



Cheap But Messy In-Car Camera Setup

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I put together a setup a few months ago that works remarkably well. First of all, I do not have a roll bar or harness bar, so all the typical camera mounts were useless to me. I had to figure out a way to mount a camera without it. Here is my somewhat complicated, but very functional solution.

I have a Sony Digital8 DCR-TRV330 camcorder. I paid about \$600 for it. It can be used as a VCR to record any input signal through standard composite RCA-type video and audio inputs using standard RCA couplers. You could also hook up a standard VCR as well using a power inverter. You'd just need to fasten it down somehow.

Since I couldn't find a way to mount the camcorder itself, I decided to hook up an external camera instead through the composite video input on the camcorder. I bought one of the small square color spy cameras (about \$150) like the ones at:<http://www.intellicamspy.com/colorspy.html> I bought a universal cigarette lighter power adaptor (Radio Shack) to power the camera.

I found that the perfect mounting bracket for the spy camera is the bracket for my G-Tech/Pro. I attached an adhesive velcro strip to the back of the camera, stuck it to the G-Tech/Pro mounting bracket, and stuck it on my windshield using the suction cup. The lens is wide angle enough that I get a little bit of my hood and the top of both headlights in the picture. I found I can also mount it to my rear window as well (facing forward) and then I get a shot between the seats which includes a bit of the dash and the driver. I haven't tried facing backwards. I prefer the windshield view.

The final piece of the puzzle is sound. Unfortunately, on my camcorder you cannot use the built-in microphone once you connect an external video source. So, you have to connect an external microphone if you also want sound. The sound input into my video camera is again a standard RCA-type line-level input. I have a nice stereo microphone, but I needed a compact, battery-powered unit to convert the microphone-level signal into a line-level signal. I checked all of the audio stores in the area and apparently no one sells such a thing. Then I got a brainstorm. I bought a cheap (\$35) stereo recording walkman at Radio Shack. I plug the stereo microphone into the microphone jack of the walkman, and plug a stereo-mini-jack-to-left-and-right-RCA-jacks splitter cable into the headphone jack of the walkman. The RCA jacks then plug into the camcorder. I press "Record" on the walkman to activate the signal converter (either with a blank tape in the walkman or the record-protect switch taped up). I adjust the volume of the tape recorder to get a decent sound level to the camera. The headphone-level signal is not quite a line-level signal, but it's close enough and works OK. The microphone base wedges nicely between the two

folded down rear seats.

It's kind of a mess of wires, but it really works great! It also removes easily. Of course you'll want to find a good way to strap down the camcorder and the tape player for track use. I've got some great video footage with sound driving along Skyline Drive here in the Bay Area. Next I need to figure out how to turn some of it into an MPEG so I can post online.

The main disadvantages of this set-up are:

- The external camera bypasses the anti-shock circuitry of the camcorder, so the picture can be jerky on rough roads, but it's not too bad.
- The image quality from the spy camera is a little worse than the camcorder itself, but it's not bad.
- There are a lot of wires and it's kind of a patchwork set-up.

The main advantages are:

- Relatively cheap.
- May be able to use a camcorder or VCR you already have.
- Does not require a rollbar or any other permanent modifications to your car.
- Totally portable. Can be easily moved from car to car.
- Except for the spy camera power supply, everything else is battery-powered.

E-mail me if you have any questions. Hope this helps some of you.

Peace,

Scott Russell

'95 911 (993) Carrera (2) Coupe (Midnight Blue/Cashmere)