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M00-013.00 External Modem Configuration

Procedure Guide

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1 Introduction

This procedure guide covers the 20-8048 dial-in modem used with the K800™ and System2™ Fuel Site Controllers, and the 20-7078 network dial-out modem used with the FSC30000™.

2 20-8048 Dial-in Modem Configuration Procedure

All modems shipped from OPW Fuel Management Systems are configured for use with your system. If the modem needs to be reconfigured, use the following instructions.

2.1 New Style Modem Features

If the modem was purchased from OPW Fuel Management Systems after June 1, 2004, it has some advanced features, including support for faster serial port speeds and a maximum phone-line connection speed of 33.6K.

> **CAUTION**: Although the new modem is capable of faster data transmission, the host equipment (the System2 or K800 FSC, for example) is still the "limiting factor". The System2 FSC has a top speed of 9600 bps; the K800 FSC has a top speed of 2400 bps. See your equipment documentation for additional details.

The older modem can only communicate with another modem at a maximum of 2400 baud; or, with its host at 2400 bps or slower.

Newer modems have a "33.6K" label affixed to the underside. To determine if you have a newer style OPW Fuel Management Systems modem, please perform the following steps:

1. Connect the modem to a terminal or to a PC equipped with terminal emulation software.

> **NOTE**: For K2500/System2 users, connect the modem to the modem port and access it through the ***CAP*** terminal using the ***CALL*** command.

2. Set the terminal or PC emulation software for 1200 baud.
3. Type the command **AT&F** and press "ENTER."
4. Type the command **AT$SB1200** and press "ENTER." Newer-style modems respond with "OK"; older-style modems respond with "ERROR**."**

2.2 Configuring a Newer-Style OPW Modem

K2500 or System2 Users must configure the modem from the **CAP** terminal using the **CALL** feature. Set the terminal or PC emulation software for any baud rate.

1. Type in the command **AT&F** and press "ENTER." The modem should reply with "OK." The modem may or may not echo the command (depending on its configuration), but should reply with "OK."

> **NOTE**: If the modem does not reply, check the cables, terminal and PC software.

2. Enter the following configuration commands, one at a time. Your entries must be in bold type.
   AT$SBxxxx [ENTER] *(where "xxxx" is port speed, enter 1200, 2400, 4800 or 9600)*

   OK

> **NOTE**: This setting must match host (System2, K800, etc.) serial port speed setting.

ATS0=1 **[ENTER]** Tells modem to answer on the first ring
OK
AT&C1 **[ENTER]** Monitor carrier detect
OK

If using a modem on a K2500 CAP port, use the **AT&D0** command. For all other systems, use the **AT&D2** command.

ATS0=1 **[ENTER]** Tells modem to answer on the first ring
OK
AT&C1 **[ENTER]** Monitor carrier detect
OK
AT&D0 **[ENTER]** K2500 CAP port only - ignores DTR
OK
AT&D2 **[ENTER]** Responds to data terminal ready
OK
AT&K0 **[ENTER]** Turn off flow control
OK
ATE0 **[ENTER]** Turns echo "off"
OK
ATQ1 **[ENTER]** No result codes
No reply
AT&W **[ENTER]** Saves the configuration
No reply

2.3 Configuring an Older-Style Modem

NOTE: K2500 or System2 users, configure the modem from the CAP terminal using the CALL feature. The terminal or PC emulation software, must be set for 1200 or 2400 baud.

1. Type in the command **AT&F** and press "ENTER**."** The modem should reply with "OK." The modem may or may not echo the command (depending on its configuration), but it should always reply with "OK."

NOTE: If the modem does not reply, check the cables, terminal and PC software.

2. Enter the following commands, one at a time.

ATS0=1 **[ENTER]** Answers on the first ring
OK
AT&C1 **[ENTER]** Monitor carrier detect
OK

If using a modem on a K2500 CAP port, use the **AT&D0** command. For all other systems, use the **AT&D2** command.

AT&D0 **[ENTER]** K2500 CAP port only - ignores DTR
OK
AT&D2 **[ENTER]** Responds to data terminal ready
OK
ATE0 **[ENTER]** Turns echo "off"
OK
ATQ1 **[ENTER]** No result codes
No reply
AT&W **[ENTER]** Saves the configuration
No reply

2.4 Configuring Other (Third-Party) External Modems

Use the commands listed previously in this document to configure your third-party modem. If your modem has DIP switches (some do not), set them as shown in the table below.

Table 2-1 Third-Party Modem Settings

Function	Setting
Respond to DTR (Data Terminal Ready) - Except K2500 CAP	ON OFF
Result Codes	OFF
Command Mode Echo	OFF
Auto-Answer	ON
Carrier Detects Drop on Disconnect	ON

Your modem is now ready for use. Disconnect the modem from the terminal (or PC) then reconnect to the system.

3 20-7078 Network Modem Configuration

3.1 US Robotics v.92 56K Fax Modem Model 5686G

3.1.1 Configuring Dip Switch Settings

This section explains how to configure and connect the U.S. Robotics Model 5686G Fax Modem to the FSC3000.

1. Make sure Dip switches 1, 2, 4, 6 and 7 are in the OFF (UP) position.
2. Make sure Dip switches 3, 5 and 8 are in the ON (DOWN) position.

Figure 3-1 Dip Switch Settings

3.1.2 Connecting and Configuring U.S. Robotics Modem for FSC3000

1. Connect the modem to port 5 of the FSC using the 20-1517-01 cable.
2. Log into the FSC3000 and issue the SET NETWORK command.
3. Enter option number “14” for Configure Host Port(s) and Devices.
4. When asked to change the Primary Host device settings, answer “YES”.
5. Enter option number “1” for Change Modem Type/Init String.
6. Finally, enter option “O” (for old) for Configure Init String for Primary Host modem.

If you need assistance please contact OPW Fuel Management Systems’ Technical Support at 1-877-OPW-TECH (877-679-8324).