Atlas Laundry System

Overview and Programming Instructions

DEMA Engineering

Atlas Laundry System

The Atlas Laundry Dispensing System is:
- Modular
- Flexible
- Easy to install
- Easy to use
- Designed for the Customer's needs

Atlas Laundry System

The Atlas Laundry Dispensing System:

- Accurately delivers chemical product to commercial laundry machines
- Has pre-wired main power and communication system
- Uses Quick Change peristaltic pumps to deliver the chemical product to the laundry machine pocket

(continued)

Atlas Laundry System

- Houses the pumps and main control in a durable and attractive ABS enclosure to provide easy access to inside components
- Uses an integrated stainless steel mounting bracket system
- Includes a modular pump system allowing up to 6 pumps and a flush system OR

  7 pumps without a flush system

Atlas Laundry System

Atlas Laundry System includes:

- Dispensing System which contains the pumps, the power supply and the IQ-85 electronic control board

- Hookup Kit which contains Velcro fasteners, communication cable, various strain reliefs and wire ties

(continued)

Atlas Laundry System

- Signal Transfer Unit (STU) for receiving trigger signals and sending commands back to the IQ-85
- Optionally, the Laundry Dispensing System will come with an Enhanced Digital Select Module (EDSM) for all programming functions, selecting 30 formulas, defeating bleach, and remote emergency stop
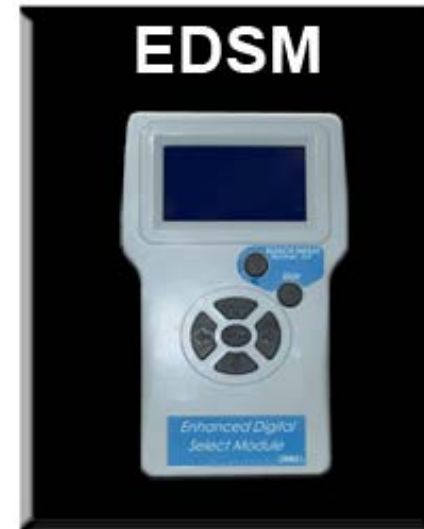
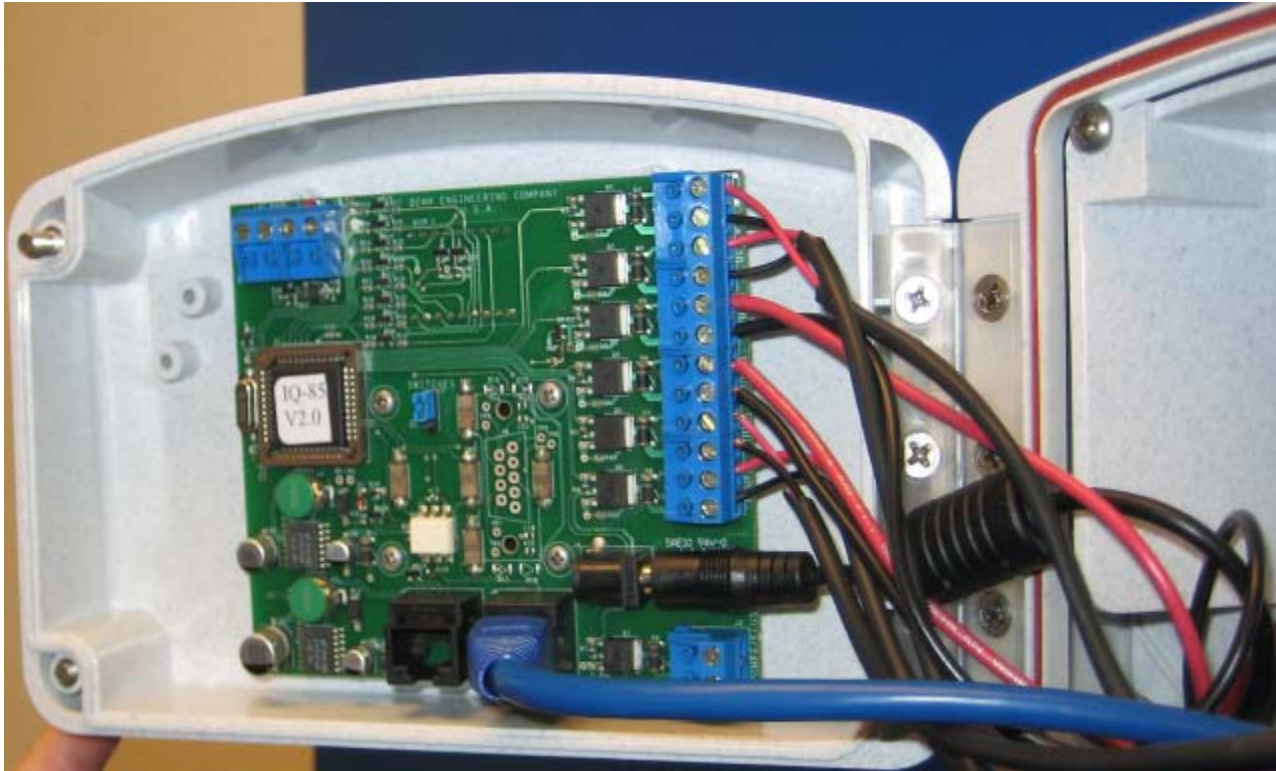# Atlas Laundry System
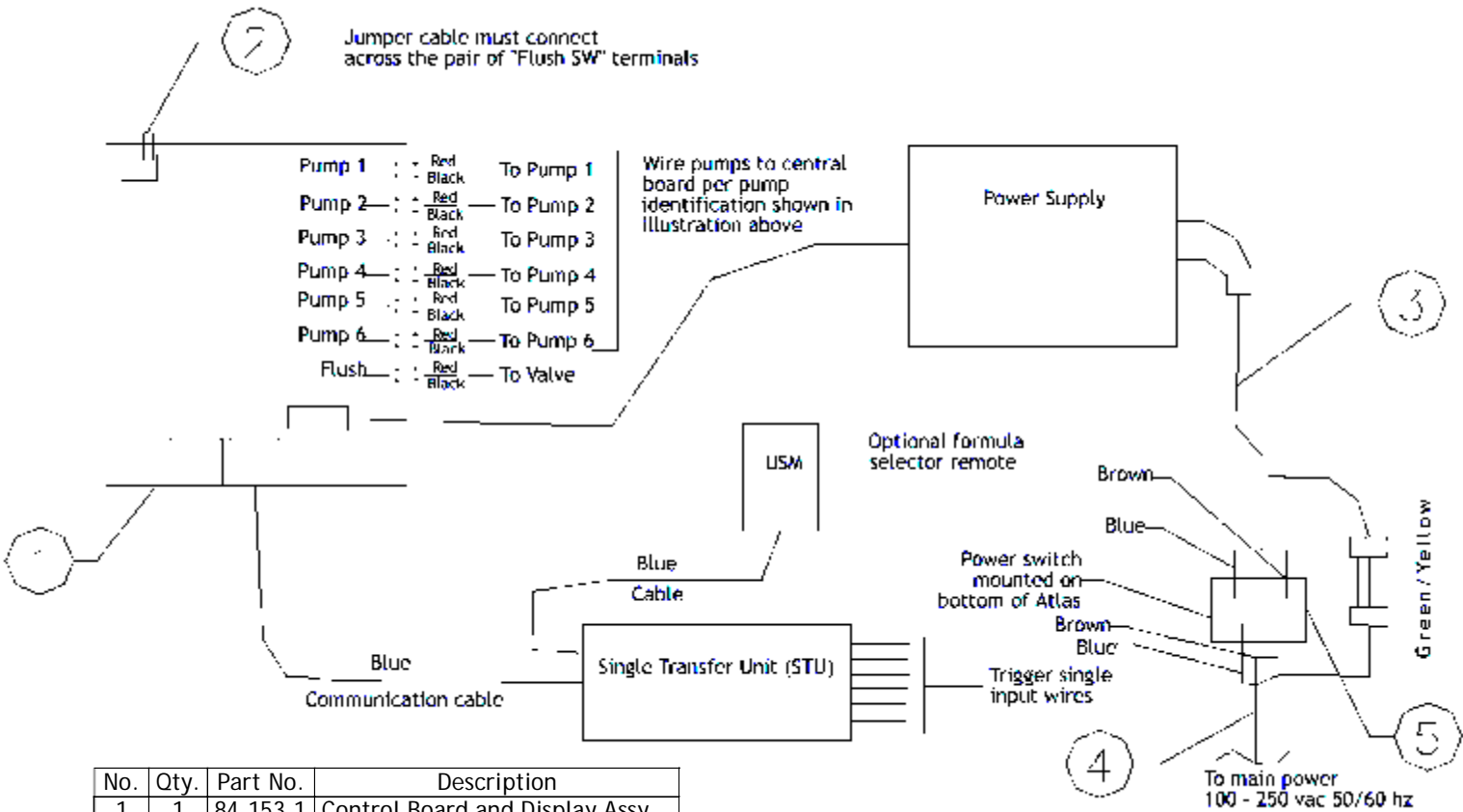
Atlas Laundry System

Universal Select Module

Enhanced Digital Select Module

Atlas Laundry System

Motherboard

Atlas Laundry System

No.	Qty.	Part No.	Description
1	1	84.153.1	Control Board and Display Assy
2	1	82.7.2	Jumper Line
3	1	81.125.4	Power Supply Cable
4	1	80.106.4	Power Cable
5	1	81.186.7	Access Panel Assy

Wiring Diagram

Atlas Laundry System

Flush Manifold

Atlas Laundry System

Programming the
Atlas Laundry Dispensing System

Atlas Laundry System

The Atlas Laundry Dispensing System offers four main modes:

- Formula Select Mode
- Sequence Mode
- Relay Mode
- Auto Formula Select

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Formula Select Mode:

This is where the unit can be programmed with up to 20 different formulas. Each formula is driven to operate by individual trigger sources that are generated by the laundry machine.

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Sequence Mode:

This is where the unit can be programmed to count a single event from the laundry machine. Up to 20 formulas can be programmed in this mode as well.

Example - Using the drain valve on the laundry machine as a trigger source, the IQ-85 will count the drain valve operations and will operate pumps based on these counts.

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Relay Mode:

There is only one programming variable to set on the IQ-85. A flush can be programmed to run with, and for an additional time after, each pump operation. Otherwise the IQ-85 is not programmed, but instead, the laundry machine is programmed to provide various formulas.

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The IQ-85 acts like a relay board and will only operate pumps for the length of time that the STU receives a trigger signal from the laundry machine.

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Auto Formula Select Mode:

This feature allows the formula to be selected based on a trigger signal that is received from the laundry machine. It is necessary to have a separate programmable input from the laundry machine to correctly use the Auto Formula Select.

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Note:

To program and configure the Atlas Laundry Dispensing System, the STU (Signal Transfer Unit) must be connected between the IQ-85 board and the laundry machine.

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The Enhanced Digital Select Module (EDSM) incorporates all OPL programming into one hand held remote that can be located at any place in a laundry location. The unit is for use with the Atlas Laundry Dispensing System.

(continued)

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Up to 240 formulas can be entered into eight programs in the EDSM. Most of the action screens are intuitive and easily understood.

(continued)

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You can always use the PROGRAM-EXIT button (BLEACH DEFEAT button) to back out of a display or to keep going backward until you find the display you are looking for. Use the ENTER button to activate the display that is shown on the EDSM screen.

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Step by Step:
Programming the EDSM

Atlas Laundry System

Enhanced Digital Select Module (EDSM)

BLEACH DEFEAT *(PROGRAM-EXIT)* - Press this button to <u>toggle</u> the bleach pump *off* or *on.* Otherwise, use as a *PROGRAM-EXIT* button to back up one screen at a time in order to get back to the previous menu screen.

STOP - Press this button to immediately stop a pump.

Atlas Laundry System

Enhanced Digital Select Module (EDSM)

ENTER - Press this button to go to the next screen or to take an action that is shown on the display screen. When a value is keyed into the EDSM, the enter button must be pressed for the value to be programmed.

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Enhanced Digital Select Module (EDSM)

DIRECTION ARROWS - ÀÅ ÃÄ
Use intuitively to increase or decrease display numbers or to move about the display.

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Important: On the very first usage of the EDSM, new out of the box, connect the EDSM to the Atlas Laundry Dispensing System per the installation instructions. Power it up, enter Programming and proceed to the Utility menu. CLEAR ALL PROGRAMS before using the EDSM for the first time.

(Continued)

Atlas Laundry System

UTILITY
Send Program File
Capture Prog. File
Set Access Code
Set Formula Names
Set Product Names
Set Factory Default
◆ Clear All Programs

CLEAR ALL PROGRAMS will only need to be done at the first usage. It is not necessary to clear all programs after the initial clearing.

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When the dispenser is powered up, the EDSM screen will activate and the following information will be displayed:

- Formula number
- Total load count of the displayed formula
- All of the pumps indicated by a pump number - the EDSM will show six pumps no matter how many pumps are being used

(continued)

Atlas Laundry System

- The formula name (i.e. *Sheets-White*)
- The product being dispensed (or if a pump is <u>not</u> presently running, the <u>last</u> product dispensed, i.e. *Sour*)
- Bleach Defeat status (i.e. *Off*)

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*Note: When in this initial display mode, depressing the left arrow key Ã several times will **darken** the display. Depressing the right arrow key Ä several times will lighten the display.*

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1. Press ENTER to access programming.
2. Use the right and left buttons ÃÄ to navigate to the 4 digits and use the up and down buttons ÀÅ to change the digits so that they read the 4 digit numeric code. The factory default code is 0000.
3. Press ENTER.
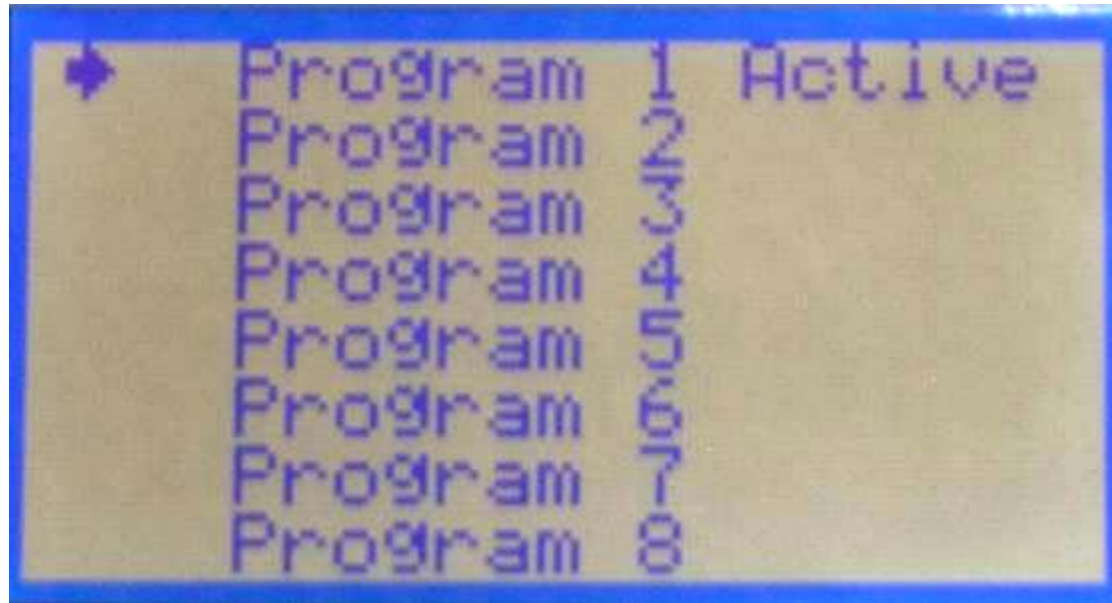
Atlas Laundry System
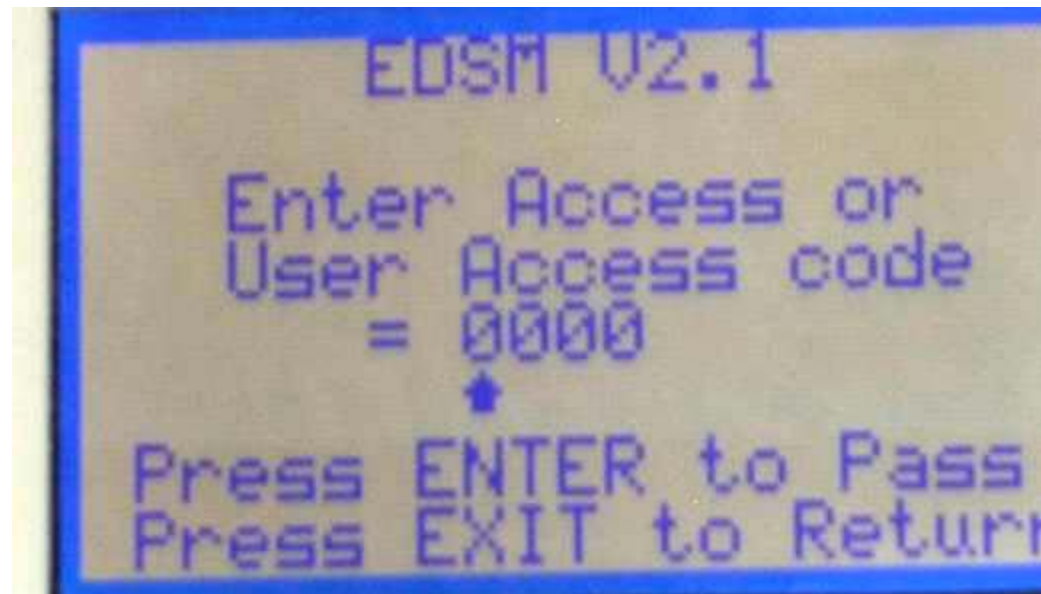
Atlas Laundry System

4. Use the up and down arrow buttons ÀÅ to select the desired program to enter and modify. Each program can have up to 30 formulas. When you enter a program, all changes that you are making are modified in that program. When going to the UTILITY menu, the sending and capturing features are sending and capturing the program that has been entered.

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5. Use the up and down arrow buttons ÀÅ to select the appropriate sync option.

6. Press ENTER.

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Note: If the remote is entering programming for the first time since it was last powered up, the DO YOU WANT TO SYNC screen will be displayed. Otherwise, this screen will be skipped and the MAIN MENU will be displayed.

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7. Use the up and down buttons ÀÅ to select an area to enter and begin setup or programming.

8. Press ENTER.

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Menus, Programming and Setup Procedures

Atlas Laundry System
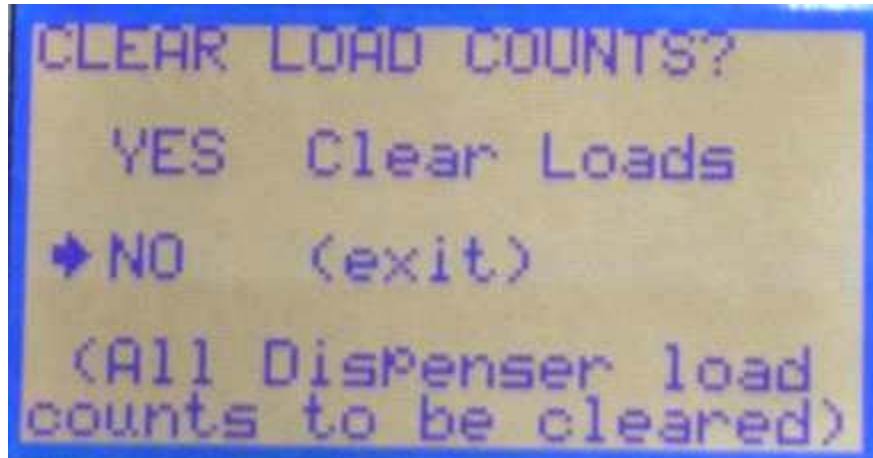
SETUP
SUBMENU HEADINGS
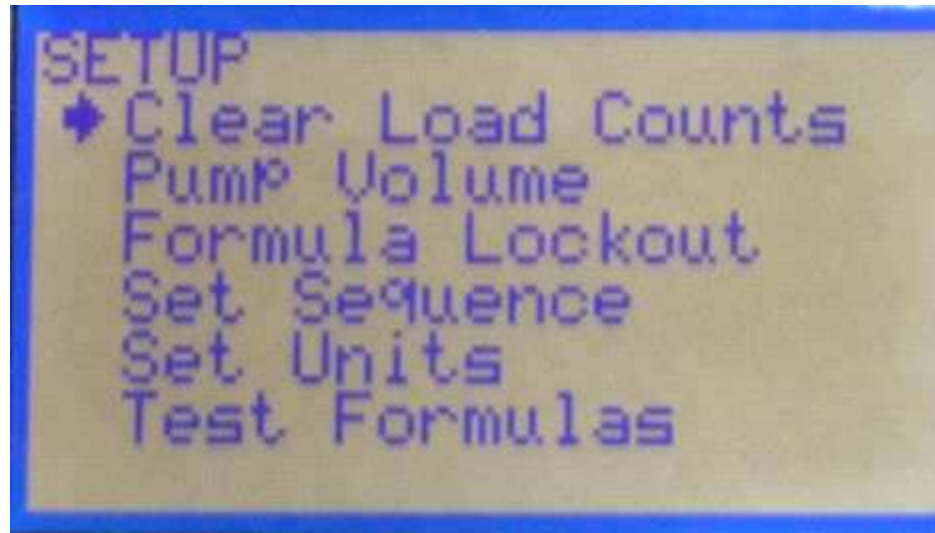
Atlas Laundry System

Clear Load Counts:

1. The Load Count screen is self explanatory. Select with the arrow ÀÅ then press ENTER. This will clear and reset the load counts in all of the formulas back to zero.

Atlas Laundry System

Pump Volume:

First Screen – Selecting formula to be programmed.
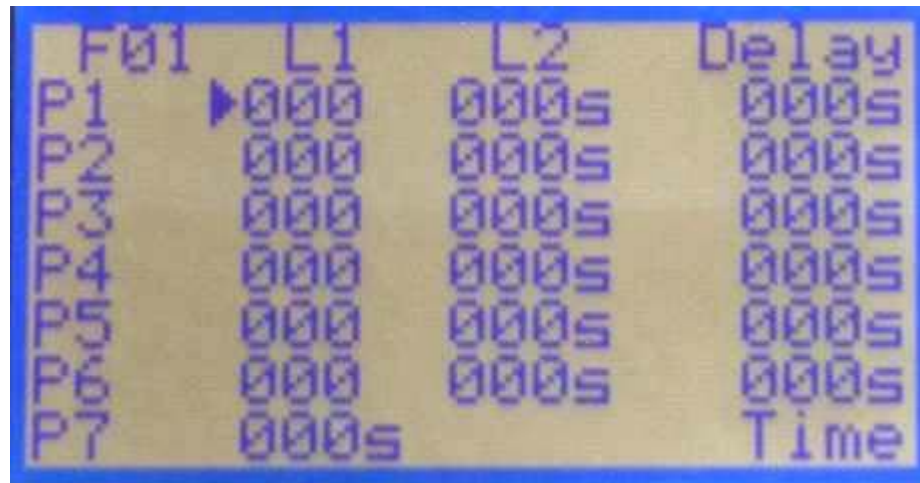
1. Select the formula number with the up and down buttons ÀÅ.
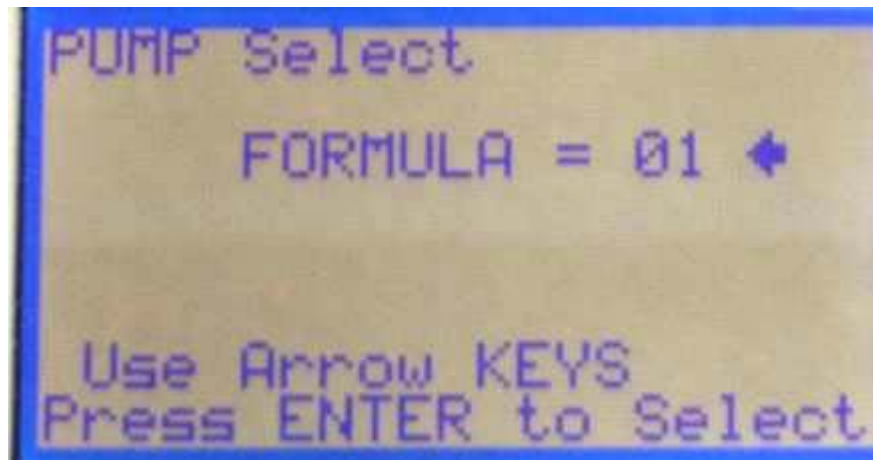
2. Press ENTER.

Atlas Laundry System

Second Screen - Pump run and delay times and flush time.

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3. Each programmable field shown on the screen represents LEVEL 1, LEVEL 2 and DELAY for each pump. Pumps are listed on the left side P1 - P7.

Note: Level mode is explained in a later slide (see Set Level Mode). P7 is the flush when flush system is activated.

Atlas Laundry System

4. Use the arrow keys ÀÅ ÃÄ to navigate to the desired location to be programmed.

5. Press the ENTER key and the first zero to the left of that field will begin to flash. Use the ÀÅ buttons to set the desired digits to make adjustments of 0 - 9. Set the values so that the three character field shows the desired value (i.e. *023 or 115).*

Atlas Laundry System

The units available are:

- s = seconds
- ml = milliliters
- oz = ounces

Units can be changed in the Units Selection menu.

Note: ml and oz require the use of the calibration system – see calibration section for instruction.
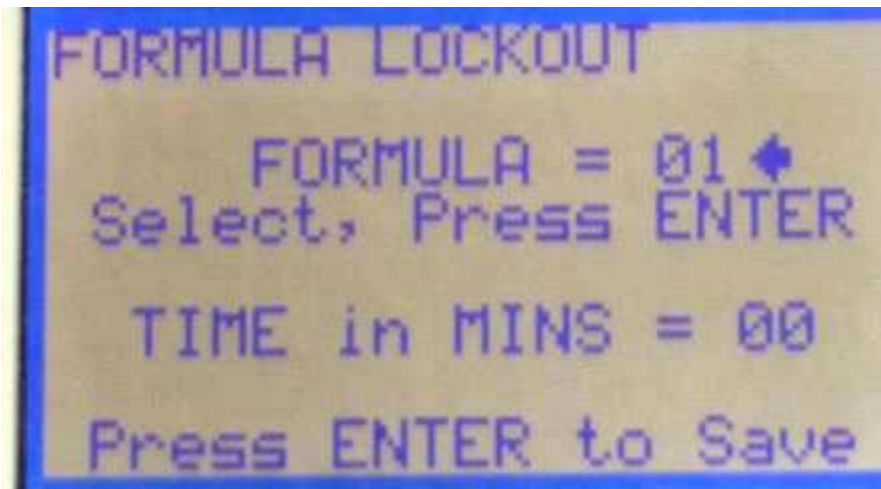
Atlas Laundry System

6. Press the ENTER key and that value will be stored.

7. Repeat these steps to set other values on this screen.

8. Use the *PROGRAM-EXIT* button to back out to the previous screen to move to a new formula.

Atlas Laundry System

Formula Lockout:

1. Use the up and down buttons ÀÅ to select the formula number. Press ENTER.

2. Use the arrow buttons ÀÅ ÃÄ to move the cursor to the two digit selection and make adjustments 0 - 9. Set the values to read the desired LOCKOUT time in minutes.
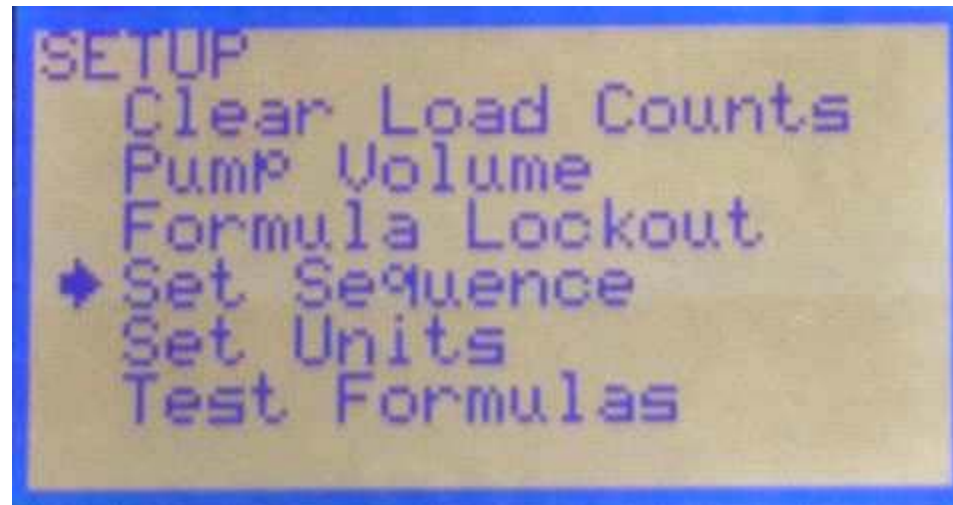
3. Press ENTER to save.

Atlas Laundry System

4. Input the same information for the other formulas.

5. Use the *PROGRAM-EXIT* button to back up to the SETUP screen.

Atlas Laundry System

Set Sequence:

Note: In order to use the sequence mode the STU must be wired for the SEQUENCE MODE as shown in the installation Instruction Sheet I-841.
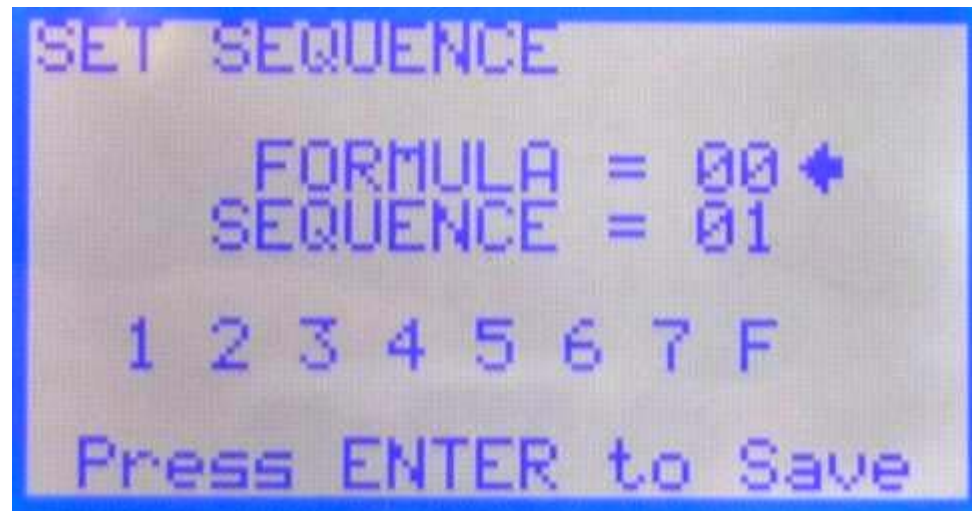
Atlas Laundry System

1. Press ENTER and use the up or down buttons ÀÅ to select the formula number.
2. Press ENTER and use the up or down buttons ÀÅ to select the sequence event (1 through 16) closest to the time activation of the selected pump.

Atlas Laundry System

3. Press ENTER and use the left and right buttons ÃÄ to select the pump to be activated and press the up arrow À to select it. An asterisk * will appear above the selected pump (to deselect, press the down arrow Å). <u>Up to three pumps may be selected</u> to run at the same time.

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Note: F means Final Event, (not Flush), and it <u>must be selected when finished</u>. The final event is used to reset the sequence system on the last trigger signal from the laundry machine.

To check the sequence programming, perform steps 1 and 2 and scroll through the events looking for the asterisk * above the appropriate pumps.

Atlas Laundry System

Set Units:

1. Move the cursor up and down to the desired unit of measure.

   - Time = seconds
   - English = fluid ounces
   - Metric = milliliters

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2. Press ENTER to set the desired units.
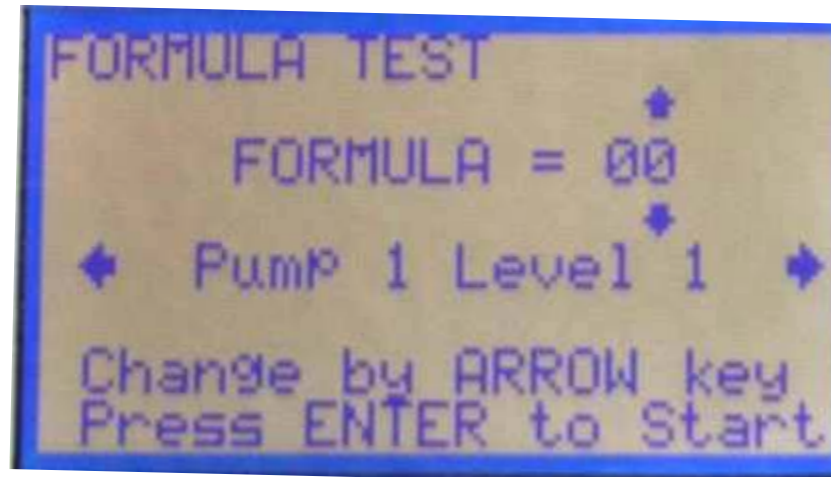
Atlas Laundry System

Note: If English or Metric units are selected, a reminder to calibrate the pumps will be displayed.

Atlas Laundry System

Test Formulas:

This feature allows each pump and flush to be tested manually. The function of this feature will allow the programmed amount of pump run time and flush time to be operated manually.
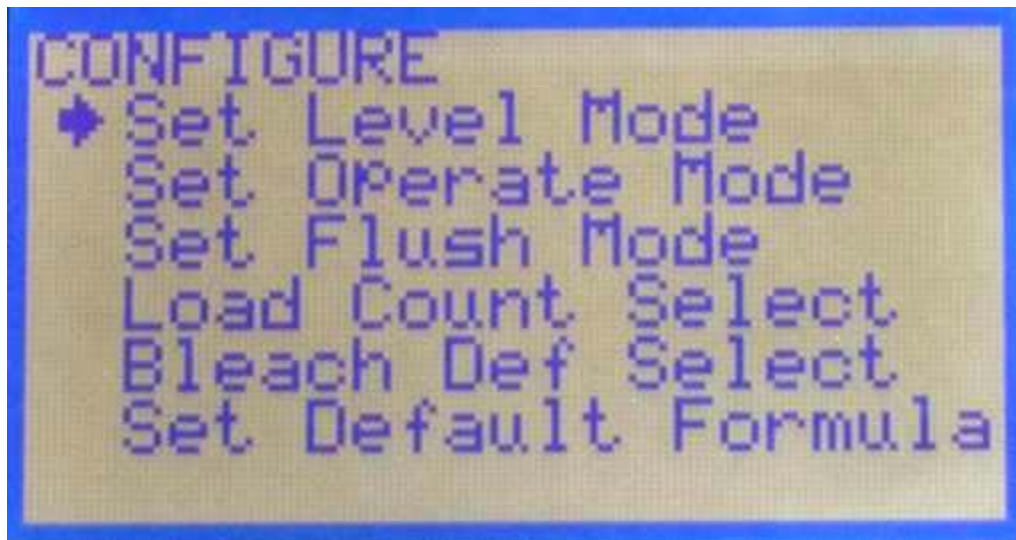
Atlas Laundry System

3. Press up or down arrow ÀÅ to select the formula to be tested. Press the appropriate arrow ÃÄ to select the pump and level to be tested.

4. Press ENTER to set the desired units.

Atlas Laundry System

CONFIGURE
SUBMENU HEADINGS

Atlas Laundry System

Set Level Mode:

Level mode allows for the injection of different amounts of chemical in different steps in the formula.
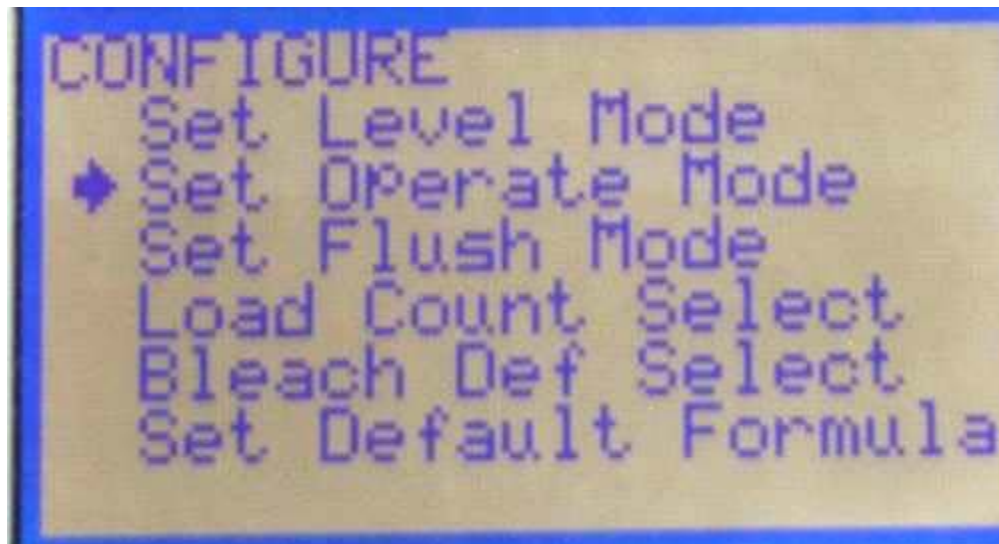
1. The Level Mode screen is self explanatory. Select ON or OFF with the up and down buttons ÀÅ.
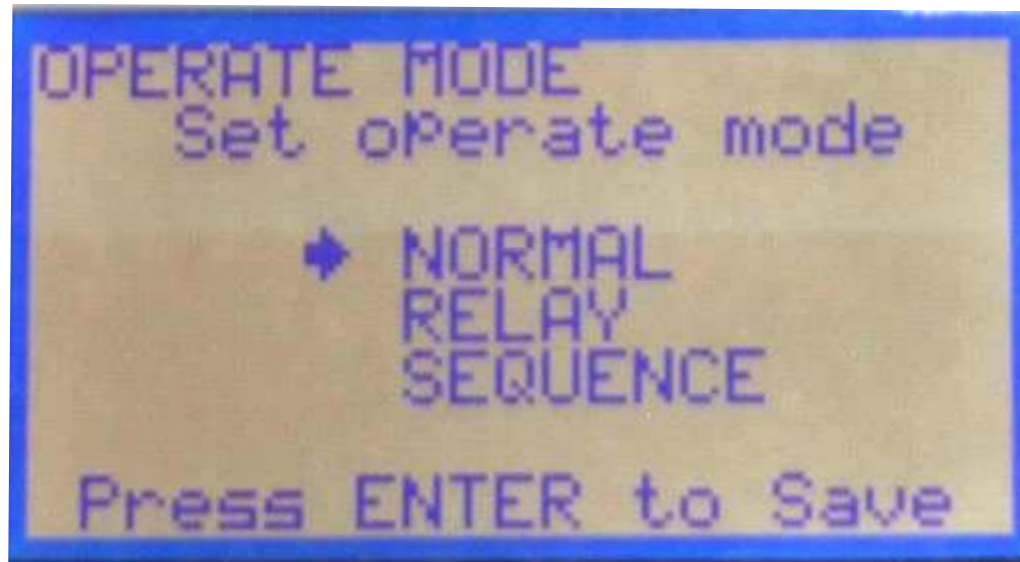
2. Press ENTER.

Atlas Laundry System

Atlas Laundry System

Set Operate Mode:

Atlas Laundry System

1. Use the up and down buttons ÀÅ to select the desired operation mode.
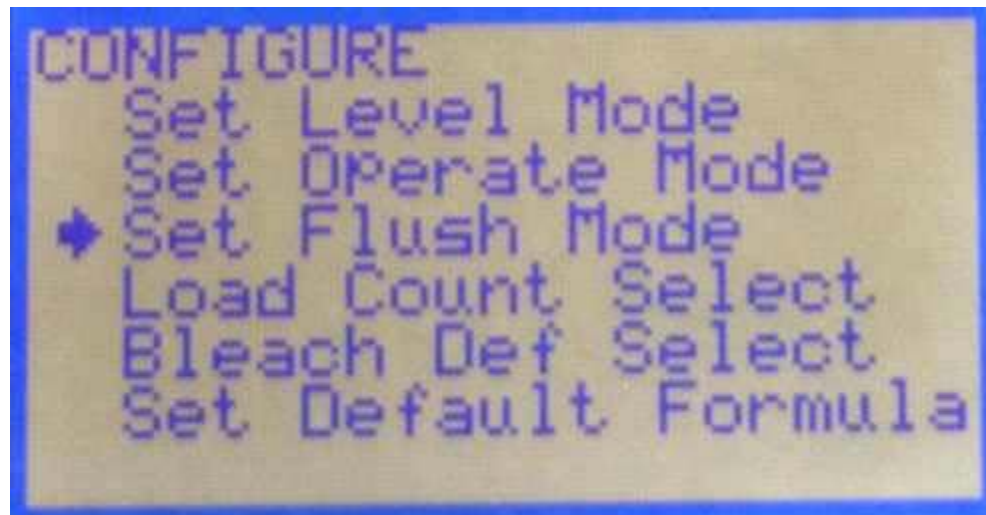2. Press ENTER.

Atlas Laundry System

Note:

- *Normal = programmed formulas into DEMA laundry dispenser, use remote or Auto Formula Select to select formulas.*

- *Relay = formulas are programmed into the laundry machine and only a flush is programmed into the DEMA laundry dispenser.*

- *Sequence = uses a single trigger signal from laundry machine and Normal programming features.*

Atlas Laundry System

Set Flush Mode:

Atlas Laundry System

1. The Flush Mode screen is self explanatory. Select ON or OFF with the up and down buttons ÀÅ.
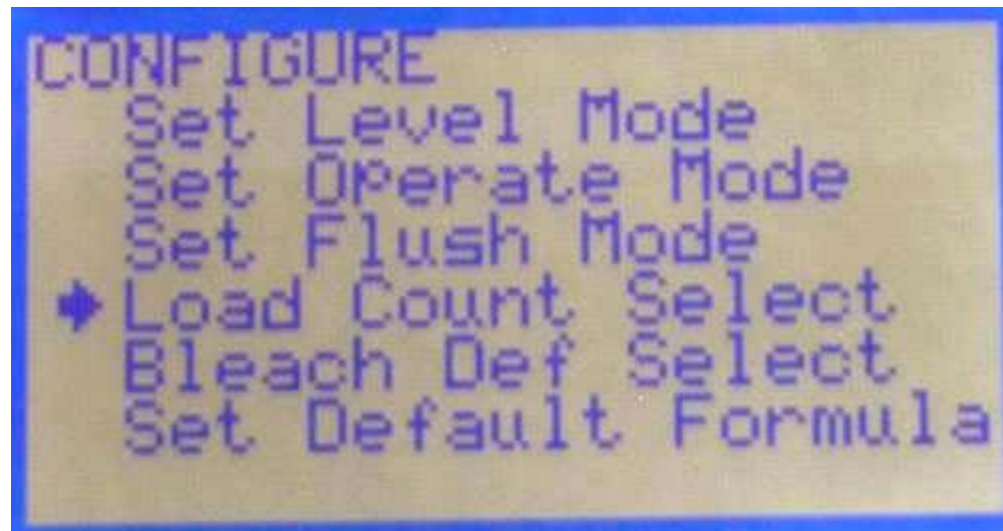
2. Then press ENTER.

Atlas Laundry System

Note: When ON, the system will flush with a pump operation and continue to flush after a pump operation for the amount of flush time programmed.
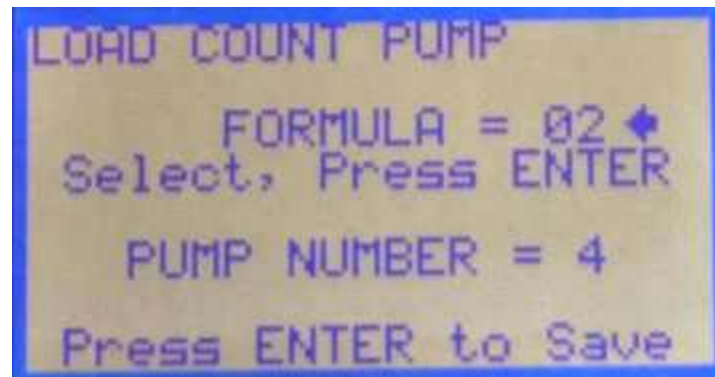
Atlas Laundry System

Load Count Select:

Atlas Laundry System

3. Select the Formula with up and down buttons ÀÅ.

4. Press ENTER.

5. Select the Load Count Pump with the up and down buttons ÀÅ.
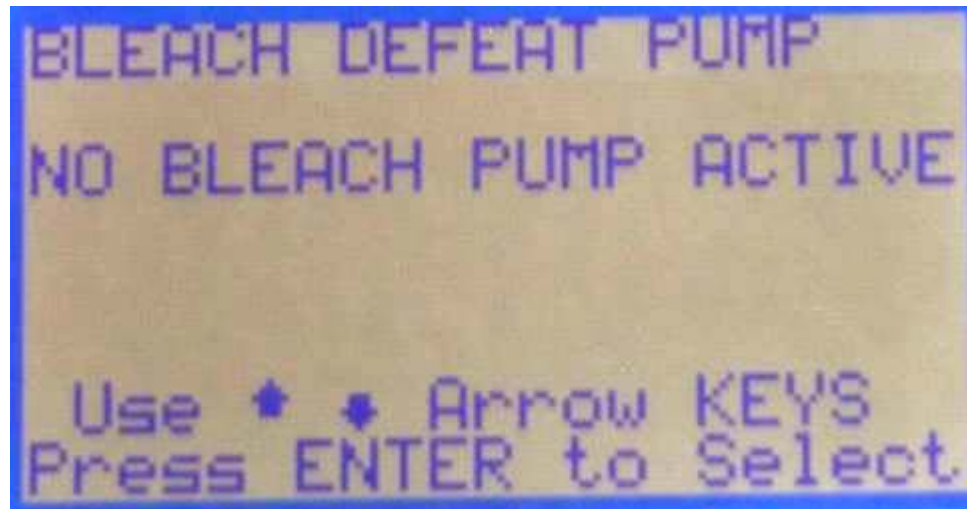
6. Press ENTER to save.

Atlas Laundry System

Note: Each formula has a specific load count pump. It is necessary to program a load count pump for each formula to be used in an application.

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Bleach Def Select:

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1. No Bleach Pump Active is default.
2. Press up or down arrows ÀÅ to select bleach pump.
3. Press ENTER to save.
4. This activates the Bleach Defeat button on USM on washer. If No Bleach Pump Active, then this button is not functional.

Atlas Laundry System

Note: When a bleach pump is programmed, no other pump will be allowed to run simultaneously.

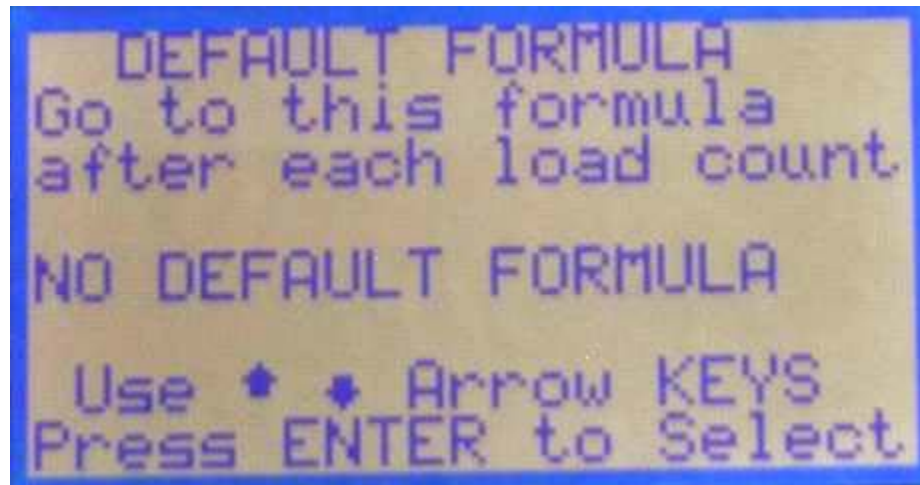*Example: A detergent pump and a bleach pump are triggered at the same time, one will run followed by the other.*

Atlas Laundry System

Default Formula:

Default Formula is an optional feature that can allow the system to automatically change to a known formula after the load count pump is run. It can be used as a formula that would be safe for any type of load, in the event that the end user does not change the formula when necessary.

Atlas Laundry System

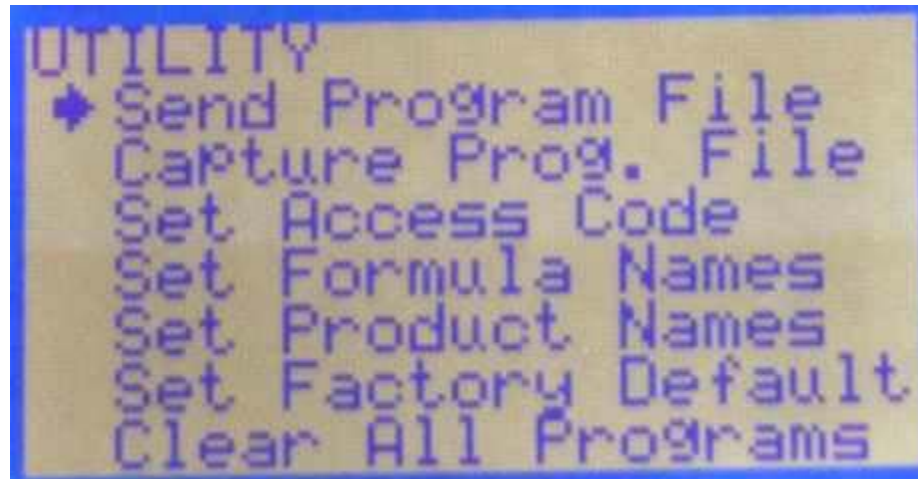1. Select the formula that will be the default formula with up and down buttons ÀÅ. One of the choices is NO DEFAULT FORMULA.

2. Press ENTER to save.

Atlas Laundry System

UTILITY

SUBMENU HEADINGS

Atlas Laundry System

Send Program File:

1. File number is the number program you are working in.

2. Move the cursor using the up and down buttons ÀÅ to YES.

3. Press ENTER.

Atlas Laundry System

4. This sends the new program to the Atlas.

Note: If it is not counting at the bottom of the screen, it is not sending the file. Make sure the STU is plugged into the Atlas.

Atlas Laundry System

Capture Program File (Saving a setup from a dispenser into the memory of the EDSM):

1. File number is the number of the program you are working in and where the program file from the dispenser will be saved on the EDSM.

2. Move the cursor using the up and down buttons ÀÅ to YES.

Atlas Laundry System

3. Press ENTER.
4. This saves the current Atlas program to the EDSM.

Atlas Laundry System

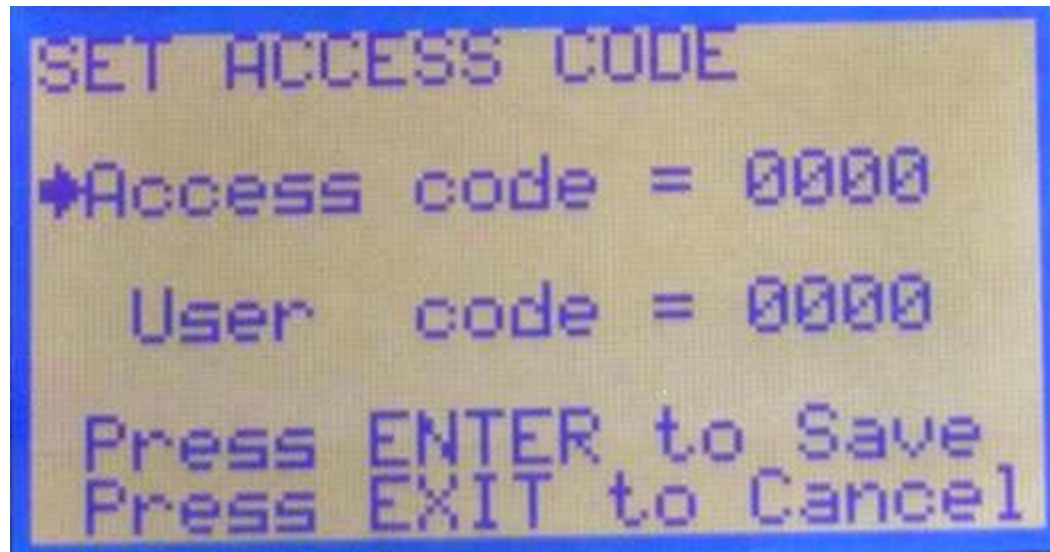**Set Access Code:**

1. Access Code - Use the left and right buttons ÃÄ to navigate the cursor to the 4 digits on the Access Code setting. Use the up and down buttons ÀÅ to change the digits at each of the 4 digits.
2. Press ENTER.

Atlas Laundry System

3. User Code - Use the left and right buttons ÃÄ to navigate the cursor to the 4 digits on the User Code setting. Use the up and down buttons ÀÅ to change the digits at each of the 4 digits.

4. Press ENTER – The Data Accepted screen will be displayed momentarily then it will go back to the Set Access Code screen, but it will not show the new access code. It will show 0000.

Atlas Laundry System

Note:
- *Access Code – allows full access into programming and all features of the EDSM and the Atlas.*
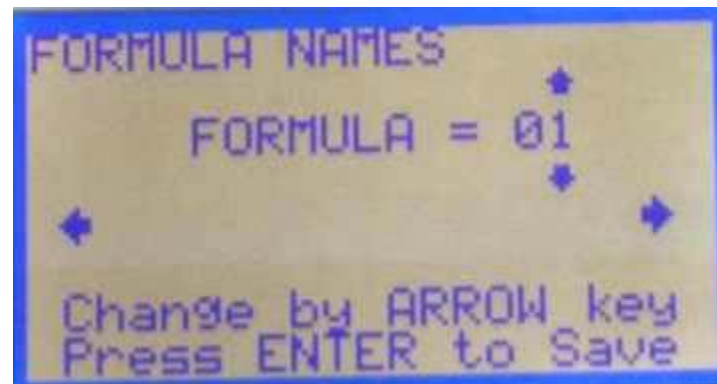- *User Code – allows limited access to prime pumps only.*

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Set Formula Names:

1. Use the up and down buttons ÀÅ to select the formula to label. Use the left and right buttons ÃÄ to select the label for the formula displayed.

2. Press ENTER to save. The Data Accepted screen will display followed by the Formula Names display.

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3. A formula can be disabled by selecting the DO NOT USE. This will remove the formula as a choice for the end user. It can be reactivated any time by reentering the Formula Names menu.

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Note:
As the formulas are scrolled, the formula name will show the current setting.

Default - Formulas 11 - 30 are disabled. To use them, they must be activated.
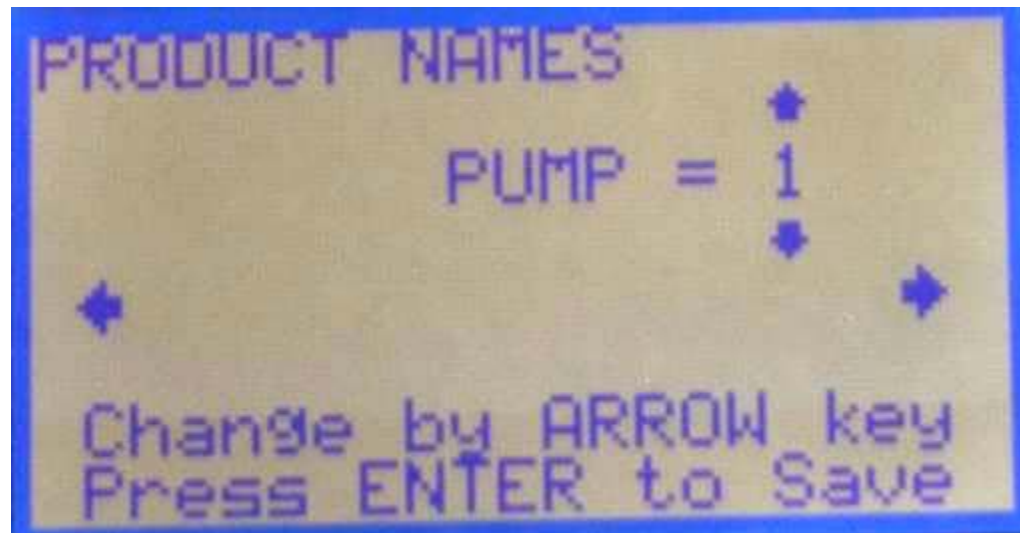
Atlas Laundry System

Set Product Names:

1. Use the up and down buttons ÀÅ to select the pump to label. Use the left and right buttons ÃÄ to select the label for the pump displayed.

2. Press ENTER to save. The Data Accepted screen will display followed by the Product Names display.

Atlas Laundry System

Note: As the pumps are scrolled, the product name will show the current setting.

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Set Factory Default – Resetting one of the eight chemical programs:

1. Use the up and down buttons ÀÅ to select YES.

2. Press ENTER – The Restoring Factory Defaults - Please Stand By screen will display. Allow the EDSM to finish this process before pressing any buttons. Utility screen is displayed when the process is complete.

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Note: This will reset the current program to its original condition from DEMA.   All programming setups and stored files are removed.   This will only reset the single program that was entered which could have been any program 1 - 8. To reset every formula, use Clear All Formulas. This change only applies to the EDSM - not the IQ-80 or IQ-85 board.   To reset the IQ-85, transfer the selected program file from the EDSM to the IQ-85.   To reset the IQ-80, refer to the IQ-80 programming manual.

Atlas Laundry System

Clear All Programs:

Resets every chemical program to its original condition from DEMA. All settings and data will be lost. Use only for a new install or to reset an existing EDSM.
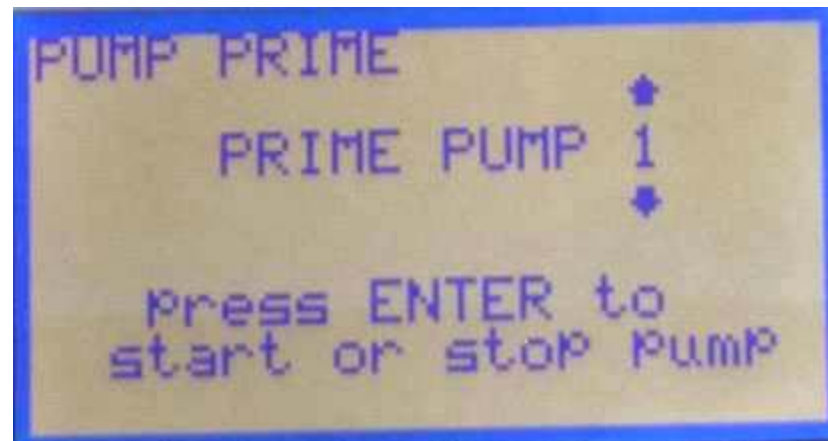
Atlas Laundry System

Prime Pump:

1. Use the up and down buttons ÀÅ to select the pump to be primed.

2. Press ENTER button to start the pump.

3. Press ENTER button to stop the pump.

Atlas Laundry System

Calibration:

Note: Units must be changed to either milliliters or ounces before pumps can be calibrated. See Set Units section in this instruction manual. It will be necessary to measure the output of the pump with either a measuring cup or graduated cylinder.
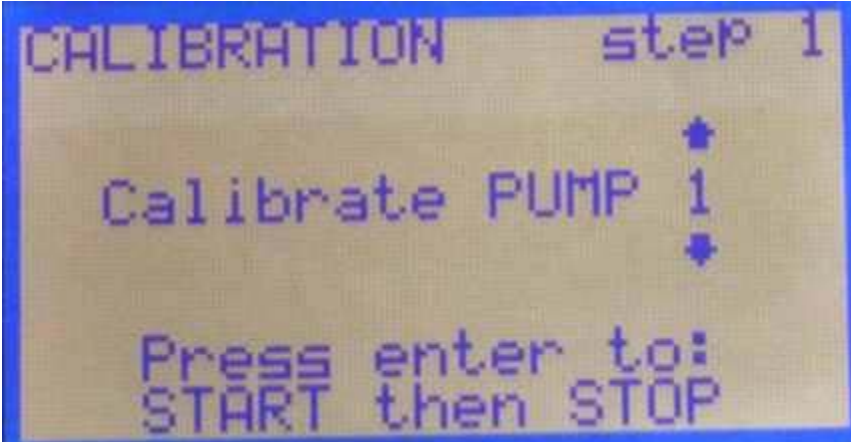
Atlas Laundry System

Calibration step 1:

1. Use the up and down buttons ÀÅ to select the pump to be calibrated.

2. Press the ENTER button to start the pump. With the measuring cup or graduated cylinder, start collecting the media.

3. Press the ENTER button to stop the pump when the desired volume of measurement is achieved.

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Atlas Laundry System

This volume does not need to be specific to the application. To improve accuracy, it is better to use an even number that takes approximately 30 seconds to 1 minute to achieve.

Atlas Laundry System

Note:

The larger the volume pumped, the more accurate this feature becomes. Minimum amount should be six ounces.
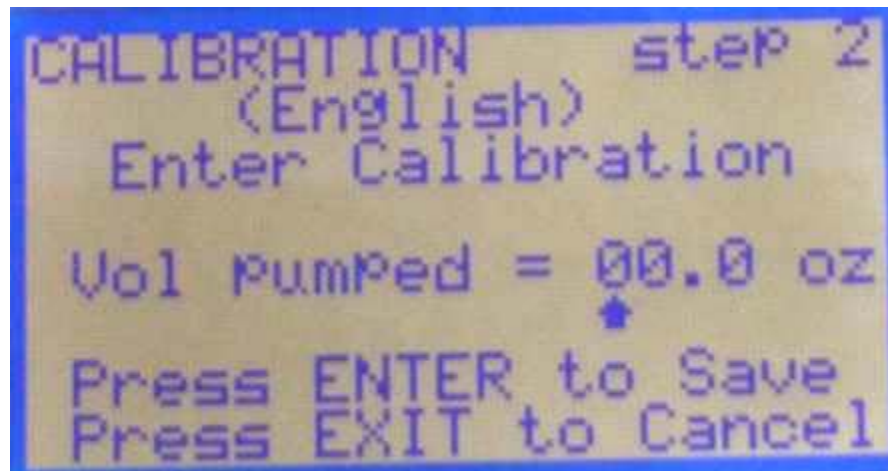
Atlas Laundry System

Calibration step 2:

4. Use the left and right buttons ÃÄ to navigate the various digits and use the up and down buttons ÀÅ to change the numbers to read the amount of volume dispensed from previous step.

5. Press ENTER to save the value.

6. The EDSM will display the pump rate momentarily and then go back to the Calibration screen.

(continued)

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7. Repeat this process for the remaining pumps.

Atlas Laundry System

Warranty:

DEMA® products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to products that have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, improper voltage supply, physical abuse or misapplication. Rubber and synthetic parts such as "O"-rings, diaphragms, squeeze tubing and gaskets are considered expendable and are not covered under warranty.

This warranty is extended only to the original buyer of DEMA® products. If products are altered or repaired without prior approval of DEMA®, this warranty will be void. Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge. F.O.B. factory DEMA® assumes no liability for damages. Return merchandise authorization number to return units for repair or replacement must be granted in advance of return.

Return Policy:

No merchandise may be returned for credit without DEMA® Engineering Company's written permission.

Return Merchandise Authorization (RMA) number required in advance of return.

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Overview and Programming Instructions

DEMA Engineering