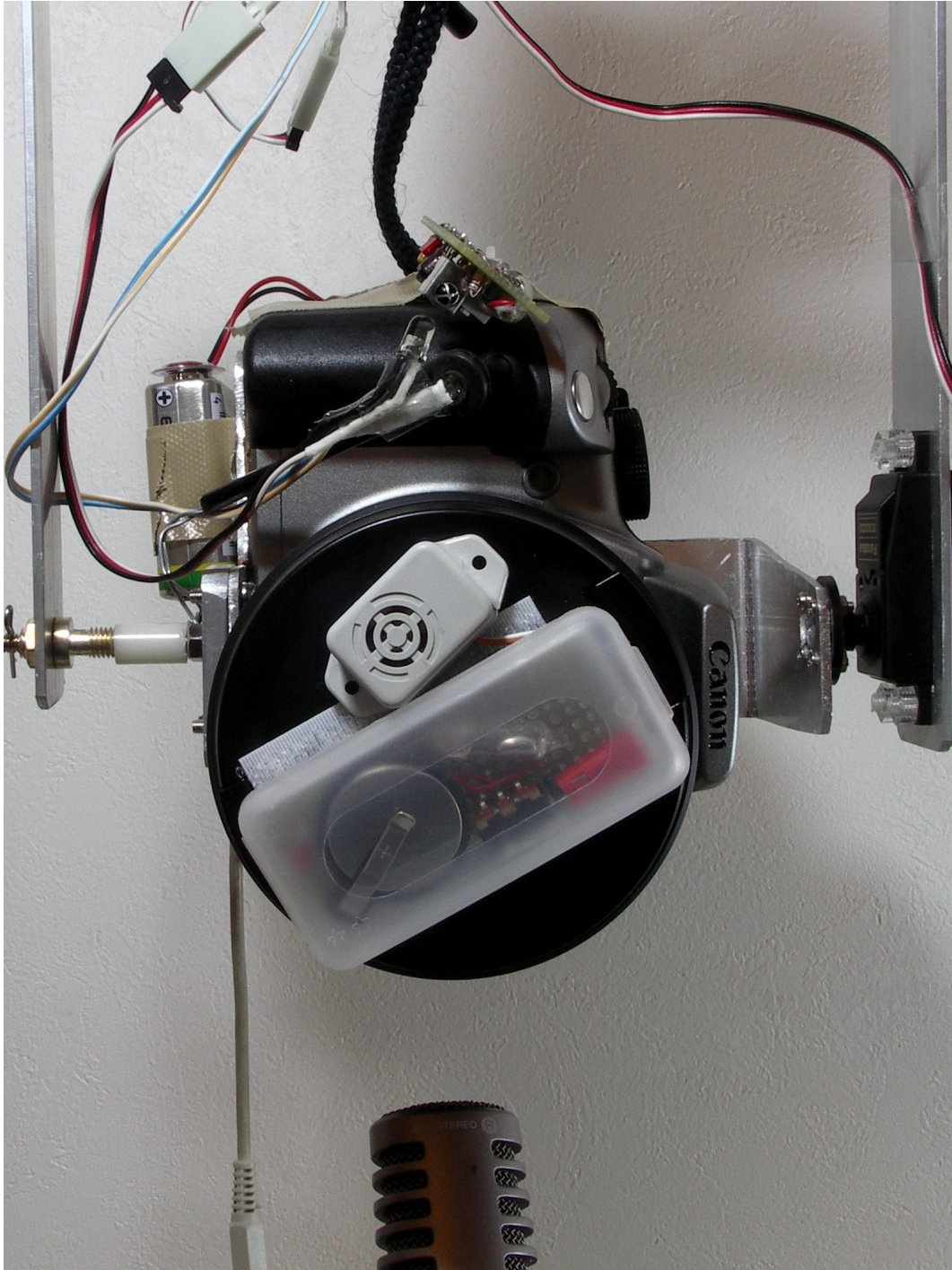


# TUCIT HIGH SPEED PANORAMAS A ZERO INTERVAL “OVERSHOOT” TEST

## PURPOSE OF THIS TEST

After each panning movement the camera and rig overshoot and then swing back a little. This test explores the fact that the moment when the movement changes direction the camera is actually or almost at rest. The question asked is how near to that we can get the shutter to open.

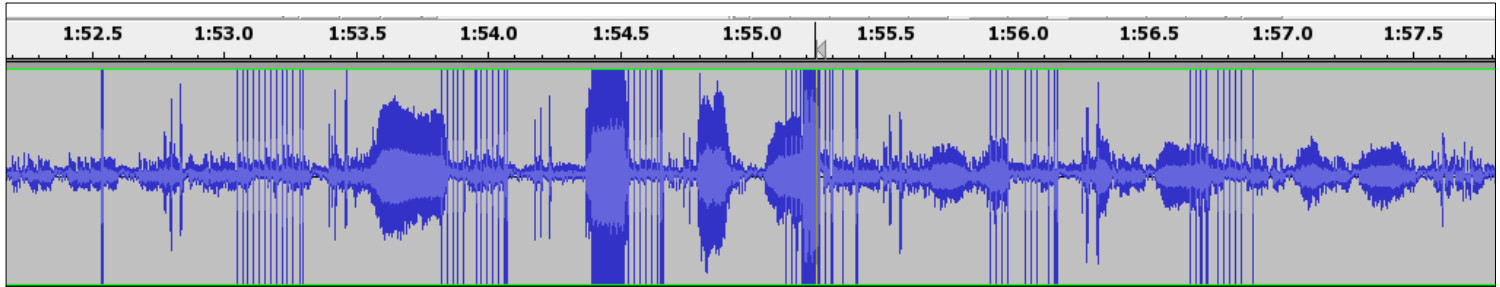


## TEST SET UP

The single mercury switch lies at rest on the right when the camera is not moving. When the pan servo accelerates to our left it stays there. But after overshooting the camera swings back momentarily to the right. When that happens the mercury rolls up the slope and closes the contacts and the buzzer sounds. (If a led replaces the buzzer it goes on fractionally before the buzzer).

The infra-red signal and the pan servo are recorded as infra-red images. The shutter click and the buzzer are recorded as a sound image. Both are mixed to one track on Audacity.

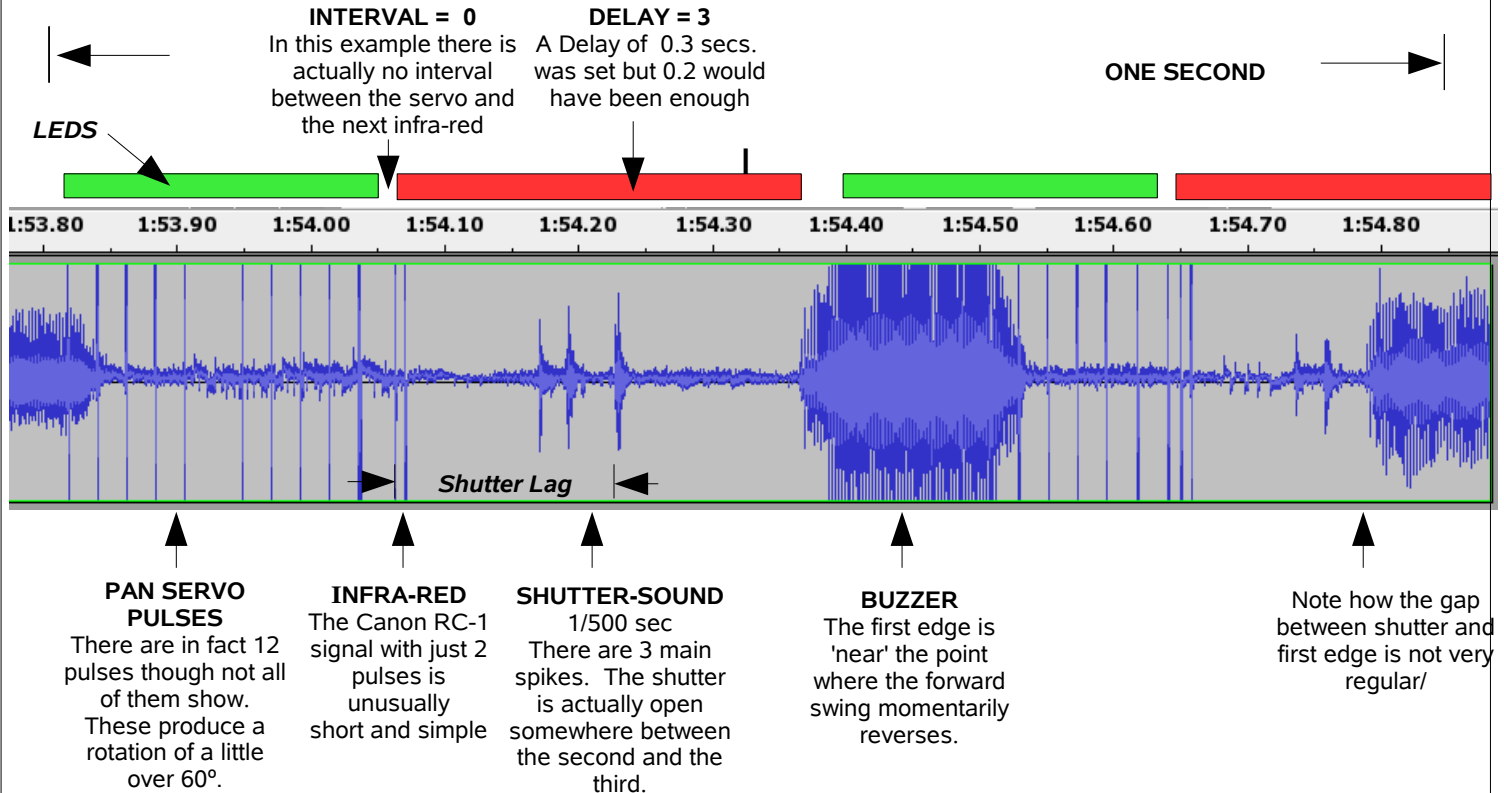
## Results



This section detailed below

### COMPLETE 6 PICTURE PANORAMA

Total time 3.75 seconds. Note the changing buzzer pattern as the swing gets going. Note also the first shutter lag is longer than all the other. An 0.3 sec delay was set (using the process in the Tucit-X manual) but somehow the shutter lag shortened after the first picture. This was true for all batches of which the above is just an example..



### AUDIO IMAGES OF TUCIT-X WITH CANON 350D AND ZERO INTERVAL

The images above are based on an Audacity recording of (1) the Infra-Red signal (ir) (2) the Pan servo pulses (mediated by ir) (3) the Shutter Click (audio) and (4) Movement Reversal Detector (mercury switch via audio buzzer). (Audacity is open source software)

Tucit-X has been set for Canon RC1 infrared (M1-6-3), Simple Pan (M2-4) 12 pan pulses, (M4-6) for 60° panning movements, Delay of 3/10 second (M4-10), Batch Mode (M1-4) with an interval of zero.

## Conclusions

1 There are very many factors which effect the timings effect the pan overshoot characteristics, Here are a few of them - camera and rig weight, picavet length, kiteline tension and angle, the camera ir signal time. the pan servo speed and it's internal resistance to the overshooting momentum, the Tucit settings for delay and pan etc etc

2 However for you, your camera and rig many of these are consistant and others are variables you can play with .

3 This test uses a zero interval. What it does shows is that it "may" be possible to use such a setting or very close to it to take very high speed panoramas.