Short-haul Modem Summary

If phone service is not available, Short-Haul Modems (SHM) can be very useful for extending RS-232 distances from the limit of the 50 foot RS-232 cable up to 4 miles. (Please see manufacturer specifications for connections and actual distances).

There are two SHMs which the UNAVCO facility has in use at permanent stations, and which transmit asynchronous data up to 4 miles depending upon wire specifications and data speed.

A short-haul modem might be required if the base computer is located at a distance greater than the practical limit of 50 feet for standard serial RS-232 cables. However, the requirement for a physical wire connecting the computer and receiver limits the usefulness of using a short-haul modem to distances usually shorter than their intended limit of approximately 4 miles. A reason for this is that the transmission rate is a function of distance with maximum data rates of 19200 bps being achieved over distances of 1 mile or less.

RAD modems

- How to configure a RAD modem pair
- Configuration of a RAD Communications ASMi-52 G.SHDSL T1 modems for site NSSP
- RAD ASMi-52 2/4-Wire SHDSL Modem Installation and Operation Manual V. 2.5b (.pdf)

Black Box Corporation
There are two SHMs which the UNAVCO facility has in use at permanent stations, and which transmit asynchronous data up to 4 miles depending upon wire specifications and data speed.

- **SHM-B Async**
- **SHM-NPR/RJ**

*Send questions or comments to Support (support@unavco.org).*

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