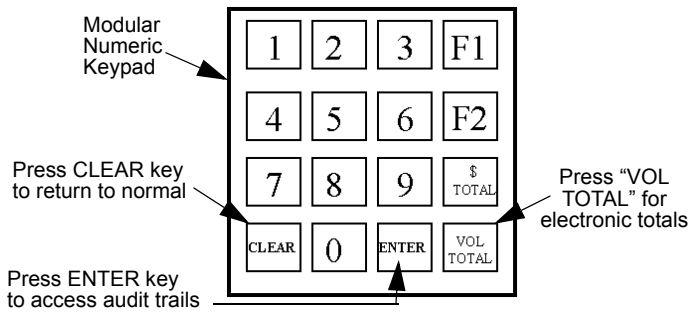
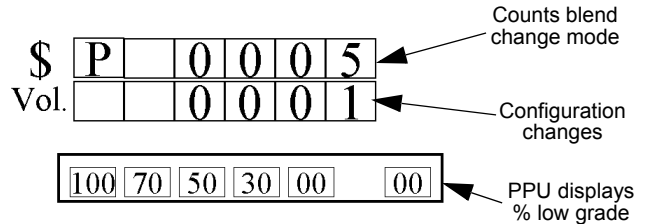


## How to Access Audit Trail Information

You can retrieve totals electronically at the pump or dispenser by using the manager keypad (shown below). In the Encore® and Eclipse® this keypad is located behind the locked access door on side A of the electronics module. In The Advantage® Series the keypad mounts on a removable magnetic pad that attaches to the inside cabinet behind the left or right option door.

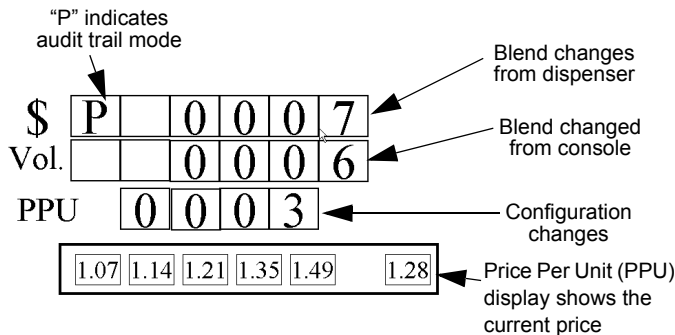


### Advantage Dispenser Audit Trail Display - Newer, no main PPU display

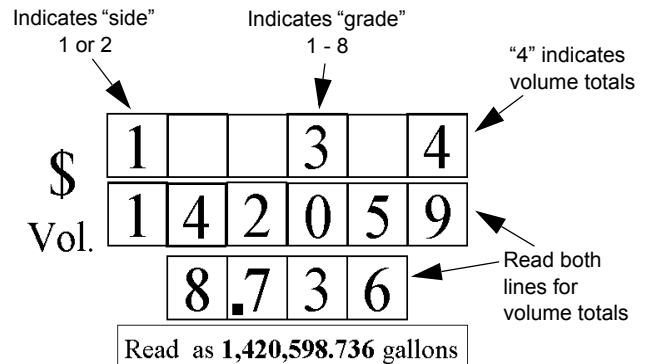


### Advantage Audit Trail Display - Older SW Versions

Note: See MDE-2540 for determining software versions.

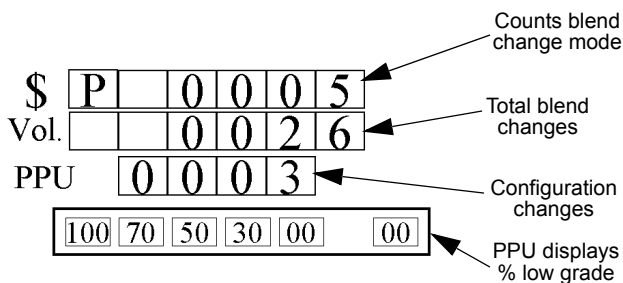


### Advantage Electronic Totals Display

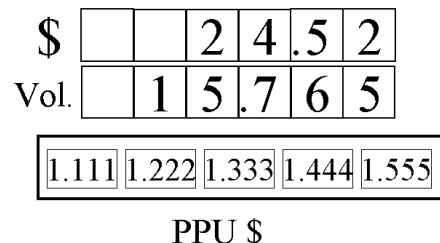


### Advantage Audit Trail Display - Newer SW Versions

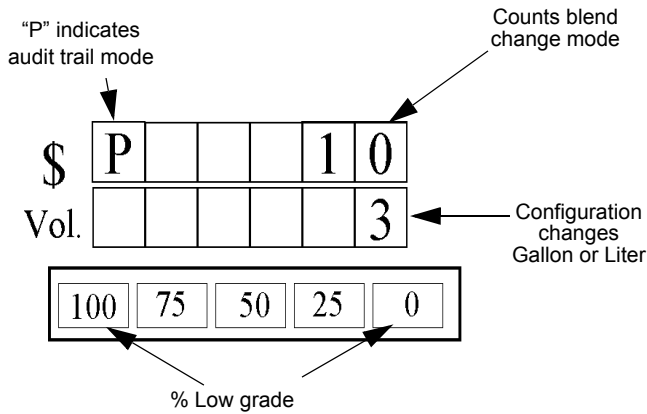
Note: See MDE-2540 for determining software versions.



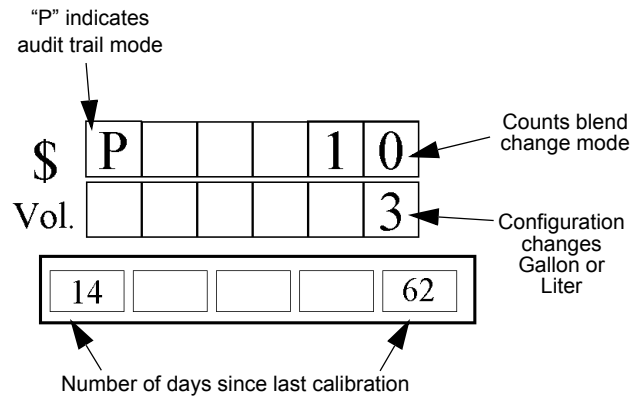
### Encore/Eclipse Normal Display



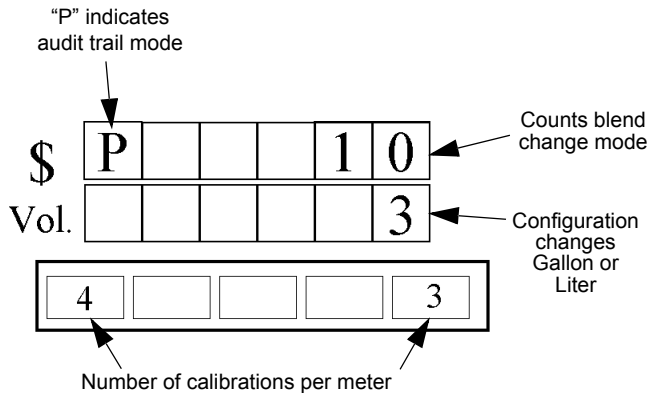
**Encore/Eclipse Audit Trail Display - Press Enter 1 Time**



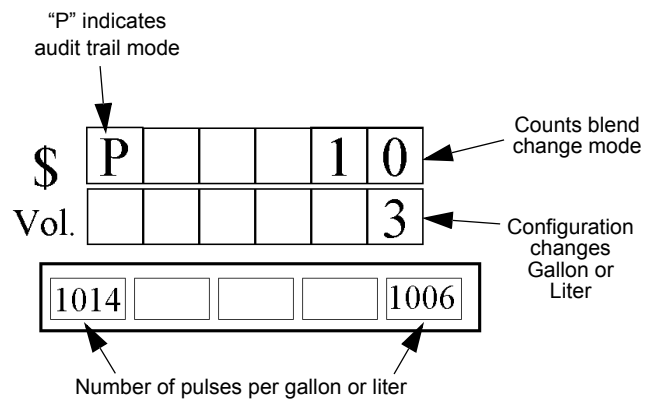
**Encore/Eclipse Audit Trail Display - Press Enter 2nd Time**



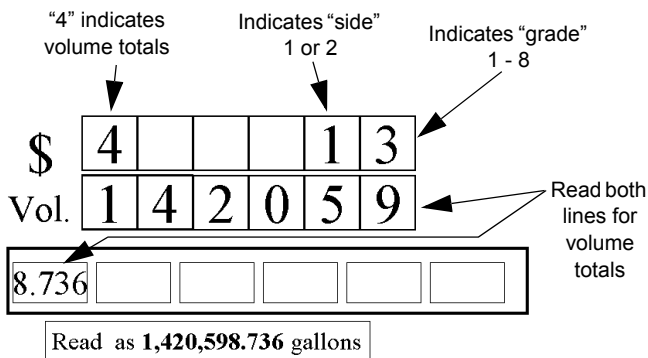
**Encore/Eclipse Audit Trail Display - Press Enter 3rd Time**



**Encore/Eclipse Audit Trail Display - Press Enter 4th Time**



**Encore/Eclipse Electronic Totals Display**



# Weights and Measures (W&M) Data Review on the Encore 500, Encore S, Encore 700 S, and Eclipse

## Purpose

This section provides procedure to access information required by W&M officials during a site audit.

## Related Equipment

- Encore 500
- Encore S
- Encore 700 S
- Eclipse

*Note: All model types are included, such as Ultra-Hi™ units and units with Diesel Exhaust Fluid (DEF).*

## W&M Data Review

All Encore 500-based systems are equipped with functionality providing a simple method for W&M officials to review common items while auditing a dispenser. Pressing **ENTER** on the manager keypad of the dispenser with both sides idle will yield information regarding the W&M data review for Multi Product Dispenser (MPD®) versus blender types as listed in tables on [page 4](#) and [page 5](#). These tables explain the information displayed on the Money, Volume, and PPU displays during the audit process.

Prior to V02.9.06, information only until P1 was available. Current production versions allow for all of the following information to be accessed.

## W&M Data Information Formats

### Blend Ratio [Command Code (CC) 72]

- **Money Display:** XXXX - Number of times the blend ratios have been adjusted.  
For example, 0018 would indicate that the blend ratios have been changed 18 times.
- **PPU Grade Display:** XXX - Each PPU window will display the percentage of the low octane of the pure product portion of the blend.  
For example, PPU 1 = 100, PPU 2 = 65, PPU 3 = 0. This would indicate that grade 1 was composed of 100% of the low octane pure product, grade 2 was composed of 65% of the low octane pure product, and grade 3 was composed of 0% of the low octane pure product.

### Volume Type (CC 71) Changes

- **Volume Display:** XXXX - Number of times volume units have been adjusted.  
For example, 0019 would indicate that the volume type has been changed a total of 19 times.

### Feature Set (CC 96) Programming

The feature set is also shown in the Money display during the boot process. During the boot process, software version is displayed on the Volume display.

In both cases, the feature set is displayed as shown in the following table:

Feature Set (CC 96)	Displayed As
1 - Encore 500 (blinking PPUs)	500 -
5 - Encore S (blinking grade indicator)	500 5

### W&M Data Review for Non-Blenders

Non-blender unit types include unit types ranging between 1-7 for MPD and Single Hose MPD, including Ultra-Hi Flow, standalone DEF; 1+1 Ultra-Hi Flow and DEF; 2+1 Ultra-Hi Flow and DEF.

For Unit Types 1-7 (MPD Types with Standard Fuels, Flex Fuels or DEF)					
Number of times ENTER is pressed	1	2	3	4	5
<b>Money Display</b>	P	Programmed Feature Set (CC96)	P1	P2XXXX XXXX = Pump Control Node (PCN) Software Cycle Redundancy Check (CRC) (for door node 5 or later only)	P3
<b>Volume Display</b>	Number of times the Volume Type (CC 71) has changed	Programmed Unit Type (CC 90)	Blank	Software Version Number	Pump Boot Version Number
<b>PPU Display(s)</b>	Days since the meter has been calibrated	Number of times the meter has been calibrated	Pulses per volume unit for the meter	MIP Version Number	Blank

For Unit Types 1-7 (MPD Types with Standard Fuels, Flex Fuels or DEF)			
Number of times ENTER is pressed	6	7	8
<b>Money Display</b>	P4	P5	P6
<b>Volume Display</b>	Side 1 Door Node Software Version Number	Side 2 Door Node Software Version Number	Automatic Temperature Compensation (ATC) Node Version (If ATC is enabled; otherwise, no change)
<b>PPU Display(s)</b>	Door Node Host Version	Door Node Host Version	Blank

## W&M Data Review for Blenders

Blender unit types include unit types ranging between 8-9, 12-25, and 60-61. These unit types represent Single Hose Blenders, Multi-Hose Blenders, 3+2 Dual Blenders and any of the above containing +1 single pure grade or +1 +1 with two extra pure grades.

For Unit Type 8-9, 12-25, 60-61 (Blender Types with Standard Fuels or Flex Fuels)					
Number of times ENTER is pressed	1	2	3	4	5
<b>Money Display</b>	P and number of times the Blend Ratios (CC 72) have been changed	Programmed Feature Set (CC96)	P1	P2	P3XXXXXXXX = PCN Software CRC (for door node 5 or later only)
<b>Volume Display</b>	Number of times the Volume Type (CC 71) has changed	Programmed Unit Type (CC 90)	<i>Blank</i>	<i>Blank</i>	Software Version Number
<b>PPU Display(s)</b>	Programmed Blend Ratios (CC 72)	Days since the meter has been calibrated	Number of times the meter has been calibrated	Pulses per volume unit for the meter	MIP Version Number

For Unit Type 8-9, 12-25, 60-61 (Blender Types with Standard Fuels or Flex Fuels)				
Number of times ENTER is pressed	6	7	8	9
<b>Money Display</b>	P4	P5	P6	P7
<b>Volume Display</b>	Pump Boot Version Number	Side 1 Door Node Software Version Number	Side 2 Door Node Software Version Number	ATC Node Version (If ATC is enabled, otherwise no change)
<b>PPU Display(s)</b>	<i>Blank</i>	Door Node Host Version	Door Node Host Version	<i>No change</i>

## Audit Trail Screen for Pump Software Version

IMPORTANT INFORMATION
This bulletin does not serve as authorization to perform any site visits or warranty service.

The installed software version can be verified via the W&M Review Screen P3, by using the internal software audit trail.

To verify the software version, press **Enter** four times on the manager keypad until the “P2” is displayed for MPD units (see [Figure 1](#)) or 5 times until “P3” is displayed on the blender units. This allows the auditor to display the currently installed pump software version in the second line of the main display.

- Notes: 1) For MPD units with door node 5 and with PCN software version 03.0.40 or later, P2 is replaced with P2XXXX, where XXXX is the PCN software CRC. For Blender units with door node 5 and with PCN software version 03.0.40 or later, P3 is replaced with P3XXXX, where XXXX is the PCN software CRC.*
- 2) During the boot process, the software version will also be displayed on the Money display, while the software version is displayed on the Volume display.*

**Figure 1: Audit Trail Screen for Pump Software Version [P02980 (V02.9.90)]**



## Examples for Non-Resettable Money and Volume Totals

The dispenser maintains a set of non-resettable totals for each dispensed fuel grade. These totals reflect the total money and volume from the time the dispenser is installed. For examples of non-resettable money and volume totals display, refer to “[Money Totals](#)” and “[Grade Volume and Pure Product Totals](#)” on [page 8](#).

*Note: For both \$ TOTAL and VOL TOTAL keys, press **Enter** to toggle between grade and side selection.*

### Money Totals

The \$ TOTAL key is used to retrieve money totals for each fuel grade. This key does not require a security code. The CLEAR key is used to exit money totals mode. The digit **1** shown in the left-most \$ display indicates that this total is a non-resettable money total. This convention comes from The Advantage Series product line and is maintained here for the Authorized Service Contractor (ASC) and site manager familiarity.

The following example shows the layout and digit position meaning for this programming feature:

<b>\$</b>	<b>1</b>				Side	Grade
<b>V</b>	Total	Total	Total	Total	Total	Total
<b>PPU</b>			Total	Total	.Total	Total

The following example shows the sequence for displaying the side 2, grade 2 money totals:

Keypad: **\$ Total**

<b>\$</b>	<b>1</b>				<b>1</b>	<b>1</b>
<b>V</b>		<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>PPU</b>			<b>6</b>	<b>7</b>	<b>.7</b>	<b>7</b>

*Note: The main display shows flashing **1** for DEFAULT side. The left-most digit is a **1** indicating the total shown is a non-resettable money total. The money total for the first grade is shown in the main volume and PPU displays. Entering **2** will automatically show total money for side 2 grade 1. The **2** will continue to flash indicating side selection is still active.*

Keypad: **2** – Select Side 2

<b>\$</b>	<b>1</b>				<b>2</b>	<b>1</b>
<b>V</b>		<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>PPU</b>			<b>2</b>	<b>1</b>	<b>.0</b>	<b>7</b>

Keypad: **ENTER** – Toggle to Grade Selection.

<b>\$</b>	<b>1</b>				<b>2</b>	<b>1</b>
<b>V</b>		<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>PPU</b>			<b>2</b>	<b>1</b>	<b>.0</b>	<b>7</b>

Keypad: 2 – Select Grade 2

\$	1				2	2
V				9	8	7
PPU			4	3	.0	5

To view all grade totals, refer to instructions in “Money Totals” on page 7. Press **CLEAR** to exit to dispenser normal mode.

### Grade Volume and Pure Product Totals

The VOL TOTAL key is used to retrieve volume totals for each fuel grade. This key does not require a security code. The CLEAR key is used to exit volume totals mode. The 4 shown in the left-most \$ display indicates that this total is a non-resettable volume total. This convention comes from The Advantage Series product line and is maintained here for ASC and manager familiarity.

The following example shows the layout and digit position meaning for this programming feature:

\$	4			Side	Grade	Grade
V	Total	Total	Total	Total	Total	Total
PPU			Total	.Total	Total	Total

The following example shows the sequence for displaying the side 2, grade 2 volume totals:

Keypad: **VOL TOTAL**

\$	4			1	0	1
V			1	5	8	2
PPU			3	.4	1	1

*Note: The main display shows flashing 1 for DEFAULT side. The left-most digit is a 4 indicating the total shown is a non-resettable volume total. The volume total for the first grade is shown in the main volume and PPU displays. Entering 2 will automatically show total volume for side 2 grade 1. The 2 will continue to flash indicating side selection is still active. Grade Totals are represented by grade numbers 1 through 6 depending on the unit type configuration.*



Pure Product totals for a 2+0, 2+1, 3+0, 3+1, 4+0, 4+1, 5+0, or 5+1 blender types can be viewed with grades 7 and 8. Pure Product totals for blend manifold 1 on a 2+2 or 3+2 blender types can be viewed with grades 7 and 8, while pure product totals for blend manifold 2 can be viewed with grades 9 and 10. In these displays, 7 and 9 are the configured HI product while 8 and 10 are the configured LOW product.

Keypad: 2 – Select Side 2

\$	4			2	0	1
V		5	3	4	7	8
PPU			3	.2	1	6

Keypad: ENTER – Toggle to Grade Selection.

\$	4			2	0	1
V		5	3	4	7	8
PPU			3	.2	1	6

Keypad: 2 – Select Grade 2

\$	1			2	0	2
V			1	0	5	3
PPU			2	.7	0	9

To view all grade totals, refer to instructions in [“Grade Volume and Pure Product Totals”](#) on page 8.

Press CLEAR to exit to dispenser normal mode.

*The Advantage Series® , Eclipse® , Encore® , and MPD® are registered trademarks of Gilbarco Inc. Ultra-Hi™ is a trademark of Gilbarco Inc.*



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