

# 1

## Introduction

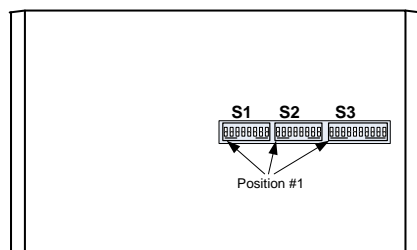
The **Data Connect Enterprise DSP9612FP** (Fast Poll) modem is a 9600/4800/0-1800 bps modem designed for 4-wire, full-duplex or 2-wire, half-duplex operation over voice-band leased lines or private lines. The modem is designed utilizing the latest digital-signal processing (DSP) technology to achieve high performance. The modem employs proprietary QAM modulation and encoding scheme to achieve fast modem training time. The modem is also backward compatible with Bell 202 and ITU-T V.23 modems.

This quick start guide is intended to let you get your modem “up and running” as quickly as possible. It contains all the information you need to configure and install your modem. Please refer to the user manual for detail installation and trouble-shooting information in the unlikely event you encounter a problem with your modem.

# 2

## Factory Default Configuration

The configurations of the modem are set by 3 sets of DIP switches located at the bottom of the modem circuit board. Turn the modem upside down and locate the 3 DIP switches as shown.



When shipped from the factory, the modem is set for the most commonly used configurations (Default configuration: **Only S3 position 9 is closed**). All other positions are open:

- 9600 bps, 8 data bits, no parity, 1 stop bit (8-N-1)
- Hardware flow control (RTS is provided by DTE)
- 4 wire full duplex
- Transmit output = 0 dBm
- Receiver terminated with 600 ohms (S3-9 is closed)
- Receiver dynamic range (threshold) is from 0 to -30 dBm.

# 3

## Customized Your Modem Configuration

It is important to follow the 3 steps below to set up the modem’s serial port to match the RS-232 or RS-485 interface of your DTE/RTU equipment, and the requirements for the leased line.

**A. Configure S3 to match your DTE (RS-232 or RS-485) Interface:**

S3	Set to OFF (open)	Set to ON (close)
1	High Speed : 9600 or 4800 bps	FSK Mode: 0 - 1800 bps
2	High Speed : 9600 bps	4800 bps
3	Data Format: 10 bits (8-N-1)	Data Format: 11 bits
4	RTS provided by DTE	Auto RTS (No RTS from DTE)
5	TX termination = 600 $\Omega$	RTS Controlled
6	Not Used.	
7	4-Wire Full Duplex	2-Wire Half duplex
8	TX Carrier: RTS Controlled	Force TX Carrier ON
9	RX Termination = High (20K)	RX Termination = 600 $\Omega$
10	Signal Ground Isolated	SG Connect to Earth Ground

**B. Configure S2 if you are using the FSK Mode (0-1800 bps).** If not skip to step C to set up for the leased line parameters.

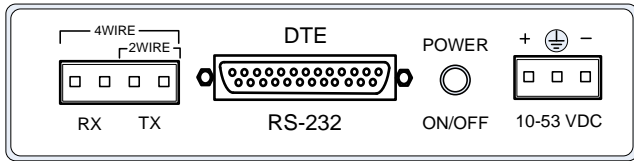
S2	Set to OFF (open)	Set to ON (close)
1	FSK Mode: Bell 202T	FSK Mode: ITU-V.23
2	RCVR Squelch: OFF	Enabled for 150 ms
3	Soft Carrier: Enabled	Disabled
4	RTS-CTS Delay-1: 8.5 ms	33 ms
5	RTS-CTS Delay-2: 59 ms	RTS-CTS Delay-2: 219 ms
6	CD ON Delay: 6 ms	CD ON Delay: 23 ms
7	Remote DLB: Disabled	Remote DLB: Enabled
8	Production Test: OFF	Production Test: ON

**C. Configure S1 to set up for the modem’s transmit output level.**

S1	Set to OFF (open)	Set to ON (close)
1	TX Level 1: 0 dBm	-8 dBm
2	TX Level 2: 0 dBm	-4 dBm
3	TX Level 3: 0 dBm	-2 dBm
4	TX Level 4: 0 dBm	-1 dBm
5	Receiver Range: 0 to -30 dBm	-10 to -43 dBm
6	TX Cable Equalizer: OFF	ON (enabled)
7	RX Cable Equalizer: OFF	ON (enabled)
8	Anti-Streaming: OFF	Enabled (27 seconds)

## 4 Connecting the Modem to Your Network

After the configurations are set for the modem, you can connect the modem to your DTE and to the leased line. Please refer to the rear panel diagram for all connections:



**NOTE: DC Power input is non-polarized with the DSP9612FP**

- Connect the RS-232 cable (not provided) from the DTE equipment
- Connect the leased line transmit pair (TX) and receive pair (RX)
- Connect the power input with the provided AC-to-DC power module or a DC voltage source from 10 to 53V.
- Turn on the power and observe the LEDs at the front panel

## 5 Testing Your Modem in the Network

When the modem is connected to your network and is communicating with the remote DSP9612 modem, you will observe the LEDs on the front panel if the modem is functioning as expected. The following LEDs will be ON and indicate the status of the modem:

**PWR:** This LED is on when power is applied to the modem

**DSR:** The modem has successfully passed self test and is ready

**RTS & CTS:** The Modem receives RTS signal from DTE

**DCD :** Modem receives a valid carrier signal from the remote unit.

**TXD & RXD:** Modem is sending and receiving data, respectively.

It is important to observe the status of the LEDs in order to diagnose the problem when the modem is not working properly. Please refer to the trouble-shooting guide provided in the user's manual or contact us for assistance.

### Contacting Data Connect Enterprise

To obtain product information or Customer Service, contact Data Connect using the following ways:

Phone: (301) 924-7400 x25

e-mail: [support@dataconnectus.com](mailto:support@dataconnectus.com)



## DSP9612FP Fast Poll Modem Quick Start Guide

This document contains all the information you will need to install the DSP9612 Fast Poll modem for your communications network

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