The Female DIY Musician Presents

3-STEP GUIDE TO SOUND TREAT YOUR RECORDING SPACE

GETTING YOUR ACOUSTICS RIGHT IS EASIER THAN YOU THINK

Have you ever wanted to record your music at home, but been worried that you'll never get a crisp, clear sound? perhaps you've tried different microphones but it just never sounds professional? The thought of even starting to wrap your head around acoustics and sound treatment can be pretty daunting, so what's a girl to do?

Inside this simple 3-step guide, I'm going to walk you through the process of sound treating your recording space. Whether it's a shed at the bottom of your garden or a corner of your bedroom there are many things you can do (often on a budget) to get better sounding recordings.

So, before you rush out and buy any expensive equipment, follow the 3-step process inside this guide and **get the most out of your home-recording space.**

STEP 1: UNDERSTANDING HOW SOUND MOVES

Knowing the foundations of how sound behaves will enable you to make good choices when sound treating your recording space. Therefore, in this first step we'll explore this process.

01 SOUND IS VIBRATION

When you hear a sound, you're actually hearing vibrations in air. These vibrations have begun at a source, for example an alarm clock, but reach your ears as waves.

A good way to imagine this is waves on the sea, which start with wind interacting with open water and continue to unfold across the ocean. Like water, sound waves also travel in multiple directions.

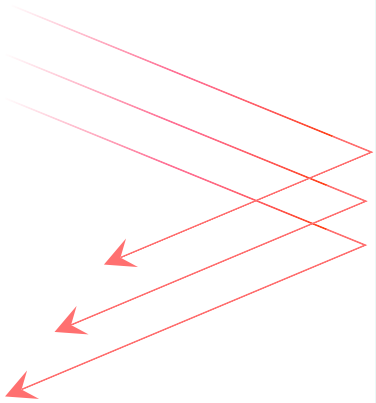
02 SOUND LOSES ENERGY

Sticking with our water analogy, much like waves on the ocean, sound waves loose energy and intensity as they travel. This is the reason sounds that are far away sound quieter and less crisp than sounds that are closer to us.

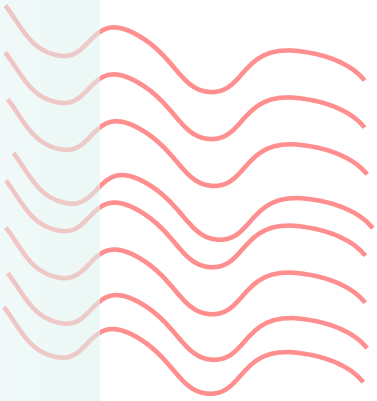
03 SOUND IS REFLECTED

Now, I'm going to give you another analogy: light. Ever noticed how when light hits a mirror it gets reflected back? This is why people stick mirrors up in dark rooms to brighten them up.

Sound waves also reflect off hard surfaces. This is why rooms with lots of hard surfaces (like hipster cafe's, for example) can almost feel abrasively loud. These types of materials will just bounce that loud lady on the next table's laugh right back at you.



04 SOUND IS ABSORBED



I'm guessing the place you've heard about absorption the most is adverts for baby's nappies, right? Well, that will actually give you *some* idea of what we're talking about regarding sound absorption. Some surfaces absorb sound rather than reflect it.

This usually happens with softer surfaces, like thick velvet curtains and carpets. You know, the type of thing you'll find in your granny's living room'. Cosy!

Now we've covered the fundamentals of how sound moves and behaves in space, we can move onto step 2: figuring out what's going on with the acoustics in your recording space.

STEP 2
DIAGNOSING YOUR ACOUSTICS

In this next step, we're getting a little more practical. We're going to see what the acoustics are like in your own recording space. To do this, make sure you're alone and things are nice and quiet.

01 TESTING FOR FLUTTER ECHOES

Once you're in your recording space close the door, stand in the middle of the room and clap loudly. What you're listening out for is 'flutter echoes', which signal how the sound dissipates in the room. You may have to do this a few times if your ears aren't tuned in just yet to hear them right away.

02 MAKING SENSE OF WHAT YOU HEAR

Once you're tuned into these flutter echos, listen to the quality of their sound. Do they sound high-pitched and intense? This likely means you have lots of reflective surfaces. Mellow and quiet? You likely have a lot of absorptive ones. Nothing at all? Maybe a mix of both. Make a note of this so we can determine how to treat your recording space.

HARSH FLUTTER ECHOES?

You'll want to create more absorption in your recording space.

SOFT FLUTTER ECHOES?

You may want to find some reflective surfaces to have options moving forward.

STEP 3
SELECTING YOUR MATERIALS

Now, taking your specific acoustics into consideration, we can now choose a mix of reflective and absorptive materials to sound treat your room. The best news? You likely already have lots of these to hand in your own home!

DECIDING WHAT YOU NEED

- **If you detected harsh flutter echos** in Step 2, then you'll want to be incorporating more absorptive materials into your space so you're not always battling with these harsh frequencies.
- **If you heard softer flutter echos**, you could try some reflective materials, in case you want a brighter sound from-time-to-time.
- **If you couldn't hear harsh or soft echos**, then it's best to have both absorptive and reflective materials so you can experiment with both.

ABSORPTIVE MATERIALS

YOU LIKELY HAVE TO HAND IN YOUR OWN HOME

- DUVET
- BLANKET
- CARPET
- RUG
- PILLOW
- CURTAIN

All of the materials listed here can be used to absorb sound in your home-recording space and will give you a cleaner, crisper sound for your recordings.

Duvets, curtains and blankets can be effective for walls and doors, carpets and rugs can soften a hard wood floor and a pillow can also be used to soften close reflections, such when recording vocals in a small, untreated room.

REFLECTIVE MATERIALS

YOU ALSO LIKELY HAVE TO HAND IN YOUR HOME

- MIRROR
- PICTURE FRAME
- DOOR
- WINDOW
- HARD WOOD FLOOR

if you're looking for more of a live sound, reflective materials like these can give your recordings more life and brightness.

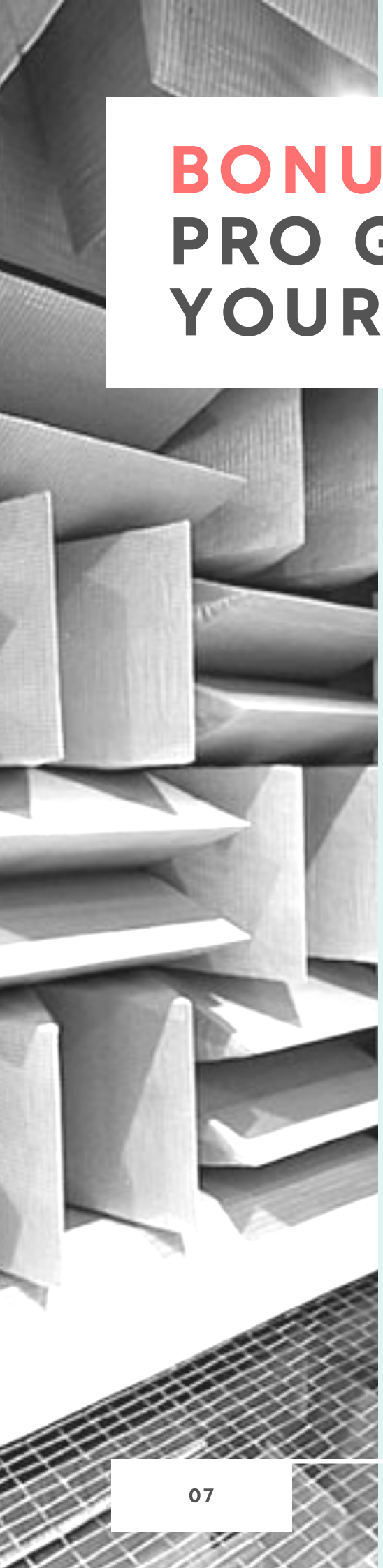
Mirrors and large picture frames can be placed to reflect sound waves in specific spots, while more static surfaces, such as windows and floors, will provide a more widespread treatment.

IF YOU'RE STILL JUST NOT SURE

It's good to have a mix of both reflective and absorptive surfaces to hand so that you can experiment with what works for your space, your instrument and your tastes. The more you try different materials, the more you'll get a good idea of what you like, acoustically, in the room you're recording in.

MOST OF ALL
EXPERIMENT

With this 3-Step guide, you likely have a much better idea of how sound behaves, what that sounds like in your space and how you can start sound treating where ever you're recording your music. But no one set-up works for everyone. Experiment with materials and get creative with what you have to hand.



BONUS
PRO GEAR TO UP YOUR GAME

Depending on your recording-space or your hunger for 'perfect' acoustics, you may eventually wonder what pro sound treatment options are out there.

Well, there are a lot! But here are two I recommend if you're planning on upping your sound treatment game any time soon.

01 VOCAL ISOLATION SHIELD

If you want a cleaner vocal recording, this is the piece of gear to get. But not all shields are made equal. Personally, I recommend the sE range, the top model coming in at just over £215.

CHECK IT OUT HERE >>

02 ACOUSTIC FOAM TILES

If you're after a more overall acoustic treatment, you could invest in some foam panels to absorb sound. Pro-Coustics have a budget friendly, but highly rated, pack of 24 coming in at just under £35.

CHECK IT OUT HERE >>

HI, I'M ISOBEL

I help female identifying musicians, like you, start recording and sharing their music.

I know that there are so many talented womxn in music that just haven't found a way to get their music out yet. Maybe you've found that studio time is a luxury you just can't afford and even that, like many female musicians, this kind of environment feels slightly intimidating?

As a **DIY musician myself**, I know how tough it can feel to even get started, let alone create any momentum as an artist. But four self-produced, self-releasing albums, over **25 million Spotify streams** and a PhD in Sonic Arts later, I now know a thing or two about carving out a sound and career you can be proud of. But I could never have done just that without first learning even just the basics of home-recording and getting those skills wasn't easy.

That's why in 2018, I started **The Female DIY Musician** to help other womxn grow their confidence with home-recording and start sharing their music. I'm passionate about creating inclusive and supportive online communities where womxn can learn without judgement or unnecessary pressure. Whether it's through teaching music production in some of London's leading music industry colleges or with the multiple female musicians inside my online learning communities, I love seeing my students transformation everyday.

I truly believe that when female musicians have the right resources, exceptional support and a thriving community we can record and produce amazing music, and that will mean more womxn in music.

I'd love to help you to do the same.

Isobel x

LET'S KEEP IN TOUCH

I'm so glad you've downloaded this PDF guide and I can't wait to share more resources and opportunities to learn with me moving forward.

IN THE MEANTIME, HERE'S SOME GREAT WAYS WE CAN STAY CONNECTED

- Listen to the **Girls Twiddling Nobs podcast**, where I share tips on recording and sharing your music as well as guest episodes with womxn smashing it with music-tech.
- Say hello on the 'gram at **@femdiymusician**
- Join the hundreds of other womxn in music in my free facebook group **The Female DIY Musician Tribe >>**
- Add **info@femalediymusician.com** to your email's contacts and look out for more amazing resources coming your way.

Know a fellow female musician who would love this free giude?

SHARE THE LOVE >>