

Read this before you start recording!

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Introduction

There are many things you can do to improve the quality and reduce the time and cost of a session. This booklet aims to provide you with some useful points to bear in mind before you arrive.

Have you ever heard someone say, regarding a rather poor recording or performance "We'll fix it in the mix" ? Unfortunately it really isn't that simple (and is often impossible) to do. The best course is always to get the right sound in the first place. The better the initial sound of your instruments the better the result will be.

Tuning

It may seem obvious to state that your instruments should be in tune but it is surprising how many musicians attempt to play with guitars (particularly !) which are out of tune.

If you have a job getting your guitar to sound in tune when you play different chords in various positions up and down the neck, even when your tuner says it is, it could be that the bridge is not correctly set up. It is worth taking your guitar to a music shop or guitar service technician and asking them if they can set up the action for you. This will make a whole lot of difference to the sound of your playing

It is also probably a good idea to fit new strings a few days before the session. This will give them time to settle in before you start recording. If you change them when you get to the studio you may well find them constantly going out of tune during the session, which is very annoying ... especially when you have just laid down the perfect take and realise one string is out of tune !

Having thought about all that, if you just don't feel your guitar is up to being placed in front of a microphone then talk to us about hiring one of ours. We have several different models for hire. This could make a very important difference to your sound.

Tuning Drums

Tuning applies to drums as well. Badly tuned toms sound horrible and will lead to the kit sounding boomy and not at all tight. As well as tuning the top heads of the toms to the correct intervals, the bottom skins should be carefully tuned in sympathy with the tops. Otherwise you will get an unpleasant beat frequency between them.

All drum kits are different. There are different types of batter head, shell, and drum stick, the combination of which defines the overall sound. For example, snare drum heads with a black sound dot tend to have a fairly damped response, whereas plain ones ring on for longer. Heavy, thick heads tend to be louder and duller, and decay quicker than light, thin heads, which sound noticeably sharper in their attack and ring on longer. Likewise, cymbals will sound very different, depending on their size, manufacturer, shape and intended purpose.

If the kit is not tuned correctly, a recording will be very disappointing. Tuning a drum kit is a reasonably complex job, not unlike tuning a piano — there are lots of tensioning adjusters to twiddle and they have to be correct in relation to one another to provide the ideal tuning.



With tom-toms and snares it is important that the head is tensioned equally around its rim. This is best done by backing all the tensioner keys off completely, then winding them up by hand until they just start to get tight. From this starting point, adjust keys in pairs on opposite sides of the head, much like you would the nuts on a car wheel. Start with a full turn (maybe two) to take up the tension, then

apply a heavy pressure to the centre of the head to stretch it a little and help it to equalise its position. Next, continue winding up the tension a half turn at a time, working on opposite pairs of nuts all around the head, until the desired pitch is achieved. You can check for an even tension by hitting the head close to the rim between



The drum shell forms a resonant cavity and so the tuning of the head is dependent on the tuning of the shell — get the two properly matched and the shell reinforces the sound of the head, giving a loud, full tone. On snares (and toms if applicable), the bottom head is tuned in the same way, but its tuning relative to the top head is the critical thing. When

the bottom head is removed from a tom it tends to make the drum louder, and affords a wider tuning range because the resonant frequency of the shell is broader. However, if the bottom head is fitted its tuning is critical. Tuning higher than the top head (up to about a fourth) gives a slightly duller attack, but an interesting pitch bending effect. If tuned lower, the attack is sharper but the sound is more damped.



Depending on the tuning and the condition of the heads, you may find some drums ring too much; most often the snare. Sometimes this can be cured by simply retensioning the skin, without changing the actual tuning. Some tom-toms have an

internal damper which can be used, although they can tend to rattle more than anything else and, since they tension the head at only one point, often don't do a particularly good job. A common solution is to make up a thin pad of tissue (or a handkerchief or duster), and tape this to the side of the head leaving the side facing the centre open to vibrate freely and thereby help to damp the ring. Alternatively, putting thin strips of plastic insulating tape in wide parallel lines (or even a noughts and crosses pattern) across the skin can help a lot too. Take this damping too far, though, and you will suck all the life out of the kit — your drummer may as well play a pile of cardboard boxes — so listen critically to any modifications you make.

With a snare drum, a tight batter head gives a crisp, sharp sound, whereas a lower tuning provides a deeper, 'fatter' sound. Equally, setting the bottom head to be fairly loose gives a deep resonant tone, while a higher tuning gives a much crisper snare effect. The snare is probably the most frequent cause of unwanted rattles. Check the mechanics of the snare action and damp with masking tape if necessary. Some tissue paper folded between the snare wires and head can help control unwanted vibrations. Try moving the tissue pad from the edge towards the centre to find the optimum location.

As regards the kick drum, a tight, well-tuned beater head gives an identifiable tone and a full body, whereas a looser head gives a more clicky sound with obvious attack — you are looking for the compromise that best suits the musical style. Clearly, a harder beater will also provide more attack and click than a soft beater.

In my experience there isn't much that can be done with cymbals (other than putting them back in the box), although radial strips of masking tape can help to dampen the ring, if found necessary. Once everything is tuned up properly, listen for squeaks and rattles. Loose hardware can be damped with masking tape, and a squirt of WD40 can cure most squeaks

Amplifiers

While we are mentioning amplifiers if yours is a bit iffy, please give this some thought. Our engineers have the right to refuse to let you plug in any equipment which they feel may be dangerous or which could damage other equipment. So if yours has seen better days please give it the once over. Better still, get an electrician to do so, to avoid problems when you get to the session.

Furthermore, if your amplifier hums, buzzes, clicks, pops, bangs or rattles then that is exactly how it will sound when we record it ! If you can't find a way to stop it making noises it shouldn't then borrow a better one. Again, if this is a problem, talk to us. We have amplifiers available for hire.

Rehearsals

We are aware that studio time is not especially cheap. But you can maximise the use of your session time by making sure you are well rehearsed and know what you are all playing in advance. If there are passages you find hard to play, practise them well so you can get them right on the day.

