

# Enware-Oras Electronic Tapware

## Installation and Maintenance Instructions

CUBISTA  
ENM6420  
ENM6450



VEGA  
ENM6222  
ENM6250



ELECTRA GOOSE NECK  
ENM6320  
ENM6323  
ENM6350  
ENM6353



VIVA  
ENM6120  
ENM6150



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## product descriptions



CUBISTA SERIES SENSOR TAP WITH  
TEMPERATURE ADJUSTER

**ENM6450 - Battery**  
**ENM6420 - Mains Operated**



VEGA SERIES SENSOR TAP WITH OPTIONAL  
TEMPERATURE ADJUSTER

**ENM6250 - Battery**  
**ENM6222 - Mains Powered**



ELECTRA SERIES GOOSE NECK SENSOR TAP  
SINGLE TEMPERATURE

**ENM6350 - 170mm Reach Spout - Battery**  
**ENM6320 - 170mm Reach Spout - Mains Powered**



ELECTRA SERIES GOOSE NECK SENSOR TAP WITH  
OPTIONAL TEMPERATURE ADJUSTER

**ENM6353 - 170mm Reach Spout - Battery**  
**ENM6323 - 170mm Reach Spout - Mains Powered**



VIVA SERIES SENSOR TAP WITH OPTIONAL  
TEMPERATURE ADJUSTER

**ENM6150 - BATTERY**  
**ENM6120 - MAINS POWERED**

## technical data

|                                    |   |
|------------------------------------|---|
| Connection                         | 3/8" & 1/2" BSP Flexi Connector   |
| Recommended Working Pressure Range | 100 – 500kPa  |
| Maximum Operating Temperature      | 70 °C   |
| Sensor Range                       | Optimally Preset using Auto-Focus technology                                    |
| Mains Powered                      | 12V transformer with 2m lead<br>Input:100-240V~50/60Hz<br>Output:+12V DC 1000mA |
| Battery Powered                    | 6V Lithium 2CR5 battery<br>Battery life guide: 4 ± 1 years                      |
| Protection Class                   | IP 67   |

## installation compliance

Enware products are to be installed in accordance with the Plumbing Code of Australia (PCA), AS/NZS3500 and the manufacturer's instructions. Installations not complying with PCA, AS/NZS 3500 and the manufacturer's instructions may void the product and performance warranty provisions.

Reference should also be made to the Australasian Health facility Guidelines (AHFG), ABCB and Local Government regulations when considering the choice of, and the installation of these products.

This product must be installed and commissioned by a qualified plumber.

For use with potable water only.

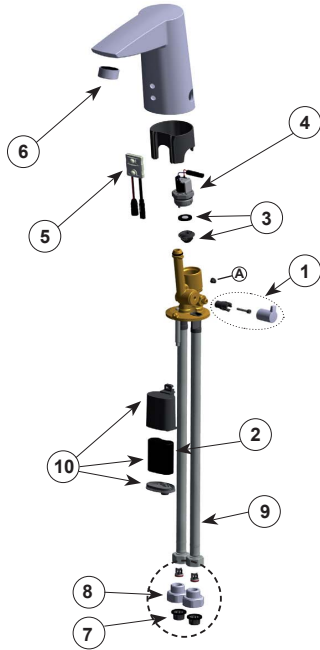
NOTE: Enware Australia advises:

1. Due to ongoing Research and Development, specifications may change without notice.
2. Component specifications may change on some export models.



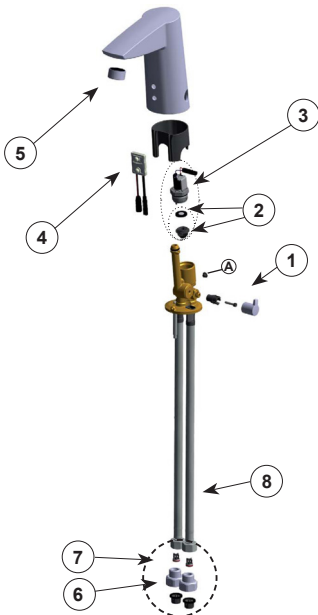
**WaterMark**  
AS/NZS3718  
WM 40054





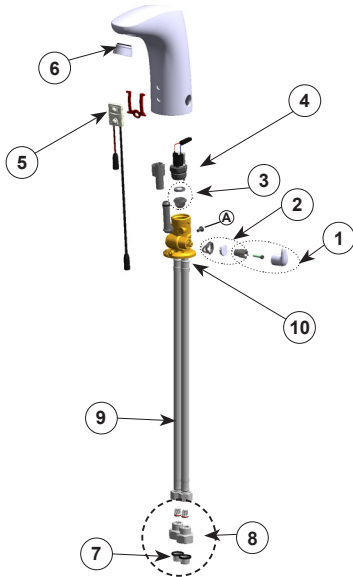
|    | DESCRIPTION   | SALES CODE |
|----|---|------------|
| 1  | Temperature Control handle                                  | ENMS216    |
| 2  | Lithium 6V Battery 2CR5                                     | ENMS204    |
| 3  | Solenoid Membrane Support                                   | ENMS212    |
| 4  | Solenoid valve  | ENMS207    |
| 5  | Sensor 1001424V<br>(Previously ENMS211 / 600659V / 199215V) | ENMS209    |
| 6  | 8 lpm Aerator STD Male                                      | SLMS620    |
|    | 6 lpm aerator only STD                                      | 672444     |
| 7  | Mesh Strainers x 2  | ENMS214    |
| 8  | G3/8-G1/2 Adaptor /Mesh Strainer/ Check Valve (1 set)       | SLMS611    |
| 9  | SPEX - Flexi Hoses (pair)                                   | SLMS612    |
| 10 | Battery Casing (includes battery)                           | ENMS206    |
|    | Fixing Plate and Nut  | SLMS644    |
| A  | Retaining screw   | ENMS262    |
|    | Inlet plug - M10x1 LH                                       | ENMS256    |
|    | Chrome mixer cover  | ENMS255    |

CUBISTA ENM6420



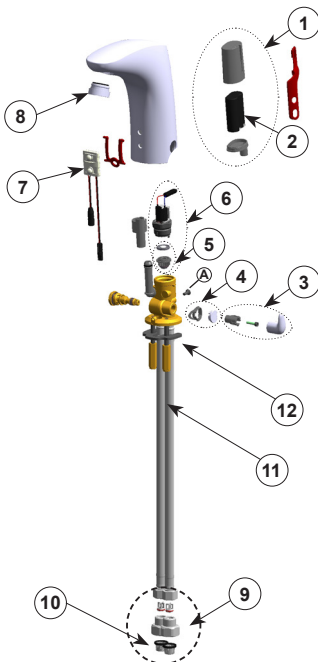
|   | DESCRIPTION   | SALES CODE |
|---|---|------------|
| 1 | Temperature Control handle                            | ENMS216    |
| 2 | Solenoid Membrane Support                             | ENMS212    |
| 3 | Solenoid valve  | ENMS207    |
| 4 | Sensor 1001424V<br>(Previously 60082V / 600839V)      | ENMS209    |
| 5 | 8 lpm Aerator STD Male                                | SLMS620    |
|   | 6 lpm aerator only STD                                | 672444     |
| 6 | Mesh Strainers x 2                                    | ENMS214    |
| 7 | G3/8-G1/2 Adaptor /Mesh Strainer/ Check Valve (1 set) | SLMS611    |
| 8 | SPEX - Flexi Hoses (pair)                             | SLMS612    |
|   | Fixing Plate and Nut                                  | SLMS644    |
|   | Transformer   | ENMS231    |
|   | Extended Transformer 4.5M                             | ENMS230    |
|   | Extension cable 3m                                    | 673841     |
|   | Extension cable 8m                                    | 673840     |
| A | Retaining screw                                       | ENMS262    |
|   | Inlet plug - M10x1 LH                                 | ENMS256    |
|   | Chrome mixer cover                                    | ENMS255    |

## VEGA ENM6222



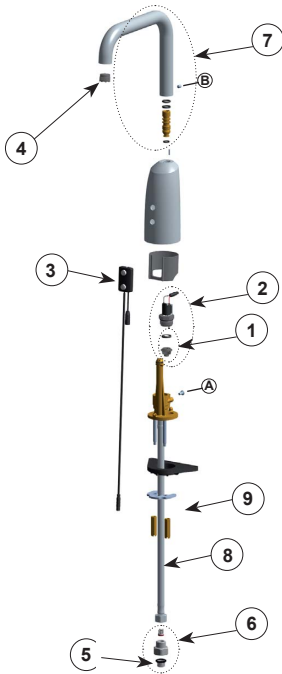
|    | DESCRIPTION  | SALES CODE |
|----|--|------------|
| 1  | Temperature Control handle                                 | ENMS222    |
| 2  | Chrome mixer Cover   | ENMS225    |
| 3  | Solenoid Membrane Support                                  | ENMS212    |
| 4  | Solenoid valve   | ENMS207    |
| 5  | Sensor 1001424V<br>(Previously 600082V/<br>600839V)        | ENMS209    |
| 6  | Aerator and key STD Male                                   | ENMS220    |
|    | 6 lpm aerator only STD                                     | 672444     |
| 7  | Mesh Strainers x 2   | ENMS214    |
| 8  | G3/8-G1/2 Adaptor /Mesh<br>Strainer/Check Valve<br>(1 set) | SLMS611    |
| 9  | SPEX - Flexi Hoses (pair)                                  | SLMS612    |
| 10 | Fixing Plate and Nuts                                      | SLMS605    |
|    | Transformer  | ENMS231    |
|    | Extended Transformer 4.5M                                  | ENMS230    |
|    | Extension cable 3m   | 673841     |
|    | Extension cable 8m   | 673840     |
| A  | Retaining screw  | ENMS262    |
|    | Inlet plug - M10x1 LH                                      | ENMS256    |

## VEGA ENM6250



|    | DESCRIPTION   | SALES CODE |
|----|---|------------|
| 1  | Battery Casing (includes<br>battery)  | ENMS206    |
| 2  | Lithium 6V Battery 2CR5   | ENMS204    |
| 3  | Temperature Control handle  | ENMS222    |
| 4  | Chrome mixer Cover  | ENMS225    |
| 5  | Solenoid Membrane Support   | ENMS212    |
| 6  | Solenoid valve  | ENMS207    |
| 7  | Sensor To Suit ENM6250 6V -<br>1008924V<br>(Previously ENMS226/<br>600766V) | ENMS257    |
| 8  | Aerator and Key STD Male  | ENMS220    |
|    | 6 lpm aerator only STD  | 672444     |
| 9  | G3/8 - G1/2 Adaptor/Mesh<br>Strainer/Check Valve<br>(1 set)                 | SLMS611    |
| 10 | Mesh Strainers x 2  | ENMS214    |
| 11 | SPEX - Flexi Hoses (pair)   | SLMS612    |
| 12 | Fixing Plate and Nuts   | SLMS605    |
| A  | Retaining screw   | ENMS262    |
|    | Inlet plug - M10x1 LH   | ENMS256    |

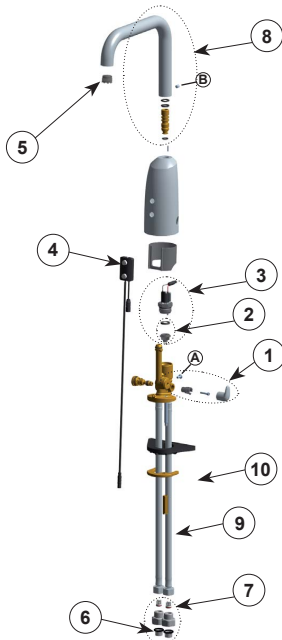
## ELECTRA GOOSENECK ENM6320



| DESCRIPTION  | SALES CODE |
|--|------------|
| 1 Solenoid Membrane Support                        | ENMS212    |
| 2 Solenoid valve                                   | ENMS207    |
| 3 Sensor 1005063V<br>(Previously ENMS228/ 600780V) | ENMS258    |
| 4 Aerator 6L/min TJ                                | ENMS221    |
| 5 Mesh Strainers x 2                               | ENMS214    |
| 6 G3/8 - G1/2 Adaptor/Mesh<br>Strainer/Check Valve | SLMS611    |
| 7 170mm spout                                      | ENMS235    |
| 8 SPEX - Flexi Hoses (pair)                        | SLMS612    |
| 9 Fixing Plate and Nuts                            | SLMS605    |
| Transformer  | ENMS231    |
| Extended Transformer 4.5M                          | ENMS230    |
| Extension cable 3m                                 | 673841     |
| Extension cable 8m                                 | 673840     |

|                    |         |
|--------------------|---------|
| A Retaining screw  | ENMS262 |
| B Spout grub screw | 673360  |

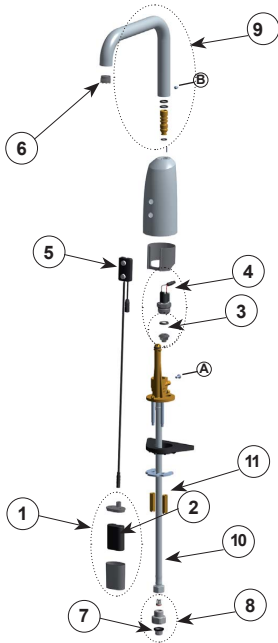
## ELECTRA GOOSENECK ENM6323



| DESCRIPTION  | SALES CODE |
|--|------------|
| 1 Temperature Control handle                               | ENMS222    |
| 2 Solenoid Membrane Support                                | ENMS212    |
| 3 Solenoid valve   | ENMS207    |
| 4 Sensor 1005063V<br>(Previously ENMS228/ 600780V)         | ENMS258    |
| 5 Aerator 6L/min TJ  | ENMS221    |
| 6 Mesh Strainers x 2                                       | ENMS214    |
| 7 G3/8 - G1/2 Adaptor/Mesh<br>Strainer/Check Valve (1 set) | SLMS611    |
| 8 170mm spout  | ENMS235    |
| 9 SPEX - Flexi Hoses (pair)                                | SLMS612    |
| 10 Fixing Plate and Nut                                    | SLMS644    |
| Transformer  | ENMS231    |
| Extended Transformer 4.5M                                  | ENMS230    |
| Extension cable 3m   | 673841     |
| Extension cable 8m   | 673840     |

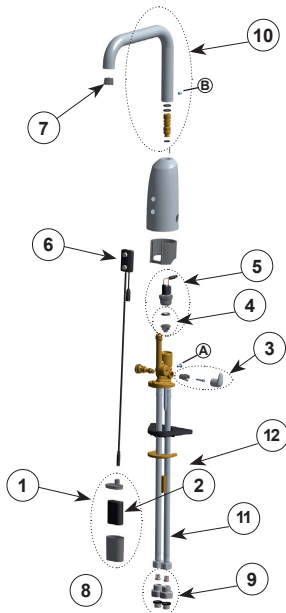
|                       |         |
|-----------------------|---------|
| A Retaining screw     | ENMS262 |
| B Spout grub screw    | 673360  |
| Inlet plug - M10x1 LH | ENMS256 |

## ELECTRA GOOSENECK ENM6350

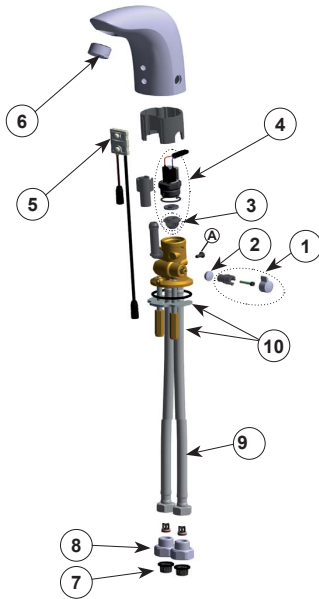


|    | DESCRIPTION  | SALES CODE |
|----|--|------------|
| 1  | Battery Casing (includes battery)                        | ENMS206    |
| 2  | Lithium 6V Battery 2CR5                                  | ENMS204    |
| 3  | Solenoid Membrane Support                                | ENMS212    |
| 4  | Solenoid valve   | ENMS207    |
| 5  | Sensor 1005063V<br>(Previously ENMS227/ 600774V)         | ENMS258    |
| 6  | Aerator 6L/min TJ  | ENMS221    |
| 7  | Mesh Strainers x 2                                       | ENMS214    |
| 8  | G3/8 - G1/2 Adaptor/Mesh<br>Strainer/Check Valve (1 set) | SLMS611    |
| 9  | 170mm spout  | ENMS235    |
| 10 | SPEX - Flexi Hoses (pair)                                | SLMS612    |
| 11 | Fixing Plate and Nuts                                    | SLMS605    |
| A  | Retaining screw  | ENMS262    |
| B  | Spout grub screw   | 673360     |

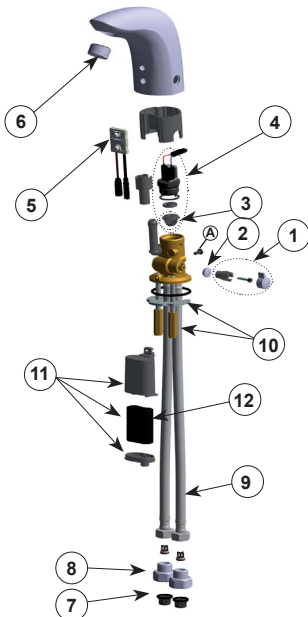
## ELECTRA GOOSENECK ENM6353



|    | DESCRIPTION  | SALES CODE |
|----|--|------------|
| 1  | Battery Casing (includes battery)                        | ENMS206    |
| 2  | Lithium 6V Battery 2CR5                                  | ENMS204    |
| 3  | Temperature Control handle                               | ENMS222    |
| 4  | Solenoid Membrane Support                                | ENMS212    |
| 5  | Solenoid valve   | ENMS207    |
| 6  | Sensor 1005063V<br>(Previously ENMS227/ 600774V)         | ENMS258    |
| 7  | Aerator 6L/min TJ  | ENMS221    |
| 8  | Mesh Strainers x 2                                       | ENMS214    |
| 9  | G3/8 - G1/2 Adaptor/Mesh<br>Strainer/Check Valve (1 set) | SLMS611    |
| 10 | 170mm spout  | ENMS235    |
| 11 | SPEX - Flexi Hoses (pair)                                | SLMS612    |
| 12 | Fixing Plate and Nut                                     | SLMS644    |
| A  | Retaining screw  | ENMS262    |
| B  | Spout grub screw   | 673360     |
|    | Inlet plug - M10x1 LH                                    | ENMS256    |



| DESCRIPTION |   | SALES CODE |
|-------------|---|------------|
| 1           | Temperature Control handle                              | ENMS215    |
| 2           | Chrome mixer Cover                                      | ENMS219    |
| 3           | Solenoid Membrane Support                               | ENMS212    |
| 4           | Solenoid valve  | ENMS207    |
| 5           | Sensor 1001424V<br>(Previously 600082V/ 600839V)        | ENMS209    |
| 6           | 8 lpm Aerator STD Male                                  | SLMS620    |
|             | 6 lpm aerator only STD                                  | 672444     |
| 7           | Mesh Strainers x 2                                      | ENMS214    |
| 8           | G3/8-G1/2 Adaptor /Mesh<br>Strainer/Check Valve (1 set) | SLMS611    |
| 9           | SPEX - Hoses (pair)                                     | SLMS612    |
| 10          | Fixing Plate and Nuts                                   | SLMS605    |
|             | Transformer   | ENMS231    |
|             | Extended Transformer 4.5M                               | ENMS230    |
|             | Extension cable 3m                                      | 673841     |
|             | Extension cable 8m                                      | 673840     |
| A           | Retaining screw   | ENMS262    |
|             | Inlet plug - M10x1 LH                                   | ENMS256    |



| DESCRIPTION |  | SALES CODE |
|-------------|--|------------|
| 1           | Temperature Control handle                                   | ENMS215    |
| 2           | Chrome mixer Cover   | ENMS219    |
| 3           | Solenoid Membrane Support                                    | ENMS212    |
| 4           | Solenoid valve   | ENMS207    |
| 5           | Sensor 1001424V<br>(Previously ENMS211/<br>600659V/ 199215V) | ENMS209    |
| 6           | 8 lpm Aerator STD Male                                       | SLMS620    |
|             | 6 lpm aerator only STD                                       | 672444     |
| 7           | Mesh Strainers x 2   | ENMS214    |
| 8           | G3/8-G1/2 Adaptor /Mesh<br>Strainer/Check Valve (1 set)      | SLMS611    |
| 9           | SPEX - Hoses (pair)  | SLMS612    |
| 10          | Fixing Plate and Nuts  | SLMS605    |
| 11          | Battery Casing (includes battery)                            | ENMS206    |
| 12          | Lithium 6V Battery 2CR5                                      | ENMS204    |
| A           | Retaining screw  | ENMS262    |
|             | Inlet plug - M10x1 LH  | ENMS256    |

# installation instructions

Before proceeding with installation ensure all operating and dimensional specifications are suitable for the intended installation.

Ensure all supply lines are flushed thoroughly to remove debris prior to the installation of this product as per AS/NZS 3500.1. Debris in Solenoid valve may void warranty. A Pressure reduction valve may be required to comply with the recommended maximum supply pressure and/or balanced pressure requirements.

It is recommended that isolation valves are installed prior to the mixer in an easily accessible position.



**WARNING: Do not cut the electrical cable of the sensor tap, or alter the product in any way to suit installation. Damage caused in this way will void warranty.**

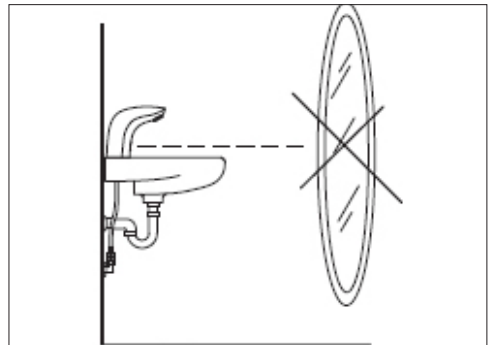
**Extended cable transformer and extension cables are available if extra power cable length is required.**

**NOTE: Flexi hose fittings have a reverse left handed thread**

Tools Required for Installation: spanner, flat head screw driver, thread seal tape or equivalent.



**It is advised NOT TO position taps directly in front of a mirror where the sensor could reflect back causing false operation.**



ENM6120, ENM6150, ENM6220 & ENM6250 models which all come as standard single temperature with the option to modify into a dual temperature mixer tap. **This modification should be done prior to installing the tap.**

### DUAL TEMPERATURE

1. Remove cover cap using a small flat head screwdriver being careful not to damage tap's chrome finish **IMAGE 1**
2. Push grey plastic handle bracket onto the spindle found within the cavity where the chromed cover cap was., The small lug on the handle bracket should face the back of the tap when spindle is in a fully closed position. **IMAGE 2**  
**NOTE: Fit handle bracket and test location prior to securing.**
3. Secure the Handle Bracket by fitting the screw and tightening with a 2.5mm Allen key. **IMAGE 3**
4. Place the Chrome Handle over handle bracket and align hole in the handle with the lug. When in position, firmly press handle onto the bracket until it clicks in place. **IMAGE 4**
5. Test the orientation and rotation of temperature handle, if handle orientation needs correcting use the Allen key to depress lug and remove temperature adjustment handle, repeat steps 2-4 to re-position the grey handle bracket to suit. **IMAGE 5**
6. Unscrew the hot water flexi hose from tap base\* until it comes to a firm stop.  
**\* Plug has a reverse LEFT-handed thread**  
**IMAGE 6**
7. Continue installing tap as per Basin Mount Instructions **Page 12**, test operation of mixer by rotating the handle back and forth while checking the water temperature from the outlet.



IMAGE 1



IMAGE 2



IMAGE 3



IMAGE 4



IMAGE 5



IMAGE 6



IMAGE 7

**\* Plug and hoses have reverse LEFT-handed thread**

### PRE-SET TEMPERATURE

1. Rotate temperature adjustment handle until desired water temperature is reached.
2. Remove handle using Allen key to press securing lug inwards.
3. Loosen Allen head screw using a 2.5mm Allen Key, remove handle bracket from temperature adjustment spindle. **IMAGE 3**
4. Insert chromed plastic cover cap in place of temperature adjustment handle. **IMAGE 1**

### COLD OR PRE-MIXED WATER

1. Repeat steps 1-4 as above in PRE-SET TEMPERATURE
2. Unscrew the hot water flexi hose\* and screw in the plug in place of the inlet pipe. **IMAGE 7**

Before mounting tap onto basin, check the configuration of water supply single inlet or dual (hot & cold) inlets. To change the configuration, refer to Page 11 - Modification to a Mixer.

1. Isolate water supply before commencing installation.
2. Place the base sealing o-ring over the end of the Flexi hoses and press firmly against base of tap body. **IMAGE 8**
3. Feed each end of Flexi hoses through the basin/sink hole, alternately. Position tap over basin/sink hole & align the spout. Ensure sealing washer is positioned flat between basin/sink and tap body base. **IMAGES 9 & 10**

Note: An optional\* Fixing Support Plate (SLMS608) can be used as additional support and is to be positioned between the underside of the basin/sink and the fixing plate. \*Supplied as standard with Gooseneck Models.

4. Place the Fixing Plate over threaded rod and screw on Fixing Nuts. Wind fixing nuts up threaded rod to press the fixing plate against the underside of the basin. **IMAGE 11**

**Caution: Be careful not to pinch the sensor cable with the fixing plate. If sensor cable is squashed it may result in permanent damage to the sensor.**

5. Check the position and alignment of tap again, tighten fixing nuts up to secure it onto the basin/sink using a flat head screw driver, a spanner or a socket wrench.
6. Screw the G3/8"-1/2" adaptor onto the supply Outlet/Isolation valve, ensuring the mesh strainer is in position between the Outlet and Adaptor. **IMAGE 12 & 13**

7. Connect Flexi hose to the G3/8"-1/2" Adaptor. **IMAGE 14**
8. If the tap is to be used as a mixer, see Modification for Mixer on Page 11 and repeat steps 6 & 7 with the second adaptor and Flexi hose making sure the hot water is connected to the hot water hose.

**Note: It is the manufacturer's recommendation that the Flexi (SPEX) hoses are connected directly to isolation valves**



IMAGE 8



IMAGE 9



IMAGE 10



IMAGE 11

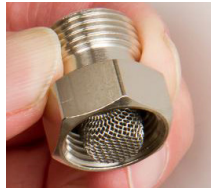


IMAGE 12



IMAGE 13

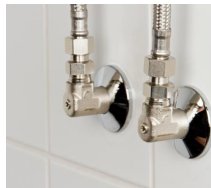


IMAGE 14

9. Once the tap is installed and secure, take the power cable which should be hanging down near flexi hoses (N/A for ENM6250 models) and firmly press connector into either battery connector or transformer cable connector. **IMAGES 15 & 16**

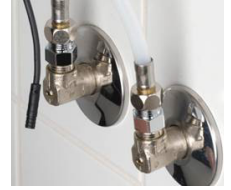


IMAGE 15



IMAGE 16

Ensure battery is connected with white line on the cable connector aligning with the moulded line in the battery casing and /or white line on transformer cable connector. **IMAGE 17 & 18**



**WARNING: Failure to align the connections correctly will result in permanent damage to the sensor & void warranty.**



Align white strip with moulded line on battery case

IMAGE 17



White strips must align on transformer cable

IMAGE 18

10. For mains powered models, once the power cables are connected, plug transformer into power supply and turn power 'ON'.

For Battery Models, secure the battery case to the flexi hose in an upside down position with the battery connector facing down (facing the connection upside down prevents water pooling near the connection) using the plastic ties and battery holder provided. **IMAGE 19**



IMAGE 19

# servicing

## ACCESS TO COMPONENTS - REMOVING INTERNALS OF TAP FOR SERVICING

NOTE: Take note of the process and orientation of removing components will require the reverse process for refitting.

1. Ensure water supply is turned off and the battery or transformer is disconnected (except ENM6250)
2. Remove chrome cover cap using a small flat head screwdriver to lever off. If tap is set for mixing, rotate temperature handle fully anti-clockwise and remove handle using an allen key to press securing lug inwards. **IMAGE 30**
3. Unwind Allen head screw using a 2.5mm Allen key, and remove handle bracket from temperature adjustment spindle.
4. Remove securing grub screw at back of the tap using the 2.5mm Allen key and carefully lift the Chromed tap body vertically off the hob mount. **IMAGE 31**

**!** Be careful not to lift too high as cables will still be connected.

5. Disconnect sensor cable from solenoid valve. **IMAGES 32 & 33**  
**NOTE: for ENM6250 models battery is within tap body and should be removed at this point and replaced immediately after the intended operation is complete.** See Changing Battery Instructions **Page 15**
6. Perform required operation then proceed .
7. For ENM6250 models, connect sensor to battery, for other models, connect the sensor cable to the solenoid valve and feed power cable of the sensor through the tap hob mount.

The solenoid and sensor connectors are to be secured within the grey plastic connector housing which is fixed to the solenoid. Check that the connector housing is in a suitable position in relation to the internal cavity of the tap body. **IMAGE 34**. It should be positioned where it will not interfere with the internal components, approximately the same distance from the solenoid valve as the porting pipe. **IMAGES 35** NOTE: The longer end of the connector housing faces downwards.

8. Lower the tap body, taking care not to pinch the cables, until it locates over the lug on the hob mount, and the grub screw hole in the tap body aligns with the grub screw hole in the hob mount. Secure in place using the grub screw and tighten with the 2.5mm Allen key. Replace the temperature handle/chrome cover cap.
9. Connect tap to its power source either 6V battery or 12V mains power transformer cable. Ensure the battery is connected in its correct configuration with the white line on the cable connector aligning with the moulded line in the battery casing or white line on the transformer cable connector. See Installation Instructions on **Page 13 IMAGES 17 & 18**

**!** **WARNING: Failure to align the connections correctly will result in permanent damage to the sensor & void warranty**

10. Turn power and water supply on and test operation.

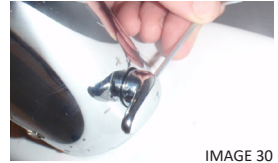


IMAGE 30

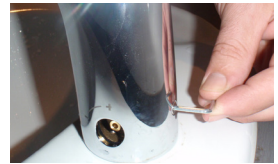


IMAGE 31



IMAGE 32



IMAGE 33

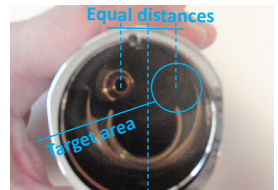


IMAGE 34

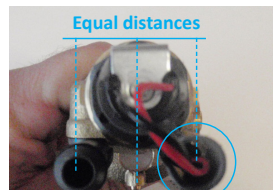


IMAGE 35

**CHANGING BATTERY**

A battery typically lasts between 2 - 5 years, depending on usage. Working voltage is between 5.4v - 6.3v. If voltage falls below 5.3v, replace the battery. **Use only 6V Lithium 2CR5 battery.**

^ Ensure the battery is connected in its correct configuration with the white line on the cable connector aligning with the moulded line in the battery casing or white line on the transformer cable connector.

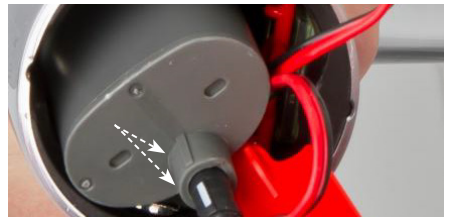
**⚠ WARNING: Failure to align connections correctly can permanently damage sensor & void warranty**

**For all models (except ENM6250)**

1. Detach battery casing from holder.
2. Detach the sensor cable and open battery casing.  
**Cover will be tightly fitted.**  
**IMAGE 36**
3. Change battery ^ . Use only 6V Lithium 2CR5 battery.
4. Replace battery casing cover and the sensor lead.
5. Re-attach battery casing in the holder



IMAGE 36



Align white strip with moulded line on battery case

IMAGE 17

Secure the battery case to the flexi hose in an upside down position with the battery connector facing down (facing the connection upside down prevents water pooling near the connection) using the plastic ties and battery holder provided. **IMAGE 19**



IMAGE 19

**CHANGING BATTERY ENM6250**

1. Disassemble the tap following instructions on Page 14.
2. With internals exposed, pull battery casing out of tap body base using red plastic tab. **IMAGE 37**
3. Detach the sensor cable and open the battery casing. **NOTE: cover is tightly fitted.**
4. Change the battery^.
5. Replace battery casing cover and connect sensor lead.
6. Replace battery casing into base of tap body.
7. Re-assemble the tap by following instructions Page 14.



IMAGE 37

## CHANGING SENSOR

1. Disassemble tap by following instructions on Page 14
2. Once internals are exposed, pull plastic sensor bracket out of base of the tap body and remove sensor.  
**IMAGES 42 & 43**
3. Sensor cables are contained within connector housing attached to side of Solenoid. With sensor removed from tap body, it can be disconnected and replaced.

Take note of orientation when removing tap body and sensor as it should be re-assembled the same way when fitting a new sensor.

4. Place the sensor into the tap body so that the lens fits within the holes provided. Ensure the sensor is positioned with the text on the back facing upright. When in position, carefully secure in place with plastic sensor bracket. **IMAGE 44**
5. Connect sensor to solenoid and position cables within the cable clip so it can be inserted within the tap body without being caught or damaged. **IMAGE 45.**

When re-connecting the 'new' sensor cables it is critical that the white lines on the connectors align prior to pressing together.

6. Re-assemble tap by following instructions on Page 14



IMAGE 42



IMAGE 43



IMAGE 44



IMAGE 45

## CHANGING SOLENOID VALVE

1. Disassemble tap by following instructions on Page 14
2. With internals exposed, disconnect solenoid lead and detach solenoid valve using maintenance tool provided. **IMAGE 48**
3. Disassemble solenoid valve and service as necessary.
4. Check for any damage to membrane & replace if necessary.

### IMAGE 49

**Note: orientation of membrane - larger white circular surface faces up**

5. Check there is a sealing o-ring attached to the bottom part of solenoid. If the o-ring has been left in the tap body, take it out and re-attach to the bottom of solenoid. **IMAGE 50**
6. Re-assemble solenoid valve and reconnect solenoid lead.
7. Re-assemble tap by following instructions on Page 14



IMAGE 48



IMAGE 49



IMAGE 50



White strips must align on transformer cable IMAGE 18

# maintenance

Enware Product should be cleaned with a soft damp cloth using only mild liquid detergent or soap and water.

Do not use cleaning agents containing a corrosive acid, scouring agent or solvent chemicals or cream cleaners.

Use of unsuitable cleaning agents may damage surface. Any damage caused in this way will not be covered by warranty.

If re-greasing always use a silicon based potable water approved lubricant such as Hydroseal 'O' Ring Lubricant or Molykote 111 silicone based grease.

## CLEANING THE FILTERS ON INLET HOSES

1. Ensure the water supply is turned off.
2. Disconnect the flexi hose from G3/8"-1/2" adaptor.
3. Remove the G3/8"-1/2" adaptor from isolation valve.
4. Clean any collected debris from the filter.
5. Re-assemble the water supply connection to tap.

# sensor program

The sensor has a built-in program that can be accessed using the Oras 360 App on a mobile device, to monitor or adjust the sensor program. (Available on sensors with Bluetooth® connectivity.)

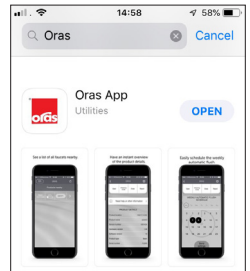
Through the Oras 360 App, you can:

- Identify the Bluetooth® sensors in the vicinity
- Access all important product information and adjust current settings with secure password access
- Set periodic automatic flushing to avoid water becoming stagnant
- Turn the tap on or off remotely
- Turn the tap off for a set time, for cleaning
- Report the product information and settings made directly to your email
- Keep track of the remaining battery life
- Monitor water consumption

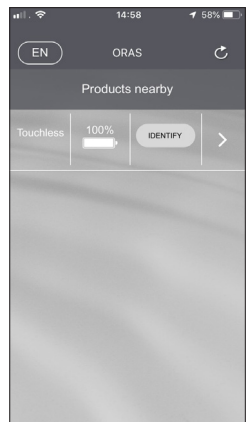


## HOW TO USE THE ORAS 360 APP

1. Download the Oras 360 App from the App Store in an iOS device, or from the Google Play store in an Android device.




2. Turn on the Bluetooth® wireless connection in your smart phone or tablet settings.
3. Open the Oras 360 App. All Bluetooth® compatible tap sensors in the vicinity will be listed automatically. (If the product is not listed, check that the sensor tap has power turned on or the battery plugged in.)
4. Select the desired sensor and access the settings through your phone or tablet device.



The Bluetooth® trademark and logos are property of Bluetooth SIG, Inc., and their usage is licensed for Orasgroup. Other brands and trade names are property of the respective owners. Apple, the Apple logo, iPhone, iPad, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc. Google Play and the Google Play logo are trademarks of Google Inc.

The first page shows details about the sensor.


For explanation on the information listed, see the explanation page (press the  button on the App).


To access Command Buttons and Sensor Program Settings, contact Enware Technical Services on **1300 369 273**, or email **oraspasword@enware.com.au**, for access password.

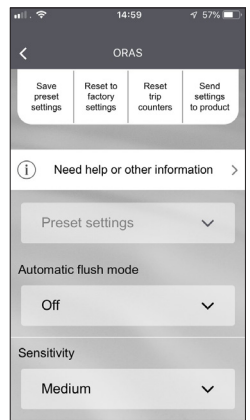
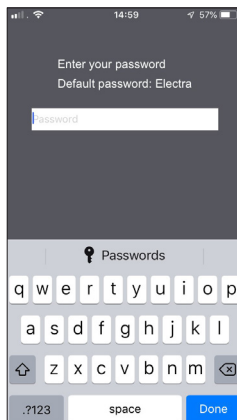
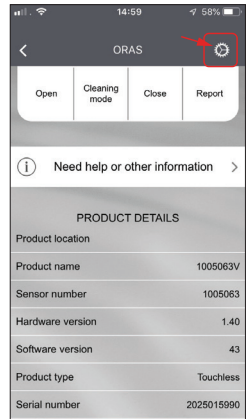
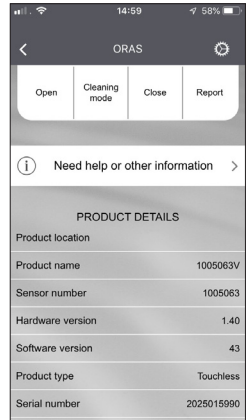
## COMMAND BUTTONS

Use the command buttons to open or close the tap using the App, or activate Cleaning Mode (turns off the sensor for a set period of time to allow for cleaning, indicated by green pulsing light indicator on sensor). Report function sends the sensor information to your email.

## HOW TO CHANGE THE SENSOR PROGRAM SETTINGS

1. To access the sensor function program, press the settings button .
2. Enter the password. (Contact Enware for default password, or your selected password if already registered).
3. Change the settings as desired. Once the settings are set in the App, send the settings to the sensor tap. (Press the "Send settings to product" button.)
4. Activate the sensor tap several times for the new settings to come into effect.

For explanation on the program settings listed, see the explanation page (press the  button on the App), or refer to next page.



---

# sensor program settings

## **Automatic Flush Mode:**

Can set the tap to turn on by itself periodically to flush the water in the line, to prevent the water becoming stagnant. [Set the flush duration (s) and interval (hrs or weekly schedule). Default setting is OFF.]

## **Sensitivity:**

Reduce the sensitivity (Low) if bright lighting or environmental disturbance is affecting sensor function. Increase the sensitivity (High) if sensor is not detecting the user well. [Set to High, Medium or Low.]

## **Max IR power:**

Reduce the maximum power of sensor if sensor malfunctions due to the sensor picking up the basin bowl or objects at a far distance. [Settings 0=20%, 1=40%, 2=60%, 3=80%, 4= 100%]

## **Max Flow Time:**

Set the maximum length of time the water can run for per activation while the user is in the sensor range. If the water runs for longer than this time, the sensor goes to Vandalism state and turns off. It will stay closed until the object in the sensor range is removed, and the sensor will return to normal mode. [Set the time from 2 to 1800 seconds.]

## **Manual Flush Time:**

Set the maximum length of time the water can run for per activation when activated by the App using a mobile device. [Set the time from 1 to 1800 seconds.]

## **Cleaning Mode Time:**

Set the length of time the tap will be turned off for Cleaning Mode (activated by the App using a mobile device, or by Magnetic Key). [Set the time from 2 to 1800 seconds.]

## **After Flow Time:**

Set the length of time the tap runs for after user moves hand away from sensor range. [Set from 1 to 20 seconds.]

## **Intelligent After Flow Mode:**

Turn on to allow the sensor to control and vary the After Flow Time down to 1 sec depending on how long the user is inside the sensor range. (In addition to normal After Flow mode)

## **Open Distance (Sensor Range):**

Set the sensor detection range. [Settings: Short - reduces the sensor range distance by -20%; Optimal - factory setting; Long - increases sensor range distance by +20%.]

## **Operation Mode:**

- **Automatic (Auto Sense)** - Tap turns on and stays on as long as the user is within sensor range, up to the max flow time. Turns off when the user is out of sensor range.
- **Hand shower** - Short swing activates hand shower mode. The waterflow stops after the max flow time or when a hand is again in the sensor range. If a hand is in the range longer than 1s, it activates the Automatic mode.
- **Manual ON/ AUTO OFF** - If hand is within sensor range for longer than Activation Delay Time, the tap turns on and runs for the fixed duration of the maximum flow time without interruption. Set the Activation delay time from 1 to 20 seconds.
- **ON/OFF (On Demand Sensor)**: Hover hand in front of sensor to turn the tap on. Stops after max flow time, or if hand is again in the sensor range. (Not suitable if sensor is located below spout.)

## **Flow Rate For Consumption Calculation:**

Set the flow rate of the tap outlet to monitor water consumption. [Set from 0.1 up to 40 l/min.]

## **Product Location:**

Enter the name of your choice to identify the location of the tap.

## **Password:**

Set the password of your choice to limit access to the settings by others (e.g. for public places).

# troubleshooting

| FAULT/SYMPTOM  | CAUSE   | RECTIFICATION   |
|--|---|---|
| Leaking or dripping water from outlet  | Solenoid has debris caught in the mechanism                                   | Remove solenoid and inspect solenoid membrane for debris. Remove debris and/ or replace solenoid membrane if damaged. Follow steps in Maintenance and Servicing Instructions.   |
|  | Supply water pressure is too high. Incorrect installation                     | Check water pressure and install a pressure reduction valve if greater than 500 kPa.  |
|  | Solenoid valve is damaged   | Replace Solenoid valve. Follow steps in Maintenance and Servicing Instructions.   |
| No water flow from tap   | Water turned off  | Turn water on.  |
|  | Power supply is turned off  | Turn on power supply.   |
|  | Solenoid seized up due to excessive water pressure or water hammer            | Release water pressure from solenoid, either by disconnecting the flexible hose, or by dismantling the tap and unscrewing the solenoid. Sensor tap should start working again. Install a Pressure Reduction Valve (PRV) before the tap to prevent the problem recurring.  |
| <p><b>Note: Small sized storage type electric water heaters can often cause excessive pressure in the hot water line (down stream to the heater) while heating, typically above 1000kPa. This excessive pressure may cause the sensor tap solenoid to malfunction and must be regulated to under 500kPa as required by AS/NZS 3500.1-2003 Clause 3.3.4 – Maximum pressure within buildings. PLV installed at the inlet of the heater does not limit the outlet pressure of heater. Any malfunction due to excessive pressure is not covered by warranty.</b></p> |   |   |
|  |   | Check TPR valve is working on hot water heater. Replace if necessary.   |
|  | Electronic component failure – solenoid valve, sensor, battery or transformer | Follow steps in Maintenance and Servicing instructions, and replace if needed. Check that the red light turns on in the sensor lens for a few seconds when power is first connected. If it does, the problem is likely to be with the solenoid. If not, either sensor, or power pack, or both may be faulty. Replace battery if required. |
|  | Power supply failure  | Check that the power cable is not pinched between the fixing clip and tap body. Replace sensor if cable is damaged  |
| Water is leaking from base of tap body   | Solenoid valve is damaged or o-rings are worn                                 | Remove Solenoid and inspect. Replace solenoid or o rings if damaged. Follow steps in Maintenance and Servicing instructions.  |
|  | Tap body shroud is not fully engaged into tap hob base                        | Ensure internal components are aligned and that shroud is fully engaged into hob base, being careful not to pinch any electronic cables   |
|  | Solenoid valve loose in body  | Ensure solenoid valve is secure in tap body – tighten if needed, however do not overtighten. Follow steps in Maintenance and Servicing instructions.  |

|  |   |  |
|--|---|--|
| Constant flow of water   | Solenoid valve is damaged or solenoid has debris caught in the mechanism                                  | Remove solenoid and inspect solenoid membrane for debris. Remove debris and/or replace solenoid if damaged.  |
|  | Electronic component failure – solenoid valve/ sensor/ battery/ power supply                              | Follow steps in Maintenance and Servicing instructions and replace if needed.  |
|  | Power supply is turned off  | Turn on power supply   |
|  | Sensor is constantly activated by an object in front of sensor, such as a raised sink or bowl             | Remove interfering object  |
| Tap turns on randomly or erratically   | Sensor beam interference by reflections off mirror or high-visibility vest                                | Remove interfering object. Adjust sensor range or sensitivity by reprogramming the sensor  |
|  | Incompatible lighting or electrical interference in the environment                                       | Remove interference. Adjust sensor range or sensitivity by reprogramming the sensor  |
| Battery only lasts a few weeks or days   | Sensor has been permanently damaged due to reversed polarity (being incorrectly connected)                | Replace sensor and battery. (A new battery typically lasts between 3 to 5 years, depending on frequency of use). Follow steps in Installation Instructions and Maintenance and Servicing instructions. |
| Sensor red light constantly blinks   | Low voltage<br>Battery is running out, or power supply is insufficient                                    | Replace battery.<br>Check if power cable is not pinched or damaged. Check power supply.  |
| Water stop slowly – long after flow period greater 1 second if hands have been in sensor range for longer than 5 seconds | Solenoid has debris caught in the mechanism   | Remove solenoid and inspect solenoid membrane for debris. Remove debris and/or replace solenoid if damaged. Follow steps in Maintenance and Servicing instructions.                                    |
| Low flow from tap  | Debris caught in flow path  | Remove aerator, solenoid and mesh strainers, then inspect and clean pathway. Follow steps in Maintenance and Servicing instructions.   |
|  | Aerator or flow control is blocked by debris  | Remove aerator and flow control from spout and clean debris  |
|  | Temperature adjustment handle on side is positioned incorrectly (for models with optional mixer function) | Turn handle to suitable position to allow full flow. Follow steps in Modification to Pre-set Temperature ( Page 11)  |
|  | Inlet hose is kinked  | Re-install inlet hose without any sharp bends, replace hose if necessary   |

For further assistance, contact the Enware Service Team on 1300 369 273.

# product warranty statement - WATTS AUSTRALIA

EFFECTIVE FROM 20 November 2023

This Warranty Statement applies to products supplied by Australian Valve Group Pty Ltd (ACN 068 227 270) (**AVG**) or Enware Pty Ltd (ACN 662 302 767) (**Enware**) (each of AVG and Enware, a Supplier) and installed within Australia.

Subject to the terms and conditions outlined in this Warranty Statement, each Supplier warrants to its customers that a product supplied by it (**Product**) will be free from all defects in material and workmanship under normal usage for the applicable Warranty Period (as set out in the Warranty Table below). The Warranty Period commences from the date of delivery of the relevant Product.

## 1. Conditions

The warranty provided under this Warranty Statement will not apply in respect of a Product (or any Product defect, fault or resulting damage) if:

- (a) the Product is not installed and maintained in accordance with the requirements of the applicable laws, standards and codes (including, without limitation to, the National Construction Code Volume Three – Plumbing Code of Australia, associated reference standards as applicable at the time and AS/NZS 3500);
- (b) the Product is not installed and maintained by a qualified technician in accordance with the relevant installation and operation manual and instructions; and
- (c) any Product defect, faulty or resulting damage arises from:
  - (i) failure by you or any other person to follow the relevant manual or instructions (relating to the handling, storage, installation, fitting, connection, adjustment, maintenance or repair of the Product) published or provided by the Supplier;
  - (ii) failure by you or any other person responsible for the fitting, installation, or other work on the Product to follow or conform to applicable laws, standards and codes (including, without limitation to, the AS/NZ 3500 set of Standards, all applicable State and Territory Plumbing Codes, the Plumbing Code of Australia and directions and requirements of local and other statutory authorities);
  - (iii) any parts or components not manufactured by the Supplier (or otherwise not authorised by the Supplier) are installed or combined with the Product, without the prior authorisation of the Supplier; or
  - (iv) any act or circumstance beyond our control including, without limitation to, accident, abnormal use, vandalism, fouling caused by foreign material, damage from adverse water conditions, chemical, acts of God, damage to buildings, other structures and infrastructure and loss or damage during transit or transportation of the Product, or any abuse, misuse, misapplication, improper installation or connection, or improper maintenance or alteration of the Product.

## 2. Make a claim

To make a claim under this Warranty Statement, you must notify the relevant Supplier in writing within 7 days of any alleged defect in the Product coming to your attention and provide the Supplier with proof of your purchase of the Product to the relevant Supplier:

- (a) If the Product is supplied by **AVG**, please contact AVG by telephone at 1800 284 287, or by email via its online portal <https://www.wattsau.com.au/support>.
- (b) If the Product is supplied by **Enware**, please complete the Product Service Request form (ENF091), which is available on request from our office (see contact details below), or online via <https://www.enware.com.au/warranty-service-form/>. All notifications and accompanying forms must be sent to Enware marked for the attention of Enware, 9 Endeavour Road, Caringbah NSW 2229. Enware can also be contacted by telephone (1300 369 273) or by email ([info@enware.com.au](mailto:info@enware.com.au)).

On receipt of a notification from you of a claim under this Warranty Statement, the relevant Supplier may contact you requesting you provide reasonably additional evidence, information or details about your claim, or requiring that the relevant Product should be returned to the Supplier (in accordance with the Supplier's instructions) for inspection and testing.

Your failure to comply with any such request within a reasonable amount of time may result in your claim under this Warranty Statement being rejected.

## 3. Our responsibilities

(a) In the event that the Supplier is reasonably satisfied that there is a defect in the relevant Product within the applicable Warranty Period, the Supplier will, at its option, replace the Product, supply an equivalent product or repair the Product, free of charge. Your costs in making a warranty claim under this Warranty Statement, including any costs in relation to freight, collection, delivery and installation, are to be borne and paid by you. However, if in respect of a Product, it is indicated in the Warranty Table that labour support will be provided, and the Supplier is reasonably satisfied that a defect in the Product takes place during the period that labour support will be provided as indicated in the Warranty Table, the Supplier will bear the costs for delivery, repair and installation of the replacement Product (as applicable).

(b) TO THE EXTENT PERMITTED BY LAW AND SUBJECT TO PARAGRAPH 4 BELOW AND THE OPERATION OF THE AUSTRALIAN CONSUMER LAW:

- (i) THE WARRANTY SET OUT IN THIS WARRANTY STATEMENT IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE SUPPLIER WITH RESPECT TO THE RELEVANT PRODUCT;
- (ii) THE SUPPLIER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED;
- (iii) THE SUPPLIER HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE; AND
- (iv) THE REMEDY DESCRIBED IN THIS WARRANTY STATEMENT SHALL CONSTITUTE THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF WARRANTY, AND THE SUPPLIER SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, OR LOST PROFITS OR THE COST OF REPAIRING OR REPLACING OTHER PROPERTY WHICH IS DAMAGED IF THE PRODUCT DOES NOT WORK PROPERLY.

## 4. Australian Consumer Law

This paragraph 4 applies if you are a 'Consumer' (as defined in section 3 of the Australian Consumer Law (**ACL**)) and the Product or services supplied to you falls within the goods or services which, for the purposes of the ACL, are of a kind ordinarily acquired for personal, domestic or household use or consumption.

The Products and services provided by the Supplier come with guarantees that cannot be excluded under the ACL, and noting in this Warranty Statement should be interpreted as attempting to exclude, restrict or modify such guarantees or your rights under the ACL. For major failures with any services, you are entitled:

- (c) to cancel your service contract with us; and
- (d) to a refund for the unused portion, or to compensation for its reduced value.

You are also entitled to choose a refund or replacement for major failures with Products. If a failure with the Product or a service does not amount to a major failure, you are entitled to have the failure rectified in a reasonable time. If this is not done you are entitled to a refund for the Products and to cancel the contract for the service and obtain a refund of any unused portion. You are also entitled to be compensated for any other reasonably foreseeable loss or damage from a failure in the Products or service\*.

## 5. Warranty table

\*the applicable period commences on the date of delivery of the Product.

| PRODUCT GROUP            | PRODUCT SERIES CODES | WARRANTY PERIOD (YEARS)* | LABOUR SUPPORT (YEARS) |
|--------------------------|----------------------|--------------------------|------------------------|
| Enware Electronic Sensor | ENM                  | 3                        | 2                      |



1300 369 273  
info@enware.com.au  
enware.com.au