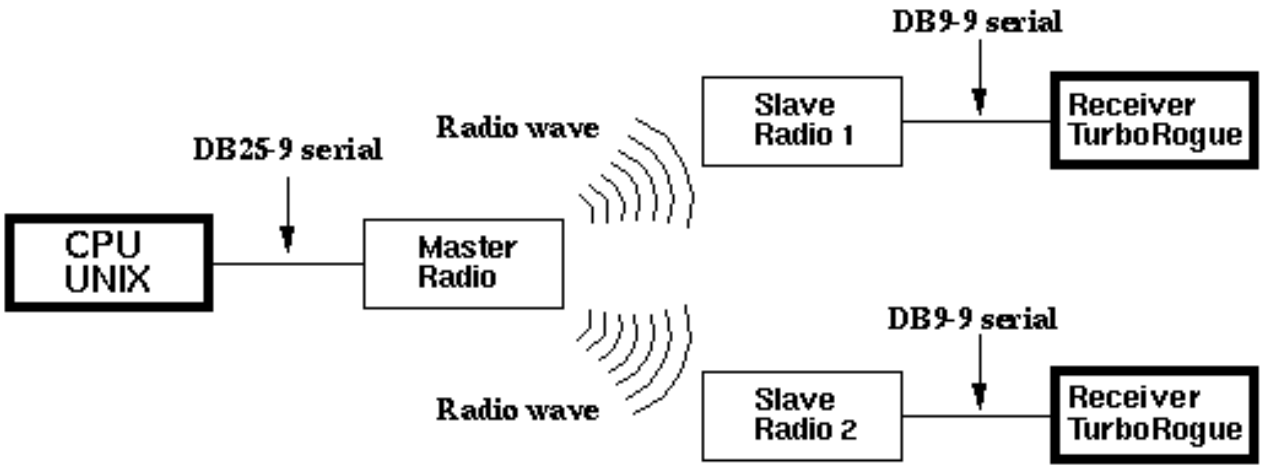
Comms Example: 2 AOA TurboRogue GPS Receivers--2 Radio Modems--Radio Modem--CPU

454 Beth Bartel June 19, 2020 Comms and Networking Examples (Diagrams), FreeWave 521

2 AOA TurboRogue GPS Receivers--2 Radio Modems--Radio Modem--CPU



NOTE: The outdated and offensive "master-slave" terminology has been replaced with "Access point (AP) - Station/Endpoint (STA)" in all instances, but will still remain in the configuration software when implemented

Equipment

In Use by UNAVCO Boulder Facility -

- 1=Chinese (specific information is not available at this time)
- 2=Computer to phone modem (specific information is not available at this time)
- **Radio modem:** FreeWave DGR115-H
- **Antenna:** Directional Yagi antenna
- **CPU:** UNIX (Solaris)
- **Receiver:** TurboRogue SNR-8000

Possible Substitutions (based on site parameters)-

- 1=Chinese (specific information is not available at this time)
- 2=Computer to phone modem (specific information is not available at this time)
- **Radio Modem:** Any radio modem which meets suggested minimum requirements as listed on our Radio Modems page.
- **Antenna:** Omnidirectional antenna
- **CPU:** UNAVCO, Boulder currently supports UNIX or LINUX operating systems

NOTE: The use of a repeater and directional antennas depends on the specifics of the site, distances signals need to travel, topography etc. For more information contact UNAVCO Support (support

unavco.org).

Connections in use by Boulder Facility

- 1=Chinese (specific information is not available at this time)
- 2=Computer to phone modem (specific information is not available at this time)
- 1=DB25-9 serial
- 2=Radio wave
- 3=DB9-9 serial

Equipment Configuration in use by Boulder Facility

Radio modems

- 1=Chinese (specific information is not available at this time)

- 2=Computer to phone modem (specific information is not available at this time)
- Baud rate 19200 bps
- 8-None-1
- RTS/CTS HW flow control
- packet size max=3 (56 bytes) min=0 (8 bytes)

The base radio modem is set to Point to Point Slave/Master Switchable and the callbook is set to call all numbers (of the slave transceivers). The remote transceivers are set to Point to Point Slave mode.

- Recommended local radio modem register settings
- Recommended remote radio modem register settings

TurboRogue Receiver

- 1=Chinese (specific information is not available at this time)
- 2=Computer to phone modem (specific information is not available at this time)
- Baud rate 19200 bps
- 8-None-1
- port B
- firmware version 3.2

Download Specifications

Download software: PERL scripts on Solaris.

NOTE: download rates will vary depending upon site location, local interference, phone line quality, and cellular service.

Online URL:
https://kb.unavco.org/article/comms-example-2-aoa-turborogue-gps-receivers-2-radio-modems-radio-modem-cpu-454.html