



Personal Satellite Network, Inc.

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GSP-2900 Data Cable

With the GSP-2900 you have voice and data capability at the junction box which has a RJ-11 adapter for voice and a DB9 connector for data, however the RJ-11 analog voice line can be run +600 ft but the data line is limited to the 50 feet per the RS-232 specification. A solution to this disparity is given by the Globalstar engineers.

We've had very good luck in using \$3.50 DB9-RJ45 adapters from Radio Shack to interface to standard CAT5 cable, giving us the ability to run up to 400 ft from the junction box. The adapters from Radio Shack come unwired (since there are 8 RJ45 wires and 9 DB9 pins), so you'll have to insert the DB9 pins yourself. Wire pins 1-5 and 7-9 to the RJ45 in any order and you'll be fine. Just make sure that you wire both DB9 converters identically so that you end up with a straight-through serial cable. Wire up the adapters and test them with a long coiled up CAT5 cable to your PC to confirm that the method is working before you run the CAT5 wire through your building (or wherever), because some CAT5 cables are better than others. I haven't ever found a CAT5 cable that doesn't work for this application, but I always test the adapters and the wire, just in case.

We have used Black Box adapters and RS422 drivers and all sorts of other complex troublesome solutions until we found this simple solution. Now we use CAT5 for all of our long serial runs, for example when wiring from conference center booths to the roofs of the conference center or when running cables from our roof down to our lab.

For this solution it is not necessary to alter the wiring at the junction box.