

# Priming/Dispensing Only Setup Guide



PRIME • DISPENSE

A photograph of the SmartDispenser's control screen. The screen displays a menu with the following settings:

- Traditional LDS9000™
- Process Controls™
- Admin
- Logoff ?
- Saved Program Number: 20
- Barrel Size: 3cc
- Dispense Volume (cc): 0.00090
- Speed (cc per sec): 0.023
- Back-off (steps): 0
- Back-off Delay (seconds): 0.65
- 3.2639 cc of 3626 steps
- Buttons: EXTEND (Retract), AUTO (Manual), Cancel, Save Program, Single Step

FISHMAN

SmartDispenser™  
21st Century Dispensing



**FISHMAN**®  
Dispensing Innovation™



# Thank you for purchasing the SmartDispenser®

## **THE FUTURE OF FLUID DISPENSING.**

**This setup guide is designed to help Administrators program SmartDispenser® system as “Prime Only” and “Dispense Only” units.**

**If you are unsure of any step or have questions, consult your SmartDispenser® Priming/Dispensing Only Setup Guide, contact your Fishman representative, or call us at one of the numbers below.**

**US & Canada: 800-433-2115**

**United Kingdom: 1905 456008**

**Europe: +441905 456008**

**Worldwide: 1-508-435-2115**

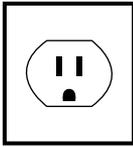


# Table of Contents

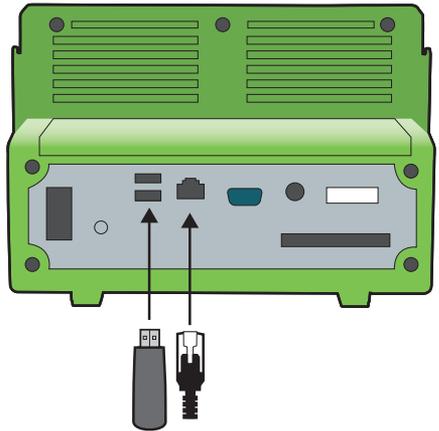
<b>1.0 Prepare your workspace for the SmartDispenser®</b>	<b>5</b>
<b>2.0 Unpack your SmartDispenser® System</b>	<b>5</b>
<b>3.0 Hook up your SmartDispenser® components</b>	<b>6</b>
<b>4.0 Startup and Logon the ProcessControl2® Mode of SmartDispenser®</b>	<b>9</b>
<b>5.0 LDS™ Push-To-Connect™ Gun Assembly</b>	<b>15</b>
<b>6.0 Attach the Genius® Barrel Reservoir to LDAH, MDAH or SDAH Gun</b>	<b>16</b>
<b>7.0 Dispense Tip Locator</b>	<b>18</b>
<b>8.0 Prime the Genius® FreeFlow™ Dispense Tip</b>	<b>22</b>
<b>9.0 “Priming Only” and “Dispensing Only” SmartDispenser® Setup</b>	<b>24</b>

# 1.0 Prepare your workspace for the SmartDispenser®

- 1.1** Be sure your work area has access to electrical power. You will not need compressed air. The SmartDispenser® works without air.



- 1.2** The SmartDispenser® utilizes a WiFi (USB WiFi adapter included) or Ethernet connection via the back panel for networking, App downloads, software updates and real time production data over the cloud.

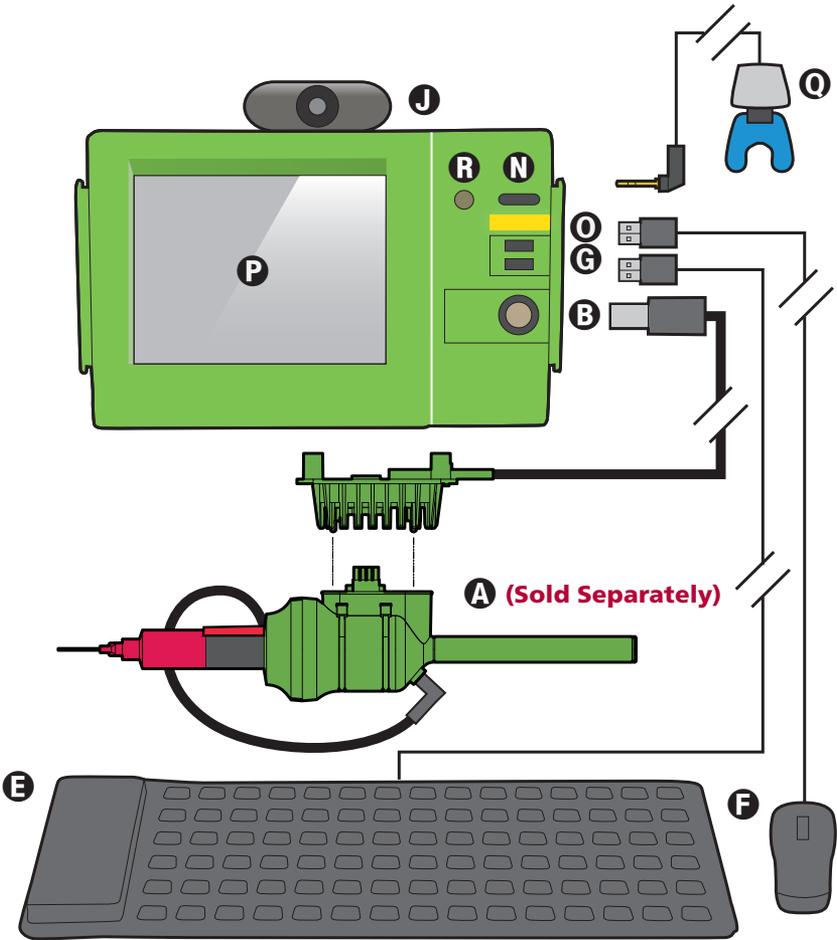


# 2.0 Unpack your SmartDispenser® System

- 2.1** Remove all items from the box.
- 2.2** Use the checklist provided to confirm that all components are present.

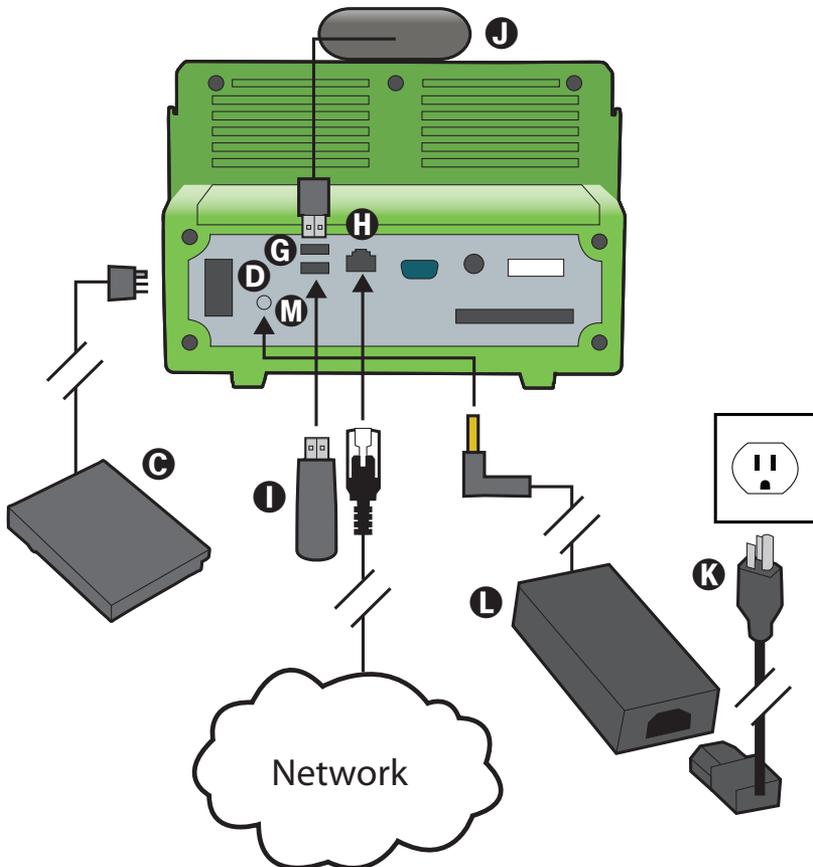
# 3.0 Hook up your SmartDispenser® components

3.1 Refer to the diagram to connect all components and peripheral devices to the SmartDispenser®.



## SmartDispenser® Components

- |                                       |                                       |                           |
|---------------------------------------|---------------------------------------|---------------------------|
| A. LDS™ Push-to-Connect™ Dispense Gun | G. USB connectors                     | M. Power Supply Connector |
| B. Gun Connector                      | H. Ethernet Port                      | N. On/Off Button          |
| C. Foot Pedal                         | I. Cisco Wireless Connectivity Device | O. Power Light            |
| D. Foot Pedal Connector               | J. Video Camera                       | P. Touch Screen           |
| E. Keyboard                           | K. Power Cord                         | Q. Earphone               |
| F. Mouse                              | L. Universal Power Supply             | R. Earphone Port          |



- 3.2 Plug SmartDispenser® Push-to-Connect™ Gun Mount **A** into gun connector **B** located on the front of the SmartDispenser®.
- 3.3 Place the foot pedal **C** on the floor and plug it into the foot pedal input connector **D** located on the back of the SmartDispenser®.
- 3.4 Connect the system keyboard **E** and mouse **F** using one of the four USB connectors **G** located on the front and back of the SmartDispenser®.
- 3.5 Connect your SmartDispenser® to an Ethernet network using the Ethernet port **H** found on the back of the unit. If you have a wireless network, install the supplied wireless connectivity device **I** in one of the USB connectors **G** located on the front and back of the unit. (Optional)
- 3.6 Plug the supplied video camera **J** into one of the four USB connectors **G** located on the front and back of the SmartDispenser®. (Optional)
- 3.7 Connect the power cord **K** to the universal power supply **L**.
- 3.8 Connect the universal power supply **L** to the power supply connector **M** on the back of the SmartDispenser®. Plug the power cord **K** into a power outlet.
- 3.9 Connect the 2.5mm earphone **Q** to earphone port **R**. (Optional)

# 4.0 Startup and Logon to the LDS9000<sup>®</sup> Traditional Mode of SmartDispenser<sup>®</sup>

4.1 Press the black startup button **N** on the front of the SmartDispenser<sup>®</sup>. The green power light will illuminate **O**. The Windows 7 operating system will now begin to boot up and in approximately two minutes the Fishman Home Screen will appear. From here you can navigate to all critical apps and functions.



**4.2** The SmartDispenser® is a Windows 7-based computer and can be left running 24/7. We recommend that you save and close all software applications when your work is done. Should you choose to shut down the SmartDispenser® you can do so by simply pressing the black start button to initiate the proper shut down sequence of the Windows 7 operating system.



**4.3** In a few moments, you will be required to fill a Genius® barrel and piston with your assembly fluid. Refer to syringe filling videos for proper filling instruction. Tap/click *Video* icon. On the left navigation panel, tap click “Videos” and select one of the listed syringe filling videos.



## 4.4

On home screen tap/click on the **LDS9000® Traditional** mode icon.



**LDS9000**

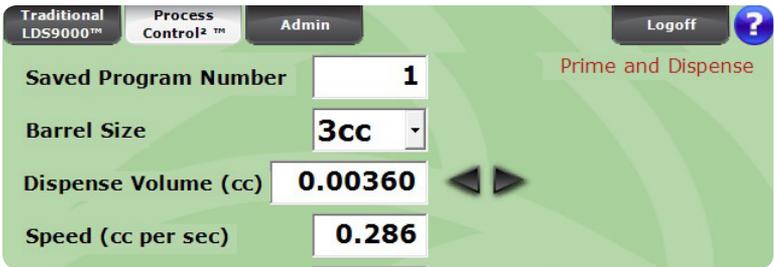
Traditional



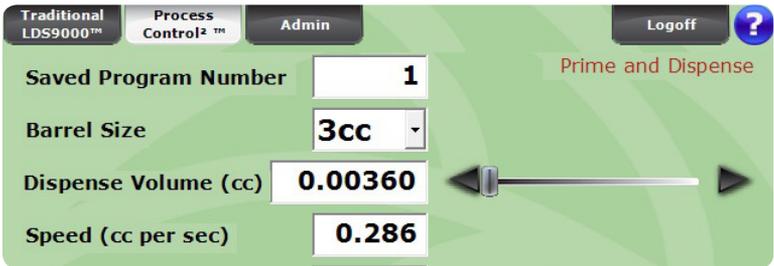
## 4.5

On SmartDispenser® Logon screen select **Administrator** from drop down menu. Tap/click password 1234, tap/click **OK**, tap/click **Logon** button. Access the **Admin** button and select the **Settings** tab. Confirm **CORRECT** settings for Machine Use Options and Prime Step Count Transfer Method. If **Dispensing Only** is selected click on the **System** tab and enter a machine name.

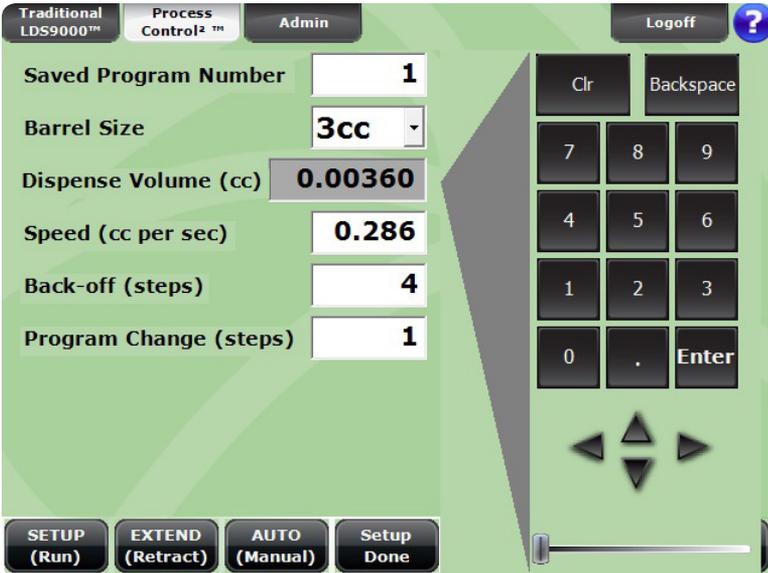
**Note:** There are three methods of programming numbers in SmartDispenser®, using either using your finger to tap the touch screen and/or the mouse to use the arrow to click on program parameter input boxes.



- 1) Tap/click the input box, left/right arrows will appear. Tap/click either arrow to increase or decrease the number.



- 2) Tap/click a second time to get the arrows to separate revealing a slide bar. Tap/click either arrow to increase/decrease the number or tap/click and hold grey slider rectangle sliding in either direction for rapid number change.



3) Tap/click and hold a third time and keypad will appear. Tap/click “CLR” button and input the desired number. Tap/click “Enter” button. Upon tap/click of “Enter” button the keypad will automatically move to the next dispense parameter.

**Tip:** Use the four arrow keys to move up and down from one dispense parameter to another.

Also, use four left/right arrow keys to increase and decrease program parameter number.

Tap/click anywhere outside the key pad to close.

## 4.6 Prime Only – USB Configuration

Traditional LDS9000™    Process Control2™    Admin    Logoff    ?

Saved Program Number

Barrel Size

Dispense Volume (cc)

Speed (cc per sec)

Back-off (steps)

Program Change (steps)

Prime Only

3.2639 cc  
0 of 3626 steps

SETUP (Run)    EXTEND (Retract)    MANUAL (Auto)    Setup Done    Save Program    Single Step    Test Dispense

4.7 On the screen the words “Prime Only” will be visible above the illustration of a filled syringe barrel. First, select the same syringe barrel size used on the SmartDispenser® in the automation system units. Any *Dispense Volume* can be chosen as you will only be utilizing the *MANUAL(Auto)* setting. Select a *Speed* setting that is approximately 25% of the fastest rate. Be certain that the dispensing gun is fully retracted, the step count at “0” and the footer buttons set to *EXTEND(Retract)* and *MANUAL(Auto)*.

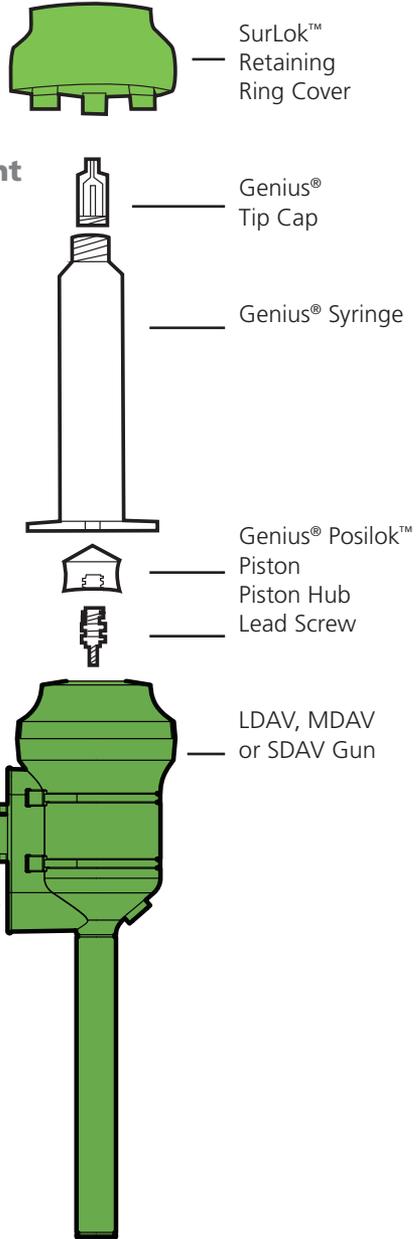
**Note:** “Prime Only” function is available exclusively in the Traditional 9000 menu. “Dispense Only” function is available in both Traditional 9000 and PC<sup>2</sup> menus.

# 5. LDS™ Push-to-Connect™ Gun Assembly

5.1 The LDS™ Push-to-Connect™ dispense gun are available in different configurations.

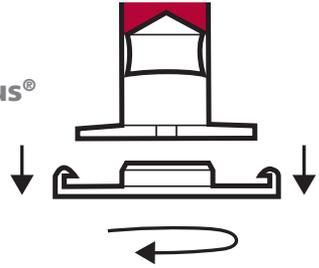
- LDAV (Large Dot Any Viscosity)
- MDAV (Medium Dot Any Viscosity)
- SDAV (Small Dot Any Viscosity)

The gun connectors are identical for easy hook-up to the LDS™ Push-to-Connect™ dispense gun.

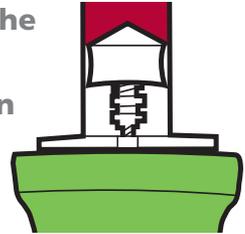


## 6.0 Attach the Genius® Barrel Reservoir to LDAV, MDAV or SDAV Gun

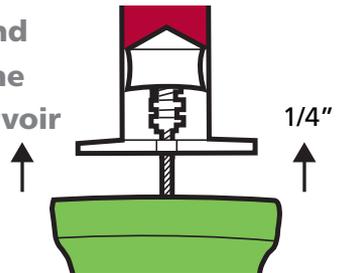
- 6.1 Remove the seal from the Genius® barrel reservoir pre-filled with your assembly fluid.



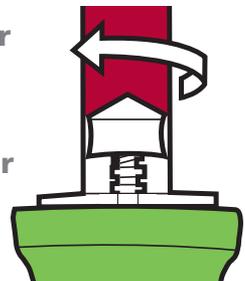
- 6.2 Holding the dispensing gun with the piston hub pointed upward, place the barrel reservoir over the piston hub of the dispensing gun.



- 6.3 Holding both barrel reservoir and dispense gun loosely, step on the foot pedal until the barrel reservoir ears are raised at least 1/4" (6.35 mm) above the plate.



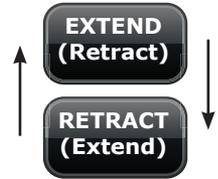
- 6.4 Manually twist the barrel reservoir in a clockwise direction until the luer lock connector is finger tight and the ears of the barrel reservoir are flush against the retaining plate.



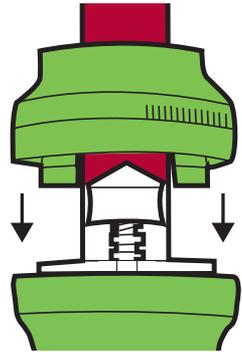
### CAUTION:

Do not over-tighten the barrel reservoir. It is only necessary to make a loose connection to bring the barrel reservoir flush. The retaining ring holds the barrel reservoir in place.

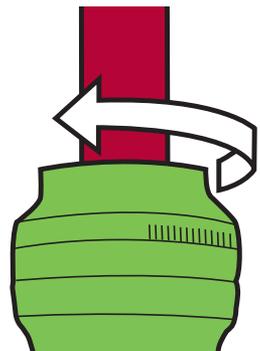
- TIP:** It may be necessary to tap/click the *EXTEND(Retract)* button to *RETRACT(Extend)* and step on the foot pedal to bring the ears completely flush to the retaining plate. If you set the switch to *RETRACT(Extend)*, be sure it is set back to *EXTEND(Retract)* before proceeding.



- 6.5** Slide the retaining ring cover over the Genius® barrel reservoir and align the legs with the open slots of the adapter plate.

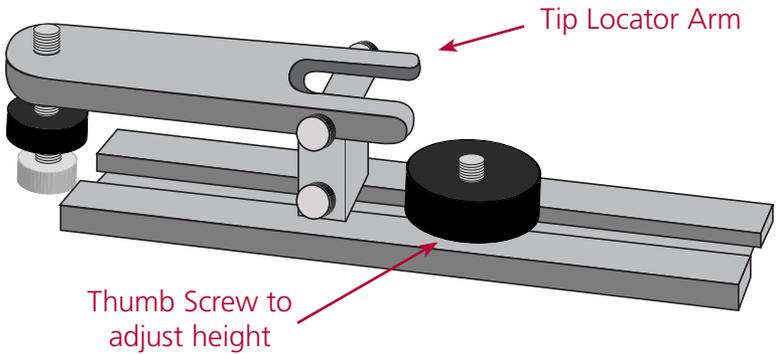


- 6.6** Rotate the retaining ring cover in a clockwise direction until it locks in place. The barrel reservoir is now firmly connected to the dispenser gun.

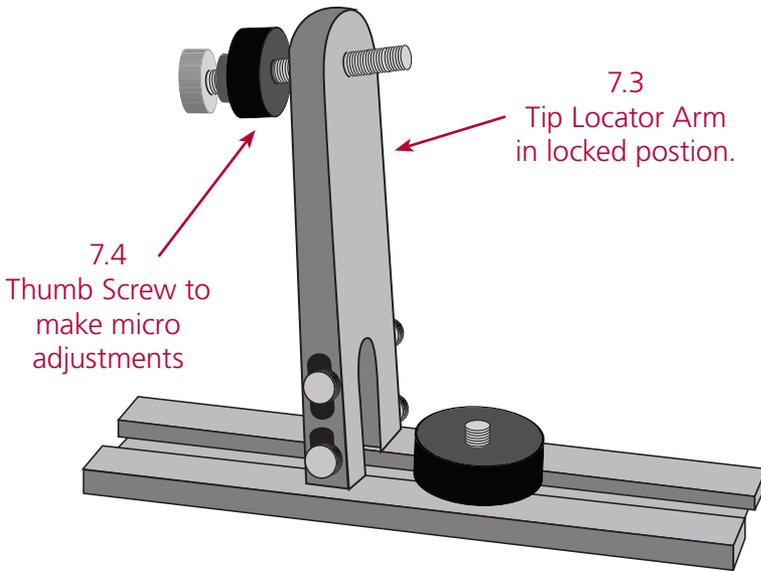


# 7.0 Dispense Tip Locator

- 7.1 If you are using a LDS dispense gun in an automated environment, secure the Dispense Tip Locator to the gun mount bracket with the screws provided and follow these steps before priming the dispense tip.
- 7.2 Adjust the thumb screw on the rail to approximate the height of the LDS dispense gun with filled syringe barrel and dispense tip attached.

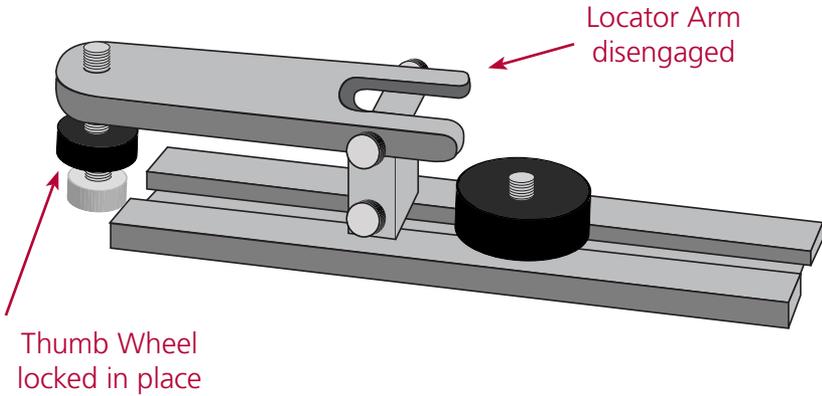


**7.3 Engage the tip locator arm by lifting it 90° and lock it in place.**



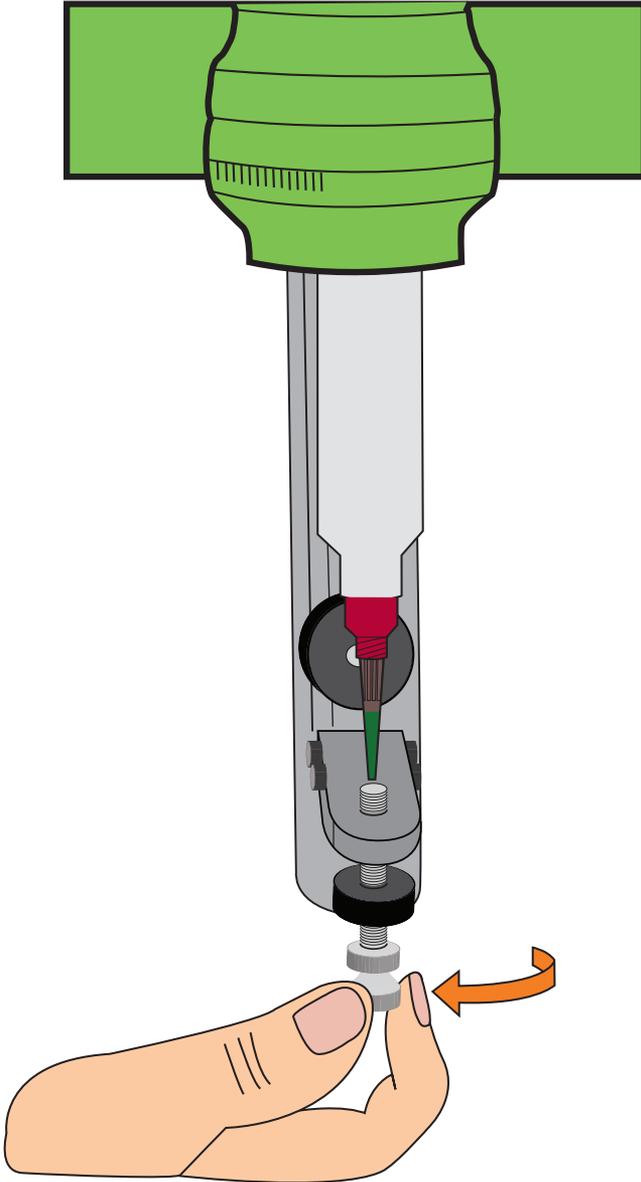
**7.4 Use the thumb screw on the arm to make micro height adjustments.**

- 7.5** When adjusted, lock the thumb wheel into place to capture the height. Gently tug the tip locator arm to disengage and remove the LDS dispense gun.



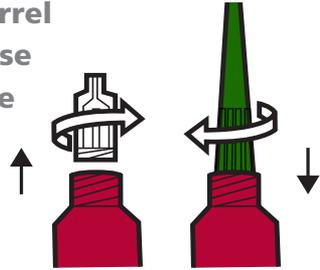
- 7.6** Add a second LDS dispense gun with filled syringe and dispense tip and lock the locator arm in place. If necessary, make a slight adjustment to the luer lock dispense tip until it comes into contact with the end of the thumb screw.

- 7.7** Gently tug the tip locator arm, remove the LDS dispense gun and continue to repeat as necessary.



# 8.0 Prime the Genius® FreeFlow™ Dispense Tip

8.1 Remove tip cap from the barrel by twisting counter-clockwise and pulling. Attach the same dispense tip being used on the automation system.



8.2 Hold the dispense tip over the provided dot chart as shown, press the foot pedal intermittently until the fluid begins to flow towards the end of the Genius® dispense tip.

**Goal:** To stop the fluid when flush with the end of the Genius® dispense tip with no air pockets.

8.3 **If too little fluid:** Continue to press on the foot pedal intermittently causing the fluid to flow to the tip.



**8.4** If too much fluid: On the control panel, tap/click the *EXTEND (Retract)* button to *RETRACT (Extend)*.

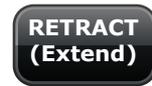
**8.5** Step on the foot pedal in small short pulses until the fluid stops flowing from the tip.

**Goal:** To stop the forward motion of the fluid by retracting the piston and sucking the fluid back.

**8.6** Clean the tip so it appears as pictured.

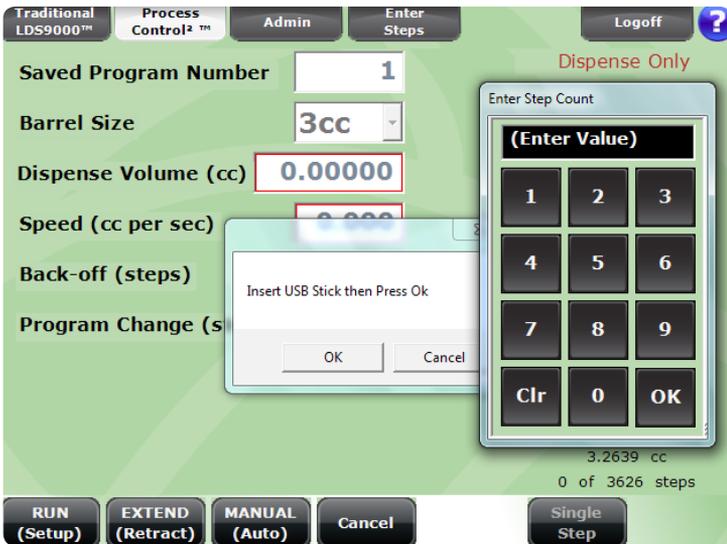
**Note:** If the material continues to ooze, repeat step 8.4 to 8.5.

**YOU ARE NOW READY TO DOWNLOAD STEP COUNT.**

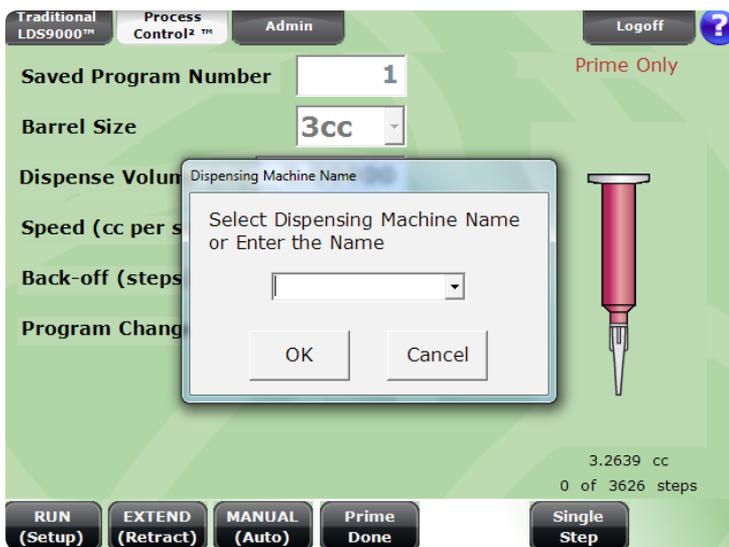


# 9.0 “Priming Only” and “Dispensing Only” SmartDispenser® Setup

## 9.1 Insert USB Stick & Press Prime Done Again



- 9.2.1 Tap/click the *Prime Done* button. You will be prompted to insert a USB stick. Allow a few seconds for the SmartDispenser® to recognize the stick and tap/click the *Prime Done* button again. Enter the name of the designated “Dispensing Only” only unit in the pop up box and select OK.



## 9.2.2 If you are providing a primed gun and data for one “P-T-C Gun Mount Gun” in the automation system skip to step 9.3.

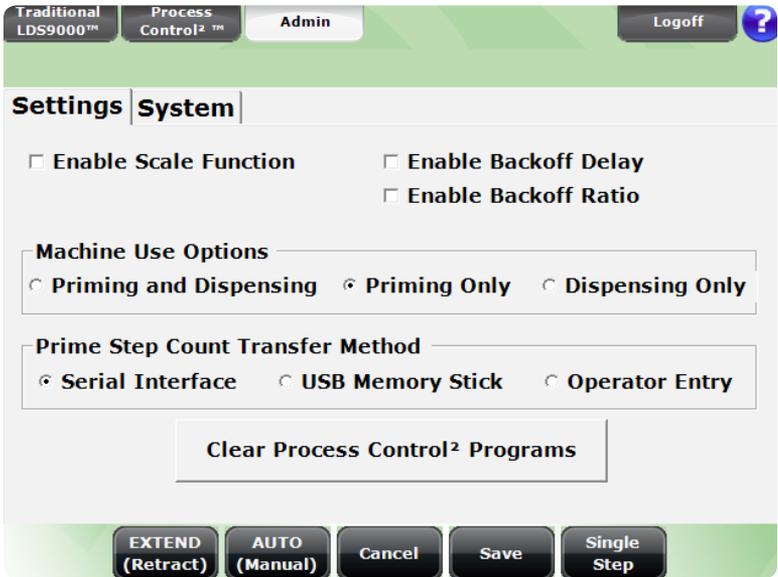
**NOTE:** If you are priming guns for multiple “P-T-C Gun Mounts” units it is essential that the guns be labeled or marked in such a way that they only be used with the designated “Dispensing Only” unit. The saved step count information for each gun can vary slightly. Optimal performance can only be achieved by matching the precise step count for the dispense gun and syringe barrel to the specific SmartDispenser®.

## 9.2.3 If you are providing primed guns for multiple “P-T-C Gun Mounts” in the automation system return to step 9.2.1.

## 9.3 Dispense Only – USB Configuration

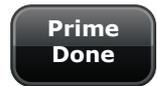
The “Dispense Only” unit can be set to either the *Traditional LDS9000™* or *Process Control2®* screen with the selected dispense program. The step count in the illustration on the right should be 0. Insert the USB stick, allow a few seconds for the SmartDispenser® to recognize it and then click the *Enter steps* button. Select O.K. and the step count will be transferred for the designated dispensing gun.

### 9.3.1 Prime Only – Serial Configuration



9.3.2 After SmartDispenser® units have been setup as either “Priming Only” or “Dispensing Only”, select “Serial Interface” as a means of transferring step count. Connect the units via a 9-pin Null Modem Serial Cable.

9.3.3 Perform priming steps with the dispense gun and syringe barrel in the same manner described in steps 9.2 through 9.2.3. When completed tap/click the *Prime Done* button.



**NOTE:** After the data has been transferred and accepted by the “Dispensing Only” unit the step count will automatically re-set to 0.

## 9.4

### Dispense Only – Serial Configuration

Traditional LDS9000™ Process Control2™ Admin Enter Steps Logoff ?

Dispense Only

Saved Program Number 1

Barrel Size 3cc

Dispense Volume (cc) 0.01980

Speed (cc per sec) 0.328

Back-off (steps) 25

Program Change (steps) 560

2.9857 cc  
309 of 3626 steps

RUN (Setup) EXTEND (Retract) AUTO (Manual) Cancel Single Step

### 9.4.1

The “Dispense Only” unit can be set to either the *Traditional LDS9000™* or *Process Control2®* screen with the designated dispense program. The step count in the illustration on the right should be at 0. Tap/click the *Enter Steps* button. A pop-up message will appear with transferred step count. Tap/click *OK* and the data will be transferred.

## 9.5

### Prime Only – Operator Entry

The screenshot shows the 'Admin' settings page for a SmartDispenser. At the top, there are tabs for 'Traditional LDS9000™', 'Process Control²™', and 'Admin', along with a 'Logoff' button and a help icon. The 'System' tab is active. Under 'Settings', there are three checkboxes: 'Enable Scale Function', 'Enable Backoff Delay', and 'Enable Backoff Ratio'. Below these are two radio button groups. The first group, 'Machine Use Options', has 'Priming and Dispensing', 'Priming Only' (selected), and 'Dispensing Only'. The second group, 'Prime Step Count Transfer Method', has 'Serial Interface', 'USB Memory Stick', and 'Operator Entry' (selected). A 'Clear Process Control² Programs' button is located below the radio buttons. At the bottom, there are five buttons: 'EXTEND (Retract)', 'AUTO (Manual)', 'Cancel', 'Save', and 'Single Step'.

**9.5.1** After SmartDispenser® units have been setup as either “Priming Only” or “Dispensing Only”, select “Operator Entry” as a means of transferring step count.

**9.5.2** Perform priming steps with dispense gun and syringe barrel in the same manner described in steps 9.2 through 9.2.3. When completed record step count manually (pen and paper, for example).

**9.5.3** If you are providing primed guns for multiple “Dispensing Only” stations connect the next dispensing gun. With the settings at *RETRACT (Extract)* and *MANUAL (Auto)*, activate foot pedal or finger switch. This will return the step count to 0 without affecting the gun.

**NOTE:** If you are priming guns for multiple “Dispensing Only” units it is essential that the guns be labeled or marked in such a way that they only be used with the designated “Dispensing Only” unit. The saved step count information for each gun can vary slightly. Optimal performance can only be achieved by matching the precise step count for the dispense gun and syringe barrel to the specific SmartDispenser®.

## 9.6 Dispense Only – Operator Entry

The screenshot shows the operator interface for the SmartDispenser. At the top, there are navigation buttons: Traditional LDS9000™, Process Control²™, Admin, Enter Steps, and Logoff with a help icon. The main screen displays the following fields:

- Saved Program Number: 1
- Barrel Size: (empty)
- Dispense Volume (cc): (empty)
- Speed (cc per sec): (empty)
- Back-off (steps): (empty)
- Program Change (steps): (empty)

A pop-up window titled "Enter Step Count" is overlaid on the screen, containing a numeric keypad with buttons for digits 1-9, 0, Clr, and OK. The keypad is currently showing "(Enter Value)".

On the right side of the screen, there is an illustration of a syringe and the text "Dispense Only". Below the syringe, the current volume is displayed as "3.2639 cc" and "0 of 3626 steps".

At the bottom of the screen, there are several control buttons: SETUP (Run), EXTEND (Retract), MANUAL (Auto), Setup Done, Save Program, Single Step, and Test Dispense.

**9.6.1** Connect primed dispense gun to SmartDispenser® unit. Tap/Click *Enter Steps* button. Using the pop-up calculator enter the step count.



# SmartDispenser®

Meets applicable CE requirements.

Administrator Manual

Priming/Dispensing Only Setup Guide | Version 3

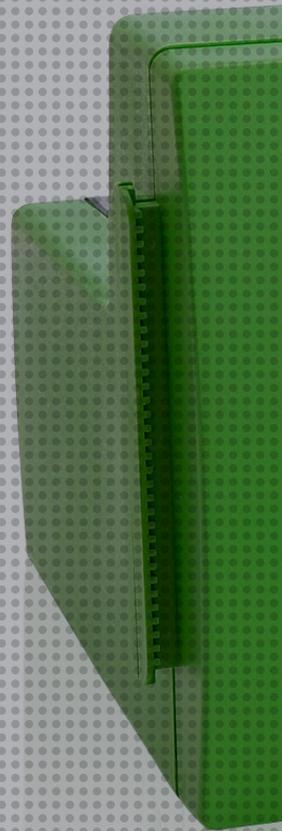
This manual is for the express and sole use of Fishman SmartDispenser® users and purchasers, and no portion of this manual may be reproduced in any form.

Fishman, SmartDispenser®, Genius®, AirFree®, PosiLok™, FreeFlow™, SafeLok™, SurLok™, DripFree™, LDS™, LDS9000®, Push-To-Connect™ and ProcessControl2® are all trademarks of Fishman Corporation.

© 2013 Fishman Corporation

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.





**Fishman Corporation**

192 South Street  
Hopkinton, MA 01748  
United States

[www.fishmancorp.com](http://www.fishmancorp.com)

US & Canada: 800-433-2115  
United Kingdom: 1905 456008  
Europe: +441905 456008  
Worldwide: 1-508-435-2115