PIcon II Console Controller

Installation Guide
and
User Reference Manual

PROGRESSIVE INTERNATIONAL
ELECTRONICS

PROGRESSIVE INTERNATIONAL ELECTRONICS

1106 Great Falls Court, Suite G
Knightdale, NC 27545
www.pie-corp.com

PEI™
MEMBER

PIcon II Console Controller
User Reference Manual
CONTENTS

PIcon II Manufacturer's Warranty

Progressive International Electronics, Inc. (SELLER) warrants to the Purchaser of the PIcon II fuel control equipment manufactured by Seller against defects in material or workmanship for one (1) year from date of shipment. Seller will replace or repair defective parts or replace and issue credits to the Purchaser's account in accordance with the following Conditions of Warranty.

CONDITIONS OF WARRANTY

1. Credit will be applied only when the completed warranty request form and the defective parts are received and inspected.

    Decisions to repair or replace defective equipment are solely at the discretion of PIE.

2. When parts shipments are made prior to receiving the required warranty request and defective parts, they will be billed to the Purchaser.

3. In all cases, approved warranty requests will be expedited by issuing the appropriate credit to the Purchaser's account and shipping replacement parts.

4. Credits will not be issued for parts and no cash refunds for warranty credits will be made.

5. All components and parts must be returned to the factory prepaid, and in turn, replacement components and parts will be returned prepaid by the factory.

6. Seller's warranty applies only if the equipment has been installed and used in accordance with Seller's instructions. The warranty is void if any unauthorized alteration or addition has been made to the equipment or if it has been subject to damage caused by abuse, misapplication, accident or improper operation.

7. The Seller's liability for any damages, including contribution and indemnification, arising out of or in any way connected with the supplying of the equipment or its use, shall not in any case exceed the cost of repair of the equipment as herein provided. Upon expiration of the warranty, all such liability, as well as any other liability, shall terminate.

8. Nothing contained herein shall make the Purchaser, its agents or employees, an agent or representative of Seller and Seller assumes no responsibility of any act, omission, representation or warranty by the Purchaser or anyone else except as expressly stated herein.

9. The final Decision as to the validity of any claims arising under the warranty shall be determined solely by the Seller.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESAID OBLIGATIONS AND ARE HEREBY DISCLAIMED AND EXCLUDED BY SELLER.

History of Documentation

Rev. 1.0

     Initial Release

Rev. 1.1

     Added System Warnings in French

Rev. 2.0

     Under Quick Startup, added step:

          Manager Mode MGR 1, Program Product Price

          Program Mode PGM 60, Pump Specific Settings

     Under Manager Mode M 3, Print Reports, added:

          PRN 15, Print Interrupt Log

          PRN 16, Print Application Log

          PRN 17, Print Debug Info

     Under Programming, added:

          PGM 12, Clear Event Log

          PGM 13, Program Operator/Manager PIN Codes

          PGM 14, Drive Away Activation

     Updated Table: Dispenser-Specific Configurations

     Added PIcon II Basic Troubleshooting

Rev. 2.1

     Under Programming, added:

          PGM 15, Program Tax Percentage

          PGM 16, Pump Interface (PIPort / RS422)

          PRN 18, Print Diagnostics Report

Rev. 2.2

- Remove the Remove Protection instructions in the Code Update section

Rev. 2.3

- Added MGR 11, Global Full/Self Service

Notice

Progressive International Electronics reserves the right to revise and improve this document as required. This publication details our PIcon II Console at this time, and may not accurately describe these products at all times in the future. Specifications are subject to change without notice.

Copyright

Patents

Progressive International products are manufactured or sold under one or more of the following U.S. patents.

5,790,410	5,663,887	5,361,216
5,831,861	5,557,529	5,270,943
5,694,326	5,394,336	5,108,742
20,140,074,282		

Service App

The most recent release of the PIcon II Installation Guide and User Reference Manual is always available at pie-corp.com in .pdf format. For assistance in the field, be sure to download the PIE Support App from the Google Play Store, or use the QR code or link below.

https://play.google.com/store/apps/details?id=com.piecorp.pie_inc_support

GENERAL INFORMATION AND WARNINGS
General Information

The PIcon II is an economical, full-featured console designed to provide control of up to 16 fueling positions. While most consoles can only control one type of fuel dispenser, the PIcon II may be configured to run any major brand electronic or mechanical dispenser. This is accomplished through the use of brand-specific Progressive International PI DBoxes that contain the unique circuitry required to interface to each individual dispenser brand. An alternative to this solution is the use of configurator boxes, supplied by PIE, along with the dispenser manufacturer's DBox.
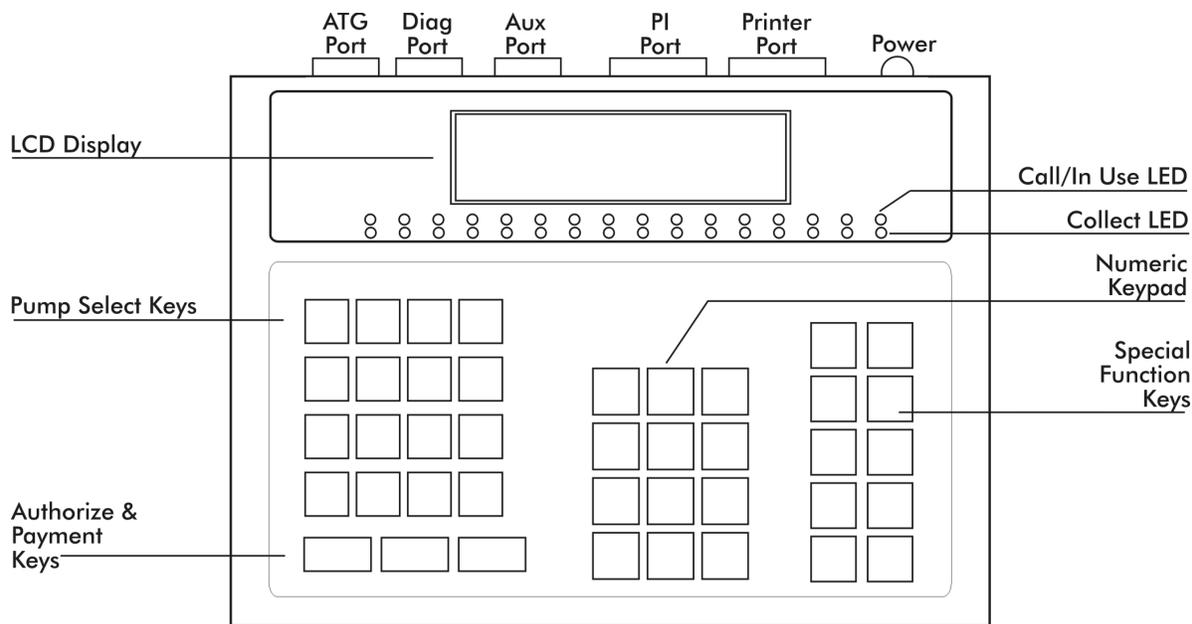
Diagram: PIcon II Port and Keyboard Layout

PIcon II provides full features, yet is very simple to install and operate. Due to meticulous design of the keyboard and display layout, keystrokes are kept to a minimum during programming setup and normal operation modes.

Standard features provided by the PIcon II for efficient control of fueling dispensers include:

- Full featured console which includes prepay/postpay, preset, drive-away alerts, stacked sale, cash/credit operation.
- Management features including dispenser, shift and station totals, management security, prices programmed by product.
- Easy to read LCD display.
- Controls up to 16 fueling positions — including *all major electronic and mechanical dispensers* and blending dispensers.
- Audible alerts for call, drive-away and collect, with low- and high-volume settings.
- Memory backup to retain data in the event of power outage.
- Built-in hardware clock to time stamp all reports.

- Compact size allowing convenient counter-top positioning while utilizing a minimum amount of valuable counter space.
- Standard printer interface for use with most low-cost parallel printers.
- Ease of installation — console wires directly into dispenser distribution boxes or PI DBoxes.

Prior to installation or operation of the PIcon II, please review each section of this manual and other pertinent equipment manuals to familiarize yourself with the system.

General Specifications

Operating Temperature	32 to 120 degrees F (0 to 49 degrees C)
Storage Temperature	32 to 120 degrees F (0 to 49 degrees C)
Humidity	50 to 90% non-condensing
Electrical Supply	110VAC, 25 watts maximum
Size	10.5" x 9" x 4"
Safety Certifications	MET labs US, CA CE

⚠

System Installation Warnings

Safety hazards are inherent with all electrical equipment. Standard precautions must be taken at all times during installation and operation of the PIcon II systems. In addition to normal electrical precautions, the following points should be noted during installation.

- Installation must comply with the National Electrical Code, as well as Federal, State/Provincial, Local, and all applicable codes.

- High voltages are present in the PIcon II components, as well as the equipment to which it is attaching. To prevent personal injury or equipment damage, disconnect all power before proceeding with installation.

- PIcon II equipment must be installed in non hazardous areas. The main box must be protected from severe vibration, extreme temperatures and excessive humidity.

- All equipment connected to the PIcon II must be UL-approved and mounted in a nonhazardous location using standard RS232 communication.

For Use in USA

Installation of the PIcon II fuel control system must comply with the requirements of the National Electrical Code (NFPA 70), the Automotive and Marine Station Code (NFPA 30A), and all Federal, State, Local, and applicable safety codes.

For Use in Canada

Installation of the PIcon II fuel control system must comply with the requirements of the Canadian Electrical Code, the Flammable and Combustible Liquid Code, and all Federal, Provincial, Local and applicable safety codes.

The installation of the systems covered by this manual in conjunction with equipment not UL Listed has not been evaluated by the Underwriters Laboratories and is outside the intended us of this equipment. Warning: All dispensing equipment discussed in this manual is not UL Listed and the combination has not been evaluated by Underwriters Laboratories.

⚠

Avertissements Système

Risques de sécurité sont inhérents à tous les équipements électriques. Les précautions standard doivent être prises à tous les fois pendant l'installation et le fonctionnement des systèmes PIcon II. En outre à la normale électrique précautions, les points suivants doivent être pris pendant l'installation.

- L'installation doit se conformer au Code national de l'électricité, ainsi que fédérales, d'État/provincial, Local, et tous les codes applicables.

- Hautes tensions sont présentes dans les composants PIcon II, ainsi que l'équipement auquel il est la fixation. Pour prévenir les blessures ou des dommages matériels, débrancher l'alimentation avant procéder à l'installation.

- Équipements PIcon II doit être installé dans les zones non dangereux. La boîte principale doit être protégé de fortes vibrations, aux températures extrêmes et à l'humidité excessive.

- Tous les équipements connectés à l' PIcon II doit être homologué UL et monté dans un non dangereux emplacement en utilisant la communication RS232 standard.

Pour Utilisation aux Etats-Unis

L'installation du système de commande de carburant PIcon II doit se conformer aux exigences de la National Electrical Code (NFPA 70), l' Automobile et le Code Station Marine (NFPA 30A), et tous les fédéral, État, local, et les codes de sécurité applicables.

Pour Utilisation au Canada

L'installation du système de commande de carburant PIcon II doit se conformer aux exigences de la canadienne Electrical Code, le Code liquides inflammables et combustibles, et tous les fédéral, provinciaux, étatiques, Codes de sécurité locales et applicables.

L'installation des systèmes couverts par ce manuel en conjonction avec un équipement non UL Inscrite n'a pas été évalué par les Underwriters Laboratories et est en dehors de l'utilisation prévue de cet équipement. Attention: Tous les équipements de distribution discuté dans ce manuel ne est pas UL et la combinaison n'a pas été évaluée par Underwriters Laboratories.

INSTALLATION
General Installation Guidelines

The basic PIcon II system consists of several components — the PIcon II console, interconnect box, PI DBox and parallel printer cable. Refer to **Diagram: PIcon II Port and Keyboard Layout**, which shows the various connections of the PIcon II system, including the port for optional printer. If further assistance is required, please contact your PIcon II dealer.
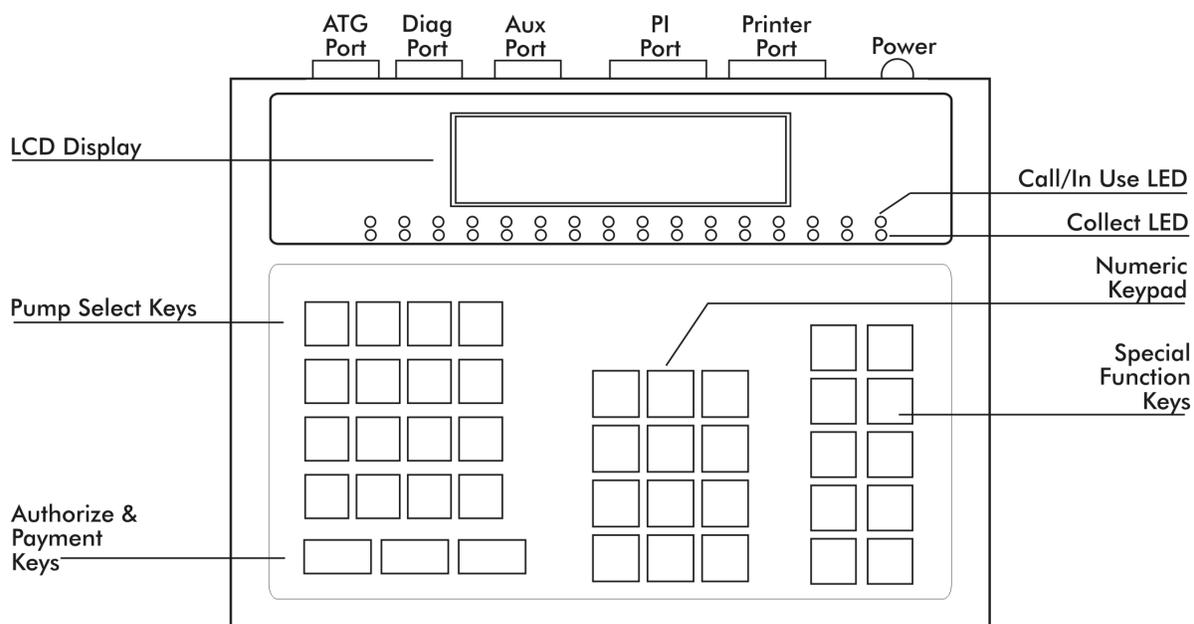
Diagram: PIcon II Port and Keyboard Layout

To install the PIcon II:

1. Place the console at the checkout counter of the station.

2. If using the PI DBox, refer to the PI DBox Installation Guide for detailed installation instructions. Attach the PIcon II system to the dispenser data distribution equipment for the appropriate dispenser type.

3. If a printer is to be used with the PIcon II, attach the printer cable to the connector on the back of the parallel printer and the other end to the printer port on back of the PIcon II.

4. If using the PI Configurator and the dispenser manufacturer's DBox, refer to the PI Configurator Installation Guide and the dispenser manufacturer's DBox installation guide for detailed instructions. Mount under the counter or on a wall adjacent to the console, not more than five feet away. Using the PIcon II cable, connect the configurator to the PIcon II's PI port.

5. Upon completion, apply power to all the components of the PIcon II system and perform Quick Startup as described on the following page. Then commence programming, as outlined in Programming Section of this manual. *Note: An uninterruptable power supply is recommended for clean power.*

PIcon II

Serial Cable

PI DBox

Pump Wires

Dispenser

NOTE
See DBox Installation
Guide for more information
on dispenser-specific wiring
to a PI DBox.

PIcon II to Dispenser Using PI DBox

PIcon II

Brand-Specific
Configurator Cable

PI Configurator

Serial Cable

**Manufacturer's
DBox**

Pump Wires

Dispenser

NOTE
See Configurator Installation
Guide for more information
on dispenser-specific wiring.

PIcon II to Dispenser Using PI Configurator and Dispenser Manufacturer's DBox

Quick Startup

This quick startup procedure lists the order and minimal programming steps for operation of the PIcon II. For more detailed explanations or for programming of optional modes, refer to the Programming Section of this manual.

1. Program Mode PGM 1 — Pump Type
       Note: Pump Type <u>must</u> be selected before other programming can be completed.

2. Program Mode PGM 2 — Dispenser Setup Information

3. Program Mode PGM 3 — Product Information

4. Manager Mode MGR 1 — Program Product Price

5. Program Mode PGM 60 — Pump Specific Settings
       Note: Certain dispenser brands require that each Model Type is configured for proper functionality.

Prior to performing Quick Startup, press <SELECT> twice and check to ensure that the date is correct. If incorrect, change date as explained in Manager Mode Section, MGR 5 — Set Date and Time. If date is correct, calculate restricted code by multiplying the current month, times the day, plus the year. For example, if the date were December 10, 2000, the restricted code would be calculated as follows:

$$12 \times 10 + 2000 = 2120 \quad \text{Restricted access code would be 2120.}$$

OPERATION

Introduction

In Operation Section, all functions available to the operator of the PIcon II are outlined. **Table: Key Functions** on the following page provides brief descriptions of key functions. Also, refer to **Diagram: PIcon II Port and Keyboard Layout**, below, for general locations of various keys, indicators and display.
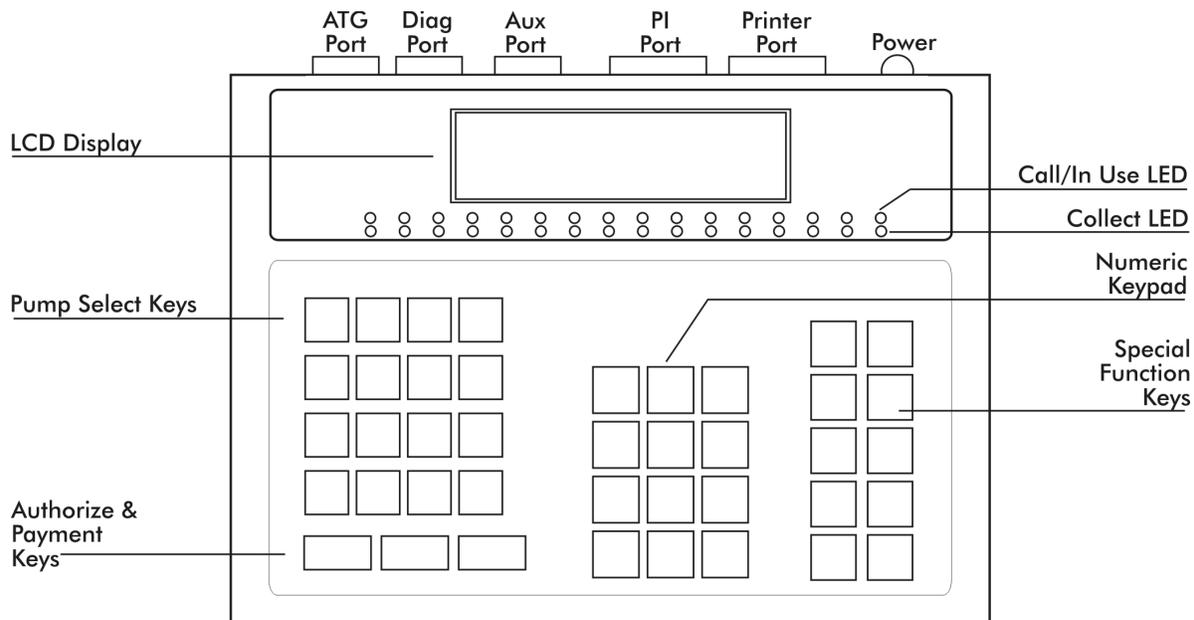
Diagram: PIcon II Port and Keyboard Layout

There are two types of operations for the operator:

- **Dispenser control** — Initiated by pressing the appropriate pump select key, followed by the keys corresponding to the command for the PIcon II to make upon that dispenser.

- **Select functions** — Provide the operator access to the time and date, operator shift report, shift change, and console deactivation functions.

Active Keys	
PUMP KEYS	Select dispenser number
AUTHORIZE	Authorize selected dispenser Resume stopped dispenser
CASH PAID	Pay out the sale in cash
CREDIT PAID	Pay out the sale in credit
VOLUME	Display the volume of the sale
PPU	Display the price per unit of sale
A/B	Toggle between the A & B sales
PUMP STOP	Stop an authorized dispenser Stop all dispensers (hold 5 seconds)
PRINT	Print a receipt
CHANGE	Show the change of a prepay sale Press twice to show the prepay amount Clear incomplete prepay
MANAGER	Enter/exit program & report modes
SELECT	Refer to Operation Section, Special Functions

Table: Key Functions

Display and Status Indicators

The LCD display provides the operator with all sale information for the dispenser selected. It also provides data such as time/date and shift totals reports when using the select functions. Listed below in **Table: Display Data** are the various fields of data which may appear in the display area, along with a brief description of each field.

```
        Pump #        Hose #     Sale Type              Entered Value

        ┌─────────────────────────────────────────────────────────┐
        │                                                         │
        │   P01   H1     C                      12.34             │
        │   A   PR 1     $                       0.00             │
        │                                                         │
        └─────────────────────────────────────────────────────────┘

        Sale #      Product #    Amount Type              Amount
```
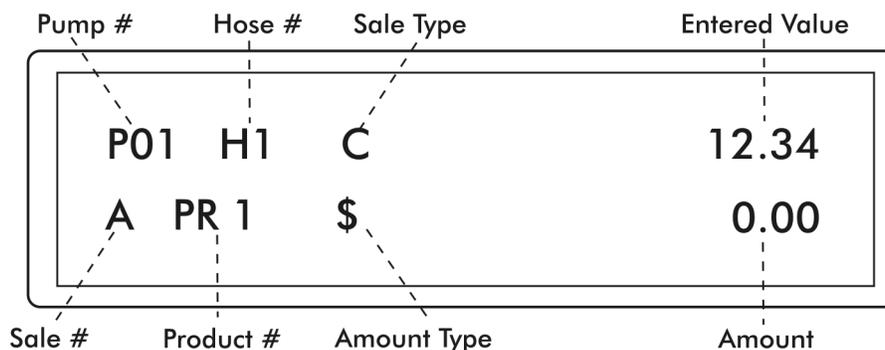
Diagram: PIcon II Display Layout

Display	Description
Pump #	Indicates the current/active dispenser #/fueling position. Further key entry, such as *authorization* or *payment* will apply to the current dispenser #.
Hose #	Indicates the active hose at a fueling position.
Sale Type	Indicates the method of payment selected for a sale — Cash (C) or Credit (R).
Sale #	Indicates which sale is selected — Current sale or previous sale respectively (A or B respectively)
Product #	Indicates the product type for the displayed sale.
Amount Type	Indicates type of data being displayed in the amount field. ($) Sale amount, (V) Volume, (CG) Change amount, (LM) Prepay Limit, (C) Cash, (R) Credit
Amount	Indicates the value, dollar or volume of the active sale.
Entered Value	Displays any data entered on the numeric keypad.

Table: Display Data

The LEDs below each of the pump numbers are the *status* indicators for that particular dispenser/fueling position. The green LED on the top indicates *Call/In Use*. The red LED on the bottom indicates *Collect/Stopped*. **Table: LED Indicators**, below, shows the various states these LEDs represent for each dispenser/fueling position.

Green LED	Red LED	Status
Fast Flash	—	Call for service
On Solid	—	Authorized
—	Slow Flash	Collect "A" Sale
—	On Solid	Dispenser Stopped
Fast Flash and	Fast Flash	Drive-Away
Slow Flash and	Slow Flash	Collect "A" and "B" Sales

<div align="center">Table: LED Indicators for Dispenser/Fueling Positions</div>

Sales

Authorization must be made for a sale as either a Postpay, Preset Postpay, or Prepay sale. **Table: Sales Procedure**, below, describes the sequence for completing each type of authorized sale. *Note: An actual key action is indicated by <____>.*

Sale Type	Procedure
Postpay	To authorize a dispenser for a Postpay/Fillup operation, press the appropriate <PUMP #> key and then press the red <AUTHORIZE> key. To pay out the sale on the console, press the <PUMP #> key. Press either <CASH PAID> or <CREDIT PAID> key. To print a receipt, press <PRINT>.
Preset Postpay	To authorize a dispenser for a preset amount, press the appropriate <PUMP #> key and then enter the preset amount on the numeric keypad. Press the red <AUTHORIZE> key. To pay out the sale on the console, press the <PUMP #> key. Press either <CASH PAID> or <CREDIT PAID> key. To print a receipt, press <PRINT>. *Note: The amount entered on the numeric keypad appears on the display in the ENTERED VALUE field.*
Prepay	To authorize a dispenser for a prepay sale, press the appropriate <PUMP #> key; then enter the amount paid on the numeric keypad. *Note that the amount entered on the numeric keypad appears on the display in the Entered Value field.* Press method of payment, <CASH PAID> or <CREDIT PAID> key; then the red <AUTHORIZE> key. *Note: If red LED is flashing at end of a prepay sale, press <CHANGE>.*

Table: Sales Procedure by Authorization Type

PIcon II has the capability (optional) of displaying stacked sales (A/B), with A representing the current sale and B representing the previous sale. The previous sale may either be already paid out or waiting to be paid out. *Refer to Programming Mode, PGM 10* to configure stacked sales.   If the transaction is a stacked sale (A/B), it is important to select the correct sale with the <A/B> key before the method of payment — <CASH PAID> or <CREDIT PAID> key — is pressed. The status indicators show the state of a transaction, such as Call for Service, Collect, etc. *Refer to the Quick Reference Guide for general sales procedures.*

Should it become necessary to stop all of the dispensers due to an emergency condition, press the red <PUMP STOP> button and hold for five seconds. This will place all of the dispensers in a stopped condition until the operator clears the emergency. This is accomplished by selecting each dispenser with the <PUMP #> key and then pressing the <AUTHORIZE> key.

Special Select Functions

Listed below are the five special operator Select Functions, along with the key sequences required to execute them. Each key sequence begins with the operator pressing the **\<SELECT\>** key. The display will prompt you to enter a function key for the appropriate mode.

Press **\<MANAGER\>** key to exit.

Select Function	Key Sequence
Time/Date	Press \<SELECT\> again Press \<MANAGER\> to exit
Turn Console Off	Press \<PUMP STOP\> Enter PIN Code Press \<ENTER\> to turn back on
View Current Shift Totals by Product	Press \<ENTER\> Press \<VOLUME\> to see total volume Press \<CASH PAID\> for cash total Press \<CREDIT PAID\> for credit total Press \<ENTER\> for next product Press \<MANAGER\> to exit
Print Current Shift Report	Press \<PRINT\>
Change Shift	Press \<CHANGE\> (only after viewing the totals or after report printing is completed) *Note: The Change Shift function may be utilized only after the totals have been viewed or printed and may be accessed only once every hour.*

Table: Select Key Functions

Show Current Shift Totals — When prompted for *Function* pressing the <ENTER> key will begin to show current shift totals by first displaying the current volume shift totals for product.

Report #   Product Name

```
  CURRENT              REGULAR


  Volume                  45.2
```

Amount Type   Amount
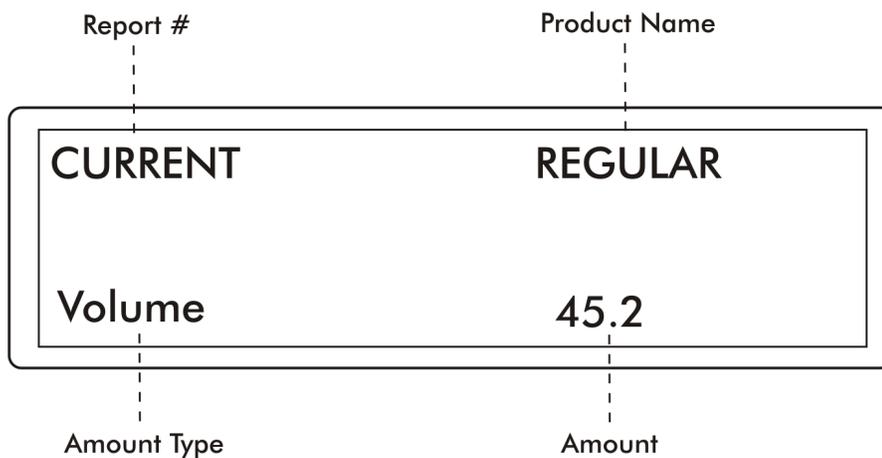
Diagram: PIcon II Select Function, Show Current Shift Totals

To view current cash shift totals, press the <CASH PAID> key. Current credit shift totals may be viewed by pressing the <CREDIT PAID> key. Press <VOLUME> to view current volume totals again.

To display current shift totals for additional product(s), continue to press the <ENTER> key. After exhibiting the current shift totals for the selected product, the display will return to the select function entry screen. If another select function is desired, it may be entered, or the select function mode may be exited by pressing the <MANAGER> key.

Print Current Shift Totals — At the Function prompt, press the <PRINT> key to print the current shift report.

After printing the current shift report, the display will return to the Select Function entry screen. If another Select Function is desired, it may be entered, or Select Function may be exited by pressing the <MANAGER> key.

Perform Shift Change — Before a shift change can be executed, totals from the shift must be viewed or printed in their entirety, using the Special Select Functions **<ENTER>** or **<PRINT>**. To execute a shift change, simply press the **<CHANGE>** key at the Function prompt. When this has been accomplished, the PIcon II changes the Current Shift Total to zero. The last shift total is then stored as Shift 1. At any time, there are four stored shift reports. They are the Current Shift, Shift 1, Shift 2, and Shift 3, with Shift 3 being the oldest. Please note that all shift reports are time/date stamped and contain a unique two-digit number that increments by one each time a shift change takes place. *In order to perform a shift change, at least one hour must have elapsed since the last shift change.*

After performing shift change, the display will return to the Select Function entry screen. If another Select Function is desired, it may be entered, or Select Function may be exited by pressing the **<MANAGER>** key.

Show Console Clock — The PIcon II's built-in clock/calendar provides accurate time/date stamping on reports and sales receipts. After being prompted for Function, press **<SELECT>** to read the time and date.

Time and date will be displayed until another key is pressed. If another Select Function is desired, it may be entered, or Select Function may be exited by pressing the **<MANAGER>** key.

Turn Off Console — At the Function prompt, press **<PUMP STOP>**. At this point, all LEDs are turned off and the word *Off* flashes on the display. Note that any fueling transactions that have already begun when the PIcon II was turned off will be allowed to run to completion.

To turn the PIcon II back on, enter the Operator, Manager, or Restricted PIN Code on the numeric pad and press the **<ENTER>** key. The default Operator PIN Code is set at the factory to 1111. The default Manager PIN Code is 2422. PIN Codes do not appear in the display as they are entered on the numeric keypad. *See the Manager Section of this manual for instructions on changing the PIN Codes.*

Operator Access

To access PIcon II program and report features, a sequence utilizing a valid PIN Code must first be entered. Access is divided into two categories — Manager and Operator. The manager, using a Manager PIN Code, has access to Reports and Manager Modes. Reports functions (Modes OPR 1 and OPR 2) are available to both the operator and the manager.

Access to Reports functions is accomplished through the entry of a valid Operator PIN Code. First, press the <MANAGER> key. A prompt on the display will ask for your PIN Code. Enter your Operator PIN Code on the numeric keypad. *This number, with a maximum of four digits, is stored in the PIcon II. Its purpose is to limit access to PIcon II report data. The number 1111 is the factory default value for the Operator PIN Code.* Next, press the <ENTER> key. OPR 0 will appear in the display, prompting for the desired mode number to be entered on the numeric keypad. Press <ENTER> again to generate the requested Reports function sequence. Press the <MANAGER> key to exit current mode.

Operator Accessible Modes

        OPR 1 — Read Reports *(Refer to Reports Section, Read Reports)*
        OPR 2 — Print Reports *(Refer to Reports Section, Print Reports)*

MANAGER
Manager Access

Before initializing Manager Mode, restricted programming must be completed. To access PIcon II Reports and Programming features, a sequence utilizing a valid PIN Code must first be entered. Access is divided into two categories — Manager and Operator. The manager, using a Manager PIN Code, has access to Reports and Manager Modes. Reports functions (Modes OPR 1 and OPR 2) are also available to the operator, who uses an Operator PIN Code. Manager Access is described below.

Entry of the correct Manager PIN Code allows access to all Reports and Manager Modes. First, press **<MANAGER>** key. The display will prompt for a PIN Code. Enter this PIN Code on the numeric keypad. (This number, with a maximum of four digits, is stored in the PIcon II. Its purpose is to limit access to PIcon II program and report data. The number **2422** is the factory default value for the Manager PIN Code.) Next, press the **<ENTER>** key. MGR 0 will appear in the display, prompting entry of the desired function mode number on the numeric keypad. *(See mode descriptions.)* Press **<ENTER>** again to generate the requested program & report function sequence. At this point, if you wish to return to the operator mode, press the **<MANAGER>** key to exit from all manager modes.

Manager Accessible Modes

MGR 1 — Program Product Price
MGR 2 — Read Reports *(Refer to Reports Section, Read Reports)*
MGR 3 — Print Reports *(Refer to Reports Section, Print Reports)*
MGR 4 — Clear Resettable Totals *(Follows in Manager Section)*
MGR 5 — Set Date and Time *(Follows in Manager Section)*
MGR 6 — Beeper Settings *(Follows in Manager Section)*
MGR 7 — Program Operator/Manager PIN Codes *(Follows in Manager Section)*
MGR 8 — Shift Report Setup *(Follows in Manager Section)*
MGR 9 — Set Auto Receipts *(Follows in Manager Section)*
MGR 10 — Set Default MOP *(Follows in Manager Section)*
MGR 11 — Global Full/Self Service *(Follows in Manager Section)*

Manager Mode MGR 1 — Program Product Price

To enter this mode from the mode number prompt, MGR 0, enter <1> on the keypad and press <ENTER>. Prices may be set for the following:

Cash PPU — To set the Cash PPU for a product, enter the desired PPU on the numeric keypad and press the <CASH PAID> key. The three decimal places are assumed.

Credit PPU — To set the Credit PPU for a product, enter the desired PPU on the numeric keypad and press the <CREDIT PAID> key. The three decimal places are assumed.

As the Cash and Credit PPUs are entered, numeric key errors may be erased by pressing the <CLEAR> key . The value will appear in the display. *Note: Both Cash and Credit prices must be programmed for each product — even if prices are the same.* The <SELECT> key moves to the next product.

To exit Mode 1, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Manager Mode MGR 2 — Read Reports *(Refer to Reports Section, Read Reports)*

Manager Mode MGR 3 — Print Reports *(Refer to Reports Section, Print Reports)*

Manager Mode MGR 4 — Clear Resettable Totals

MGR 4 is used to reset resettable totals by clearing them to zero. To enter this mode from the mode number prompt, MGR 0, enter <4> on the keypad and press <ENTER>.

```
Press  CLEAR  to
Reset  Totals
```

Diagram: Display for Manager Mode 4

The display will show Press CLEAR. To zero all resettable totals, proceed by pressing <CLEAR>. To exit Mode 4, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Manager Mode MGR 5 — Set Date and Time

MGR 5 allows the setting of time, date and year. To enter MGR 5 from the MGR 0 mode number prompt, press <5> and press <ENTER>. Date and time may now be set.

Hour, Minutes, Seconds

```
22:07:00


02/02/2013
```

Month, Day, Year

Diagram: Display for Manager Mode 5

Time — The time previously set in the PIcon II will be displayed. To change the hour, enter the hours on the numeric keypad in 24 hour format. New hours will appear in the display as it is entered. Press <ENTER> . The cursor will proceed to minutes. To change the minutes, enter the minutes on the keypad in two-digit format. Minutes will be displayed as entered. Seconds are not entered and will be automatically set as 00. Press <ENTER> again to proceed to set the date.

Date — Date already set in PIcon II will be displayed. Following the cursor, change the month by entering the new month on the numeric keypad in two-digit format. The new month will appear in the display as it is entered. Press <ENTER> and the cursor will proceed to day of the month. To change the day of the month, enter the day on the keypad in two-digit format. Day of the month will be displayed as entered. Press <ENTER> again to proceed to set the year. The year already set in the PIcon II will be displayed and may be changed by entering the new year on the numeric keypad in four digits. The new year will display as it is being entered. Press <ENTER> and the year will be updated.

To exit MGR 5, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Manager Mode MGR 6 — Beeper Settings

MGR 6 is used to select beeper volume, as well as single or continuous beeps for Handle, Collect and Drive-Away. *(Note: The console defaults to a single beep unless set otherwise.)* To enter MGR 6 from MGR 0, the mode number prompt, enter <6> on the numeric keypad and press <ENTER>.

Beeper Volume — The first selection of MGR 6 is for Beeper Volume. Using the <A/B> key, toggle among High/Low/Off. Pressing <ENTER> cycles to the next selection.

```
┌─────────────────────────────────┐
│                                 │
│   Beeper Volume                 │
│                                 │
│                                 │
│   High                          │
│                                 │
└─────────────────────────────────┘
        High/Low/Off
       (toggle to choose)
```

Diagram: Display for Manager Mode 6 Beeper Call for Service

Handle/Call for Service — The second display prompt is for selection of the style of beep associated with a Handle/Call for Service. To change the style of beep, press the <A/B> key and toggle between Single and Continuous. To proceed to the next option setting, press <ENTER>.

```
┌─────────────────────────────────┐
│                                 │
│   Handle Beeper                 │
│                                 │
│                                 │
│   Single                        │
│                                 │
└─────────────────────────────────┘
        A/B key toggles
   between Single and Continuous
```

Diagram: Display for Manager Mode 6, Handle/Call for Service

Collect — The third display prompts for selection of the style of beep associated with a Collect condition. To change the style of beep, press the <A/B> key and toggle between *single* and *continuous*. To proceed to the next option setting, press the <ENTER> key.

Drive-Away — The fourth display now prompts for selection of the style of beep associated with a Drive-Away condition. To change the style of beep, press the <A/B> key and toggle between Single and Continuous.

To exit MGR 6, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Manager Mode MGR 7/ PGM 13 — Program Operator/Manager PIN Codes

MGR 7 is used to change the PIN codes necessary to access Manager and Operator functions. To enter this mode from the mode number prompt, MGR 0, enter <7> on the keypad and press <ENTER>.

Warning: Care should be observed when using this mode. If the PIN Code is altered, be sure to make note of the new PIN Code and save in a safe location.

Operator PIN Codes — The display will show the existing Operator PIN Code under Operator PIN. (The default Operator PIN Code is **1111**.) To change the code, enter the new number (up to 4 digits) on the numeric keypad and press <ENTER>. To proceed to program Manager PIN Codes, press <ENTER>.

Manager PIN Codes — Under Manager PIN, the existing Manager PIN Code will be displayed. (The default Manager PIN Code is **2422**.) To change the code, enter the new number (up to 4 digits) on the numeric keypad and press <ENTER> — taking you back to Operator PIN Codes.

Operator PIN

1111

Operator #

Diagram: Display for Program Mode 13/Manager Mode 7

To exit MGR 7, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Manager Mode MGR 8 — Shift Report Setup

The operator Shift Report Setup Mode configures which totals are to be printed on an operator Shift Report. To choose the totals to be included, simply toggle between Yes and No by using the <A/B> key. The <ENTER> key cycles to the next option to be programmed. Totals which may be selected (or declined) for inclusion on the Operator Shift Report are:

> **By Pump** — default is Yes
> **Resettable** — default is No
> **Non-resettable** — default is No
> **Polled** (read from dispenser) — default is Yes
> **Grand Resettable** — default is Yes
> **Grand Non-reset.** — default is Yes

```
+------------------------------------------+
|  +------------------------------------+  |
|  |                                    |  |
|  |   By Pump                          |  |
|  |                                    |  |
|  |       Yes                          |  |
|  |                                    |  |
|  +------------------------------------+  |
+------------------------------------------+
```
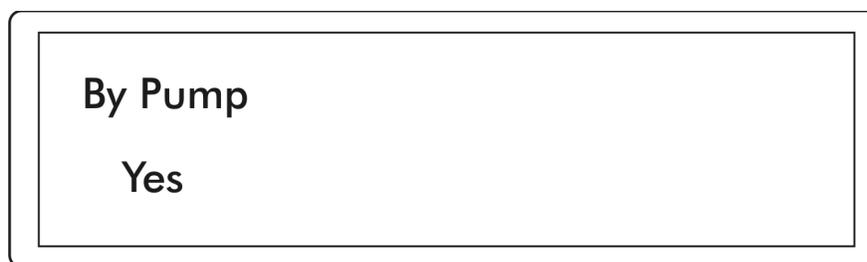
Diagram: Display for Manager Mode 8 By Pump Option

To exit MGR 8, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Manager Mode MGR 9 — Set Auto Receipts

MGR 9 automatically prints a sales receipt if in full service. The <A/B> key toggles between Off and Full Service.

```
+------------------------------------------+
|  +------------------------------------+  |
|  |                                    |  |
|  |   Auto Receipt                     |  |
|  |                                    |  |
|  |   Full Service                     |  |
|  |         |                          |  |
|  +---------|--------------------------+  |
+-----------|------------------------------+
```
Toggle Using A/B Key

Diagram: Display for Manager Mode 9

To exit MGR 9, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Manager Mode MGR 10 — Set Default MOP

MGR 10 sets the PIcon II into a default Method of Payment (MOP) mode of None/Cash/Credit. At the end of each transaction, the PIcon II returns to the selected default MOP. The <A/B> key toggles between the available options.

```
┌─────────────────────────────────────┐
│  ┌───────────────────────────────┐  │
│  │  Default    MOP               │  │
│  │                               │  │
│  │  None                         │  │
│  │      ┆                        │  │
│  └──────┆────────────────────────┘  │
└─────────┆───────────────────────────┘
    Toggle Using A/B Key
```

Diagram: Display for Manager Mode 10

To exit MGR 10, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Manager Mode MGR 11 — Global Full/Self Service

MGR 11 is used to change all dispensers to Full- or Self-Service mode. The <A/B> key toggles between the available options. *To set the service type for individual dispensers, see PGM 2.*

```
┌─────────────────────────────────────┐
│  ┌───────────────────────────────┐  │
│  │  Global Full/Self             │  │
│  │                               │  │
│  │  SELF SERVICE                 │  │
│  │    │                          │  │
│  └────│──────────────────────────┘  │
└───────│─────────────────────────────┘
    Toggle Using A/B Key
```
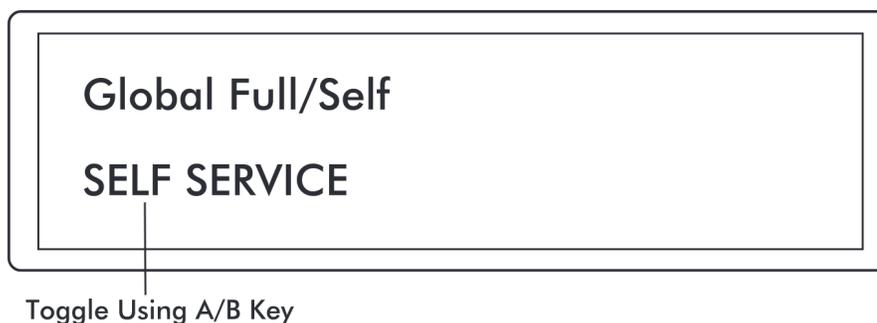
Diagram: Display for Manager Mode 11

To exit MGR 11, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

REPORTS
Read Reports

The purpose of Read Reports is to select and display totals reports for viewing. This function is available to both manager and operator, but is accessed differently, as described below.

Operator Mode OPR 1/Manager Mode MGR 2 — Read Reports

Operator Mode OPR 1 is accessed from the OPR 0 mode number prompt, by entering <1> on the keypad. Then press <ENTER>.

Manager Mode MGR 2 is accessed from MGR 0 mode number prompt, by entering <2> on the keypad. Then press <ENTER>.

Whether accessed through Operator Mode OPR 1 or Manager Mode MGR 2, the display then will show an RPT 0, prompting for entry of a report type code. From the following reports, select the one to be displayed.

Report #

```
┌─────────────────────────────────────┐
│  ┌───────────────────────────────┐   │
│  │                               │   │
│  │   RPT       0                 │   │
│  │                               │   │
│  │   None                        │   │
│  │                               │   │
│  └───────────────────────────────┘   │
└─────────────────────────────────────┘
```
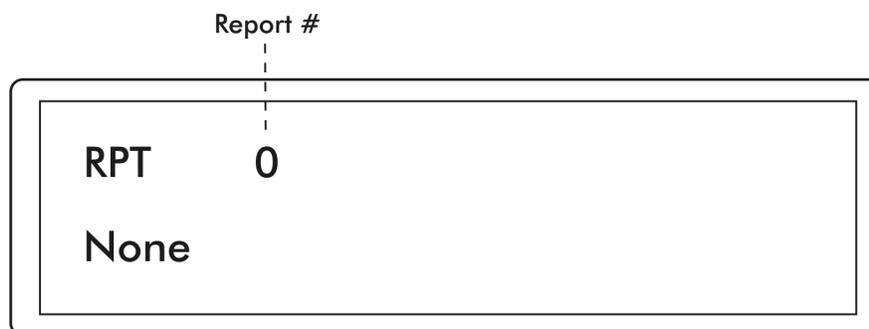
Diagram: Display for Manager Mode 2

RPT 1 — Resettable Totals *(Manager Mode MGR 4 clears this total)*
RPT 2 — Non-Resettable Totals
RPT 3 — Shift 1 Totals By Product *(for previous shift)*
RPT 4 — Shift 2 Totals By Product *(for 2 shifts previous)*
RPT 5 — Shift 3 Totals By Product *(for 3 shifts previous)*
RPT 6 — Grand Resettable Totals
RPT 7 — Grand Non-Resettable Totals
RPT 8 — Polled Totals
RPT 9 — Shift 1 Totals By Pump *(for previous shift)*
RPT 10 — Shift 2 Totals By Pump *(for 2 shifts previous)*
RPT 11 — Shift 3 Totals By Pump *(for 3 shifts previous)*

Select the report number and enter it on the PIcon II keypad, then press <ENTER>. The beginning data for the report is shown in the display. Use the following keys to scroll through the report.

<VOLUME>	Shows Volume Total
<CASH PAID>	Shows Cash Total
<CREDIT PAID>	Shows Credit Total
<1>	Shows Low Feed Stock Total (totals for meter 1 by dispenser)
<2>	Shows High Feed Stock Total (totals for meter 2 by dispenser)
<ENTER>	Next Product or Hose
<PUMP # KEY>	Select Pump

To exit OPR 1/MGR 2, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Print Reports

The purpose of Print Reports is to generate and print totals reports if a printer is attached to the PIcon II, as well as to program the print header. *If no printer is attached, "Paper Out" will appear on the PIcon II display.* This function is available to both manager and operator, but is accessed differently, as described below.

Operator Mode OPR 2/Manager Mode MGR 3 — Print Reports

Operator Mode OPR 2 is accessed from the OPR 0 mode number prompt, by entering <2> on the keypad. Then press <ENTER>.

Manager Mode MGR 3 is accessed from MGR 0 mode number prompt, by entering <3> on the keypad. Then press <ENTER>.

Whether accessed through Operator Mode OPR 2 or Manager Mode MGR 3, the display then will show PRN 0, prompting for entry of a report code number. From the following reports, select the one to be printed.

Report #

```
┌──────────────────────────────────────┐
│  ┌────────────────────────────────┐   │
│  │                                │   │
│  │  PRN      0                    │   │
│  │                                │   │
│  │  None                          │   │
│  │                                │   │
│  └────────────────────────────────┘   │
└──────────────────────────────────────┘
```
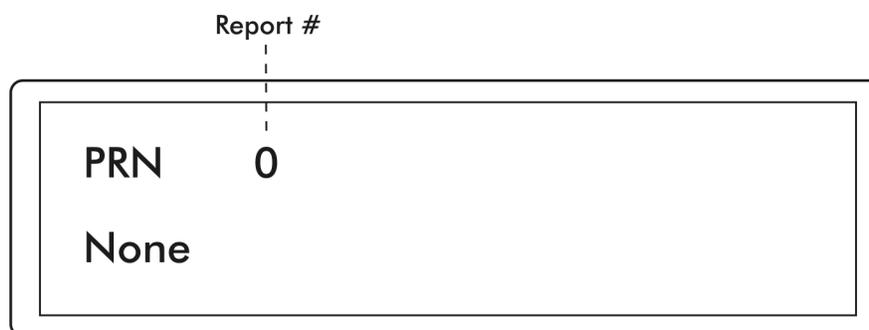
Diagram: Display for Manager Mode 3

PRN 1 — Resettable Totals
PRN 2 — Non-Resettable Totals
PRN 3 — Shift 1 Totals By Product *(for previous shift)*
PRN 4 — Shift 2 Totals By Product *(for 2 shifts previous)*
PRN 5 — Shift 3 Totals By Product *(for 3 shifts previous)*
PRN 6 — Grand Resettable Totals
PRN 7 — Grand Non-Resettable Totals
PRN 8 — Polled Totals
PRN 9 — Shift 1 Totals By Pump *(for previous shift)*
PRN 10 — Shift 2 Totals By Pump *(for 2 shifts previous)*
PRN 11 — Shift 3 Totals By Pump *(for 3 shifts previous)*
PRN 12 — Print Program Settings
PRN 13 — Print Error Queue
PRN 14 — Program Print Header

PRN 15 — Print Interrupt Log
PRN 16 — Print Application Log
PRN 17 — Print Debug Info
PRN 18 — Print Diagnostics Report

Select the report number of the report to be printed and enter it on the PIcon II keypad, then press <ENTER>. The chosen report will be printed and the display will return to PRN 0.

To exit OPR 2/MGR 3, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

PRN 14 – Print Header – Initiate programming of Print Header by pressing <14> from the opening print screen, PRN 0. The display will show the beginning information for the print header. If the header has not already been programmed or has been cleared, the cursor will prompt for the first character entry. *Refer to **Table: Print Header Character Codes** at the end of this section for a numeric code which represents the characters available for your use on the printer header*. Determine the character you wish to place in the first position of the header and look up the numeric code. Enter this numeric code on the keypad and press <ENTER>. The character will appear on the display, and has been saved in memory. For each subsequent character, follow the same sequence.

There are two special numeric codes for the header: <10> indicates a *new line* in the header; <01> is the code for *end of header*. Enter the *new line* code at the point where the printer should cease printing on the current line and go to the beginning of the next line. The *end of header* code is entered after the entire header is entered and will tell the PIcon II that no more characters are needed in the header.

Special editing features are available for use under Print Header:

<ENTER> without entering a numeric code — Display cursor will increment to next character in the header.
<SELECT> without entering a numeric code — Display cursor will go back one character in the header.
<CHANGE> without entering a numeric code — Entire print header will be cleared.
<PRINT> without entering a numeric code — Printer will print the header that is programmed.
<MANAGER> — Exit Print Header programming.

To exit Mode MGR 3, press the <MANAGER> key. MGR 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

| Print Header Character Codes | | | | | | | | | | | | | |
01 = end of header 10 = new line													
0	48	F	70	U	85	j	106	y	121	-	45	`	96
1	49	G	71	V	86	k	107	z	122	.	46	{	123
2	50	H	72	W	87	l	108	space	32	/	47	|	124
3	51	I	73	X	88	m	109	!	33	:	58	}	125
4	52	J	74	Y	89	n	110	"	34	;	59	~	126
5	53	K	75	Z	90	o	111	#	35	<	60		
6	54	L	76	a	97	p	112	$	36	=	61		
7	55	M	77	b	98	q	113	%	37	>	62		
8	56	N	78	c	99	r	114	&	38	?	63		
9	57	O	79	d	100	s	115	'	39	@	64		
A	65	P	80	e	101	t	116	(	40	[	91		
B	66	Q	81	f	102	u	117	)	41	\	92		
C	67	R	82	g	103	v	118	*	42	]	93		
D	68	S	83	h	104	w	119	+	43	^	94		
E	69	T	84	i	105	x	120	,	44	_	95		

Table: Print Header Character Codes

PROGRAMMING
Programming Access

To avoid accidental mistakes and clearing of previous programming, Program Modes may only be accessed by using Restricted PIN Code. For basic startup, press <SELECT> twice and check to ensure that the date is correct. If incorrect, change date as explained in Manager Mode Section. If date is correct, calculate restricted code by multiplying the current month, times the day, plus the year. For example, if the date were December 10, 2000, the restricted code would be calculated as follows:

> 12 X 10 + 2000 = 2120   Restricted access code would be 2120.

When Programming Mode is entered, PGM 0 will appear on the display, prompting for a Program Mode # to be entered.

Program Mode #

```
PGM        0
```
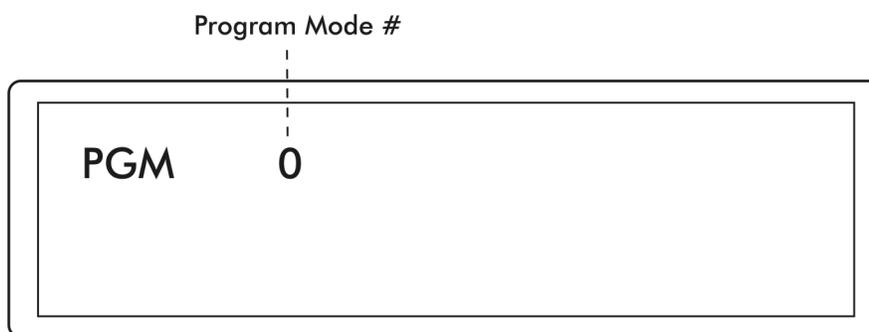
Diagram: Display for Program Mode Prompt

Choose among the following and enter corresponding number at the Program Mode prompt.

> PGM 1 — Pump Type
> PGM 2 — Pump Configuration
> PGM 3 — Product Name Assignment
> PGM 4 — Set Dollar/Volume Default
> PGM 5 — Set Dollar/Cash or Credit
> PGM 6 — Set Gallon/Litre Receipt
> PGM 7 — Handle for Authorization
> PGM 8 — Set $/V/PPU Decimals
> PGM 9 — Set Language
> PGM 10 — Stacked Sales (Y/N)
> PGM 11 — ATG Activation
> PGM 12 — Clear Event Log
> PGM 13 — Program Operator/Manager PIN Codes
> PGM 14 — Drive Away Activation
> PGM 15 — Program Tax Percentage
> PGM 16 — Pump Interface (PIPORT/RS422)
> PGM 60 — Pump Specific Settings

Program Mode PGM 1 — Pump Type

At the Program Mode prompt, PGM 0, press <1>, then press <ENTER> to choose dispenser. Scroll through dispenser brands by pressing <SELECT> until correct dispenser brand name appears.
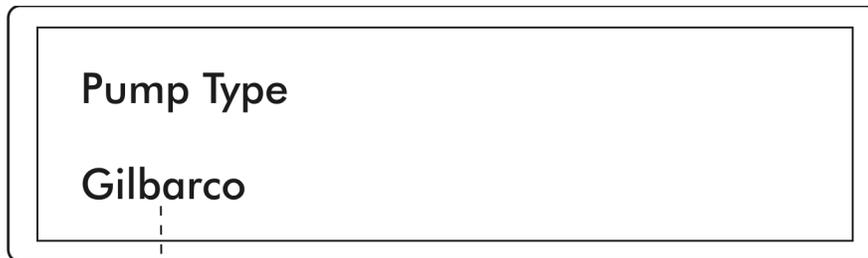
```
┌─────────────────────────────────────────┐
│  ┌───────────────────────────────────┐  │
│  │                                   │  │
│  │   Pump Type                       │  │
│  │                                   │  │
│  │   Gilbarco                        │  │
│  │           ┊                       │  │
│  └───────────┊───────────────────────┘  │
└─────────────────────────────────────────┘
            Pump Type
      (scroll through to select)
```

Diagram: Display for Program Mode 1

Press <MANAGER> to exit this mode. A prompt will appear for the option of clearing memory back to factory defaults. Press <CLEAR> to clear all totals or <MANAGER> to decline this option and exit the mode. If a change has been made in the Pump Type, the PIcon II will reset upon exiting.

Program Mode PGM 2 — Pump Configuration

In Program Mode 2, hose selection, product, service and slowdown amount are chosen for each dispenser/fueling position controlled by the PIcon II. To initiate Dispenser Setup Information Mode, after being prompted from PGM 0, the mode number prompt, enter <2>, and then press <ENTER>. Now in Program Mode 2, dispenser programming may be initiated by pressing the <Pump #_> key for the first dispenser/fueling position at the site (usually Pump #1).

Pump   Hose   Product   Self Service or Full

```
┌─────────────────────────────────────────────────┐
│                                                   │
│   P#  1       H:1        PR# 1           S         │
│                                                   │
│   Enter              SD:  15                       │
│                                                   │
└─────────────────────────────────────────────────┘
```
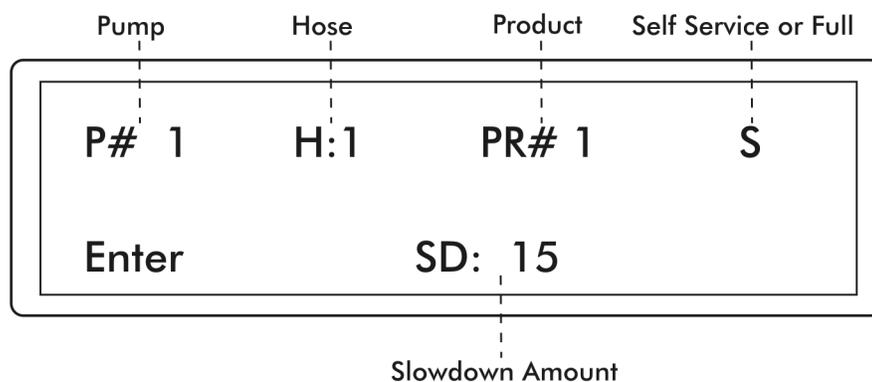
Slowdown Amount
Diagram: Display for Program Mode 2

Hose Selection — After the dispenser number is chosen, Hose 1 is indicated on the display. From this point, the following parameters may be set for Hose 1. If programming a multi-product dispenser, parameters must be set for all hoses.

> Product — Press the <GRADE> key to scroll to the desired product for the current hose displayed. During this step, pressing the <AUTHORIZE> key will clear the product number for reentry.

> Service — To select service type, press <CHANGE> key to toggle between Full- or Self-Service. Setting service type on one hose selects it for the entire dispenser. *To change the service type for all dispensers, see MGR 11.*

> Slowdown Amount — To set slowdown amount, enter new value on the numeric keypad. Setting slowdown amount on one hose sets it for the entire dispenser. Default is 15 cents. Maximum is 99 cents.

If the dispenser is a multi-product dispenser, press <SELECT> to scroll to the next hose to be programmed. Follow this procedure to program each hose of each dispenser at the site.

To exit Program Mode PGM 2, press <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press <MANAGER> key again.

Program Mode PGM 3 — Product Name Assignment

In this mode, Product Name for each product at the site is programmed. To enter this mode from the PGM 0 mode number prompt, press <3> on the numeric keypad and then press <ENTER>.

Product

Product #   1

Regular

Product Name
(scroll through to identify)

Diagram: Display for Program Mode 3

Product Name — the display now prompts for information about Product #1. To assign a product name, such as Unleaded, Regular or Plus to this product, press the <GRADE> key until the product name is presented in the display. Pressing the <AUTHORIZE> key will assign None for no product name.

To proceed to the next product number to be programmed, press the <ENTER> key. Follow the same procedure for each product type at the site.

To exit PGM 3, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 4 — Set Dollar/Volume Default

PIcon II default — DOL

In this mode, the default to be displayed on the PIcon II, Dollar or Volume, is selected. To enter this mode from the PGM 0 mode number prompt, press <4> on the numeric keypad and then press <ENTER>. Use the <A/B> key to toggle between DOL and VOL for dollar amount or volume to be displayed.
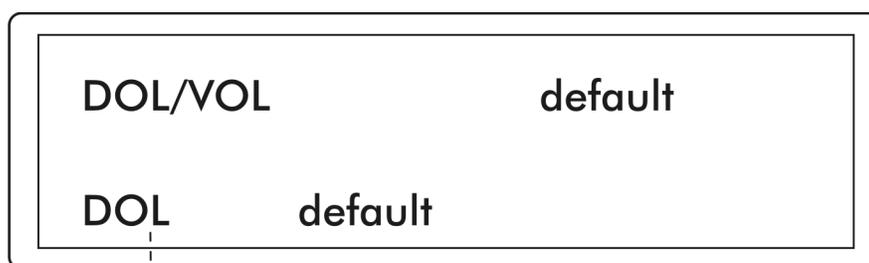
```
┌─────────────────────────────────────┐
│  DOL/VOL              default        │
│                                      │
│  DOL        default                  │
└─────────────────────────────────────┘
     ┊
  A/B key toggles
 between DOL & VOL
```

Diagram: Display for Program Mode 4

To exit PGM 4, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 5 — Set Dollar or Cash/Credit

PIcon II default — Cash/Credit

PGM Mode 5 is used to select either Cash/Credit or Dollar to be shown on reports and receipts. To enter this mode from the PGM 0 mode number prompt, press <5> on the numeric keypad and then press <ENTER>. Use the <A/B> key to toggle between Cash/Credit and Dollar.
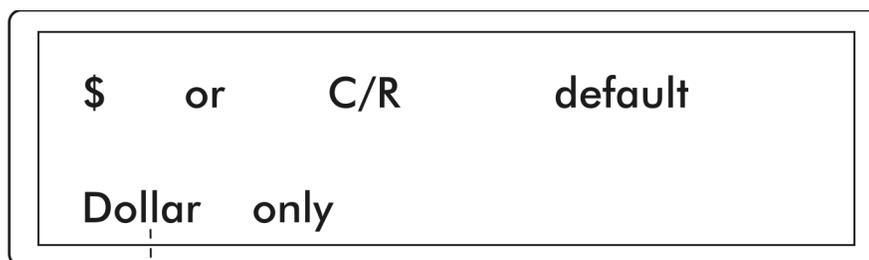
```
┌─────────────────────────────────────┐
│  $    or      C/R        default     │
│                                      │
│  Dollar    only                      │
└─────────────────────────────────────┘
     ┊
  A/B key toggles
 between Dollar & C/R
```

Diagram: Display for Program Mode 5

To exit PGM 5, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 6 — Set Gallon/Litre Receipt

PIcon II default — Gallon

In PGM 6, the default to be shown on reports and receipts, Gallon or Litre, is selected. To enter this mode from the PGM 0 mode number prompt, press <6> on the numeric keypad and then press <ENTER>. Use the <A/B> key to toggle between Gallon and Litre.

```
 _____
|  _____  |
| |                                    | |
| |   Gallon/Litre                     | |
| |                                    | |
| |                                    | |
| |   Gallon                           | |
| |_____¡_____| |
|_____|
```
      A/B key toggles
between Gallon and Litre
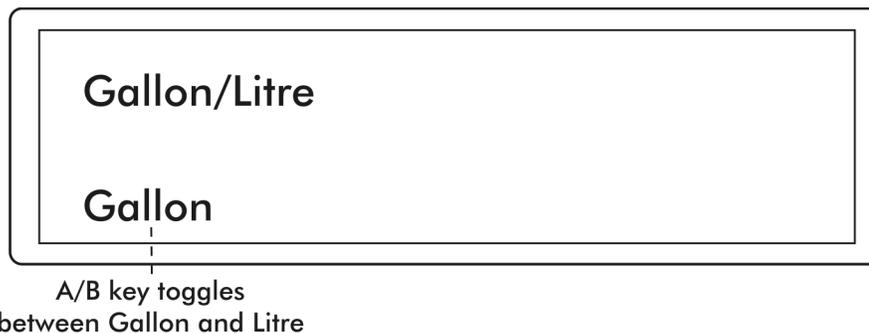
Diagram: Display for Program Mode 6

To exit PGM 6, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 7 — Handle for Authorization

PIcon II default — Yes

PGM 7 determines whether the PIcon II must acknowledge the handle request before authorization is sent to the pump. To enter this mode from the PGM 0 mode number prompt, press <7> on the numeric keypad and then press <ENTER>. Use the <A/B> key to toggle between Yes and No.

```
 _____
|  _____  |
| |                                    | |
| |   Handle for Auth.                 | |
| |                                    | |
| |                                    | |
| |   Yes                              | |
| |_____¡_____| |
|_____|
```
      A/B key toggles
between Yes and No
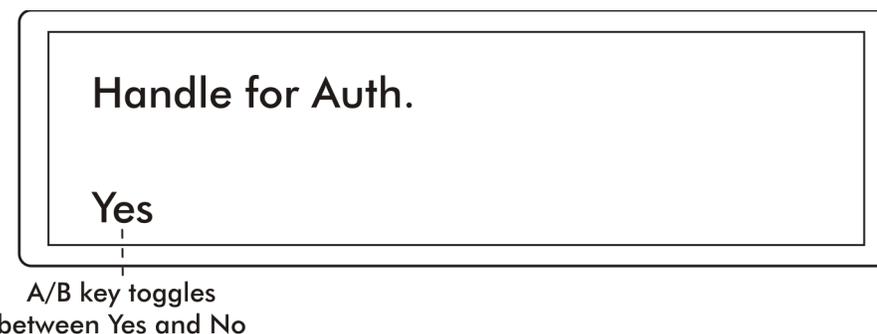
Diagram: Display for Program Mode 7

To exit Program Mode 7, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 8 — Set Dollar/Volume/PPU Decimals

PIcon II default for Dollar — 2; default for Volume – 3; default for PPU – 3

Program Mode 8 selection determines the number of decimals to be used in the Dollar, Volume and Price Per Unit (PPU) that will be shown on the PIcon II display and receipts. To enter this mode from the PGM 0 mode number prompt, press <8> on the numeric keypad and then press <ENTER>. First, the Dollar selection appears. Use the <A/B> key to toggle among 0, 1, 2 or 3. After selection is made, press <ENTER> to proceed to program Volume and PPU in the same manner until programming of decimals is complete.
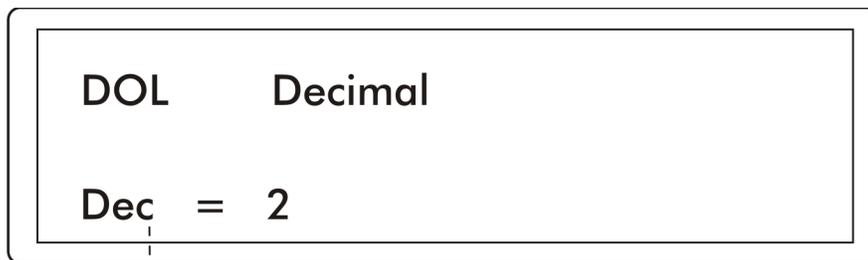
```
┌─────────────────────────────────┐
│  DOL       Decimal              │
│                                 │
│  Dec  =  2                      │
└─────────────────────────────────┘
```
A/B key toggles
among 0, 1, 2 or 3

Diagram: Display for Program Mode 8

To exit Program Mode 8, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 9 — Set Language

PIcon II default – English

PGM 9 is used to select the language to appear on display and printed reports. To enter this mode from the PGM 0 mode number prompt, press <9> on the numeric keypad and then press <ENTER>. Use the <A/B> key to toggle among supported languages.
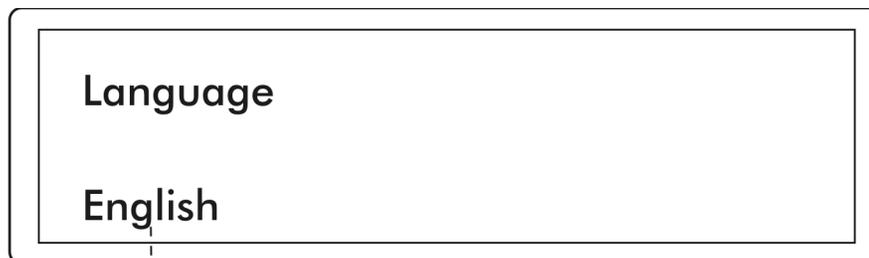
```
┌─────────────────────────────────┐
│  Language                       │
│                                 │
│  English                        │
└─────────────────────────────────┘
```
A/B key toggles
among supported languages

Diagram: Display for Program Mode 9

To exit Program Mode 9, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 10 — Stacked Sales (Yes/No)

PIcon II default — Yes

Program Mode 10 enables or disables stacked sales. To enter this mode from the PGM 0 mode number prompt, press <10> on the numeric keypad and then press <ENTER>. Use the <A/B> key to toggle between Yes and No.

```
 _____
|  _____  |
| |                                    | |
| |  Stacked Sales                     | |
| |                                    | |
| |                                    | |
| |  Yes                               | |
| |_____| |
|_____|
```

A/B key toggles
between Yes and No

Diagram: Display for Program Mode 10

To exit Program Mode 10, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 11 — ATG Port

PIcon II default — No

Program Mode 11 enables or disables the connection between the PIcon II and an auto tank guage (ATG), if one is available. When enabled, sales information will be transferred to the ATG in EMC/BIR G-site format. To enter this mode from the PGM 0 mode number prompt, press <11> on the numeric keypad and then press <ENTER>. Use the <A/B> key to toggle between Yes and No.

```
 _____
|  _____  |
| |                                    | |
| |  ATG          enabled              | |
| |                                    | |
| |                                    | |
| |  No                                | |
| |_____| |
|_____|
```

A/B key toggles
between Yes and No

Diagram: Display for Program Mode 11

To exit Program Mode 11, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 12 — Clear Event Log

Program Mode 12 clears the Application Log and the Interrupt Log. To enter this mode from the PGM 0 mode number prompt, press <12> on the numeric keypad and then press <ENTER>. The Event logs will be cleared and the display will return to PGM 0. To return to operator mode, press the <MANAGER> key.

Program Mode PGM 13/ MGR 7 — Program Operator/Manager PIN Codes

PGM 13 is used to change the PIN codes necessary to access Manager and Operator functions. To enter this mode from the mode number prompt, PGM 0, enter <13> on the keypad and press <ENTER>.

Warning: Care should be observed when using this mode. If the PIN Code is altered, be sure to make note of the new PIN Code and save in a safe location.

Operator PIN Codes — The display will show the existing Operator PIN Code under Operator PIN. (The default Operator PIN code is **1111**.) To change the code, enter the new number (up to 4 digits) on the numeric keypad and press <ENTER>. To proceed to program Manager PIN Codes, press <ENTER>.

Manager PIN Codes — Under Manager PIN, the existing Manager PIN Code will be displayed. (The default Manager PIN Code is **2422**.) To change the code, enter the new number (up to 4 digits) on the numeric keypad and press <ENTER> — taking you back to Operator PIN Codes.

Operator #

Diagram: Display for Program Mode 13/Manager Mode 7

To exit PGM 13, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 14 — Drive Away Activation

PIcon II default — On

Program Mode 14 enables or disables the Drive Away function. When disabled, the console will not alert when the handle is off-hook and flow has stopped for more than 7 seconds. To enter this mode from the PGM 0 mode number prompt, press <14> on the numeric keypad and then press <ENTER>. Use the <A/B> key to toggle between On and Off.

```
┌─────────────────────────────────────┐
│  ┌───────────────────────────────┐  │
│  │                               │  │
│  │  Drive Away                   │  │
│  │                               │  │
│  │                               │  │
│  │  ON                           │  │
│  │                               │  │
│  └───────────────────────────────┘  │
└─────────────────────────────────────┘
```
A/B key toggles
between ON and OFF
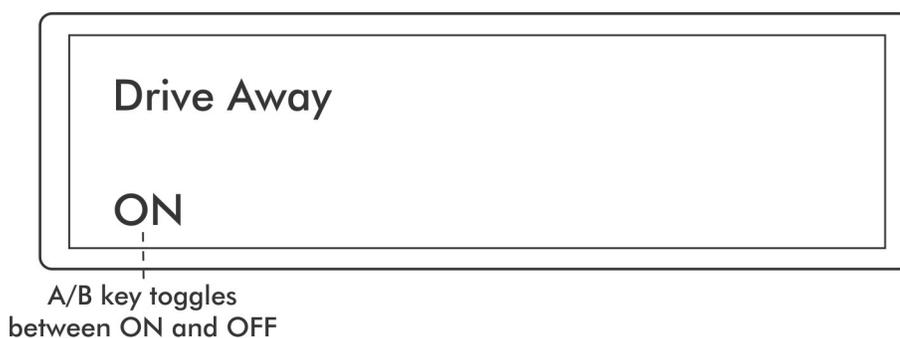
Diagram: Display for Program Mode 14

To exit Program Mode 14, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 15 — Program Tax Percentage

Program Mode 15 allows the entry of up to five (5) taxes into the console. To enter this mode from the PGM 0 mode number prompt, press <15> on the numeric keypad and then press <ENTER>. Use the <A/B> key to toggle between a list of common taxes, or just leave as "Tax" if not available. Next, use the numeric keypad to enter the four digits of the tax amount. Press <ENTER> to move to the next tax and repeat until all taxes have been entered.

```
┌─────────────────────────────────────┐
│  ┌───────────────────────────────┐  │
│  │                               │  │
│  │  Tax#  1          Tax         │  │
│  │                               │  │
│  │                               │  │
│  │  Amount (%)       0.000       │  │
│  │                               │  │
│  └───────────────────────────────┘  │
└─────────────────────────────────────┘
```
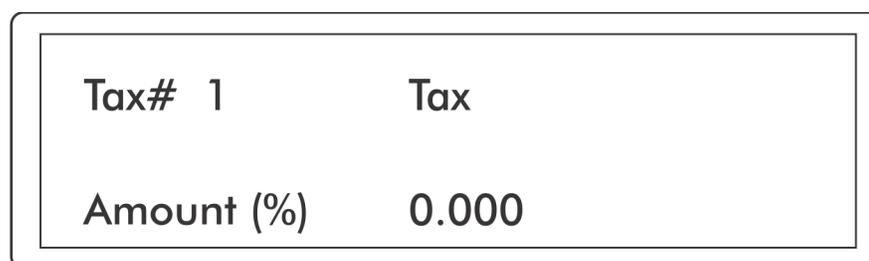
Diagram: Display for Program Mode 15

To exit Program Mode 15, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 16 — Pump Interface (PIPORT/RS422)

PIcon II default — PIPORT

In Program Mode 16, the Pump Interface type, PIPORT or RS422, is selected. To enter this mode from the PGM 0 mode number prompt, press <16> on the numeric keypad and then press <ENTER>. Use the <A/B> key to toggle between PIPORT and RS422 for the Pump Interface type. The proper connection to the PIcon II and the PI DBox is required. Refer to the PI DBox Installation Guide for detailed installation instructions.

```
┌─────────────────────────────────────┐
│                                     │
│   PIPORT    /       RS422           │
│                                     │
│                                     │
│   PIPORT                            │
│                                     │
└─────────────────────────────────────┘
```
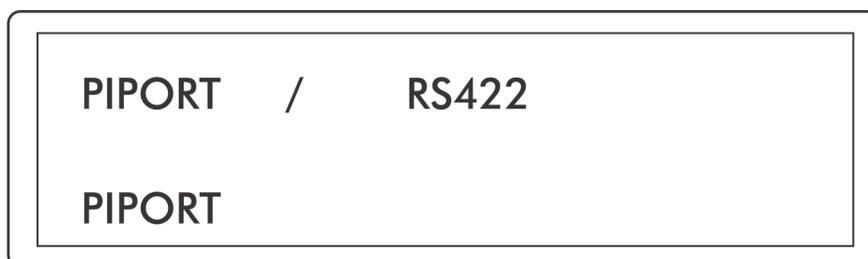
Diagram: Display for Program Mode 16

To exit Program Mode 16, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Program Mode PGM 60 — Pump Specific Settings

Not available for all dispenser brands.

Allows configuration of advanced brand-specific options. For assistance with this program mode, contact Dealer.

Note: Program Mode 1, Pump Type, must be set before continuing with this program mode. Program Mode 60 allows the configuring of advanced brand-specific options of the PIcon II. *See Table: Dispenser-Specific Configurations, which follows.* Options will vary among the different dispenser brands. To enter this mode, press <60> on the numeric keypad and then press <ENTER>. If settings are available for the selected dispenser type, the options will be displayed. Some dispensers have "global" settings which affect all 16 dispensers controlled by the PIcon II. If this option is available, the top line of the display will not show P01. Using the <A/B> key, toggle among the choices for each option. Press <ENTER> to advance to the next option.

When global settings have been configured (or if global settings are not available), press <PUMP 1> to begin configuration of individual fueling positions. Using the <A/B> key, toggle among the choices for each option. Press <ENTER> to advance to the next option. When the first position is configured, press <PUMP 2> to configure the next dispenser. Continue until all dispensers are configured.

The <SELECT> key will toggle from global settings to individual pump settings.

To exit Program Mode 60, press the <MANAGER> key. PGM 0, the mode entry prompt, will appear on the display. To return to operator mode, press the <MANAGER> key again.

Table: Dispenser-Specific Configurations	
Brand	Available Settings (Options)
Bennett	Number of PPU Displays (1 or 2) Model Type (all model types available)
Deer	Number of PPU Displays (1 or 2) Volume Decimal Digits (2 or 3) Preset Digits (4 or 6) PPU Decimal Places (0, 1, 2, or 3)
Gilbarco	Communication Speed (Modular or Legacy) [Channel Setting] Special Function Commands (yes or no) Hose Test (yes or no) Dollar Decimal Point (0, 1, or 2) Volume Decimal Point (2 or 3) PPU Decimal Point (0, 1, 2, or 3)
Kraus	Pump Head Type (Kraus or MTI) PPU Decimal Point (0, 1, 2, or 3) Volume Decimal Point (0, 1, 2, or 3) Dollar Decimal Point (0, 1, 2)
Mechanical	Handle for Authorization (yes or no)
PMC	Preset Type (Volume or Dollar)
Tatsuno	Dollar Decimal Point (0, 1, or 2) Volume Decimal Point (0, 1, 2, or 3) PPU Decimal Point (0, 1, 2, or 3)
Tokheim	Unit of Measure (Litres or Gallons) Volume Decimal Point (2 or 3) Model Type (all model types available) Blend Ratio (numeric entry for each hose)
Wayne	BCD (enabled or disabled) MOP Switches (yes or no) Blender with Single Product (3+1) (yes or no) Number of PPU Displays (1 or 2) Dollar Decimal Point (0, 1, or 2) Volume Decimal Point (2 or 3) PPU Decimal Point (0, 1, 2, or 3)

DIAGNOSTICS
PIcon II Internal Diagnostics

Refer to our web site, www.pie-corp.com for more comprehensive diagnostics.

The PIcon II has on-board diagnostics which are helpful in solving problems encountered in the field. Below are some standard diagnostic functions, which are described later in this section:

- Show Dispenser Information
- Display Version Information
- Download Print Header
- Configure Dispenser Settings

To access diagnostics, a computer running a terminal emulation software such as Hyperterm for Windows is required. *Note: A standard A to B USB cable is used to connect the terminal device to the diagnostic port, not a null modem cable. See* **Diagram: PIcon II Port Layout** *for connector locations.* The diagnostic port is a serial port with the following connection parameters.

- Baud Rate   57,600
- Data Bits   8
- Parity   None
- Stop Bits   1
- Flow Control   None
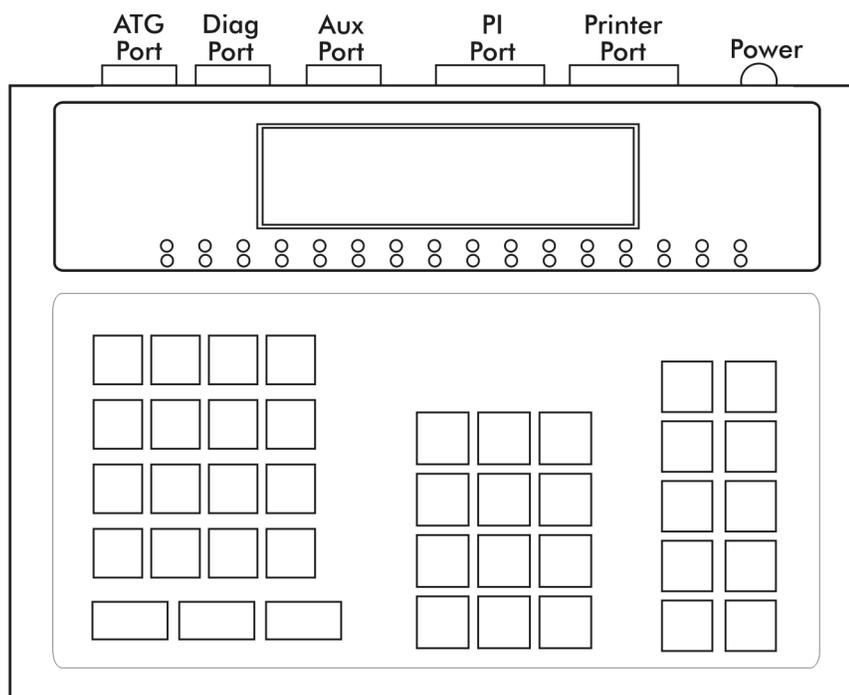
Diagram: PIcon II Port Layout

After connecting to the diagnostics port and starting the terminal emulation program, power up the PIcon II. A menu will appear, displaying the various diagnostic functions available. To select a function, type the letter shown in the menu. Some features will prompt for additional information. Press the escape key to return to the previous menu level. Diagnostic procedures are described as follows.

Show Dispenser Information

This command displays the dispenser manufacturer's pertinent information.

- Locate top diagnostic window displayed on terminal
- Press D, Section Diagnostics
- Press D, Pump Diagnostics
- Press P, Pump Diagnostics
- Select I, Show Pump Information
- Press Escape key to return to previous level

Display Version Information

This command shows current PIcon II version.

- Locate top diagnostic window displayed on terminal
- Press V, Show Version
- Press any key to return to previous level

Download Print Header

The purpose of this command is to load a print header from a computer into the PIcon II. First, the print header should be written in Notepad, using plain text — with no special formatting or tabs. (The appearance of centering, tabs, etc., must be accomplished through the use of additional hard spaces.) Then, print header may be downloaded by following this procedure:

- Locate top diagnostic window displayed on terminal

- Select D, Section Diagnostics

- Select P, Printer Diagnostics

- Select D, Download the Print Header.

- At the prompt, download may be aborted by pressing Escape key or continued by entering any other key.

- If continuing download, C's will continue to appear onscreen until the file to be downloaded is selected. To select the print header file, go to Hyperterm's toolbar and select **Transfer**, then **Send File**. At the dialog box, browse for file to be downloaded.

Select the file you have previously written for the print header. Under the **Protocol** section of the dialog box, select **Xmodem**. Press **Send** button. File will be downloaded. When download is complete, program will automatically return to the previous prompt.

Configure Pump

Dispenser specific options must be selected for some dispenser brands. Follow the sequence below to configure these brands. *If C, Configure Pump, does not appear after selecting Dispenser, this particular dispenser does not require configuration.*

- Locate top diagnostic window displayed on terminal

- Select D, Section Diagnostics

- Select D, Pump Diagnostics

- Select P, Pump Diagnostics — *If C, Configure Pump, does not appear at this point, this particular dispenser does not allow configuration.*

- Select C, Configure Pump

- Select from options in menu window

PIcon II Code Update

Contact PIE for upgrade files, which can be loaded via PIE's STM32 Update Loader. *This utility is available on our website: www.pie-corp.com*

Before beginning this procedure, close Hyperterm. Proceed with Code Update as follows:

- Connect the A to B USB cord between the computer and the PIcon II.

- Power down the PIcon II.

- Locate the Reset switch located in the small round hole beneath the power connection on back of the PIcon II.

- Using a small pointed object, such as a straightened paper clip, press and hold the Reset switch for approximately five seconds while powering up.

- Open STM32 Update Loader and use these settings:

Port Name	Com port # for Diagnostics
Baud Rate	256,000
Parity	Even
Echo	Disabled
Timeout(s)	10

- Select Next.

- Screen will read, "Target is readable. Please click 'Next' to proceed. Select Next. " *If this, or a similar message, does not appear, close program and go back to the first step*.

- Verify that Target is STM32_XL_density_1024K. Select Next.

- Ensure that "Download to device" and "Global Erase" are selected. Select the file in "Download from file". Leave all other options on this page as they are. Select Next.

- Close STM32 Update Loader when complete.

- Power cycle the PIcon II.

PIcon II Basic Troubleshooting

Problem (Possible Cause)	Possible Solution
Console Display flashing "OFF" • <SELECT>, <PUMP STOP> turns off the console	Press 1111 <ENTER> (or one of the 2 PIN Codes (Manager or Operator) programmed in the console)
Red light flashing on a Pump • A sale is waiting to be paid out • It could be a prepay that did not go to the limit (set for $20 and only pumped $15) • It could be on the B side if Stacked Sales are turned on	<PUMP #> <CASH PAID> (or <CREDIT PAID>) <CHANGE> (to refund change from a prepay that didn't go to the programmed limit) <A/B> (to switch to the B side sale) <CASH PAID> (or <CREDIT PAID>) <CHANGE>
Perform a Shift Change • Must View or Print the Current Shift Totals • Can only change shifts once an hour	<SELECT> • <PRINT> (If there is a printer connected) • <CHANGE> (display should briefly read "Shift Changed") or • <ENTER> (if there is no printer connected) • See Special Select Functions section for details on how to view report. • <MANAGER> (exit viewing the report) • <CHANGE> (display should briefly read "Shift Changed")