

# FSC3000

## Command –Line Configuration Guide



Version 1.2





This configuration guide was created for the purpose of training technicians on how to configure FSC3000 systems. All configuration values need to be setup to meet the customer's site conditions and/or needs.





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# Getting Connected

## Communication Parameters

Baud Rate 2400, 9600, 19200, 38400

Data Bits 7

Parity Even

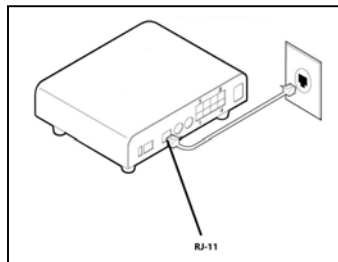
Stop 1

## Connection Methods

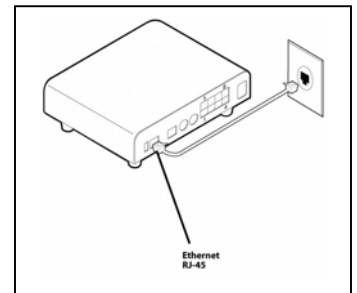
### Direct Connect



### Dial-Up

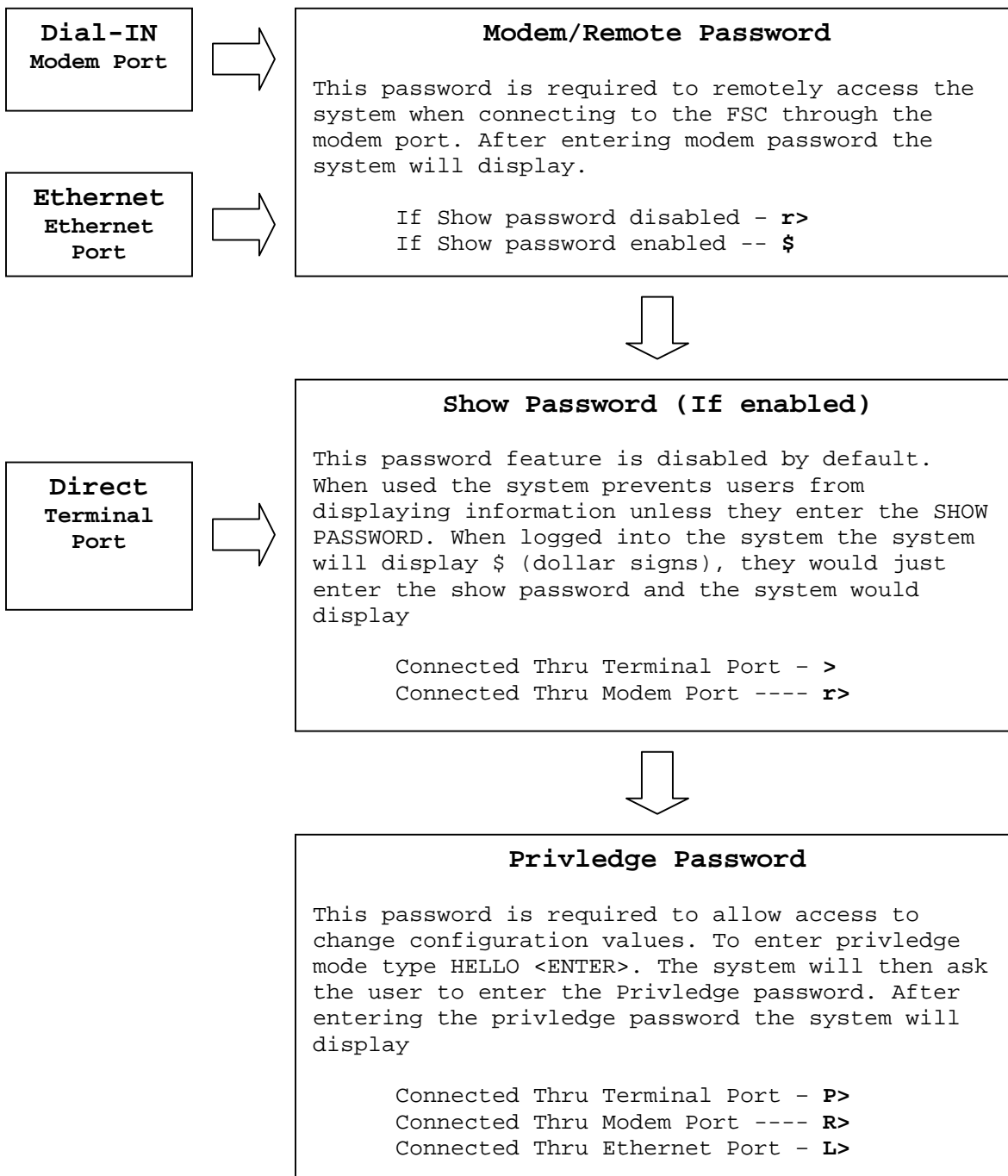


### Ethernet



# Password

## Password Sequence





## Set Password

The default password for all three passwords is **HELLO**

To change the password type: **Set Password <ENTER>**

```
ENTER 'SHOW' PASSWORD: NO Change (just press enter not to change)
ENTER MAIN PASSWORD: NO CHANGE
ENTER MODEM PASSWORD: NO Change
ENABLE 'SHOW' PASSWORD (Y/N)? N
```

## Show Password (Password Recovery)

If for some reason you forget your password we could recover it by decoding the strings that show password displays. Call Tech support if you need a password decoded.

To show password strings type: **Show Password <ENTER>**

```
SOVITDROVMTNYPQIU
YJQELCZGWEXCZFUKR
OHVMTKRRYPQCUETLW
-- 'SHOW' PASSWORD DISABLED
```



## Show Flags

The FSC3000 has software settable options. When you receive your FSC3000 you should verify all options ordered and setup and enabled. To do this you will type

Show Flags <ENTER>

App Ver: 1.04a Serial #: 12345  
FPGA ver: 1.5  
Loader Ver: 1.01A Jun 30,2005

SERIAL #: 12345 (Number needed when adding options to system)  
MAX CARDS: 65000 (Maximum number of cards FSC3000 purchased)  
MAX TRANS: 2000 (Maximum number of transactions FSC3000 purchased)  
THREE MIN PUMP TIMER: disabled (Used for weights & measures - 3 minute fueling times)  
FIXED VALUE PPU: disabled (Used for weights & measures - locks pulser rate)  
MEISINGER OIL FLAG: disabled (Allows use of Meisinger oil cards)  
PAC-PRIDE SMARTLOCK: disabled (Network - not currently supported)  
DPC FLAG: <-ENABLED (Allows direct control of electronic dispensers)  
AUTOGAS FLAG: disabled (Allows use of Autogas cards)  
DUAL HOST AVAILABLE: disabled (Allows 2 network connection devices - modem, etc.)  
PAC-PRIDE-NBS HOSTING: disabled (Network - not currently supported)  
COMDATA FLAG: disabled (Network)  
TCHEK FLAG: disabled (Network)  
EFS FLAG: disabled (Network)  
TCH FLAG: disabled (Network)  
FLEET1 FLAG: disabled (Network)  
CFN FLAG: disabled (Network)  
NBS4BANK FLAG: disabled (Network)  
NBS4FMGC FLAG: disabled (Network)  
QUARLES FLAG: disabled (Network)  
PAYMENTECH FLAG: <-ENABLED (Network)  
QUICK FUEL FLAG: disabled (Network)  
IRVING FLAG: disabled (Network)  
SHELL FLAG: disabled (Network)

EXECUTING OUT OF FLASH

FLASH ADDRESS BLOCKS:

0:100000-17FFFF (3FA9) Main App	8:500000-57FFFF (BLNK)
1:180000-1FFFFF (BLNK)	9:580000-5FFFFFFF (BLNK)
2:200000-27FFFF (3FA9)	10:600000-67FFFF (BLNK)
3:280000-2FFFFFFF (BLNK)	11:680000-6FFFFFFF (BLNK)
4:300000-37FFFF (BLNK)	12:700000-77FFFF (BLNK)
5:380000-3FFFFFFF (BLNK)	13:780000-7FFFFFFF (BLNK) Sys Params
6:400000-47FFFF (45C6) DPC	14:800000-87FFFF (D73C) Boot Ldr
7:480000-4FFFFFFF (BLNK)	15:880000-8FFFFFFF (F6C6) Options

16:900000-97FFFF (4C5B) RAM



## Time Management

### 1) Set Time

To set time type: **Set Time <ENTER>**

**Enter time (XX:XX AM/PM):** (You may enter time in military or am/pm format)

### 2) Set Date

To set date type: **Set Time <ENTER>**

**Enter Date (MMM DD, YYYY):** (month is entered as APR for april, JUN for June, etc)

### 3) Set Time Change

To set time change type: **Set Time Change <ENTER>**

**Enter date when time is moved BACK 1 hour: Inactive**

**Enter date when time is moved FORWARD 1 hour: Inactive**

**BACK 1 hour: INACTIVE**  
**FORWARD 1 hour: INACTIVE**

### 4) Set System Times

To set time type: **Set System Time <ENTER>**

**Set system ON time (Y/N)? N**  
**Set system OFF time (Y/N)? N**  
**Set 'RECEIPTS ONLY' time (Y/N)? N**  
**Set time adjust (Y/N)? N (Enter N for this)**

### 5) Set Light

To set time type: **Set Light <ENTER>**

**Enter light ON time: Inactive**  
**Enter light OFF time: Inactive**  
**Light ON time: Inactive**  
**Light OFF time: Inactive**



# Fueltypes & Tank Setup

## Fueltypes

### 1) Set Fueling Units

You can associate one of three units of measure to your fueltypes. These are simply labels - no conversion is done.

To set Fueling Unit type: **Set Fueling Unit <ENTER>**

Enter fueling UNIT 1: GALLONS

Enter fueling UNIT 2: LITERS

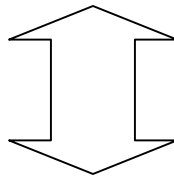
Enter fueling UNIT 3: QUARTS

### 2) Set Fueltype

You can define up to 16 products in the system. You can set each product's unit of measure, price per unit, name and network product code.

To set Fueltype type: **Set Fueltype <ENTER>**

#	Name	Units	Price	PTECH	COM	UNI	FMGC	QsFN	FLT1	CFN
1	UNLEADED	GALLONS	1.000	001	0	051	002	12	40	04
2	PREMIUM	GALLONS	1.000	002	0	053	004	09	41	05
3	SUPER	GALLONS	1.000	003	0	055	003	10	42	06
4	SPEC BULK	GALLONS	1.000	004	0	017	N/A	NA	NA	NA
5	#1 DIESEL	GALLONS	1.000	005	1	010	030	03	31	13
6	#2 DIESEL	GALLONS	1.000	006	2	001	005	06	12	01
7	REEFER	GALLONS	1.000	007	0	081	036	NA	14	NA
8	WINTER DSL	GALLONS	1.000	008	0	056	003	NA	30	NA
9	KEROSENE	GALLONS	1.000	009	0	048	N/A	NA	32	NA
10	UNLEAD BLK	GALLONS	1.000	010	0	052	N/A	NA	NA	NA
11	LUBE OIL1	GALLONS	1.000	011	3	071	045	11	NA	08
12	LUBE OIL2	GALLONS	1.000	012	3	072	822	NA	NA	09
13	TRANS OIL	GALLONS	1.000	013	3	075	808	NA	NA	NA
14	COOLANT	GALLONS	1.000	014	0	076	605	14	NA	NA
15	SUPER BULK	GALLONS	1.000	015	0	056	N/A	15	NA	NA
16	PROPANE	GALLONS	1.000	016	0	080	039	NA	39	17
17	#1DIES BLK	GALLONS	1.000	017	0	004	N/A	NA	NA	NA
18	#2DIES BLK	GALLONS	1.000	018	0	013	N/A	NA	NA	NA
19	EXTRA	GALLONS	1.000	000	0	000	N/A	NA	NA	NA



32	EXTRA	GALLONS	1.000	000	0	000	N/A	NA	NA	NA
----	-------	---------	-------	-----	---	-----	-----	----	----	----

TAX Included in price per unit..... YES



**ENTER (fuel table row # (1..32) or [RETURN] to exit) :**

We default the product table to the products defined above. Fueltype names can be changed. If using networks you need to make sure the network product code are mapped correctly to the product that you setup.

## **Tanks**

### **1) Set Tank # (# = 1 to 8)**

Used to assign fueltypes to the tanks. The setup of this is not required.

To set Tank type: **Set Tank #<ENTER>**

**Fuel type CODE (1-16):** (Enter the fueltype number to assign the tank product)  
**Enter QUANTITY:** (Enter the current inventory level of your tank)  
**Tank LOW QUANTITY:** (Enter the level at which the FSC would display the tank is low)  
**Tank ## (product name) Quantity: 0.0 LOW Level: 0.0**

You can use the **Show Tank** command to verify setup.

<b>Tank #1</b>	<b>UNLEADED</b>	<b>Quantity: 0.0</b>	<b>LOW Level: 0.0</b>
<b>Tank #2</b>	<b>UNLEADED</b>	<b>Quantity: 0.0</b>	<b>LOW Level: 0.0</b>
<b>Tank #3</b>	<b>UNLEADED</b>	<b>Quantity: 0.0</b>	<b>LOW Level: 0.0</b>
<b>Tank #4</b>	<b>UNLEADED</b>	<b>Quantity: 0.0</b>	<b>LOW Level: 0.0</b>
<b>Tank #5</b>	<b>UNLEADED</b>	<b>Quantity: 0.0</b>	<b>LOW Level: 0.0</b>
<b>Tank #6</b>	<b>UNLEADED</b>	<b>Quantity: 0.0</b>	<b>LOW Level: 0.0</b>
<b>Tank #7</b>	<b>UNLEADED</b>	<b>Quantity: 0.0</b>	<b>LOW Level: 0.0</b>
<b>Tank #8</b>	<b>UNLEADED</b>	<b>Quantity: 0.0</b>	<b>LOW Level: 0.0</b>

# Pump Setup

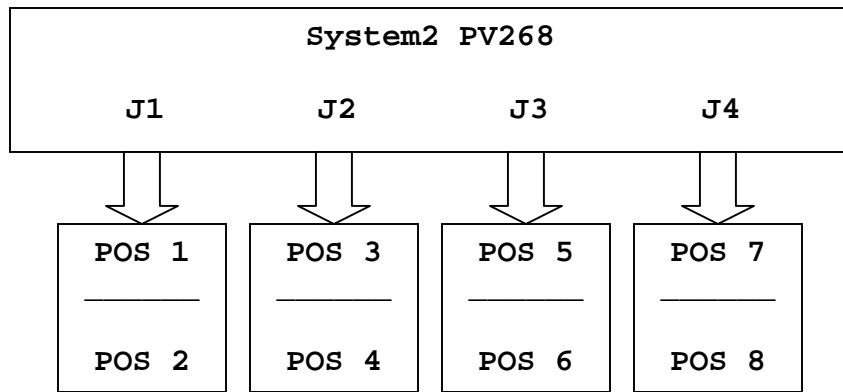
## Mechanical Pumps

### 1) Configure PCT # (# = 1 to 8)

The original system when first built was designed to control mechanical pumps using a board called a PCT (Pump Control Terminal). Since then we added the ability to control mechanical pumps with the integrated PCT in the K800 terminal and a board called PCM (Pump control Module). The configuration of the different mechanical pump interfaces is still the same. The first step is to tell the system what kind of mechanical pump interface it will interface to. The system can support up to 4 PCTs. Even though the interfaces are not all the same they are still configured as PCTs.

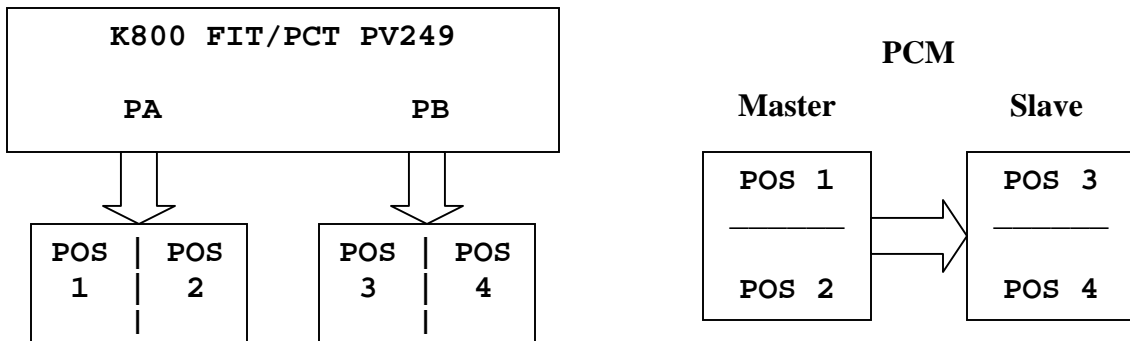
If using PCT (Mechanical) - Supports up to 8 positions per PCT

```
Type: Configure PCT #
      Is this a K800 PCT (Y/N)? N
      Is this a UPC (Y/N)? N
```



If using K800 PCT or PCM (Mechanical) - Supports up to 4 positions max

```
Type: Configure PCT #
      Is this a K800 PCT (Y/N)? Y
```





## 2) Configure PCT # POS # (PCT 1 to 8 and POS 1 to 8)

Now we are going to configure each fueling point that is connected to the specific PCT. Each fueling point is going to be wired to a specific position on the pump interface.

TYPE: **Configure PCT # POS # <ENTER>**

**Note: System/2 PCT**

**PCT 1 Position 1** (Tells you what position you configuring)

**Enter Pump #: 1** (Enter the pump # that is connected to this PCT POSITION)

**Enter Pulses Per GALLONS: 100** (Enter the pulse rate for the pump)

**MAX Fuel to be dispensed per transaction: 10** (Largest tank to be filled for this pump)

**Pump Sentry Options (Y/N)? Y** (protects against pulser\wire failure)

**Pump Sentry: ENABLED**

**Maximum time allowed for fueling (Minutes): 5**

**Maximum time allowed to retrieve pump handle (Seconds): 60**

**Maximum time allowed to detect first fueling pulse (Secs): 60**

**Maximum time allowed between fueling pulses (Secs): 30**

**Enter Fueltype Code #: 1** (Enter the fueltype code for the product that will be dispensed)

**Enter Tank #: 1** (Enter Tank number - not required for proper operation)

**Clear Pump Totals (Y/N)? N**

**Enter Totalizer Value: 0.0** (Should set to match fueling point totalizer)

Repeat process to configure each position wired to a fueling point.

## 3) Install PCT # POS # (PCT 1 to 8 and POS 1 to 8)

This command tells the system that a PCT position will be used

Repeat process to install each position you configured.

## 4) Install PCT # (# = 1 to 8)

This tells the system that the PCT is there and it should talk to it.



## Electronic Pumps controlled by UPC

The FSC300 Controller has been enhanced to support product restriction. The FSC3000 controller requires the UPC software meet or exceed the following versions.

Gilbarco - 6.21A or greater  
Tokheim - 1.03B or greater  
Wayne - 7.05C or greater

### 1) Configure PCT # (# = 1 to 4)

Another enhancement we added to the system was the ability to communicate to a pump console or controller to control electronic pumps. To do this we created a box called a UPC (Universal Pump Controller). The UPC can emulate up to 4 PCTs at once. The interface uses a UPC to control the pumps, all configurations will be still being referred to as a PCT.

If using a UPC as the PCT (Electronic)

Type: **Configure PCT #**  
    **Is this a K800 PCT (Y/N)? N**  
    **Is this a UPC (Y/N)? y**  
    **Is this an internal program (Y/N)? N**  
    **Does this UPC allow hose RESTRICTIONS (Y/N)? N**

### 2) Configure PCT # POS #

**Note: System/2 PCT**

**PCT 1 Position 1** (Tells you what position you configuring)  
**Enter Pump #: 1** (Enter the pump # that is connected to this PCT POS)  
**Enter Pulses Per GALLONS: 100** (don't care)  
**MAX Fuel to be dispensed per transaction: 10** (Largest tank to be filled for this pump)  
**Pump Sentry Options (Y/N)? Y** (protects against pulser\wire failure)  
**Pump Sentry: ENABLED**  
**Maximum time allowed for fueling (Minutes): 5**  
**Maximum time allowed to retrieve pump handle (Seconds): 60**  
**Maximum time allowed to detect first fueling pulse (Secs): 60**  
**Maximum time allowed between fueling pulses (Secs): 30**  
**Set Up Hose 1 (Y/N)? y**  
    **Enter Fueltype Code #: 1** (Enter the fueltype code)  
    **Enter Tank #: 1** (Enter Tank number - not required for proper operation)  
    **Clear Pump Totals (Y/N)? N**  
    **Enter Totalizer Value: 0.0** (Should set to match fueling point totalizer)  
**Set Up Hose 2 (Y/N)? N** (Only required if pump has more than 1 grade!)  
**Set Up Hose 3 (Y/N)? N** (Must match how the console reports hoses to the UPC)  
**Set Up Hose 4 (Y/N)? N**  
**Set Up Hose 5 (Y/N)? N**  
**Set Up Hose 6 (Y/N)? N**  
**Set Up Hose 7 (Y/N)? N**  
**Set Up Hose 8 (Y/N)? N**

Repeat process to configure each position wired to a fueling point.

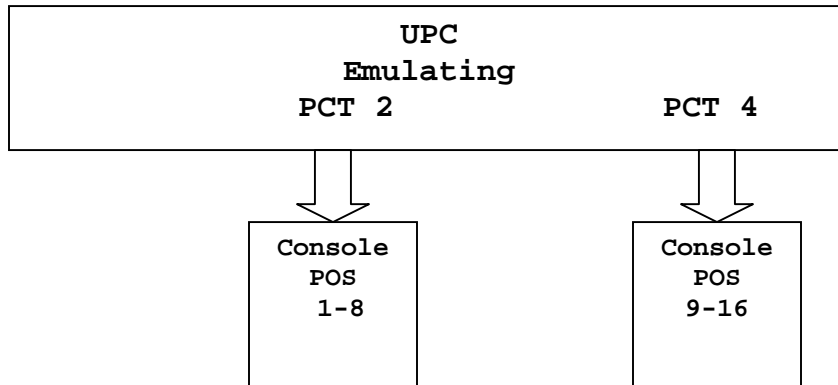
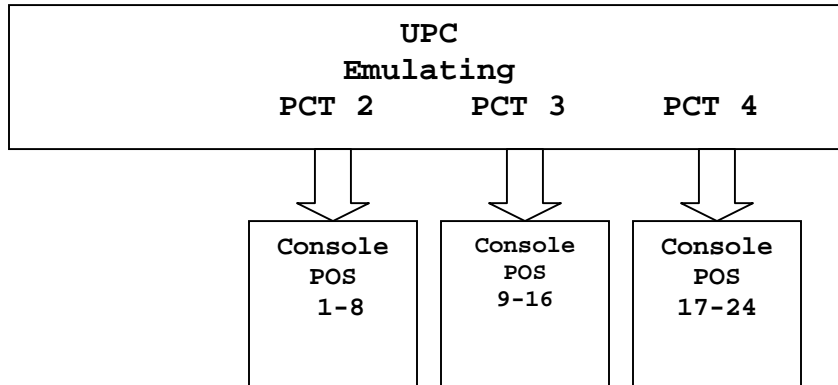
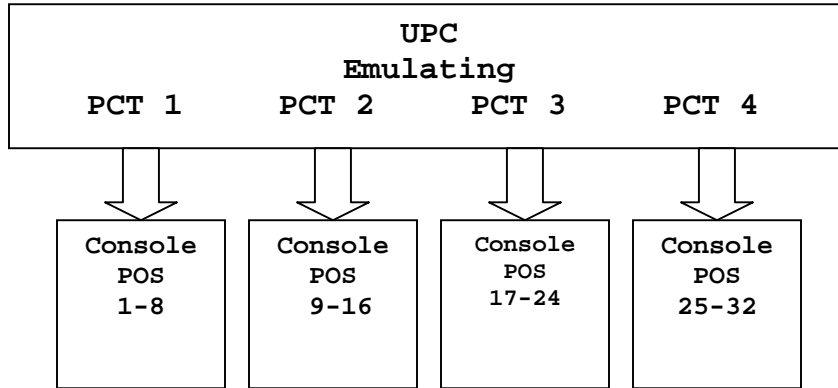
**3) Install PCT # POS # (PCT 1 to 4 and POS 1 to 8)**

This command tells the system that a PCT position will be used

Repeat process to install each position you configured.

**4) Install PCT # (# = 1 to 4)**

This tells the system that the PCT is there and it should talk to it.





## Electronic Pumps controlled by DPC (Wayne)

### 1) Install Program

The first step is to define the brand of electronic pumps that will be used and the communication parameters of them. The FSC is designed to support up to 8 PCT devices, but DPC is limited to the first 4 PCTs

Type: Install program

Install program (or Configure program if already installed)

**\*\* DIRECT PUMP SETTINGS -Ver 10.01C \*\***

Select pump types:

1-Gilbarco, 2-Wayne: (1)2

Set pump communication port:

Baud: 1-1200, 2-2400, 3-4800, 4-5760, 5-9600 -> (?)5

Character size: 1-7 bits, 2-8 bits -> (1)2

Parity: 1-Odd, 2-Even, 3-None -> (2)3

**\*\*\*\* DIRECT PUMP VERSION: 10.01C \*\*\*\***

Pumps: Wayne

Baud rate: 9600, Data bits: 8, Parity: None, Stop bits: 1

### 2) Configure PCT # (# = 1 to 4)

The next step is to define the PCT is going to be used for DPC.

Configure PCT # (# = 1 to 4)

Is this a K800 PCT (Y/N)? N

Is this a UPC (Y/N)? y (This defines the PCT is for DPC)

Does this UPC allow hose RESTRICTIONS (Y/N)? N

### 3) Configure PCT # POS # (# = PCT 1 to 4 and POS 1 to 8)

Configure PCT # POS #

Note: System/2 PCT

PCT 1 Position 1 (Tells you what position you configuring)

Enter Pump #: 1 (Enter the pump # that is connected to this PCT POS)

Enter pump's direct address (1): (Address that the pump will associated with)

Enter Pulses Per GALLONS: 100 (don't care)

MAX Fuel to be dispensed per transaction: 10 (Largest tank to be filled for this pump)

Pump Sentry Options (Y/N)? Y

Pump Sentry: ENABLED

Maximum time allowed for fueling (Minutes): 5

Maximum time allowed to retrieve pump handle (Seconds): 60

Maximum time allowed to detect first fueling pulse (Secs): 60

Maximum time allowed between fueling pulses (Secs): 30

Set Up Hose 1 (Y/N)? y

Enter Fueltype Code #: 1 (Enter the fueltype code)

Enter Tank #: 1 (Enter Tank number - not required for proper operation)

Clear Pump Totals (Y/N)? N

Enter Totalizer Value: 0.0 (Should set to match fueling point totalizer)

Set Up Hose 2 (Y/N)? N (Only required if pump has more than 1 grade!)

Set Up Hose 3 (Y/N)? N (Must match the pump mapping)

Set Up Hose 4 (Y/N)? N



Set Up Hose 5 (Y/N)? N  
Set Up Hose 6 (Y/N)? N  
Set Up Hose 7 (Y/N)? N  
Set Up Hose 8 (Y/N)? N

Repeat process to configure each position for each fueling point.

**4) Install PCT # POS # (# = PCT 1 to 4 and POS 1 to 8)**

This command tells the system that a PCT position will be used

**Install PCT # POS #** (Repeat process to install each position you configured)

**5) Install PCT # (# = 1 to 4)**

This tells the system that the PCT is there and it should talk to it.

**Install PCT #** (Repeat process to install each pct you configured)

**6) Install Program**

The last step is to start the DPC communications.

**Install program**



## Electronic Pumps controlled by DPC (Gilbarco)

### 1) Install Program

The first step is to define the brand of electronic pumps that will be used and the communication parameters of them. The FSC is designed to support up to 8 PCT devices, but DPC is limited to the first 4 PCTs

Type: Install program

Install program (or configure program if already been installed)

**\*\* DIRECT PUMP SETTINGS -Ver 10.01C \*\***

Select pump types:

1-Gilbarco, 2-Wayne: (?)1

Select transmission delay:

1-Normal, 2-Short, 3-Shorter, 4-The shortest: (1)

Set pump communication port:

Baud: 1-1200, 2-2400, 3-4800, 4-5760, 5-9600 -> (5)4

Character size: 1-7 bits, 2-8 bits -> (2)2

Parity: 1-Odd, 2-Even, 3-None -> (3)2

**\*\*\*\* DIRECT PUMP VERSION: 10.01C \*\*\*\***

Pumps: Gilbarco, Transmission Delay: Normal

Baud rate: 5760, Data bits: 8, Parity: Even, Stop bits: 1

### 2) Configure PCT # (# = 1 to 4)

The next step is to define the PCT is going to be used for DPC.

Configure PCT # (# = 1 to 4)

Is this a K800 PCT (Y/N)? N

Is this a UPC (Y/N)? y (This defines the PCT is for DPC)

Does this UPC allow hose RESTRICTIONS (Y/N)? N

### 3) Configure PCT # POS # (# = PCT 1 to 4 and POS 1 to 8)

Configure PCT # POS #

Note: System/2 PCT

PCT 1 Position 1 (Tells you what position you configuring)

Enter Pump #: 1 (Enter the pump # that is connected to this PCT POS)

Enter pump's direct address (1): (Address that the pump will associated with)

Select dispenser type: 1-Standard, 2-Without SF, 3-Highline -> (1)

Enter Pulses Per GALLONS: 100 (don't care)

MAX Fuel to be dispensed per transaction: 10 (Largest tank to be filled for this pump)

Pump Sentry Options (Y/N)? Y

Pump Sentry: ENABLED

Maximum time allowed for fueling (Minutes): 5

Maximum time allowed to retrieve pump handle (Seconds): 60

Maximum time allowed to detect first fueling pulse (Secs): 60

Maximum time allowed between fueling pulses (Secs): 30

Set Up Hose 1 (Y/N)? y

Enter Fueltype Code #: 1 (Enter the fueltype code)

Enter Tank #: 1 (Enter Tank number - not required for proper operation)

Clear Pump Totals (Y/N)? N

Enter Totalizer Value: 0.0 (Should set to match fueling point totalizer)

Set Up Hose 2 (Y/N)? N (Only required if pump has more than 1 grade!)



Set Up Hose 3 (Y/N)? N (Must match the pump mapping)  
Set Up Hose 4 (Y/N)? N  
Set Up Hose 5 (Y/N)? N  
Set Up Hose 6 (Y/N)? N  
Set Up Hose 7 (Y/N)? N  
Set Up Hose 8 (Y/N)? N

Repeat process to configure each position for each fueling point.

**4) Install PCT # POS # (# = PCT 1 to 4 and POS 1 to 8)**

This command tells the system that a PCT position will be used

**Install PCT # POS #** (Repeat process to install each position you configured)

**5) Install PCT # (# = 1 to 4)**

This tells the system that the PCT is there and it should talk to it.

**Install PCT #** (Repeat process to install each pct you configured)

**6) Install Program**

The last step is to start the DPC communications.

**Install program**

## Terminal Setup

### 1) Configure FIT # (1 to 8)

The system uses variety of terminals

#### C/OPT Terminals



Type: Configure FIT #

```
Is this an OPT (Y/N)? y
Enter Decline Message Time-Out seconds : 15
Enter Prompt Time-Out Code (1..9): 1
Issue Receipts (Y/N)? y
--Enter limit to receive receipts in days (0..99): NO Limit
--Clear Receipt Counter (Y/N)? N
ENABLE Keyboard Access (Y/N)? y
Enter Keyboard Length (1..32): 0 (Defaults to zero, but must be 1-32 to work)
Specify PCTs to shut off on E-Stop (Y/N)? N
Change FIT Access To Pumps (Y/N)? y
--Limit FIT Access To Pumps (Y/N)? N
** ALL Pumps Accessed **
```

The system will then display what is configured

```
FIT Installed
FIT INFO: GRAPHICS PRT PUSH_PULL v1.02S 2990
Island Terminal : OPT
Decline Time-Out: 15 SECONDS
Prompt Time-Out: 15 SECONDS
Receipts: 0 NO Limit To Receive Receipt
Keyboard Access --ENABLED.....Length : 0
PCTs To Shut Off On E-Stop: 1,2,3,4
Card Reader Error Counter: 0
--ACCESS TO ALL PUMPS
```

## K800 Terminals



Type: **Configure FIT #**

```
Is this an OPT (Y/N)? N
this a K800 FIT (Y/N)? y
Enter Decline Message Time-Out seconds : 15
Enter Prompt Time-Out Code (1..9): 1
ENABLE Keyboard Access (Y/N)? y
Enter Keyboard Length (1..32): 0 (Defaults to zero, but must be 1-32 to work)
Specify PCTs to shut off on E-Stop (Y/N)? N
Change FIT Access To Pumps (Y/N)? N
```

The system will then display what is configured

```
FIT Installed
FIT INFO: GRAPHICS PRT PUSH_PULL v1.02S 2990
Island Terminal : K800 FIT
Decline Time-Out: 15 SECONDS
Prompt Time-Out: 15 SECONDS
Keyboard Access --DISABLED
PCTs To Shut Off On E-Stop: 1,2,3,4
Card Reader Error Counter: 0
--ACCESS TO ALL PUMPS
```

## System2 FIT Terminals



Type: **Configure FIT #**

```
Is this an OPT (Y/N)? n
Enter Decline Message Time-Out seconds : 15
Enter Prompt Time-Out Code (1..9): 1
Issue Receipts (Y/N)? y
--Enter limit to receive receipts in days (0..99): NO Limit
--Clear Receipt Counter (Y/N)? N
ENABLE Keyboard Access (Y/N)? y
Enter Keyboard Length (1..32): 0 (Defaults to zero, but must be 1-32 to work)
Specify PCTs to shut off on E-Stop (Y/N)? N
Change FIT Access To Pumps (Y/N)? y
--Limit FIT Access To Pumps (Y/N)? N
  ** ALL Pumps Accessed **
```

The system will then display what is configured

```
FIT Installed
FIT INFO: GRAPHICS PRT PUSH_PULL v1.02S 2990
Island Terminal : System/2 FIT
Decline Time-Out: 15 SECONDS
Prompt Time-Out: 15 SECONDS
Receipts: 0      NO Limit To Receive Receipt
Keyboard Access --ENABLED.....Length : 0
PCTs To Shut Off On E-Stop: 1,2,3,4
Card Reader Error Counter: 0
--ACCESS TO ALL PUMPS
```

## 2) Install FIT # (1 to 8)

This tells the system that the FIT is there and it should talk to it.



# Display Prompts & Receipts

## Dual Language

### 1) Set Language

The Dual feature allows the System2 to change its prompts and receipts to another language. When the cards are setup in the buffer they are assigned a language code. When the card is read by the system it checks the card configuration to determine language code then from this point on prompts and prints receipts in that language.

Note: Network cards do not support dual language.

To set Dual Language type: **SET LANGUAGE <ENTER>**

```
Enable DUAL language (Y/N)? y
--DUAL language Enabled
```

## Receipts

The Receipts section allows you configure the receipts header, trailer, and body.

### 1) Format Receipt Header

The Receipt header can support up to 4 lines. The system can have a Header defined for each language and network receipts. When configuring Network receipt header never use more 2 lines.

To change the receipt header type: **Format Receipt Header <ENTER>**

```
Format Receipt Header      ENTER Language 1 or 2 or N :
```

```
Select the header you wish to set
(1 - language 1, 2 - language 2, N Network)
```

Enter you header.

```
line 1 --> (company name)      --red print (Y/N)? (Say yes for inverse print)
line 2 --> (Company address)   --red print (Y/N)?
line 3 --> (Company Phone #)  --red print (Y/N)?
```

### 2) Format Receipt Trailer

The Receipt Trailer can support up to 4 lines. The system can have a Trailer defined for each language and network receipts. When configuring Network receipt trailer never use more 2 lines.

To change the receipt trailer type: **Format Receipt Trailer**

```
Format Receipt Trailer      ENTER Language 1 or 2 or N :
```



Select the trailer you wish to set  
 (1 - language 1, 2 - language 2, N Network)

Enter you Trailer.

```

line 1 --> (company name)          --red print (Y/N)? (Say yes for inverse print)
line 2 --> (Company address)       --red print (Y/N)?
line 3 --> (Company Phone #)      --red print (Y/N)?
  
```

### 3) Format Receipt Body

The system will allow you to configure what is included, not-included, the order and text for language 1 or 2 for proprietary receipts. Network receipts bodies are fixed and can't be change.

To change the receipt body type: **Format Receipt Body**

ENTER (Show, Delete, Insert, eXit, Line #): S <ENTER>

Line #	Language 1	Language 2	Code
1	>CARD #: <	>	< > 1<
2	>CARD #2: <	>	< > 2<
3	>TRANS #: <	>	< > 3<
4	>PRODUCT: <	>	< > 4<
5	>QUANTITY: <	>	< > 5<
6	>PR/UNIT:\$ <	>	< > 6<
7	>TOTAL: \$ <	>	< > 7<
8	>DRIVER: <	>	< > 8<
9	>VEHICLE: <	>	< > 9<
10	>ACCT NAME:<	>	< >10<
11	>SITE ID: <	>	< >11<
12	>MISC: <	>	< >12<
13	>ODOM: <	>	< >13<
14	>MPG: <	>	< >14<
15	>LPHKM: <	>	< >15<
16	>PUMP #: <	>	< >16<
17	>ACCOUNT#: <	>	< >17<

ENTER (Show, Delete, Insert, eXit, Line #):



## Receipt Body Code Variables

Each code represents the information that will be displayed in the receipt body when the receipt is printed. If the transaction does not contain information for the specific transaction receipt it will exclude it from the body.

Code #	Variable	Code #	Variable
1	Card # 1	18	Additional Prompt A
2	Card # 2	19	Additional Prompt B
3	Transaction #	20	Additional Prompt C
4	Product Name	21	Additional Prompt D
5	Quantity	22	Additional Prompt E
6	Price per Unit	23	Additional Prompt F
7	Total price	24	Additional Prompt G
8	Driver/Single Name	25	Additional Prompt H
9	Vehicle Name	26	Additional Prompt I
10	Account Name	27	Additional Prompt J
11	Site ID	28	Additional Prompt K
12	Miscellaneous Prompt	29	Additional Prompt L
13	Odometer Entry	30	Additional Prompt M
14	MPG	31	Additional Prompt N
15	LPHKM	32	Additional Prompt O
16	Pump #	33	Additional Prompt P
17	Account #	34	Additional Prompt Q
		35	Additional Prompt R
		36	Additional Prompt S
		37	Additional Prompt T



## Prompts

### Standard Prompts

The system is standard display messages guide the customer through the fueling process with a series of prompts. These prompts can be changed as needed, but the meaning of the prompt can't be changed. When the customer first approaches the terminals he will see as follows

System Open - Display # 8 & 9 alternating

System closed Receipts only - Display # 6 & 7 alternating

System Closed - Display # 10

To format a display type: **Format display # <ENTER>**

#### Format Display 8

LANGUAGE 1 DISPLAY # 8:

^1^T^KPETRO VEND^L SYSTEM 2

Insert a 2 line Display Message (Y/N)? N

|Lang 1 |

^1^T^KPETRO VEND^L SYSTEM 2

### Additional Prompts

The FSC3000 controller has the ability for addition prompts. These addition prompts original designed for network cards can also be used for additional prompts on proprietary cards. The Additional prompts have the ability just like the other prompts to have the message change. In addition you also have the ability to restrict the number and type of input. The input can alphanumeric, numeric, Numeric (hidden), Yes/no. If dual language is enable you will be able to set different messages for language 1 & 2. You can assign up to 3 additional prompts to each card type.

Note: If using Networks cards on the system do not modify the prompts used by the specific network.

To format a additional prompts: **Set Prompt <ENTER>**

Code	Prompt	Entry	#
A	^5^T^JREFER FUEL Y/N :	Y/N	1
B	^6^T^JMILEAGE:	123	6
C	^5^T^JTRIP #:	ABC	12
D	^5^T^JTRIP LEG:	ABC	2
E	^5^T^JPIN:	***	8
F	^5^T^JDRIVER ^KID:	ABC	16
G	^5^T^JVEHICLE ^KID:	ABC	12
H	^5^T^JTRAILER ^KID:	ABC	12
I	^5^T^JREFER ^KHOURS:	123	5
J	^5^T^JDRIVER LICENSE ^KSTATE:	ABC	2
K	^5^T^JDRIVER LICENSE ^K#:	ABC	25
L	^5^T^JVEHICLE LICENSE ^KSTATE:	ABC	2
M	^5^T^JVEHICLE LICENSE ^K#:	ABC	20
N	^5^T^JTRAILER LICENSE ^KSTATE:	ABC	2
O	^5^T^JTRAILER LICENSE ^K#:	ABC	20
P	^5^T^JDRIVER NAME:	ABC	16
Q	^5^T^JPURCHASE ^KORDER #:	ABC	10
R	^5^T^JCONTROL #:	ABC	12
S	^5^T^JPRO #:	123	12
T	^5^T^JMISC ^KENTRY:	123	8

ENTER (prompt table row # (A-T) or [RETURN] to exit) :



## **Format Display Default**

Later versions of software we added the ability to to reload the default display and additional prompts and from RAM without cold starting the FSC. This completely wipeouts all changes you made to the prompts.

To set time type: **Format Display Prompt <ENTER>**

### **Display TYPE Options:**

- 0 - NO Change
- 1 - 2x16
- 2 - 1x40
- 3 - 2x40 (Graphics)

**ENTER OPTION: 3**

**DISPLAY: 2x40 - (GRAPHICS)**

## System2 Default Display Prompts


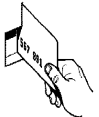

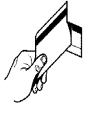



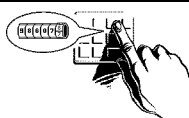
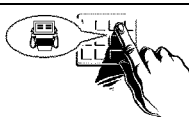

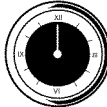


	2x16 Display	Graphics Display
1	SYSTEM OUT OF SERVICE	^: ^T^F SYSTEM OUT OF^G SERVICE
2	READING CARD	^T^K READING CARD
3	REMOVE CARD	^T^K REMOVE CARD
4	INCORRECT READING	^T^K INCORRECT READING
5	CHECK CARD ORIENTATION	^T^K CHECK CARD^L ORIENTATION
6	INSERT CARD FOR RECEIPT	^1^T^KINSERT CARD^LFOR RECEIPT
7	INSERT CARD FOR RECEIPT	^T^KINSERT CARD^LFOR RECEIPT
8	PETRO VEND SYSTEM 2	^1^T^KPETRO VEND^L SYSTEM 2
9	INSERT CARD	^T^K INSERT CARD
10	SYSTEM CLOSED	^: ^T^F SYSTEM CLOSED
11	PLEASE WAIT	^T^J PLEASE^K WAIT
12	PRINTING RECEIPT	^: ^T^F PRINTING^G RECEIPT
13	TAKE RECEIPT	^8^T^F TAKE^G RECEIPT
14	PRINTER ERROR	^0^T^F PRINTER ERROR
15	ISSUE RECEIPT? :	^5^T^K ISSUE^L RECEIPT? :
16	ENTER PUMP #:	^7^T^K ENTER^L PUMP #:
17	IN USE, RE-ENTER:	^T^K IN USE, ^L RE-ENTER:
18	INVALID, RE-ENTER:	^T^K INVALID, ^L RE-ENTER:
19	PUMP HANDLE? RE-ENTER:	^T^K PUMP HANDLE?^L RE-ENTER:
20	FAULTY PUMP, RE-ENTER:	^T^K FAULTY PUMP, ^L RE-ENTER:
21	UNAUTH'ZED, RE-ENTER:	^T^K UNAUTH'ZED, ^L RE-ENTER:
22	RESTRICTED, RE-ENTER:	^T^K RESTRICTED, ^L RE-ENTER:
23	USE PUMP # %	^T^K USE PUMP #^L %
24	INSERT 2nd CARD	^1^T^K INSERT^L 2ND CARD
25	INCORRECT CARD	^0^T^F INCORRECT CARD
26	ENTER CARD #:	^5^T^J ENTER^K CARD #:
27	ENTER PIN:	^5^T^K ENTER^L PIN:
28	ENTER ODOM:	^6^T^K ENTER^L ODOM:
29	ENTER MISC:	^5^T^K ENTER^L MISC:
30	ENTER 2nd CARD #:	^5^T^J ENTER 2ND^K CARD #:
31	RE-ENTER PIN:	^5^T^K RE-ENTER^L PIN:
32	RE-ENTER ODOM:	^6^T^K RE-ENTER^L ODOM:
33	SORRY! NETWORK SYSTEM OFF	^0^T^F SORRY! ^G POS SYSTEM OFF
34	PROCESSING... PLEASE WAIT	^9^T^I PROCESSING^K PLEASE WAIT
35	NOT A NETWORK CARD	^0^T^F NOT A NETWORK CARD
36	CARD EXPIRED	^0^T^F CARD EXPIRED
37	CARD RECORD EXPIRED	^0^T^F CARD RECORD^G EXPIRED
38	CARD INVALIDATED	^0^T^F CARD INVALIDATED
39	3 BAD ENTRIES	^0^T^F 3 BAD ENTRIES
40	ALLOCATION EXCEEDED	^0^T^F ALLOCATION^G EXCEEDED
41	UNABLE TO PROCESS: +	^0^T^F UNABLE^H TO PROCESS: +
42	variable pos messages	variable pos messages
43	ACCOUNT EXPIRED	^0^T^F ACCOUNT EXPIRED
44	ACCOUNT INVALIDATED	^0^T^F ACCOUNT^G INVALIDATED
45	ACCOUNT #s DO NOT MATCH	^0^T^F ACCOUNT #s^G DO NOT MATCH
46	ACCOUNT RECORD NOT FOUND	^0^T^F ACCOUNT RECORD^G NOT FOUND
47	KEYBOARD ENTRY NOT ALLOWED	^0^T^F KEYBOARD ENTRY^G NOT ALLOWED
48	JOURNAL ERROR -GET MANAGER	^0^T^F JOURNAL ERROR^G -GET MANAGER
49	SYSTEM BUSY -BUFFER FULL	^0^T^F SYSTEM BUSY^G -BUFFER FULL
50	ENTER DESIRED QTY. (2-#):	^5^T^K ENTER DESIRED^L QTY. (2-#):
51	RE-ENTER QTY. (2-#):	^5^T^K RE-ENTER^L QTY. (2-#):
52	3 BAD PRESET QTY. ENTRIES	^0^T^F 3 BAD PRESET ^H QTY. ENTRIES
53	ENTER HOSE #:	^KENTER HOSE #:
54	INVALID HOSE RE-ENTER:	^KINVALI RE-ENTER:
55	DO YOU HAVE AN ASSIGNED PIN?	^5^T^KDO YOU HAVE^L AN ASSIGNED PIN?
56	RESERVED	RESERVED
57	RESERVED	RESERVED
58	RESERVED	RESERVED
59	RESERVED	RESERVED
60	RESERVED	RESERVED

## Graphic Codes

When using graphics displays you have the ability to change font, dipplppp

ALL Graphic codes must be upper-case.

CODE	System2 FIT Ver. 1.01	System2 FIT Ver. 1.02A and up C/OPT
^A	Position on Line 1	
^B	Position on Line 2	
^C	Position on Line 3	
^D	Position on Line 4	
^E	Position on Line 5	
^F	Position on Line 6	
^G	Position on Line 7	
^H	Position on Line 8	
^I	Position on Line 9	
^J	Position on Line 10	
^K	Position on Line 11	
^L	Position on Line 12	
^M	Invert Display	Position on Line 13
^N	Restore display	Position on Line 14
^O	N/A	Position on Line 15
^P	N/A	Invert Display
^Q	N/A	Restore Display
^T	Insert Current Time	
^V	Sm. Sans-Serif Font	
	!#\$%&()*+,-./012345 6789:;<=>?@ABCDEFGHIJ KLMNOPQRSTUVWXYZ[\ ] ^ - " ' ;	
^X	Lg. Sans-Serif Font Int.	
	!#\$%& í ú * + , - . / 0 1 2 3 4 5 6 7 8 9 : ñ = ö ? ü A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ä ß ç ì É Ê á ó	
^Y	Lg. Serif Font	
	!#\$%&()*+,-./012345 6789:;<=>?@ABCDEFGHIJ KLMNOPQRSTUVWXYZ[\ ] ^ - " ' ;	
^Z	Large Sans-Serif Font Std.	
	!#\$%&()*+,-./012345 6789:;<=>?@ABCDEFGHIJ KLMNOPQRSTUVWXYZ[\ ] ^ - " ' ;	
^0	Clear Display	

CODE	System2 FIT	C/OPT
^1		
^2		
^3		
^4		
^5		
^6		
^7		
^8		
^9		
^:		



## Download

When a system first starts communicating with the Pump controllers and terminals it downloads configuration related to that device. If you change information after communication has been established with those devices you need to tell the FSC to download the configuration again.

You can download all configurations by typing: **Download <ENTER>**

Or you could Download specific devices

**Download PCT # (Leave out # to download all PCTs)**

**Configure PCT #**

**Configure PCT # Position #**

**Download FIT # (Leave out # to download all FITs)**

**Configure FIT #**

**Format Receipt Header**

**Format Receipt Trailer**

**Format Receipt Body**

**Format Receipt Bonus Points**

**Format Display #**

**Format Keyboard #**

## Set Journal

To setup Journal Printer type: **Set Journal <ENTER>**

**Office Journal (Y/N)? y**

**Set Journal printer options (Y/N)? y**

**Print:**

**ACCOUNT, DRIVER, VEHICLE, ODOM, and MISC (Y/N)? y**

**ACCOUNT #, CARD 2 (Y/N)? y**

**Prompt Responses (Y/N)? y**

**STOP line skip between transactions (Y/N)? y**

**Journal ERROR option (Y/N)? y**

**--ENABLE Auth on journal ERROR (Y/N)? y**



## FSC3000 memory structure

The FSC3000 memory is divided into 3 sections as defined below.

### Application Memory

The section of memory of the FSC3000 is dedicated to the application. The size of memory allocated here is determined by the Firmware version of the controller. This is where all the configurations such as the pump, terminal, products, etc. are stored. The size of this memory cannot be change therefore there is nothing you need to do.

### Transaction Buffer (Memory)

This is where the transaction data is stored. You can specify the amount of transactions you wish to store when the FSC300 is purchased. The FSC3000 can be purchased with the following transaction levels with level 2 as the default.

Transaction Level	# of Transactions
2 (Std.)	500
3	1000
4	2000

### Card/Account Buffer (Memory)

This memory is where all cards and account are stored. The number of card/accounts that you wish to store is specified when the FSC3000 is ordered. The FSC3000 will support the following Card/Account levels.

Card Level	# of Cards	Min Options on Cards	Max Options on Cards
2 (Std.)	2000	2000	2000
3	8000	8000	8000
4	MAX	63,290	8900

Note: The maximum card/accounts the FSC3000 can support currently are 63,290 with no options and 8900 with all options. As features are added to the FSC3000 controller the memory size for card/account will decrease. For the current number of cards the FSC can support at level 4 contact technical support.

## 1) Set Card Buffer (option 1) - Card/Tran size

The next step is to set the number of transactions you wish to store. The system will display the max number of transactions you can store based on the transaction level that was purchased. The next step will be to set the card/account size

To setup Card/Tran buffer type: **Set Card Buffer <ENTER>**

- 1 - Specify Card/Tran buffer size
- 2 - Define Card/Account record
- 3 - Clear Card Record Totals
- 4 - Reconcile Card Record Allocation
- 5 - Clear All Account Record Totals
- 6 - Reconcile Account Record Allocation
- 7 - Month End Totals
- 8 - Set Keyboard Card Control Data
- 9 - Additional Options
- X - Exit

Enter Choice: 1

NOTE: Transaction and message buffer will be CLEARED !! (Y/N)? y

Enter # of transactions to be stored (max 2000): (Enter the number that is displayed)

#NOTE: Transaction buffer will be CLEARED!! Are you sure (Y/N)?y

Enter # of cards to be stored (max xxxxxx):

- 1 - Specify Card/Trans buffer size
- 2 - Define Card/Account record
- 3 - Clear Card Record Totals
- 4 - Reconcile Card Record Allocation
- 5 - Clear All Account Record Totals
- 6 - Reconcile Account Record Allocation
- 7 - Month End Totals
- 8 - Set Keyboard Card Control Data
- 9 - Additional Options
- X - Exit

Enter Choice:



## **2) Set Card Buffer (option 2) - Card/Account Options**

The next step of setting up the system is to define how the card/account file will be setup.

Except the card level 2 (2000) and 3 (8000), the number of cards and accounts the system can hold is based on the number options you define for the card/accounts. The more options you assign the larger the individual card/account size increases, therefore decreasing the number of card/accounts you can fit into the card/account Buffer (memory).

Note: Unless otherwise noted to disable or enable options you will need to re-define the card buffer. This will involve the clearing and re-entering of all card/account records. Therefore if you wish to use one of the following options at a later date, it is wise to include it in the initial setup.

Before we start we will be covering what options are available and how they work.

### **Account #:**

When enabled this option requires you to assign a 4 digit account # to each card and also insert the account into the card file. This account number allows you to group cards together for reporting when using the optional report package. When using driver/vehicle cards with accounts enabled you can use card/account restriction. Card/account restriction allows you to restrict certain drivers to vehicles or certain vehicles to drivers.

Example: For a driver to use a vehicle card/key his account number must match or the driver or vehicle must be in account 0000. So if you put the driver into account 0000 then he could use any vehicle or if you put the vehicle into account 0000 then any driver could use this vehicle.

### **Expiration Date:**

This option allows you to define a date when each card/account can no longer be used in the system. This option is global and will require all cards/accounts to have the expiration date defined.

### **Monthly Allocation:**

Not recommended for multi-site systems. Allow you to define a monthly monetary amount limit for each card/account. This option is global and will require all cards/accounts to have the amount defined. (See SET CARD - options 3,4,5,6,7 for more information related to allocation)

### **Daily Allocation:**

Allow you to define a daily monetary amount for all card/account records. This option is global and will require all cards/accounts to have the amount defined.



**PIN #:**

This option allows you to assign a Personal Identification Number to a single and/or driver card. Even with this option enabled, you can still disable PIN numbers for specific cards.

**Card Invalidation:**

This option is not available if you do not select "PIN #" option. Allows you have a card automatically invalidated when the user enters three bad PIN numbers. This option can be changed with re-defining the card buffer.

**Save Odometer Entries:**

Not recommended for multi-site systems. Allows the odometer entry from the last fueling transaction to be stored in the card parameters for Single & vehicle cards. This option must be activated for MPG or KM/L calculations to be performed (via the option Internal Report Package) and Odometer Reasonability option. If you were not using internal report package or odometer reasonability then I would recommend disabling this option

**Odometer Reasonability:**

Not recommended for multi-site systems. This option is available if you selected save odometer entries. This option allows you to select an Odometer restriction code for a single or vehicle card that will reference the Odometer Reasonability Table. This feature is used to check the difference in mileage from the odometer stored in the card file to the odometer entered for the current transaction. The difference is then compared to the against the odometer reasonability table with the code defined for that card. If the mileage traveled is between the lower and upper limit the odometer is considered reasonable and the transaction will continue. If the transaction mileage is higher than the upper limit or lower than the lower limit the transaction mileage entry is considered unreasonable and the system will respond in one of the two ways.

Accept the third bad entry and fueling is allowed

Reject the third the bad entry and terminate transaction

Odometer Reasonability Table Setup is required - If used.

**Product Restriction:**

Allow you to define a product restriction code to each card/account. This code is then assigned to cards and accounts and defines which product(s) can be accessed. If you are unsure if you want product restriction you can enable this option and assign each card a code 00 for unrestricted.

Common Use: Using single cards (associated to vehicles) and Vehicles cards (dual card system) you would restrict the vehicle to the fueltype it uses.

Product Table Setup is required - If used.



### **Quantity Restriction:**

Allow you to define a quantity restriction code to each card/account to limit how much fuel each transaction can pump. This code then references the quantity restriction table to which defines what pump(s) can be accessed. If you are unsure if you want quantity restriction you can enable this option and assign each card a code 00 for unrestricted. The Quantity restriction can be setup to limit either by quantity or monetary but not both.

Common Use: Using single cards (associated to vehicles) and Vehicles cards (dual card system) you would use this to restrict the transaction from pumping more than the tank size of the vehicle.

Quantity Restriction Table Setup is required - If used.

### **Driver/Vehicle/Name:**

This option allows you to assign a name up to nine characters to each Single/Driver/Vehicle or account.

### **Verify Prompts 1, 2, 3:**

This option allows you to have 3 of the additional prompts verified against the value setup on the card. This is basically like another PIN number. I recommend not using.

### **Prompt-Sequence:**

This option allows you to have 3 additional prompts for each card type and account. The additional prompts can be setup to have a predefined input such as alphanumeric, numeric, yes/no, and max number of input. This option is already enabled if Verified Prompts was enabled.



To setup Card/Account buffer type: Set Card Buffer <ENTER>

- 1 - Specify Card/Tran buffer size
- 2 - Define Card/Account record
- 3 - Clear Card Record Totals
- 4 - Reconcile Card Record Allocation
- 5 - Clear All Account Record Totals
- 6 - Reconcile Account Record Allocation
- 7 - Month End Totals
- 8 - Set Keyboard Card Control Data
- 9 - Additional Options
- X - Exit

Enter Choice: 2

Card/Account Records: Card/Account storage NOT yet defined

Specify Card/Account record (Y/N)? y

--Card/Account file will be DESTROYED !!! Sure (Y/N)? y

ACCOUNT #'S (Y/N)? y

EXPIRATION DATE (Y/N)? y

MONTHLY ALLOCATION (Y/N)? y

DAILY ALLOCATION (Y/N)? y

PIN # (Y/N)? y

-- CARD INVALID AFTER 3 BAD PIN ENTRIES (Y/N)? y

SAVE ODOMETER ENTRIES (Y/N)? y

ODOMETER REASONABILITY (Y/N)? y

PUMP RESTRICTION (Y/N)? y

QUANTITY RESTRICTION (Y/N)? y

DRIVER / VEHICLE / ACCOUNT NAME (Y/N)? y

VERIFY 1 (Y/N)? N

VERIFY 2 (Y/N)? N

VERIFY 3 (Y/N)? N

PROMPT-SEQ. (Y/N)? y

Maximum Cards/Accounts: 1911

- 1 - Specify Card/Tran buffer size
- 2 - Define Card/Account record
- 3 - Clear Card Record Totals
- 4 - Reconcile Card Record Allocation
- 5 - Clear All Account Record Totals
- 6 - Reconcile Account Record Allocation
- 7 - Month End Totals
- 8 - Set Keyboard Card Control Data
- 9 - Additional Options
- X - Exit

Enter Choice:

## Restrictions & Reasonability

### Set Product Restriction

Allow you to define which products can be activated when a card is assigned the specific code. For this feature to work on electronic pumps with multiple products the allow product restriction must be set to yes when pct is configured.

Card/Account buffer - Product Restriction option had to be setup to use this.

To set Pump Restriction Table type: **Set Product Restriction** <ENTER>

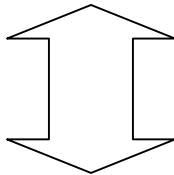
#### Pump Restriction Codes:

CODE 0 \*\* ALL Products Valid \*\*

CODE 1: Valid Products: NONE  
--Specify Code 1 (Y/N/X)? Y

Enter Valid Products (1-32)  
->

CODE 2: Valid Products: NONE  
--Specify Code 2 (Y/N/X)? N



CODE 14: Valid Products: NONE  
--Specify Code 14 (Y/N/X)? N

CODE 15: Valid Products: NONE  
--Specify Code 15 (Y/N/X)? N



## Set Quantity Restriction

Allow you to assign a Monetary or Quantity number to specific code. The Quantity restriction can be setup to limit either by quantity or monetary but not both.

Card/Account buffer - Quantity Restriction option had to be setup to use this.

To set Quantity restriction table type: **Set Quantity Restriction** <ENTER>

### QUANTITY RESTRICTION CODES:

(values represent quantities)

CODE 0: NO Restrictions  
CODE 1: 20  
CODE 2: 40  
CODE 3: 60  
CODE 4: 80  
CODE 5: 100  
CODE 6: 120  
CODE 7: 140  
CODE 8: 160  
CODE 9: 180  
CODE 10: 200  
CODE 11: 220  
CODE 12: 240  
CODE 13: 260  
CODE 14: 280  
CODE 15: 300

Qty restriction value options (Y/N)? N

## Set Odometer reasonability

This table is where assign the ranges for odometer reasonability feature. Each code you would assign a minimum and maximum range. This rang would then be assigned to single or vehicle cards. During a transaction the difference is then compared to the against the odometer reasonability table with the code defined for that card. If the transaction mileage is higher than the upper limit or lower than the lower limit the transaction mileage entry is considered unreasonable and the system will respond in one of the two ways. Depending on how you defined it.

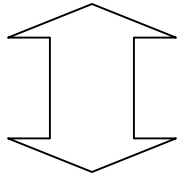
Accept the third bad entry and fueling is allowed

Reject the third the bad entry and terminate transaction

Card/Account buffer - Odometer Reasonability option had to be setup to use this.

To set Odometer Reasonability table type: **Set Odometer Reasonability <ENTER>**

- 1) Enter MINIMUM mileage: 0  
Enter MAXIMUM mileage: 100
- 2) Enter MINIMUM mileage: 0  
Enter MAXIMUM mileage: 250
- 3) Enter MINIMUM mileage: 0  
Enter MAXIMUM mileage: 500



- 14) Enter MINIMUM mileage: 150  
Enter MAXIMUM mileage: 700
- 15) Enter MINIMUM mileage: 150  
Enter MAXIMUM mileage: 1000

--Change action after BAD Odom entries (Y/N)? y  
Allow fueling if 3 BAD Odom entries (Y/N)? N





# Card/Account Management

## Understanding the Card file

### Media Formats

#### ChipKey

Proprietary System2 (R/W only)	Format - NNNNCCCCCCCCCCCCCCC
Proprietary K3000L	Format - NNNNCCCCC
Proprietary K800	Format - NNNNCCCC (ChipKey R/W)
Proprietary K800	Format - NNNNCCCCC (all other software)

#### Magnetic Cards

Proprietary System2	Format - NNNNCCCCCCCCCCCCC
Proprietary K800	Format - NNNNCCCC
Non-Proprietary	Format - Track 2 first 19 digits

#### Optical Cards

Proprietary System2	Format - NNNNCCCCC
---------------------	--------------------

#### Proximity

Format - Varies up to 19 digits

#### Keypad

Standard Card Record	Format - up to 8 digits
Multi-truck SW	Format - Up to 19 digits (can be limited)

## Card/Account Adding/Modifying/Deleting

Insert Card  
Edit card  
Delete card

Insert Account  
Edit Account  
Delete Account

Set Security Table



## Card/Account Reports

Print/Show Card # (leave out # for all cards)  
Print/Show <validity><source><category> Card <range>  
Print/Show Account # (leave out # for all accounts)  
Print/Show Account # (leave out # for all accounts)  
Print/Show Card Account #  
Print/Show Card Account  
Print Show Card Summary

# Set Network

set network

## NETWORK CHOICES

- 1 - NBS\BankCard
- 2 - FDIS
- 3 - Comdata
- 4 - CFN
- 5 - T-CHEK
- 6 - NBS\FMGC
- 7 - EFS
  
- 8 - Set Time Zone
- 9 - Set Fleet Table
- 10 - Perform Communication Test
- 11 - Set Forced Trans Capture Time
- 12 - Force Transaction Capture.....117 Seconds
- 13 - Print Price and Total on Network Receipts: Yes
- 14 - Satellite connection used in place of modem: No

Enter option number or press [RETURN] to exit:

## NETWORK option settings

NETWORK : NBS\BankCard

- 1 - Site ID.....
- 2 - Site Name.....
- 3 - Site City.....
- 4 - Site State.....
- 5 - Redial Attempts..... 1
- 6 - Connect Time.....(Seconds).... 30
- 7 - Local Authorization..... Disabled
- 8 - Network System..... ON
  - ON..... 12:00 AM
  - OFF..... 12:00 AM
- 9 - Authorization Message..... HAVE A SAFE TRIP
- 10 - Re-Prompt Time.....(Minutes).... 10
- 11 - Communication Parameters..... 1200 7E1 T60Y

Enter option number or press [RETURN] to exit:



# Set Fleet

Set fleet  
 R>set fleet

# ?	Fleet/Acct	Name	PromptSeq	Primary	Secondary	Onln	Off	A	B
1							0		
2							0		
3							0		
4							0		
5							0		
6							0		
7							0		
8							0		
9							0		
10							0		
11							0		
12							0		
13							0		
14							0		
15							0		
16							0		
17							0		
18							0		
19							0		
20							0		

ENTER (fleet table row # (1..20) or [RETURN] to exit) :



## Set ISO

set iso

ISO table for Bank, Fleet and Private Label card configuration

I - ISO #                                    C - Card Number  
L - Luhn check digit    = - must be field separator  
M - Month                                    X - don't care digit or field separator  
Y - Year                                      # - don't care digit  
0-9 - must be specified digit  
> - don't check length to the end OR alternate network card

ISO #1:            VISA                                    --Inactive

Format:            ICCCCCCCCCCL=YYMM>

ISO Range: 4-4

# of digits to display/print: 4

Type/OFP: 6/000-1

ALL Products Valid

--Modify this ISO (Y/N/X)? N

ISO #2:            VISA FLEET                                    --Inactive

Format:            IIIIIICCCCCCCCCL=YYMM>

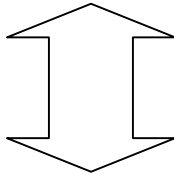
ISO Range: 448460-448611

# of digits to display/print: 4

Type/OFP: 18/000-1

ALL Products Valid

--Modify this ISO (Y/N/X)? N



ISO #23:            Row NOT defined!

--Modify this ISO (Y/N/X)? N

ISO #24:            Row NOT defined!

--Modify this ISO (Y/N/X)? N

ISO #25:            Row NOT defined!

--Modify this ISO (Y/N/X)? N





# Transaction Management

## Set Transaction

To set Transaction options type: **Set Transaction** <ENTER>

Set wrap around options ? y  
-Enable wrap around ? y  
-Write Over NON-CAPTURED or FAILED Transactions ? y  
Re-Define Transaction ? y  
-TRANS = Unauthz'd users also ? y  
Specify displayed fields ? y

Enter 'Y' to display the field:

ACCOUNT, DRIVER, VEHICLE ? y  
DATE & TIME ? y (required for Phoenix)  
HOST CAPTURE Date/Time? y  
TRANS # ? y (required for Phoenix)  
CARD #1 ? y (required for Phoenix)  
CARD #2 ? y (required for Phoenix if using driver/vehicle cards)  
FUELTYPE ? y (required for Phoenix)  
PUMP ? y (required for Phoenix)  
HOSE ? y (required for Phoenix if using reconciliation and multi-hose pumps/dispensers)  
QUANTITY ? y (required for Phoenix)  
USE 8 Digit field length? y  
PRICE ? y (required for Phoenix)  
TOTAL ? y  
ODOMETER ? y (required for Phoenix if you want transaction MPG reports)  
DISTANCE PER UNIT ? y  
MISCELLANEOUS ? y (required for Phoenix if you want in transaction reports)  
RECEIPT STATUS ? y  
ACCOUNT # ? y  
PROMPT ENTRIES ? y  
Send in Computer format ? y  
  
--Computer format check data in header ? y

## Transaction Reports

Print/Show Transaction # (leave out # for all transactions)  
Print/Show Transaction Summary  
Print /Show Day (Current day)  
Print/Show Day <mmmm dd,yyyy>  
Print/Show Shift

## Transaction Searches

Print/Show Transaction where Date = <mmm dd,yyyy>  
Print/Show Transaction where Date < <mmm dd,yyyy>  
Print/Show Transaction where Date > <mmm dd,yyyy>  
Print/Show Transaction where Time = <mmm dd,yyyy>  
Print/Show Transaction where Time < <mmm dd,yyyy>  
Print/Show Transaction where Time > <mmm dd,yyyy>  
Print/Show Transaction where Card = <#>  
Print/Show Transaction where Account = <#>

## Clearing Transactions

Clear Transaction <mmm dd,yyyy> Sequence <#>  
Clear Transaction (all)

## Pump & Fuel Reports

Print/Show Fueltype # Totals (leave # out for all Fueltypes)  
Print/Show Pump # Totals  
Print/Show PCT # Totals  
Clear Pump # Totals  
Clear PCT # Totals  
Print Show Midnight Totals

## Other Commands

CALL  
Test  
Format LCD