



An insider's guide to creating a home studio that's right for you

Not so long ago, recording in a studio was a pricey ordeal. A musician or band had to select a studio, ensure it had a quality engineer—and because the meter was running, hope to capture the necessary tracks without breaking the bank. Enter the digital age: Now nearly anyone can set up a quality studio right in his or her home. Sure, there's gear to acquire, but once those essentials have been purchased you can create, record and tinker with your music all day long. Plus you can customize your studio environment to suit your personal creative requirements.

While having your personal Hit Factory down the hall is a fantastic asset, building it—and using it effectively—can be challenging. Where do you begin? What gear do you need? Just as importantly, what don't you need? We turned to experts John Cuniberti and Mike Brown for help. Cuniberti is an engineer and producer who works with

artists like Joe Satriani, Sammy Hagar and Dead Kennedys, and who has helped build numerous home studios. Brown, the owner of Cleveland's Lava Room Recording, is a producer and engineer who has worked with the Ramones, Garbage, Paramore, Velvet Revolver and many others.

How do you prepare a room?

CUNIBERTI: Most rooms in homes and apartments have parallel walls, which can cause sound problems—the walls produce standing waves that can boost at certain frequencies and dip in others. The way to reduce that is to place materials on the walls that absorb or diffuse sound. For most home studios I use 3-inch fabric and rockwool panels made by GIK Acoustics. They're affordable, look better than acoustic products made out of foam, and can get the sound of a room under control.

BROWN: For home and commercial studios, mood and ambience are also important. People respond to colors and lighting—and creating the right mood can free you to perform and record at a higher level.

How do you insulate?

BROWN: To dampen loud elements like guitars and drums, you can buy modular isolation booths that can fit inside a room. But they're often too expensive for many home studios. Properly designed walls can be great for soundproofing—and there's a fountain of information on the internet about constructing walls if you're up to the task. All materials are available at Home Depot. The most expensive part of constructing a custom studio space is the labor. If you can do it yourself, you'll save a lot of money. CUNIBERTI: Without building custom walls, sound is going to escape through walls and

windows, and under doors. Commercial studios are basically rooms built inside rooms, so you've got multiple walls and a lot of air between the drum kit and your neighbors. In an apartment, you don't get that. Your best bet is to record when they're not home—or buy them a pizza.

What about outside noise?

CUNIBERTI: If you're doing vocals, you can buy acoustic barriers from Primacoustic or RealTraps that block unwanted sound and reduce room ambience. If you have windows in your room, double-paned glass is a must for keeping street sounds out of your recording.

What mics do you recommend?

BROWN: The Shure SM57 goes a long way when it comes to basics. For everything from drums to guitars, that's the main all-purpose mic you need.

CUNIBERTI: I'd recommend a mic with adjustable response patterns—one that can be set to cardioid, bi-directional and omni. The Telefunken R-F-T series are great for vocals and acoustic instruments, and are quite affordable. And if it's in your budget, a ribbon mic like a Royer R-122 would be a great option.

How about monitors?

BROWN: I'm a Dynaudio fan, but I've beta-tested a new Genelec series of monitors that self-tunes to your room. You run a white noise program through them and they adjust to suit your listening environment. Without proper construction in your home studio, you'll always have standing waves and weird nodes, but having monitors like those will let you adapt to the room. They're

more expensive than some other monitors but cheaper in the long run than custom construction.

CUNIBERTI: A lot of studio monitors that sound good in showrooms are hyped in the highs and lows because people respond better to music when it's got a lot of top and bottom. But that's the last thing you want in your monitors while engineering a record. Look for a self-powered monitor like the Dynaudio BM 6A that allows you to adjust frequencies on the back of the speaker.

How do you position them?

CUNIBERTI: In general, monitors need to be away from walls and corners. Use an equilateral triangle between the monitors and your listening position, and place rubber or foam isolation pads under them.

What about headphones?

CUNIBERTI: You want a professional pair that doesn't overamplify high or low frequencies. If you're mixing records in your home studio, use those headphones to

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—Mike Brown

listen to albums you like and then use them for references as you mix your own work. Spending \$500 for a pair of Sennheiser HD 650 headphones may seem like a lot, but you can get excellent results.

Which artists use home studios?

BROWN: I've been working a bit with Keyshia Cole recently. She's running Pro Tools at home with a Control|24 console. She has super-nice mics and preamps, and everything she's recorded sounds on par with what you'd get from a pro studio.

CUNIBERTI: Joe Satriani records all of his demos in his home studio, using much of the same gear we use in the commercial studios we record in. Some, like Sammy Hagar, build personal studios not located in their homes. His studio [Red Rocker Sound] has a large control room and isolation booths. He and Satriani recorded the last Chickenfoot album there.



Joe Satriani



Keyshia Cole

How does Joe deal with volume?

CUNIBERTI: Since miking a loud Marshall stack isn't always an option at home, Satriani uses a "speaker simulator" box made by Palmer. He can use any of his amp heads without a speaker connected, and record direct to Pro Tools. With headphones he can wait at 2 a.m. without bothering anybody.

Do you recommend Mac or PC?

BROWN: Ninety-nine percent of pro audio and video work is done on Macs. PCs are cheaper but they're more susceptible to viruses. If you've ever had your system shut down by a virus, you know it's a catastrophe. Pay a bit more and get the right computer.

CUNIBERTI: I'm working with two recording artists now, George Cole and Girl Named T, who are both buying iMacs with 27-inch screens and the Mbox Pro bundled with Pro Tools 10. With a good mic and headphones, that is one powerful recording and mixing system.

Can you get pro results at home?

BROWN: If you put someone with 20 years of experience in any studio, they'll do well. Most with home studios lack that experience, so even if you buy the same equipment as a pro studio and have a finely tuned room, it won't necessarily sound the same. It's always important to remember that half of any recording studio is the engineer.

—Michael Gallant