



PRO MIX ACADEMY

6 STEPS IN CREATING A RADIO READY SONG





As producers, engineers, and songwriters, we sometimes struggle to transpose the sounds and ideas in our heads to “tape.” We may have all the tools at our disposal to make great music—quality instruments, microphones, all the fixings of a home studio, and the technical/creative chops—but it just isn’t enough. And it’s perfectly normal to feel like this!

Whether it’s the songwriting itself or a mix that just isn’t competitive with major commercial releases, there are many factors preventing us from sounding our absolute best. Luckily, these are all problems/skills that can be solved/honed with some patience and dedication to quality song-crafting.

If a radio-ready, commercially competitive song is what you’re after, bear in mind the 6 essential steps in building a great track!



STEP 1: LYRICS & MELODY

Before considering any of the technical aspects of recording and mixing a radio-friendly track, the song itself should be the best it can possibly be. If you're a songwriter who leans more toward the engineering side of things, your tendency may be to jump into the tracking and mixing as quickly as possible. Or maybe you're simply a gear geek wanting to give your newest vocal mic a spin. There's nothing wrong with that, of course! But don't expect to make up for poor songwriting in the tracking or mixing stages.

Lyrics and melody are the cornerstone of virtually every radio-ready hit you've ever heard. Think about it like this: how many songs have you heard on the radio that have a bad lyrical flow, clunky word choice, or a forgettable melody? Chances are, none—or at least not many.

This is because careful attention has been given to writing catchy melodies with lyrics that either trigger a listener's emotion or lend themselves to the best execution of the melody.

PRO TIP:

A 'great melody and amazing lyric will always win.'



As the times change, you may find yourself not relating to 20-year-olds as you once did. This is normal, but can be frustrating when you don't seem to speak their language. Shelly Peiken—an incredibly talented songwriter—is honest that the modern vernacular and “swagger” in today's songs is sometimes difficult for her to relate to, but her career speaks to her amazing talent and ability.

A good melody and a good lyric is still a good melody and a good lyric. She says it has been helpful to complement her ability and strong songwriting skills with someone that can help to bring in the modern and young influences. Shelly is very humble and often collaborates with writers who bring out modern influences.

If a radio-friendly hit is what you're after, don't be afraid to adapt your lyrics to what's popular. This may seem counterintuitive to free and honest songwriting, but there is a time and place for both “manufactured” pop hits and uncompromising self-expression!

STEP 2: PRODUCTION AND ARRANGEMENT

Arrangement and production is sometimes the most rushed process of writing a great song—and understandably so. The seemingly endless possibilities



of instrumentation, harmony, layered effects, etc. can be daunting, causing us to “play it safe” or rely on what we know.

However, it’s paramount to take advantage of all of these production opportunities to keep a listener engaged for a song’s duration. If you think about the last pop song you heard, you probably figured out the basic arrangement right after the first chorus. But what keeps someone listening for a full 3-4 minutes?

Believe it or not, great radio-ready songs have complex arrangements (layers) that develop over the course of the entire song. This means that new elements are often introduced in each section of the song to differentiate them from previous sections. The following are some simple ways to add movement and differentiation from section to section in a simple song:

- Adding vocal harmonies at different points in the song—namely the chorus
- Adding a layer of effected vocals (telephone EQ, saturation, etc.)
- Layers of percussion (for example, a shaker that comes in on the second verse, etc.)
- Additional synth/pad layers
- Doubled, tripled, or even quadrupled vocals panned creatively
- Spicing up chorus guitar production with complimentary octaves, tremolo-picked lines for movement, and other techniques



PRO TIP:

A Good Arrangement Takes Listeners on a Journey

Simply put, no two sections of a song should be exactly the same. Instrumental or vocal elements should be added or removed as the song develops, with specific elements being reserved for later parts of the track.

It's common to go "all in" during the arrangement phase, piling all of our instrumentation on top of one another from beginning to end. Practicing some reservation is key here, so that there's room to actually develop the piece!

Be honest with yourself: is each section refreshingly different from the last? Is the song going somewhere or stuck on a treadmill? Your answers to these questions and analysis of your own should determine if/where your arrangement could be use improvement.

STEP 3: TRACKING

When you're confident you've written a song with quality lyrics, a catchy melody, and a compelling arrangement, you'll be ready to start recording!

For those of us working out of a home studio, we'll need a minimum of 5 components to get up and running, covering all the basics. Keep in mind, it doesn't take a massive studio or lots of fancy outboard equipment to



finish a radio-friendly hit! Knowing your tools and how to use them is always first and foremost.

1. DAW

The digital audio workstation (DAW) is the software you'll use to record, edit, mix, and master audio, create MIDI arrangements, and perform anything else you can imagine. Everything happens in the DAW, so pick one and learn it well!

Whether you choose Pro Tools, Logic Pro X (Mac-only), Digital Performer, Ableton, Cubase, Reaper, Garageband, or any other DAW, is up to you. Each is a viable option that performs the same set of basic tasks in a slightly different way.

For reference, Pro Tools is the industry standard and excels at recording and editing audio. Logic Pro is a close runner-up, with especially great MIDI capabilities and a wide variety of incredible virtual instruments (making it a great choice for finishing radio-ready arrangements). It is Mac-only, however, which may exclude it from some users, though it's also quite affordable relative to others.

Don't worry about expensive plugins in the beginning. Every DAW has its own set of stock plugins that will get you up and running!

2. Audio Interface

The interface is a hardware component that connects microphones or other instruments to your computer.



In the simplest sense, it provides I/O for your studio and sends audio signals to your DAW for recording, commonly via USB.

For many home recording set-ups, two inputs are enough. The Focusrite Scarlett 2i2 is a popular option, featuring two preamps and hybrid XLR/TS inputs for microphones or line-level instruments.

There are numerous great, affordable interface options. What you choose is largely dependent on your I/O needs and personal preference.

3. Microphone(s)

Early on, you should consider investing in one or two “all-around” mics that suit your budget. A large-diaphragm condenser can do just about anything, as can the awesome (and inexpensive!) Shure SM57: a popular workhorse dynamic microphone.

Typically, condensers provide a more articulate frequency response, while dynamic microphones are robust and more tolerant of high-volume sound sources. If you’re a guitarist, you especially can’t go wrong with the aforementioned SM57 on a speaker cabinet, for example.

Vocalists, on the other hand, may prefer a condenser, like the Røde NT1—an excellent entry-level option. Consider what you’ll be recording the most and make a decision from there!



4. Headphones and/or Monitors

Headphones, headphones, headphones. They're of sometimes understated importance, but, for many of us, the only means of hearing anything we're doing. Home recording studios seldom have the luxury of really cranking a pair of speaker monitors, particularly when creativity strikes in the wee hours of the night!

Of course, when it comes to mixing, using monitors in a treated room is preferable. Get yourself a pair if the time is right! At the very least, though, headphones are a must for tracking and are passable for mixing. In the early stages of building your home rig, cans are the more affordable and less offensive (noise-wise!) option.

5. MIDI Controller

If you plan to use virtual instruments in your productions, a MIDI keyboard/controller is indispensable. Manually drawing MIDI data in a DAW is tedious business. Being able to load up the desired instrument and physically play it in real time is a much more familiar/musical experience. Plus, many of them have drum pads too, allowing you to "play" all of the MIDI information you might be using.

A good controller is crucial if you're writing a lot of radio-ready pop/hip hop songs!



PRO TIP:

Think Like a Producer

In a traditional session, a band or artist would be working alongside both an engineer and a producer. The producer would typically be in charge of communicating the overall sonic aesthetic to the engineer, who would then be responsible for mic choice/placement, amplifier choice, etc., to achieve the desired sound.

In the home studio, you're artist, engineer, and producer! You are responsible for imagining the sounds you're after and creating them with the tools and abilities you have.

Whatever you do, try to get the best sounds as possible at the source. Consider microphone choice and placement carefully, and invest in acoustic treatment if the only place you have to record is very "live." All of these factors are essential to recording tracks that have radio-ready potential.

STEP 4: EDITING

The next step after recording is to prepare your tracks for mixing during the editing process. The goal of editing is to clean or tighten up any recordings that aren't up to your standards or finalized enough to be considered for mixing.



Luckily, the modern DAW has made editing a cinch. You can easily cut, copy, paste, or otherwise manipulate audio in ways that was a huge burden back in the day! You probably don't want to edit your tracks with robotic precision all of the time, but it can be done with relative ease and efficiency—no manual tape cutting required.



PRO TIP:

Comp Your Takes

This applies to every instrument in your arrangement for which you recorded multiple takes. Comping is the process of creating a “composite” of multiple takes into a final version. For example, you may have half a dozen full lead vocal takes, from which you pick and choose the best sections, words, and phrases to make a final comp.



PRO TIP:

Clean Up Your Vocals

Tuning: Chances are you'll want to tune your vocals to compensate for pitches that aren't quite right. No one is perfect, after all! Using software like Auto-Tune, Melodyne, or Waves Tune will help you pitch correct vocals when necessary.

Breaths and Extraneous Noise: To give your vocals that extra professional polish, you'll also want to go in and edit distracting breaths or other extraneous mouth noise. In most cases, you won't want to remove breaths entirely, as this can lend itself to an unnatural sounding



performance. Instead, a less invasive way of editing breaths/mouth noise is to isolate the sound and simply reduce its level via clip gain. That way, the breath is still present for naturalness, but it isn't as distracting!



PRO TIP:

Make Sure Kick/Bass Gel

The relationship between kick drum and bass is symbiotic. They both play off of each other and are responsible for setting the overall pocket and timing of a song. You'll want to take some time to manually edit kick and bass create the timing and feel you're going after. Be wary of aligning everything to the grid—this can remove the swing, sounding a little too “perfect.” Instead, keep it subtle and natural; no timing issues should jump out as incorrect, but nothing has to be gridded, either

STEP 5: MIXING

The mixing process is where your recorded and edited tracks begin to take on their final shape and sound. Mixing is incredibly important, because it's where raw or “dry” tracks will start to sound like polished, radio-ready material.

There are 5 basic elements of mixing to consider: level, panning, dynamics processing, equalization, and time-based effects. Mixing is often thought of as this mysterious process where a song “magically” becomes ready for commercial release.



In reality, it's a highly subjective part of music production that can be simplified as "hearing problems and solving them" using the 5 elements below. You'll want to invest a lot of time learning how to mix (or send your material to a professional mixer) if you want your songs to be commercially competitive!

Consider the following elements at their basic level as you start to learn the process.

Level

Level, or volume, is the first place to start when mixing. The level-to-level relationship between tracks will determine the overall foundation of your mix. Once you begin to bring up faders, you'll find a rough mix quickly taking shape!

Start with the kick drum and work your way through the drum tracks until they're nicely balanced. Continue with bass and the rhythm instruments before finally bringing in vocals and other lead instruments. Once you're happy with basic levels, you can move on to the next element of your mix.

Of course, great mixes don't stop at simply leveling with faders. You'll likely need volume automation at select points further in the mixing process, though you can keep things simple in the beginning.



Panning

Panning allows mix engineers to place elements in the stereo field. Some panning tends to dictate itself, such as with drum overheads or multi-tracked rhythm guitars. Other times you can get a bit clever with it, employing automation or even auto-panner plugins!

It's good to keep in mind that panning is often used to create width. If you have multiple vocal harmonies, for example, they may sound rather flat stacked on top of one another. But if you move a track over to the left and another to the right, with a lead vocal sitting in the center, you will have widened your vocals and made them sound bigger.

This concept can be applied to anything so long as it sounds good to you!

Dynamics

Dynamics processors are used to control the volume envelope of a sound. Tools like compressors, limiters, noise gates, and de-essers are all examples of dynamics processors, which can control or smooth out the peaks and troughs of a given signal.

Once you've established a rough mix with leveling and panning, you may want to start taming its dynamics. Noise gates, for instance, can be placed on various parts of the drum kit to eliminate unwanted bleed.



You'll probably apply compression, too, throughout much of the mix on many instruments, either as an effect or to control dynamics. If there's ever a processor you'll want to fully understand, it's compression. Using it well can enhance a mix, though the opposite is true if its application is haphazard! As usual, trust your ears.

Consider our guide for [quick compression tricks](#)

EQ

EQ is where you'll start to fine tune an instrument's overall frequency response so it sits right with all of the other mix elements. Subtractive EQ is used to remove unwanted or harsh frequencies, while additive EQ is used to enhance a particular pitch or set of frequencies. Keep in mind that you can't boost or cut what isn't already there!

Consider our [EQ Cheat Sheet](#) for a set of guidelines on how to work with common instruments!

Time-Based Effects

The most commonly used time-based effects are reverb and delay. Using either or both of these can create an aural space for an instrument to sit, can add "excitement" to a track, can add depth and dimension to an instrument, or can push a track further back in the mix.



To create an aural space, for instance, a great trick is to imagine the performer in an acoustic environment and to attempt to recreate what that environment might sound like by using reverb. Additionally, to make something sound bigger or more exciting, experiment with using small reverbs or short delays.

To add depth or push a track back, use longer delays or big reverbs. Again, beyond just setting up a time-based effect return and sending a signal to it, you can automate various parameters to achieve interesting sounds.

Experience and creativity will play a major role in how you decide to utilize time-based effects.

Check out these [5 quick reverb mixing tricks!](#)

STEP 6: MASTERING

Many people often mistake mastering for the process where songs go from sounding “okay” to radio-ready. In reality, mastering done well is fairly subtle, with the bulk of the sonic landscape being handled during mixing.

Mastering is optimizing the overall sound of a track or an entire album. When a song leaves mixing, a mastering engineer will apply his/her own additional compression, EQ, and other signal processors as the final touch. For an album, at the most basic level, mastering ensures that overall levels are relatively even from track to track.

For more on the differences between mixing and mastering, [check out our guide!](#)





PRO TIP:

Mastering is Like Audio Photoshop

The biggest thing to remember when differentiating mixing and mastering is that the latter intends to put polish on the finished product. In mixing, individual tracks are each paid careful attention, ensuring that they sit well for the final stereo bounce. In mastering, a final stereo bounce may be all the engineer is working with!

There's a great analogy saying that mastering is like Photoshop for audio. You can buy a great camera, learn the art of photography, take beautiful photos, and sometimes things still aren't quite right. The lighting may be off, or a smudge on the lens can ruin an otherwise perfect shot. A skilled Photoshop user can touch things up and make sure the photo is at its highest potential.

In a similar way, mastering engineers "touch up" an already incredible mix. In addition to equalizing track-to-track levels across an album, they're also listening to songs individually and applying any additional processing that will help an already-mixed track.

While you can learn how to master yourself, it's sometimes best left to a professional mastering engineer if you want the greatest results. Mastering is an art form in and of itself totally separate from tracking and mixing!



Start Making Radio-Ready Songs Today!

From lyrics and melody to arrangement, and from tracking to mixing and mastering, every step of the music production process is fundamental in preparing a song for commercial release.

There really are no shortcuts, but with practice and dedication, you can develop the skills it takes to make the best music you can, whether you're trying to get it on the radio or simply keeping it in your personal archive.

