## Short-haul Modem Summary

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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



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

**Black Box Corporation** 



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- <u>SHM-B Async</u>
- <u>SHM-NPR/RJ</u>

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

Online URL: https://kb.unavco.org/article/short-haul-modem-summary-341.html