

# Viper/Titan power wiring

So...2 boxes (rsw04 & 05) have Titan power panels, Titan front panels, and Viper CPUs. With testing, I found that the DC-DC control was not being driven by any of vio 0-7 (though vio 3 controlled the Aux power). With the DC-DC control not driven (and thus at 0V), the DC-DC converter wasn't enabled to provide +24V to the Ubiquiti. Thus, I came up with a hack of using wire-wrap wire to insert +5V to the "Titan J3" connection on the power front panel. This successfully turns on the DC-DC converter. However, since J3 is now not connected, we've lost vio control of Aux. Thus, I also changed the Aux FET jumpers to leave Aux always on at +12V. (This probably wasn't necessary, since the Aux FET control has a pull-up and was on anyway, but it seemed the proper thing to do.)

I haven't mapped out the other vio ports to determine which/how ttySx are controlled by vio, but it seems to differ from what vio reports.

Even though rsw02 has an actual Titan CPU, I did the same wiring on that box as well. Perhaps vio would have worked...

rsw03 is completely different – Viper power panel, Viper front panel, and maybe a Viper. However, this tower will have a DTU Moxa system, so it needs to have an ethernet switch. Andy and I placed a switch inside it, which is a tight fit, but it probably still should be secured since it will be placed 30m high. Unfortunately, this is also the box that Gordon had identified (and I confirmed) to have intermittent data when using the front-panel RJ45 jack. Thus, the only way to connect to the Viper ethernet would appear to be using one of the precarious adaptors that slip on to the Viper board itself. (I did find that the outside Bulgin connector worked, but then we would have to route the ethernet signal back into the box to get to the switch!) This entire front panel has obvious corrosion on the connectors, so an issue with the RJ45 jack perhaps is not surprising.