MID:COM Matrix

E:Count Configuration Utility User's Guide

Reference for Using the MID:COM Matrix E:Count Configuration Utility

📢 Matrix	- MID:COM E:Count Configuration Utility		\mathbf{X}
Tools Help			
MID:COM Product I <	Abels Prices Ticket Header/Footer Ticket Print Spec D: PRODUCT PROPANE C: PRODUCT PUEL DIL/DISEL O: PRODUCT HEITANOL D: PRODUCT HEITANOL D: PRODUCT HEITANOL D: PRODUCT JETA FUEL O: PRODUCT JETA FUEL O: PRODUCT JETA FUEL O: PRODUCT STANDER 1 1: PRODUCT NUMBER 1 1: PRODUCT	Additional Product Descriptions: Defaults Additional Descriptions to Print per Product: Defaults	n Debug Taxes Totalizer LT Only 101: 102: 103: 103: 103: 104: 103: 105: 105: 105: 106: 107: 1000 11: 1000 12: 10: 10: 10: 10: 10: 10: 10: 10

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System Requirements

The recommended system configuration for the MID:COM E:Count Matrix is a computer running Microsoft Windows Xp® Professional with a 2.0 GHz processor and at least 128 megabytes (MB) of RAM. Below are the minimum requirements your computer needs to run the MID:COM E:Count Matrix.

Minimum Requirements			
Computer/Processor	Computer with Pentium 133 megahertz (MHz) or higher processor; Pentium III recommended		
Memory	64 MB of RAM; other programs running simultaneously may require additional memory		
Hard Disk	Hard disk space requirements will vary depending on configuration; custom installation choices may require more or less. Listed below are the minimum hard disk requirements for MapPoint:		
	 25 megabytes for full configuration - recommended Users without Windows XP, Windows 2000, Windows Me, or Office 2000 Service Release 1 (SR-1) require an extra 50 MB of hard disk space for System Files Update. 		
Operating System Windows 98, Windows 98 Second Edition, Windows Millennium Edition (Windows Me), Windows NT 4.0 with Service Pack 6 (SP6) or later, * Windows 2000, Windows XP, Windows Server 2003, or later			
Drive	none		
Display	XGA (1024x768) or higher-resolution monitor with 256 colors		
Peripherals	Microsoft Mouse, Microsoft IntelliMouse®, or compatible pointing device		

* Systems running Windows NT 4.0 SP6 must have Microsoft Internet Explorer 4.01 SP1 or later.

1.0.0 Installation

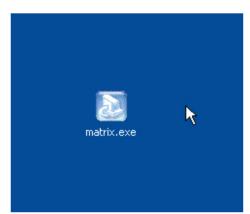


Figure 1. Matrix Installation File on the Windows Desktop

Install Step 1 - Launch install.

Locate and then double-click the **matrix.exe** *Matrix Installation Program.* This may be obtained from the MID:COM website or you may order a CD directly from MID:COM.

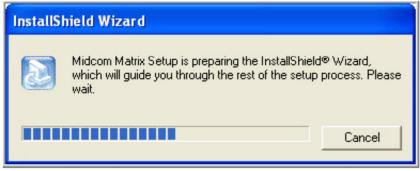


Figure 2. Matrix Install Progress Bar

Install Step 2 - Extracting Files.

The **Matrix Installation Program** will show a progress bar while extracting the files necessary for the installation to a temporary location on your computer.

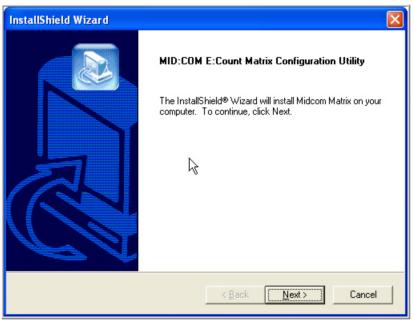


Figure 3. Matrix Install Welcome Screen

Install Step 3 - Welcome Screen.

After all files have been extracted click <Next> to continue.

InstallShield Wizard			
MID:COM E:Count Matrix Configuration Utility			
Press the PAGE DOWN key to see the rest of the agreement.			
Midwest Computer Register Software End-User License Agreement E:Count Matrix v1.0 Copyright (c) 2006 Midwest Computer Register, Inc. All Rights Reserved NOTICE TO ALL USERS: CAREFULLY READ THE FOLLOWING LEGAL AGREEMENT ("AGREEMENT"), WHICH SETS FORTH LICENSE TERMS			
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Midcom Matrix, you must accept this agreement.			
InstallShield Ko			

Figure 4. Matrix Install License Agreement

Install Step 4 - License Agreement.

Accept the terms of the Midwest Computer Register Software Enduser License Agreement in order to install the MID:COM software. Select <Yes> to accept the license and continue the install.

InstallShield Wizard
MID:COM E:Count Matrix Configuration Utility
Setup will install Midcom Matrix in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\Midcom\Matrix Browse
InstallShield
< Back Next> Cancel

Figure 5. Matrix Install Destination Folder

Install Step 5 - Destination Folder.

The default installation folder should be acceptable for most users, select <Next> to continue.

InstallShield Wizard			
MID:COM E:Count Matrix Configuration Utility			
Program files and shortcuts wil be created. Press Next to continue. Current Settings:			
Install or update Matrix application files. Install, update, or register Windows components. Create or update Desktop and Start Menu shortcuts.			
InstallShield Cancel			

Figure 6. Matrix Install System Modification Summary

Install Step 6 - System Modification Summary.

A summary of the changes is displayed, select <Next> to begin installing files and configuring your system.

InstallShield Wizard				
	InstallShield Wizard Complete Setup has finished installing Midcom Matrix on your computer.			
	< Back Fish Cancel			

Figure 7. Matrix Install Finished

Install Step 7 - Install Finished.

After all necessary files have been installed, select <Finish> to complete the installation.

2.0.0 Operation



Figure 8. Midcom Matrix Shortcut on the Windows Desktop

To start the Matrix application double-click the **Midcom Matrix** shortcut on the desktop.

🐔 Matrix - MID:COM E:Count Configuration Utility 🛛 🛛 🔀					
Tools Help					
Product Labels Prices Ticket Header/Footer Ticket Print Special Charges Calibration Debug Taxes Totalizer LT Only					
Product Labels: Load Defaults	01: PRODUCT PROPANE 02: PRODUCT FUEL OIL/DIESEL 03: PRODUCT GASOLINE 04: PRODUCT LUBE OIL 05: PRODUCT METHANOL 06: PRODUCT JET-A FUEL 08: PRODUCT JET-B FUEL 09: PRODUCT JET-B FUEL 09: PRODUCT NUMBER 10 11: PRODUCT NUMBER 11 12: PRODUCT NUMBER 12 13: PRODUCT NUMBER 13 14: PRODUCT NUMBER 13 14: PRODUCT NUMBER 15 16: PRODUCT NUMBER 15 16: PRODUCT NUMBER 16 17: PRODUCT NUMBER 18	Additional Product Descriptions: Load Defaults Additional Descriptions to Print per Product: Load Defaults	001: 002: 003: 004: 005: 006: 006: 000 01: : : 000 02: : 000 03: : 000 04: : 000 04: : 000 04: : 000 05: : 000 05: : 000 06: : 000 06: : 000 06: : 000 07: : 000 06: : 000 06: : 000 06: : 000 07: : 000 06: : 000 06: : 000 06: : 000 06: : 000 06: : 000 06: : 000 07: : 000 06: : 000 00: :		
Export Pricing to CSV Load from Matrix File Send All to E:Count					
Register: 1 Load All Defaults Import Pricing from CSV Save to Matrix File Get All from E:Count Exit					

Figure 9. Matrix Main Screen

The opening screen will display the default Product Label Configuration and there will be no Register selected.

2.1.0 MID:COM Matrix Main Screen

Tools Help	MID:COM E:Count Configuration Utility bels Prices Ticket Header/Footer Ticket Print Spe 01: PRODUCT PROPANE 02: PRODUCT FUEL OIL/DIESEL	Additional Product	001: 002:	
Load Defaults	03: PRODUCT GASOLINE 04: PRODUCT LUBE OIL 05: PRODUCT METHANOL 06: PRODUCT ANHYDROUS AMMONIA 07: PRODUCT JET-A FUEL 09: PRODUCT JET-B FUEL 09: PRODUCT THANOL 10: PRODUCT NUMBER 10 11: PRODUCT NUMBER 11 12: PRODUCT NUMBER 12 13: PRODUCT NUMBER 13 14: PRODUCT NUMBER 13 14: PRODUCT NUMBER 15 16: PRODUCT NUMBER 15 16: PRODUCT NUMBER 16 17: PRODUCT NUMBER 17 18: PRODUCT NUMBER 18	Descriptions: Load Defaults Additional Descriptions to Print per Product: Load Defaults	003: 004: 005: 006: 01: : : 000 ▲ 02: : 000 03: : 000 04: : 000 04: : 000 05: : 000 05: : 000 06: : 000 07: : 000 ♥ Save	
Saved: C:\Matrix Defaults.mtx Export Pricing to CSV Load from Matrix File Send All to E:Count				
Register:	Load All Defaults Import Pricing from (SV S	ave to Matrix File Get All from E:Count Exit	

Figure 10. Sections of the Matrix Main Screen

Menus

Tools and Help: Selecting a Menu opens up a new screen with additional functions for the operator.

Tabs

Product Labels, Product Prices, Ticket Header and Footer, Ticket Configuration, Special Charges, Calibration Data, Debug, Taxes, Totalizer, and LT: Selecting a Tab displays information specific to that Tab and allows the operator to edit data for the E:Count on that Tab.

Commands

Register Selection, Load All Defaults, Export Pricing to CSV, Import Pricing from CSV, Load from File, Save to File, Get All from E:Count, Send All to E:Count, and Exit: Each is a special command that may be used at any time.

Tools Help	MID:COM E:Count Configuration Utility bels Prices Ticket Header/Footer Ticket Print Spe 01: PRODUCT PROPANE 02: PRODUCT FUEL OIL/DIESEL 03: PRODUCT GASOLINE 04: PRODUCT LUBE OIL 05: PRODUCT METHANOL 06: PRODUCT METHANOL 06: PRODUCT JET-A FUEL 08: PRODUCT JET-B FUEL 09: PRODUCT TUMBER 10 11: PRODUCT NUMBER 12 13: PRODUCT NUMBER 13 14: PRODUCT NUMBER 14	Additional Product Descriptions: Load Defaults Additional Descriptions to Print per Product: Load	ation Debug Taxes Totalizer LT Only 001: 002: 003: 004: 0006: Image: Constraint of the second of the seco
Saved: C:\M	15: PRODUCT NUMBER 15 16: PRODUCT NUMBER 16 17: PRODUCT NUMBER 17 18: PRODUCT NUMBER 18 Save	 Defaults SVLo	07: : 000 V Save Send Product Labels and Descriptions to E:Count
Register:	1 Load All Defaults Import Pricing from I	csv s	ave to Matrix File

Figure 11. Commands

Note: The Calibration, Taxes, Totalizer, and LT labels must be sent separately.

2.2.0 Menus

2.2.1 - Tools Menu

ools Help Print Matrix Data Ctrl+P Print Current Tab Ctrl+C View Log File Ctrl+V	ket Header/Footer Ticket Print Sp	pecial Charges Calibr	ation Debug Taxes Totalizer L	
07: PRODUCT 08: PRODUCT 09: PRODUCT 10: PRODUCT 11: PRODUCT 12: PRODUCT 13: PRODUCT 14: PRODUCT 15: PRODUCT 16: PRODUCT	UEL OIL/DIESEL GASOLINE LUBE OIL METHANOL ANHYDROUS AMMONIA JET-A FUEL JET-B FUEL ETHANOL NUMBER 10 NUMBER 11 NUMBER 11 NUMBER 12 NUMBER 13 NUMBER 14 NUMBER 15 NUMBER 16 NUMBER 17	Additional Descriptions: Load Defaults Additional Descriptions to Print per Product: Load Defaults	002: 003: 004: 005: 006: 006: 003: 004: 003: 004: 005: 006: 07: 06: 07: 06: 07:	Save : 000 ▲ : 000 ▲ : 000 : 000 : 000 : 000 : 000 : 000 Save tions to E:Count
Loaded: C:\Matrix Defaults.mtx	Export Pricing to	csy Lo	ad from Matrix File	ount

Figure 12. Tools Menu

Print Matrix Data: Print all settings. Print Current Tab: Print settings on the Active Tab. View Log File: Display the Matrix program log file. Options Display the Matrix Options screen.

2.2.3 - Help Menu

🚯 Matrix	- MID:COM E:Count Configuration Utility			×
Tools Help				
Pro R	egisaddon Carrix	pecial Charges Ca	alibration Debug Taxes Totalizer LT Only	1
Pro	bout Matrix Ctrl+A	Additional	001:	
Labels:	02: PRODUCT FUEL OIL/DIESEL	Product		
Load	03: PRODUCT GASOLINE 04: PRODUCT LUBE OIL	Descriptions	\$: 003: 004:	
Defaults	05: PRODUCT METHANOL	Load	005:	
	06: PRODUCT ANHYDROUS AMMONIA	Defaults	006:	
	07: PRODUCT JET-A FUEL		Save	
	08: PRODUCT JET-B FUEL 09: PRODUCT ETHANOL			
	10: PRODUCT NUMBER 10	Additional	01: : 000 🔨	
	11: PRODUCT NUMBER 11	Descriptions to Print per	s 02: : 000 - : 000 - : 000 - : 000	
	12: PRODUCT NUMBER 12	Product:	04: : 000	
	13: PRODUCT NUMBER 13 14: PRODUCT NUMBER 14	· · · · · ·	05: : 000	
	15: PRODUCT NUMBER 15	Load Defaults	06: : 000	
	16: PRODUCT NUMBER 16	Dordano	07: : 000 💌	
	17: PRODUCT NUMBER 17 18: PRODUCT NUMBER 18			
	18: PRODUCI NOMBER 18	y	Save	
	Save			
			Send Product Labels and Descriptions to E:Count	
Loaded: 0	Matrix Defaults.mtx			
	Export Pricing to	CSV	Load from Matrix File Send All to E:Count	
Register:	Load All Defaults Import Pricing fro	m CSV	Save to Matrix File Get All from E:Count Exit	

Figure 13. Help Menu

Matrix Help: Display the Matrix Help file. Registration: Display the Registration screen. About Matrix: Display the Matrix About screen.

2.3.0 Tabs

2.2.1 Product Labels Tab

🐔 Matrix - Tools Help	MID:COM E:Count Configuration Utility		
Product La	bels Prices Ticket Header/Footer Ticket Print Sp	ecial Charges Calibra	ation Debug Taxes Totalizer LT Only
Product Labels: Defaults	01: PRODUCT PROPANE 02: PRODUCT FUEL OIL/DIESEL 03: PRODUCT GASOLINE 04: PRODUCT LUBE OIL 05: PRODUCT METHANOL 06: PRODUCT JET-A FUEL 08: PRODUCT JET-A FUEL 09: PRODUCT JET-E FUEL 09: PRODUCT NUMBER 10 11: PRODUCT NUMBER 11 12: PRODUCT NUMBER 12 13: PRODUCT NUMBER 13 14: PRODUCT NUMBER 14 15: PRODUCT NUMBER 15 16: PRODUCT NUMBER 16 17: PRODUCT NUMBER 17 18: PRODUCT NUMBER 18	Additional Product Descriptions: Load Defaults Additional Descriptions to Print per Product: Load Defaults	001: ▲ 002: 003: 004: 005: 006: ▼ 01: : 000 ▲ 02: : 000 ▲ 03: : 000 ▲ 03: : 000 ▲ 04: : 000 ▲ 03: : 000 ▲ 04: : 000 ▲ 05: : 000 ♥ 06: : : 000 ♥ 06: : : 000 ♥ ○?: : : : Save ● ● • Send Product Labels and Descriptions to E:Count ● •
Saved: C:\N	fatrix Defaults.mtx		
Register:	Export Pricing to I Load All Defaults Import Pricing from		ad from Matrix File Send All to E:Count

Figure 14. Product Labels Tab

Product Labels

To change the Product Label for a specific product, click the row for the desired Product Label. The editing field below the list will display the Product Label and allow the user to change the label. Select <Save> to save the Product Label.

Additional Product Descriptions

Up to 100 Additional Product Description Lines are available. To change a specific Additional Product Description Line, click the row of the desired Additional Product Description. The editing field below the list will display the Additional Product Description and allow the user to change the Product Description. Select <Save> when editing is complete.

The product Description fields allow additional information to be displayed on a per-product basis.

Additional Product Description to Print per Product

To specify which Product Description(s) should be printed on the ticket for a particular product, if any, click the row corresponding to the desired product.

In the "Start Line" combo box below the list select the Initial Product Description to print, or select {none} to indicate that no Extra Description should print for that product.

In the "End Line" combo box below the list select the Final Product Description to print, or select {none} to indicate that no Extra Description should print for that product.

All lines between and including the "Initial Line" and the "Final Line" will be printed on every delivery ticket meter block where that particular product is delivered.

Select <Save> to save the Additional Product Description(s) for the selected product.

Send Product Labels to E:Count

When the desired Product Labels and Product Descriptions have been configured and are ready to be sent to the E:Count, select the Send Product Labels to E:Count button. The E:Count must be powered up and the serial cable must be connected from the Power Control Module (PCM) to the computer running the Matrix. A progress bar will display the status of the transmission of the Product Labels. When the progress bar reaches 100% the transmission is complete.

Load Defaults - Product Labels and Product Descriptions

To reset the Product Labels, Product Descriptions, or Selected Product Descriptions to the default values and erase all changes for all products select the appropriate Load Defaults button. If the existing settings have not been saved a prompt will appear and allow the current settings to be saved.

2.3.2 Product Pricing Tab

🚳 Matrix -	MID:COM	E:Count Co	nfiguration U	tility					×
Tools Help									
Product La	ibels Price	es Ticket Hea	der/Footer Ticł	ket Print Spe	ecial Charges	Calibration	Debug Ta	xes Totalizer LT Only	۱ (
Pricing:	02: PRO	DUCT PROPAN DUCT FUEL C	IL/DIESEL	Price = \$ Price = \$	00.0000				
Load Defaults	04: PR0 05: PR0 06: PR0 07: PR0 08: PR0 09: PR0 10: PR0 11: PR0 12: PR0 13: PR0 14: PR0	DUCT GASOLI DUCT LUBE C DUCT METHAN DUCT ANHYDF DUCT JET-A DUCT JET-B DUCT ETHANC DUCT NUMBEF DUCT NUMBEF DUCT NUMBEF DUCT NUMBEF DUCT NUMBEF	IL IOL ROUS AMMONIA FUEL FUEL L L L L L L L L L L L L L L L L L L	Price = \$ Price = \$	00.0000 00.0000 00.0000 00.0000 00.0000 00.0000 00.0000 00.0000 00.0000 00.0000				
1: Price	00.0000								Save
Tax #1	00.0000	Type 🕺		Discount	00.0000	Type 🔀	Days 00		
Tax #2	00.0000	Type 🔏	Special	Charges 1 & 2	0 0	Tax Special (Charges N		
								Send Product Pricing to E:	Count
Loaded: C:\	Matrix Defa	ults.mtx							
			Exp	ort Pricing to C	:sv	Load fro	m Matrix File	Send All to E:Count	
Register:	1 💌	Load All Def	aults Impo	rt Pricing from	CSV	Save to	o Matrix File	Get All from E:Count	E <u>x</u> it

Figure 15. Product Pricing Tab

Product Pricing

To change the Price, Tax Rates, Tax Types, Discount, and Special Charges for a specific product click the row for the desired product number, the editing fields below the list will display the Product Pricing data and allow the user to modify them. Select <Save> to save the Product Pricing data.

Send Product Pricing to E:Count

When the desired Product Pricing has been configured and is ready to be sent to the E:Count, select the Send Product Pricing to E:Count button. The E:Count must be powered up and the serial cable must be connected from the Power Control Module (PCM) to the computer running the Matrix. A progress bar will display the status of the transmission of the Product Pricing. When the progress bar reaches 100% the transmission is complete.

Load Defaults - Product Pricing

To reset the Product Pricing to the default values and erase all changes for all products select the Load Defaults button. If the existing settings have not been saved a prompt will appear and allow the current settings to be saved.

Product Pricing Fields

Price Tax #1, #2 Discount	: A value from 00.0000 to 99.9999. : :
	: Either % or \$: : \$ calculates per unit volume, : % calculates on the amount.
Special Charge	<pre>: 0, 1-9: : 0 indicates no Special Charge is to be applied : 1-9 is the index of the Special Charge : (see Special Charges)</pre>
Discount Days	: 00-99: : The number of Discount Days printed on the : ticket. The number of days the customer is : allowed to pay the invoice and subtract the : discount amount.
Tax Special Charges	

🚱 Matrix - MID:COM E:Count Configur	ation Utility	\mathbf{X}
Tools Help		
Product Labels Prices Ticket Header/For	oter Ticket Print Special Charges Calibration Debug Taxes Totalizer LT Only	
Header Lines: 02:	Left All Lines	
Load 03: Defaults 04:	Center Header	
005:	Lines	
07:		
09:		
Line	Save	
Footer 01: Lines: 02:	Left All Lines	
Load 03: Defaults 04:	Center Footer	
Line	Save Lines Send Header and Footer to E:Count	
Loaded: C:\Matrix Defaults.mtx	Export Pricing to CSV Load from Matrix File Send All to E:Count	
Register: 1 💌 Load All Defaults	Import Pricing from CSV Save to Matrix File Get All from E:Count Exit	

2.3.3 Ticket Header and Footer Tab

Figure 16. Ticket Header and Footer Tab

Ticket Header and Footer

Click the row corresponding to a line to be changed. The editing field below the list will display the Ticket Header or Ticket Footer line and allow the user to modify it. Select <Save> to save the Ticket Header or Ticket Footer line.

To indicate the line should be printed make sure the checkbox next to the line is checked. To indicate a line should not be printed clear the checkbox for that line.

A blank line in either the Header or the Footer will be printed if the checkbox next to the line is selected and there is no text on the line.

Sample Ticket Header and Footer

The sample will always reflect what the current Ticket Header and Ticket Footer will look like when the delivery ticket printed. The Ticket Configuration Tab will also be updated.

Send Header and Footer to E:Count

When the desired Ticket Header and Ticket Footer have been configured and are ready to be sent to the E:Count, select the Send Header and Footer to E:Count button. The E:Count must be powered up and the serial cable must be connected from the Power Control Module (PCM) to the computer running the Matrix. A progress bar will display the status of the transmission of the Ticket Header and Ticket Footer. When the progress bar reaches 100% the transmission is complete.

Load Defaults - Ticket Header and Footer

To remove all Ticket Header and Ticket Footer lines and reset the Ticket Header and Ticket Footer to the default (blank) values, select Load Defaults for the desired Ticket section. If the existing settings have not been saved a prompt will appear and allow the current settings to be saved.

2.3.4 Ticket Configuration Tab

Printed Lines: Load Defaults Remove Blank Lines Minimize	 ✓ 35: AMOUNT DUE 4 XXX.XX ✓ 36: <blank 6:="" line="" no="" text=""></blank> ✓ 37: DISCOUNT DAYS ✓ 38: DISCOUNT AMT \$ XXX.XX ✓ 39: DISCOUNT RATE AND TYPE ✓ 40: <blank 7:="" line="" no="" text=""></blank> ✓ 41: PRODUCT DESCRIPTION ✓ 42: VOL. COMPENSATED TO tt ✓ 43: <blank 8:="" line="" no="" text=""></blank> ✓ 44: TOTALIZER XXXXXXXXXX ✓ 45: REGISTER # rrrrr ✓ 46: <blank 9:="" line="" no="" text=""></blank> ✓ 47: FOOTER LINE #1/4 ✓ 48: FOOTER LINE #2/4 ✓ 50: FOOTER LINE #4/4 	Charges Calibration Debug Taxes Totalizer LT Only Sample Ticket: TRUCK# xxxx DRIVER# xxxx DATE xx/xx/xx STIME xx:xx DATE xx/xx/xx FTIME xx:xx DATE xx/xx/xx FTIME xx:xx DATE xx/xx/xx FTIME xx:xx VOLUME START xxx VOLUME START xxx PRODUCT DESCRIPTION VOL. COMPENSATED TO tt TOTALIZER xxxxxxxxx REGISTER # rrrrr
Loaded: C: [\]	Matrix Defaults.mtx Export Pricing to CSV Load All Defaults Import Pricing from CSV	Send Ticket Configuration to E:Count Load from Matrix File Send All to E:Count Save to Matrix File Get All from E:Count

Figure 17. Ticket Configuration Tab

Printed Lines

There are multiple sections of data printed on the Delivery Ticket:

- 1. Ticket Header
- 2. Meter Time Block
- 3. Product Pricing
- 4. Meter Product Block
- 5. Ticket Footer

The lines that print on the ticket depend on the Product Calibration settings, on the Product Pricing settings, on the configuration of the Ticket Header and the Ticket Footer, and also on the setting of user-configurable lines.

To remove a line from the ticket or add a line back to the ticket, click on the checkbox to the left of the line to be removed. If the check box remains checked the line you have selected is unable to be removed.

Sample Ticket

When the Ticket Configuration, Ticket Header, Ticket Footer, or Product Pricing are modified the Sample Ticket will be updated to reflect how the ticket will print.

If any Product Pricing value is changed from the default values all Product Pricing lines will be displayed on the Sample Ticket.

Send Ticket Configuration to E:Count

When the desired Ticket Configuration has been configured and is ready to be sent to the E:Count, select the *Send Ticket Configuration to E:Count* button. The E:Count must be powered up and the serial cable must be connected from the Power Control Module (PCM) to the computer running the Matrix. A progress bar will display the status of the transmission of the Ticket Configuration. When the progress bar reaches 100% the transmission is complete.

Load Defaults - Ticket Configuration

To reset the Ticket Configuration to the default (all lines printed) select the Load Defaults button. If the existing settings have not been saved a prompt will appear and allow the current settings to be saved.

Remove Blank Lines

To remove all blank lines from the Ticket Configuration while leaving all lines containing text intact, select Remove Blank Lines. The Sample Ticket will be updated to reflect the change in the Ticket Configuration. If the existing settings have not been saved a prompt will appear and allow the current settings to be saved.

Minimize

To remove all lines that are not required from the Ticket Configuration, select Minimize. The Sample Ticket will be updated to reflect the current Ticket Configuration. If the existing settings have not been saved a prompt will appear and allow the current settings to be saved.

2.3.5 Special Charges Tab

Matrix - MID:COM E:Count Configurat Tools Help Product Labels Prices Ticket Header/Foote Special 01: Charge 03: Load 04: 04: 05: 06: 07: 08: 09:	r Ticket Print Special Cha Si C A	rges Calibration Debug Ta pecial harge mounts: Load Defaults 01: 0000.00 02: 0000.00 04: 0000.00 05: 0000.00 06: 0000.00 07: 0000.00 09: 0000.00 09: 0000.00	xes Totalizer LT Only	
	Save			Save
			Send Special Charges to E:	Count
Loaded: C:\Matrix Defaults.mtx	Export Pricing to CSV	Load from Matrix File	Send All to E:Count	
Register: 1 🔽 Load All Defaults	Import Pricing from CSV	Save to Matrix File	Get All from E:Count	E <u>x</u> it

Figure 18. Special Charges Tab

Special Charge Labels

To change the Special Charge Label for a specific Special Charge, click the row for the desired Special Charge. The editing field below the list will display the Special Charge Label and allow the user to change the label. Select <Save> to save the Special Charge Label.

Special Charge Amounts

To change the Special Charge Amount for a specific Special Charge, click the row for the desired Special Charge. The editing field below the list will display the Special Charge Amount and allow the user to change the amount. Select <Save> to save the Special Charge Amount.

The Special Charge Amounts are not editable at the time of delivery. The Special Charge Amount(s) will be added to each Delivery Ticket when the Delivery Product includes Pricing and has been configured for one or two Special Charges.

The specific Special Charge to include for each product is configured on the Product Pricing tab.

Send Special Charges to E:Count

When the desired Special Charges have been configured and are ready to be sent to the E:Count, select the *Send Special Charges* to E:Count button. The E:Count must be powered up and the serial cable must be connected from the Power Control Module (PCM) to the computer running the Matrix. A progress bar will display the status of the transmission of the Special Charges. When the progress bar reaches 100% the transmission is complete.

Load Defaults - Special Charges and Special Charge Labels

To reset the Special Charges to the default values and erase all changes select the appropriate Load Defaults button. If the existing settings have not been saved a prompt will appear and allow the current settings to be saved.

2.3.5 Calibration Tab

ools Help Product Labels	Prices Ticket Hea	der/Footer Ticket	Print Special Cha	rges Calibration D	ebug Mic	dcom] Taxes	Totalizer LT Only
Calibration Factors: Load Defaults	01: 00.0000 02: 00.0000 03: 00.0000 04: 00.0000 05: 00.0000 06: 00.0000 07: 00.0000 09: 00.0000 11: 00.0000 11: 00.0000 12: 00.0000 14: 00.0000 14: 00.0000 15: 00.0000 16: 00.0000 18: 00.0000	Dwell Factors: Load Defaults	01: 000.0 02: 000.0 03: 000.0 04: 000.0 05: 000.0 06: 000.0 07: 000.0 09: 000.0 10: 000.0 11: 000.0 11: 000.0 12: 000.0 14: 000.0 14: 000.0 15: 000.0 15: 000.0 15: 000.0 17: 000.0 18: 000.0	Compensation Tables:	01: 0 02: 0 03: 0 04: 0 05: 0 07: 0 08: 0 09: 0 10: 0 11: 0 12: 0 13: 0 14: 0 15: 0 15: 0 17: 0 18: 0	Multip	Edit MPC Get MPC
18: 00.0000 18: 00.0 18: 0 Is: 0							

Figure 19. Calibration Tab

Calibration Factors

In order for a product to be valid and to be deliverable by the E:Count the desired product must have a valid Calibration Factor.

To change the Calibration Factor for a specific Product, click the row for the desired Calibration Factor. The editing field below the list will display the Calibration Factor and allow the user to change the factor. Select <Save> to save the Calibration Factor.

Valid Calibration Factors are from 0.0001 to 1.9999. During the Calibration process the Prover will provide the actual Calibration Factor that should be used for the product being proved.

Dwell Factors

To change the Dwell Factor for a specific Product, click the row for the desired Dwell Factor. The editing field below the list will display the Dwell Factor and allow the user to change the factor. Select <Save> to save the Dwell Factor.

Compensation Tables

To change the Compensation Table for a specific Product, click the row for the desired Compensation Table. The editing field below the list will display the Compensation Table and allow the user to change the table number. Select <Save> to save the Compensation Table.

Set the Compensation Table value to the corresponding built-in table value of the actual product being delivered:

Compensation Table #	Description
00	UNCOMPENSATED
01	PROPANE
02	DIESEL/HEATING OIL
03	GASOLINE
04	LUBE OIL
05	METHANOL
06*	ANHYDROUS AMMONIA (E179 and older)
06*	AVIATION GASOLINE (E180 and newer)
07	JET-A FUEL
08	JET-B FUEL
09	ETHANOL

Note: If a product is *not* to be temperature compensated the Compensation Table should be 0 (uncompensated).

<u>Load Defaults - Calibration Factor, Dwell Factor, Compensation</u> Table

To reset the Calibration Factors, Dwell Factors, or Compensation Tables to the default values and erase all changes select the appropriate Load Defaults button. If the existing settings have not been saved a prompt will appear and allow the current settings to be saved.

(continued)

Get Calibration Data from E:Count

The desired Calibration Factors, Dwell Factors, and Compensation Tables may be retrieved from the E:Count and saved on a computer. To retrieve the Calibration Data from the E:Count, select the *Get Calibration Data from the E:Count* button. The E:Count must be powered up and the serial cable must be connected from the Power Control Module (PCM) to the computer running the Matrix. A progress bar will display the status of the transmission of the Calibration Data. When the progress bar reaches 100% the transmission is complete.

Send Calibration Data from E:Count

When the desired Calibration Factors, Dwell Factors, and Compensation Tables have been configured and are ready to be sent to the E:Count, select the Send Calibration Data to E:Count button. The E:Count must be powered up and the serial cable must be connected from the Power Control Module (PCM) to the computer running the Matrix. A progress bar will display the status of the transmission of the Calibration Data. When the progress bar reaches 100% the transmission is complete.

Note: In order to send Calibration Data to the E:Count the Calibration Bolt must have first been loosened and then tightened; after doing so the Calibration Data may be sent to the E:Count until the next time the E:Count is shut down. This prevents Calibration Data from being overwritten unless the meter and register are being calibrated during the Proving process. If the operator attempts to send Calibration Data to the E:Count without the Calibration Bolt having been loosened and then tightened the operator will get an error in the Matrix Software as shown below.

(continued)

MultiPoint Calibration Functions

The MultiPoint Calibration data is only valid for those versions that support Multipoint Calibration, M173, E180+ and L415+.

For more information on MultiPoint Calibration refer to the MultiPoint Calibration Manual for the ECount MCR-05 and ECount LT MCR-09.

Edit MPC

Display the MultiPoint Calibration Factor Data Entry and Edit Form to allow the entry and editing of MPC data.

🕵 Multipoint	Calibration Da	ta		
	Flow Rate 00-FF (Hex)	Direction +/-	Factor 0.0000-0.9999	Load Defaults
Point 0:	00	-	0.0000	
Point 1:	00	-	0.0000	
Point 2:	00	-	0.0000	
Point 3:	00	-	0.0000	
Point 4:	00	-	0.0000	
Point 5:	00	-	0.0000	
Point 6:	00	-	0.0000	
Point 7:	00	-	0.0000	
Point 8:	00	-	0.0000	Verify
Point 9:	00	-	0.0000	Save

Figure 20. MultiPoint Calibration Factor Data Entry and Edit Form

Send MPC

Send the MultiPoint Calibration Factors to the ECount. The Calibration Bolt must have been both loosened and tightened prior to sending the MPC Data to the register similar to the regular Calibration Data.

Get MPC

Get the existing MultiPoint Calibration Factors from the ECount.

2.3.6 Taxes Tab

🖗 Matrix - MID:COM E:Count Configuration Utility					
Tools Help					
Product Labels Prices Ticket Header/	Footer Ticket Print Special	Charges Calibration Debug Ta	xes] Totalizer LT Only		
Tax Labels and Subtotal Tax Setup					
Maximu	n Length = 16 Characters				
Tax 1 Label: TAX #1		🔲 Tax 1 is Subject to Tax	2		
Tax 2 Label: TAX #2					
,					
Load Tax Setup Defaults					
Note 1: The Tax Setup is *not					
Note 2: The Tax Setup is *not	* able to be read from	n the E:Count , it may only l	be sent to the E:Count.		
			Send Tax Setup to E:Count		
Loaded: C:\Matrix Defaults.mtx					
	Export Pricing to CSV	Load from Matrix File	Send All to E:Count		
Register: 1 💽 Load All Defaults	Import Pricing from CSV	Save to Matrix File	Get All from E:Count Exit		
	1				
Figure 21. Taxes Ta	di				
Tax Labels					
The Default Tax Labe	els for all p	roducts for Tax	1 and Tax 2 are		
as follows: Tax 1: TAX #	1				
Tax 2: TAX					
_ \ .\					
To change the Tax La as desired. The lak					
		could be se app			
Subtotal Tax					
If Tax 2 is a Subtotal Tax, or if "Tax 1 is Subject to Tax 2" check the check box labeled "Tax 1 is Subject to Tax 2". The					
calculation of Tax 2 will include the value of Tax 1 in addition					
to all other values being taxed. Select <save> to save the</save>					
Calibration Factor.					
As indicated, these	values are "	Write Onlv" and	are not included		
in the "Get All" or "Send All" operations.					
Load Defaults - Tax Labels and Subtotal Tax					

To reset the Tax Labels and Subtotal Tax to the default values and erase all changes select the Load Tax Setup Defaults button. If the existing settings have not been saved a prompt will appear and allow the current settings to be saved.

Send Tax Setup to E:Count

To send the new Tax Labels and the Subtotal Tax setting to the E:Count select "Send Tax Setup to E:Count". The existing values in the E:Count will be over-written with the displayed values.

3.0.0 E:Count Serial Communication

Tools Help	MID:COM E:Count Configuration Utility bels Prices Ticket Header/Footer Ticket Print Spe 01: PRODUCT PROPANE 02: PRODUCT FUEL OIL/DIESEL 03: PRODUCT GASOLINE 04: PRODUCT LUBE OIL 05: PRODUCT METHANOL 05: PRODUCT JET-A FUEL 06: PRODUCT JET-A FUEL 09: PRODUCT JET-B FUEL 09: PRODUCT TUMBER 10 11: PRODUCT NUMBER 12 13: PRODUCT NUMBER 13 14: PRODUCT NUMBER 15 16: PRODUCT NUMBER 16 17: PRODUCT NUMBER 18 V	Additional Product Descriptions: Load Defaults Additional Descriptions to Print per Product: Load Defaults	ation Debug Taxes Totalizer LT Only 001: 002: 003: 004: 005: 006: 001: 000 Save 01: 100 100 Save 01: 100 Save 000 Save Save Save Save Save	
Send Product Labels and Descriptions to E:Count Saved: C:\Matrix Defaults.mtx				
Export Pricing to CSV Load from Matrix File Send All to E:Count Register: 1 Load All Defaults Import Pricing from CSV Save to Matrix File Get All from E:Count Exit				

Figure 22. Register Selection

Register Selection

In order to communicate with an E:Count via a serial cable, the Matrix Software must know which E:Count to communicate with.

Register 1 will be valid for most users. Register 2 is only valid in a dual register configuration with 2 registers connected to a single Power Control Module (PCM).

Changing the Register setting from Register 1 to Register 2 allows the operator to configure either of the E:Count registers on a vehicle.

The value of the Register setting will be saved and restored each time the program is run.

Options

On the main Matrix screen select the *Tools* Menu and then select *Options*.

🔞 Matrix - Options	×		
COM Port: 1			
E:Count Type			
 Stand-Alone: Single or Dual E:Count System connected to a Power Control Module (default) 			
MID:COM 8000: Single or Dual E:Count System connected to a Programming Harness			

Figure 23. Options

COM Port and Baud Rate

Set the COM Port correctly and set the Baud Rate to 9600.

The E:Count Power Control Module (PCM) has a 9-pin female D-sub connector for serial communication interfacing with external devices labeled "Serial 1". It follows the RS-232 protocol. It is configured as a DCE device. It is set up to communicate using 9600,N,8,1. The communicating software must be set up the same, and must be set to NO hardware handshaking. It uses pins 2, 3, and 5, and requires a regular cross-over serial cable assembly to connect to DTE devices such as a P.C., laptop, or handheld.

4.0.0 Print Data

To view and print a list of settings, either all or just the current tab, select the *Data* menu then select *Print All Data* or *Print Active Tab*.

4.1.0 Print Preview

Matrix - Print Preview								
Print to Default Printer Select Pr	inter	<u>C</u> lose						
Workstation: BAR	T-15-2500)						~
E:Count Version:								
Program Version: 2.0	0.0631							
Print Date: 01/	31/2015 3	10:32 AM						
PRODUCT LABELS AND PRICING								
======================================	Price	Toyl Trm	Tax2 Typ	Dies Tro	Da	127	Iblest	
## Froducc	FLICE	Taxi Typ	Tax2 Typ	DISC TYP	DS	121	LDICHC	
01 PRODUCT PROPANE	00 0000	00 0000%	00.0000%	00 0000%	00	0.010	00000	
02 PRODUCT FUEL OIL/DIESEL			00.0000%					
03 PRODUCT GASOLINE			00.0000%					
04 PRODUCT LUBE OIL			00.0000%					
05 PRODUCT METHANOL			00.0000%					
06 PRODUCT ANHYDROUS AMMONIA								
07 PRODUCT JET-A FUEL	00.0000	00.0000%	00.0000%	00.0000%	00	OON	000000	
08 PRODUCT JET-B FUEL	00.0000	00.0000%	00.0000%	00.0000%	00	OON	000000	
09 PRODUCT ETHANOL	00.0000	00.0000%	00.0000%	00.0000%	00	OON	000000	
10 PRODUCT NUMBER 10	00.0000	00.0000%	00.0000%	00.0000%	00	00N	000000	
11 PRODUCT NUMBER 11	00.0000	00.0000%	00.0000%	00.0000%	00	00N	000000	
12 PRODUCT NUMBER 12	00.0000	00.0000%	00.0000%	00.0000%	00	00N	000000	
13 PRODUCT NUMBER 13	00.0000	00.0000%	00.0000%	00.0000%	00	00N	000000	
14 PRODUCT NUMBER 14			00.0000%					
15 PRODUCT NUMBER 15			00.0000%					
16 PRODUCT NUMBER 16			00.0000%					
17 PRODUCT NUMBER 17			00.0000%					
18 PRODUCT NUMBER 18			00.0000%					
19 PRODUCT NUMBER 19	00.0000	00.0000%	00.0000%	00.0000%	00	OON	000000	*

Figure 24. Print Preview

Print to Default Printer :	Print the Settings to the Default
	Windows Printer.
Select Printer	Display the Printer Select dialog.
Close	Close the Print Preview Screen and
	return to the Matrix main screen.

5.0.0 E:Count Reference

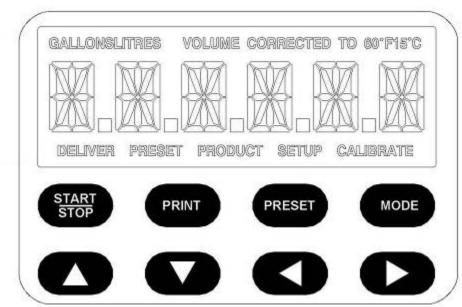


Figure 25. E:Count LCD and Keyboard Layout

GALLONSLITRES	'GALLONS' or 'LITRES' indicates the current Volume Mode (US or Metric).
VOLUME CORRECTED TO 60F15C	Displayed whenever the Temperature Compensation is active. `60F' in Gallons Mode, 15C' in Liters mode.
DELIVER	Indicates <u>Delivery Mode</u> is active and will display until the Fuel Delivery Ticket prints.
PRESET	Indicates the Preset Volume is being changed.
PRODUCT	Indicates the Product Code is being changed.
SETUP	Displayed in the <u>Delivery Menu</u> and the <u>Calibration Menu</u> .
CALIBRATE	Calibration Screw backed out. Displayed until Calibration Screw tightened.

Special Note on Keyboard Entry

The E:Count uses special technique called **PRESS & HOLD** for keyboard entry. This technique eases keyboard operation, especially when wearing gloves, in the absence of any audible or tactile feedback. Simply press a button and wait for the desired action.

Examples:

- For menus press & hold the mode key until the selection appears.
 - o PRESS & HOLD **<START/STOP>** to enter that selection. o PRESS & HOLD **<START/STOP>** to exit the selection.
 - O PRESS & HOLD START/SIOP> to exit the selection.
- To enter a number PRESS & HOLD the **<RIGHT>** or **<LEFT>** arrow keys to select the digit to be changed. To change the number PRESS & HOLD the **<UP>** or **<DOWN>** arrow.
- To start a delivery PRESS & HOLD **<START/STOP>**.
- To enter a preset PRESS & HOLD **<PRESET>**.

Pressing and releasing a button may give results but it is only coincidental that the button was held long enough.

6.0.0 Initial Standalone E:Count Settings

The Matrix cannot configure all settings in an E:Count. The following are the minimum recommended values that need to be configured at the E:Count prior to operation or further configuration with the Matrix software.

<u>Step 1.</u> Setup calibration menu values by loosening the Calibration Bolt and then pressing the Mode button. Most of the values will be set in the Matrix software, however the following need to be set at the E:Count:

Calibration Mode:

PRCODE	- Current Product Code
CALFAC	- Calibration Factor
ATOCAL	- Auto-Calibration
MRATIO	- Meter Ratio
CMPTBL	- Compensation Table Number
SERIAL	- Register Serial Number
TIMER	- No Flow Timeout setting
REGNUM	- Register Port Number
U TYPE	- Unit Type, either Mass or Volume
UNITS	- Units, either Gallons or Litres
PGROSS	- Print Gross Volume setting
DECMAL	- Decimal Settings
AIRSEN	- Air Sensor Status
PROBE	- RTD or Analog (RTD replaces Analog as of June 2007)

When finished replace the Calibration Bolt.

<u>Step 2.</u> Setup Delivery menu values by pressing the Mode button. The following need to be set at the E:Count:

DELIVERY MENU

DRIVER - Driver Number

Press Start/Stop to save the Driver Number and return to Delivery Mode.

<u>Step 3.</u> Enter Setup menu values by pressing the Mode button and then Start/Stop on SETUP followed by the Security Code. The following need to be set at the E:Count:

NEWCOD	- Note the Existing Security Code
STAGE1	– Stage 1 Shutoff Value
STAGE2	– Stage 2 Dwell Value
SALE	- Next Sale Number
TRUCK	- System Truck Number
CURNCY	– Currency Display setting
PRINTR	- Printer Type
COPIES	- Number of Thermal Printer Copies (if necessary)
HOSEPK	– Enable Hose Packing (if necessary)

Press Start/Stop on Exit to return to Delivery Mode.

<u>Step 4.</u> If the Currency function is enabled, it is not necessary to enter currency values at the E:Count - the Matrix software will allow you to edit all Pricing values.

<u>Step 5.</u> The computer needs to be connected to Serial Port 1 (or the HOST Port) of the Power Control Module when running the Matrix Program. Run the Matrix and refer to the Matrix User's Guide for additional Information.

7.0.0 Upgrading E:Count Software and Settings

<u>Step 1.</u> Settings on each of the E:Count menus should be noted before upgrading an E:Count. Use the following worksheet to save those values. The items with an "*" in front of them are items that are able to be loaded through the Matrix program.

DELIVERY MENU DRIVER - Driver Number <u>MONEY MENU</u> (Each value must be recorded for each valid product) * PRICE - Product Price * TAX 1 - Tax 1 Rate * TXTYP1 - Tax 1 Type

- * TAX 2 Tax 2 Rate
- * TXTYP2 Type
- * TAXSUB Subtotal Tax
- * DISCNT Discount Rate
- * DSCTYP Discount Type
- * DSCDAY Discount Days

SETUP MENU

NEWCOD	_	Note the Existing Security Code
STAGE1	_	Stage 1 Shutoff Value
* STAGE2	_	Stage 2 Dwell Value (per product)
SALE	—	Next Sale Number
TRUCK	—	System Truck Number
CURNCY	_	Currency Display setting
PRINTR	_	Printer Type
COPIES	_	Number of Thermal Printer Copies
HOSEPK	-	Enable Hose Packing (if necessary)

CALIBRATION MENU

PRCODE –	Current Product Code
* CALFAC	- Calibration Factor
MRATIO -	Meter Ratio
* CMPTBL	- Compensation Table Number
SERIAL -	Register Serial Number
TIMER –	No Flow Timeout setting
REGNUM -	Register Port Number
U TYPE –	Unit Type, either Mass or Volume
UNITS -	Units, either Gallons or Litres
PGROSS -	Print Gross Volume setting
DECMAL -	Decimal Settings
AIRSEN -	Air Sensor Status
PROBE –	RTD or Analog (RTD replaces Analog as of June 2007)

<u>Step 2.</u> Replace the chip in the Power Control Module with the PCMx chip provided by MID:COM (x is the version of the PCM software and may change).

<u>Step 3.</u> Hook up the programming wire harness (provided by MID:COM) to the outside 9 pin circular connector on the E:Count register head and the serial port on your laptop. Change the software in the E:Count register head to the current version (provided by MID:COM) by double clicking on the xxxx.BAT file (provided by MID:COM).

<u>Step 4.</u> The computer needs to be hooked to serial port 1 of the Power Control Module when running the Matrix Program. Run the Matrix and refer to the Matrix User's Guide for additional Information.

8.0.0 Import and Export CSV Files

The Matrix has a function that allows the Import and the Export of a comma-delimited text file (CSV) to be used with an external spreadsheet application to update/modify pricing fields (Excel).

REQUIREMENTS

- There are 18 required fields in each record of the CSV File.
- All 18 fields are required for every record.
- The fields within each record must be comma-delimited.
- The fields themselves must contain no commas, neither in the amounts nor the text.
- There are 100 records in the CSV file, 1 Header Record and 99 Product Records.
- All 100 records are required.
- Record #1 is the Header Record; the Header will contain the name of each field in all caps with no spaces.
- The Header record must start with "PRODUCTCODE" and must end with "THISFIXESEXCEL".
- The Product records must start with the number 1-99 in the first field and must end with "DO_NOT_CHANGE" in the last field.
- All text in the file will be converted to upper-case.
- All of the text in the records must be valid printable ASCII characters.
- The records in the file need to be terminated with CRLF characters, these will be the only characters that are not printable but are required to separate records.

The data in each field will be format-checked and range-checked, however it is still possible that errors may happen during the import.

Contact MID:COM for assistance with importing CSV files.

Field Name # Records		Format	Tab
PRODUCTCODE	99	2 digits, 01-99	*
DESCRIPTION	99	25 ASCII characters	Product Labels
PRICE	99	00.0000 to 99.9999	Prices
TAX1RATE	99	00.0000 to 99.9999	Prices
TAX1TYPE	99	1 character, % or \$	Prices
TAX2RATE	99	00.0000 to 99.9999	Prices
TAX2TYPE	99	1 character, % or \$	Prices
DISCOUNTRATE	99	00.0000 to 99.9999	Prices
DISCOUNTTYPE	99	1 character, % or \$	Prices
DISCOUNTDAYS	99	2 digits, 00-99	Prices
	99	1 digit, 0-9	Prices
FEE2INDEX	99	1 digit, 0-9	Prices
FEESTAXABLE	99	1 character, Y or N	Prices
EXTRALABELSTART	99	3 digits, 000-100	Product Labels
EXTRALABELCOUNT	99	3 digits, 000-100	Product Labels
THISFEEAMOUNT	9**	00.0000 to 99.9999	Special Charge
THISEXTRALABEL	99	25 ASCII characters	Product Labels
THISFIXESEXCEL	99	DO_NOT_CHANGE	***

Figure 26. CSV Import/Export Fields

* The ECount has 99 Product Codes, 01-99. The PRODUCTCODE field is included in the CSV file format in order to clarify which Product Code the fields in that record apply to.

** There are only 9 Fee Amounts available, as a result only the first 9 rows will have an amount in the THISFEEAMOUNT (field #16). Records 10-99 will have "DO NOT USE" in THISFEEAMOUNT. Any values in THISFEEAMOUNT for records 10-99 will be ignored.

*** Excel has a known issue regarding inconsistent behavior when saving CSV files if the last cell in a block of 16 rows is empty. To prevent this there is an 18th field at the end of each record that must not be blank. This field is called "THISFIXESEXCEL" and must contain "DO_NOT_CHANGE" in all product records.

Microsoft Knowledgebase Article ID: 77295

http://support2.microsoft.com/kb/77295/en-us#appliesto

Excel saves text files in 16-row blocks. Therefore, if all the cells in the last column in a 16-row block are empty, Excel saves that area as if the column does not exist. No tabs or commas are saved for that 16-row block.

Data Tools Help Product Labels: Prices Ticket Header/Eooter Ticket Product Labels: 01: PRODUCT FUEL OIL/DIESEL 03: PRODUCT GASOLINE 03: PRODUCT GASOLINE 04: PRODUCT GASOLINE 03: PRODUCT GASOLINE 05: PRODUCT METHANOL 06: PRODUCT ANHYDROUS AMMONIA 07: PRODUCT JET-A FUEL 08: PRODUCT JET-B FUEL 09: PRODUCT NUMBER 10 11: PRODUCT NUMBER 10 11: PRODUCT NUMBER 11 12: PRODUCT NUMBER 13 14: PRODUCT NUMBER 13 14: PRODUCT NUMBER 16 17: PRODUCT NUMBER 16 17: PRODUCT NUMBER 16 17: PRODUCT NUMBER 18 18: PRODUCT NUMBER 18 PC 2 PRODUCT FUEL OIL/DIESEL PRODUCT FUEL OIL/DIESEL	Print Speci	Additional Product Descriptions: Load Defaults Label #2 Additional Descriptions to Print per Product: Load Defaults Start for PC 2 End for PC 2	tion Debug Midcom Taxes Totalize	∑ave ∑ave : 000 ∧ : 000 : 000 : 000 : 000 : 000 · 000 ▼ ∑ave
PRICING IMPORTED FROM CSV				
Register: 1 💌 Load All Defaults		<u>G</u> et	All from E:Count Send All to E:Count	E <u>x</u> it

Figure 27. Product Labels Tab for CSV File

DESCRIPTION

25 Characters, Printed on delivery tickets

EXTRALABELSTART

Index from 1-100 of the First Additional Product Description to Print, 0 = no additional product descriptions will print.

EXTRALABELCOUNT

Count of Additional Product Descriptions to print, starting at the First Additional Product Description to Print and counting up. Start Index + Count must be less than or equal to 100.

THISEXTRALABEL

There are 100 Additional Product Description Lines, but only Descriptions 1-99 will be imported or exported. This is done in order to maintain uniform record layouts for all of the Product Records in the CSV file. The 100th Description will be blank after exporting but may be edited directly in the Matrix

ta Tools	Help									
Product Lab	els P <u>r</u> ice:	s Ticket Heade	r/ <u>F</u> ooter <u>T</u> icket	Print Sp	ecial Charges	<u>Calibration</u>	Debug	Midcom	Ta <u>x</u> es Tota	ali <u>z</u> er <u>L</u> T Only
Pricing:	01: PRO	DUCT PROPANE		Price =	\$ 03.4900					
	02: PRO	DUCT FUEL OI	L/DIESEL I	Price =	\$ 00.0000					
Load		DUCT GASOLIN		Price =	\$ 00.0000					
Defaults		DUCT LUBE OI		Price =	\$ 00.0000					
Dordano		DUCT METHANO			\$ 00.0000					
		DUCT ANHYDRO			\$ 00.0000					
		DUCT JET-A F			\$ 00.0000					
		DUCT JET-B F			\$ 00.0000					
1		DUCT ETHANOL			\$ 00.0000					
		DUCT NUMBER			\$ 00.0000					
		DUCT NUMBER	Real States of S	S 23	\$ 00.0000					
		DUCT NUMBER	0.0		\$ 00.0000					
		DUCT NUMBER			\$ 00.0000					
		DUCT NUMBER			\$ 00.0000 \$ 00.0000					
		DOCI NOMBER	19 1	Fice -	\$ 00.0000					
1: Price	03.4900									Save
Tax #1	00.7990	Type \$		Discount	00.0200	Type \$	Days 10)		
Tax #2	06.5000	Type 🏾 🎖	Special Ch	arges 1 & 2	1 7	Tax Special C	Charges Y			
								Send Pro	oduct Pricing	to E:Count
PRICING IMP	PORTED FI	ROM CSV								

Figure 28. Prices Tab for CSV File

PRICE

Numeric Price per unit Volume/Mass, from 0.0000 to 99.9999.

TAX1RATE, TAX2RATE, DISCOUNTRATE Numeric Tax/Discount Rate, from 0.0000 to 99.9999.

TAX1TYPE, TAX2TYPE, DISCOUNTTYPESales Tax %, Excise Tax \$/unit, or Discount % or \$/unit.Must be \$ or %.07.5000% = 7.5%\$100 x 7.5% = \$7.507.5000\$ = \$7.50/unit100GL x \$7.50 = \$750 ***00.0750% = 0.075%\$100 x 0.075% = \$0.075 ***00.0750\$ = \$0.075/unit100GL x \$0.075 = \$7.50 ***

DISCOUNTDAYS

Number of days to Pay for the Quick Pay Discount, calculated printed on delivery ticket, must be from 00-99

(continued)

PRICES TAB (continued)

FEE1, FEE2

Index of Fee (or Special Charge) to be added to total cost on delivery ticket, from 1-9, or 0 if no Fee. Refers to the Special Charges Tab for the Fee Amount and Fee Description for a particular Fee. Must be from 0-9.

FEESTAXABLE

Indicates whether or not the fee(s) should have the taxes applied. Y indicates the Fees are Subject to the same taxes as the product, while N indicates the Fees are not subject to any tax. Must be a Y or an N.

Matrix - MID:COM E:Count Configuration Utility Data Tools Help Product Labels Prices Special Charge Labels: 01: RCC FEE 02: TRIP CHARGE 03: OFF-ROUTE FEE 04: HAZMAT FEE 05: 06: 07: 08: 09:	Special Charges Calibration Debug Midcom Taxes Totalizer LT Only Special Charge Amounts: 01: 0004.76 02: 0050.00 03: 0025.00 04: 0010.00 05: 0000.00 05: 0000.00 05: 0000.00 06: 0000.00 06: 0000.00 06: 0000.00 08: 0000.00 09: 0000.00 00: 00: 00: 00: 00: 00: 00: 00: 00: 00:
# 1 RCC FEE S	ave # 1 0004.76 <u>S</u> ave Send Special Charges to E:Count
PRICING IMPORTED FROM CSV	
Register: 1 _ Load All Defaults	Get All from E:Count Send All to E:Count Exit

Figure 29. Special Charges Tab for CSV File

THISFEEAMOUNT

Fee Amount from \$0000.00 (no fee) to \$9999.99. Only the first 9 Fee Amounts (in the first 9 Product Records in the CSV File) will be used. The Fee Amounts in Product Records 10-99 are ignored. "DO NOT USE" is exported in records 10-99.

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1	PRODUCT	DESCRIPTI	PRICE	TAX1RA	TE TAX1TYP	E TAX2RA	TE TAX2TY	PE DISCOUNT	DISCOUNT	DISCOUNT	FEE1INDE)	FEE2INDE	FEESTAX	AEXTRALA	BEXTRALAB	THISFEEA	THISEXT	RALABE
2	1	PRODUCT	C)	0 %		0 %	0	%	0	0	C	N		0 0	1111.11		
3	2	PRODUCT	C)	0 %		0 %	0	%	0	0	C	N		0 0	0		
4	3	PRODUCT	C)	0 %		0 %	0	%	0	0	C	N		0 0	0		
5	4	PRODUCT	C)	0 %		0 %	0	%	0	0	C	N		0 0	0		
6	5	PRODUCT	C)	0 %		0 %	0	%	0	0	C	N		0 0	0		
7	6	PRODUCT	C)	0 %		0 %	0	%	0	0	C	N		0 0	0		
8	7	PRODUCT	C)	0 %		0 %	0	%	0	0	C	N		0 0	0		
9	8	PRODUCT	C)	0 %		0 %	0	%	0	0	C	N		0 0	0		
10	9	PRODUCT	C)	0 %		0 %	0	%	0	0	C	N		0 0	9999.99		
11	10	PRODUCT	0)	0 %		0 %	0	%	0	0	0	N		0 0	DO NOT US	ε	

Figure 30. CSV File in Excel 2010

	1		
	1-	+2+	3+8+9+6+7+8++9++0
1	PRODUCTCODE	E, DESCRIPTION, PRIC	CE, TAX1RATE, TAX1TYPE, TAX2RATE, TAX2TYPE, DISCOUNTRATE, DISCOUNTTYPE, DISCOUNT
2	01, PRODUCT	PROPANE	,00.000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,0000.00,
3	02, PRODUCT	FUEL OIL/DIESEL	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,0000.00,
4	03, PRODUCT	GASOLINE	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,0000.00,
5	04, PRODUCT	LUBE OIL	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,0000.00,
6	05, PRODUCT	METHANOL	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,0000.00,
7	06, PRODUCT	ANHYDROUS AMMONIA	A,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,0000.00,
8	07, PRODUCT	JET-A FUEL	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,0000.00,
9	08, PRODUCT	JET-B FUEL	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,0000.00,
10	09, PRODUCT	ETHANOL	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,0000.00,
11	10, PRODUCT	NUMBER 10	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,DO NOT USE,
12	11, PRODUCT	NUMBER 11	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,D0 NOT USE,
13	12, PRODUCT	NUMBER 12	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,D0 NOT USE,
14	13, PRODUCT	NUMBER 13	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,D0 NOT USE,
15	14, PRODUCT	NUMBER 14	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,DO NOT USE,
16	15, PRODUCT	NUMBER 15	,00.0000,00.0000,%,00.0000,%,00.0000,%,00,0,0,N,0,0,DO NOT USE,
17	16.PRODUCT	NUMBER 16	.00.0000.00.0000.%.00.0000.%.00.0000.%.00.0.0.N.0.0.DO NOT USE.

Figure 31. CSV File in Text Editor

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	A	В	C	D		E	F	G	H		1	J	K	L	M	N	C		Р	Q		R
1	PROD	DUCTIDESCRI	P1PRICE	TAX1R4	ATE TAX	(1TYPE)	TAX2RA	TE TAX2TY	PEDISCO	iUN" D	ISCOUN	DISCOUN	FEE1INDE	FEE2INDE	FEESTA	X/ EXTRAL	AE EXTR.	ALAE	THISFEEA	THISEXT	RALA	BEL
2		1 PRODU	CT C)	0%			0 %		0 %	5	C) 0	0	N		0	0	0			
3		2 PRODU	CT C)	0%			0 %		0 %	5	C) 0	0	N		0	0	0			
4		3 PRODU	CT C)	0%			0 %		0 %	5	0) 0	0	N		0	0	0			
5		4 PRODU	CT C)	0%			0 %		0 %		0) 0	0	N		0	0	0			
6		5 PRODU	CT C)	0%			0 %		0 %	5	0) 0	0	N		0	0	0			
7		6 PRODU	CT C)	0%			0 %		0 %		C) 0	0	N		0	0	0			
8		7 PRODU	CT C)	0%			0 %		0 %		C) 0	0	N		0	0	0			
9		8 PRODU	CT C)	0%			0 %		0 %		C) 0	0	N		0	0	0			
10		9 PRODU	ст с)	0%			0 %		0 %	5	0) 0	0	N		0	0	0			
11		10 PRODU	CT C)	0 %			0 %		0 %	5	0) 0	0	N		0	0	DO NOT U	SE		
12		11 PRODU	CT C)	0 %			0 %		0 %	5	0) 0	0	N		0	0 0	DO NOT U	SE		

Figure 32. CSV File in Excel 2003

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1.00	12-05-06	BJS	Document created
1.01	12-07-06	BJS	Added Install Images
1.02	12-12-06	BJS	Updated Index
1.03	12-14-06	BJS	Updated Upgrade and Setup Notes
1.04	12-14-06	BJS	Corrections and Updated Index
1.05	12-15-06	BJS	Corrections
1.06	01-03-07	BJS	Serial Communication Update
1.07	01-03-07	BJS	Serial Communication Update
1.08	09-14-07	BJS	Modified Product Label commands
1.09	10-23-07	BJS	Updated Product Label commands
1.10	04-14-08	BJS	Subtotal Tax, Tax Labels
1.11	01-31-15	BJS	Screens, CSV File, Options, etc
E180-1.12	09-24-15	BJS	E180, MPC

VERSION HISTORY

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