



BUILDING THE HUB

Since June, the Headliner team has been busy putting together a unique recording space, above an ancient inn in the heart of St. Albans. Here's how we did it.

Photographs Marley Hart

The last time I attempted to build a proper recording studio was about 15 years ago. I was in a touring band at the time, and we needed somewhere to record our demos, and rehearse. We found a lovely old barn to rent on a local farm, and aside from making what seemed like a million horse riding enemies due to our decision not to sound proof the place (at *all*), all things considered, we didn't do too shabby a job. We had 24 tracks of digital via two AKAI multitracks (a DR8 and DR16, connected to external SCSI drives), a 16-way snake, and a 24-channel Soundcraft Ghost analogue console.

But times have changed, haven't they?

For this project, we didn't quite have the budget for an SSL Duality, but saying that, although having a beast of a console would be incredible, for our workflow, and to keep things as compact as we could, creating an in the box environment was definitely the way to go.

First things first, we had to plan it all out. We sourced our space, which is part of a creative hub above an old inn in the heart of St. Albans which dates back to 1420 - so not only does a lot of history come with it, we think it may be the oldest building out there to house a professional recording studio.

We had two rooms to work with, so called on a few of our musical friends to come and take

a look. After lots of discussion about what we should do with each space, we decided to turn our smaller room (pictured above, before and after) into a control room, and our larger room (currently a work in progress) would be a great 'hybrid' space: it's big enough for a small band, and got a nice enough natural acoustic not to have to go too crazy on the treatment. The two rooms will be linked up in early 2018.

The Proper Treatment

Unlike the larger space, the control room was incredibly reflective - and the side wall was pretty thin, too. We soundproofed that with rockwool, and got in touch with GIK Acoustics to spec out the room with regard to applying professional sound treatment.

I knew a little - but *only* a little - about reflection points and the like, but getting GIK involved was an absolute godsend. Essentially, they helped us transform what was once an empty, reflective space, into a great sounding control room - and more impressive still, they did this purely by me sending GIK's David Shevyn a few photos of the space to study, some basic room measurements, a couple of short phone calls, and one amusing video over WhatsApp involving a white mannequin in a haunted room. The less said about the last bit,

the better..!

Because our control room is rectangular, David suggested the best place to set up would be to face the window. The biggest problem he envisaged was low end issues due to the roof being so low. With this in mind, he suggested corner bass traps. Bass will build up at any boundary: a wall, a floor, a ceiling; and corners are efficient, because they are the ends of two or three boundaries.

Putting bass traps in as many corners as possible would improve low end decay times, frequency response, and imaging, so we ordered four GIK Tri-Traps. We then covered the window with a bespoke 1x1m, four-inch-thick GIK panel, to help balance the room.

Next, back wall bass treatment. The back wall can be responsible for large peaks and nulls, not only in the low end, but in the mid and upper frequency range; and unlike corners, it is a single boundary, therefore requires different types of treatment. So we agreed that a single bass trap would work here

Reflections & Other Issues

Treating early and first reflection points is essential to avoid issues with stereo imaging and comb filtering. In short, these are any reflections reaching your ears very shortly after

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the direct sound, and they can generally create an inaccurate listening environment, and are located along the side walls and ceiling. David suggested some GIK 244 panels, and advised we create a ceiling cloud, also using 244s, which provided a little extra low absorption.

Next up, the front wall. David cited two reasons as to why we may treat this area: first, to combat SBIR (Speaker Boundary Interference Response); and secondly, if we were unable to treat the back wall. In our case, we *could* treat the back wall, so we just placed one GIK Impression panel on the front wall. That, with the bass trap across the window, seemed to do the trick nicely.

Finally, we had to look at high and mid frequency reflections, which cause flutter echoes. What's a flutter echo? Basically, these are created by any two flat, hard, opposing parallel surfaces. So, depending on the size of the room, we can use absorption, diffusion, or a combination of both to tame these reflections.

With all this in mind, David decided that one more set of panels should be enough here, so we went with the GIK 4A Alpha Panels.

The Results?

What was nice about working with GIK - aside from the fact their kit speaks for itself - was the professionalism and attention to detail given throughout the project. I was also amazed that all of this was essentially done remotely - I would have laughed out loud had someone told me a few months ago that I would be putting all this stuff up myself, but I did. Well, I didn't, necessarily - I need to thank my dad, and Will Hughes, the landlord of The Boot, for doing all the tricky bits. But ultimately, they helped make the process pretty straightforward - and the

difference it's made to our room is staggering.

The real litmus test would be playing some of my new mixes to my mate, Barry Grint, of Alchemy Mastering. Barry had helped me out with some of my early mixes before we had the studio, which were carried out in my open plan apartment. Not an ideal place to mix music, but actually, aside from him having to take a chunk of low-mid out of the tracks, Barry was genuinely surprised that the mixes hadn't been done in a professional studio. I'll take that!

Barry recently came and had a look and a listen to the new room, and was immediately impressed. A few days later, I sent a few mixes across from the Pines project I'm working on, and they were a massive improvement. So it's definitely working!

All the Kit

At the core of The Hub, 'phase one' (prior to connecting the hybrid room to the control room) is a MacBook Pro running Reaper, which we're big fans of, mainly due to its intuitive interface, and ease of use.

In terms of interfaces, we've been using an RME Babyface Pro, which is tremendous: it's rugged, very clean, and warm sounding, so there is no noise at all. We would like to get a couple of Neve 1176s (wouldn't we all?), but for now, our AKG C414 XL II, or Audio-Technica 5047, straight into the Babyface Pro, is great.

We've also brought in the Waves Mercury bundle of plugins - some incredible sounding bits of kit in there, and particularly versatile, too.

Our most monumental leap has probably been upgrading the studio monitors to 'The Ones' by Genelec: a pair of 8331s and 8341s, both of which are a delight to mix on and work

with: zero fatigue, you can hear everything (and more!), and most impressively, I find myself mixing as I go, all the time, without even realising it. As soon as I calibrated the room, and listened to some reference tracks, I was making improvements to mixes in minutes.

In terms of keys, we have a lovely Nord 3 HP which we use for all piano and Hammond type tones, and the compact and quite brilliant Roland System-1 plug-out synth, which is full of amazing tones and effects - whether you're after an airy pad, or something raw and dirty, this will do the trick. What's also cool is, you can jump in and get something happening right away, or dig deeper and spend time really nurturing your sound.

Our master MIDI board is a Roland A-800, which is superb: easy for transposing (when you get too scared of the black keys!), and a nice enough weight so you can 'feel' any piano you might want to track, yet not injure your right hand when getting over excited on the organs. It fits nicely under the desk, and has plenty of options when it comes to dynamics - crucial in most of my projects, as I'm often composing and playing in strings parts. The mod wheel is getting a lot of action, too. We've also got an AKAI MPK Mini, which is superb for programming loops, especially on the go.

The Hub is a pretty unique space, and we can't wait to open it up to the public. Anyone interested in getting involved in a project, or just fancies coming along to have a look, drop me a line: paul@headlinerhub.com

www.gikacoustics.co.uk