MID:COM

E:COUNT MCR-05 AND E:COUNT LT MCR-09 FIRMWARE VERSION AND REVISION NUMBERS

Determine E:Count MCR-05 & E:Count LT MCR-09 Firmware Version = Print Calibration Ticket

- 1. Make sure the ECount/LT is not in a Delivery and not in Calibration Mode
- 2. Enter the Delivery Menu: Press <MODE> ... PRCODE will be shown
- 3. Press and hold <MODE> until CALTKT is shown, release <MODE>
- 4. Press <START/STOP> on CALTKT to print the Calibration Report

Calibration Report showing the Version (E179E0) and Revision (A)

CALIBRATION REPORTATRUCK# 0000DRIVER# 0000DATE 06/23/15FTIME 15:51FINISH TOT.00000000047.0USER SOFTWARE VER.E179E0METROLOGICAL VER.M 17ASERIAL #000000SALE #000003PRINTERTHERMLMETER RATIO01TMPSET 08DEMOSTAGE1 00HOSTFX OFF6501PF 0CURNCY OFFCOPIES 1HOSEPK 0PS RQD 0SS RST ONTIMER 0REGNUM 1AIRSEN 0PGROSS OFFDECMAL 1U TYPE 0UNITS 0PROBE 1BRKVLV 0KEYSON BOTHONADJUSTMENT EVENT # 000001CONFIGUREEVENT # 000001PRODUCT # 01PRODUCT PROPANECALIBRATION FACTOR 1.0125PRESET VALVE DWELL 000.0COMPENSATOR STATUSON			
DATE 06/23/15 FTIME 15:51 FINISH TOT.00000000047.0 USER SOFTWARE VER. E179E0 METROLOGICAL VER. M 17A SERIAL # 000000 SALE # 000003 PRINTER THERML METER RATIO 01 TMPSET 08 DEMO ON STAGE1 00 HOSTFX OFF 6501PF 0 CURNCY OFF COPIES 1 HOSEPK 0 PS RQD 0 SS RST ON TIMER 0 REGNUM 1 AIRSEN 0 PGROSS OFF DECMAL 1 U TYPE 0 UNITS 0 PROBE 1 BRKVLV 0 KEYSON BOTHON ADJUSTMENT EVENT # 000001 CONFIGURE EVENT # 000001 PRODUCT # 01 PRODUCT # 01 PRODUCT # 01 PRODUCT PROPANE CALIBRATION FACTOR 1.0125 PRESET VALVE DWELL 000.0	CALIBRA	TION REPOR	rt A
METROLOGICAL VER. M 17A SERIAL # 000000 SALE # 000003 PRINTER THERML METER RATIO 01 TMPSET 08 DEMO ON STAGE1 00 HOSTFX OFF 6501PF 0 CURNCY OFF COPIES 1 HOSEPK 0 PS RQD 0 SS RST ON TIMER 0 REGNUM 1 AIRSEN 0 PGROSS OFF DECMAL 1 U TYPE 0 UNITS 0 PROBE 1 BRKVLV 0 KEYSON BOTHON ADJUSTMENT EVENT # 000001 CONFIGURE EVENT # 000001 PRODUCT # 01 PRODUCT # 01 PRODUCT PROPANE CALIBRATION FACTOR 1.0125 PRESET VALVE DWELL 000.0	DATE 06	/23/15 FT	IME 15:51
TMPSET 08 DEMOONSTAGE1 00 HOSTFX OFF6501PF 0CURNCY OFFCOPIES 1HOSEPK 0PS RQD 0PS RQD 0SS RST ONTIMER 0REGNUM 1AIRSEN 0PGROSS OFFDECMAL 1U TYPE 0UNITS 0PROBE 1BRKVLV 0KEYSON BOTHONADJUSTMENT EVENT # 000001CONFIGUREEVENT # 01PRODUCT # 01PRODUCT PROPANECALIBRATION FACTOR 1.0125PRESET VALVE DWELL 000.0	METROLO SERIAL SALE # PRINTER	GICAL VEN #	R. M 17A 000000 000003 THERML
CONFIGURE EVENT # 000001 PRODUCT # 01 PRODUCT PROPANE CALIBRATION FACTOR 1.0125 PRESET VALVE DWELL 000.0	TMPSET STAGE1 6501PF COPIES PS RQD TIMER AIRSEN DECMAL UNITS	08 DEMO 00 HOSTFX 0 CURNCY 1 HOSEPK 0 SS RST 0 REGNUM 0 PGROSS 1 U TYPE 0 PROBE	ON OFF OFF ON 1 OFF 0 1
COM LINEATON STATUS ON	CONFIGU PRODUCT PRODUCT CALIBRA PRESET	RE EVENT # 01 PROPANE TION FACT(VALVE DWE)	# 000001 OR 1.0125 LL 000.0

Delivery Menu from the ECount E179 Quick Command Reference

Delivery Menu			
HOSEPK	OK		
PRCODE	▲▼⋖►		
QOB	▲▼⋖►		
MONEY	currency menu		
TIMOVR	▲ ▼		
SHIFT	print shift report		
DRIVER	▲▼⋖►		
TOTAL	<►		
DISVOL	▲ ▼		
TEMP F			
TEMP C			
CALTKT	print cal report		
SETUP	setup menu		
EXIT	delivery mode		

Delivery Menu from the LT L414 Quick Command Reference

Delivery Menu		
TOTAL	<►	
QOB	▲▼⋖►	
TIMOVR	▲ ▼	
SHIFT	print shift report	
USER	▲▼⋖►	
PRCODE		
DISVOL	▲ ▼	
TEMP F		
TEMP C		
CALTKT	print cal report	
SETUP	setup menu	
EXIT	delivery mode	

The Matrix includes a function on the DEBUG Tab to display the Calibration Report text – Matrix Build 648 or newer is required:

Matrix - MID:COM E:Count Configuration Utility		
ools Help		
Product Labels Prices Ticket Header/Footer Ticket Print Special Charges Calibration Debug Midcom Taxes Totalizer LT Only		
15101520253035404550556065707580859095100		
PRESET VALVE DWELL 000.0		
COMPENSATOR STATUS ON		
COMPENSATION TABLE # 01		
PROPANE ASTM 54 @ 510		
KILOGRAMS PER CUBIC METER		
* END CALIBRATION REPORT*		
Print Duplicate Ticket Print Shift Ticket Print Calibration Ticket		
E:Count version: E179EH Datablock version: 06 Get Shift Ticket Get Calibration Ticket		
Clear V - Get Version J - Get Status Get Date-Time Set Date-Time Show Matrix v 1.0		
Export Pricing to CSV Load from Matrix File Send All to E:Count		
Register: 1 Import Pricing from CSV Save to Matrix File Get All from E:Count Exit		

E:Count Firmware Version Numbers as of September 2014: E179E0, E179F0, E179S0

E	179	E	0
PRODUCT	VERSION	LANGUAGE	COMPENSATION TABLE
E = ECount	3-Digits	E=English	0 = All Tables 1-9
L = ECount LT		F=French	1 = Propane Only
		S=Spanish	2 = Fuel Oil/Diesel Only

The COMPENSATION TABLE # may be other than 1-9 ... that means it is a custom version.

Versions used to look like this: E176F

- E ECount English (F176F = ECount French, S176F = ECount Spanish)
- 176 Version
- F Revision of Some Feature(s)

CALIBRATION REPORT	
TRUCK# 0000 DRIVER# 0001 DATE 05/20/13 FTIME 10:30 GALLONS TOT.00000006810.6	
USER SOFTWARE VER UE177F	
SERIAL # 002346 METER RATIO 01 SALE# 000296	166 = NO Revision
TMPSET 00 DEMO ON STAGE1 05 HOSTFX OFF PRINTER BLASTR	CALIBRATION REPORT
6501PF 0 CURNCY OFF COPIES 1 HOSEPK 0 PS RQD 0 SS RST ON TIMER 0 REGNUM 1	TRUCK# 1000 DRIVER# 0000 DATE 10/09/02 FTIME 18:35 GALLONS TOTAL 0039514.5
AIRSEN 0 PGROSS OFF	

DECMAL 1 U TYPE 0 UNITS 0 PROBE 0

DELIVERED PRODUCT CALIBRATION FACTOR 1.0000

ADJUSTMENT EVENT # 000001 CONFIGURE EVENT # 000001

PRESET VALVE DWELL 000.0

END CALIBRATION REPORT

COMPENSATOR STATUS ON

BATCH 0

PRODUCT # 01

COMP. TABLE # 01

USER SOFTWARE VER. UE166E METROLOGICAL VER. M 17A REGISTER # 000000 METER RATIO 01

ADJUSTMENT EVENT # 000001 CONFIGURE EVENT # 000001

PRODUCT # 01 PRODUCT PROPANE CALIBRATION FACTOR 1.0000 COMPENSATOR STATUS OFF

PRODUCT # 02 ř CALIBRATION REPORT 2 PRODUCT FUEL OIL CALIBRATION FACTOR 1.0432 TRUCK# 0038 DRIVER# 0015 DATE 01/22/15 FTIME 11:23 PRESET VALVE DWELL 000.0 COMPENSATOR STATUS OFF FINISH TOT.00001800622.2 * END CALIBRATION REPORT* USER SOFTWARE VER. E179E0 METROLOGICAL VER. M 17A SERIAL # 005940 METER RATIO 10 SALE# 009358 TMPSET OO DEMO OFF STAGE1 05 HOSTFX OFF PRINTER TM-295 6501PF 0 CURNCY OFF COPIES 1 HOSEPK 1 PS RQD O SS RST NSSOHM TIMER O REGNUM 1 AIRSEN O POROSS OFF DECMAL 1 U TYPE O UNITS O PROBE O U TYPE O 3.1 BATCH O BRKULV 1 ADJUSTMENT EVENT # 000002 CONFIGURE EVENT # 000002

· · · · ·		
CALIBRATION REPORT 6		l
	CALIBRATION REPORT · · · · · · · · · · · · · · · · · · ·	
TRUCK# 0000 DRIVER# 0000		
DATE 04/21/15 FTIME 14:45	ID. # · ·0000 · · · · · · · · · · · · · ·	
FINISH T01.0000002925.8	DATE 04/17/15 FTIME 09:41	
	FINISH TOT.000000140.77	
USER SOFTWARE VER. E179E0		
METROLOGICAL VER. M 17A		
SERIAL # 000000	USER · SOFTWARE · VER. · L415E1 ·	
METER RATIO 10	METROLOGICAL ··VER. ·M ··17A ·	
SALE# 000055 TNPSET OO DENO OFF	REGISTER #	
STAGE1 00 HOSTFX OFF	SALE -# 000008 -	
PRINTER THERML	PRINTER · · · · · · · · · · · · · · · · · · ·	
6501PF 0 CURNCY OFF		
COPIES 1 HOSEPK 0	METER RATIO	
PS ROD O SS RST ON	TMPSET 80 DEMO ··· OFF ··· ··	
TIMER O REGNUM I	STAGE1 · 00 · HOSTFX · OFF · · · · ·	CALIFORNIA DEDODT
AIRSEN O PGROSS OFF	AUTHOR 1 · AUTHRX 0 · · ·	CALIBRATION REPORT · · · · 9
DECMAL 1 U TYPE 0	COPIES 1 · AUX2 · · OFF · · · ·	
UNITS O PROBE O	PS RQD 0 · SS RST ON · · · ·	TRUCK# ·0000 · · DRIVER# ·0000
BRKVLV 1	REGNUM 1 · · TIMER · · OFF · · · · ·	DATE 03/20/15 FTIME 16:51
KEYSON BOTHON	HOSSEL 1 PRTGRS OFF	FINISH TOT.0000004898.1
	DECMAL · 2 · · U · TYPE · 0 · · ·	
ADJUSTMENT EVENT # 000001	UNITS · · 0 · · PROBE · · 0 · · ·	USER SOFTWARE VER E179E0
CONFIGURE EVENT # 000000	BATCH · · 0 · · BRKVLV · 0 · · ·	METROLOGICAL ··VER. ·M ·· 17A
	MODELK 0 ··· KEYSON ·BOTHON ···	SERIAL # · · · 006294 · · · · · ·
PRODUCT # 01		METER RATIO · · 10 · · · · · ·
PRODUCT PROPANE	ADJUSTMENT · EVENT · # · 000000 ·	SALE# · 000032 · · · · · · ·
CALIBRATION FACTOR 1,0000	CONFIGURE ·· EVENT ·# ·000000 ·	TMPSET 8D DEMO · ON · · ·
PRESET VALVE DWELL 000.0	CONFIGURE EVENT # 000000	STAGE1 · 00 · HOSTFX · OFF · · · ·
COMPENSATOR STATUS OFF	DRODUCT & 01	PRINTER CTS651
	PRODUCT # 01 ····	6501PF 0 ··CURNCY ·OFF ····
PRODUCT # 02	PRODUCT PROPANE	COPIES 1 · HOSEPK · 0 · ·
PRODUCT FUEL OIL/DIESEL	CALIBRATION FACTOR 0.9696	PS RQD 0 ··· SS RST ·ON ·····
CALIBRATION FACTOR 1.0000	PRESET VALVE DWELL 000.0	TIMER · O · REGNUM · 1 · ·
PRESET VALVE DWELL 000.0	COMPENSATOR STATUS · · · OFF ·	AIRSEN 0 · PGROSS · ON · · · ·
COMPENSATOR STATUS OFF		DECMAL · 1 · · U · TYPE · 0 · ·
	MULTI-POINT CALIB. · · · · ON ·	UNITS · · 0 · · PROBE · · 0 · ·
PRODUCT # 03	00104	BRKVLV · 1 · ·
PRODUCT GASOLINE	10052	KEYSON BOTHON -
CALIBRATION FACTOR 1.0000	20030	AD THETMENT . FUENT . # .000004
PRESET VALVE DWELL 000.0	30039	ADJUSTMENT · EVENT · # ·000001 CONFIGURE · · EVENT · # ·000001
COMPENSATOR STATUS OFF	40000	CONFIGURE - EVENT .# .000001
	50000	PRODUCT · # · 01 · · · · · · · · · · · · ·
PRODUCT # 04	60000	PRODUCT · PROPANE · · · · · · ·
PRODUCT LUBE OIL	7 0000	CALIBRATION FACTOR 1.0000
CALIBRATION FACTOR 1.0000	80000	PRESET VALVE DWELL 000.0
PRESET VALVE DWELL 000.0	9 0000	COMPENSATOR STATUS
COMPENSATOR STATUS OFF	50000	COMPLISATION STATUS
* END CALIBRATION REPORT*	* .FND .CMI TERMITON .DEDORT#	Sourt - TABBE # VI
- LID GALIDRATION REPORT*	* END CALIBRATION REPORT*	* ·END ·CALIBRATION ·REPORT*
		LAD CALIFICATION ALLONI

SERIAL COMMUNICATIONS LOG

TX: 1 bytes DEC: 086 HEX: 56 TXT: V

TX: 1 bytes sent

RX: 17 bytes; 17 total DEC: 086 069 049 055 057 069 072 048 054 049 049 050 051 048 048 048 124 HEX: 56 45 31 37 39 45 48 30 36 31 31 32 33 30 30 30 7C 7 TXT : v Е 1 9 Е н 0 6 1 1 2 3 0 0 0 1

VIA MATRIX

0x1F 0x02	
~V	
VE179EH061123000	
E:Count version: E179EH Databl	ock version: 06
E:Count Version Data =======	
Software Version :E179EH	
Data Block Version :06	
Register Number :1	
Register Serial # :123000	
OVER	

Parsing Serial Data for the Version using Host Commands

- 1. Send 0x1F 0x02 to connect Host to Register 1 2. Send the V, Wait for all 17 bytes of response
- 3. Send 0xFF
- 4. Parse the 6-byte version string from the response: a. E179EH
- 5. Drop the first non-numeric characters (can be 1 or 2)
- 6. Grab all of the next numeric characters,
- 7. Stop saving characters at the next non-numeric
- 8. Ignore everything else
 - a.E176F would result in 176
 - b. LT409B would result in 409
 - c.E179E0 would result in 179

SERIAL COMMUNICATIONS LOG TX: 1 bytes DEC: 106 HEX: 6A TXT: j TX: 1 bytes sent RX: 25 bytes; 25 total DEC: 106 067 065 076 073 066 082 065 084 073 079 078 032 082 069 080 079 082 084 032 032 032 032 032 032 HEX: 6A 43 41 4C 49 42 52 41 54 49 4F 4E 20 52 45 50 4F 52 54 20 20 20 20 20 20 TXT: j C A L I B R A T I O N R Е P 0 R т RX: 25 bytes; 50 total DEC: 067 013 010 010 013 010 010 084 082 085 067 075 035 032 048 048 048 048 032 032 068 082 073 086 069 HEX: 43 D A A D A A 54 52 55 43 4B 23 20 30 30 30 30 20 20 44 52 49 56 45 TXT: C ** ** ** ** ** T R U C K # 0 0 0 0 D R I V E DRIVE RX: 25 bytes; 850 total DEC: 010 010 013 010 010 042 032 069 078 068 032 067 065 076 073 066 082 065 084 073 079 078 032 082 069 HEX: A A D A A 2A 20 45 4E 44 20 43 41 4C 49 42 52 41 54 49 4F 4E 20 52 45 TXT: ** ** ** ** ** E N D C A L I R R A T T O M P P E N D CALIBRATION RX: 9 bytes; 859 total DEC: 080 079 082 084 042 013 010 010 124 HEX: 50 4F 52 54 2A D A A 7C TXT: P O R T * ** ** ** 1

VIA MATRIX

~j jCALIBRATION REPORT C				
-				
TRUCK# 0000 DRIVER# 0000 DATE 04/22/15 FTIME 11:21				
FINISH TOT.0000000219.4				
USER SOFTWARE VER. E179EH				
METROLOGICAL VER. M 17A			-	
	Print Duplicate Ticket	Print Shift Ticket	Print Calibration Ticket	L
E:Count version: E179EH Datablock version: 06		Get Shift Ticket	Get Calibration Ticket	
PRESET VALVE DWELL 000.0				
COMPENSATOR STATUS ON				
COMPENSATION TABLE # 01				
PROPANE ASIM 54 @ 510				
KILOGRAMS PER CUBIC METER				
* END CALIBRATION REPORT*			E	
1			-	
	Print Duplicate Ticket	Print Shift Ticket	Print Calibration Ticket	
E:Count version: E179EH Datablock version: 06		Get Shift Ticket	Get Calibration Ticket	1

The following assumes English

- 1. Send 0x1F 0x02 to connect Host to Register 1
- 2. Send the j, Wait for all data to be returned after the final pipe ("")
- 3. Send 0xFF
- 4. Read the lines from the returned text looking for "CALIBRATION REPORT"
 - a. The leading "j" is the echo of the command character
- 5. Look for the next non-space and non CR-LF character and save it a. Revision can be any single ASCII character 0-9, A-Z, a-z, etc...
- 6. If all of the bytes after the text and before the CR or LF are spaces that means the revision had not yet been implemented in this Version.
- 7. Ignore everything else
 - a. "jCALIBRATION REPORT C" indicates Revision C
 - b. "jCALIBRATION REPORT " indicates No Revision
 - c. "jCALIBRATION REPORT 7" indicates Revision 7

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