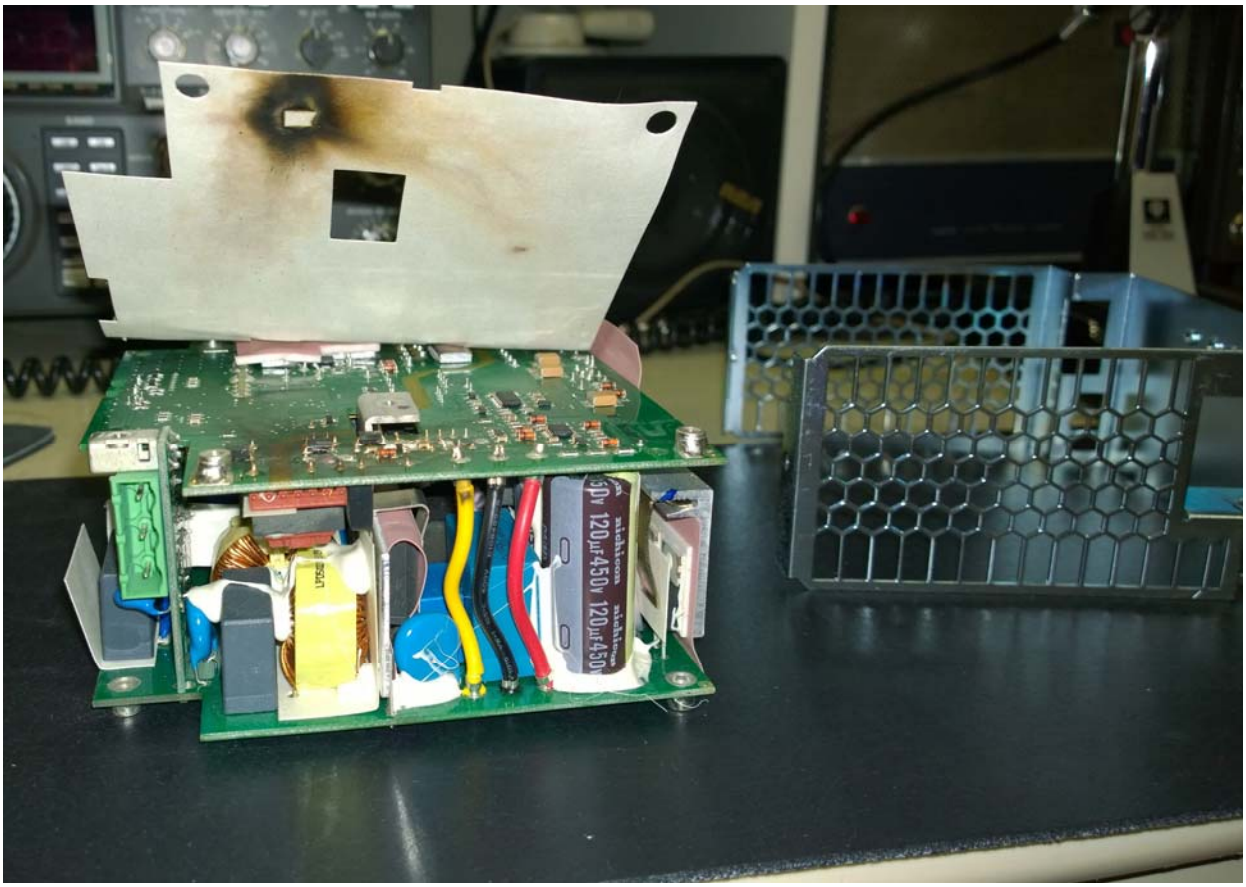
HOW SHOULD YOU WIRE THE FRONT PANEL SWITCH WHEN YOU INSTALL YOUR QUINT?

Kenwood used an unusual switching scheme in the TS-930S. Apparently concerned about back EMF from the transformer power supply, they used a switch with separate contacts to simultaneously switch the neutral side of the AC line, and the 28-volt DC output from the AVR board. The AC lines are grey, and the DC lines are orange and yellow. Once you convert your radio over to a modern power supply like the Quint, you can simply eliminate the DC switch circuit. Some HAMs then bridge the two sets of contacts on top of the front switch to improve the current-carrying capability of the front switch.

Other HAMs change the Kenwood wiring at the fuseholder so that the front panel switch now carries the full AC line voltage when the rig is off. That way, you don't get zapped if you forget to unplug your rig while you're working on things in the back near the Quint. But now the risk is at the front panel switch.

Both schools of thought have pros and cons. If you switch the "hot" side of the line, you can get a serious shock if you're working around the switch area up front. Or you could short the terminals on top of the switch and have a small fireworks display if while removing the top cover, you accidentally touch the AC hot side with the top cover. Of course, wrapping the switch assembly with electrical tape or installing a protective cover will reduce that possibility. And Kenwood's scheme of switching the neutral through the original transformer can still produce a nasty shock through the transformer's primary winding.

If you choose the easy way out and leave the switch wiring as it was, be aware that there is some risk associated with that solution as the below photo shows. A stray piece of wire and a plugged-in radio can produce the disaster that you see here:



This what used to be my Quint 763 model that you see in the Compendium. There's a fuse built into the Quint, but it didn't blow fast enough, so this nice power supply ended up in the trash. Here's what happened.

I was testing different PA's in my 930S, and I noticed that my spare that's featured in the Compendium – the one that I rebuilt without removing the board from the heat-sink – was a little "hotter" than my OEM unit, so I decided to use it for awhile and give my OEM unit a rest. But I got careless.

I had taken the fan loose behind the Phoenix 763 PS to make testing the different PA's easier, and in my haste I forgot to pull the power plug from the rear jack. And the "wire memory" on my spare PA was different from my OEM one. As I was installing the spare, the red 10 gauge power wire went in through one of the rear vent openings on my Phoenix and of course, it shorted one of the live AC bus lines (the yellow, I believe) to the grounded vent opening. The PS was destroyed, as were a perfectly good set of low-beta HUAGAO drivers. To my surprise, the rest of the PA survived.

The only silver lining in this expensive cloud is that it prompted me to install a big 20/26-amp Quint that I had in my shack, and it's what has prompted my efforts to find a way to make almost any good-quality MRF485 work in the 930S. But it was an expensive lesson that I hope none of you who are reading this experience.