Smith Meter Inc.
An FMC Corporation subsidiary

Electronic Preset Delivery System

# *AccuLoad II ™- SQR*

## Programming Workbook

Issue/Rev. 0.0 (5/96) Bulletin AB06044

This worksheet applies to AccuLoad II operating with SQR-00 and above firmware. (Refer to Operator Reference Manual MN06103L for complete program entry descriptions.)

Security Access Code: _____

Company Name: _____

Prepared By: _____

Date: _____

Unit/Meter No.: _____

Location: _____

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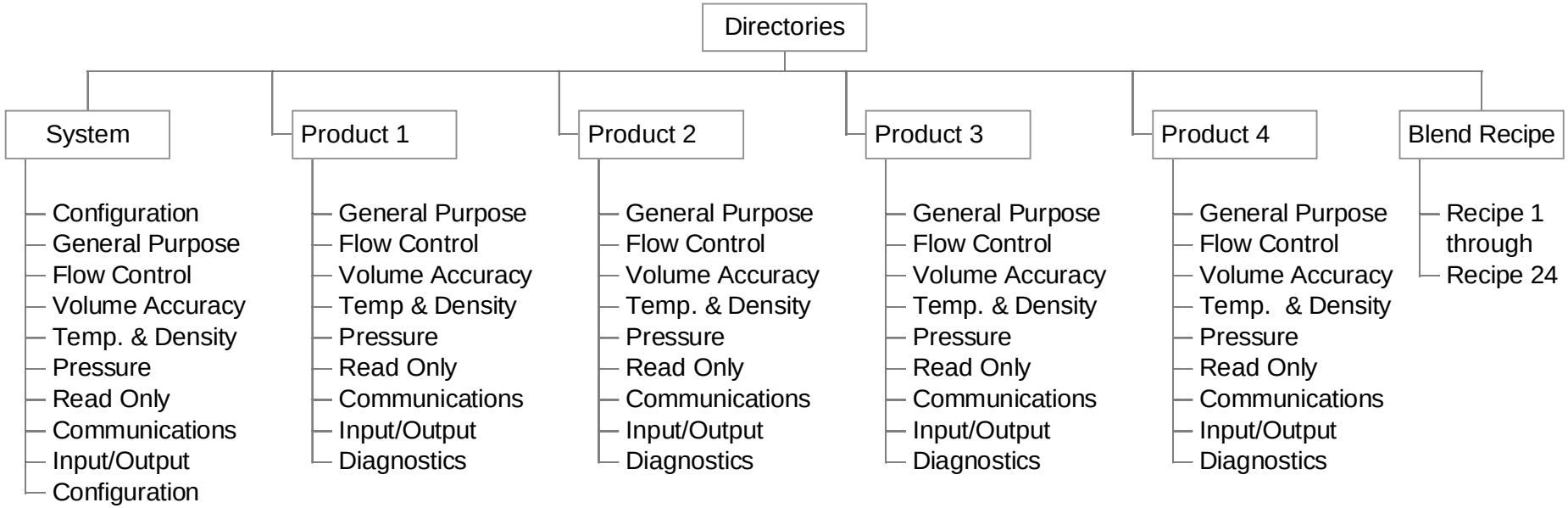
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| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| | | | ***System Directories*** | | |
| 000 | | | System Configuration Directory | | 000 |
| 001 | Number of Products | Enter: | "1" One (1) Product<br>"2" Two (2) Products<br>"3" Three (3) Products<br>"4" Four (4) Products | __ | 001 |
| 002 | Number of Additive Injectors | Enter: | "0" No Additive Injectors<br>"1" One (1) Additive Injector<br>"2" Two (2) Additive Injectors<br>"3" Three (3) Additive Injectors<br>"4" Four (4) Additive Injectors<br>"5" Five (5) Additive Injectors<br>"6" Six (6) Additive Injectors<br>"7" Seven (7) Additive Injectors | __ | 002 |
| 003 | A/C Output Relay 1<br>Terminals 89 & 90<br>(Position #1)<br>Terminals 124 & 125<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Alarm Relay (ALR)<br>"02" Additive Relay 1 (ADD1)<br>"03" Additive Relay 2 (ADD2)<br>"04" Additive Relay 3 (ADD3)<br>"05" Additive Relay 4 (ADD4)<br>"06" Additive Relay 5 (ADD5)<br>"07" Additive Relay 6 (ADD6)<br>"08" Additive Relay 7 (ADD7)<br>"09" Block Valve Relay 1 (BVR1)<br>"10" Block Valve Relay 2 (BVR2)<br>"11" Block Valve Relay 3 (BVR3)<br>"12" Block Valve Relay 4 (BVR4)<br>"13" General Relay (GEN)<br>"14" First Trip Indicator (FTR) | __ __ | 003 |
| ***Note:*** | *When using a Smart Additive Subsystem, options 02 through 08 (Additive Relays) are not available for selection.* | | | | |
| 004 | A/C Output Relay 2<br>Terminals 91 & 92<br>(Position #1)<br>Terminals 126 & 127<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Alarm Relay (ALR)<br>"02" Additive Relay 1 (ADD1)<br>"03" Additive Relay 2 (ADD2)<br>"04" Additive Relay 3 (ADD3)<br>"05" Additive Relay 4 (ADD4)<br>"06" Additive Relay 5 (ADD5)<br>"07" Additive Relay 6 (ADD6)<br>"08" Additive Relay 7 (ADD7)<br>"09" Block Valve Relay 1 (BVR1)<br>"10" Block Valve Relay 2 (BVR2)<br>"11" Block Valve Relay 3 (BVR3)<br>"12" Block Valve Relay 4 (BVR4)<br>"13" General Relay (GEN)<br>"14" First Trip Indicator (FTR) | __ __ | 004 |
| ***Note:*** | *When using a Smart Additive Subsystem, options 02 through 08 (Additive Relays) are not available for selection.* | | | | |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 005 | A/C Output Relay 3<br>Terminals 93 & 94<br>(Position #1)<br>Terminals 128 & 129<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Alarm Relay (ALR)<br>"02" Additive Relay 1 (ADD1)<br>"03" Additive Relay 2 (ADD2)<br>"04" Additive Relay 3 (ADD3)<br>"05" Additive Relay 4 (ADD4)<br>"06" Additive Relay 5 (ADD5)<br>"07" Additive Relay 6 (ADD6)<br>"08" Additive Relay 7 (ADD7)<br>"09" Block Valve Relay 1 (BVR1)<br>"10" Block Valve Relay 2 (BVR2)<br>"11" Block Valve Relay 3 (BVR3)<br>"12" Block Valve Relay 4 (BVR4)<br>"13" General Relay (GEN)<br>"14" First Trip Indicator (FTR) | __ __ | 005 |
| ***Note:*** | *When using a Smart Additive Subsystem, options 02 through 08 (Additive Relays) are not available for selection.* | | | | |
| 006 | A/C Output Relay 4<br>Terminals 95 & 96<br>(Position #1)<br>Terminals 130 & 131<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Alarm Relay (ALR)<br>"02" Additive Relay 1 (ADD1)<br>"03" Additive Relay 2 (ADD2)<br>"04" Additive Relay 3 (ADD3)<br>"05" Additive Relay 4 (ADD4)<br>"06" Additive Relay 5 (ADD5)<br>"07" Additive Relay 6 (ADD6)<br>"08" Additive Relay 7 (ADD7)<br>"09" Block Valve Relay 1 (BVR1)<br>"10" Block Valve Relay 2 (BVR2)<br>"11" Block Valve Relay 3 (BVR3)<br>"12" Block Valve Relay 4 (BVR4)<br>"13" General Relay (GEN)<br>"14" First Trip Indicator (FTR) | __ __ | 006 |
| ***Note:*** | *When using a Smart Additive Subsystem, options 02 through 08 (Additive Relays) are not available for selection.* | | | | |
| 007 | A/C Output Relay 5<br>Terminals 87 & 88<br>(Position #1)<br>Terminals 121 & 122<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Alarm Relay (ALR)<br>"02" Additive Relay 1 (ADD1)<br>"03" Additive Relay 2 (ADD2)<br>"04" Additive Relay 3 (ADD3)<br>"05" Additive Relay 4 (ADD4)<br>"06" Additive Relay 5 (ADD5)<br>"07" Additive Relay 6 (ADD6)<br>"08" Additive Relay 7 (ADD7)<br>"09" Block Valve Relay 1 (BVR1)<br>"10" Block Valve Relay 2 (BVR2)<br>"11" Block Valve Relay 3 (BVR3)<br>"12" Block Valve Relay 4 (BVR4) | __ __ | 007 |
| ***Note:*** | *When using a Smart Additive Subsystem, options 02 through 08 (Additive Relays) are not available for selection.* | | | | |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 008 | D/C Output Relay 1<br>W/O Quad OPV<br>Terminals 9 & 10<br>(Position #1)<br>Terminals 57 & 58<br>(Position #2)<br><br>W/Quad OPV<br>Terminals 11 & 10<br>(Position #1)<br>Terminals 15 & 14<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Pulse Output (POT)<br>"02" Additive Relay 1 (ADD1)<br>"03" Additive Relay 2 (ADD2)<br>"04" Additive Relay 3 (ADD3)<br>"05" Additive Relay 4 (ADD4)<br>"06" Additive Relay 5 (ADD5)<br>"07" Additive Relay 6 (ADD6)<br>"08" Additive Relay 7 (ADD7)<br>"09" Block Valve Relay 1 (BVR1)<br>"10" Block Valve Relay 2 (BVR2)<br>"11" Block Valve Relay 3 (BVR3)<br>"12" Block Valve Relay 4 (BVR4) | __ __ | 008 |

***Note:*** *When using a Smart Additive Subsystem, options 02 through 08 (Additive Relays) are not available for selection.*

| | | | | | |
|---|---|---|---|---|---|
| 009 | D/C Output Relay 2<br>W/Quad OPV<br>Terminals 13 & 12<br>(Position #1)<br>Terminals 17 & 16<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Pulse Output (POT)<br>"02" Additive Relay 1 (ADD1)<br>"03" Additive Relay 2 (ADD2)<br>"04" Additive Relay 3 (ADD3)<br>"05" Additive Relay 4 (ADD4)<br>"06" Additive Relay 5 (ADD5)<br>"07" Additive Relay 6 (ADD6)<br>"08" Additive Relay 7 (ADD7)<br>"09" Block Valve Relay 1 (BVR1)<br>"10" Block Valve Relay 2 (BVR2)<br>"11" Block Valve Relay 3 (BVR3)<br>"12" Block Valve Relay 4 (BVR4) | __ __ | 009 |

***Note:*** *1. This code is only available for use if the Quad OPV option has been purchased with the AccuLoad II. The terminals listed for this code are located on the Quad OPV board.*
*2. When using a Smart Additive Subsystem, options 02 through 08 (Additive Relays) are not available for selection.*

| | | | | | |
|---|---|---|---|---|---|
| 010 | A/C Input 1<br>Terminals 98 & 101<br>(Position #1)<br>Terminals 106 & 109<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Additive Feedback 1 (AFB1)<br>"02" Additive Feedback 2 (AFB2)<br>"03" Additive Feedback 3 (AFB3)<br>"04" Additive Feedback 4 (AFB4)<br>"05" Additive Feedback 5 (AFB5)<br>"06" Additive Feedback 6 (AFB6)<br>"07" Additive Feedback 7 (AFB7)<br>"08" Block Valve Feedback 1 (BVF1)<br>"09" Block Valve Feedback 2 (BVF2)<br>"10" Block Valve Feedback 3 (BVF3)<br>"11" Block Valve Feedback 4 (BVF4)<br>"12" First/Second High Flow (FSC)<br>"13" Printer Tray Switch (PTS) *<br>"14" Permissive 1 Contact (PRC1)<br>"15" Permissive 2 Contact (PRC2)<br>"16" Valve Power (VPW)<br>"17" Valve Stem (VST) | __ __ | 010 |

***Note:*** *1. Or can be used for Master Reset.**
*2. When using a Smart Additive Subsystem, options 01 through 07 (Additive Feedbacks) are not available for selection.*

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 011 | A/C Input 2<br>Terminals 99 & 101<br>(Position #1)<br>Terminals 107 & 109<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Additive Feedback 1 (AFB1)<br>"02" Additive Feedback 2 (AFB2)<br>"03" Additive Feedback 3 (AFB3)<br>"04" Additive Feedback 4 (AFB4)<br>"05" Additive Feedback 5 (AFB5)<br>"06" Additive Feedback 6 (AFB6)<br>"07" Additive Feedback 7 (AFB7)<br>"08" Block Valve Feedback 1 (BVF1)<br>"09" Block Valve Feedback 2 (BVF2)<br>"10" Block Valve Feedback 3 (BVF3)<br>"11" Block Valve Feedback 4 (BVF4)<br>"12" First/Second High Flow (FSC)<br>"13" Printer Tray Switch (PTS) *<br>"14" Permissive 1 Contact (PRC1)<br>"15" Permissive 2 Contact (PRC2)<br>"16" Valve Power (VPW)<br>"17" Valve Stem (VST) | __ __ | 011 |

***Note:*** *1. Or can be used for Master Reset.**
*2. When using a Smart Additive Subsystem, options 01 through 07 (Additive Feedbacks) are not available for selection.*

| | | | | | |
|---|---|---|---|---|---|
| 012 | A/C Input 3<br>Terminals 100 & 101<br>(Position #1)<br>Terminals 108 & 109<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Additive Feedback 1 (AFB1)<br>"02" Additive Feedback 2 (AFB2)<br>"03" Additive Feedback 3 (AFB3)<br>"04" Additive Feedback 4 (AFB4)<br>"05" Additive Feedback 5 (AFB5)<br>"06" Additive Feedback 6 (AFB6)<br>"07" Additive Feedback 7 (AFB7)<br>"08" Block Valve Feedback 1 (BVF1)<br>"09" Block Valve Feedback 2 (BVF2)<br>"10" Block Valve Feedback 3 (BVF3)<br>"11" Block Valve Feedback 4 (BVF4)<br>"12" First/Second High Flow (FSC)<br>"13" Printer Tray Switch (PTS) *<br>"14" Permissive 1 Contact (PRC1)<br>"15" Permissive 2 Contact (PRC2)<br>"16" Valve Power (VPS)<br>"17" Valve Stem (VST) | __ __ | 012 |

***Note:*** *1. Or can be used for Master Reset.**
*2. When using a Smart Additive Subsystem, options 01 through 07 (Additive Feedbacks) are not available for selection.*

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 013 | A/C Input 4<br>Terminals 103 & 105<br>(Position #1)<br>Terminals 110 & 112<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Additive Feedback 1 (AFB1)<br>"02" Additive Feedback 2 (AFB2)<br>"03" Additive Feedback 3 (AFB3)<br>"04" Additive Feedback 4 (AFB4)<br>"05" Additive Feedback 5 (AFB5)<br>"06" Additive Feedback 6 (AFB6)<br>"07" Additive Feedback 7 (AFB7)<br>"08" Block Valve Feedback 1 (BVF1)<br>"09" Block Valve Feedback 2 (BVF2)<br>"10" Block Valve Feedback 3 (BVF3)<br>"11" Block Valve Feedback 4 (BVF4)<br>"12" First/Second High Flow (FSC)<br>"13" Printer Tray Switch (PTS) *<br>"14" Permissive 1 Contact (PRC1)<br>"15" Permissive 2 Contact (PRC2)<br>"16" Valve Power (VPS)<br>"17" Valve Stem (VST) | __ __ | 013 |

***Note:***
1. *Or can be used for Master Reset.**
2. *For "Remote Start" operation this code must be programmed "14" (Permissive Contact #1), code 806 must be programmed "5" (Remote Start) and jumpers must be installed as shown in the Installation Manual (MN06105).*
3. *When using a Smart Additive Subsystem, options 01 through 07 (Additive Feedbacks) are not available for selection.*

| | | | | | |
|---|---|---|---|---|---|
| 014 | A/C Input 5<br>Terminals 104 & 105<br>(Position #1)<br>Terminals 111 & 112<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Additive Feedback 1 (AFB1)<br>"02" Additive Feedback 2 (AFB2)<br>"03" Additive Feedback 3 (AFB3)<br>"04" Additive Feedback 4 (AFB4)<br>"05" Additive Feedback 5 (AFB5)<br>"06" Additive Feedback 6 (AFB6)<br>"07" Additive Feedback 7 (AFB7)<br>"08" Block Valve Feedback 1 (BVF1)<br>"09" Block Valve Feedback 2 (BVF2)<br>"10" Block Valve Feedback 3 (BVF3)<br>"11" Block Valve Feedback 4 (BVF4)<br>"12" First/Second High Flow (FSC)<br>"13" Printer Tray Switch (PTS) *<br>"14" Permissive 1 Contact (PRC1)<br>"15" Permissive 2 Contact (PRC2)<br>"16" Valve Power (VPS)<br>"17" Valve Stem (VST) | __ __ | 014 |

***Note:***
1. *Or can be used for Master Reset.**
2. *For "Remote Stop" operation this code must be programmed "15" (Permissive 2 Contact), code 810 must be programmed "5" (Remote Stop) and jumpers must be installed as shown in the Installation Manual (MN06105).*
3. *When using a Smart Additive Subsystem, options 01 through 07 (Additive Feedbacks) are not available for selection.*

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 015 | A/C Input 6<br>Terminals 73 & 74<br>(Position #1)<br>Terminals 75 & 76<br>(Position #2) | Enter: | "00" No Assignment (NAS)<br>"01" Additive Feedback 1 (AFB1)<br>"02" Additive Feedback 2 (AFB2)<br>"03" Additive Feedback 3 (AFB3)<br>"04" Additive Feedback 4 (AFB4)<br>"05" Additive Feedback 5 (AFB5)<br>"06" Additive Feedback 6 (AFB6)<br>"07" Additive Feedback 7 (AFB7)<br>"08" Block Valve Feedback 1 (BVF1)<br>"09" Block Valve Feedback 2 (BVF2)<br>"10" Block Valve Feedback 3 (BVF3)<br>"11" Block Valve Feedback 4 (BVF4)<br>"12" First/Second High Flow (FSC)<br>"13" Printer Tray Switch (PTS) *<br>"14" Permissive 1 Contact (PRC1)<br>"15" Permissive 2 Contact (PRC2)<br>"16" Valve Power (VPW)<br>"17" Valve Stem (VST) | | 015 |

***Note:*** *1. Or can be used for Master Reset.**
*2. When using a Smart Additive Subsystem, options 01 through 07 (Additive Feedbacks) are not available for selection.*

| | | | | | |
|---|---|---|---|---|---|
| 016-039 | | | Unassigned at Present | | 016-039 |
| 040 | Print Configuration | Enter: | Press 'ENTER' to Print Configuration Report. | | 040 |

***Note:*** *Configuration Report will print for both preset positions.*

| | | | | | |
|---|---|---|---|---|---|
| 041 | Additive System and Pacing Control Selection | Enter: | "0" Piston Injectors<br>"1" Titan w/Pulse<br>"2" Titan w/Comm<br>"3" Gate City w/Pulse<br>"4" Gate City w/Comm<br>"5" Gate City Mini-Pak w/Pulse<br>"6" Gate City Mini-Pak w/Comm | __ | 041 |
| 042-089 | | | Unassigned at Present | | 042-089 |
| 090 | Input/Output Configuration | Enter: | "1" One Product<br>"2" Two Products<br>"3" Three Products<br>"4" Four Products | __ | 090 |

***Note:*** *Entering the above number will program the AccuLoad II to a typical Input and Output configuration for the number of products selected. Refer to manual MN06103L for input & output assignments when using this method of configuring the AccuLoad II - SQR.*

**Caution: This code will override anything that is currently programmed in the configuration directory. Do not use this code if you have already configured the unit.**

| | | | | | |
|---|---|---|---|---|---|
| 091-099 | | | Unassigned at Present | | 091-099 |

| Program Code | Function | Description | Entry | Program Code |
|---|---|---|---|---|
| 100 | | ***System General Purpose Directory*** | | 100 |
| 101 | System Alarm Check/Reset | Read only, Press E to clear | None | 101 |

Available Alarms

AC: Additive Communications
A2: Print Cover Open
A4: Print Cover Open
B2: Buffer Overflow
B4: Buffer Overflow
CL: Clean Line
CM: Communication
DA: EEProm Bad
DA: Ram Bad
DA: Rom Uxx Bad
DA: Watchdog Alarm
DA: Display Error
DA: Data Retention
DA: Display Boot Required
DA: Control Module
DA: Security Code
DA: Software Version
DA: Internal Temperature
DA: Program Code
DP: Down Pulse Error
DR: Density Transducer
D2: Printer Deselected
D4: Printer Deselected
E2: Printer Error
E4: Printer Error
F1: Add 1 Feedback
F2: Add 2 Feedback
F3: Add 3 Feedback
F4: Add 4 Feedback
F5: Add 5 Feedback
F6: Add 6 Feedback
F7: Add 7 Feedback
H2: Printer Hardware
H4: Printer Hardware
IA: Injector Alarm
I2: Printer Not Responding
I4: Printer Not Responding
K1: Low Additive 1
K2: Low Additive 2
K3: Low Additive 3
K4: Low Additive 4
K5: Low Additive 5
K6: Low Additive 6
K7: Low Additive 7
L1: Additive 1 Pulse
L2: Additive 2 Pulse
L3: Additive 3 Pulse
L4: Additive 4 Pulse
L5: Additive 5 Pulse
L6: Additive 6 Pulse
L7: Additive 7 Pulse
M1: Too Many Pulses Additive 1
M2: Too Many Pulses Additive 2
M3: Too Many Pulses Additive 3
M4: Too Many Pulses Additive 4
M5: Too Many Pulses Additive 5
M6: Too Many Pulses Additive 6
M7: Too Many Pulses Additive 7
N1: No Pulses Detected Address 1
N2: No Pulses Detected Address 2
N3: No Pulses Detected Address 3
N4: No Pulses Detected Address 4
N5: No Pulses Detected Address 5
N6: No Pulses Detected Address 6
N7: No Pulses Detected Address 7
OA: Overrun
O2: Printer Paper Out
O4: Printer Paper Out
PA: Power Fail
PC: Pulse Collision
PR: Pressure Transducer
PS: Pulse Security
PT: Pulse Transmission
P2: Printer Communication
P4: Printer Communication
R1: Additive 1 Frequency
R2: Additive 2 Frequency
R3: Additive 3 Frequency
R4: Additive 4 Frequency
R5: Additive 5 Frequency
R6: Additive 6 Frequency
R7: Additive 7 Frequency
SF: Storage Full
SP: Shared Printer
TK: Ticket Alarm
TP: Temperature Probe
TT: Temperature Transducer
U1: Unauthorize Command Failed Additive 1
U2: Unauthorize Command Failed Additive 2
U3: Unauthorize Command Failed Additive 3
U4: Unauthorize Command Failed Additive 4
U5: Unauthorize Command Failed Additive 5
U6: Unauthorize Command Failed Additive 6
U7: Unauthorize Command Failed Additive 7
VF: Valve Fault
ZF: Zero Flow

| Program Code | Function | Description | Entry | Program Code |
|---|---|---|---|---|
| 102 | Product 1 Alarm Check/Reset | Read only, Press E to clear | None | 102 |
| | | Available Alarms | | |
| | | BH: Blend High<br>BL: Blend Low<br>BP: Back Pressure<br>BV: Block Valve Fault<br>HD: High Density<br>HF: Excess High Flow | HP: High Pressure<br>HT: High Temperature<br>LD: Low Density<br>LF: Low Flow<br>LP: Low Pressure<br>LT: Low Temperature | |
| 103 | Product 2 Alarm Check/Reset | Read only, Press E to clear | None | 103 |
| | | Available Alarms | | |
| | | BH: Blend High<br>BL: Blend Low<br>BP: Back Pressure<br>BV: Block Valve Fault<br>HD: High Density<br>HF: Excess High Flow | HP: High Pressure<br>HT: High Temperature<br>LD: Low Density<br>LF: Low Flow<br>LP: Low Pressure<br>LT: Low Temperature | |
| 104 | Product 3 Alarm Check/Reset | Read only, Press E to clear | None | 104 |
| | | Available Alarms | | |
| | | BH: Blend High<br>BL: Blend Low<br>BP: Back Pressure<br>BV: Block Valve Fault<br>HD: High Density<br>HF: Excess High Flow | HP: High Pressure<br>HT: High Temperature<br>LD: Low Density<br>LF: Low Flow<br>LP: Low Pressure<br>LT: Low Temperature | |
| 105 | Product 4 Alarm Check/Reset | Read only, Press E to clear | None | 105 |
| | | Available Alarms | | |
| | | BH: Blend High<br>BL: Blend Low<br>BP: Back Pressure<br>BV: Block Valve Fault<br>HD: High Density<br>HF: Excess High Flow | HP: High Pressure<br>HT: High Temperature<br>LD: Low Density<br>LF: Low Flow<br>LP: Low Pressure<br>LT: Low Temperature | |
| 106 | Blend Alarms Check/Reset | Read only, Press E to clear | None | 106 |
| | | Available Alarms<br>DA: Program Code | | |
| 107 | Transaction Alarms | To be read only | None | 107 |
| 108 | Ready Mode Alarms | To be read only | None | 108 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 109 | Set Time | Enter: | Five (5) digits. Two (2) digits for hours, Two (2) digits for minutes and one (1) to indicate military, time, AM or PM. The last digit will be "0" = AM, "1" = PM and "2" = Military (e.g., 01:130) | __ __ __ __ __ | 109 |
| 110 | Set Date | Enter: | Six (6) digits. Two (2) digits for month followed by two (2) digits for day, followed by (2) digits for year (e.g., 011288) | __ __ __ __ __ __ | 110 |
| 111 | Dynamic Display Time-out | Enter: | Two (2) digits in seconds of time-out (e.g., 15) "00" Display will remain till the "CLEAR" key is pressed | __ __ | 111 |
| 112-139 | | | Unassigned at Present | | 112-139 |
| 140 | Protection of Program Codes 180-189 | Enter: | "0" for Weights and Measures Mode "1" for Program Mode | __ | 140 |
| 141 | Local Mode Alarm Clearing | Enter: | One (1) digit from one (1) to nine (9) indicates the number of alarms that can be cleared during a transaction when in the Run & Ready Mode. (e.g., 3) | __ | 141 |
| 142 | Decimal or Comma Selection | Enter: | "0" Decimal "1" Comma | __ | 142 |
| 143 | Alarm Relay | Enter: | "0" Alarm Relay on Valve Fault "1" Alarm Relay on Any Fault "2" No Alarm Relay | __ | 143 |
| 144 | Run & Ready Mode Initialization | Enter: | "0" English "1" Not Used "2" Spanish | __ | 144 |

***Note:*** *Entry "1" is reserved for future use and is not allowed by the AccuLoad II.*

| | | | | | |
|---|---|---|---|---|---|
| 145 | Ready/Run Mode Clearable Alarms Selection | Enter: | The number of the alarm that is to to be changed (see Appendix for the alarms, associated numbers and recording entries.) When the alarm is displayed enter a "0" if the alarm is allowed to be cleared in the Ready/Run Mode. Enter a "1" if the alarm is not allowed to be cleared in the Ready/Run Mode. | | 145 |

***Note:*** *1. If code 141 is set to "0" the message "No Alarm Clearing" will be displayed and no entries will be allowed.*

| | | | | | |
|---|---|---|---|---|---|
| 146-179 | | | Unassigned at Present | | 146-179 |
| 180 | Programming Access Code | Enter: | Four digit number permits entry in to the Program or Weights and Measures Mode (e.g., 1234) | __ __ __ __ | 180 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 181 | Transaction Security ID | Enter: | Eight (8) digit transaction ID number (e.g., 12345678) "00000000" disables this feature. | __ __ __ __ __ __ __ __ | 181 |
| 182 | Transaction Security Prompt Message | Enter: | Up to twenty (20) characters for a prompt message (e.g., Enter ID Number) | _____ | 182 |
| 183 | Auto Reset Timer | Enter: | Two (2) digit number in minutes that the AccuLoad II will remain in the a mode of operation before automatically returning to the Ready Mode (e.g., 05) "00" disables this feature. | __ __ | 183 |
| 184 | Ready Mode Message | Enter: | Up to Fifteen (15) characters for a prompt message (e.g., Load Arm #1) | _____ | 184 |
| 185 | Run & Ready Mode Customized Display | Enter: | The number of the display that you want to change. Press "ENTER". The default display will appear for that number or you can scroll through the displays by pressing the "ENTER" key. The display can be changed using the character set resident in the AccuLoad II. (See Appendix for entry numbers and to record translation.) | | 185 |
| 186 | Power-fail Alarm | Enter: | "0" Power-fail Alarm Disabled "1" Power-fail Alarm Enabled | __ | 186 |
| 187-189 | | | Unassigned at Present | | 187-189 |
| 190 | Meter Position Disable | Enter: | "0" Meter Enabled "1" Meter Disabled | __ | 190 |
| 191-199 | | | Unassigned at Present | | 191-199 |
| 200 | | | ***System Flow Control Directory*** | | 200 |
| 201 | Low Flow Start Volume | Enter: | Four (4) digits in whole units (e.g., 0100) | __ __ __ __ | 201 |
| 202 | Low Flow Start Rate | Enter: | Four (4) digits in whole units per minute (e.g., 0150) "0000" entry will not allow the valve to open. | __ __ __ __ | 202 |
| 203 | Low Flow Start | Enter: | "0" Low Flow Start always after "START" is pressed. "1" Low Flow Start at beginning of batch only. | ___ | 203 |
| 204 | Zero Flow Timer | Enter: | Two (2) digits in seconds (e.g., 15) "00" disables this option | __ __ | 204 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 205 | Overrun Alarm Limit | Enter: | Two (2) digits in whole units (e.g., 15)<br>"00" disables the alarm | __ __ | 205 |
| 206 | Start Delay After Stop | Enter: | Three (3) digits in whole seconds of delay time (e.g., 020) | __ __ __ | 206 |
| 207 | Pump Relay Time Delay | Enter: | Two (2) digits in seconds of delay time (e.g., 09) | __ __ | 207 |
| 208 | Valve Delay To Open | Enter: | Two (2) digits in seconds of delay time. (e.g., 07)<br>"00" disables option | __ __ | 208 |
| 209 | PT/VF Time Delay | Enter: | Two (2) digits in seconds of time delay (e.g., 15)<br>Entry must not be "00" | __ __ | 209 |
| 210 | Flow Control Valve | Enter: | "0" for a Digital Valve<br>"1" for a Two-stage Valve | __ | 210 |
| 211 | Zero Flow Alarm | Enter: | "0" Zero Flow Alarm Disabled<br>"1" Zero Flow Alarm Enabled | __ | 211 |
| 212-239 | | | Unassigned at Present | | 212-239 |
| 240 | Protection of Program Codes 280-289 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | 240 |
| 241 | Flow Control Valve Security | Enter: | "0" for No Security<br>"1" for Security | __ | 241 |
| 242-279 | | | Unassigned at Present | | 242-279 |
| 280 | Clean Line Product | Enter: | "1" for Product 1<br>"2" for Product 2<br>"3" for Product 3<br>"4" for Product 4 | __ | 280 |
| 281 | Clean Line Volume | Enter: | Three (3) digits in whole units of product to be left in the line at the end of the batch. (e.g., 050) | __ __ __ | 281 |
| *Note: The Clean Line Volume is always subtracted from 1st product in the recipe* | | | | | |
| 282 | Clean Line Alarm Limit | Enter: of under | Two (2) digits in volume delivery of the clean line volume allowed. (e.g., 10) | __ __ | 282 |
| 283 | Block Valve Position | Enter: | "0" Valve off SP & ET<br>"1" Valve on SP, off ET<br>"2" Valve off SP, on ET<br>"3" Valve on SP & ET | __ | 283 |
| ***Note:*** *ET = End of Transaction and SP = Stop is Pressed* | | | | | |
| 284-299 | | | Unassigned at Present | | 284-299 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 300 | | | ***System Volume Accuracy Directory*** | | 300 |
| 301 | Transaction Control | Enter: | "0" Local Tray Switch<br>"1" Print Key<br>"2" Remote<br>"3" Master Reset | __ | 301 |
| 302 | Maximum Preset Volume | Enter: | Five (5) digits in whole units<br>(e.g., up to 99,999 units)<br>"00000" disables option | __ __ __ __ __ | 302 |
| 303 | Minimum Preset Volume | Enter: | Five (5) digits in whole units<br>(e.g., up to 99,999 units)<br>"00000" disables option | __ __ __ __ __ | 303 |
| 304 | Auto Preset | Enter: | Five (5) digits in whole units<br>(e.g., 99,999 units)<br>"00000" disables option | __ __ __ __ __ | 304 |
| 305 | Auto Preset Increment | Enter: | Four (4) digits in whole units<br>to increment the auto preset.<br>(e.g., 0100 units)<br>"0000" disables option | __ __ __ __ | 305 |
| 306 | Blank Downcounter | Enter: | "0" Downcounter to be Displayed<br>"1" No Downcounter Displayed | __ | 306 |
| 307 | Volumes for Local Storage | Enter: | Five (5) digit number indicating<br>the volumes that will be stored in<br>local storage. | | 307 |

***Note:*** *A maximum of three (3) volumes will be stored.*

1st digit - Raw Volumes (RW)
2nd digit - Gross Volumes (GR)
3rd digit - Gross at Standard Temperature Volumes (GT)
4th digit - Net Volumes (NT)
5th digit - Mass Totals (MA)

A zero (0) in the digit indicates that the volume will not be saved in local storage, a (1) indicates the volume will be saved in local storage. __ __ __ __ __

| | | | | | |
|---|---|---|---|---|---|
| 308-339 | | | Unassigned at Present | | 308-339 |
| 340 | Protection of Program Codes 380-389 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | 340 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 341 | Dual Pulse Error Count | Enter: | Three (3) digits indicating the number of error counts from the Dual Pulse Comparator prior to alarming. (e.g., 050) | __ __ __ | 341 |
| ***Note:*** *"000" disables the error counting.* | | | | | |
| 342 | Dual Pulse Error Reset | Enter: | "0" No DPC Error Reset<br>"1" Reset at the End of Transaction Only<br>"2" Reset Upon Power-up Only<br>"3" Reset Upon Power-up and at the End of Each Transaction | __ | 342 |
| 343 | Dual Pulse Flow Rate Cutoff | Enter: | Three (3) digits defining the flow rate that the Dual Pulse errors will begin to be counted. | __ __ __ | 343 |
| 344 | Display Units | Enter: | Three (3) character message identifying the display units (e.g., GAL) | __ __ __ | 344 |
| 345 | Corrected Display | Enter: | "0" No Correction<br>"1" Correct Delivery Display<br>"2" Corrected Preset Display<br>"3" Corrected Delivery & Preset | __ | 345 |
| 346 | Pulse #1 Output | Enter: | "0" Raw Pulse Out 1<br>"1" Gross Pulse Out 1<br>"2" Gst Pulse Out 1<br>"3" Net Pulse Out 1<br>"4" Mass Pulse Out 1 | __ | 346 |
| 347 | Pulse #1 Output Resolution | Enter: | Four (4) digits defining the pulse output resolution (units/pulse) in tenth units, "0000" Disables this feature (e.g., 010.0) | __ __ __ . __ | 347 |
| ***Note:*** *Input pulses must be 2.5 times greater than the output pulses (e.g., 100 output pulses/unit volume requires at least 250 input pulses/unit volume).* | | | | | |
| 348 | Pulse #2 Output | Enter: | "0" Raw Pulse Out 2<br>"1" Gross Pulse Out 2<br>"2" Gst Pulse Out 2<br>"3" Net Pulse Out 2<br>"4" Mass Pulse Out 2 | __ | 348 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 349 | Pulse #2 Output Resolution | Enter: | Four (4) digits defining the pulse output resolution (units/pulse) in tenth units, "0000" Disables this feature (e.g., 010.0) | __ __ __ . __ | 349 |
| | ***Note**: Input pulses must be 2.5 times greater than the output pulses (e.g., 100 output pulses/unit volume requires at least 25- input pulses/unit volume).* | | | | |
| 350 | Display Resolution | Enter: | "0" Whole Unit Display<br>"1" Tenth Unit Display<br>"2" Hundredth Unit Display<br>"3" Tens Unit Display | __ | 350 |
| 351 | Input Resolution | Enter: | Four (4) digit number representing the number of pulses per unit of registration (e.g., 0100) Entry must be between 0025 and 9999 | __ __ __ __ | 351 |
| 352 | Proving Modes | Enter: | "0" Not Proving<br>"1" Weights and Measures Proving<br>"2" High Speed Proving | __ | 352 |
| 353 | Proving Output | Enter: | "0" No Prover Output<br>"1" Meter #1 Prover Output<br>"2" Meter #2 Prover Output | __ | 353 |
| 354 | Proving Output Units | Enter: | "0" Raw Prover Output (Raw)<br>"1" Gross Prover (Grs)<br>"2" Gross Prover at Standard Temperature (Gst)<br>"3" Gross Prover at Standard Temperature and Pressure Preset (Net)<br>"4" Mass Preset (Whole Units) | __ | 354 |
| 355 | Blend Tolerance (Percentage) | Enter: | Two (2) digits in tenths of a percentage for the tolerance allowed for all delivered blends. (e.g., 5.0 = 5 %) | __ __ | 355 |
| | ***Note:** The larger of the tolerances as calculated using the percentage entered in this code or the volume entered in code 357 will be used to determine when a blend alarm should be triggered.* | | | | |
| 356 | Blend Tolerance (Volume) | Enter: | Three (3) digits of Volume for Blend Tolerance in tenths of units. (e.g., 10.0) | __.__ | 356 |
| | ***Note:** The larger of the tolerances as programmed in this code or calculated in code 356 will be used to determine when a blend alarm will be triggered.* | | | | |
| 357 | Blend Correction | Enter: | "0" No Blend Correction<br>"1" Self-corrected Blend<br>"2" Self-corrected/Complete Blend | __ | 357 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 358 | Recipes Per Transaction | Enter: | "0" Single Recipe/Transaction<br>"1" Multiple Recipes/Transaction | __ | 358 |
| 359 | Auto Proving Select | Enter: | "0" Auto Proving Disabled<br>"1" Auto Proving Enabled<br>"2" Auto Proving Always | __ | 359 |
| 360-389 | | | Unassigned at Present | | 360-389 |
| 390 | Input Pulse Type | Enter: | "0" Active Pulse Input<br>"1" Contact Type Input | __ | 390 |
| 391 | Input Pulse Doubler | Enter: | "0" Pulses Times One<br>"1" Pulses Times Two | __ | 391 |
| 392 | Transmitter Type | Enter: | "0" Single Channel<br>"1" Single and Inverted<br>"2" Dual Channel<br>"3" Dual and Inverted | __ | 392 |
| 393-399 | | | Unassigned at Present | | 393-399 |
| 400 | | | ***System Temperature & Density Directory*** | | 400 |
| 401-439 | | | Unassigned at Present | | 401-439 |
| 440 | Protection of Program Codes 480-489 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | 440 |
| 441 | Temperature Units | Enter: | "0" No Temperature Probe<br>"1" Fahrenheit<br>"2" Celsius | __ | 441 |
| 442 | Reference Temperature | Enter: | Four (4) digit reference temperature in tenth degrees (e.g., 060.0) | __ __ __ . __ | 442 |
| 443 | Temperature Offset | Enter: | Three (3) digits. First digit must be "0" or "1" (0 = positive, 1 = negative). Second and third digits represent the offset temperature in tenth degrees (e.g., 10.5 entered will display as -0.5 degrees offset) | __ __ . __ | 443 |
| 444 | Density or Temperature Input | Enter: | "0" Density Input<br>"1" Temperature Input | __ | 444 |

***Note:*** *If Temperature is selected AccuLoad II will ignore the RTD channel. To accept readings from the RTD channel this entry must be selected for density input.*

| | | | | | |
|---|---|---|---|---|---|
| 445 | Density Units | Enter: | "0" No Densitometer Installed<br>"1" Lbs/$Ft^3$.<br>"2" Kgs/$M^3$. | __ | 445 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 446 | Minimum Density OR Minimum Temperature as selected in code 444 | Enter: | Five (5) digits. For minimum density at 4 mA in tenth units (e.g., 0100.0). For minimum Temperature at 4 mA the first digit indicates the polarity. First digit "0" = Positive First digit "1" = Negative The last four digits indicate the temperature in tenth degrees. (e.g., 0030.0 = +030.0) Temperature units as selected in code 441. | __ __ __ __ . __ | 446 |
| 447 | Maximum Density OR Maximum Temperature as selected in code 444 | Enter: | Five (5) digits. For maximum density at 20 mA in tenth units (e.g., 1600.0). For maximum Temperature at 4 mA the first digit indicates the polarity. First digit "0" = Positive First digit "1" = Negative The last four digits indicate the temperature in tenth degrees. (e.g., 0100.0 = +100.0) Temperature units as selected in code 441. An entry of -999.9 (Temperature) or 0000.0 (Density) will disable this feature. | __ __ __ __ . __ | 447 |
| 448 | Volume/Mass Conversion | Enter: | "0" Gallons per Density Units "1" Dekaliters per Density Units "2" Liters per Density Units "3" Barrels per Density Units "4" Cubic Meters per Density Units | __ | 448 |
| 449 | Mass Units | Enter: | Three (3) character message identifying the mass units (e.g., Lbs) | __ __ __ | 449 |
| 450-499 | | | Unassigned at Present | | 450-499 |
| 500 | | | ***System Pressure Directory*** | | 500 |
| 501-539 | | | Unassigned at Present | | 501-539 |
| 540 | Protection of Program Codes 580-589 | Enter: | "0" for Weights and Measures Mode "1" for Program Mode | __ | 540 |
| 541 | Pressure Units | Enter: | "0" No Pressure Transducer Installed "1" Psi "2" Bar "3" Kgcm | __ | 541 |
| 542 | Minimum Pressure Units | Enter: | Four (4) digits in tenth units for minimum pressure at 4 mA. (e.g., 1600 = 160.0) Units dependent on selection in code 541. | __ __ __ . __ | 542 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 543 | Maximum Pressure Units | Enter: | Four (4) digits in tenth units for maximum pressure at 20 mA. (e.g., 4500 = 450.0) Units dependent on selection in code 541. "0000" indicates no pressure transducer installed. | __ __ __ . __ | 543 |
| 544-599 | | | Unassigned at Present | | 544-599 |
| 600 | | | ***System Read Only Directory*** | | 600 |
| 601 | Injector 1 Non-resettable Totals | | To be read only | None | 601 |
| 602 | Injector 2 Non-resettable Totals | | To be read only | None | 602 |
| 603 | Injector 3 Non-resettable Totals | | To be read only | None | 603 |
| 604 | Injector 4 Non-resettable Totals | | To be read only | None | 604 |
| 605 | Injector 5 Non-resettable Totals | | To be read only | None | 605 |
| 606 | Injector 6 Non-resettable Totals | | To be read only | None | 606 |
| 607 | Injector 7 Non-resettable Totals | | To be read only | None | 607 |
| 608 | Local Storage Transactions | | To be read only | None | 608 |
| 609-639 | | | Unassigned at Present | | 609-639 |
| 640 | Protection of Program Codes 680-689 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | 640 |
| 641-699 | | | Unassigned at Present | | 641-699 |
| 700 | | | ***System Communication Directory*** | | 700 |
| 701 | EIA-232 Communication Type | Enter: | "0" No Communications<br>"1" for EIA Type Terminal<br>"2" for EIA Type Minicomputer<br>"3" Gate City Additive System | __ | 701 |
| 702 | EIA-232 Communication Control | Enter: | "0" for Poll Only<br>"1" for Poll and Authorize<br>"2" for Remote Control<br>"3" for Auto Out<br>"4" for Shared Auto Out<br>"5" Smart Additives | __ | 702 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 703 | EIA-232 Baud Rate | Enter: | "0" for 110 Baud<br>"1" for 150 Baud<br>"2" for 300 Baud<br>"3" for 600 Baud<br>"4" for 1200 Baud<br>"5" for 2400 Baud<br>"6" for 3600 Baud<br>"7" for 4800 Baud<br>"8" for 7200 Baud<br>"9" for 9600 Baud | __ | 703 |
| 704 | EIA-232 Data Format | Enter: | "0" EIA-232 7 Bits Even<br>"1" EIA-232 7 Bits Odd<br>"2" EIA-232 7 Bits None<br>"3" EIA-232 8 Bits Even<br>"4" EIA-232 8 Bits Odd<br>"5" EIA-232 8 Bits None | __ | 704 |
| 705 | EIA-485 Communication Type | Enter: | "0" No Communications<br>"1" EIA Type Terminal<br>"2" EIA Type Minicomputer<br>"3" Gate City Additive System | __ | 705 |
| 706 | EIA-485 Communication Control | Enter: | "0" for Polling only<br>"1" for Poll and Authorize<br>"2" for Remote Control<br>"3" for Auto Out<br>"4" for Shared Auto Out<br>"5" Smart Additives | __ | 706 |
| 707 | EIA-485 Baud Rate | Enter: | "0" for 110 Baud<br>"1" for 150 Baud<br>"2" for 300 Baud<br>"3" for 600 Baud<br>"4" for 1200 Baud<br>"5" for 2400 Baud<br>"6" for 3600 Baud<br>"7" for 4800 Baud<br>"8" for 7200 Baud<br>"9" for 9600 Baud | __ | 707 |
| 708 | EIA-485 Data Format | Enter: | "0" EIA-485 7 Bits Even<br>"1" EIA-485 7 Bits Odd<br>"2" EIA-485 7 Bits None<br>"3" EIA-485 8 Bits Even<br>"4" EIA-485 8 Bits Odd<br>"5" EIA-485 8 Bits None | __ | 708 |
| 709 | Communication Address | Enter: | Two (2) digit number to identify the unit location for communications, range 01 to 99 (e.g., 25) | __ __ | 709 |
| 710 | Printer Output Message #1 | Enter: | Up to twenty (20) characters for printer message (e.g., Smith Meter Inc.)_____ | | 710 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 711 | Printer Output Message #2 | Enter: | Up to twenty (20) characters for printer message (e.g., P. O. Box 10428) | _____ | 711 |
| 712 | Printer Output Message #3 | Enter: | Up to twenty (20) characters for printer message (e.g., 1602 Wagner Ave.) | __ | 712 |
| 713 | Printer Output Message #4 | Enter: | Up to twenty (20) characters for printer message (e.g., Erie, Pa.) | _____ | 713 |
| 714 | Printer Output Message #5 | Enter: | Up to twenty (20) characters for printer message (e.g., Erie Terminal) | _____ | 714 |
| 715 | Prompt Message #1 | Enter: | Up to twenty (20) characters for prompt message (e.g., Enter Driver ID) | _____ | 715 |
| 716 | Prompt Message #2 | Enter: | Up to twenty (20) characters for prompt message (e.g., Enter Company ID) | _____ | 716 |
| 717 | Prompt Message #3 | Enter: | Up to twenty (20) characters for prompt message (e.g., Enter Trailer No) | _____ | 717 |
| 718 | Prompt Message #4 | Enter: | Up to twenty (20) characters for prompt message (e.g., Enter Carrier ID) | _____ | 718 |
| 719 | Prompt Message #5 | Enter: | Up to twenty (20) characters for prompt message (e.g., Connect Ground) | _____ | 719 |
| 720 | Meter ID | Enter: | Up to twenty (20) characters for meter identification (e.g., Meter XX12) | _____ | 720 |
| 721 | Print Summary | Enter: | "0" Summary w/Report<br>"1" No Summary w/Report<br>"2" Summary Only<br>"3" User Configured Report | __ | 721 |
| 722 | Delivery Report | | To be read only. Displays the current setup of the Delivery Report. | | 722 |
| 723-739 | | | Unassigned at Present | | 723-739 |
| 740 | Protection of Program Codes 780-789 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | 740 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 741 | Communication Link Programming | Enter: | "0" for No Program Code Values<br>"1" for Program Values Only<br>"2" for Program and Weights and Measures Values<br>"3" for Alarm Reset Only | __ | 741 |
| 742 | Communications Time-out | Enter: | Three (3) digits in seconds that communication polling may be absent (e.g., 060)<br>"000" disables the Communications Alarm Mode | __ __ __ | 742 |
| 743 | Communications Alarm Mode | Enter: | "0" Standby Mode<br>"1" Communications Alarm Mode<br>"2" Standby and Communications Alarm Mode | __ | 743 |
| 744 | Prompt Time-out | Enter: | Three (3) digits in seconds of time-out allowed with each prompt (e.g., 015) | __ __ __ | 744 |
| ***Note:*** *Minimum time-out is 10 seconds.* | | | | | |
| 745 | Prompt Data Entry #1 | Enter: | Two (2) digits representing the prompt data response.<br>First digit "0" = Displayed<br>First digit "1" = Hidden Display<br>Second digit "0 - 9" = Digits for prompt entry (e.g., 04) | __ __ | 745 |
| 746 | Prompt Data Entry #2 | Enter: | Two (2) digits representing the prompt data response.<br>First digit "0" = Displayed<br>First digit "1" = Hidden Display<br>Second digit "0 - 9" = Digits for prompt entry (e.g., 15) | __ __ | 746 |
| 747 | Prompt Data Entry #3 | Enter: | Two (2) digits representing the prompt data response.<br>First digit "0" = Displayed<br>First digit "1" = Hidden Display<br>Second digit "0 - 9" = Digits for prompt entry (e.g., 15) | __ __ | 747 |
| 748 | Prompt Data Entry #4 | Enter: | Two (2) digits representing the prompt data response.<br>First digit "0" = Displayed<br>First digit "1" = Hidden Display<br>Second digit "0 - 9" = Digits for prompt entry (e.g., 16) | __ __ | 748 |
| 749 | Prompt Data Entry #5 | Enter: | Two (2) digits representing the prompt data response.<br>First digit "0" = Displayed<br>First digit "1" = Hidden Display<br>Second digit "0 - 9" = Digits for prompt entry (e.g., 16) | __ __ | 749 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 750 | Start Key Enable/Disable | Enter: | "0" Start Key Enabled<br>"1" Start Key Disabled | __ | 750 |
| 751 | Shared Printer Out Alarm | Enter: | "0" for No SP Alarm<br>"1" for Local SP Alarm<br>"2" for Program SP Alarm | __ | 751 |
| 752 | Shared Printer Out Timer | Enter: | Two (2) digits in minutes of time that the AccuLoad II will wait before Alarming. | __ __ | 752 |
| 753 | EIA-232 Printer Security | Enter: | "0" No 232 Security<br>"1" XON/XOFF<br>"2" DEC Protocol<br>"3" PTB - FX Protocol<br>"4" PTB - LQ Protocol | __ | 753 |
| 754 | EIA-485 Printer Security | Enter: | "0" No 485 Security<br>"1" XON/XOFF<br>"2" DEC Protocol<br>"3" PTB - FX Protocol<br>"4" PTB - LQ Protocol | __ | 754 |
| 755 | Shared Printer Security Alarm | Enter: | "0" No Security Alarm<br>"1" Local Security Alarm<br>"2" Prg Security Alarm | __ | 755 |

***Note:*** *Used with DEC Security.*

| | | | | | |
|---|---|---|---|---|---|
| 756 | Select Volumes to Print | Enter: | Five (5) digit number indicating the totals that will be printed on the Product Receipt Ticket.<br><br>1st digit - Raw Totals<br>2nd digit - Gross Totals<br>3rd digit - Gross at Standard Temperature Totals<br>4th digit - Net Totals<br>5th digit - Mass Totals<br><br>A zero (0) in the digit indicates the total will not be printed, a one (1) indicates the total will be printed. (e.g., 01100 indicates that Gross totals and the Gross at Standard Temperature will be printed on the Product Receipt Ticket.) | __ __ __ __ __ | 756 |

***Note:*** *The current load ticket can have all five of the volumes printed on it. However, any reprint of that load ticket will only contain the volumes that have been selected for local storage in code 307 and in this program code.*

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 757 | Select Load Averages to Print | Enter: | Two (2) digit number indicating the load averages that will be printed on the Product Receipt Ticket.<br><br>1st digit - Load Average Temperature<br>2nd digit - Load Average Density<br><br>A zero (0) in the digit indicates the load average will not be printed, a one (1) indicates the load average will be printed. (e.g., 11 indicates that the Load Average Temperature and the Load Average Density will be printed on the Product Receipt Ticket.) | __ __ | 757 |
| 758 | Select the Additive Volumes to Print | Enter: | Seven (7) digit number indicating the additive volumes that will be printed on the Product Receipt Ticket.<br><br>1st digit - Additive Volume #1<br>2nd digit - Additive Volume #2<br>3rd digit - Additive Volume #3<br>4th digit - Additive Volume #4<br>5th digit - Additive Volume #5<br>6th digit - Additive Volume #6<br>7th digit - Additive Volume #7<br><br>A zero (0) in the digit indicates the additive volume will not be printed, a one (1) indicates the additive volume will be printed. (e.g., 1010000 indicates that Additive Volume #1 and Additive Volume #3 will be printed on the Product Receipt Ticket.) | __ __ __ __ __ __ __ | 758 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 759 | Define Delivery Report | Enter: | Eight digits in the form of three digits for the current line (000), two digits for the column number that the data will start at (00), and the item that will be printed (000) on the delivery report. (e.g., 134, 16, 135) | __ __ __, __ __, __ __ __ | 759 |

***Note:*** *To delete information from the delivery report move to the entry number field by pressing "ENTER" and enter a zero and press "ENTER" again.*

| | | | | | |
|---|---|---|---|---|---|
| 760 | Additive 1 Address | Enter: | Three digit communication address to identify this additive if a Smart Additive System is being used (e.g., 001) | __ __ __ | 760 |
| 761 | Additive 2 Address | Enter: | Three digit communication address to identify this additive if a Smart Additive System is being used (e.g., 002) | __ __ __ | 761 |
| 762 | Additive 3 Address | Enter: | Three digit communication address to identify this additive if a Smart Additive System is being used (e.g., 003) | __ __ __ | 762 |
| 763 | Additive 4 Address | Enter: | Three digit communication address to identify this additive if a Smart Additive System is being used (e.g., 004) | __ __ __ | 763 |
| 764 | Additive 5 Address | Enter: | Three digit communication address to identify this additive if a Smart Additive System is being used (e.g., 005) | __ __ __ | 764 |
| 765 | Additive 6 Address | Enter: | Three digit communication address to identify this additive if a Smart Additive System is being used (e.g., 006) | __ __ __ | 765 |
| 766 | Additive 7 Address | Enter: | Three digit communication address to identify this additive if a Smart Additive System is being used (e.g., 007) | __ __ __ | 766 |
| 767-779 | | | Unassigned at Present | | 767-779 |
| 780 | Number of Prompts | Enter: | One (1) digit between 0 and 5 representing the number of prompts used in the Standby Mode (e.g., 4) "0" Disables prompts in the Standby Mode | __ | 780 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 781 | Print Transaction | Enter: | Three (3) digit Transaction Number to print the transaction data desired. (e.g., 010 will print the tenth transaction back from the current transaction.) | __ __ __ | 781 |
| 782 | Prompts Printed | Enter: | "0" Standby Blank<br>"1" Standby Print<br>"2" Always Print | __ | 782 |
| 783-799 | | | Unassigned at Present | | 783-799 |
| 800 | | | ***System Input/Output Directory*** | | 800 |
| 801 | Additive Injector Stop | Enter: | "0" Additive stop at end of batch (Injector Option 1)<br>"1" Additive stop at First trip point with no recalculation (Injector Option 2)<br>"2" Additive stop at First trip point with recalculation (Injector Option 3)<br>"3" Additive stop at Additive Injector stop volume with no recalculation of additive (Injector Option 4)<br>"4" Additive Stop at Additive Injector stop volume with recalculation of additive (Injector Option 5) | __ | 801 |
| 802 | Additive Injector Output | Enter: | "0" for Raw Output<br>"1" for Gross Output<br>"2" for Gst Output<br>"3" for Net Output | __ | 802 |
| 803 | Manual/Auto Additive Injector Selection | Enter: | "0" for Auto Injectors<br>"1" for Manual Injectors when in the Standby Mode.<br>"2" for Manual Injectors per transaction.<br>"3" for Manual Injectors per batch. | __ | 803 |
| 804 | Restart After Valve Power Restored | Enter: | "0" Manual Valve Start<br>"1" Auto Valve Start | __ | 804 |
| 805 | Valve Power Sense Permissive Message | Enter: | Up to twenty (20) characters for prompt message (e.g., Permissive Not Met) | _____ | 805 |
| 806 | Permissive #1 | Enter: | "0" No Permissive 1<br>"1" Permissive 1 Transaction Start Only<br>"2" Permissive 1 Continuously<br>"3" Start Permissive 1<br>"4" Batch Permissive 1<br>"5" Remote Start | __ | 806 |

***Note:*** *Option 5 requires hardware jumpers (see Installation Manual MN06105).*

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 807 | Permissive #1 Message | Enter: | Up to twenty (20) characters for prompt message (e.g., Connect Ground) | _____ | 807 |
| 808 | Restart After Permissive Met | Enter: | "0" Man Perm. 1 Start<br>"1" Auto Perm. 1 Start | __ | 808 |
| 809 | Prompt Message | Enter: | Up to twenty (20) characters for prompt message if no ac power is detected on the ac input programmed for Printer Tray Switch (e.g., Please Insert Ticket) | _____ | 809 |
| 810 | Permissive #2 | Enter: | "0" No Permissive 2<br>"1" Permissive 2 Transaction Start Only<br>"2" Permissive 2 Continuously<br>"3" Start Permissive 2<br>"4" Batch Permissive 2<br>"5" Remote Stop | __ | 810 |
| ***Note:*** *Option 5 requires hardware jumpers (See Installation Manual MN06105).* | | | | | |
| 811 | Permissive #2 Message | Enter: | Up to twenty (20) characters for prompt message (e.g., Connect Vapor) | _____ | 811 |
| 812 | Restart After Permissive | Enter: | "0" Man Perm. 2 Start<br>"1" Auto Perm. 2 Start | __ | 812 |
| 813 | Additive Feedback Alarm Message | Enter: | Up to twenty characters for an additive feedback alarm message. This message will be displayed at the end of the batch if code 864 is programmed "1" (e.g., Additive Failure). | _____ | 813 |
| 814 | Additive Injector Stop Volume | Enter: | Three digits in whole units of remaining volume to be loaded when the additive injectors will be stopped (e.g., 75) | __ __ __ | 814 |
| 815-839 | | | Unassigned at Present | | 815-839 |
| 840 | Protection of Program Codes 880-889 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | 840 |
| 841 | Additive Injector #1 Feedback | Enter: | "0" No Injector 1 Feedback<br>"1" Injector 1 Feedback/Control<br>"2" INJ1 Feedback Only | __ | 841 |
| 842 | Additive Injector #2 Feedback | Enter: | "0" No Injector 2 Feedback<br>"1" Injector 2 Feedback/Control<br>"2" Injector 2 Feedback Only | __ | 842 |
| 843 | Additive Injector #3 Feedback | Enter: | "0" No Injector 3 Feedback<br>"1" Injector 3 Feedback/Control<br>"2" Injector 3 Feedback Only | __ | 843 |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 844 | Additive Injector #4 Feedback | Enter: | "0" No Injector 4 Feedback<br>"1" Injector 4 Feedback/Control<br>"2" Injector 4 Feedback Only | __ | 844 |
| 845 | Additive Injector #5 Feedback | Enter: | "0" No Injector 1 Feedback<br>"1" Injector 1 Feedback/Control<br>"2" INJ1 Feedback Only | __ | 845 |
| 846 | Additive Injector #6 Feedback | Enter: | "0" No Injector 2 Feedback<br>"1" Injector 2 Feedback/Control<br>"2" Injector 2 Feedback Only | __ | 846 |
| 847 | Additive Injector #7 Feedback | Enter: | "0" No Injector 3 Feedback<br>"1" Injector 3 Feedback/Control<br>"2" Injector 3 Feedback Only | __ | 847 |
| 848 | Injector Units | Enter: | Three (3) character message identifying the injector units (e.g., Ozs) | __ __ __ | 848 |
| ***Note:*** *This code not used with Smart Additive Subsystems.* | | | | | |
| 849 | Additive Injector Feedback Errors | Enter: | Two (2) digits defining the number of errors before alarming | __ __ | 849 |
| ***Note:*** *This code not used with Smart Additive Subsystems.* | | | | | |
| 850 | Injector #1 Feedback Delay | Enter: | Three (3) digits in seconds allowed between feedbacks before an alarm. | __ __ __ | 850 |
| ***Note:*** *This code not used with Smart Additive Subsystems.* | | | | | |
| 851 | Injector #2 Feedback Delay | Enter: | Three (3) digits in seconds allowed between feedbacks before an alarm. | __ __ __ | 851 |
| ***Note:*** *This code not used with Smart Additive Subsystems.* | | | | | |
| 852 | Injector #3 Feedback Delay | Enter: | Three (3) digits in seconds allowed between feedbacks before an alarm. | __ __ __ | 852 |
| ***Note:*** *This code not used with Smart Additive Subsystems.* | | | | | |
| 853 | Injector #4 Feedback Delay | Enter: | Three (3) digits in seconds allowed between feedbacks before an alarm. | __ __ __ | 853 |
| ***Note:*** *This code not used with Smart Additive Subsystems.* | | | | | |
| 854 | Injector #5 Feedback Delay | Enter: | Three (3) digits in seconds allowed between feedbacks before an alarm. | __ __ __ | 854 |
| ***Note:*** *This code not used with Smart Additive Subsystems.* | | | | | |
| 855 | Injector #6 Feedback Delay | Enter: | Three (3) digits in seconds allowed between feedbacks before an alarm. | __ __ __ | 855 |
| ***Note:*** *This code not used with Smart Additive Subsystems.* | | | | | |

| Program Code | Function | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| 856 | Injector #7 Feedback Delay | Enter: | Three (3) digits in seconds allowed between feedbacks before an alarm. | __ __ __ | 856 |
| ***Note:*** *This code not used with Smart Additive Subsystems.* | | | | | |
| 857 | Additive Feedback Alarm | Enter: | "0" Additive Feedback Alarm with Shut-down.<br>"1" Additive Feedback Alarm Message at the End of the Batch with No Shut-down. | __ | 857 |
| 858 | Additive Totals Units | Enter: | "0" Gallons<br>"1" Liters | __ | 858 |
| ***Note:*** *If a Smart Additive Subsystem is selected, this code will be used rather than 855.* | | | | | |
| 859-899 | | | Unassigned at Present | | 859-899 |
| 900 | | | ***System Diagnostic Directory*** | | 900 |
| 901 | Diagnostic | | Display Test | None | 901 |
| 902 | Diagnostic | | Keypad Test | None | 902 |
| 903 | Diagnostic | | RTD Test | None | 903 |
| 904 | Diagnostic | | 4 - 20 mA Channel 1 | None | 904 |
| 905 | Diagnostic | | 4 - 20 mA Channel 2 | None | 905 |
| 906 | Diagnostic | | Internal Temperature | None | 906 |
| 907 | Diagnostic | | Power Supply Test | None | 907 |
| 908 | Diagnostic | | Firmware Version | None | 908 |
| 909 | Diagnostic | | AccuLoad II Model Number | Read Only | 909 |
| 910 | Diagnostic | | ACM Model Number | Read Only | 910 |
| 911 | Diagnostic | | System Messages | | 911 |
| 912 | Diagnostic | | Calibration Event Counter | None | 912 |
| 913 | Diagnostic | | Configuration Event Counter | None | 913 |
| 914-939 | | | Unassigned at Present | | 914-939 |
| 940 | Protection of Program Codes 980-989 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | 940 |
| 941 | Diagnostic | | Communication Test - EIA-232 No Echo Back | None | 941 |
| 942 | Diagnostic | | Communication Test - EIA-232 With Echo | None | 942 |
| 943 | Diagnostic | | Communication Test - EIA-485 No Echo Back | None | 943 |
| 944 | Diagnostic | | Communication Test - EIA-485 With Echo | None | 944 |
| 945 | Diagnostic | | SINGL CH-INV-1X-ACT-U | None | 945 |
| 946 | Diagnostic | | SINGL CH-INV-2X-ACT-U | None | 946 |
| 947 | Diagnostic | | DUAL CH-INV-1X-ACT-U | None | 947 |
| 948 | Diagnostic | | DUAL CH-INV-1X-CTA-U | None | 948 |
| 949 | Diagnostic | | DUAL CH-INV-2X-ACT-U | None | 949 |
| 950 | Diagnostic | | DUAL CH-INV-1X-ACT-U | None | 950 |
| 951 | Diagnostic | | DUAL CH-INV-1X-ACT-D | None | 951 |

| Program Code | Function | Description | Entry | Program Code |
|---|---|---|---|---|
| 952 | Diagnostic | Contact Input Test | None | 952 |
| 953 | Diagnostic | High Speed Prover | None | 953 |
| 954 | Diagnostic | Ticket Print 1 Test | None | 954 |
| 955 | Diagnostic | Ticket Print 2 Test | None | 955 |
| 956 | Diagnostic | Clear Local Storage | None | 956 |
| 957 | Diagnostic | Contact Output | None | 957 |
| 958 | Diagnostic | Clear Configurable Report | None | 958 |
| 959-990 | | Unassigned at Present | None | 959-990 |
| 991 | Diagnostic | Relay Test | None | 991 |
| 992 | Diagnostic | Ram Test | None | 992 |
| 993 | Diagnostic | Power-up Diagnostics | None | 993 |
| 994 | Diagnostic | See Service Manual | None | 994 |
| 995 | Diagnostic | See Service Manual | None | 995 |
| 996 | Diagnostic | Watchdog | None | 996 |
| 997 | Diagnostic | Relay Select Test | None | 997 |
| 998 | Diagnostic | Copies Codes (Side #1 to Side #2) | None | 998 |
| 999 | Diagnostic | Programs EEPROM/Default Parameters | None | 999 |

| Program Code | Function | | Code Description | Prod 1 | Prod 2 | Prod 3 | Prod 4 |
|---|---|---|---|---|---|---|---|
| | | | ***Product Directories*** | | | | |
| 100 | | | ***Product General Purpose Directory*** | | | | |
| 101-139 | | | Unassigned at Present | | | | |
| 140 | Protection of Program Codes 180 - 189 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | __ | __ | __ |
| 141 | Product Selection | Enter: | "0" for Product in Use<br>"1" for Product Not in Use | __ | __ | __ | __ |
| 142-179 | | | Unassigned at Present | | | | |
| 180 | Product Message | Enter: | Up to nine (9) characters for meter or product identifier (e.g., Regular) Prod 1_____<br>Prod 2_____<br>Prod 3_____<br>Prod 4_____ | | | | |
| 181-199 | | | Unassigned at Present | | | | |
| 200 | | | ***Product Flow Control Directory*** | | | | |
| 201 | Excess Flow Rate | Enter: | Two (2) digits as a percentage (e.g., 10) "00" Disables the High Flow Alarm | __ __ | __ __ | __ __ | __ __ |
| 202 | Minimum Flow Rate | Enter: | Three (3) digits in whole units (e.g., 080) | __ __ __ | __ __ __ | __ __ __ | __ __ __ |
| 203 | Block Valve Type | Enter: | "0" Hydraulic Block Valve<br>"1" Electric Block Valve | __ | __ | __ | __ |
| 204 | First High Flow Rate | Enter: | Four (4) digits in whole units (e.g., 0600) "0000" Entry will not allow the valve to open | _____ | _____ | _____ | _____ |
| 205 | Flow Tolerance | Enter: | One (1) digit as a percentage of First High Flow Rate (e.g., 7) | __ | __ | __ | __ |
| 206 | Second High Flow Rate | Enter: | Four (4) digits in whole units (e.g., 0300) "0000" Entry will not allow the valve to open if configured for 1st/2nd High Flow. | _____ | _____ | _____ | _____ |
| 207 | First Trip Volume | Enter: | Four (4) digits in whole units (e.g., 0050) | _____ | _____ | _____ | _____ |
| 208 | Final (Second) Trip Volume | Enter: | Three (3) digits in tenth units (e.g., 01.0) | ___._ | ___._ | ___._ | ___._ |
| 209 | Final (Second) Trip Auto Adjust | Enter: | One (1) digit which defines the number of runs to average. (e.g., 3) | __ | __ | __ | __ |
| 210 | Low Flow Rate Alarm Limit | Enter: | Three (3) digits in whole units per minute (e.g., 050) "000" disables the alarm | ____ | ____ | ____ | ____ |
| 211 | Block Valve Delay to Close | Enter: | Two (2) digits in seconds of delay time (e.g., 05) | ___ | ___ | ___ | ___ |

| Program Code | Function | | Code Description | Prod 1 | Prod 2 | Prod 3 | Prod 4 |
|---|---|---|---|---|---|---|---|
| 212 | Block Valve Delay to Open | Enter: | Two (2) digits in seconds of delay time (e.g., 05) | ___ | ___ | ___ | ___ |
| 213-239 | | | Unassigned at Present | | | | |
| 240 | Protection of Program Codes 280-289 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | __ | __ | __ |
| 241 | Block Valve Security | Enter: | "0" for No Security<br>"1" for Security | __ | __ | __ | __ |
| 242-299 | | | Unassigned at Present | | | | |
| 300 | | | ***Volume Accuracy Directory*** | | | | |
| 301 | Minimum Batch Volume | Enter: | Five (5) digits in whole units (e.g., up to 99,999 units) | _____ | _____ | _____ | _____ |
| 302-339 | | | Unassigned at Present | | | | |
| 340 | Protection of Program Codes 380-389 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | __ | __ | __ |
| 341 | Flow Rate for Meter Factor #1 | Enter: | Four (4) digits in whole units per minute (e.g., 0600) | _____ | _____ | _____ | _____ |
| 342 | Meter Factor #1 | Enter: | Five (5) digits as one (1) whole number followed by four (4) decimals (e.g., 1.0033) | _._____ | _._____ | _._____ | _._____ |
| 343 | Flow Rate for Meter Factor #2 | Enter: | Four (4) digits in whole units per minute (e.g., 0400) | _____ | _____ | _____ | _____ |
| ***Note:*** *If the flow rate is set at zero the AccuLoad II will ignore codes 344 through 348.* | | | | | | | |
| 344 | Meter Factor #2 | Enter: | Five (5) digits as one (1) whole number followed by four (4) decimals (e.g., 1.0040) | _._____ | _._____ | _._____ | _._____ |
| 345 | Flow Rate for Meter Factor #3 | Enter: | Four (4) digits in whole units per minute (e.g., 0150) | _____ | _____ | _____ | _____ |
| ***Note:*** *If the flow rate is set at zero the AccuLoad II will ignore codes 346 through 348.* | | | | | | | |
| 346 | Meter Factor #3 | Enter: | Five (5) digits as one (1) whole number followed by four (4) decimals (e.g., 1.0048) | _._____ | _._____ | _._____ | _._____ |
| 347 | Flow Rate for Meter Factor #4 | Enter: | Four (4) digits in whole units per minute (e.g., 0080) | _____ | _____ | _____ | _____ |
| ***Note:*** *If the flow rate is set at zero the AccuLoad II will ignore code 348.* | | | | | | | |
| 348 | Meter Factor #4 | Enter: | Five (5) digits as one (1) whole number followed by four (4) decimals (e.g., 1.0058) | _._____ | _._____ | _._____ | _._____ |
| 349 | Meter Factor % Change/Deg. | Enter: | Five (5) digits representing the meter factor percent change per degree of unit temperature in percentage, (e.g., 0.0012) | _._____ | _._____ | _._____ | _._____ |

| Program Code | Function | | Code Description | Prod 1 | Prod 2 | Prod 3 | Prod 4 |
|---|---|---|---|---|---|---|---|
| 350 | Meter Factor Reference Temperature | Enter: | Four (4) digits representing the temperature that the percent meter factor variation was determined, Three (3) whole units and one (1) decimal in degrees (i.e., 120.1) | _____._ | _____._ | _____._ | _____._ |
| 351-389 | | | Unassigned at Present | | | | |
| 390 | Master Meter Factor | Enter: | Five (5) digits as one (1) whole number followed by four (4) decimals (e.g., 1.0040) Restricts meter factors 1 through 4, Program codes 353, 355 357, and 359 to +/- 2% of this entry. Enter 0.0000 to disable this feature. | _._____ | _._____ | _._____ | _._____ |
| 391 | Linearized Factor Deviation | Enter: | Three (3) digits in a percentage, one (1) whole number followed by two (2) decimals (e.g., 3.40). Restricts deviation between adjacent meter factors. Enter 0.00 to disable this feature. | _.___ | _.___ | _.___ | _.___ |
| 392 | Meter Factor Variation | Enter: | "0" No Meter Factor Variation<br>"1" Yes Meter Factor Variation | __ | __ | __ | __ |
| 393-399 | | | Unassigned at Present | | | | |
| 400 | | | ***Temperature & Density Directory*** | | | | |
| 401-439 | | | Unassigned at Present | | | | |
| 440 | Protection of Program Codes 480-489 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | __ | __ | __ |
| 441 | API Table & Product | Enter: | "00" No API Table "12" API Table 24A<br>"01" API Table 5A "13" API Table 24B<br>"02" API Table 5B "14" API Table 24D<br>"03" API Table 5D "15" API Table 53A<br>"04" API Table 6A "16" API Table 53B<br>"05" API Table 6B "17" API Table 53D<br>"06" API Table 6C "18" API Table 54<br>"07" API Table 6D "19" API Table 54A<br>"08" API Table 23A "20" API Table 54B<br>"09" API Table 23B "21" API Table 54C<br>"10" API Table 23D "22" API Table 54D<br>"11" API Table 24 | ___ | ___ | ___ | ___ |
| 442 | Reference Density | Enter: | Five (5) digit density with floating decimal. (e.g., 0999.9 to 0.9999 depending on selection in code 441). | _____ | _____ | _____ | _____ |

| Program Code | Function | | Code Description | Prod 1 | Prod 2 | Prod 3 | Prod 4 |
|---|---|---|---|---|---|---|---|
| 443 | Low Temperature Alarm | Enter: | Four (4) digits. The first digit indicates polarity. First digit "0" = Positive First digit "1" = Negative The last three (3) digits indicate temperature in whole degrees. (e.g., 0020 = + 020) Temperature units are dependent on entry made in code 441. An entry of -999 will disable this feature. | _____ | _____ | _____ | _____ |
| 444 | High Temperature Alarm | Enter: | Four (4) digits. The first digit indicates polarity. First digit "0" = Positive First digit "1" = Negative The last three (3) digits indicate temperature in whole degrees. (e.g., 0250 = + 250) Temperature units are dependent on entry made in code 441. An entry of 0999 (+999) will disable this feature. | _____ | _____ | _____ | _____ |
| 445 | Maintenance Temperature | | Enter: Five (5) digits. The first digit indicates polarity. First digit "0" = Positive First digit "1" = Negative The last four (4) digits indicate temperature in tenths of degrees. An entry of -999.9 will disable this feature. (e.g., 0085.0 = + 85.0) | _____._____._____._____._ | | | |
| ***Note:*** *Any entry other than -999.9 will override the RTD or 4-20 mA Temperature Input and will be used in all calculations using the temperature factor.* | | | | | | | |
| 446 | Low Density Alarm | Enter: | Four (4) digits. The range is from 0000 to 9999. Density units are dependent on entry made in code 445 of the Systems Directory. An entry of 0000 will disable this feature. | _____ | _____ | _____ | _____ |
| 447 | High Density Alarm | Enter: | Four (4) digits. The range is from 0000 to 9999. Density units are dependent on entry made in code 445 of the Systems Directory. An entry of 0000 will disable this feature. | _____ | _____ | _____ | _____ |
| 448-499 | | | Unassigned at Present | | | | |

| Program Code | Function | | Code Description | Prod 1 | Prod 2 | Prod 3 | Prod 4 |
|---|---|---|---|---|---|---|---|
| 500 | | | ***Pressure Directory*** | | | | |
| 501 | Minimum Back Pressure Flow Rate Setting | Enter: | Four (4) digits to select the minimum flow rate allowed during back pressure operation in whole units per minute. (e.g., 0100) "0000" disables the alarm | ____ | ____ | ____ | ____ |
| 502 | Differential Pressure | Enter: | Three (3) digits of differential pressure in units of psia, bars, or $kg/cm^2$ that is to be maintained above the vapor pressure or back pressure (e.g., 060). Unit selection is made in code 541 of the Systems Directory. | ___ | ___ | ___ | ___ |
| 503 | Minimum Back Pressure Flow Rate Timer Setting | Enter: | Two (2) digits in seconds to achieve a desired flow rate (e.g., 20). "00" disables this minimum flow rate timer and the back pressure reduction in code 504. | __ | __ | __ | __ |
| 504 | BP Reduction | Enter: | Two (2) digits in % reduction of flow rate for back pressure flow control and AFO (e.g., 80, Range 50% - 90%) | __ | __ | __ | __ |
| 505 | Low Pressure Alarm | Enter: | Four (4) digits indicating the pressure reading that will generate a low pressure alarm. The range is from 0000 to 9999. Pressure units are dependent on entry made in code 541 of the Systems Directory. An entry of 0000 will disable this feature. | ____ | ____ | ____ | ____ |
| 506 | High Pressure Alarm | Enter: | Four (4) digits indicating the pressure reading that will generate a high pressure alarm. The range is from 0000 to 9999. Pressure units are dependent on entry made in code 541 of the Systems Directory. An entry of 0000 will disable this feature. | ____ | ____ | ____ | ____ |
| 507-539 | | | Unassigned at Present | | | | |
| 540 | Protection of Program Codes 580-589 | Enter: | "0" for Weights and Measures Mode "1" for Program Mode | _ | _ | _ | _ |
| 541 | Compressibility Factor | Enter: | Five (5) digit compressibility factor used in calculating the CPL (e.g., 39600 entered represents 0.000039600) | _____ | _____ | _____ | _____ |
| 542 | Vapor Pressure Calculation | Enter: | "0" Straight Line Approximation "1" GPA Table TP-15 | _ | _ | _ | _ |

| Program Code | Function | | Code Description | Prod 1 | Prod 2 | Prod 3 | Prod 4 |
|---|---|---|---|---|---|---|---|
| 543 | Low Vapor (P1) Pressure | Enter: | Four (4) digits indicating the low vapor pressure in PSIA, Bars or kg/cm$^2$ in tenths of pressure units, (e.g., 006.0). Pressure units are dependent on entry made in code 541 of Systems Directory. | ____._ | ____._ | ____._ | ____._ |
| 544 | Low Product Vapor Pressure (P1) Temperature | Enter: | Four (4) digits in Degrees C or Degrees F that corresponds to the low vapor pressure in code 543. First digit "0" = Plus Degrees First digit "1" = Minus Degrees (e.g., 1150=-150). Temperature units are dependent on entry made in code 441 of the Systems Directory. | _____ | _____ | _____ | _____ |
| 545 | Middle Vapor Pressure (P2) | Enter: | Four (4) digits indicating the middle vapor pressure in PSIA, Bars or kg/cm$^2$ in tenths of pressure units, (e.g., 020.0). Pressure units are dependent on entry made in code 541 of the Systems Directory. | ____._ | ____._ | ____._ | ____._ |
| ***Note:*** *This entry must exceed the entry made is 543 or it will be ignored.* | | | | | | | |
| 546 | Middle Product Vapor Pressure (P2) Temperature | Enter: | Four (4) digits in Degrees C or Degrees F that corresponds to the middle vapor pressure in code 545. First digit "0" = Plus Degrees First digit "1" = Minus Degrees (e.g., 0030 = +030). Temperature units are dependent on entry made in code 441 of the Systems Directory. | _____ | _____ | _____ | _____ |
| 547 | High Vapor Pressure (P3) | Enter: | Four (4) digits indicating the high vapor pressure in PSIA, Bars or kg/cm$^2$ in tenths of pressure units, (e.g., 100.0). Pressure units are dependent on entry made in code 541 of the Systems Directory. | ____._ | ____._ | ____._ | ____._ |
| ***Note:*** *This entry must not exceed the entry made in 545 or it will be ignored.* | | | | | | | |
| 548 | High Product Vapor Pressure (P3) Temperature | Enter: | Four (4) digits in Degrees C or Degrees F that corresponds to the high vapor pressure in code 546. First digit "0" = Plus Degrees First digit "1" = Minus Degrees (e.g., 0600 = +060). Temperature units are dependent on entry made in code 441 of the Systems Directory. | _____ | _____ | _____ | _____ |

| Program Code | Function | | Code Description | Prod 1 | Prod 2 | Prod 3 | Prod 4 |
|---|---|---|---|---|---|---|---|
| 549 | Maintenance Pressure | Enter: | Four (4) digit maintenance pressure to be used when a pressure transducer is not installed, in tenths of units (e.g., 150.0) Pressure units dependent on selection made in code 541 of the Systems Directory. "0000" disables this feature. | _____._____._____._____._____._____._____._____ | | | |
| 550-599 | | | Unassigned at Present | | | | |
| 600 | | | ***Read Only Directory*** | | | | |
| 601 | Raw Non-resettable Totals | | To be read only | None | | | |
| 602 | Gross Non-resettable Totals | | To be read only | None | | | |
| 603 | Gross at Standard Temp. Non-resettable Totals | | To be read only | None | | | |
| 604 | Net Non-resettable Totals | | To be read only | None | | | |
| 605 | Mass Non-resettable Totals | | To be read only | None | | | |
| 606 | Load Average Temperature | | To be read only | None | | | |
| 607 | Load Average Pressure | | To be read only | None | | | |
| 608 | Load Average Density | | To be read only | None | | | |
| 609-639 | | | Unassigned at Present | | | | |
| 640 | Protection of Program Codes 680-689 | Enter: | "0" for Weights and Measures Mode "1" for Program Mode | __ | __ | __ | __ |
| 641-699 | | | Unassigned at Present | | | | |
| 700 | | | ***Communications Directory*** | | | | |
| 701 | HM Classification | Enter: | First 20 characters of the classification. Prod1_____ Prod2_____ Prod3_____ Prod4_____ | | | | |
| 702 | HM Classification | Enter: | Second 20 characters of the classification. Prod1_____ Prod2_____ Prod3_____ Prod4_____ | | | | |
| 703 | HM Classification | Enter: | Last 20 characters of the classification. Prod1_____ Prod2_____ Prod3_____ Prod4_____ | | | | |

| Program Code | Function | | Code Description | Prod 1 | Prod 2 | Prod 3 | Prod 4 |
|---|---|---|---|---|---|---|---|
| 704-739 | | | Unassigned at Present | | | | |
| 740 | Protection of Program Codes 780-789 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | __ | __ | __ |
| 741-799 | | | Unassigned at Present | | | | |
| 800 | | | ***Inputs & Outputs Directory*** | | | | |
| 801-839 | | | Unassigned at Present | | | | |
| 840 | Protection of Program Codes 880-889 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | __ | __ | __ |
| 841-899 | | | Unassigned at Present | | | | |
| 900 | | | ***Diagnostics Directory*** | | | | |
| 901-939 | | | Unassigned at Present | | | | |
| 940 | Protection of Program Codes 980-989 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | None<br>__ | __ | __ | __ |
| 941-999 | | | Unassigned at Present | | | | |

| Program Code | Function Code | | Description | Entry | Program Code |
|---|---|---|---|---|---|
| | | | ***Blend Recipe Directories*** | | |
| __00 | | | ***Blend Recipe # __ Directory*** | | __00 |
| __01 | Blend Recipe | Enter: | "0" Recipe Not Used<br>"1" Manual Recipe<br>"2" Auto Recipe | __ | __01 |
| __02 | Blend Recipe Name | Enter: | Up to nine (9) characters for meter or product identifier. | _____ | __02 |
| __03 | Product using Injector #1 | Enter: | Four (4) digit number indicating the products this injector is used with.<br><br>1st digit - Product 1<br>2nd digit - Product 2<br>3rd digit - Product 3<br>4th digit - Product 4<br><br>A zero (0) in the digit indicates the injector will not be used with that product, a one (1) indicates the injector will be used with that product. (e.g., 0100 indicates that this injector is used with product 2 only). | __ __ __ __ | __03 |
| __04 | Product using Injector #2 | Enter: | Four (4) digit number indicating the products this injector is used with.<br><br>1st digit - Product 1<br>2nd digit - Product 2<br>3rd digit - Product 3<br>4th digit - Product 4<br><br>A zero (0) in the digit indicates the injector will not be used with that product, a one (1) indicates the injector will be used with that product. (e.g., 0100 indicates that this injector is used with product 2 only). | __ __ __ __ | __04 |

| Program Code | Function Code | Description | | Entry | Program Code |
|---|---|---|---|---|---|
| __05 | Product using Injector #3 | Enter: | Four (4) digit number indicating the products this injector is used with.<br><br>1st digit - Product 1<br>2nd digit - Product 2<br>3rd digit - Product 3<br>4th digit - Product 4<br><br>A zero (0) in the digit indicates the injector will not be used with that product, a one (1) indicates the injector will be used with that product. (e.g., 0100 indicates that this injector is used with product 2 only). | __ __ __ __ | __05 |
| __06 | Product using Injector #4 | Enter: | Four (4) digit number indicating the products this injector is used with.<br><br>1st digit - Product 1<br>2nd digit - Product 2<br>3rd digit - Product 3<br>4th digit - Product 4<br><br>A zero (0) in the digit indicates the injector will not be used with that product, a one (1) indicates the injector will be used with that product. (e.g., 0100 indicates that this injector is used with product 2 only). | __ __ __ __ | __06 |
| __07 | Product using Injector #5 | Enter: | Four (4) digit number indicating the products this injector is used with.<br><br>1st digit - Product 1<br>2nd digit - Product 2<br>3rd digit - Product 3<br>4th digit - Product 4<br><br>A zero (0) in the digit indicates the injector will not be used with that product, a one (1) indicates the injector will be used with that product. (e.g., 0100 indicates that this injector is used with product 2 only). | __ __ __ __ | __07 |

| Program Code | Function Code | Description | | Entry | Program Code |
|---|---|---|---|---|---|
| __08 | Product using Injector #6 | Enter: | Four (4) digit number indicating the products this injector is used with.<br><br>1st digit - Product 1<br>2nd digit - Product 2<br>3rd digit - Product 3<br>4th digit - Product 4<br><br>A zero (0) in the digit indicates the injector will not be used with that product, a one (1) indicates the injector will be used with that product. (e.g., 0100 indicates that this injector is used with product 2 only). | __ __ __ __ | __08 |
| __09 | Product using Injector #7 | Enter: | Four (4) digit number indicating the products this injector is used with.<br><br>1st digit - Product 1<br>2nd digit - Product 2<br>3rd digit - Product 3<br>4th digit - Product 4<br><br>A zero (0) in the digit indicates the injector will not be used with that product, a one (1) indicates the injector will be used with that product. (e.g., 0100 indicates that this injector is used with product 2 only). | __ __ __ __ | __09 |
| __10 | Recipe Raw Non-resettable Totals | To be read only | | | __10 |
| __11 | Recipe Gross Non-resettable Totals | To be read only | | None | __11 |
| __12 | Recipe Gross at Standard Temp. Non-resettable Totals | To be read only | | None | __12 |
| __13 | Recipe Net Non-resettable Totals | To be read only | | None | __13 |
| __14 | Recipe Mass Non-resettable Total | To be read only | | None | __14 |

| Program Code | Function Code | Description | | Entry | Program Code |
|---|---|---|---|---|---|
| __15 | HM Classification | Enter: | "1" Product 1<br>"2" Product 2<br>"3" Product 3<br>"4" Product 4 | __ | __15 |
| __16 | Minimum Preset | | To be read only | | __16 |
| __17-__39 | | | Unassigned at Present | | __17-__39 |
| __40 | Protection of Program Codes __80-__89 | Enter: | "0" for Weights and Measures Mode<br>"1" for Program Mode | __ | __40 |
| __41 | Blend Preset Display | Enter: | "0" Raw Preset (Raw)<br>"1" Gross Preset (Grs)<br>"2" Gross Preset at Standard Temperature (Gst)<br>"3" Gross Preset at Standard Temperature and Pressure (Net)<br>"4" Mass Preset | __ | __41 |
| __42 | Blend Deliver Display | Enter: | "0" Raw Delivery (Raw)<br>"1" Gross Delivery (Grs)<br>"2" Gross Delivery at Standard Temperature (Gst)<br>"3" Gross Delivery at Standard Temperature and Pressure (Net)<br>"4" Mass Delivery | __ | __42 |
| __43 | First Component Number to Deliver | Enter: | "0" Not Used<br>"1" Product 1<br>"2" Product 2<br>"3" Product 3<br>"4" Product 4 | __ | __43 |
| __44 | First Component Percentage | Enter: | Four (4) digits in tenth of a percent (e.g., 050.0). | __ __ __ __ | __44 |
| ***Note:*** *Codes _42, _44, _46, _48 and _50 must add up to 100%.* | | | | | |
| __45 | Second Component Number to Deliver | Enter: | "0" Not Used<br>"1" Product 1<br>"2" Product 2<br>"3" Product 3<br>"4" Product 4 | __ | __45 |
| __46 | Second Component Percentage | Enter: | Four (4) digits in tenth of a percent (e.g., 050.0). | __ __ __ __ | __46 |
| ***Note:*** *Codes _42, _44, _46, _48 and _50 must add up to 100%.* | | | | | |
| __47 | Third Component Number to Deliver | Enter: | "0" Not Used<br>"1" Product 1<br>"2" Product 2<br>"3" Product 3<br>"4" Product 4 | __ | __47 |
| __48 | Third Component Percentage | Enter: | Four (4) digits in tenth of a percent (e.g., 050.0). | __ __ __ __ | __48 |
| ***Note:*** *Codes _42, _44, _46, _48 and _50 must add up to 100%.* | | | | | |

| Program Code | Function Code | Description | | Entry | Program Code |
|---|---|---|---|---|---|
| __49 | Fourth Component Number to Deliver | Enter: | "0" Not Used<br>"1" Product 1<br>"2" Product 2<br>"3" Product 3<br>"4" Product 4 | __ | __49 |
| __50 | Fourth Component Percentage | Enter: | Four (4) digits in tenth of a percent (e.g., 050.0). | __ __ __ __ | __50 |
| ***Note:*** *Codes _42, _44, _46, _48 and _50 must add up to 100%.* | | | | | |
| __51 | Fifth Component Number to Deliver | Enter: | "0" Not Used<br>"1" Product 1<br>"2" Product 2<br>"3" Product 3<br>"4" Product 4 | __ | __51 |
| __52 | Fifth Component Percentage | Enter: | Four (4) digits in tenth of a percent (e.g., 050.0). | __ __ __ __ | __52 |
| ***Note:*** *Codes _42, _44, _46, _48 and _50 must add up to 100%.* | | | | | |
| __53 | Additive Injector #1 Volume | Enter: | Six (6) digits defining the volume of additive to be injected for each Additive Injector cycle (e.g., 001.000) | __ __ __ . __ __ __ | __53 |
| ***Note:*** *Only one decimal place for Smart Additive Injectors.* | | | | | |
| __54 | Additive Injector #2 Volume | Enter: | Six (6) digits defining the volume of additive to be injected for each Additive Injector cycle (e.g., 001.000) | __ __ __ . __ __ __ | __54 |
| ***Note:*** *Only one decimal place for Smart Additive Injectors.* | | | | | |
| __55 | Additive Injector #3 Volume | Enter: | Six (6) digits defining the volume of additive to be injected for each Additive Injector cycle (e.g., 001.000) | __ __ __ . __ __ __ | __55 |
| ***Note:*** *Only one decimal place for Smart Additive Injectors.* | | | | | |
| __56 | Additive Injector #4 Volume | Enter: | Six (6) digits defining the volume of additive to be injected for each Additive Injector cycle (e.g., 010.000) | __ __ __ . __ __ __ | __56 |
| ***Note:*** *Only one decimal place for Smart Additive Injectors.* | | | | | |
| __57 | Additive Injector #5 Volume | Enter: | Six (6) digits defining the volume of additive to be injected for each Additive Injector cycle (e.g., 001.000) | __ __ __ . __ __ __ | __57 |
| ***Note:*** *Only one decimal place for Smart Additive Injectors.* | | | | | |
| __58 | Additive Injector #6 Volume | Enter: | Six (6) digits defining the volume of additive to be injected for each Additive Injector cycle (e.g., 001.000) | __ __ __ . __ __ __ | __58 |
| ***Note:*** *Only one decimal place for Smart Additive Injectors.* | | | | | |

| Program Code | Function Code | Description | | Entry | Program Code |
|---|---|---|---|---|---|
| __59 | Additive Injector #7 Volume | Enter: | Six (6) digits defining the volume of additive to be injected for each Additive Injector cycle (e.g., 001.000) | __ __ __ . __ __ __ | __59 |
| ***Note:*** *Only one decimal place for Smart Additive Injectors.* | | | | | |
| __80 | Additive Injector Pulser No. 1 | Enter: | Three (3) digits in whole units defining the amount of mainstream product for each injection cycle. (e.g., 040) | __ __ __ | __80 |
| __81 | Additive Injector Pulser No. 2 | Enter: | Three (3) digits in whole units defining the amount of mainstream product for each injection cycle. (e.g., 040) | __ __ __ | __81 |
| __82 | Additive Injector Pulser No. 3 | Enter: | Three (3) digits in whole units defining the amount of mainstream product for each injection cycle. (e.g., 040) | __ __ __ | __82 |
| __83 | Additive Injector Pulser No. 4 | Enter: | Three (3) digits in whole units defining the amount of mainstream product for each injection cycle. (e.g., 040) | __ __ __ | __83 |
| __84 | Additive Injector Pulser No. 5 | Enter: | Three (3) digits in whole units defining the amount of mainstream product for each injection cycle. (e.g., 040) | __ __ __ | __84 |
| __85 | Additive Injector Pulser No. 6 | Enter: | Three (3) digits in whole units defining the amount of mainstream product for each injection cycle. (e.g., 040) | __ __ __ | __85 |
| __86 | Additive Injector Pulser No. 7 | Enter: | Three (3) digits in whole units defining the amount of mainstream product for each injection cycle. (e.g., 040) | __ __ __ | __86 |

| Code | Recipe 1 | Recipe 2 | Recipe 3 | Recipe 4 |
|---|---|---|---|---|
| __01 | __ | __ | __ | __ |
| __02 | _____ | _____ | _____ | _____ |
| __03 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __04 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __05 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __06 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __07 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __08 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __09 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __10 | Read Only | Read Only | Read Only | Read Only |
| __11 | Read Only | Read Only | Read Only | Read Only |
| __12 | Read Only | Read Only | Read Only | Read Only |
| __13 | Read Only | Read Only | Read Only | Read Only |
| __14 | Read Only | Read Only | Read Only | Read Only |
| __15 | __ | __ | __ | __ |
| __16 | Read Only | Read Only | Read Only | Read Only |
| __40 | __ | __ | __ | __ |
| __41 | __ | __ | __ | __ |
| __42 | __ | __ | __ | __ |
| __43 | __ | __ | __ | __ |
| __44 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __45 | __ | __ | __ | __ |
| __46 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __47 | __ | __ | __ | __ |
| __48 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __49 | __ | __ | __ | __ |
| __50 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __51 | __ | __ | __ | __ |
| __52 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 1 | Recipe 2 | Recipe 3 | Recipe 4 |
|---|---|---|---|---|
| __53 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __54 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __55 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __56 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __57 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __58 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __59 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __80 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __81 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __82 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __83 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __84 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __85 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __86 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 5 | Recipe 6 | Recipe 7 | Recipe 8 |
|---|---|---|---|---|
| __01 | __ | __ | __ | __ |
| __02 | _____ | _____ | _____ | _____ |
| __03 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __04 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __05 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __06 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __07 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __08 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __09 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __10 | Read Only | Read Only | Read Only | Read Only |
| __11 | Read Only | Read Only | Read Only | Read Only |
| __12 | Read Only | Read Only | Read Only | Read Only |
| __13 | Read Only | Read Only | Read Only | Read Only |
| __14 | Read Only | Read Only | Read Only | Read Only |
| __15 | __ | __ | __ | __ |
| __16 | Read Only | Read Only | Read Only | Read Only |
| __40 | __ | __ | __ | __ |
| __41 | __ | __ | __ | __ |
| __42 | __ | __ | __ | __ |
| __43 | __ | __ | __ | __ |
| __44 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __45 | __ | __ | __ | __ |
| __46 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __47 | __ | __ | __ | __ |
| __48 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __49 | __ | __ | __ | __ |
| __50 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __51 | __ | __ | __ | __ |
| __52 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 5 | Recipe 6 | Recipe 7 | Recipe 8 |
|---|---|---|---|---|
| __53 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __54 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __55 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __56 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __57 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __58 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __59 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __80 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __81 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __82 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __83 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __84 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __85 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __86 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 9 | Recipe 10 | Recipe 11 | Recipe 12 |
|---|---|---|---|---|
| __01 | __ | __ | __ | __ |
| __02 | _____ | _____ | _____ | _____ |
| __03 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __04 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __05 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __06 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __07 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __08 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __09 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __10 | Read Only | Read Only | Read Only | Read Only |
| __11 | Read Only | Read Only | Read Only | Read Only |
| __12 | Read Only | Read Only | Read Only | Read Only |
| __13 | Read Only | Read Only | Read Only | Read Only |
| __14 | Read Only | Read Only | Read Only | Read Only |
| __15 | __ | __ | __ | __ |
| __16 | Read Only | Read Only | Read Only | Read Only |
| __40 | __ | __ | __ | __ |
| __41 | __ | __ | __ | __ |
| __42 | __ | __ | __ | __ |
| __43 | __ | __ | __ | __ |
| __44 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __45 | __ | __ | __ | __ |
| __46 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __47 | __ | __ | __ | __ |
| __48 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __49 | __ | __ | __ | __ |
| __50 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __51 | __ | __ | __ | __ |
| __52 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 9 | Recipe 10 | Recipe 11 | Recipe 12 |
|---|---|---|---|---|
| __53 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __54 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __55 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __56 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __57 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __58 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __59 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __80 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __81 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __82 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __83 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __84 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __85 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __86 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 13 | Recipe 14 | Recipe 15 | Recipe 16 |
|---|---|---|---|---|
| __01 | __ | __ | __ | __ |
| __02 | _____ | _____ | _____ | _____ |
| __03 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __04 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __05 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __06 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __07 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __08 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __09 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __10 | Read Only | Read Only | Read Only | Read Only |
| __11 | Read Only | Read Only | Read Only | Read Only |
| __12 | Read Only | Read Only | Read Only | Read Only |
| __13 | Read Only | Read Only | Read Only | Read Only |
| __14 | Read Only | Read Only | Read Only | Read Only |
| __15 | __ | __ | __ | __ |
| __16 | Read Only | Read Only | Read Only | Read Only |
| __40 | __ | __ | __ | __ |
| __41 | __ | __ | __ | __ |
| __42 | __ | __ | __ | __ |
| __43 | __ | __ | __ | __ |
| __44 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __45 | __ | __ | __ | __ |
| __46 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __47 | __ | __ | __ | __ |
| __48 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __49 | __ | __ | __ | __ |
| __50 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __51 | __ | __ | __ | __ |
| __52 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 13 | Recipe 14 | Recipe 15 | Recipe 16 |
|---|---|---|---|---|
| __53 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __54 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __55 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __56 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __57 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __58 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __59 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __80 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __81 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __82 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __83 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __84 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __85 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __86 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 17 | Recipe 18 | Recipe 19 | Recipe 20 |
|---|---|---|---|---|
| __01 | __ | __ | __ | __ |
| __02 | _____ | _____ | _____ | _____ |
| __03 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __04 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __05 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __06 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __07 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __08 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __09 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __10 | Read Only | Read Only | Read Only | Read Only |
| __11 | Read Only | Read Only | Read Only | Read Only |
| __12 | Read Only | Read Only | Read Only | Read Only |
| __13 | Read Only | Read Only | Read Only | Read Only |
| __14 | Read Only | Read Only | Read Only | Read Only |
| __15 | __ | __ | __ | __ |
| __16 | Read Only | Read Only | Read Only | Read Only |
| __40 | __ | __ | __ | __ |
| __41 | __ | __ | __ | __ |
| __42 | __ | __ | __ | __ |
| __43 | __ | __ | __ | __ |
| __44 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __45 | __ | __ | __ | __ |
| __46 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __47 | __ | __ | __ | __ |
| __48 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __49 | __ | __ | __ | __ |
| __50 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __51 | __ | __ | __ | __ |
| __52 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 17 | Recipe 18 | Recipe 19 | Recipe 20 |
|---|---|---|---|---|
| __53 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __54 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __55 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __56 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __57 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __58 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __59 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __80 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __81 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __82 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __83 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __84 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __85 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __86 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 21 | Recipe 22 | Recipe 23 | Recipe 24 |
|---|---|---|---|---|
| __01 | __ | __ | __ | __ |
| __02 | _____ | _____ | _____ | _____ |
| __03 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __04 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __05 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __06 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __07 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __08 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __09 | __ __ __ __ | __ __ __ __ | __ __ __ __ | __ __ __ __ |
| __10 | Read Only | Read Only | Read Only | Read Only |
| __11 | Read Only | Read Only | Read Only | Read Only |
| __12 | Read Only | Read Only | Read Only | Read Only |
| __13 | Read Only | Read Only | Read Only | Read Only |
| __14 | Read Only | Read Only | Read Only | Read Only |
| __15 | __ | __ | __ | __ |
| __16 | Read Only | Read Only | Read Only | Read Only |
| __40 | __ | __ | __ | __ |
| __41 | __ | __ | __ | __ |
| __42 | __ | __ | __ | __ |
| __43 | __ | __ | __ | __ |
| __44 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __45 | __ | __ | __ | __ |
| __46 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __47 | __ | __ | __ | __ |
| __48 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __49 | __ | __ | __ | __ |
| __50 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __51 | __ | __ | __ | __ |
| __52 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

| Code | Recipe 21 | Recipe 22 | Recipe 23 | Recipe 24 |
|---|---|---|---|---|
| __53 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __54 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __55 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __56 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __57 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __58 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __59 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __80 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __81 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __82 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __83 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __84 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __85 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |
| __86 | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ | __ __ __ . __ |

## SQR Display Customization Entry Table

| *Entry Number* | *Entry Description* | *Translation* | *Output Length* |
|---|---|---|---|
| *001 | Alarm - See Manager | | 22 |
| *002 | Alarm Press "CLEAR" | | 22 |
| *003 | Alarm Press "PRINT" | | 22 |
| *004 | Alarm - Remove Ticket | | 22 |
| 005 | ** Remove Ticket ** | | 24 |
| 006 | Please Wait | | 24 |
| 007 | Report Pending to Print | | 24 |
| 008 | No Local Start Allowed | | 24 |
| 009 | Meter Position Not Used | | 24 |
| 010 | Press Clear to Continue. | | 24 |
| 011 | Press Start to Continue | | 24 |
| 012 | ** Error Press CLEAR ** | | 24 |
| 013 | Preset Completed | | 24 |
| **014 | Restart In | | 11 |
| **015 | Valve Delay = | | 14 |
| 016 | ** Not Authorized ** | | 24 |
| 017 | Flow = | | 7 |
| 018 | Flow*= | | 7 |
| 019 | /Min | | 4 |
| 020 | /Hr | | 3 |
| **021 | Temperature= | | 15 |
| **022 | Ref Density | | 12 |
| **023 | Rel Density = | | 18 |
| **024 | Meter Factor = | | 18 |
| 025 | Raw Transaction | | 15 |
| 026 | Grs Transaction | | 15 |
| 027 | Gst Transaction | | 15 |
| 028 | Net Transaction | | 15 |
| 029 | Mas Transaction | | 15 |
| **030 | Inj1 Trans | | 14 |

| ***Entry Number*** | ***Entry Description*** | ***Translation*** | ***Output Length*** |
|---|---|---|---|
| **031 | Inj2 Trans | | 14 |
| **032 | Inj3 Trans | | 14 |
| **033 | Inj4 Trans | | 14 |
| **034 | Inj5 Trans | | 14 |
| **035 | Inj6 Trans | | 14 |
| **036 | Inj7 Trans | | 14 |
| 037 | Inj1 Total | | 10 |
| 038 | Inj2 Total | | 10 |
| 039 | Inj3 Total | | 10 |
| 040 | Inj4 Total | | 10 |
| 041 | Inj5 Total | | 10 |
| 042 | Inj6 Total | | 10 |
| 043 | Inj7 Total | | 10 |
| 044 | Density | | 7 |
| 045 | Total | | 5 |
| **046 | Valve Requested | | 16 |
| 047 | Open | | 4 |
| 048 | Closed | | 6 |
| 049 | Lock | | 4 |
| **050 | Load Avg Tmp | | 15 |
| 051 | No Alarms Present | | 17 |
| **052 | Avg Pres | | 8 |
| **053 | Avg Den | | 7 |
| 054 | Off | | 3 |
| 055 | On | | 3 |
| 056 | Secs. | | 5 |
| 057 | Select Injector# | | 16 |
| 058 | Injs. On=# | | 10 |
| 059 | No Injectors Selected | | 24 |
| 060 | Inj | | 3 |
| 061 | Prog | | 4 |
| 062 | Cal | | 3 |
| 063 | Raw | | 3 |

| ***Entry Number*** | ***Entry Description*** | ***Translation*** | ***Output Length*** |
|---|---|---|---|
| 064 | Grs | | 3 |
| 065 | Gst | | 3 |
| 066 | Net | | 3 |
| 067 | Mas | | 3 |
| 068 | Temp | | 7 |
| 069 | Gross | | 5 |
| 070, 071, 072 | Preset batch volume exceeds the maximum permitted. | | 3 * 24 |
| 073, 074, 075 | Preset batch volume is below the minimum required. | | 3 * 24 |
| 076, 077, 078 | The preset volume will cause the max transaction volume to be exceeded. | | 3 * 24 |
| 079, 080 | Invalid I.D. number. Press CLEAR to enter. | | 2 * 24 |
| 081 | No Recipes Available | | 24 |
| 082 | Select Recipe | | 21 |
| **083 | Recipe No | | 10 |
| 084, 085 | The minimum preset for this recipe is | | 2 * 24 |
| 086 | Mass | | 4 |
| 087 | Prv Err | | 7 |
| 088, 089, 090, 091 | * Attention: An out of blend condition has developed. Press ENTER to continue. | | 4 * 24 |
| *092, 093 | * Select one of the following options: | | 2 * 24 |
| 094 | 1 = Terminate Delivery | | 24 |
| 095 | 2 = Complete to Preset | | 24 |
| 096, 097 | 3 = Blend Correct by Adjusting Preset | | 2 * 24 |
| ***098 | To | | 4 |
| * 099, 100 | *Blend Action Selection is | | 2 * 24 |
| 101, 102 | Press SET to confirm, CLEAR to re-select | | 2 * 24 |
| 103 | Opened | | 6 |

| ***Entry Number*** | ***Entry Description*** | ***Translation*** | ***Output Length*** |
|---|---|---|---|
| 104 | Close | | 5 |
| 105 | * Batch Limit Reached * | | 24 |
| 106 | * Delivery Terminated * | | 24 |
| **107 | Flow | | 5 |
| 108 | Flow* | | 5 |
| 109 | Dynamic Batch No = | | 18 |
| 110 | Tmp Lav | | 7 |
| 111 | Additive 1 = | | 12 |
| 112 | Additive 2 = | | 12 |
| 113 | Additive 3 = | | 12 |
| 114 | Additive 4 = | | 12 |
| 115 | Additive 5 = | | 12 |
| 116 | Additive 6 = | | 12 |
| 117 | Additive 7 = | | 12 |
| 118 | Trans | | 5 |
| **119 | Ld | | 3 |
| 120 | Av Dn | | 5 |
| 121, 122 | Fatal: Entry is out of specified range. | | 2 * 24 |
| 123, 124, 125 | Recipe selected is not available. Press CLEAR to continue. | | 3 * 24 |
| 126 | Program Error | | 13 |
| 127, 128, 129, 130, 131, 132, 133 | Warning: Premature batch termination may result in out of blend delivery. If you desire to terminate anyway, press ENTER. Otherwise, press CLEAR to continue. | | 7 * 24 |
| **134 | Dyn Display | | 12 |
| 135 | System | | 6 |
| 136 | Recipe | | 6 |
| 137 | Product | | 7 |
| 138 | Batch | | 5 |
| 139 | Summary | | 7 |

***Note:*** ** An entry number flagged with an asterisk (*), designates that the entry description should have a leading space in the message. This will allow for display concatenation without running words together.*

***Note:*** *** An entry number flagged with two asterisks (**), designates that the entry description should have a trailing space in the message. This will allow for display concatenation without running words together.*

***Note:*** **** An entry number flagged with three asterisks (***), designates that the entry description should have a leading and trailing space in the message. This will allow for display concatenation without running words together.*

***Note:*** *The output length of each table entry signifies that maximum number of characters allowable for that particular message even though the default message may not take up all spaces allowed.*

***Note:*** *Entry numbers shown grouped together are 24 character messages concatenated together to form a scrolling message. The total length of these messages are found by multiplying the output lengths together.*

***Note:*** *Some literal strings that have been abbreviated to 2 or 3 characters will not be concatenated with other strings.*

## Ready/Run Mode Clearable Alarms

| Entry | Alarm | 0 = Clearable<br>1 = Not Clearable |
|---|---|---|
| 1 | CM: Communications | |
| 2 | TK: Ticket | |
| 3 | TP: Temperature Probe | |
| 4 | OA: Overrun | |
| 5 | PT: Pulse Transmission | |
| 6 | VF: Valve Fault | |
| 7 | PR: Pressure Transducer | |
| 8 | PC: Pulse Collision | |
| 9 | PS: Pulse Security | |
| 10 | DP: Down Pulse | |
| 11 | DR: Density Transducer | |
| 12 | TT: Temperature Transducer | |
| 13 | SP: Set at entry 751 (Shared Printer) | |
| 14 | SF: Storage Full | |
| 15 | F1: Additive Feedback 1 | |
| 16 | F2: Additive Feedback 2 | |
| 17 | F3: Additive Feedback 3 | |
| 18 | F4: Additive Feedback 4 | |
| 19 | F5: Additive Feedback 5 | |
| 20 | F6: Additive Feedback 6 | |
| 21 | F7: Additive Feedback 7 | |
| 22 | H2: Set at entry 755 (232 Printer Hardware) | |
| 23 | O2: Set at entry 755 (232 Paper Out) | |
| 24 | A2: Set at entry 755 (232  Cover Open) | |
| 25 | P2: Set at entry 755 (232 Communications) | |
| 26 | B2: Set at entry 755 (232 Buffer OverFlow | |
| 27 | D2: Set at entry 755 (232 Deselected) | |
| 28 | E2: Set at entry 755 (232 General Error) | |
| 29 | I2: Set at entry 755 (232 No Response) | |
| 30 | H4: Set at entry 755 (485 Printer Hardware) | |
| 31 | O4: Set at entry 755 (485 Paper Out) | |

| Entry | Alarm | 0 = Clearable<br>1 = Not Clearable |
|---|---|---|
| 32 | A4: Set at entry 755 (485 Cover Open) | |
| 33 | D4: Set at entry 755 (485 Deselected) | |
| 34 | B4: Set at entry 755 (485 Buffer OverFlow) | |
| 35 | P4: Set at entry 755 (485 Communications) | |
| 36 | E4: Set at entry 755 (485 General Error) | |
| 37 | I4: Set at entry 755 (485 No Response) | |
| 38 | CL: Clean Line | |
| 39 | PA: Power-fail | |
| 40 | ZF: Zero Flow | |
| 41 | HT: High Temperature | |
| 42 | LT: Low Temperature | |
| 43 | HP: High Pressure | |
| 44 | LP: Low Pressure | |
| 45 | HD: High Density | |
| 46 | LD: Low Density | |
| 47 | BP: Back Pressure | |
| 48 | LF: Low Flow | |
| 49 | HF: High Flow | |
| 50 | BV: Block Valve | |
| 51 | BH: Blend High | |
| 52 | BL: Blend Low | |
| 53 | AC: Additive Communications | |
| 54 | IA: Injector Alarm | |
| 55 | R1: Additive 1 Frequency | |
| 56 | R2: Additive 2 Frequency | |
| 57 | R3: Additive 3 Frequency | |
| 58 | R4: Additive 4 Frequency | |
| 59 | R5: Additive 5 Frequency | |
| 60 | R6: Additive 6 Frequency | |
| 61 | R7: Additive 7 Frequency | |
| 62 | L1: Additive 1 Pulse | |
| 63 | L2: Additive 2 Pulse | |

| Entry | Alarm | 0 = Clearable<br>1 = Not Clearable |
|---|---|---|
| 64 | L3: Additive 3 Pulse | |
| 65 | L4: Additive 4 Pulse | |
| 66 | L5: Additive 5 Pulse | |
| 67 | L6: Additive 6 Pulse | |
| 68 | L7: Additive 7 Pulse | |
| 69 | N1: No Pulses Detected Add1 | |
| 70 | N2: No Pulses Detected Add2 | |
| 71 | N3: No Pulses Detected Add3 | |
| 72 | N4: No Pulses Detected Add4 | |
| 73 | N5: No Pulses Detected Add5 | |
| 74 | N6: No Pulses Detected Add6 | |
| 75 | N7: No Pulses Detected Add7 | |
| 76 | M1: Too Many Pulses Add1 | |
| 77 | M2: Too Many Pulses Add2 | |
| 78 | M3: Too Many Pulses Add3 | |
| 79 | M4: Too Many Pulses Add4 | |
| 80 | M5: Too Many Pulses Add5 | |
| 81 | M6: Too Many Pulses Add6 | |
| 82 | M7: Too Many Pulses Add7 | |
| 83 | K1: Low Additive 1 | |
| 84 | K2: Low Additive 2 | |
| 85 | K3: Low Additive 3 | |
| 86 | K4: Low Additive 4 | |
| 87 | K5: Low Additive 5 | |
| 88 | K6: Low Additive 6 | |
| 89 | K7: Low Additive 7 | |
| 90 | U1: Unauth Failed 1 | |
| 91 | U2: Unauth Failed 2 | |
| 92 | U3: Unauth Failed 3 | |
| 93 | U4: Unauth Failed 4 | |
| 94 | U5: Unauth Failed 5 | |
| 95 | U6: Unauth Failed 6 | |
| 96 | U7: Unauth Failed 7 | |

***Note:*** *1. Alarms that have the statement "Set at entry ???" are programmable in their respective program codes as to whether they are clearable or not clearable in the Run and Ready Mode of operation*

*2. Alarms 1 through 40 are System Alarms, alarms 41 through 52 are Product Alarms, alarms 53 through 96 are Smart Additive Alarms.*

# Related Publications

The following literature can be obtained from the Smith Meter Literature Department. Please reference the appropriate bulletin number and title when ordering.

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## AccuLoad II - SQR

Specifications ..... Bulletin SS06026
Installation ..... Bulletin MN06105
Operator Guide ..... Bulletin MN06101
Operator Reference ..... Bulletin MN06103
Programming Workbook ..... Bulletin AB06044
Communications ..... Bulletin MN06104L

## Load Printer

Specifications ..... Bulletin SS06004
Installation/Operation ..... Bulletin MN06010
Service ..... Bulletin MN06009

## Valves

Model 210 Specifications ..... Bulletin
Model 210 Installation/Operation ..... Bulletin
Model 215 Specifications ..... Bulletin
Model 215 Installation/Operation ..... Bulletin
Model 215 Service ..... Bulletin

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| | |
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