panels in the kit at 24 x 48 in. and 2 in. thick. Installing them in the corners will up their effectiveness tremendously, not only because the corners are where your low end will resonate, but also as allowed airflow behind the panel will absorb high frequency reflections from the rear. The corner Impalers that come with the kit make hanging these big panels at an angle very easy. With a level, pencil, and drill, our intern and I were able to hang the two corner panels in under 30 minutes. The Impalers allow for a small amount of play when securing the panel, meaning the final leveling can be done with accuracy.

Next up to hang were the Control Columns. There are eight in the kit and, like all of the included panels, they have a nice beveled edge. They are designed to absorb and diffuse at and around your sound sources' primary reflection points.

The best way to determine where to position these panels is with a mirror. Get in your listening position and have another person move a mirror along the wall on which you want to hang the panel. Move the mirror laterally until you see the opposing speaker in it, and then hang the panelling in and around this position. Placing panels here will help with clarity and stereo imaging on playback.

Having a well-balanced system will not only help your mix but will inevitably help with orchestration decisions in music that serve the stereo soundstage. The control columns were also hung with Impalers. Again, they were easy to finesse into level positions and look very symmetrical with little to no fuss. Eight Control Columns were hung in under an hour.

If you feel you have the space, Primacoustic also sells Impalers that will offset the panels from the wall by 3.5 in. This additional airspace will lower the panels' effective frequency by an additional octave. If I were outfitting a third room with a similar kit, I would opt to roll on latex paint that matched my walls and use the offset impalers to increase the panels' effectiveness.

The 12 Scatter Blocks were the last we hung. Each of these small panels is hung with a single Impaler. I gave myself a challenging layout that I assumed would be tricky

to hang symmetrically; however, 10 panels went up with little to no effort in under an hour, and they look great. Lots of compliments from clients on the new space.

Something worth mentioning is that these panels smelled like white pigment when they were taken out of the box. It's an earthy, kind of industrial smell. This scent was quickly replaced with the smell of latex spray paint. (Tip: paint outdoors or in a well-ventilated space and wear a mask while painting.) It did take over a week for the room to completely dissipate the paint's scent. As with any freshly painted space, keep this in mind if you're planning on working or hosting clients in the room.

I should add that the latex covering material has to allow for a certain amount of airflow in order to absorb high frequency information. This makes the panels' exterior relatively delicate. I also suspect these panels are prone to damage during the shipping process. The manufacturer has affixed a label on the box that advises the receiver to note any shipping damage and report it. This is one way for Primacoustic to ensure their customers are getting what they paid for.

### Performance

The London 12 Room Kit is designed to take a 100- to 200-sq. ft. room and give it the much-desired LEDE configuration. Most of the panels are meant to be hung in and around the sound source with an array of Scatter Blocks behind the listener that act as absorption and diffusion. I opted to put the Scatter Blocks in my dead end as I have heavy drapes behind my listening position that are working effectively.

So, how do they sound? The panels have improved the space dramatically without sucking out all of the high end. The room is clear and airy without flutter echoes and, most importantly, comfortable. I took a new measurement of the space using the REW software and was surprised to see the 300 Hz dip completely corrected, and also that some information between 2 K and 8 K was leveled out. The room is by no means without its character, but the clarity of voice, acoustic guitar, and general Pro Tools playback is very noticeable.

I've built acoustic panelling for four studio spaces since getting into the industry.

With each build, my skills and the quality of the panelling have increased. Also with each build, the time it takes to construct and hang the panelling has grown. A few challenges on my DIY builds I've run into are: keeping the panels looking good enough for client work, sourcing the proper insulative filling, and sourcing the tools to not only build but also secure the paneling to walls and ceilings.

The Primacoustic kit checks all these boxes with ease. In our Studio A room, it took over five full days of labour to build and hang 12 DIY ceiling-mounted panels. This doesn't include the time it took to gather all the materials and tools for the build. I also didn't skimp on materials and paid over \$800 CDN for a dozen of the DIYs. The London Room Kits are an ideal solution for someone who doesn't have the time, tools, or interest to build and hang DIY panelling. For one tenth of the work and a more professional aesthetic, this kit is a no-brainer.

### Summary

In my opinion, room treatment should be among any recordist's top priorities. I've had more success with lower-end recording equipment in a treated space when compared to high-end mics, pres, instruments, etc. in untreated rooms. I would hold off buying that next 500 series module or high-end microphone and jump at something that will not only improve what you're recording, but also improve the quality of the sound being played back through your monitors.

Primacoustic is a great Canadian company with a large variety of products for outfitting studios, commercial spaces, and listening spaces. I could see this kit working really well for anyone hosting music lessons in their home or a small studio. It would also serve video editors needing some extra clarity for sound editing.

The London 12 Room Kit has added a professional look and sound to our second studio space that has clients complimenting and booking more than ever before.

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