

SPECIFICATIONS:

Transmission Mode: Synchronous, full-duplex

Transmission Line: Unconditioned/Unloaded 4-wire (2 twisted pairs), 19 to 26 AWG.

Data Rates: 900 to 19,200 bps

Transmission Level: -6 dBm

Transmit Timing: Internal

Connectors: (1) DB25 male or female (depending on model)
(1) 5-screw terminal block

Power: None required, uses ultra-low power from the EIA RS-232C.

ME749A-M/F

DESCRIPTION:

The Mini Driver 4W-S is a synchronous full-duplex, 4-wire short-haul modem with a range of up to eleven miles. It is small in size, packaged inside a connector cover. It can handle data rates of 900 to 19,200 bps. The modems are to be used in pairs, one at each end of the line.

The Mini Driver 4W-S requires no AC power supply, batteries, or EIA test voltages. Very low power is derived from the RS-232 data and control lines. It generates positive and negative signals in compliance with the RS-232 standard, even when Transmit Data is constantly a MARK.

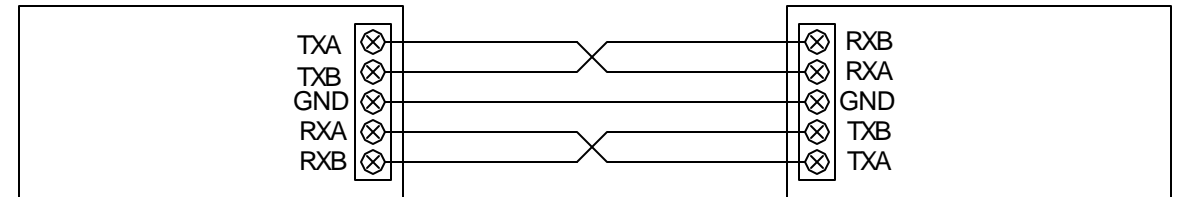
The Mini Driver 4W-S is isolated from the line by balanced transformers. These transformers, together with the electronic circuitry, protect the modem against voltage transients.

The Mini Driver 4W-S's low transmit level minimizes crosstalk onto adjacent lines in the same cable. The use of differential diphas modulation provides immunity to background noise, eliminates line distortion, and permits efficient transmission and reception of data.

Data is transmitted and received at a balanced impedance which ensures excellent immunity to circuit noise. The Mini Driver 4W-S is transformer-isolated from the telephone line to protect against voltage spikes.

INSTALLATION:

1. Open the unit by pressing in the tabs on the side of the cover with a small screwdriver.
2. Separate the top half of the case from the bottom half.
3. Set the baud rate switch to the desired setting as shown to the right. The factory default is 9600 bps. The switch settings for the available baud rates are printed on the underside of the circuit board. Remove the circuit board from the case to access this information
4. Connect the twisted-pair cable to the transmit and receive screw-terminals.
5. Be sure that the screw locks for the RS-232 connector are in their mounting holes. Align the top cover with the bottom cover and snap them together.
6. Repeat steps 1 to 4 for the remote Mini Driver 4W-S. Make sure the local transmit terminals are connected to the remote receive terminals and that the local receive terminals are connected to the remote transmit terminals.
7. Plug each Mini Driver 4W-S into the computing device and tighten the screwlocks to prevent the Mini Driver 4W-S from being disconnected from the computer.
8. Each Mini Driver 4W-S is now ready for operation.



If there is a shield around the telephone cable, it may be connected to "GND" on the terminal block. We recommend connecting the shield at the one end only to avoid ground loops. A ground wire is not necessary to properly operate the Driver.

SPEED	Wire Gauge		
	19-AWG	24-AWG	26-AWG
1200 bps	11 miles	7.5 miles	5.5 miles
2400 bps	8.5 miles	5.5 miles	3.5 miles
4800 bps	7.5 miles	5 miles	3 miles
9600 bps	5.5 miles	3.5 miles	2.5 miles
19,200 bps	3.5 miles	2.5 miles	2 miles

Baud Rate (bps)	Switch Setting
900	9
1200	8
1800	7
2400	6
3600	5
4800	4
7200	3
9600	2 (Factory Setting)
14400	1
19200	0