

## Re: Synchronizing camcorder with telemetry

**Source:** <http://sci.tech-archive.net/Archive/sci.electronics.design/2004-07/1764.html>

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**Date:** 07/10/04

Date: 10 Jul 2004 07:50:54 -0700

> *The most common problem has been loss of sync between  
> speech and lip movement and you didn't say how critical your  
> timing was. Just thought I would mention it.*

Actually, I did mention it briefly – I will accept 2.5 seconds drift over 120 minutes recording time. As you can see, I don't care about getting the data synced with a specific frame.

The info that would be going in this track (assuming I put actual data in there as well as a timestamp) is sampled at all sorts of different rates according to the individual sensor characteristics, and the micro we're talking about here only gets to see an infrequent periodic snapshot of the sampled data anyway.

As long as the data stream can be recovered reliably (which was my major concern), I think timing issues are not really a problem. If the tape speed varies, the data and video will vary at the same time, right? For archival purposes I'll capture in MJPEG with a 22.05kHz uncompressed mono audio track so there shouldn't be playback sync issues on that end either. Empirically, I can tell you that my capture card and playback software (with the aforementioned settings) keeps A-V sync very tight over 120 minutes continuous recording time; certainly close enough to keep lip sync appearing OK.