# Avoiding Audio Sync Issues with the Zoom & 7d

It turns out the issue a lot of us have been having with the zoom and 7d going out of sync, and its causes by one one of those little final cut 'gotchas'.

In a nutshell- final cut doesn't like anything that doesn't have a timecode - like audio from the zoom. So when you import it, it gives it a timecode stamp. However, it ignores what your sequence or projects framerate is, and instead gives that audio the framerate of your *default sequence settings*. And by default, this is the ntsc frame rate. This means final cut stamps your audio as 29.97 fps. Final cut has just stamped the audio with the wrong timecode and this is what causes it to run out of sync when synced with 25fps footage.

The good news, is nothing is wrong with the audio - final cut is just playing it back at the wrong speed, which is what causes the sync problem. To get it right, you need to make sure final cut is setup correctly, so when audio is imported, it has the correct framerate stamp, and then everything will sync up as it should.

What to Look out for:

If your zoom audio has a green bar at the top, like in the image to the right, then you have a problem. That green bar means final cut wants to render the audio. - which it shouldn't need to do.
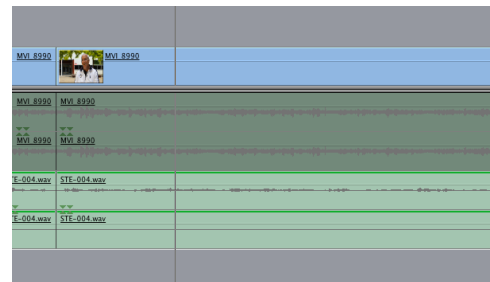
The Easy Fix:

The best thing to do is to make sure your *sequence preset* is set to a 25fps, then you should never have an issue. Goto audio / video settings in the menu at the top

Once that dialogue box opens, click on the sequence preset tab and make sure a 25 fps sequence has a tick next to it. If not, just click on one to make it your preset.
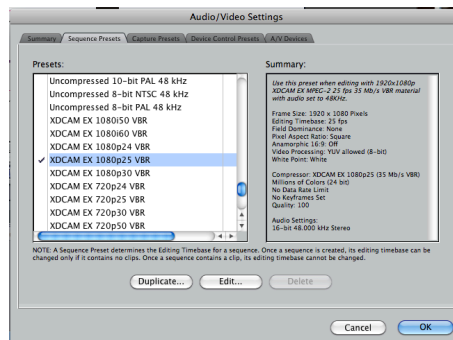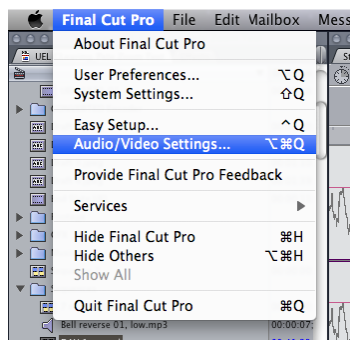
Then   click   ok. Now, when you import audio from the zoom, it should not have the green line at the top, and it should sync perfectly.

Audio Notes - Best practice.

- Make sure final cut is setup properly - default sequence settings should be set to a 25fps sequence.

- Make sure the 7d is set to 25fps, not 24.

- The ideal settings for the zoom, are 48khz sample rate, 24 bit. Other settings wont affect sync, but 48khz will match the sample rate of other cameras, and 24 bit is 'maximum quality' in audio speak.

- Plug it into the mains power if you can - especially if you are using phantom power, to power a shotgun mic. It eats batterys.

- Make sure the 'stamina mode' is switched off - this is switch right next to the batteries underneath the zoom. Its easy to knock this accidentally when changing battery. \the stamina mode improves battery life but drops the audio quality. Make sure this is in the *off* position.

- The 7d now has manual audio control hidden in its menu, thanks to a recent firmware update. in time, we will get a headphone splitter for the zoom, so you can run the zoom audio to the 7d. You can then level the audio on the 7d so it doesn't peak, and you should have a backup audio on the 7d - but still, never reply on the 7d's audio, since you have no way of actually listening to what its recording on headphones.

- We are also getting a top mic for the 7d, so again, you can visually make sure the audio levels aren't peaking, and you should have decent atmos audio form the 7d.

- If you can, please use a clapper board. Its not just for sync - mark it up properly, and call it out for audio as well.- and it can save the editor a lot of time working out who an interviewee is, and can help work out what audio belongs to what video clip.