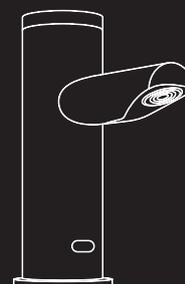


# ELECTRONIC SENSOR TAP INSTALLATION & MAINTENANCE GUIDE

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SUITABLE FOR 2.2705.00, 2.2705.02, 2.2705.20, 2.2705.22, 2.2705.30,  
2.2705.70, 2.2706.00, 2.2706.02, 2.2706.20, 2.2706.22, 2.2706.30,  
2.2706.70, 2.2706.94 2.2702.90 & 2.2702.92



## **THANKYOU FOR YOUR PURCHASE OF A SENSOR BASIN SET FROM BRODWARE**

To ensure correct operation of the wall set for years to come, please carefully read and understand the following installation and maintenance instructions before commencing the installation of your sensor wall set.

After reading this manual, if you still have any questions about the installation process or correct maintenance of the sensor wall set, please call us on +61 1300 800 300 or email us at [technicalsupport@brodware.com](mailto:technicalsupport@brodware.com)

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## TECHNICAL DATA

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Basin mounted electronic tap for cold or premixed water.

<b>POWER SUPPLY:</b>	6 X 1.5V AA / 240V-9V TRANSFORMER
<b>MINIMUM WATER PRESSURE:</b>	200KPA
<b>MAXIMUM WATER PRESSURE:</b>	500KPA IN ACCORDANCE WITH AS3500
<b>SECURITY SHUT OFF:</b>	90 SECONDS DEFAULT
<b>HOT WATER TEMPERATURE:</b>	MAX 70°C
<b>ADJUSTABLE FLOW TIME:</b>	3-12 SECONDS
<b>ADJUSTABLE SENSOR RANGE:</b>	80MM - 170MM

Wall mounted electronic tap for cold or premixed water.

<b>POWER SUPPLY:</b>	BATTERY OR 9V TRANSFORMER
<b>MINIMUM WATER PRESSURE:</b>	200KPA
<b>MAXIMUM WATER PRESSURE:</b>	500KPA IN ACCORDANCE WITH AS3500
<b>SECURITY SHUT OFF:</b>	90 SECONDS
<b>HOT WATER TEMPERATURE:</b>	MAX 70°C
<b>ADJUSTABLE FLOW TIME:</b>	3-12 SECONDS
<b>ADJUSTABLE SENSOR RANGE:</b>	20-250MM

## PRE-INSTALLATION INFORMATION

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Before installing this unit, ensure that the listed precautions have been checked off. Failure to do so will void warranty.

### AVOID REFLECTION ISSUES

- The sensor eye must be installed no closer than 300mm to any adjacent surface.
- Do not install the unit with the sensor eye above a plug/waste in a basin or sink.
- This unit is not intended to be used with any reflective surface, such as polished stainless steel.
- Do not install the sensor facing a mirror or any other system operated by an infra-red sensor.
- Be aware of lighting that may reflect into basins/sinks that may reflect back into the sensor eye.

### WATER SUPPLY

- A 500kpa pressure limiting valve, 60 mesh in line filter and an isolation valve must be installed in line before the solenoid valve. Flush water supply lines thoroughly before installing the solenoid. Do not allow dirt, Teflon tape or foreign particles to enter into the tap. All plumbing is to comply with Australian Standards AS3500. Failure to do so will void warranty.
- These units are not suitable for gravity feed systems.

### CORRECT SOAP VISCOSITY

- Ensure that the correct soap is selected for the Brosmart Sensor Soap Dispensers. A soap with no grit and a viscosity of 100-3800cPs is to be used. Failure to do so will void warranty. We recommend using "Reward Distribution" Liquid Hand Soap (P/N: 3072120).

### SERVICE ACCESS

- Install the transformers and solenoids in a serviceable location (either behind a nearby service access panel, or in the ceiling). Soap bottles need to be installed in an easily accessible location to refill the bottles with soap.
- A minimum of 32mm conduit should be used to house the leads, to aid with drawing cables & plugs.
- Brodware have extension leads if required (sold separately). Do not cut or make your own. Doing so will void warranty.

### SENSOR ADJUSTMENT

- Adjustments to the sensor sensitivity and run time are done by using a specific remote control (sold separately) for both the Brosmart Sensor Taps and Brosmart Sensor Soap Dispensers. If you do not have one on site when installing, please contact your supplier.

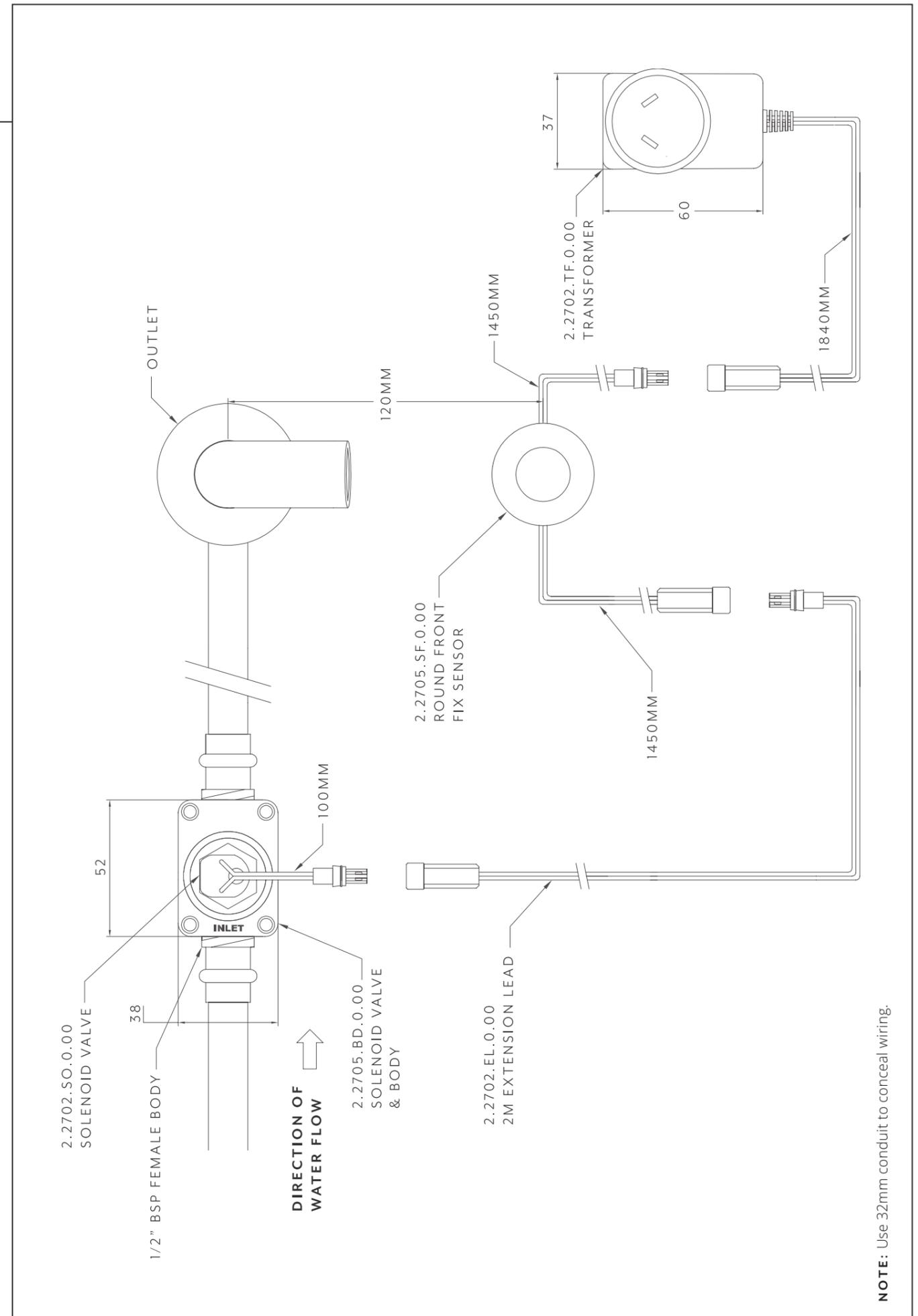
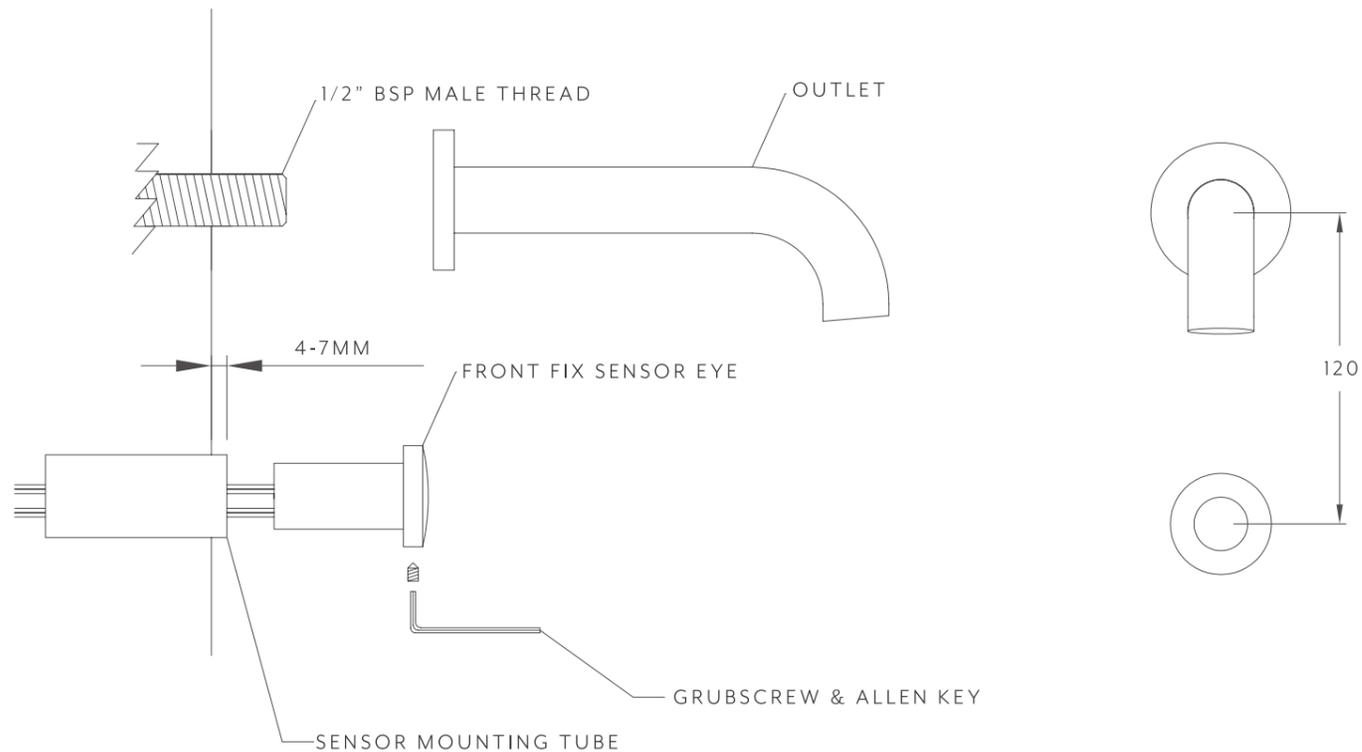
If there are any issues with complying with any other above, please contact Brodware before proceeding on 1300 800 300 or [service@brodware.com](mailto:service@brodware.com).

# OUTLET AND SENSOR INSTALLATION GUIDE FOR 2.2705.00, 2.2705.20, 2.2706.00 AND 2.2706.20 MODELS

## MIXER INSTALLATION:

1. Shut off water supply.
2. Ensure that the sensor is not installed within 300mm of any adjacent surface. Do not install the sensor facing a mirror or any other system operated by an infra-red sensor.
3. Install a 1/2" BSP male thread for the outlet in the required location/position. (Refer to the dimensions on the drawing for correct positioning). Screw the outlet into position to the thread.
4. Install the Sensor Mounting Tube. A Ø33mm hole is required through the finished face of the tile. Install the Sensor Mounting Tube at a minimum of 120mm below the outlet point. Leave 4-7mm of tube protruding past the finished tile face, to allow for fitment of the sensor eye.
5. Feed the leads from the transformer and the solenoid through from the rear of the Sensor Mounting Tube to the front face. Connect the sensor to the leads (1x male connection, and 1x female connection). Push the sensor into the mounting tube. Secure the sensor to the Sensor Mounting Tube with the grub screw from the underside of the sensor face. If there is a gap between the finished tile face and the sensor eye, measure the gap and cut down the sensor Mounting Tube accordingly.
6. Turn on the water and power supply, and test for functionality. Adjustments to the sensor range and run time are done by using the appropriate remote control (C27.02.RM sold separately). If there are any set up queries, please refer to the troubleshooting section in the back of this booklet.

**Note:** If there is not enough length in either lead, do not cut or make your own lead. Modifying or making your own lead will void warranty. Brodware have extension leads to suit (part numbers are in the spare parts list at rear of this booklet). Please contact your supplier to place your order.

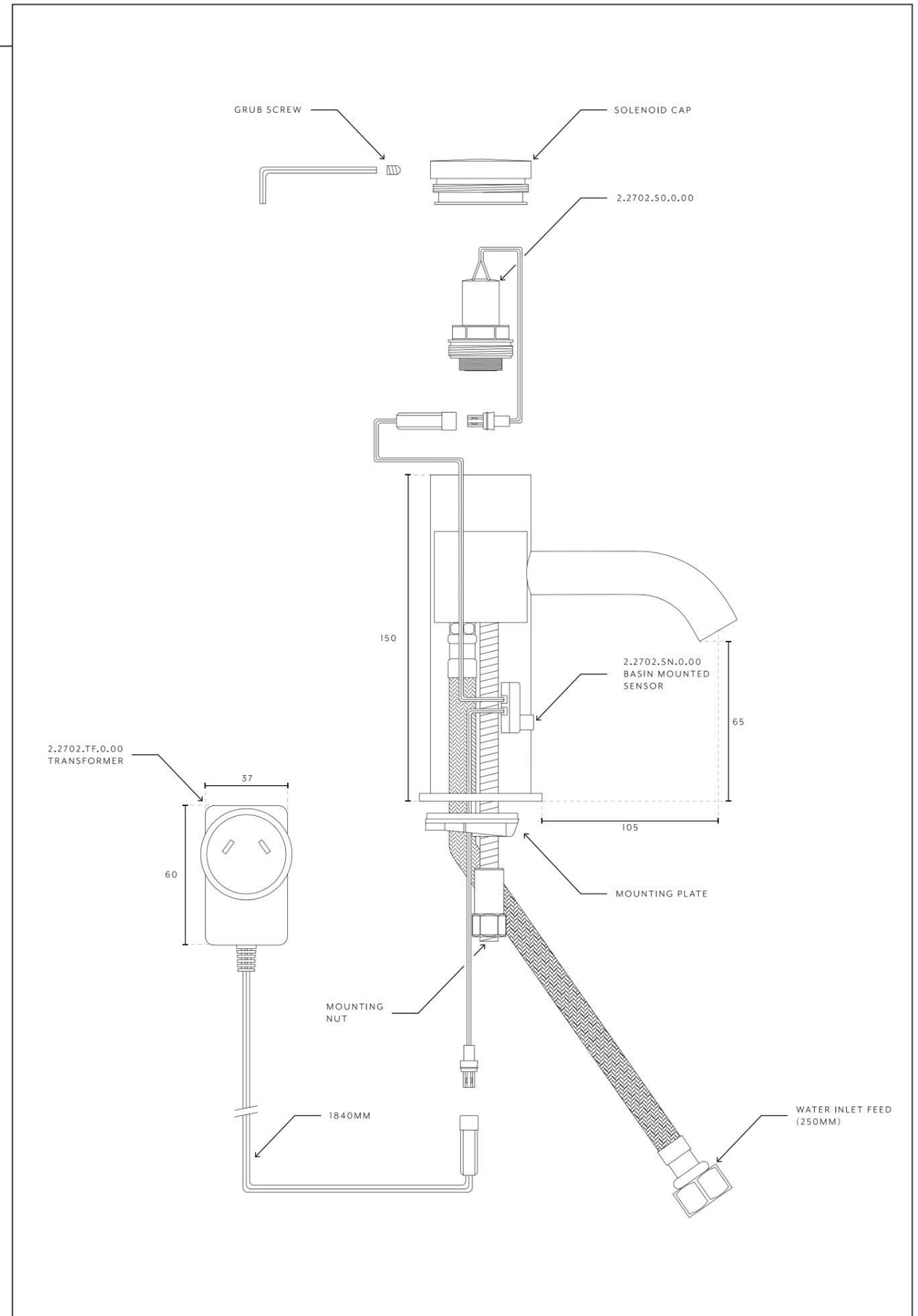


# INSTALLATION GUIDE FOR 2.2702.90 & 2.2702.92

## MIXER INSTALLATION:

1. Shut off water supply.
2. Remove the fixing nut and mounting plate from the bottom of the mixer. Ensure not to remove o-ring seal from the trim. It must be there to seal the mixer to the bench top.
3. Screw the braided hose into the bottom of the mixer.
4. Fit the mixer with the trim to the bench top.
5. Refit the mounting plate and fixing but to the underside of the mixer. Do the nut up finger tight. Ensure the tap is aligned and in the correct position.
6. Secure the tap by tightening the fixing nut using a wrench or a spanner.

CONTINUE TO PAGE 13 FOR FOLLOWING INSTRUCTIONS TO COMPLETE THE INSTALLATION OF YOUR BRODWARE SENSOR TAP



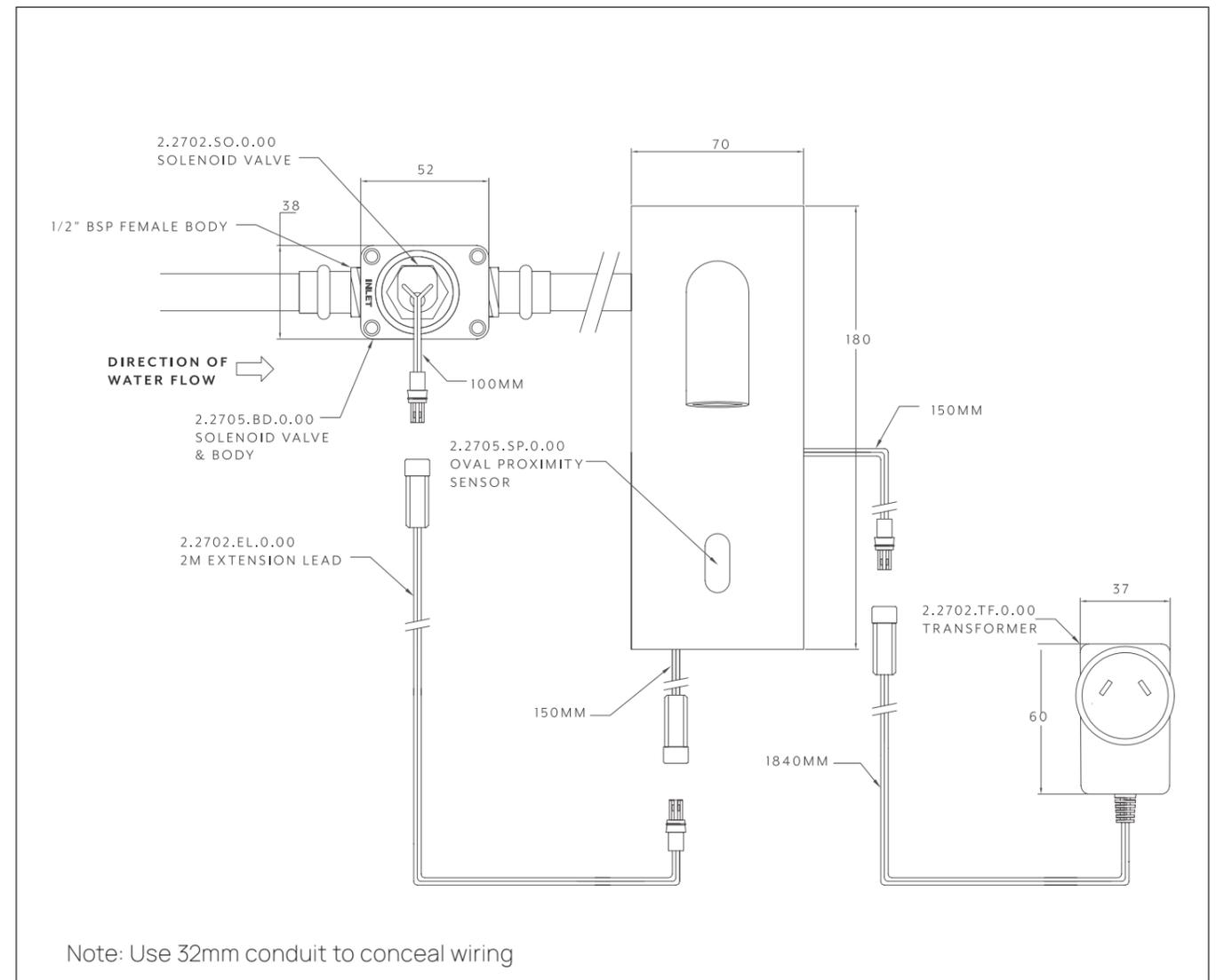
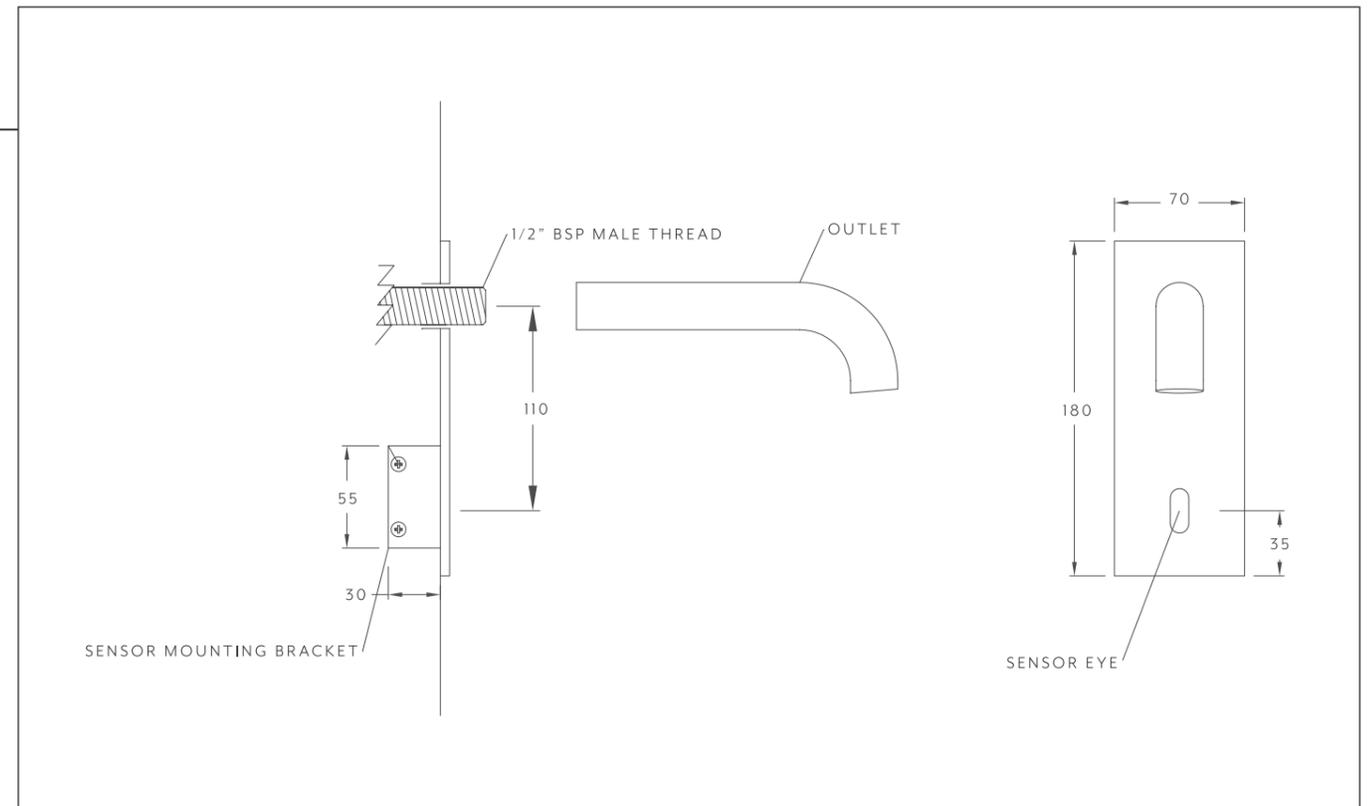
# OUTLET AND SENSOR INSTALLATION GUIDE FOR 2.2705.02, 2705.22, 2.2706.02 AND 2.2706.22

## STEP ONE:

1. Shut off water supply.
2. Ensure that the sensor is not installed within 300mm of any adjacent surface. Do not install the sensor facing a mirror or any other system operated by an infra-red sensor.
3. Install a ½" BSP male thread for the outlet in the required location/position. (Refer to the dimensions on the drawing for correct positioning).
4. Below the male thread, a cut out of 50mm x 80mm is required in the wall to recess the sensor and sensor mounting bracket. This is to be 110mm from centre of male thread, to centre of the sensor eye.
5. Feed the leads from the transformer and from the solenoid from inside the wall cavity through to the front of the recess for the sensor. Connect the sensor to the leads (1x male connection, 1x female connection).
6. Run a thin bead of silicone sealant on the inside face of the cover plate to seal the unit to the wall. Press the plate into position on the wall. Apply thread sealant or thread tape to male thread, and screw the outlet to the male thread.
7. Turn on the water and power supply, and test for functionality. Adjustments to the sensor range and run time are done by using the appropriate remote control (C27.02.RM sold separately). If there are any set up queries, please refer to the troubleshooting section in the back of this booklet.

Note: If there is not enough length in either lead, do not cut or make your own lead. Modifying or making your own lead will void warranty. Brodware have extension leads to suit (part numbers are in the spare parts list at rear of this booklet). Please contact your supplier to place your order.

CONTINUE TO PAGE 13 FOR FOLLOWING INSTRUCTIONS TO COMPLETE THE INSTALLATION OF YOUR BRODWARE SENSOR TAP



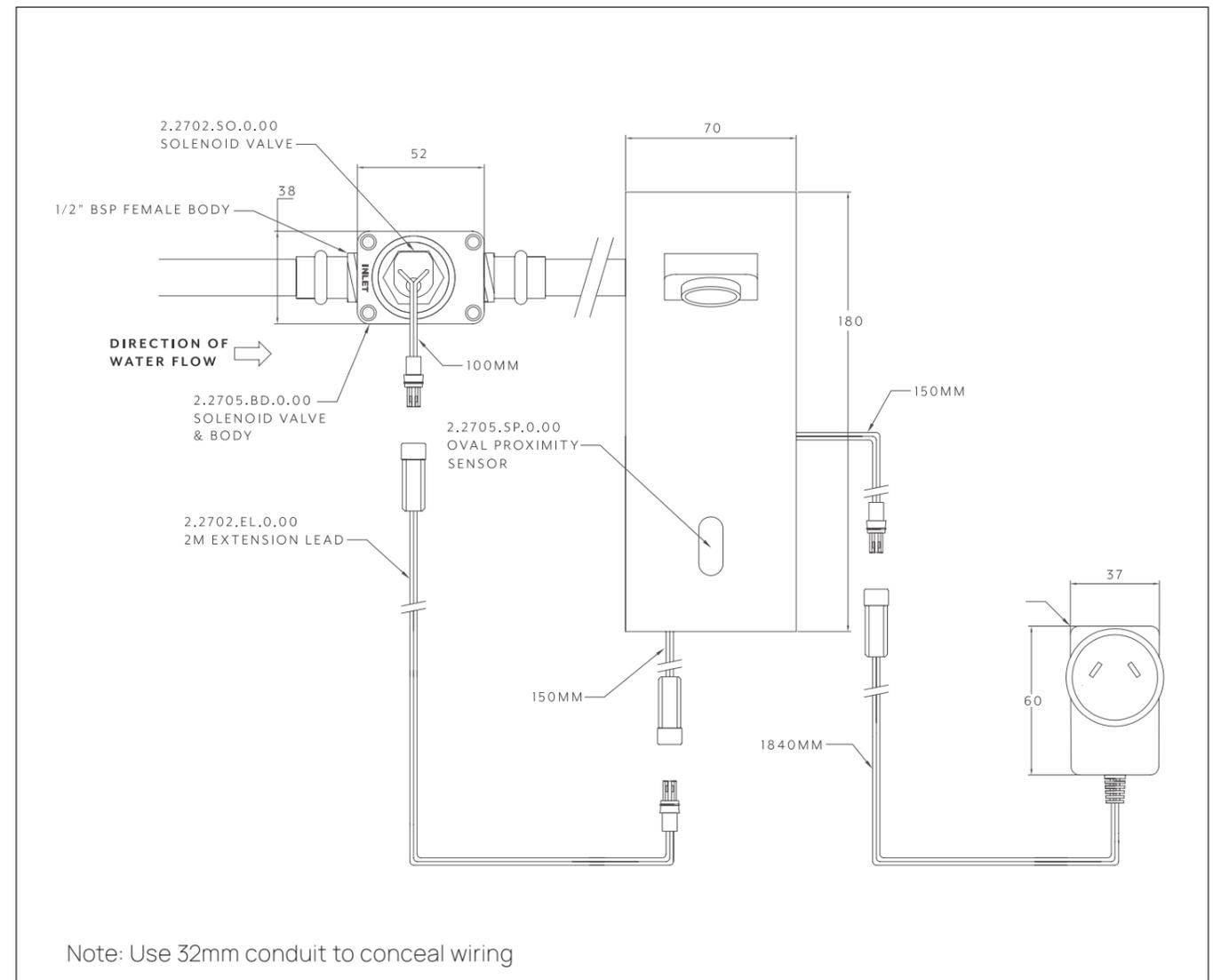
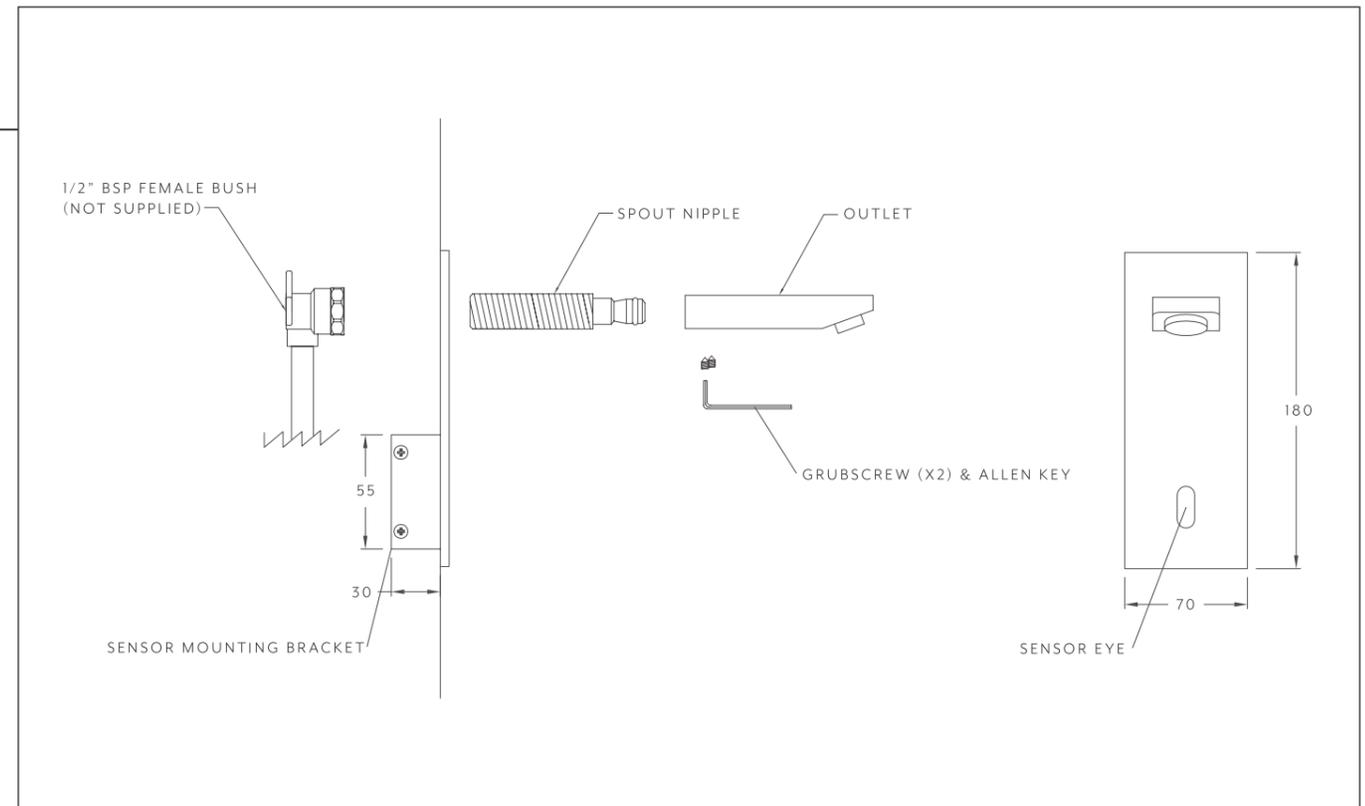
# OUTLET AND SENSOR INSTALLATION GUIDE FOR 2.2705.70 AND 2706.70

## STEP ONE:

1. Shut off water supply.
2. Ensure that the sensor is not installed within 300mm of any adjacent surface. Do not install the sensor facing a mirror or any other system operated by an infra-red sensor.
3. Install a 1/2" BSP female fitting in the wall for the outlet (not supplied) in the required location/position. (Refer to the dimensions on the drawing for correct positioning).
4. Below the male thread, a cut out of 50mm x 80mm is required in the wall to recess the sensor and sensor mounting bracket. This is to be 110mm from centre of male thread, to centre of the sensor eye.
5. Feed the leads from the transformer and from the solenoid from inside the wall cavity through to the front of the recess for the sensor. Connect the sensor to the leads (1x male connection, 1x female connection).
6. Trial fit the spout nipple by screwing the spout nipple through the cover plate, and into the female fitting in the wall. Press the spout onto the nipple. If there is a gap between the back of the spout and cover plate, measure the gap and cut down the male thread on the nipple to the desired length. Apply thread sealant or thread tape to the male thread of the spout nipple, and screw the spout nipple into the female fitting in the wall.
7. Run a thin bead of silicone sealant on the inside face of the cover plate to seal the unit to the wall. Press the plate into position on the wall.
8. Press and fit the spout onto the nipple. Set it into position, and lock into position using the 2 grub screws and allen key provided on the under side of the spout.
9. Turn on the water and power supply, and test for functionality. Adjustments to the sensor range and run time are done by using the appropriate remote control (sold separately). If there are any set up queries, please refer to the troubleshooting section in the back of this booklet.

Note: If there is not enough length in either lead, do not cut or make your own lead. Modifying or making your own lead will void warranty. Brodware have extension leads to suit (part numbers are in the spare parts list at rear of this booklet). Please contact your supplier to place your order.

CONTINUE TO PAGE 13 FOR FOLLOWING INSTRUCTIONS TO COMPLETE THE INSTALLATION OF YOUR BRODWARE SENSOR TAP



# OUTLET AND SENSOR INSTALLATION GUIDE FOR ALL MODELS (CONTINUED)

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## **STEP TWO** - CONNECTING THE WATER SUPPLY:

1. Install a shut off/isolation valve (1 per unit is ideal)
2. Screw the braided hose from the mixer to the shut off valve

The solenoid valve is installed into the water connection to the outlet spout. This must be accessible for servicing. An access panel in the wall under the outlet is a widely used option. Observe the flow direction through the valve and ensure that no Teflon tape, copper filings, grit or other foreign particulates enter and foul the valve. An inline strainer (60 mesh) must be fitted before the valve.

The water supply is provided via normal plumbing practices, either cold or pre-mixed warm, using a thermostatic mixing valve, plumbed to the solenoid, then to the outlet.

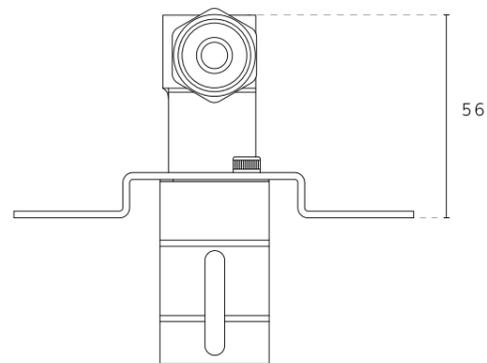
## **STEP THREE** - CONNECTING THE POWER SOURCE:

1. Connect the cable coming from the electronic sensor unit or the solenoid valve connector.
2. Connect the other cable coming from the electronic sensor unit to the power source connector (battery box or transformer).
3. Connect the power source:
  - a) For battery versions: Install the battery box at the wall underneath the sink using the two sided adhesive foam tape. The cable connection must point down. (You can use an optional extension cable in order to assemble the battery box up to 3m away from the solenoid.)
  - b) For transformer versions: Check to ensure the power point is switched off. Plug the transformer into the electricity wall socket and connect the connectors. Once secure, then turn the power point to the on position. Note that the power pack and connections are NOT spray or water proof. If water may come into contact with the power pack, the plug and socket or quick connects, the unit and all of the interconnections should be installed into a water-proof enclosure.
  - c) Wait a few seconds before activating the tap. For Wave Sensors, wave the back of your hand through the beam to turn the water on, and again to turn the water off.
  - d) If the automatically adjusted sensor range is not satisfactory to your purposes, please refer to the section entitled "Settings Adjustment".

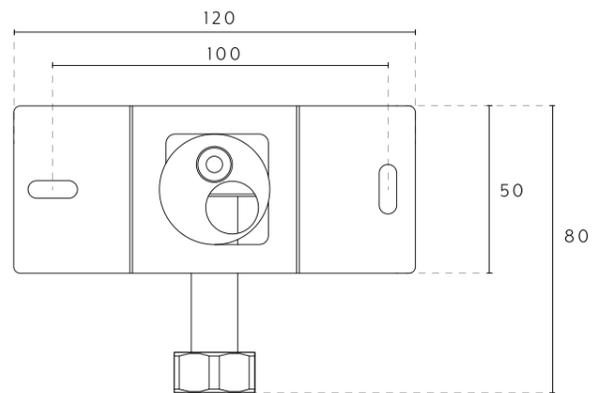
# OUTLET AND SENSOR INSTALLATION GUIDE FOR 2.2706.94

## STEP ONE - CONNECTING THE WATER SUPPLY:

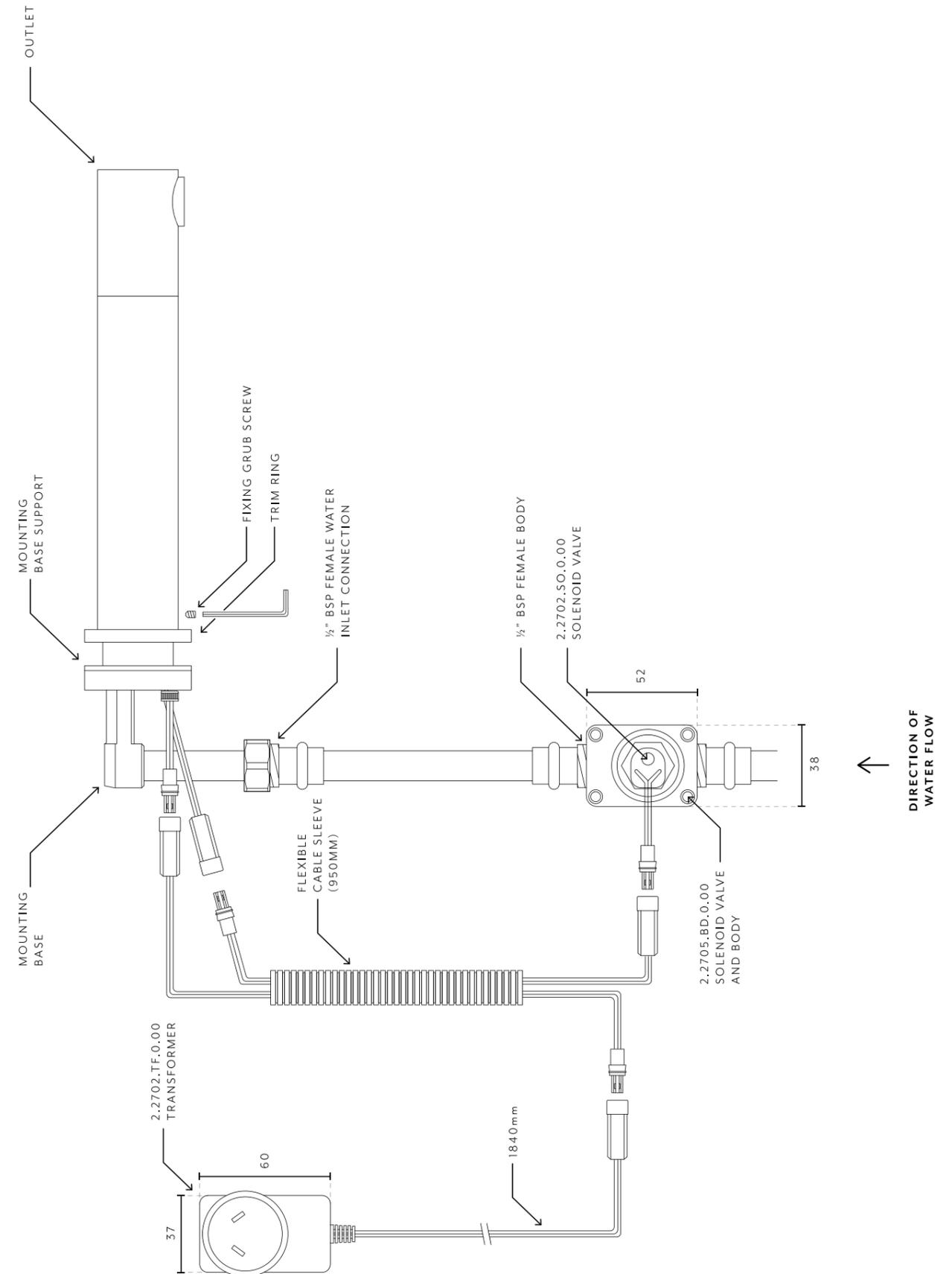
1. Shut off water supply.
  2. Cut out an adequate opening in the wall according to the dimensions of the cable sleeve, the water supply pipe and the mounting base, where you want to install the spout.
  3. Cut two small holes for the mounting base support and drive the anchors in.
  4. Remove the outlet and trim ring from the mounting base, by removing the securing grub screw from the underside of the outlet.
  5. Mount the mounting base with the support through the opening, and secure the base support to the two holes using two screws.
- Important: The mounting base should be installed so that the outside surface of the finished wall falls between the min and max lines marked on the base.
6. Connect the water supply pipe from outlet side of the solenoid body to the inlet connection on the mounting base.
  7. Pull the wires of the power supply and solenoid out of the mounting base.
  8. Feed the wires through the cable sleeve
  9. Connect the electronic unit's connections coming out from the mounting base to the solenoid and power supply connectors.
  10. Fit the trim ring and outlet to the mounting base on the wall. Secure the unit with the grub screw to the underside of the outlet.



MOUNTING BASE AND SUPPORT - BOTTOM VIEW



MOUNTING BASE AND SUPPORT - FRONT VIEW

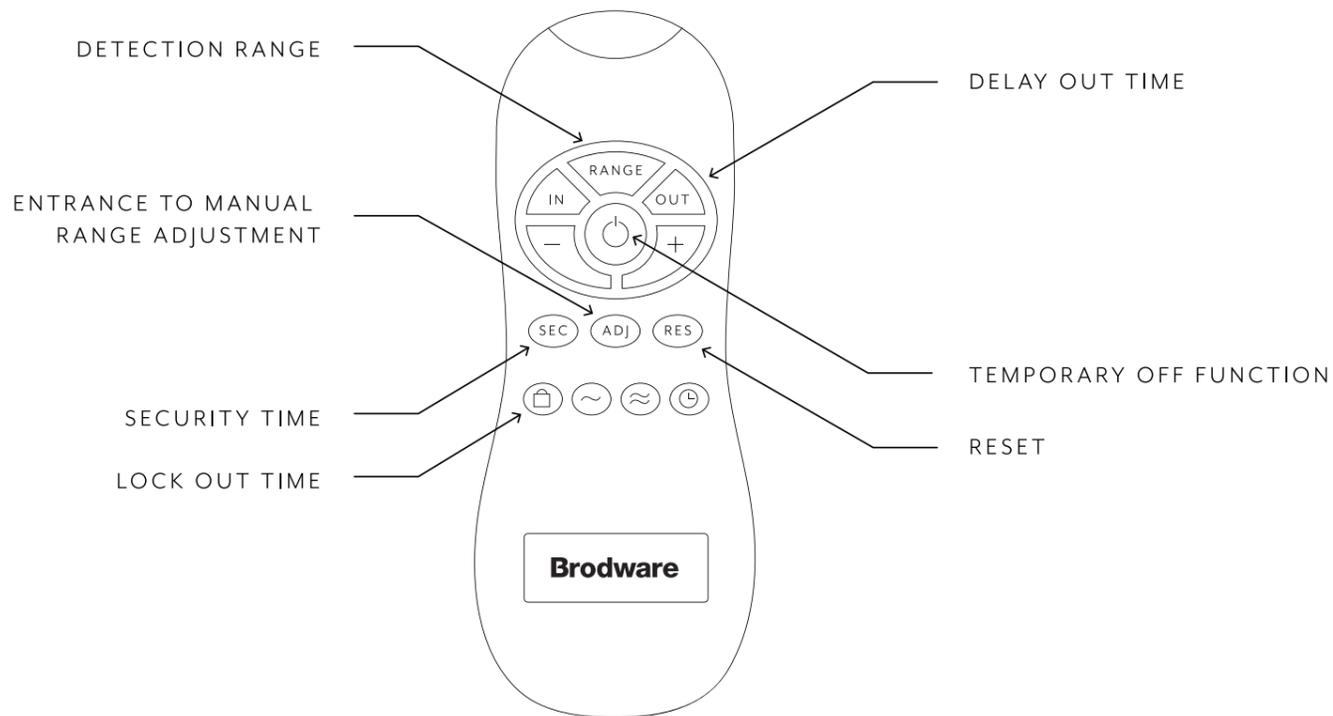


# SETTINGS ADJUSTMENT

- Note: To operate the advanced functions with the remote control you must have a compatible product model. The remote control is sold separately.

## ADJUSTING THE SETTINGS WITH THE REMOTE CONTROL

- Connect the cable coming from the electronic sensor unit or the solenoid valve connector.
- If necessary, the sensor settings can be adjusted as following:
- Shut off the water supply. In order to adjust the sensor with the remote control, hold the remote control straight in front of the sensor in a distance of about 15-20cm.
- Choose the function you want to adjust by pressing once on one of the function buttons. After pressing once on a specific function button, a quick flashing of the red light at the front of the sensor will occur. At this stage, you can change the setting by pressing the (+) or the (-) buttons, every press will increase or decrease one unit.
- After finishing the adjustment, turn the water supply back on.



## DETECTION RANGE

Only if necessary, use the remote control to adjust the sensor range as follows: Press the 'Range' button. Wait until a quick flashing of the red light of the sensor eye is visible. Then, press + to increase the range and - to reduce it.

Note: Once you have changed the detection range with the remote control, this distance is retained by the sensor, even if the power source is disconnected. To get back to the self adjustment mode, use the 'Adj' button.



## ENTRANCE TO THE SELF ADJUSTMENT MODE

Check that no objects are in front of the sensor. Press the 'Adj' button. Once a quick flashing of the red light of the sensor eye is visible, remove the remote control and move away from the sensor area. The ideal sensor range for the specific location will be set automatically. Once the self adjustment has taken place the solenoid valve will open for about 1 second as an indication that the ideal sensor range was set and the product is ready for use.



## SECURITY TIME

The Security time, prevents continuous running of water due to reflections or vandalism. By default, if the sensor is covered for more than 90 seconds the water flow will shut automatically.

To resume regular operation any obstruction must be removed.

Press the 'Sec' button. Wait until a quick flashing of the red light of the sensor eye is visible. Then, press + to increase the security time and - to reduce it.



## DELAY OUT TIME

This allows the adjustment of the flow time after the users hands have been removed from the sensors range. A shorter delay out time will save more water. A longer delay out time will assist in ease of use.

If required, the delay out time can be modified as follow;: press the 'Out' button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the delay out time and - to reduce it.

## MAINTENANCE

### BATTERY MODELS ONLY

When the battery weakens, the red indicator light will blink at a constant rate. The battery must be replaced.

#### TO REPLACE THE BATTERY ON BATTERY MODELS:

1. Carefully open the battery box.
2. Remove the old batteries.
3. Replace the used batteries with 6x AA batteries. (Lithium batteries are recommended).
4. Close the box.

### CARE AND CLEANING OF CHROME AND SPECIAL FINISHES

The Brodware product you have purchased has been designed to provide many years of dependable service. However, the finish, as on all plumbing products, requires care to be taken to retard the wear that will eventually occur.

Whilst our Electoplate finishes are durable, we recommend cleaning with a non ammoniated pure soap liquid to remove stains and water spots.

Rinse all traces of soap thoroughly. Wipe and buff gently with a soft cloth. Do not use abrasive cleaners or sponges. We recommend the occasional application of a pure non abrasive polish such as Mr Sheen™, which is helpful in preventing water spots on all finishes.

Unlacquered Polish Brass items, which normally tarnish because of the effects of water and the atmosphere, will regain their shine by polishing with Brasso™ or Autosol™.

- Due to impurities in most water supplies, a regular cleaning of aerators is recommended.
- Ensure in line filter is cleaned or replaced on a regular basis.

### ALL WORK MUST BE CARRIED OUT BY A LICENSED PLUMBER

## TROUBLESHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
NO WATER FLOW	Sensor flashes continuously when user's hands are within the sensor's range.	Low battery	Replace with 6 new batteries.
	Sensor does not flash when user's hands are within the sensor's range	Range is too short	Increase the range using the remote control
		Range is too long	Decrease the range using the remote control
		Battery is completely used up	Replace battery
		Unit is in "Security Mode" *	See footnotes
	Red light in the sensor flashes when user's hands are within range.	Sensor is picking up reflections from the washbasin or another object	Remove/eliminate the cause.
Connections between the between the tap and solenoid are disconnected		Connect the solenoid to the tap.	
Debris or scale in solenoid		Replace the solenoid.	
The water supply pressure is > 500kPa		Reduce the water supply pressure	
		Water supply pressure is <500kPa yet the pressure in the taps body is higher. This could be caused by a sudden increase in the water supply pressure that the back chock prevents from dropping, even after water supply pressure drops <500kPa.	Shut off water supply and unscrew the flexible pipes in order to reduce the pressure.
WATER FLOW FROM SPOUT DOES NOT STOP	Sensor flashes when user's hands are within range.	Debris or scale in diaphragm	Clean the orifice or replace the diaphragm
	Red light in the sensor does not flash when user's hands are within the sensor's range	Sensor is dirty or covered. **	Clean or eliminate cause of interference
		Sensor is picking up reflections from the washbasin or another object.	Decrease the range or eliminate cause of reflection
WATER FLOW IS DIMINISHED		Filter or aerator is clogged	Remove, Clean, Re-Install

\* "Security Mode": If the sensor is covered for more than 90 seconds the tap will automatically shut off water flow. To return to normal operation remove obstruction.

\*\* In this case, the water flow will stop anyway after 90 seconds because of the security time.



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