



Singer Magazine's

projectstudioproject

part one



# NOW ALL WE HAVE TO DO IS WAIT FOR A CALL FROM THE GRAMMYS®

By R.A. Lindquist

For some twenty years now, I've been road testing, reviewing and writing about the latest and greatest gear from the best sources on the planet. I say that not as a boast or a point on which to reflect nostalgically, but to illustrate a much larger issue: my living room typically looks like the test site for low-level nuclear devices. Boxes, packing material, cords, manuals, and various pieces of PA gear and musical items are strewn everywhere. My wife is a saint for putting up with it, and she knows that if it really gets out of hand, all she needs to say is, "The Blanks are coming over on Saturday." At that point, I immediately don a miner's hat and start digging for the furniture.

But that was all BS (Before Studio). Over the last couple of years, I've been slowly watching a dream come true: a small studio perfect for reviewing gear and helping a few of the local hillbillies and church groups commit their best tunes to CD. As we often write about artists who are recording in a home project studio, we thought that by sharing how our own studio came to be, you too may realize how relatively easy it is to have a studio of your own. It wasn't all that expensive either, especially spread out over a couple of years.

## Born in a Barn

There are several ways to approach the task of building a project studio. If you have lots of time, space, and money, and plan on using it as a full-time venture, you would certainly want to consult studio designers and others with huge amounts of experience in the recording field. But that's not

what we're talking about. What we needed was a space that was insulated and isolated from outside noise, and relatively free of acoustic echo and reverb. The best way to accomplish the former is to build a "room within a room" so that outside sounds cannot be physically transmitted into the studio. But we know that, for the typical musician, this just isn't practical, and neither was it for us.

The first thing we did was pay a visit to Nick Colleran at Acoustics First in Richmond, VA ([www.acousticsfirst.com](http://www.acousticsfirst.com)). Nick has been building studios and consulting on acoustic issues for longer than he cares to say. Although he deals with major, corporate level acoustic issues daily, he's still a realist in that he recognizes that the typical home studio is being built in a room modified for the task, as opposed to being purpose built. He also has several rooms of acoustic problem solvers to help the project studio builder obtain the best results (more on that next time).

Nick's first suggestion was that we build the studio approximately 10' wide and 14' deep. As our studio was being built in the back of an existing barn, we had to go with 12' wide and 17.5' deep. Nick didn't see this as a problem, and said that having the extra depth in your room is helpful, especially at lower frequencies.

## Framed

Step one was to frame the walls, with special attention to those that backed into the garage area of the structure (the overall barn is 42' x 30'). Recalling an article by Bruce Bartlett in one of our earlier issues, the walls were built with "2x4s" staggered on "2x6s" (see photo below left).

By using this method, there's no direct physical connection between one side of the wall and the other. We then filled the air space with lots and lots of fiberglass insulation. For the walls along the exterior perimeter, 3/4" insulating board was applied first to the outside of the barn, and then the inside, leaving a two-inch air space. The wall was then framed and packed with more insulation. For aesthetics (to break up the "boxy" look) and, for additional space to insulate, the ceiling was designed with a moderate peak in the center. This added to the cost a bit, but gives the room the feeling that it's larger than it really is. The peak at the center is just shy of ten feet. At the walls, the ceiling height is about eight feet.

Once the framing was completed, the next step was to apply first, OSB (oriented strand board), and then drywall. As Nick Colleran explained, fiberglass insulation won't stop sound. That takes something with mass, the thicker, the better. We applied the OSB and drywall to both sides of the walls in an effort to reduce any sounds from the garage, as well as sounds from the outside world. At the time we were doing this project, 1" OSB was expensive and hard to find (the fellow at the lumberyard said it was all going to Iraq). We used 3/4" (see photo below right) with better-than-adequate results.

So as part one of our story comes to a close, we have a comfortably sized room, surprisingly isolated from the sounds of the outside world. Inside, it sounds like a cave. In part two, we'll explain how we got that under control and talk about a few mysterious sounds we never expected or planned for. We'll be looking for you then. ■

