

Telebyte 209 Short Haul Modem

This document provides installation instructions for the Telebyte 209 Short Haul Modem. This short haul modem can be used to assist in long-distance, direct-connect host computer to PXL-250 access control network connections. The Telebyte 209 is fully compatible with PC/AT serial communication ports and requires no external power for its operation.

Specifications

Dimensions

0.85 inches High x 1.30 inches Wide x 3.00 inches Long
(2.16 cm H x 3.30 cm W x 7.62 cm L)

Connector

DB-9F with screw connection terminals

Cable Run Distance

using Belden 9502 or its equivalent

Data Rate (KBPS)	Wire Gauge		
	19	24	26
9600 Baud	4.9 Miles	3.1 Miles	1.8 Miles

Table 1 – Cable Run Distances per Wire Gauge



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Installation

The short haul modems are shipped in pairs. One modem is attached to the PXL-250 master controller on the access control network. The other is attached to the host computer's COM port.

Connecting to the Controller

- The DB-9 connector on the modem and the controller are both female. To make the modem to controller connection a DB-9 male-to-male connector is provided (see Figure 1). Set the switch on the modem to the DTE position.

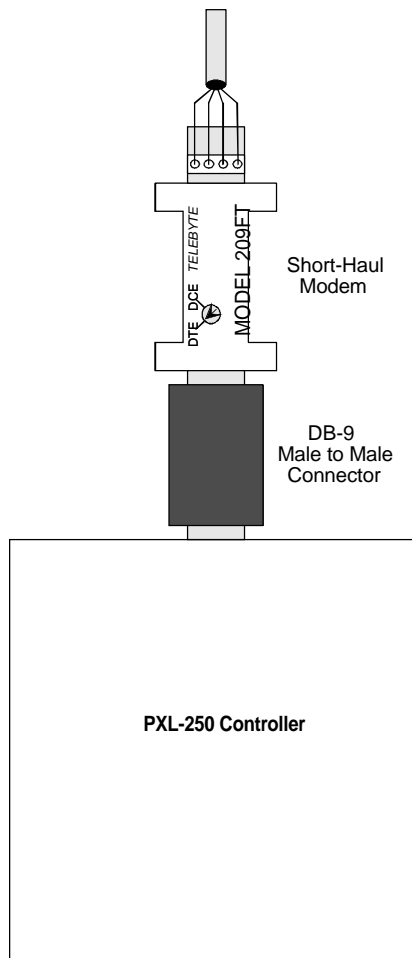


Figure 1 – Controller to Modem Connection

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Connecting to the Host Computer

- If the host computer's COM port uses a DB-25 connector a DB-25 to DB-9 reduction plug must be used.
- If the reduction plug uses a "straight-through" connection (pins 2 and 3 on the 25 pin side go straight through pins 2 and 3 on the 9 pin side) set the switch on the modem to the DCE position (see Figure 2).

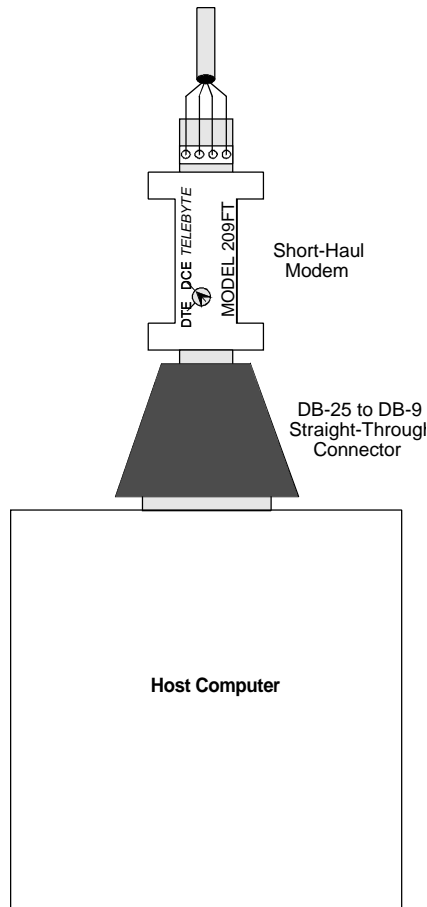


Figure 2 – Host Computer to Modem Connection
Straight-Through Reduction Plug

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- If the reduction plug uses a "2-3 twisted" connection (pin 2 on the 25 pin side goes to pin 3 on the 9 pin side and pin 3 on the 25 pin side goes to pin 2 on the 9 pin side) set the switch on the modem to the DTE position (see Figure 3).

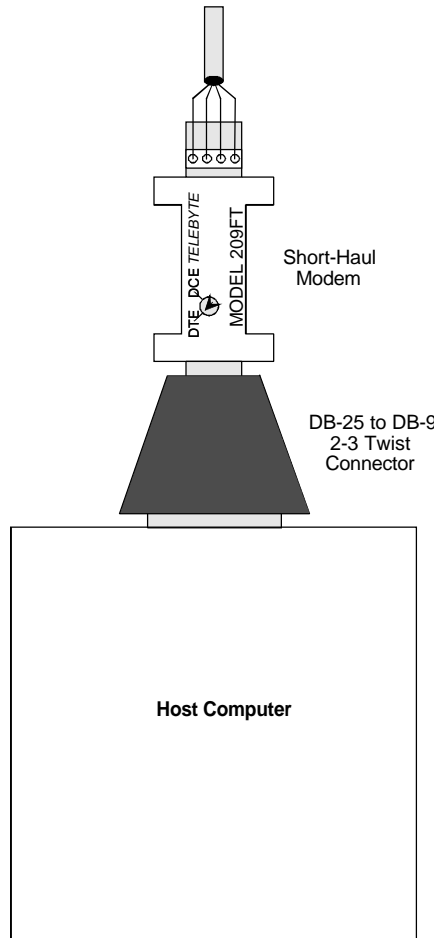


Figure 3 – Host Computer to Modem Connection
2-3 Twisted Reduction Plug

NOTE: Each modem has a small switch allowing the modem to be set for use with either DTE or DCE devices. Please ensure that each modem's switch is set correctly. The position of the slot in the switch does not correspond to the DTE/DCE position setting. Insert a thin-blade screwdriver into the switch slot and verify the switch is turned completely counter-clockwise for a DTE application or verify the switch is turned completely clockwise for a DCE application.

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Modem to Modem Wiring

- Two sets of twisted pair cables are used to connect the modems. Connect the cable between the two modems as shown in Figure 4. The shield wire is not connected at either end of the cable.

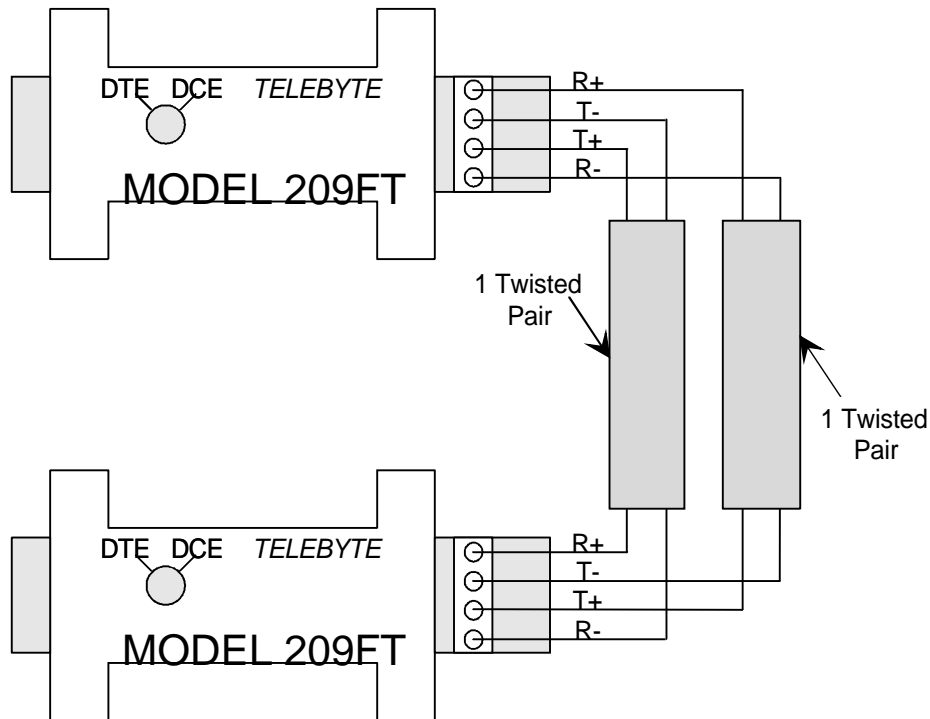


Figure 4 – Modem to Modem Wiring Diagram