



# MAC FAUCETS, LLC

## Electronic Soap Dispensers

### ALL PYOS INSTALLATION MANUAL



**For All**  
PYOS SOAP  
DISPENSERS

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# MAC FAUCETS, LLC

## Mounting Methods

There are 2 options available for mounting pump housing (gray plastic enclosure):

**Spout Mount Method:** Pump housing is mounted onto the spout shank. See below left.

**Wall Mount Method:** Pump housing is mounted to a bracket which is affixed to the wall. See below right.

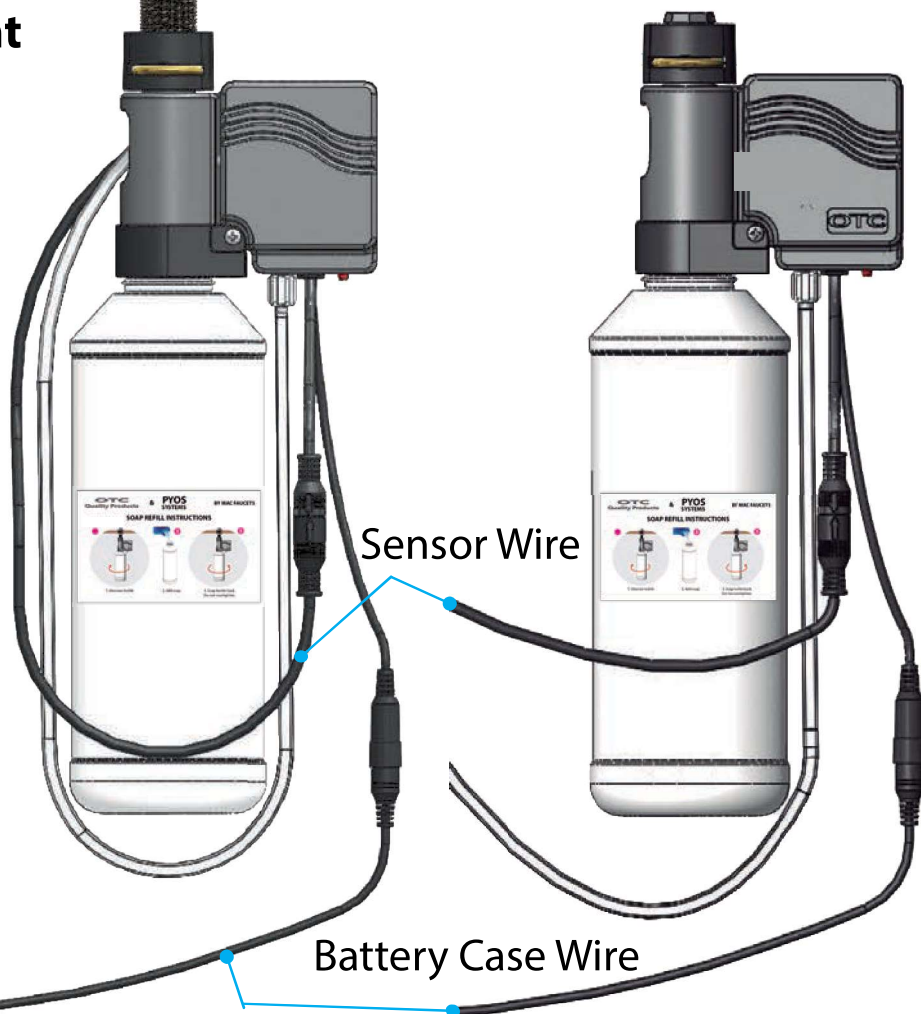


**Model PYOS-17**  
Standard 4" reach



**Spout Mount Method**

**Wall Mount Method**



Sensor Wire

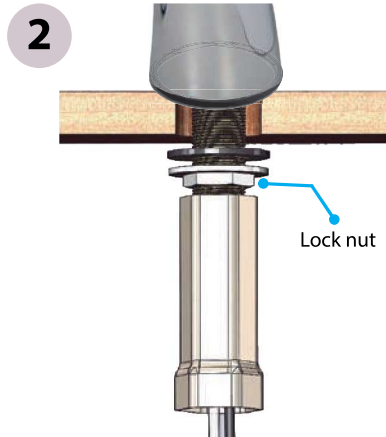
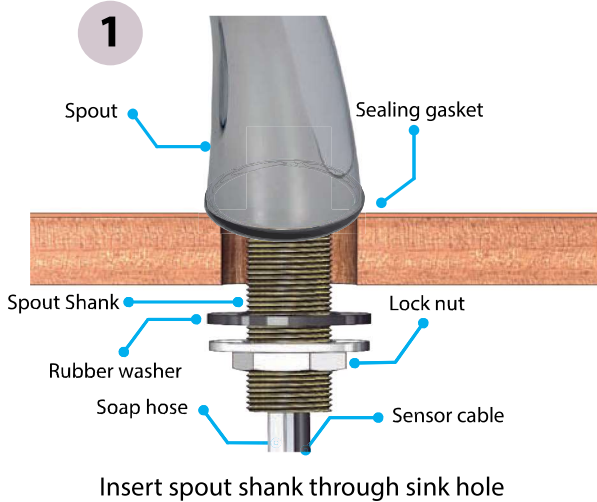
Battery Case Wire

## Tools Needed



## Deck Mounting Installation

**Before proceeding, refer to Page 2 for mounting methods, and to page 4 for proper installation of soap dispenser relative to faucet.**

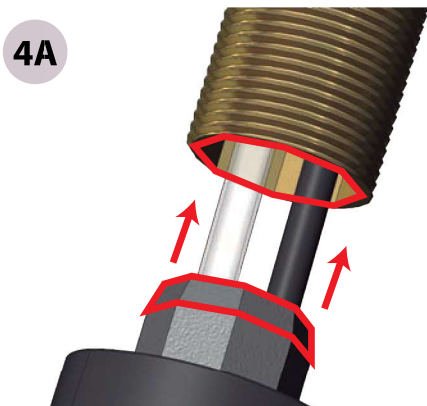


Use proper tool to tighten lock nut  
Careful not to damage hose & cable  
*Installations using 1 gallon soap container, please proceed to page 7.*

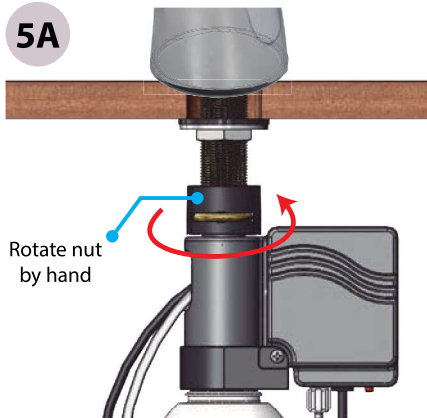
**Spout Mount Method. See page 2**



Insert sensor cable **FIRST** then hose into tubular part of pump housing

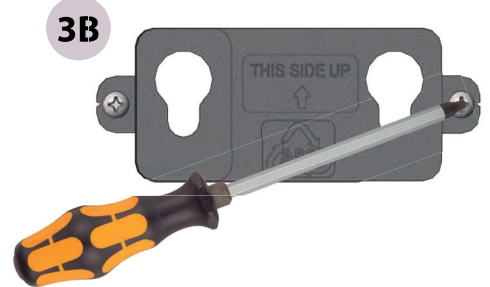


Align octagon detail of pump housing with octagon ID detail of shank and push

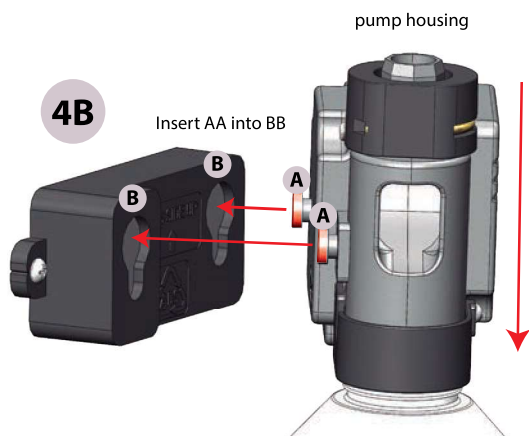


Fasten pump housing onto spout shank by rotating plastic nut by hand only. Do not overtighten  
**Skip steps 3B and 4B, go directly to 6 & 7**

**Wall Mount Method. See page 2.**



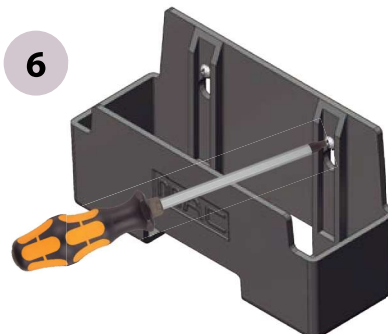
Mount wall bracket onto wall in a level horizontal position. Follow arrows showing UP side.



Install pump housing onto wall bracket (insert AA into BB and push enclosure down).

### Instructions 6 & 7 below for battery powered units only.

*For AC powered units, skip 6 & 7. Go directly to page 5, step 8*



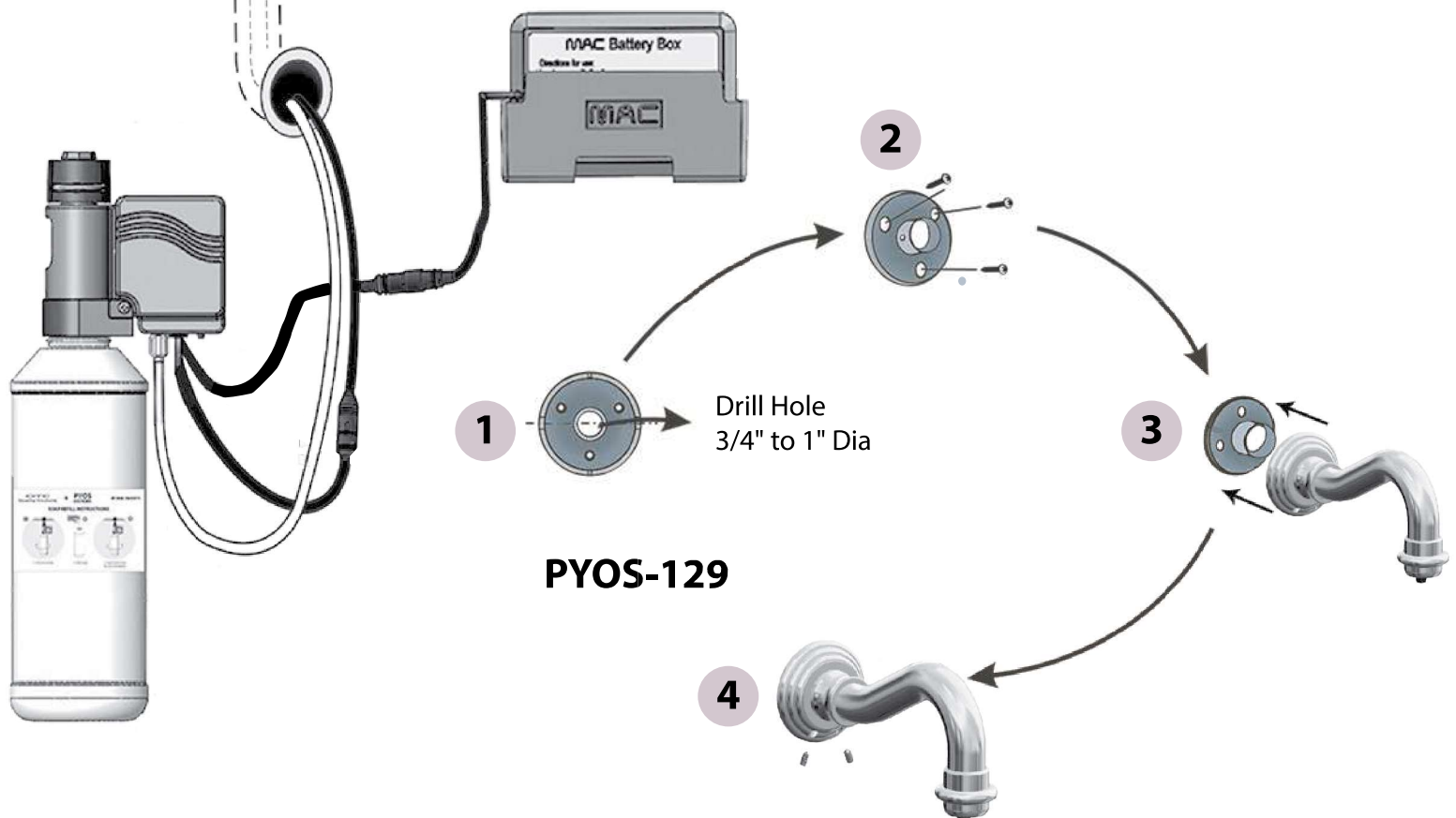
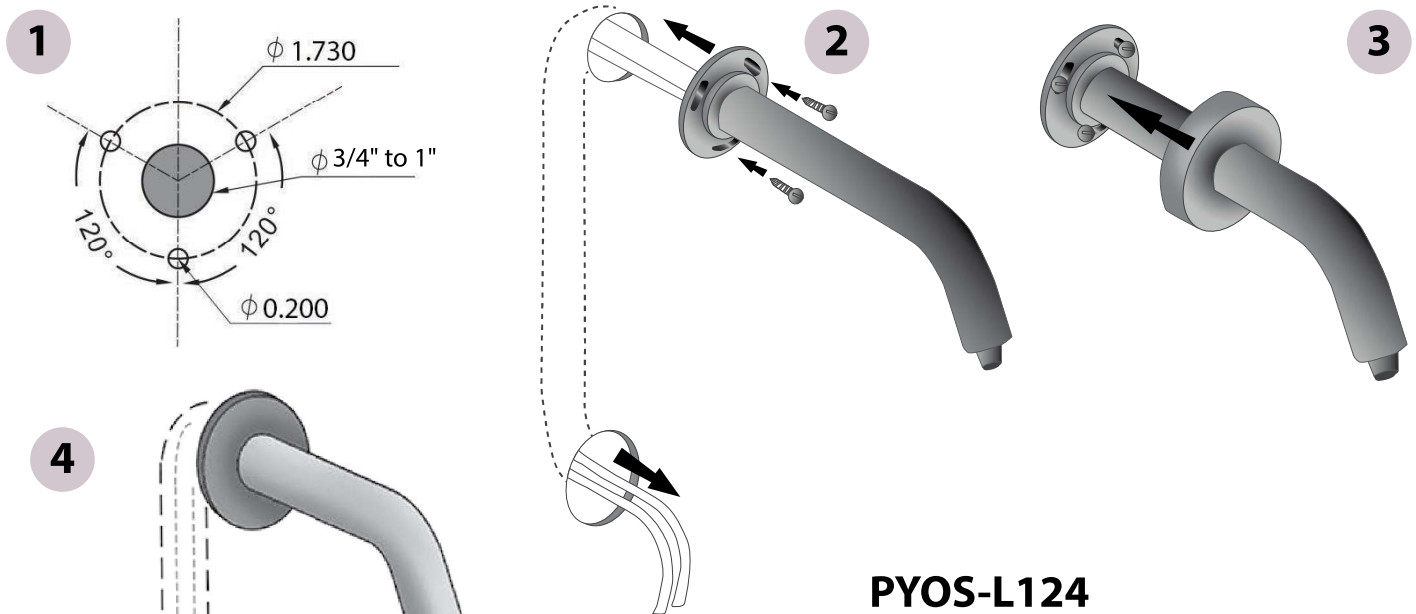
Install Battery case holder onto wall in a level horizontal position.



Place battery case inside of battery holder so that case label is legible



## PYOS wall mounted soap dispensers



8



OPTIONAL: 110V AC Power supply

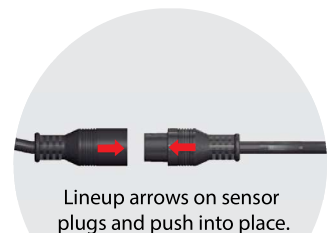
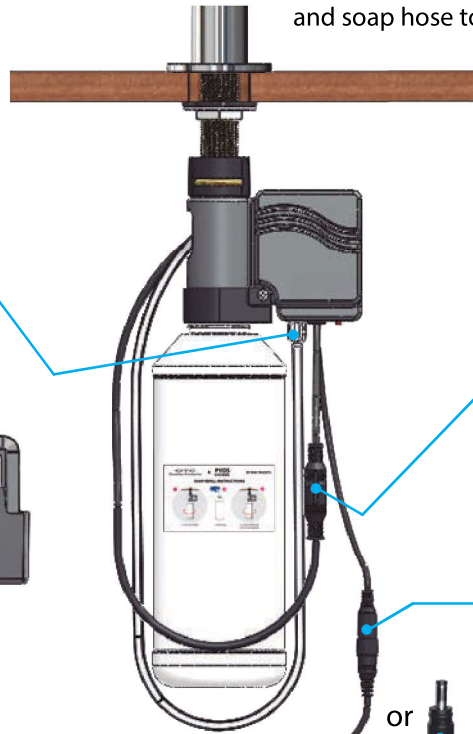
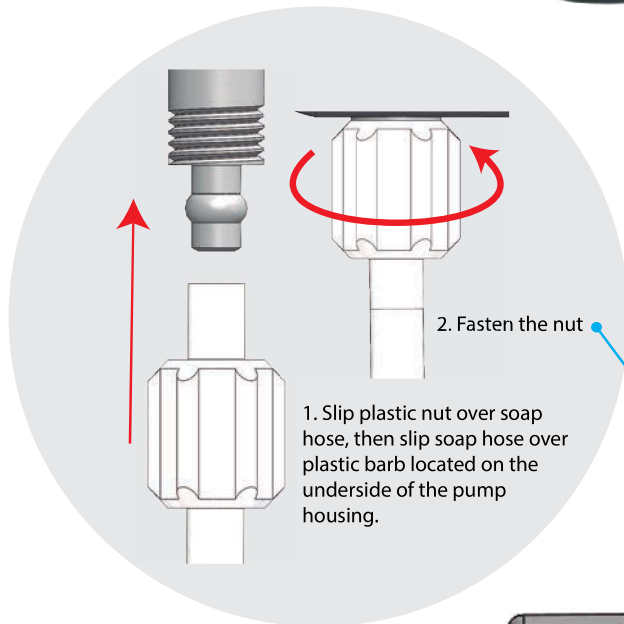
Before proceeding to step 8 make sure wall socket has power **OTHERWISE** soap dispenser will not function

Soap dispensers with **optional AC adapter**: Plug AC adapter into wall socket as usual.

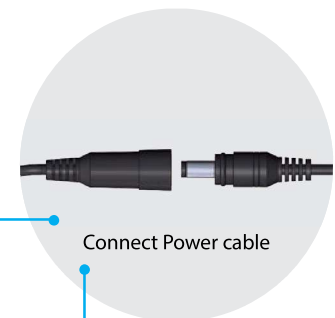
9

Before proceeding to step 9 make sure no objects are present under spout or in front of sensor **OTHERWISE** soap dispenser will not function properly

Connect sensor plug, Power cable, and soap hose to pump housing.

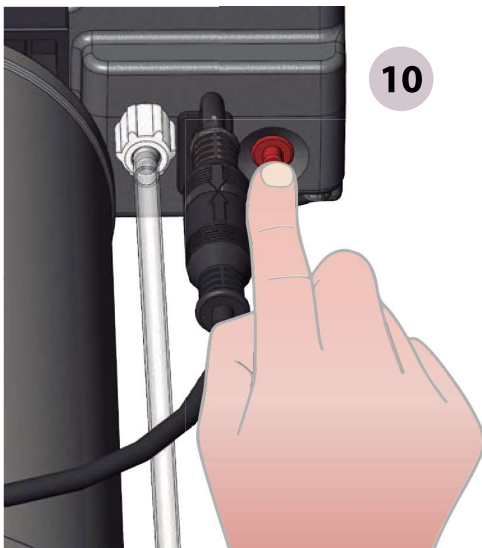


Lineup arrows on sensor plugs and push into place.



Connect Power cable

10



Before proceeding to step 10 make sure soap bottle is filled with liquid soap. See page 6, or page 7 (depending on the type of soap bottle or container used) for soap refill instructions

Press and hold the primer button located on the underside of the pump housing until soap pours out of nozzle

## SOAP REFILL INSTRUCTIONS

**DO NOT USE HEAVY CREAM SOAPS OR GRIT TYPE SOAPS**

It is best to use the same brand of soap every time, and not to let dispenser remain dry for too long

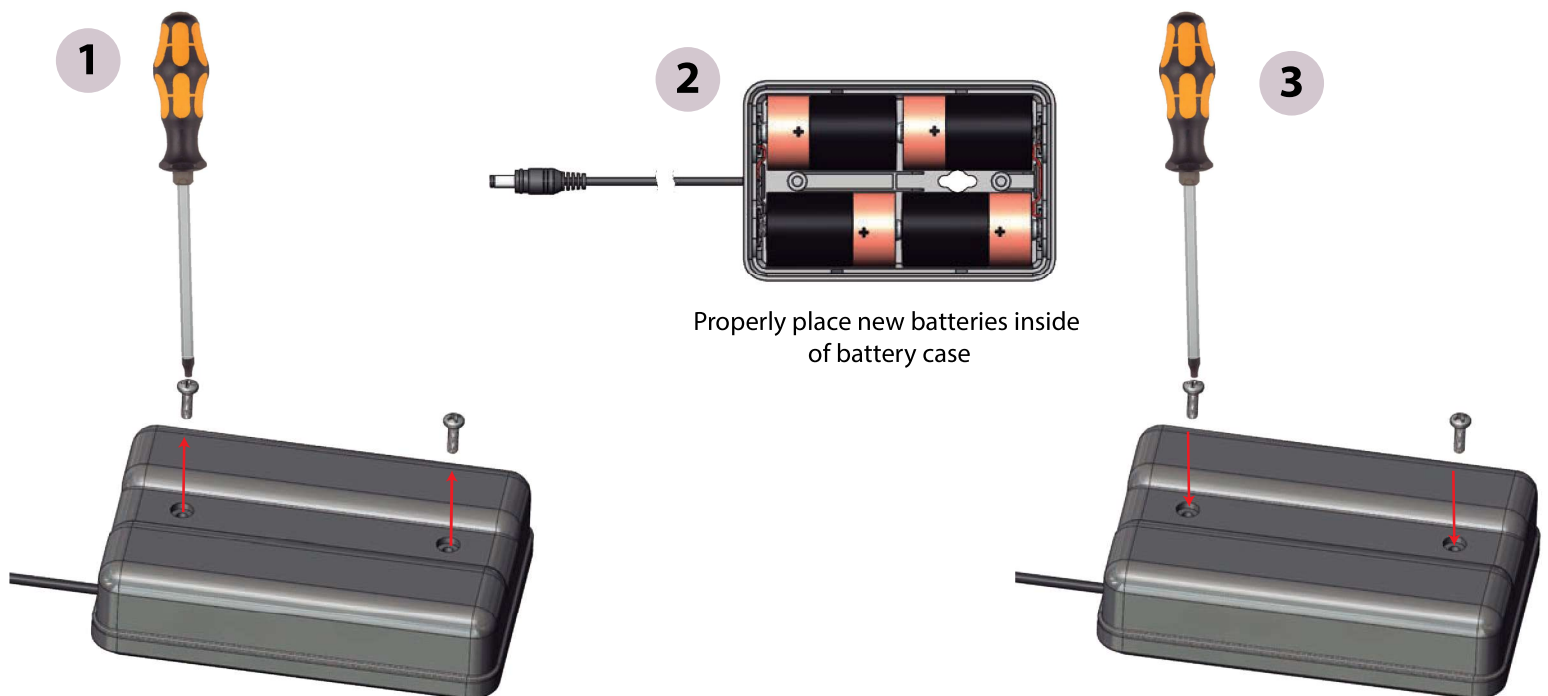


1. Unscrew the empty bottle

2. Add liquid soap into the empty bottle

3. Affix bottle filled with soap onto pump housing. Do not overtighten.

## BATTERY REPLACEMENT INSTRUCTIONS



Unfasten 2 cover screws, and lift cover up and away from batteries

Properly place new batteries inside of battery case

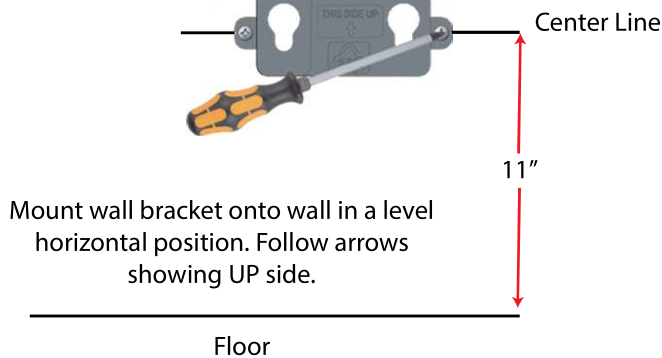
Place cover back onto battery case and fasten 2 cover screws

# GALLON CONTAINER INSTALLATION

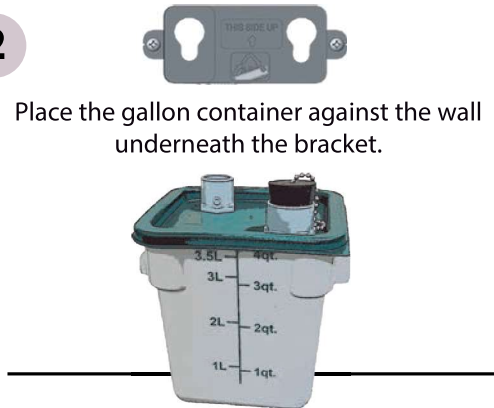
NOTE : CONTINUE FROM STEP 2, PAGE 3 OF THE MANUAL INSTALLATION

GALLON CONTAINER MUST BE PLACED ON LEVEL SURFACE CAPABLE OF SUPPORTING 10LB WEIGHT OR GREATER.

1

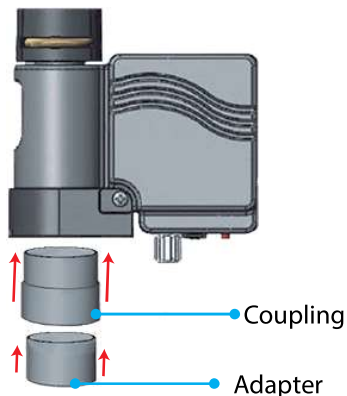


2



3

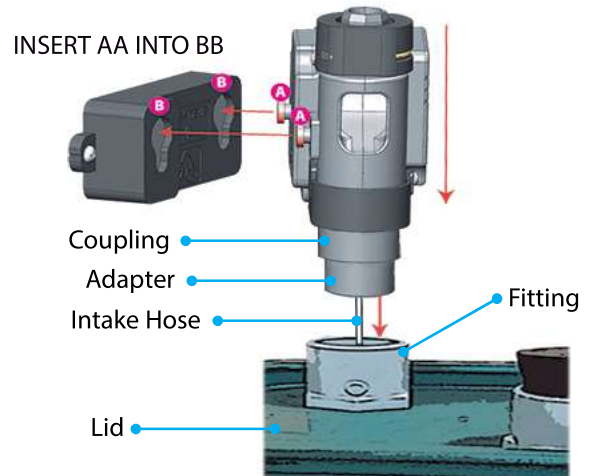
Insert the smaller diameter of the coupling into the threaded side of the pump housing, then insert the adapter in the coupling



**NOTE: Coupling and adapter are used only for Gallon Container**

4

Install pump housing onto wall bracket (insert AA into BB and push pump housing down), insert the adapter onto the fitting of the lid at the same time

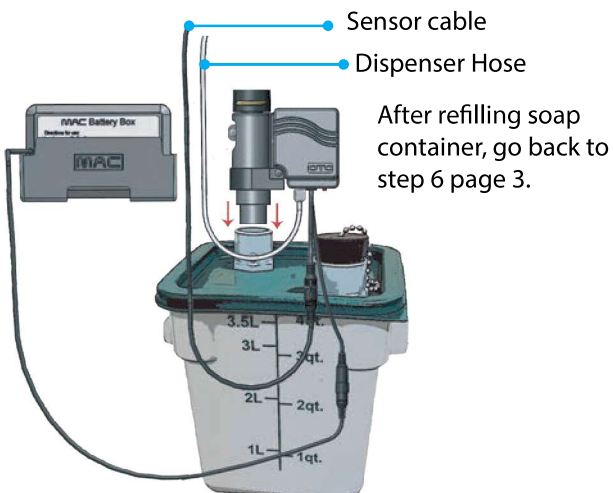


## Refill Instructions

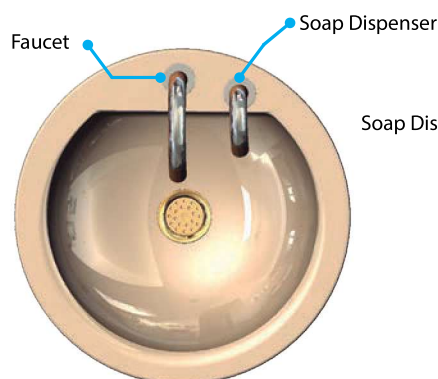
Remove the plug for refill

Put back after refill

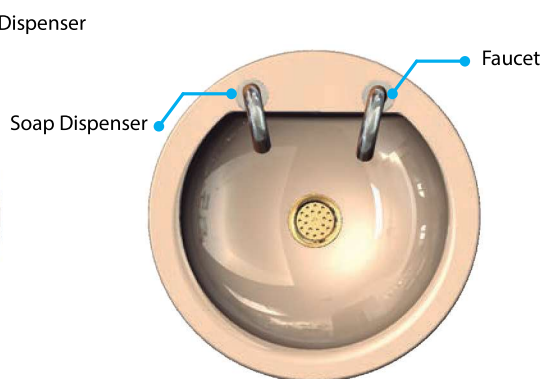
Do not use heavy cream soaps or grit type soaps



## Installation Option A



## Installation Option B



### Proper Installation of Soap Dispenser Relative to Faucet

Electronic soap dispenser as well as faucet SHALL be accessible to all users.

Special consideration must be given to electronic soap dispenser location to prevent accidental activation

## OPTIONAL EQUIPMENT



**A-14381**

1 Gallon Soap Container



**A-19000**

AC Adapter



**A-10420**

Remote Control



**FA444-17**

Matching Electronic Faucet



**FA400-101**

Electronic Faucet



**FA-3260**

Electronic Faucet



**FA43-124**

Electronic Faucet



**FA43-129**

Electronic Faucet

**More Models are Available**

## LIMITED WARRANTY

MAC FAUCETS warrant this product to be free of defects for a period of one year from date of purchase. MAC FAUCETS will replace, free of charge, during this warranty period, parts that prove defective when properly installed and under normal use and service. Damage that occurs as a result of abuse, improper installation, environmental conditions, or improper application will void this warranty. Products or components that have been altered or in any way modified will not be covered under this warranty. This warranty does not cover installation or any other labor charges. This warranty does not cover shipping and handling of both replacement parts and returned defective parts. Defective products must be shipped back to MAC FAUCETS facilities with postage and handling prepaid, along with dated proof of purchase.



# MAC FAUCETS

## FA43 WALL MOUNT FAUCETS

### Installation Procedure:

**Take a moment to view drawings and read “special Installation note” on pages 4 and 5 of this manual before proceeding with installation. Connect Faucet Automator model FA43 exactly as shown in drawing, with sensor cable connection pointing down, water inlet on the right, water outlet from below. Failure to install Faucet Automator Model FA43 exactly as shown will result in premature product failure and will void all warranties including extended warranty.**

Make sure wall surface area is clean and free of debris.

- > Faucet FA43-124: slide supplied disc (flashing) over spout with smooth surface facing forward.
- > Faucet FA43-125 place supplied decorative ring onto end of spout. This faucet requires 1/2” nipple (not supplied).
- > Faucets FA43-129 and FA43-130 require 1/2” nipple (not supplied).

Install new faucet by fastening spout to pipe elbow which has been installed behind the wall. Elbow must be 1/2” NPT

**Please be especially careful not to mar the faucet surface.**

Install Sensor by placing sensor wire through the hole designated for sensor.

Using “Plumbers Putty” or Silicon as a bedding compound, push sensor body into hole and allow to hold.

**Make sure that wire is not crimped or cut during installation. Cutting or severely crimping sensor wire will cause faucet to malfunction and will also void warranty. Sensor wire is specifically designed to resist damage, simple careful steps and common sense is all that is necessary for a complete and rewarding installation process.**

**Locate a spot on the wall (below counter) that you feel is suitable for installing Faucet Automator FA43. The spot selected should be within reach of braided hose and sensor wire, and should not be located below an area with potential water leaks.**

1. Place Faucet Automator FA43 against the wall and mark the 2 spots where mounting holes will be. Using drill size 1/4” drill 2 holes. Insert supplied anchors in the holes.
2. Fasten Faucet Automator FA43 using supplied fasteners.
3. Remove stainless steel braided hose from package and fasten to brass pipe below sink that is designed to deliver water to the spout. Install the other end of the hose to Faucet Automator’s water outlet **located at the bottom of the FA43 Automator.**
4. Align groove on sensor plug with groove on Faucet Automator FA43 sensor receptacle, insert plug into receptacle and push.
5. If Supplied, connect mixing valve to inlet side of faucet Automator **located on the right side of the FA43 Automator.**

**Before proceeding to step the next step, purge both hot and cold water lines for at least a minute each at high volume. Purging water lines clears out dirt and debris that would otherwise find its way to screen filter.**

**\*\*\*For single water source application: Install cold water supply hose to Faucet Automator’s water inlet. Do not install hot water supply hose only in single water source application as this might result in scalding injury..**

**\*\*\*For hot/cold water application: Install hot and cold water supply hoses to inlet side mixing valve. Turn angle stops on. Check for leaks.**

**MAC FAUCETS**

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## Operation:

Place hands under spout and directly in front of sensor, water will begin to flow out, flow rate is governed by aerator and supply pressure. Water mixture is selected at MAC A-12910 mixing valve (when used) as well as water temperature in supply pipes. PLEASE REMEMBER, AUTOMATIC FAUCETS EMPLOY "PRESENCE" NOT "MOTION" SENSORS. AN IDLE OBJECT PLACED DIRECTLY UNDERNEATH SPOUT WILL IMMEDIATELY ACTIVATE FAUCET.

Remove hands and water will cease to flow within 1-3 seconds.

If hands are left underneath spout for 30 seconds, water will automatically shut off. To initiate flow again move hands away from faucet and start at step 1.

When attempting to run water over small objects such as tooth brush, it may be necessary to bring object closer to sensor to initiate water flow, when water begins to flow, move object back under stream of water.

## Battery Replacement Instructions:

Batteries should provide 12 to 24 months of reliable service mostly depending on the make of battery used and the frequency of usage among other factors. Battery weakness is indicated by constantly flashing LED light within the sensor capsule. When replacing batteries **please view drawings on page 4.** and follow these simple steps:

1. Unfasten the 4 Philips screws located on face of the Faucet Automator FA43.
2. Hold both water fittings down and carefully remove enclosure cover.
3. Pull black battery holder out, and unfasten 4 Phillips screws. **Be careful not to damage wire.**
4. Replace batteries with **4 AA Duracell Copper Top** batteries only.  
Make sure batteries are oriented properly in the battery holder.
5. Reassemble black battery holder, and fasten 4 Phillips screws.
6. Re-install battery holder into the Faucet Automator.  
If battery holder was unplugged during removal, replug making sure the male and female plugs are oriented correctly.
7. Test faucet prior to placing enclosure cover back on.
8. Place enclosure cover back on. Fasten 4 Philips screws.

## Sensor Range Adjustment:

Sensor range is self adjusting for optimal performance the moment the sensor is plugged into Automator. When plugging sensor into Automator, make sure that no object are placed in front of sensor (such as boxes, tools, etc..)

Sensor range may be adjusted for closer range by: a. disconnecting sensor from Automator. b. placing a **TAN OBJECT such as SHIPPING BOX** in front of sensor at the desired distance, and c. replugging sensor into Automator triggering the sensor to adjust itself to the desired distance. This process might be repeated in order to achieve the desired performance.

**\*\*\*\*\* Sensor wire must be unplugged for 60 seconds minimum before replugging \*\*\*\*\***

**Please note: Sensors that are adjusted for longer range may be triggered unnecessarily by individuals walking in front of sink. Please adjust sensor range with that in mind.**

## Trouble Shooting:

*(Always make sure that sensor lens is clean and Duracell Copper Top batteries are fresh)*

*Faucet does not operate, red light does not blink in response to approaching objects:*

1. Sink is blocking "sensor's vision", reinstall properly.
2. Hands are not placed properly under spout and inline with sensor.
3. Batteries need replacing. See battery replacement instructions.
4. Batteries installed improperly in battery pack, battery harness not plugged in properly, see installation instruction, and battery replacement instructions.
5. Sensor wire loose, unplugged, plugged improperly, plug sensor wire properly. Please call MAC Faucets for instructions.

*Faucet does not operate, red light DOES blink in response to approaching objects:*

1. No water, very low water pressure in supply pipes, supply valves closed.
2. Water pressure very high, well above 115 PSI.
3. Screen filter severely clogged up.
4. Supply hoses severely kinked.
5. Batteries low or defective, replace batteries.

*Faucet operates on and off “by it self”:*

1. Sensor range adjusted too long, and must be adjusted for shorter range.
2. Objects (such as sink lip) may be present in close proximity to sensor.
3. (Rare) Severe transient infrared signal present in the environment, probably caused by a defective neon light.

*Faucet leaks, drips:*

Constant leaks or drips indicate defective solenoid valve, send Faucet Automator for repair or contact an authorized plumbing professional.

*Loud thump noise when faucet turns on and off.*

This is an issue commonly associated with diaphragm type valves such as washing machine valves, dishwasher valves, etc. The noise is generally present in the piping system. Clear winner remedies are to:

1. Lower water flow rate (see flow rate adjustment section of this manual).
2. Install “hammer arrestors” in close proximity to your automatic faucet. Please consult a plumbing professional for this task.
3. Problem often caused by defective angle stop. Replace angle stop.

*Faucet continues to run for 30 or 60 seconds after hands are removed then shuts off:*

This very rare condition generally occurs due to over sensitivity on the part of the sensor, high water flow, and/or bathroom lighting setting. This condition is always field curable.

1. Turn down water flow rate.
2. Replace aerator with 0.5GPM aerator (when possible).
3. Adjust sensor range to “shorter”. Please call MAC Faucets for instructions.

*Runaway faucet, water runs out of faucet continuously, longer than 1 minute, does not stop.*

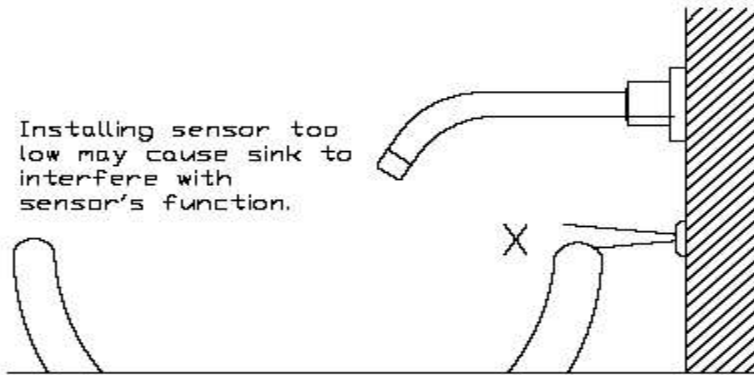
1. Make sure batteries are installed properly, if A.C., make sure that power is present at wall receptacle.
2. Make sure Faucet Automator is properly oriented on the wall, see drawings below.
3. Make sure that sensor wire from faucet is plugged into Faucet Automator.
4. Make sure that sensor wire is not cut or broken specially near mounting nut and washer immediately below deck.
5. Make sure that water is plumbed correctly into Faucet Automator, Water in to “inlet”, water out from “Outlet” see Drawings.
6. If items 1 to 5 are OK, please contact Factory for more tips on your particular installation.

## Special Installation Note

Automatic faucets are design to perform properly in a variety of applications. There are some conditions, however, that may adversely impact the faucet’s ability to perform. Please note the following conditions prior to installing you new faucet:

1. Your automatic faucet is designed for indoor applications. This faucet is not designed for outdoor applications.
2. Avoid installing your new faucet in direct sunlight. Direct sunlight that is focused on sensor will temporarily disable faucet’s sensing capabilities.
3. If you choose to install your faucet to one water source only, **do not install to hot water only** as this may result in scalding injury.
4. **Important:** Before connecting supply line to Faucet Automator, purge both hot and cold water lines for at least one minute each at high volume. Purging water lines clears out dirt and debris that would otherwise find its way to screen filter within the solenoid valve.
5. **Important:** Do not use pipe putty on water connection to faucet. Pipe putty may cause immediate and irreversible damage to solenoid valve. Please use Teflon tape instead.
6. **Important:** If you do not plan on using faucet immediately after installation (within 60 days of installation), disconnect water supply lines to faucet and unload the water pressure that may be present in faucet. This will keep new solenoid valve components from bonding together under high pressure.

Installing sensor too low may cause sink to interfere with sensor's function.



## LIMITED WARRANTY

MAG FAUCETS WARRANT THIS FAUCET TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF PURCHASE. MAG FAUCETS WILL REPLACE, FREE OF CHARGE, DURING THIS WARRANTY PERIOD, PARTS THAT PROVE DEFECTIVE WHEN PROPERLY INSTALLED AND UNDER NORMAL USE AND SERVICE. DAMAGE THAT OCCURS AS A RESULT OF ABUSE, IMPROPER INSTALLATION, ENVIRONMENTAL CONDITIONS, OR IMPROPER APPLICATION WILL VOID THIS WARRANTY. PRODUCTS MUST BE SHIPPED WITH POSTAGE AND HANDLING PREPAID, ALONG WITH DATED PROOF OF PURCHASE. THIS WARRANTY DOES NOT COVER INSTALLATION OR ANY OTHER LABOR CHARGES. IT DOES NOT COVER SHIPPING AND HANDLING OF BOTH REPLACEMENT PARTS AND RETURNED DEFECTIVE PARTS. PRODUCTS OR COMPONENTS THAT HAVE BEEN ALTERED OR IN ANY WAY MODIFIED WILL NOT BE COVERED UNDER THIS WARRANTY. REPLACEMENT PARTS ARE UNDER WARRANTY ONLY FOR THE REMAINING PERIOD UNDER THE INITIAL WARRANTY. SOME STATES DO NOT ALLOW FOR EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGE.

Minimum Vertical Dimensions:

A = 4" Center to Center.

B = 2" Center to Center.

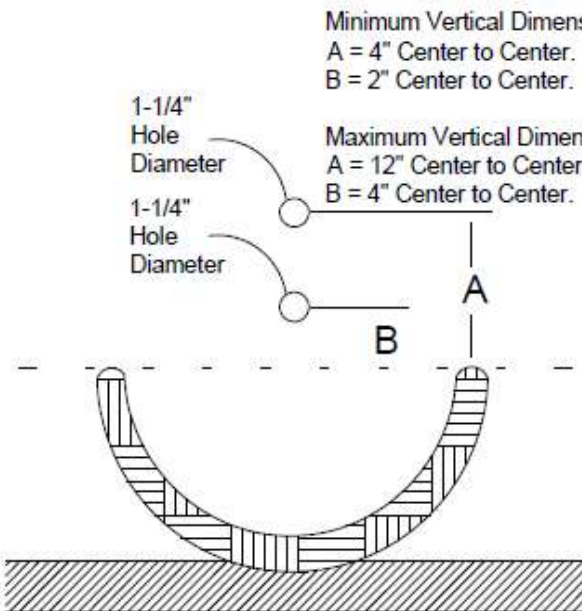
1-1/4"  
Hole  
Diameter

1-1/4"  
Hole  
Diameter

Maximum Vertical Dimensions:

A = 12" Center to Center.

B = 4" Center to Center.

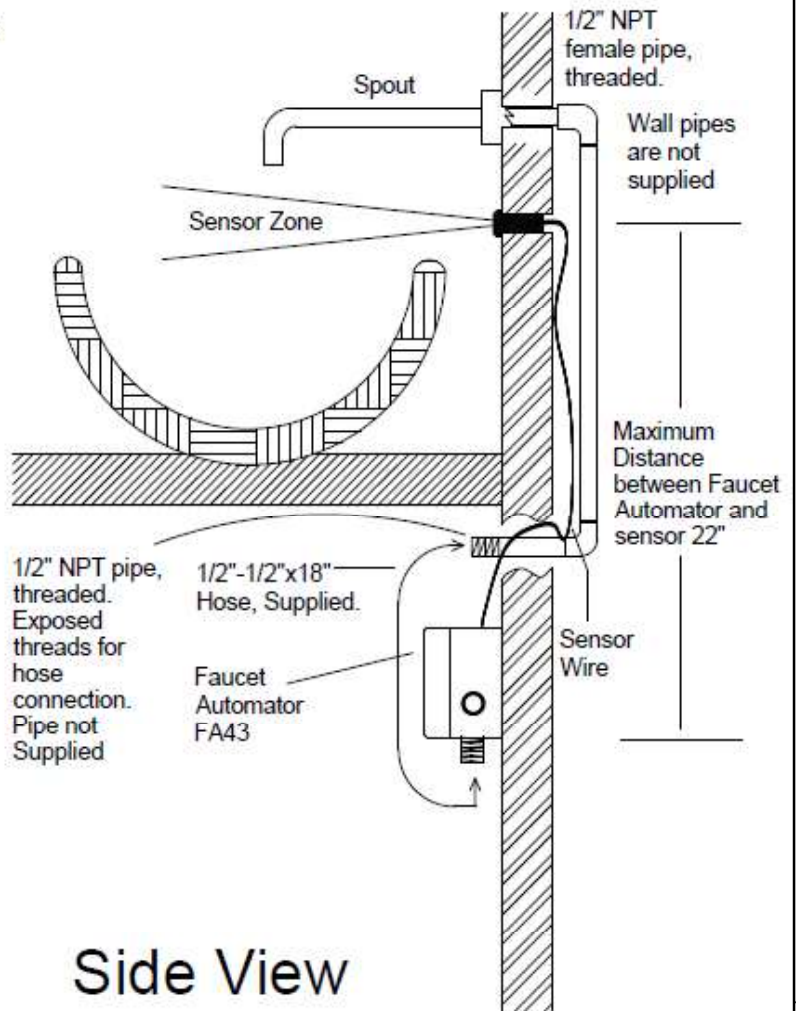


Hole  
Diameter  
2"

When replacing  
batteries or  
servicing  
solenoid valve,  
remove these 4  
screws



Front View



Side View



# MAC FAUCETS

## *Electronic, Sensor bulk Soap Dispenser*



**Model: PYOS-L124** Patent Pending

### Features:

- Wall mount installation matches MAC FA43-124 faucet.
- Dispenses Standard Liquid Soap.
- Solid Brass Tube Spout.
- Battery Powered, AC Optional.
- **Available in Twenty+ Matching Finishes.**



### Package Includes

*Spout*

*Soap Pump*

*All Hose Connections  
Between Pump and  
Spout*

*800ml Soap Bottle*

*Battery Compartment  
or Optional AC Power  
Supply*

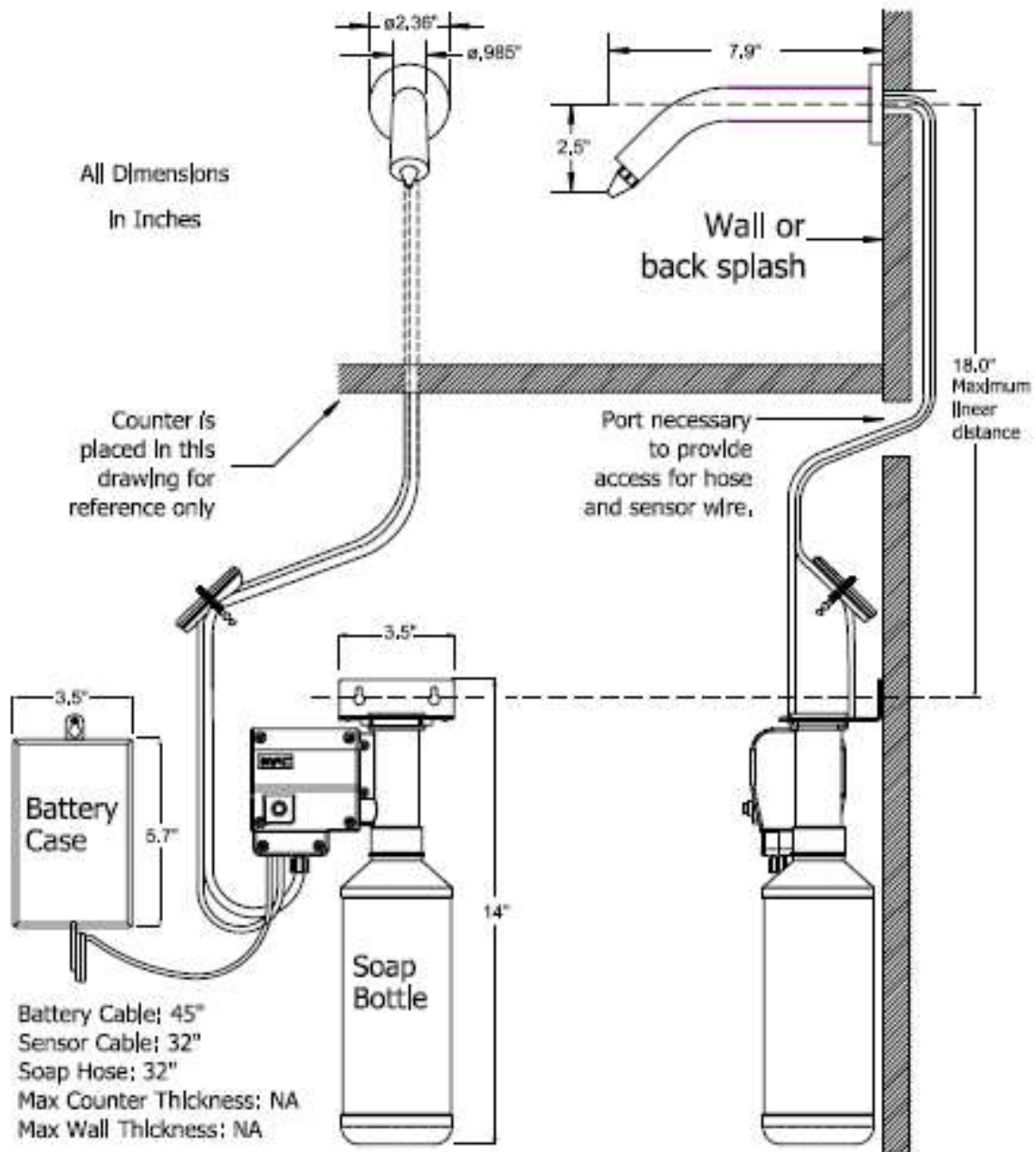
*Mounting Hardware*

*Remote Control  
Optional*

*All hardware necessary for  
satisfactory installation*

SPECIFICATIONS	
MODEL:	PYOS-L124
SPOUT:	SOLID BRASS TUBE
POWER:	4 (D) BATTERIES / AC ADAPTER OPTIONAL
SOAP PUMP:	6 VOLT PERISTALTIC PUMP SYSTEM
COUNTER ACCOMMODATION:	ACCOMMODATES COUNTER THICKNESS UP TO 2"
SENSOR TYPE:	ACTIVE INFRARED, SELF ADJUSTING
SENSING RANGE:	2" TO 6" ADJUSTABLE WITH <b>OPTIONAL REMOTE CONTROL</b>
WORKING SOAP:	STANDARD LIQUID SOAP. NO GRIT (INDUSTRIAL) SOAP
SOAP BOTTLE CAPACITY:	800ML (JUST UNDER A QUART) <b>OPTIONAL 1 GALLON CONTAINERS</b>
SOAP AMOUNT PER USE:	0.5ML TO 1.5ML, ADJUSTABLE WITH OPTIONAL REMOTE CONTROL
REMOTE CONTROL:	<b>HAND HELD. OPTIONAL</b>
FINISH SELECTION:	20+ MATCHING FINISHES

All Dimensions below are approximate, and in inches



**Optional Equipment:**

- AC Adapter
- Remote Control (one for many dispensers)
- 1 Gallon capacity container.