Computer/Computer Mounting

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I originally started out the cheap way, with an Epia 800 board and a cheap, low-res TFT LCD display. My second system was based on an Athlon XP-M. This system is the current one. I got very tired of trying to get suspend working on the bigger box so I switched back to a low-power Epia setup, this time with an Epia CL10000, which is sort of a compromise between my previous systems - it's not painfully slow like the 800, but it's not nearly as fast as the Athlon. But, it's small, low-power, and supports standby just fine.Trunk InstallationI installed a panel in the rear right side of my trunk. There's quite a bit of space behind the wheel well there, enough for the computer to fit in, and it seems like the best place in my trunk to put it. The panel is cut from plywood. I started with a big sheet of corrugated cardboard, and slowly cut it down to shape through trial and error, until it fit well in that spot. Then I just transferred the pattern over to a sheet of plywood and cut it out with a jigsaw. I ran it through a table saw to separate the top 6" or so as a separate panel. The reason for this is that the top part of the panel is very form-fitting to the trunk, and if I wanted the entire thing to be hinged from the bottom, it would be kind of difficult to open and close it if I wanted the top to hug the trunk so tightly. So, the top panel is fixed, and the bottom part is hinged, and there's a bolt latch to hold it shut. The top panel is attached to the car by screwing it to the closest convenient locations of the frame with some pieces of plumber's tape (perforated metal strap), ie - places where the screws don't puncture the outside of the car or anything like that. The bottom is screwed directly into the little "shelf" on the side of the trunk. The screws do go through to "the outside world" underneath, but into a cavity of air space under which is another layer of metal which is the actual underbody of the car, so they are not going through to an area that will get directly exposed to the elements. I'm sure it'll rust a bit eventually, but it should take so long that the car won't be worth anything anymore anyway.The panels are covered in some typical speaker-box carpet I got at the local car audio place. Not much to say there, except get some 3M spray contact adhesive, read and follow the instructions on the can, and think ahead about where you're cutting and folding the carpet around the sides. Pretty straightforward. In the upper left corner you can just see the deadbolt-type latch I put on. Two 5" aluminum angle brackets hold the computer at the bottom (covered with heavy duty weather stripping to prevent scratching) and the computer is held in place with a strap. More weather stripping is on the bottom of the inverter, which is held on top of the computer with the same strap. The power wires run up and go behind the carpet; the ground wire is bolted to the chassis right there, the power wire runs under the carpet to the distribution block under the rear seat.One really nice thing about the way this is set up is that with the weight of the computer on the inside of the panel, gravity holds it shut pretty well, and the latch just ensures that it doesn't fly open when I go around a corner, etc. This panel system is really drastically oversized for the current computer, because it was designed for the much larger one I had previously. But, It's not like I'm desperate for space, and I have plenty of room to stuff other equipment back there if I wanted. {mospagebreak title=Old System}Old System This system is a Micro-ATX using a Biostar M7NCG mobo, mobile athlon XP 2200+, 512MB RAM, all stuffed into about the smallest case it could possibly fit in; My case of choice is an athenatech that I got from newegg. It's several times bigger than my Epia 800 system but my car has massive trunk space, and I'd gladly sacrifice a bit more of it to make the carPC be an order of magnitude better and easier to use. Essentially, this time I have a system that's right on par with many common desktop PC's, so I can do just about anything I want with software and not have to be limited by the speed. The CPU fan is right under the vent on top, the PSU is to the right of that, and there's that auxiliary fan on the side which is right behind the PSU. With a laptop hard drive, the CPU and power supply are likely to be the only things producing more than a negligible amount of heat, so the ventilation is well-placed. One of the nice things about this case is that the CDROM bays overlap the motherboard a bit, which saves space, however the entire drive cage unit (CDROM bays and the hard drive cage underneath) actually pivot up on spring-loaded levers when released, making it extremely easy to work with. Here you can see the whole thing flipped completely upside down, giving easy access to the HD cage. I mounted the laptop hard drive with chopped-up foam around all the edges, with the top and bottom of the drive left relatively exposed for cooling, although I doubt that will be a big deal as this drive runs very cool. The foam is, of course, there as shock-mounting, to try and minimize the amount of shock and vibration the drive has to deal with. In addition, the case is mounted on its side when in the car, so the drive is also, which is rumored to help as well.