

Do It Yourself Radio

Written by Tamzin Byrne

So you want to make radio. Cool. It's way easier than you think. This factsheet will talk you through what sort of equipment you'll need, how to structure your content and decide what to talk about. At the end, we've got a few tips on how to broadcast your work, whether that's through a traditional land-based radio station, an online internet-only radio station, or just as a standalone podcast.

To make DIY radio, you need three things:

- Some recording gear
- Something to talk about
- Somewhere to broadcast/podcast

Get some recording gear

When I was a kid (in the glorious mid-90s), all we needed to record ourselves was a second-hand Walkman and a blank tape. It's a little trickier now. You almost certainly will need a computer and a relatively new one that is capable of running some basic audio editing software. Even if you use a portable recording device (more on that later), you're still going to need to transfer that audio to your computer to edit and publish your work.

Microphones

So, assuming that you have a computer, all you really need is a cheap microphone. You might find that your computer already has one – many new machines, especially laptops, will have a built-in mic. For your purposes, that's probably almost good enough. The next step up might be a cheap headset. You'll find that it's adequate for radio, and also useful in other ways, for example, using [VoIP](#) or [Skype](#) to call your friends, or chatting with other players in online games.

If you're starting to get serious about radio, you might like to invest in a decent quality microphone. You can buy microphones with a [minijack connection](#) (like the one on the end of headphones) or with a USB connection. I'd go for the minijack option, because you'll be able to use that mic in a variety of other devices, not just your computer.

Portable Digital Recorders

If you don't have a computer – don't panic! There are a variety of portable digital recording devices that you can use. You'll still need access to a computer to edit your audio, but perhaps you could use one at school, or sweet-talk the local librarian into letting you install a free audio editing program on their computers. These digital recorders are also a good option if you want to be able to record audio out-and-about, for example, recording interviews, or commentating on the local football, or recording sound effects and field audio.

You can spend thousands of dollars on high-end recorders. There are some that are designed for professional use, by musicians or journalists. Don't let the sales guy talk you into something that you don't think you need. Work out your budget and do some serious research.

At SYN, we use two main brands or types of digital recorders – Zoom and Marantz. They're pretty standard across the industry and they're what a lot of media and journalism schools have.

The Zoom Series

These are a great range of recorders for different purposes. We've got the H4 – it's expensive, but powerful. If you want to persuade your school, uni or radio station to buy a recorder, pitch them this one first.

The H4 allows you to record in several channels at once, so it's good for recording music, especially if you can get an [XLR](#) out from the audio desk. It has a decent on-board mic, so long as you take care to point it in the right direction. But, if your budget allows, you can buy a decent mic (or two!) and plug into the XLR inputs. It gives you many options of recording formats and qualities. It also has a standard USB connection for transferring your audio to the computer.

Many journalism schools use the H2, which is a cutback version. It's great for recording voice, less good for music and background audio. It has pretty good on-board audio (they reckon you can use it to record music, I find it's not that great at a distance). It's super small, which means you can easily throw it in your bag. It also acts as a USB mic, so you can plug it into your computer and use it as a microphone there.

The H1 is their newest, cheapest recorder. It's a genuinely powerful little device, with almost all the features of their other products. It's a great place to start, especially if you're only interested in recording voice.

Marantz

This is what the pros use – perfect sound quality and all the features you need to use other professional gadgets with it. Lots of media and journalism schools have these. If you have access to one, you should learn how to use it. Don't go out and buy one, though. In the last ten years, the quality of the smaller digital recorders has really improved. The Marantz is probably more powerful than you need.

iRiver / iPhone / your mobile

Don't discount these – they often do decent quality recording. Have a play with it, if you're happy with the quality, then use it!

Editing software

The industry standard is [Adobe Audition](#) – it's the audio equivalent of Photoshop, or Premiere. It's reasonably expensive and totally more than you need for a simple podcast. But, if you have access to a copy, at school or uni, you should learn how to use it. Adobe makes another audio editing program, [Soundbooth](#), which is cheaper and simpler to use. But, writing in late 2010, lots of people are reporting problems and bugs with the software.

A good free alternative is [Audacity](#). The main drawback is that it isn't as pretty and it can sometimes take a long time to copy or save your work. If you keep your file sizes small, by saving in a lower quality format and keeping the duration short, you'll be fine.

If you're using a Mac, give [Garage Band](#) a go. It's simple, but that's OK. Adobe doesn't yet make Audition for Mac, but they plan to release a version by early 2011. [Soundtrack Pro](#) is the Mac equivalent, made by the same people as Final Cut Pro. [Audacity](#) should also work fine on your Mac, or there's another free alternative called [Wavepad](#).

Whichever program you use, make sure you keep your files organised. On the training portal of the SYN website you'll find a handy fact sheet that takes you step by step through the process of effective digital file management.

The SYN training portal also has heaps of videos and fact sheets that will guide you through the editing process, so check them out for more in-depth information on using editing software.

Something to talk about

There's more info about launching your own podcast in the SYN Podcasting Learners Guide on the training portal of the SYN website, but here are a couple of pointers:

Be specific

The best podcasts focus on something specific. No-one wants to hear you and your mates rambling on about nothing. Pick a topic, or a central idea, or some shared interest.

Plan lots of things to say

Before you sit down to record, brainstorm a whole bunch of topics. If you have loads of content, then your podcast will have a momentum to it, you'll be skimming from one topic to the next. If you don't have enough ideas, your audience will get bored.

Music and sound effects

If you plan to broadcast your work online, you'll need to make sure you don't break any copyright laws. Broadcasting on a real radio station is different – they will have a licence which covers you to use that music.

But, if your work's going on the internet, you can't use music and effects that someone else has created without paying for them. There are lots of great royalty-free music and effects that you can download from the internet. And you can always use stuff you've created yourself. For a list of handy royalty-free music websites, please see the 'Podcasting a SYN show' fact sheet on the training portal of the SYN website.

Show media

These are the little stings, sweepers and idents that make you sound totally professional. They're usually really simple, like "you're listening to New and Approved, on SYN". Or, "this is Get Cereal, with Michael, Mac and Sarah". Put some sound effects behind it and you're all set.

Put yourself out there

So, now that you have a super sweet podcast and all the gear you need to record some more, all you're missing is an audience.

Online

A great first step would be to set up a little blog or simple website through websites like blogspot.com, tumblr.com, wordpress.org, blogger.com and livejournal.com. You can put up podcasts on your own terms, whenever you like. It's pretty simple to link your new blog through to Facebook and Twitter, so you can tell all your friends and family when you upload new work. With some blog platforms, you can even embed audio into Facebook, so they can listen right there on your Facebook page.

Once you start blogging, you'll find that there is a whole network of people out there sharing and talking about their blogs. If your podcast is on a niche topic (like a sport, or a hobby, or a particular TV show), you'll be able to interact with other people who are already writing about that same topic online.

You could also submit your podcast to an established [online radio station](#). There are so many different types, focussing on different genres of music, or interests. Some are centred on a certain area, or community. They will all have their own criteria for submissions. You should listen to the station for a while to get a sense of what they like, and then look on their website for instructions for how to submit your work.

SYN is also a great place to publish your work. To find out more about becoming a member and creating an online account, please visit syn.org.au.

In real life

Community radio stations are always looking out for new volunteers. You can find information about community stations in your area on the [CBAA website](#). You may need to be a little bit patient. Most stations have a training program that you will need to complete before you go on air. Some stations also ask you to demonstrate your commitment by working on the front desk for a while, or helping with an off-air project. Stick with it – prove that you're keen and you'll quickly become a part of the station.

The 'professionals' are also scouting for new and interesting content. The ABC often asks for 'user-generated content', particularly on Radio National. They will have a specific set of guidelines for you to follow. On commercial radio, we're also seeing call-outs for contributions from young people, at the moment on Austereo's [Barry](#) and [U20](#). They have some really useful tips on their websites if you're interested in tailoring your radio program to fit those networks.

About the writer

Tamzin Byrne, 26, volunteered at SYN Media for a number of years in various roles including presenter, producer and SYN Radio Programming Manager. In 2009, Tamzin won the Radio Producer of the Year Award at the annual SYN Awards Ceremony for her work as Executive Producer of 'Panorama'.