LectroCount³ On-Board Truck Computer

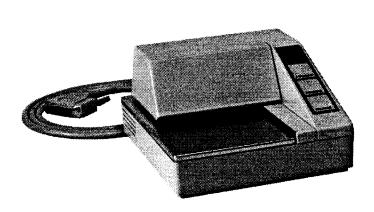
Standard Bulk Truck System Operator's Manual



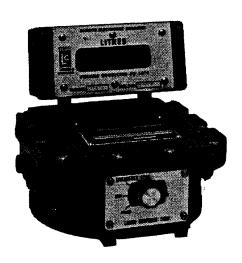
Model E4030-1 Lap Pad



Model E2530-1 Supervisory Control Module with Model E4310-1 RAM Module



Model E4900-1 Printer



Model E-2604-41 Remote Electronic Counter And Remote Supervisory Control Box



Absolute Accountability[™]

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GENERAL INFORMATION

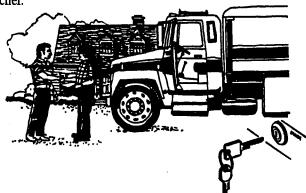
instructions.

8. To turn on the display's back light, push [ALPHA], then

GENERAL IN GROWING
Represents a key on the Lap Pad.
Represents the Prompting Display on the Lap Pad.
1. Prompting display indicates GROSS VOLUME OR NET VOLUME based on customer preference, optional hardware, or Weights and Measures.
2. If you try to access a specific line label and it does not appear on the display, your system does not include that line label.
3. If you try to access a mode that is not a part of your system, or that is secured, LectroCount³ will automatically return to Mode 1
4. All line labels are listed in the order they appear when pushing the key. To quickly access line labels at end of the list, use the key.
5. If a change is required after START is pressed, push STOP and re-enter data.
6. After entering data, simply push ENTER and then push START. If you wish to change your input before you've pushed START, simply push M1 and then re-enter data, push ENTER, then push START.
7. After pressing number keys, you must push ENTER, e.g., you want to enter 13, you push 1, 3 and ENTER.
LectroCount³ performs all its functions through software modes. Modes contain system operation information. The driver has access to these modes:
Mode 1 - the delivery mode, always accessible by pushing Mode 10 - shift information mode, access Mode 10 by pushing M#, 1, 0 and ENTER follow prompting display

GETTING STARTED

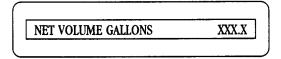
1. Pick up a preprinted route schedule, tickets, or both from the dispatcher.



2. Start your truck to power-up LectroCount³.

! WARNING! Do not use jumper cables or battery chargers to start the truck. If the truck does not start, contact your supervisor.

When the truck battery power reaches and holds a + 12 VDC charge, LectroCount³ will power-up (20 seconds minimum required). When LectroCount³ is on, the READY lamp on the unit will illuminate and the display will flash a start-up screen, then the display will read:



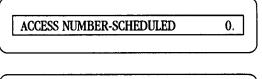
If not, push | MI key. If after pushing MI the prompting display does not read:

ET VOLUME GALLONS	XXX X
-------------------	-------

Consult your supervisor.

keys to scroll through the Mode 1 line labels. 3. Use the You may wish to make entries or check the following:

ACCESS NUMBER	0
ACCESS NUMBER	U.



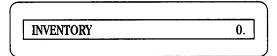
0.

ACCESS NUMBER-UNSCHEDULED

Enter the access number.

PRODUCT CODE 0.

Enter the product code for the product on board. This number will remain the same after it is entered. To change this code you must enter a new number. Scroll down through Mode 1 to get to:



Enter the volume of product on board. Volume indicated will print on Mode 10 shift ticket and decrease as deliveries are made.

DRIVER NUMBER 0.

Enter your driver number. This number will remain the same after it is entered. To change this code you must enter a new number.

MISC TRANSACTION ACCESS# 0.

Enter miscellaneous transaction access number.

- 4. Print a shift ticket.
 - a. Enter Mode 10 by pushing M#, 1, 0 and ENTER, the prompting display will read:

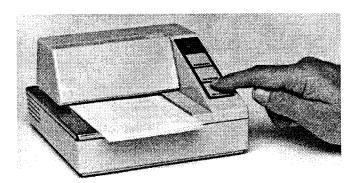
FOR END OF SHIFT TICKET PUSH PRINT

Push PRINT, the display will read:

INSERT TICKET AND PUSH ENTER OR PUSH STOP

b. Insert ticket face UP in the printer and push FORWARD

Then push ENTER on the Lap Pad. The ticket
will feed in and a shift ticket will print.



c. When printing stops, remove the ticket by pushing the RELEASE button on the printer. The system will automatically return to Mode 1.

NOTE: Examine the printed shift ticket totals. All line items with an asterisk should read 0 at the beginning of each shift. If 0 does not appear, print another shift ticket and notify your supervisor or turn both tickets in at the end of your shift. See Step 15 for End Of Shift Ticket Procedure.

This shift ticket replaces your hand-written driver's report.

MODE 10 SHIFT TOTALS	
	08:06:56
06/09/94	15:49:37
PRODUCT CODE	1.
DRIVER MARBER	5.
UNIT ID MUMBER	24.
TRUCK NAMBER	85.
INVENTORY	9234.2
TICKET MANBER	60.
SALE NUMBER	60.
HISC TRANSACTION NUMBER	1.
TOTAL NET VOLINE	770.7
TOTAL GROSS VOLUME	769.8
DRONETER START OF SHIFT	0.0
ODDRETER END OF SHIFT	0.0
S# TOTAL MILES BRIVEN	9.0
S# NUMBER OF BELIVERIES	9.
	770.7
S# TOTALIZER NET VOLUME	
SE TOTALIZER GROSS VOLUME	769.8
G- IGILE AMERINA INC.	685.92
On INIUE INVERSOR !	13.72
CALICALE THAN ANY CAN T	0.00
Resident to the second of the	27.43
- 10112 1100 0101 011	0.00
Q- Q S S S S S S S	0.00
A. 1911 P. 1121 P. 2011 A.	0.00
C. Idiic lies mes mit a	30.82
de letter time a city t	0.00
S# TOTAL TAX/UNIT CAT 4	0.00
	71.97
	757.89
	252.50
	129.10
S# TOTAL UNIVETERED TRANS - VO	
SI TOTAL GROSS VOL NOT PRICED	
S# TOTAL NET VOL NOT PRICED	0.0
On 1014F ME1 ANT MO1 ELITORS	717

DELIVERY PROCEDURE

NOTE: This is a general overview of the delivery procedure operating software. The actual software in your LectroCount³ may be tailored to your specific operating requirements. Therefore the general format (mode #'s) will be the same, but the prompting display and/or sequence of messages may be different.

5. Proceed to first delivery. The system should be in Mode 1. The prompting display should read:

NET VOLUME GALLONS XXX.X

If not, push MI key.

6. Push key once, the display should read:

ACCESS NUMBER

Key in the delivery access number and push ENTER. If ACCOUNT SETUP is used by your company the display will respond with:

ACCOUNT SETUP

IF ACCOUNT SETUP DOES *NOT* APPEAR ON THE PROMPTING DISPLAY GO TO STEP 7.

NOTE: If a non-RAM program is used, the line label titled ACCESS NUMBER will appear rather than SCHEDULED or UNSCHEDULED. NOTE: If Presets are not enabled in Mode 5, Presets won't appear.

IF YOU DO HAVE ACCOUNT SETUP:

Scroll through the line labels using the / keys.

NOTE: Using the key, the first line item to appear on the screen is:

PRODUCT CODE 0.

Account Setup line labels include any presets enabled:

PRESET NET 0.0

Enter NET (temperature compensated) volume to be delivered, if applicable.

PRESET GROSS 0.0

Enter GROSS (un-compensated) volume to be delivered, if applicable.

PRESET PRICE 0.0

Enter the dollar value of product to be delivered. Your customer wants only 100.00 dollars worth of fuel. You push [1], [0], and [ENTER]. The system will calculate the volume of product to be delivered.

SELECT MULTIPLE DELIVERY TICKET

NOTE: This will only appear if enabled in Mode 5.

NOTE: Any or all presets will appear. If your company does not use preset deliveries, these items will not appear. If more than 1 preset is set up, the one which is equal to the smallest volume will override all others.

PRICE/GALLON \$.0000

You may enter a one-time price (for that delivery only). Entry here is required only if the price to be charged is different from the base price. EXAMPLE: Your company's base price (less tax) is \$1.25, this customer is to be charged \$1.20. You push 1, 2, 0 and ENTER. After this delivery the price will automatically return to 1.25.

Operating Note: A base price can be set at 0. If the base price is set at 0, you must enter a price for every delivery. After each delivery the price will automatically return to 0.

% TAX CAT 1 .0000

There are nine different tax categories available in LectroCount³, consult your supervisor for the tax categories that apply to your deliveries.

Tax category entries are only required if the applicable tax(es) are different from the base tax(es) used for your deliveries.

Operating Note: A base tax can be set at 0. If the base tax is set at 0, you *must* enter a tax for every delivery. After each delivery the tax(es) will automatically return to 0.

ENABLE VOLUME DISCOUNT 0.

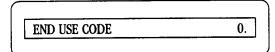
and wife if no volume discount is to be given. You must be sure that the correct code appears on the prompting display for each delivery. If the correct code appears on the display for this delivery you do not have to make an entry. If the wrong code appears you must enter the correct code.

SELECT CASH DISCOUNT CATEGORY 0.

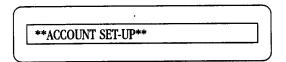
Select the cash discount category that applies to this delivery. Category 1, 2, or 3. If no discount applies, enter a 0. Consult your supervisor for a description of the cash discount categories. This entry returns to zero after each delivery.



BEFORE the delivery begins enter any charges that apply. EXAMPLE: You checked the customer's furnace, the charge is 10.00. You push $\begin{bmatrix} 1 \\ 1 \end{bmatrix}$, $\begin{bmatrix} 0 \\ 0 \end{bmatrix}$, $\begin{bmatrix} \bullet \\ 0 \end{bmatrix}$, $\begin{bmatrix} 0 \\ 0 \end{bmatrix}$, $\begin{bmatrix} 0 \\ 0 \end{bmatrix}$ and $\begin{bmatrix} \text{ENTER} \\ 0 \end{bmatrix}$.

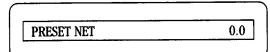


Enter end use code if applicable. The end use code is assigned by management to designate how a product is to be used. This number returns to zero after each delivery. Push the and the display will return to:



PROCEED TO STEP 8.

7. Scroll through the Mode 1 line labels using the wou reach PRESET NET.



Enter NET (temperature compensated) volume to be delivered, if applicable.

PRESET GROSS	0.0
--------------	-----

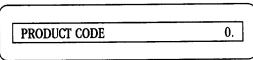
Enter GROSS (un-compensated) volume to be delivered, if applicable.

PRESET PRICE \$	0.0
-----------------	-----

Enter the dollar value of product to be delivered. Your customer wants only 100.00 dollars worth of fuel. You push 1, 0, and enter. The system will calculate the volume of product to be delivered.

NOTE: Any or all of these presets may be used in your system. If your company does not use preset deliveries these items will not appear on the prompting display. If more than one preset is set up, the one which is equal to the smallest volume will override all others.

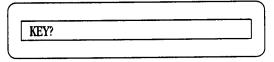
Scroll • until the following is displayed:



Enter the correct code for the product on board, if it has changed. If you do not need to enter any price or tax information proceed to Step 8.

NOTE: If **ACCOUNT SET-UP** does not appear on the display, you will have to enter Mode 2 $\boxed{\text{M#}}$, $\boxed{\text{2}}$ and $\boxed{\text{ENTER}}$ to enter a special price for this delivery.

LectroCount³ will then ask you for:



Consult you supervisor for a key to Mode 2. Enter the key and follow prompting display instructions.

8. Push start to begin the delivery.

The prompting display will read:

INSERT TICKET AND PUSH ENTER
OR PUSH STOP

If STOP is pushed, the system will return to M1. Follow prompting display instructions. When the ticket is in place, the system security valve will open, allowing you to proceed with the delivery.

POSSIBLE ERROR MESSAGE:

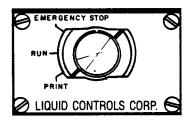
REMOTE PRINT SWITCH ON OR PUSH STOP

The Rear Print Switch must be in the RUN position to make a delivery. If this switch is in the PRINT or EMERGENCY STOP position, the system security valve will not open. Return the switch to the RUN position to make a delivery.

9. Reel out hose and follow normal delivery and safety procedures.

TO STOP A DELIVERY:

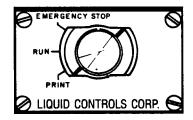
- 10. Product flow may be stopped without terminating the transaction by:
 - a. Rotating the Red Switch on the Remote Electronic Counter And Remote Supervisory Control Box to the EMERGENCY STOP position. To resume product delivery, return the switch to the RUN position.



- b. Pressing STOP on the Lap Pad keyboard. The display will respond with: "PUSH START TO RESUME DELIVERY OR PRINT." To resume product delivery, push START.
- c. Closing the fill valve, or other valve in product line. To resume product delivery, open the valve.

TO TERMINATE A DELIVERY:

- 11. A delivery (transaction) may be terminated by:
 - a. Reaching the PRESET (NET, GROSS or PRICE) QUANTITY.



- Rotating the Red Switch on the Remote Supervisory Control Box to the PRINT position.
- c. Pushing the PRINT button on the Lap Pad keyboard.

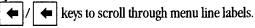
NOTE: When the miscellaneous transaction for delivery ticket feature is used, the system requires two print commands to end

the delivery and print a ticket.

If MISC TRANSACTION FOR DELIVERY TICKET is disabled, a ticket will automatically print when the transaction is terminated. LectroCount³ will return to Mode 1.

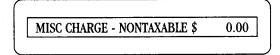
MISC TRANSACTION FOR DELIVERY TICKET

12. If MISC TRANSACTION FOR DELIVERY TICKET is used by your company, at the time the system receives its *first* print command, (by one of the methods listed in Step 11) the LectroCount³ prompting display will take you to a menu of options. Use the

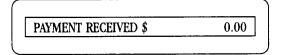


NOTE: If there are no miscellaneous transactions for this delivery proceed to Step 13.

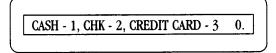
Top line of prompting display reads:



Enter any miscellaneous charges that apply to this transaction, e.g., customer had furnace checked, charge is \$10.00.



Enter the payment received from the customer.



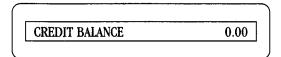
Enter the proper code to indicate payment method.

MISC CHARGE - NONTAXABLE \$	0.00
CURRENT BALANCE DUE	0.00

As each of these entries is made the second line of the prompting display will reflect the current status of the account and read one of the following:



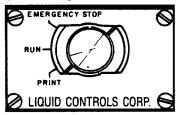
This line shows the current balance due from the customer for the completed delivery. Any entries for MISC CHARGE or PAYMENT RECEIVED will cause a change in this display.



If a cash discount applies to this customer the system will apply that discount and display the discounted balance due in place of the current balance due. A credit balance indicates the payment received was greater than the current or discounted balance due. EXAMPLE: The miscellaneous charge entered was 25.00. The current balance due was 45.00. The customer pays 50.00. Credit balance 5.00 appears on the second line of the display.

After making all entries, push PRINT and the delivery ticket will print.

- 13. If there were no miscellaneous transactions for this delivery, to bypass the menu options and end the delivery, send a second * print command by either:
 - a. Turning the remote print switch to the print position and a delivery ticket will print.

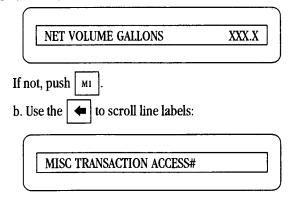


- b. Pushing the PRINT button on the Lap Pad keyboard.
- * The first print command was sent by one of the methods listed in Step 11.

Repeat Steps 5 through 13 for each delivery.

MISCELLANEOUS TRANSACTION TICKET

- 14. Printing a separate miscellaneous transaction ticket:
- a. The system should be in Mode 1 with the prompting display reading:

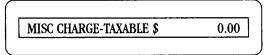


Entering a miscellaneous transaction access number takes you to a menu of options. These options allow you to print:

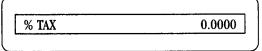
- 1. A ticket when a miscellaneous charge is incurred.
- 2. A receipt when cash is collected.
- 3. A ticket for inventory control of unmetered product.

Miscellaneous transaction access number menu options:

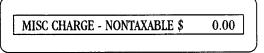
NOTE: The next three options are used to print a ticket for billable miscellaneous transactions.



This number reverts to 0 after each transaction.

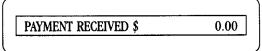


This number reverts to 0 after each transaction.

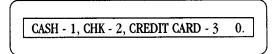


This number reverts to 0 after each transaction.

NOTE: The next two options are used to give a customer a receipt when the customer pays on his account without receiving any other services, or in place of a MISC TRANSACTION FOR DELIVERY TICKET.

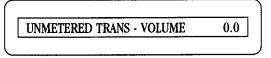


This number reverts to 0 after each transaction.



This number reverts to 0 after each transaction.

NOTE: The next option is used for inventory control. It allows you to record product loaded on the bulk truck, fuel used to complete your deliveries, and removal of fuel from a customer's tank.

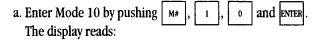


This number reverts to 0. After making all entries push PRINT and follow the prompting display instructions.

TRANSACTION CODE	0.
------------------	----

The number is used to identify a customer, geographic location, or type of transaction performed. This number reverts to 0 after each transaction.

15. At the end of the day, print an end of shift ticket. To print a shift ticket:

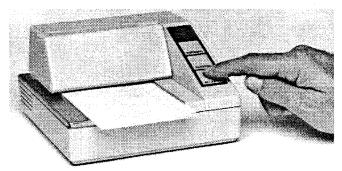


FOR END OF SHIFT TICKET PUSH PRINT

Push PRINT, the display will respond with:

INSERT TICKET AND PUSH ENTER

b. Insert ticket face up in the printer and push Push on the Lap Pad. The ticket will lock in and a shift ticket will print.



c. When printing stops, push RELEASE and remove the ticket. The system will automatically return to Mode 1.

REAR PRINT SWITCH ON

POSSIBLE ERROR MESSAGES **ERROR MESSAGE CORRECTIVE ACTION ERROR MESSAGE** CORRECTIVE ACTION HARDWARE FAILURE MESSAGES: BAD PRESET PRICE A preset price delivery was attempted and the price The system's temperature TEMPERATURE FAILURE per gallon was zero. Enter probe and/or circuitry is the correct price per galnot functioning correctly. lon an push start Contact your supervisor. MAX PRICE W/TAX OVERFLOW A price or tax for the cur-CHECK PRINTER AND CABLES The printer is not respondrent delivery is over the ing to the system. Check allowable limit. Verify the the connections of the price and tax information power and data cables. and push start. This error message can be the result of the printer being NO ACCESS NUMBERexposed to extremely cold ambient temperature (less **DELIVERY ABORTED** A delivery was attempted

> and the rear switch was in the "PRINT" POSITION. Turn the switch to the "RUN" position to start the

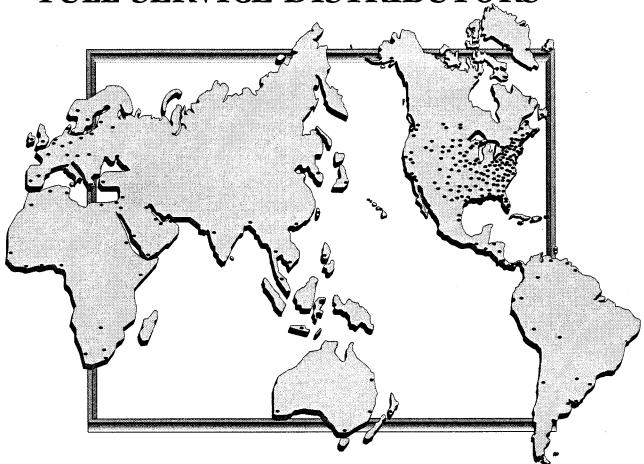
delivery.

than -30°C/-22°F). Printer malfuntion of this type is without entering an access indicated by the green light on the reverse button flashing. number. Key in a valid Unplug and then reconnect the printer power cable. If this access number. does not clear the problem, the printer must be warmed up either by heating the truck's cab or by temporarily The start button was placing the printer in a warmer area. pushed to begin a delivery

ERROR MESSAGE CORRECTIVE ACTION ERROR MESSAGE CORRECTIVE ACTION **POWER-UP DIAGNOSTICS:** PUSH START FOR NO-TICKET PROVER DATA ERROR -TRANS. OR STOP A delivery was attempted An error has occurred in without a working **PUSH ENTER** printer attached to the systhe system's calibration tem. Push start to begin a data. Contact your supervi-TICKET-STORE delivery, or sor. push stop to abort the delivery.* ROM CHECK SUM ERROR The system has an internal hardware problem. *NOTE: Ticket storage feature not available in Canada. Contact your supervisor. All available ticket storage TICKET STORAGE SPACE FULL space required for NO-TICKET transactions has been used. No additional deliveries are allowed if this message is displayed. Contact your supervisor.* PRINT OUT ALL TICKETS IN If NO-TICKET transactions **DATA STORAGE** have been made, this message will display if the printer is repaired and a delivery or Mode 10 end of shift is attempted.* The pulser failed during a PULSER FAILURE - PUSH PRINT delivery. Push PRINT to print the delivery ticket.

Contact your supervisor.

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