



Card Encoder

PC Software

User Manual
Software 5.21

OPW Fuel Management Systems - System and Replacement Parts Warranty Statement

Effective September 1, 2002

System and Replacement Parts Warranty

OPW Fuel Management Systems warrants that all OPW Tank Gauge and Petro Vend Fuel Control systems supplied by OPW Fuel Management Systems to the Original Purchaser will be free from defects in material and/or workmanship under normal use and service for a period of 12 months from the date of installation or 15 months from the date of shipment. Additionally, OPW Fuel Management Systems warrants that all upgrades and replacement parts (new and remanufactured) supplied by OPW Fuel Management Systems will be free from defects in material and workmanship under normal use and service for a period of 90 days from the date of installation or for the remainder of the system's original warranty, whichever is greater, as set forth in the first sentence of this statement. The foregoing warranties will not extend to goods subjected to misuse, neglect, accident, or improper installation or maintenance or which have been altered or repaired by anyone other than OPW Fuel Management Systems or its authorized representative.

The buyer's acceptance of delivery of the goods constitutes acceptance of the foregoing warranties and remedies, and all conditions and limitations thereof.

If a claim is made within the warranted time period that any equipment and/or remanufactured part is defective in material or workmanship under normal use and service, such equipment and/or remanufactured part shall be returned to OPW Fuel Management Systems, freight prepaid. If such equipment or remanufactured part is found by OPW Fuel Management Systems in its sole judgment, to be defective in material or workmanship under normal use and service, OPW Fuel Management Systems, shall, at its sole option, repair or replace such equipment and/or remanufactured part (excluding, in all instances, fuses, ink cartridges, batteries, other consumable items, etc.)

The warranties, as set forth above, are made expressly in lieu of all other warranties, either expressed or implied, including, without limitation, warranties of merchantability and fitness for any particular purpose and of all other obligations or liabilities on OPW Fuel Management Systems part. Further, OPW Fuel Management Systems neither assumes, nor authorizes any other person to assume for it, any other liability in connection with the sale of the systems, or any new/replacement part that has been subject to any damage from any act of nature or any *force majeure*.

The term "Original Purchaser" as used in these warranties shall be deemed to mean the authorized OPW Fuel Management Systems distributor to which the system or any new/replacement part was originally sold. These warranties may be assigned by the original purchaser to any of its customers who purchase any OPW Fuel Management Systems systems or new/replacement parts.

The sole liability of OPW Fuel Management Systems, for any breach of warranty, shall be as set forth above. OPW Fuel Management Systems does not warrant against damage caused by accident, abuse, faulty or improper installation or operation. In no event shall manufacturer's liability on any claim for damages arising out of the manufacture, sale, delivery or use of the goods exceed the original purchase price of the goods. In no event shall OPW Fuel Management Systems be liable for any direct, indirect, incidental or consequential damage or loss of product.

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Card Encoder Software

Notes:

Introduction

This booklet applies to AMC Card Encoders Model 712 and Model 712E (712E version 2.0 and 3.0). Except where noted, instructions apply to both types.

The PC-based Card Encoder from **Petro Vend, Inc.** is an easy-to-operate, menu-driven program that enables you to read and encode magnetic cards using either an AMC Model 712 or 712E card reader/programmer.

The software has predefined card data formats for **Petro Vend's** K-2500, K-3000 and K-800 fuel distribution systems. To speed card encoding, the software can be set to increment card and ID numbers automatically. All card data are encoded according to the ANSI/ISO track 2 standard (5 bits per character, 75 bits per inch of the track).

System Requirements

Hardware Requirements

The Card Encoder software is designed to work with IBM® XT/AT and compatible computers equipped with at least 640 K of RAM memory. The computer must have a floppy disk drive that is compatible with the distribution floppy disk. A hard disk drive is highly recommended.

Your computer must also have an RS-232 serial port available to connect to the AMC reader/programmer.

Software Requirements

The Card Encoder software is designed to perform with versions 3.0 and later of PC-DOS and MS-DOS.

Card Encoder

Notes:

Installation

Before You Begin

The Card Encoder software is *not* copy-protected and can be duplicated using the standard DOS command, `COPY'. Make a backup disk of the original disk before you continue.

Create a directory for the Card Encoder program (using the DOS command MKDIR) on your PC hard drive and copy the Encoder program to this directory. Refer to your computer's documentation for details about creating directories.

Example: MKDIR PVENC and copy *.*

Most personal computers have one or more RS-232 serial ports located on the back, labeled `COM1', `COM2', etc. With the power to the computer turned OFF and the power cable for the AMC reader/programmer UNPLUGGED, attach the serial communication cable from the AMC device to one of the RS-232 sockets on the computer. Connect the power cable to the AMC device and plug it into any standard AC power supply.

When you are ready to begin programming cards, turn the power to both devices ON.

Model 712E Setup

If the AMC Programmer/Reader does NOT have switches on the bottom, it is a Model 712E. The 712E setup differs slightly from the basic Model 712:

1. Plug the AMC programmer into the COMM port of your computer. Plug the transformer into a 110V wall outlet.
2. Place the supplied AMC floppy into your disk drive. Change the prompt on your PC's screen to the drive containing the floppy (**A:** or **B:**, typically).
3. Type **CFGGEN** at the prompt and press ENTER (for example, **A:>CFGGEN** Enter).

After you execute **CFGGEN.EXE** you will see:

```
Model 7X2E Configuration Program
Version 3.0
```

```
Which Port is the M7X2E Attached?
```

1. COM 1
2. COM 2
3. End Program

Card Encoder

4. Enter 1, 2 or 3. After you selecting “1” or “2” you will see:

A - Change Reader Parameters
Z - Dump EEPROM*
X - END PROGRAM

**NOTE: “Dump EEPROM” restores default EEPROM settings*

5. Select A - Change Reader Parameters

6. Change the reader parameters to:

COM Port:	COM 1 or COM 2
Baud Rate:	9600
Response Mode:	PROTOCOL 0
Custom Data Mode:	Mode 1
Data Decoding Mode:	ISO FORMAT ONLY

The encoder responds with:

Programming EEPROM....
Done.

7. Select **END PROGRAM**

If the communication parameters for the AMC device and the computer's serial port do not match, the Card Encoder software can not function properly.

During the configuration process, check the connection using Options\Edit comm.\Save Menu.

When both units are correctly configured, you will be prompted to write or read data for a card and to choose a transmission protocol.

After a positive connection, run the Options\Edit comm.\Save Menu to save the transmission parameters for the next session.

The programming unit is factory-set for protocol number 0.

DO NOT CHANGE THIS PROTOCOL NUMBER.

Refer to the AMC documentation for a more detailed description of the transmission protocols.

Starting the Program

Type the following at the DOS command line:

PVENC

If you have a computer with a monochrome monitor type **PVENC MONO**

Main Menu

```

|-----|PETRO VEND ENCODER|-----|
| 1- K3000  2 - K2500  3 - K800  Options  EXit |
|-----|

```

The Main Menu has five selections. Three choose cards (for K3000, K2500/System2 and K800). One is for setting options and one exits you from program.

Use the left & right arrow keys to make a menu selection. Each menu displays a help screen

Options Menu

Highlight Options in the Main Menu:

```

|-----|PETRO VEND ENCODER|-----|
| 1 - K3000  2 - K2500  3 - K800  Options  EXit |
|-----|
|
| Edit comm. |
| Info      |
| EXit     |
|
|-----|

```

Edit Comm

Edits communication settings for the PC-to-AMC link. Defaults are: **COM1** port, speed **9600** bauds, **7 bit** character length, **1 stop bit** and **even** parity. These settings are AMC programmer defaults.

To change a setting, select it with the arrow key. Press ENTER to toggle the values (or, press the "highlighted" key). After choosing a port and changing its settings, check the settings with **CoNnect & read status** option. If you see **Connection OK**, select **SaVe settings** to save to the configuration file. Then, all future sessions will use these settings.

Info

The program information window selected from the Options pull-down in the Main Menu shows program version number and date.

Card Menus

Common Card Menu Features

All three card menus offer the following options:

Read

For reading data from a magcard choose **Read** from one of the card menus. Select this option and the programmer's green LED comes ON. Swipe a card through the AMC programmer, data encoded on the card (if any) is displayed. If the programmer can't read the card, an error message appears.

Edit

To change contents of any predefined card fields, select **Edit**. To activate auto-increment for the card or ID field, select the field and press your PC's **[F1]** key. To deactivate this feature for a field, select the field and press **[F1]** again. The **[F2]** key toggles the automatic increment of the 'auto increment fields'.

Program

To write data to a card select **Program**. The AMC programmer is in programming mode when the red LED is ON. While in Edit mode, press **[F2]** to toggle the automatic increment after programming each card. OR, **[F1]** to manually increment the contents of an active 'auto increment' field.

When you program a card, ALL data on the card is overwritten and destroyed.

K2500/System2 Card Menu

When using K2500 or System2 you will only need to enter information in fields 1 & 2 by using the Edit command.

PETRO VEND ENCODER	
1 - K3000	2 - K2500
3 - K800	Options Exit
card data	
AUTO-INCREMENT ON	1 - NETWORK : 0000
	2 - CARD # : 000000000000
	3 - CARD TYPE : 0
	4 - EXP. DATE : 0000
	5 - PUMP REST. : 00
	6 - QTY REST. : 00
	7 - PROG. CODE : 0
AUTO-INCREMENT ON	8 - ID # : 00000000
POST WRITE INCREMENT - ENABLED	
0000000000000000=000000000=00000000	
Read	Edit Program Exit

HELP WINDOW

SELECT:

Read - to read a card
 Edit - to edit card fields
 Program - to program the card
 Press 'Esc' key to return to Main Menu

- 1. NETWORK** The 4 digit network number of your system.
- 2. CARD #** Up to 12 digits. Leading zeros will be filled in. The total length of a card number is actually 16 digits

- 6. **PROD1 CODE:** NNNNNNNN (for products 1 – 8)
- 7. **PROD2 CODE:** NNNNNNNN (for products 9 – 16)

Each of the eight digits (NNNNNNNN) in the PROD (product) codes represents a product. PROD1 controls products 1 – 8; PROD2 controls products 9 – 16.

Enter a "1" to authorize a product; enter a "0" to prohibit authorization. For example, if you entered 11110000 for PROD1, products 1 – 4 would be authorized for use, but products 5 – 8 would not be authorized.

8. QUANTITY: N

The Quantity Restriction is defined in the K3000 system.

Default quantity restrictions are:

- 1 - 00010
- 2 - 00020
- 3 - 00050
- 4 - 00100
- 5 - 00000
- 6 - 00000
- 7 - 00000
- 8 - 00000
- 9 - 00000

If these codes are not set to the K3000 default values, use the "A" command to view the current settings and the "M" command to change the quantity restriction codes.

Error Messages

UART's address error!

The serial transmission port number selected in the configuration does not exist.

Error in configuration file!

The data error in configuration file. Create the file again.

Verify write error! Repeat writing.

The data written to the card is *not* the same as the data read from the card for verification purposes. Try programming the same card again or get a new card.

Device did not respond!

The programming unit does not respond. Check the communications parameters set in the program and on the AMC programmer.

Device response error!

Device is not responding normally to the commands sent from the PC. Check if connections are correct and reset the unit by powering it off and on.

Verify sum error of received message!

The response from the unit has been corrupted during transmission. Try the same operation again.

Break line signal received!

Transmission error. Make sure that no other equipment is connected to the same serial port as the AMC programmer.

Framing Error.

Parity Error.

Overrun Error.

Transmission error.

Verify that the transmission parameters are the same for the AMC programmer and the program.



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