

# MONITOR FOUR OPERATION MANUAL

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## INTRODUCTION

This manual is intended to be a self-teaching guide to the use of the Monitor Four Self Serve System. It is also intended as a refresher for experienced Monitor Four operators.

If you are using Monitor Four for the first time, you should familiarize yourself with the console layout before reading any further.

## AUTHORIZING PUMPS

You will be alerted to a request for pump authorization by an "AUTHORIZE REQUEST" lamp and an audible tone.

To authorize the requested pump, press the appropriate pump number key, followed by the "RESET" key. The corresponding "PUMP READY" light will light and the customer can begin to refuel.

A flashing "PUMPING/COLLECT" light will indicate that refueling is in progress.

## CLEARING PUMPS

When refueling is complete, and the pump is switched off, the "PUMP READY" light will go out. The "PUMPING/COLLECT" light will stop flashing and remain on.

To find out the dollar value of the sale, press the pump number key. The dollar value of the sale will appear on the console display. The corresponding gallon/litre amount of the sale can be displayed by pressing the "VOLUME" key. The display will automatically return to the dollar value of the sale after a few seconds.



**ATTENTION**

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**The number of decimal places to the right of the decimal point in the display indicates dollar or gallon/litre value. One decimal place (9.9)=Gallons/litres; two decimal places (9.99)=Dollars.**

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After the customer has paid for the fuel, press the "CLEAR" key. This will zero the display and the "PUMPING/COLLECT" light will go out.



## **PREVIOUS SALE REMINDER**

If you are unable to clear a sale from a particular pump before the next customer wants to use that pump, MONITOR FOUR provides a PREVIOUS SALE REMINDER feature. This means that the next customer does not have to wait until you have cleared the pump from the previous sale before he/she can use it.

Here's how PREVIOUS SALE REMINDER works:

When you re-authorize the pump (see AUTHORIZING PUMPS) without using the "CLEAR" key, the "PUMPING/COLLECT" light will begin to flash rapidly. This tells you that there is an outstanding amount to be collected from a previous sale on that pump.

## **PREVIOUS SALE RECALL**

Press the pump number key followed by the "PREVIOUS SALE" button. The dollar amount of the "previous sale" will be displayed. The gallon/litre amount can be displayed by pressing the "VOLUME" key (as described in the CLEARING PUMPS section). After the customer has paid, press "CLEAR". The rapidly flashing "PUMPING/COLLECT" light will return to normal status (see AUTHORIZING PUMPS).

The previous sale can be recalled for any pump at any time.

## PRE-PAY MODE

If you wish to have the customer pay before refueling, you can program a pre-set dollar amount into the MONITOR FOUR console. With this programming in place, the pump so programmed will automatically shut off after the pre-set amount has been reached.

To enter PRE-PAY mode:

1. Press and hold "VOLUME" until a second "beep" is heard. The decimal point on the display will begin to flash, indicating that the system is in PRE-PAY mode.
2. Select the pump you wish to use by pressing the corresponding pump number key. The display will show a zero dollar amount like this:  
000.00
3. Enter the requested dollar amount by using the numbered keys. If you make a mistake just press "CLEAR" and re-enter the amount. When the entry is complete, press "RESET".
4. The "PUMP READY" and "PUMPING/COLLECT" lights will come on, as in normal operation.
5. As the customer takes his/her fuel, you will see the displayed pre-set dollar amount decrease until it reaches zero. At this point, the "PUMP READY" and "PUMPING/COLLECT" lights will go off and the pump will shut off.

If, for whatever reason, the customer does not take all of the fuel that was paid for, simply refund the amount shown on the display for that pump and press "CLEAR" to zero that pump display.



**ATTENTION**

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YOU MAY HAVE AS MANY SIMULTANEOUS PRE-PAY SALES AS YOU WISH, BUT THE CONSOLE WILL NOT ACCEPT PRE-PAY AMOUNTS GREATER THAN. 99.99 OR LESS THAN 1.00

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## **PROGRAMMING PRICE**

Before you can get a total gallon/litre or dollar value reading for any sale, you must program the system.

A price must be assigned to each pump that is being controlled by the console.

To set the price for each pump:

1. Press the number key of the pump you wish to program, followed by the "PRICE" key.
2. The console will display the current price setting for the pump, provided that a price was previously programmed. If no programming has been done yet, the display will show "000.00".
3. You can now enter the desired price using the numbered keys and pressing "RESET". The system automatically enters the price you have selected and exits from price set mode.

Other pumps can be price-programmed in exactly the same way.

## READING TOTALS

Some MONITOR FOUR models are equipped with totalizers. The totalizers give you the ability to display total sales, for each pump, expressed in dollars and gallons/litres. You can also display grand totals for all pumps.

The totalizers are numbered to correspond to a particular pump number as follows:

Totalizer 6 = Total Dollars and Gallons/Litres of Pump #1  
Totalizer 7 = Total Dollars and Gallons/Litres of Pump #2  
Totalizer 8 = Total Dollars and Gallons/Litres of Pump #3  
Totalizer 9 = Total Dollars and Gallons/Litres of Pump #4  
Totalizer 5 = Total Dollars and Gallons/Litres - All Pumps

To read the totals, simply press and hold the desired "TOTALIZER" key. As long as you hold the key down, the display will show total sales to the nearest dollar (no cents). Releasing the key will display both dollars and cents.

This display method allows a seven figure dollar total to be displayed with only five digit positions on the console display.

To display the total volume of product (Gallons/Litres) sold, press the "VOLUME" key while the dollar total is being displayed. The volume will show on the display for several seconds then return to total dollars.

To distinguish dollar totals from product volume totals, note that there is no decimal fraction displayed for product volume. This allows up to 99999 gallons/litres to be displayed.

## CLEARING TOTALIZERS

Totalizers can only be zeroed when the "PROGRAM KEY" is in the ON position.

To clear the totalizers, press the "TOTALIZER NUMBER" key then the "CLEAR" key. Both dollar sales and product volume totals are cleared by this procedure. You can zero all of the totalizers at once by clearing the grand total (key #5)



**ATTENTION**

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**WHEN BOTH THE PROGRAM KEY AND EMERGENCY SWITCH ARE ON,  
THE SYSTEM WILL RESET EVERYTHING!**

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## PRE-PAY SLOW DOWN POINT PROGRAMMING

Different types of fuel dispensers require different slow down point settings as some respond faster to the slow down command. On a fast-responding dispenser, a high slow down point setting will result in an unnecessarily long delivery time from beginning to end of sale. If the setting is too low, the dispenser will over-run its prepay limit. To avoid this problem, the MONITOR FOUR system provides for a programmable slow down point.

You will have to experiment with the equipment in your station to find the correct slow down point setting. It is recommended that you begin your experimentation at 20 cents.

You can set the pre-pay slow down point anywhere between 0 and 99 cents, as dictated by your equipment.

To set the pre-pay slow down point:

1. Turn the "PROGRAM" key to the ON position and press key number 5.
2. Press the "PRICE" key. The display will show the cent slow down point (if it was previously programmed).
3. To enter a new slow down point, simply press the numbered keys (0 through 9). All numbers to the left of the decimal are ignored.
4. Press the "RESET" key and the two digits that you have selected will be entered and the system will return to normal mode.
5. Turn the program key to the OFF position when you are satisfied that the slow down point that you have programmed is correct.



## **INDIVIDUAL PUMP SHUT DOWN**

If, at any time during a sale, it becomes necessary to shut down a pump just press the appropriate pump number key and press the "PUMP ON/OFF" key. You can re-authorize the pump by pressing the "PUMP ON/OFF" key again.

## **EMERGENCY SHUT DOWN**

If you need to shut off all pumps at once, turn the "EMERGENCY/OPERATE" switch to the EMERGENCY position. You should use this switch to disable the system when the station is closed.

## **MANUAL OVERRIDE**

In the event of a system failure, or if you wish to have one or more pumps available for full-service operation, place the "AUTOMATIC/MANUAL" switch (located on the left hand side of the interconnection box) in the MANUAL position. For normal system operation, these switches will remain in the AUTOMATIC position.

## **SYSTEM POWER DOWN**

If, for any reason, the AC power supply to the interconnection box must be interrupted, place the "POWER DOWN/STANDBY" switch in the POWER DOWN position. Failure to do this will result in a constant drainage of the standby battery for as long as the AC power interruption continues. (See EMERGENCY SHUT DOWN for normal overnight station closure).