

MyGUITAR LESSONS

Getting a great guitar sound with My Guitar Lessons.

It doesn't matter how well you can play if your guitar sounds horrible. You see this a surprising amount at gigs - the guitarist might actually be pretty good, but his tone will be vile and you either can't make out what he's playing or it just sounds nasty. Here's some advice to getting a great guitar sound, and some of the common mistakes to avoid!

If you're playing electric guitar, you're going to want a decent amp. The amp you should get will depend entirely on the style of music you want to play - there's no reason why you couldn't use a super-gain Dimebag Darrell signature head to play 1930s jazz music but it might not be the first one you'd look at! Let's take a look at things that are going to affect your sound.

Guitar Pickups

OK there are two main types of pickups. Magnetic pickups - these are the ones in 99% of the guitars you've ever seen - and piezoelectric pickups, which you might not have heard of. These differ from magnetic pickups in that they work with all types of strings. You could stick one in an electro-classical guitar, for example. Magnetic pickups only work with steel/nickel (standard electric/acoustic) strings.

Here's how pickups work (**you don't actually need to know any of this, but we will run it by you anyway**):

Pickups have magnets and a coil of wire inside. The strings are attracted to the magnet but held in place above the pickups, and a magnetic field flows through the coil and part of the strings. When you pluck the string, it vibrates in the magnetic field, disturbing it and this disturbance causes an electric current to flow in the coil. If you want to sound really clever, you could point out that this effect is dictated by Faraday's Law Of Induction. Anyway, the electric signal induced in the coil vibrates in exactly the same way as the string. This is passed through the pickup, through the wires in your guitar and down the lead to the amp - where it is boosted by the preamp to be big enough for the main amplifier to handle which in turn boosts it once again, enough so to power the speakers. The speakers convert the electrical signal back into sound waves and you can hear your guitar! Damn, we're clever.

Single Coil Pickups



Single coil pickups have been around as long as the electric guitar has and are popular in many Stratocaster/Telecaster type guitars. A single-coil pickup tends to produce a very clear and bright sound, can sound kinda old-skool if you want it to and is a favourite in country music as well as rock and roll - a lot of your favourite records from years ago will have been recorded using single-coil pickups and they can give that classic Fender Strat-sorta sound. However, single coil pickups can also be prone to picking up electrical signals coming from other sources than your strings, which can cause unwanted buzzing noises.

Humbucker Pickups



It's called a humbucker because it gets rid of the humming noise! A humbucker is a double-coil pickup, and the magnets are installed in opposite polarity so that the signals produced in each coil are effectively out of phase with each other. The signals are added together within the pickup to give you double the sound, and because of the way the coils are connected they cancel out interference from other sources. Put bluntly, you get a much fatter sound and no annoying buzzing noises - a humbucker pickup will give you a more powerful, cleaner sound.

The main advantages of a humbucker pickup are the increased output and the reduction in interference and unwanted noise. They'll give you a very fat, warm overdriven sound if that's what you're after but depending on what style you're playing you may feel a humbucker doesn't sound bright enough for you.

Active Pickups

Now we're getting onto some serious gear! An active pickup uses electronics to boost the signal coming from your guitar strings. They're virtually noise-free and have a massive output - so if you're going for a monstrous heavy metal, take-your-face-off -in-a-single-riff kinda sound, these could be just what you're looking for. They have their own disadvantages too, though - an active pickup requires its own power supply, usually in the form of a 9-volt battery. Inevitably there won't be anywhere on your guitar for it to go, which usually means boring a hole into the back of the body to accommodate it will be necessary. They tend to be used mainly by heavy metal guitarists and will produce a huge sound, but also have plenty of critics!

Stacked Humbuckers

A stacked humbucker will basically do everything a regular humbucker does - but it'll look like a single-coil when it's in your guitar. This is a very good thing if you want to get a fatter sound but don't have the space for a humbucker - a Telecaster, for example, will have a single coil-shaped hole for the pickups. So if you were determined to stick a humbucker in there but the stacked one hadn't been invented, cutting holes in your guitar to make room for them would have been the only way to go. Having said that, installing stacked humbuckers may still require some modification to the body of your guitar to make the holes deeper.

Getting Strung Up!

Now that we've decided what sort of pickups we're using, we're going to find ourselves the right set of strings. Different types of guitar strings can have a dramatic effect on your sound and because they're made differently - some will be smoother than others, for example - they can affect your playing too. Let's look at the differences between them.

Stainless Steel Strings

Stainless steel strings are very popular and every guitar shop should have them. They produce a very bright tone with a lot of sustain, and should last a good amount of time due to being anti-corrosive. One of the downsides is that the way they're made makes their surface a little rough, which can cause problems if you're trying to break the sound barrier with your guitar solos, and may also cause a lot of finger noise when you're jumping between notes/chords.

Nickel-Plated Strings



These are basically the same as stainless steel strings, except they have a layer of nickel stuck over the string to give them a smoother feel under your fingers and to eliminate the finger noise. These tend to be the most popular choice among guitarists, despite some people claiming that the addition of nickel to the strings makes them sound a little duller than stainless steel.

Pure Nickel Strings

Less popular than the other two, they'll sound less bright than the stainless steel strings but will still produce a bright sound. They're also a little more forgiving on your fingers, being slightly softer and 'bendier'.

Nylon Strings



Primarily used on classical guitars, but the mellow tone of nylon strings means that you'll also see them making an appearance in other styles of guitar playing, such as folk music. Nylon strings are available in different gauges just like any other type of strings.

Different String Gauges

The 'gauge' of your strings basically refers to how thick they are, and this can cause a great difference not only to the sound they produce but to your ability to play them! They are referred to, for example, as 'gauge 9 strings'...'gauge 11s'...or just "hey buddy - can I have a set of tens please?" etc. The number in their title refers to their thickness, or in particular, how thick the top string is - measured in inches, you'll find that the top E string in a set of 9s is 0.009 inches across. The top E on a set of 11s will be 0.011 inches across. Doesn't sound like much of a difference, but different gauges may well be

better suited to different guitars - 14s might sound fantastic on an acoustic guitar but be difficult to play and brutal on your fingers if you decide to stick them on your Stratocaster! Here's a few things to bear in mind when choosing a string gauge:

The higher the gauge of string, the higher the tension - and the stiffer they're going to be when you try to play them. As a standard rule, electric guitars coming right off the factory line have gauge 9 strings on them, and acoustic guitars tend to come equipped with 12s as standard.

The higher the string gauge, the 'fuller' the tone will be. This is why acoustic guitars tend to have thicker strings on them - you tend not to have a rack full of effects pedals with an acoustic guitar, so you want to get the best sound you can get out of your strings! They'll be stiff on your fingers at first but because, as a rule, you won't really be doing too much string bending etc on an acoustic they shouldn't take too long to get used to. Barre chords may become tricky with a really heavy gauge though.

If you downgrade the gauge of strings on your guitar - i.e. take the 12s off your acoustic and stick 10s on instead - you may find it a little easier to play, but may also find that you've sacrificed a lot of tone and your guitar sounds a bit feeble. Also, lower gauge strings have less tension so you might run the risk of hearing buzzing noises or even having the strings touching the frets - to avoid this, if you really want to have lighter strings, it may mean taking your guitar to a (good) guitar shop and having a professional set up your guitar to accommodate the strings properly.

On an electric guitar, most people tend to swear by 10s but you may disagree. With a good amp sound your guitar should always sound fantastic as long as your pickups don't stink - so you may see no sense in putting your fingers through any more of a workout than necessary. With gauge 9s you should find it fairly easy to play things that would be more difficult with heavier strings - and things like string bending or playing fast runs will be easier on your fingers too. Some people might argue that you lose tone in your riffs with the bottom strings being thinner, so if this is you, you might want to check out '9s with heavy bottoms' (this is basically a set where the top three strings are like those in a standard set of 9s, and the bottom three from a standard set of 10s) but don't take my word for it - try a bunch of different ones and see which you prefer!

NOTE: If you're a heavy metal headbanging kinda guy and want to tune your guitar down more than about a semitone, ignore my advice about the 9s - unless you're happy to have strings like elastic bands and having to retune your guitar after every riff you play (as well as having your guitar sound like a mush), heavier strings will indeed be the way to go but as the tuning goes lower, the tension is less, so try to get a fine balance whereby the heavier strings in your low tuning feel roughly like a set of 9s at standard tuning. That would be my advice, anyway.

Picking The Right Amplifier

If you're just starting out, and you've just got your first guitar, you might want to bypass this section for a while - just find a (cheap) amp that sounds decent, where you're happy with the sound you're getting as you're learning your stuff. There's no point spending a fortune on your first amp only to discover after playing for a while that you prefer something else. Here we go - and please bear in mind that this section is only relevant if you are playing ELECTRIC guitar.

There are several different types of amplifiers. Check these out:

Micro Amps



A micro amp is basically a low-power, usually fairly cheap amp that is designed to practice with. And by practice I mean jamming in your bedroom to your favourite songs - it almost certainly won't have the power to be heard over a drum kit in the rehearsal room. Usually, the sound isn't up to much, but you wouldn't want to record your album or do any gigs with it anyway. A micro amp is a small amp that's easy to carry around, but apart from bedroom jams and the novelty factor (tiny stacks are always amusing) they don't have a great deal of use.

NOTE: Don't confuse a micro amp with a practice amp. While a practice amp is also, really, designed for the same sort of things - bedroom jamming, getting the guys round and playing a few riffs - it's higher power and in some cases might be suitable for a small gig (you're going to want to "mic it up through the PA" though). But if it has less than a ten-inch speaker, you'll probably want to keep it at home. You almost certainly won't be blown away by the tone either.

1x12 Combo



The term "1x12" means it contains one 12-inch speaker. A "2x12" amp would contain two 12-inch speakers, a "4x12" contains four, and so on. The term "combo amp" is short for 'combination amplifier', meaning that the amplifier and the speaker are contained within a single unit. This is the next step up from the practice amp, and could be seen as the first level of amp that is decent enough to do a gig with. It's worth shopping around for a decent one - check through a bunch of guitar magazines and get yourself down to the guitar store and try a few out! Advantages would include the price tag (it'll cost a hell of a lot less than a stack!) and its weight - carrying it to gigs/auditions shouldn't be too much of a hassle, but it doesn't look particularly cool.

Here's an idea: Don't bother with a 'bedroom amp'. Instead, get a decent 8 or 12-track recorder with guitar sounds built-in from a good music dealer, plug a decent set of computer speakers into the headphone socket and use that instead. You may find you can get pretty cool tones at volumes lower than you'd have the TV, and it will have the distinct advantage of letting you record your riffs in your bedroom! This means you can

just practice, or it also means you can lay a riff down, stick a drum machine in (a decent 8/12-track recorder will have this built-in anyway) and work on those guitar harmonies by jamming with yourself! You can't do all that with an amp - and you may find your songwriting comes a long way. A lot of them have a bass simulator in them too, so you can stick the bass lines down by playing them on your guitar and get a great idea of what your songs are gonna sound like.

2x12 Combos



This, in turn, would be the next step up from a 1x12 combo and is the most common type of amp you'll see guitarists playing. You could do a decent gig with one of these - and to be fair, the best all-round amp choice for practicing/band rehearsals/recording may well be a 2x12. It'll still be pretty heavy (though nothing like lugging a 4x12 cab around) and powerful enough to get a cool sound out of should you be smart enough to dig out a good one, but some lesser-quality models may result in the better tones only being produced at high volumes (that's particularly true of distorted tones).

Head and Cab - a "Stack"



A 'stack' amp is effectively where you have two parts - the amplifier - or "head" - is the bit that sits on top with all the tone controls on it.

The speakers are underneath in a cabinet (a "cab"), usually in the form of four 12-inch speakers (should you hear the term "4 by 12 cab" you now know what it means). There are no two ways about it - a head and cab 'stack' will have a lot more power than a combo amp, and you'll look pretty cool onstage with it! But bear in mind that even if you were playing Wembley Stadium the amp would be mic-ed up and run through the PA system, so you wouldn't have needed all that power anyway. Lots of people make the mistake of thinking "I'm going to play gigs, so I need a super-powerful amp", which is not accurate. Any half-decent gig you're playing will have an in-house PA system - so you're

going to get a cool sound on your amp with it set fairly low, then the sound engineer is going to turn it up through the PA system. If you could get the same sound out of your combo, it would have done exactly the same thing.

NOTE: The "head has no speakers. If you're going to get one, you have to get the other. You can't get a sound out of a head alone.

Another drawback to owning a stack is that it can be a nightmare to get it to gigs/rehearsals - it'll weigh a ton and take up a lot of space in the car (well, mainly the cab - you want to be careful or in some cases you might genuinely risk back problems carrying it around). That's not even mentioning that it'll probably cost you a fortune to get a decent one in the first place.

On the plus side, carrying the head alone should be easier than carrying a combo, and with a few pre-gig phone calls you can probably wangle a way to borrow someone's cab at the venue - saving not just any change-over time but the hassle of taking yours down in the first place! You can also mix-and-match heads and speaker cabinets if you so desire to get more a custom sound.

NOTE: You may hear the terms 'half-stack' and 'full-stack'. A 'half stack' is a cabinet with a head on top. A 'full stack' is a head sitting on two cabs.

IMPORTANT: If you're going to invest in a half or full stack, you need to invest in a decent set of earplugs too. And I don't mean crappy foam ones - I mean **decent** ones that any good music shop will be able to sell you. It is **EXTREMELY** worthwhile and important to shell out the extra cash because a head and cab amplifier **WILL** leave you with hearing damage if you don't. You ever climb into bed after a loud gig and hear that whistling in your ears? Continued exposure to loud volume will leave you with that permanently - it's called tinnitus and how loud the whistling is depends on how loud the volumes were. You may also find yourself unable to hear higher frequencies or even going deaf if you don't protect your ears properly. **Don't skip over that section, and don't roll your eyes at me - get your earplugs and don't be an idiot.** Band practices sound a hell of a lot better with earplugs in anyway - fact. They cut out all the distortion noise caused by the extreme volume and you'll realise that you can actually hear what you're playing properly.

Valve Amps / Tube Amps

More commonly referred to as a 'valve amp', these tend to be very sought-after because of the very warm sounds they produce. Should something go wrong with a valve amp (i.e. one of your valves breaks) they tend to be easily fixable. A valve amp will survive a power surge much better than a transistor amp would too, but on the downside the sound quality from the valves tends to deteriorate over time which means every now and again you're gonna have to put it through an MOT of sorts. Added to that, the glass valves tend to be a bit fragile so you need to handle it with extreme care - especially if it's bouncing about in the car on the way to a gig! Also, despite being far from new technology (the first valve amp was invented in 1907!), they tend to be expensive. And very heavy. But don't be dismayed - there's a very good reason they're so popular, and most guitarists will argue that for any style of music you simply can't beat the sound from a valve amp. The one possible exception to this is for heavy metal/thrash metal - while opinion may be divided on this, there are plenty of players who think that the

harsher/tinnier sound of a distorted transistor amp suits their playing better. Dimebag Darrell, for example, never used valve amps.

Vintage Amps

Don't confuse a "vintage" amp with an "old amp". Vintage amps are a modern thing - what they do is recreate the classic sounds of older amps and let you sound like all your favourite players from the early 1950s-1970s. If you want to sound like Jimi Hendrix/The Beatles/Led Zeppelin, for example, a vintage amp is where it's at! Don't confuse "vintage" with "not as good as modern". You may, however, come across a genuinely old amp that still has a quality sound and is in good condition - in which case you may well have found a gem if that's the sound you're going for.

High Gain/Low Gain Amps

This is going to make a big difference to your sound too. A high-gain amp has more gain stages in the preamp than a low-gain amp does, which means you can get a much more distorted sound without cranking the volume to 10 and blowing the windows out. Here's a simple way to look at it:

If you want to sound like anybody before 1980 - that includes Hendrix, Zeppelin, Sabbath, every blues player and everybody else before then - you almost certainly want to go with a low-gain amp.

If you want to sound like anybody AFTER 1980 - that includes every shred guitarist, Metallica, Limp Bizkit, Lamb Of God and Fall Out Boy - you want to go with a high-gain amp. You could still play all the vintage stuff on a high gain amp, just turn the gain down! But if you're really going for that classic tone in particular, you're going to want the amp that was designed specifically for it.

Modelling Amps

A modelling amp is an amplifier that digitally reproduces different amplifier tones - so all you have to do is press a button / turn the switch to the sound you want! This means the amp will make you sound like a classic blues player, but then click the next button and you sound like modern heavy metal, and the next gives you an acoustic guitar tone. It removes the need for a vast array of effects pedals to get all those sounds - which in turn reduces things like unwanted noise from all those connections, not to mention the headache of linking them all together.

Put simply, it's a cheaper way to get a load of sounds at your fingertips - and won't need to crank it up to insane volumes to get a cool sound. But watch out! There are some surprisingly fantastic modelling amps about - that really do exactly what they say on the tin - but remember that sometimes, when something seems too good to be true it often is. There are some models that really stink and you can't tell the difference between half of the sounds, particularly when you get into distorted tones.

If you decide a modelling amp might be for you, as with any amp, make sure you try out a LOAD of them before you pick the one you're gonna buy. You don't want to buy the first one just because it sounded cool, before you'd compared it to any of the others!