# Chapter 8 Rate Adapter Option

## **GENERAL**

With the internal rate adapter option, the DDS/MR64 can also be configured to transmit 19.2 kbps or 9.6 kbps synchronous or asynchronous data over a 56 kbps or 64 kbps DDS or LDM link, or 1.2 kbps synchronous or asynchronous data over a 2.4 kbps DDS or LDM link. This mode of operation is called rate adapted 19200 bps, rate adapted 9600 bps, or rate adapted 1200 bps. Several operating characteristics and options are different from the standard format.

Rate adapted 19200 bps, 9600 bps, or 1200 bps can be run by the DDS/MR64 when the rate adapter option and the appropriate rate is selected.

## FRONT PANEL DISPLAY

During data mode, the LCD displays the same messages as for the nonrate adapting option with the following exceptions:

Data Rate:	SYNC RA 1200 2.4K BPS LINE	DDS/MR64 is operating at rate adapted synchronous 1200 bps.
	ASYNC RA 1200	DDS/MR64 is operating at rate adapted asynchronous 1200 bps.
	2.4K BPS LINE	
	SYNC RA 9600 56K BPS LINE (64K BPS LINE)	DDS/MR64 is operating at rate adapted synchronous 9600 bps.
	SYNC RA 19200 56K BPS LINE (64K BPS LINE)	DDS/MR64 is operating at rate adapted synchronous 19200 bps.

## **Operating Distance**

When the unit is running rate adapted 19200 bps, 9600 bps, or 1200 bps, the maximum distance between units is determined by the line rate. Refer to Table 7-1 for the maximum operating distances.

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### RATE ADAPTER CONFIGURATION OPTIONS

Most options available for the non-rate adapter option are available for the rate adapter option. Configuration options which are different for the rate adapter option include the following:

## Timing

If the rate adapter option is running rate adapted 19200 bps or 9600 bps, the standard timing options are not used. Timing options are as follows:

NET TIME - Network transmitter timing can be slaved to either:

- DDS Received data timing for normal operation.
- INTERNAL Timing for limited distance modem operation.
- DATA TIME The rate adapter circuitry can be slaved to either:
- INTERNAL Timing for normal operation.
- EXTERNAL DTE provided timing.

### Rate

This option is the same as for the non-rate adapter option except that while the rate adapter is enabled, the only options available are 64 kbps, 56 kbps, and 2.4 kbps. If the asynchronous and rate adapter options are enabled, this menu is skipped and the line rate is set for 2400 bps (rate adapted asynchronous 1200 bps).

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