



Product Instruction Manual

Wave



HW30M, HW30A

Instantaneous Hand Wash

Overview

Thank you for purchasing a Wave Instantaneous Hand Wash. Available in manual and automatic models, to be used for light hand washing at a single basin. Instantaneous water heaters are energy efficient as they only consume energy when in use, so have no standing losses. The HW30M manual model is operated manually via a rotating knob on the front, the HW30A automatic model operates automatically via an infrared sensor on the front.

Confirm that the flow rate and temperature performance is adequate for your application using the information provided.

Please read and follow these instructions to ensure that installation and operation are as simple and safe as possible.

Important Safety Points

-  The appliance should only be installed and maintained by a competent person in accordance with any local electrical and plumbing regulations.
-  This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
-  Children shall not play with the appliance.
-  Cleaning and user maintenance shall not be made by children without supervision.
-  The spray head must be descaled regularly to ensure it remains unimpeded and free from debris and to avoid a pressure build up.
-  Do not use the appliance in an ambient temperature exceeding 30°C.
-  Do not switch on if there is a possibility that the water in the heater is frozen.
-  This appliance is intended for open outlet usage, use only the fittings provided/ specified and do not attempt to modify them in any way.
-  This appliance incorporates a safety relief valve; do not attempt to modify this in any way.

-  Do not use pre heated water to supply the inlet of this appliance.
-  Only connect the appliance to an electrical supply that meets the specification detailed on the rating label.
-  The appliance must be permanently connected to the electrical supply through an appropriately rated isolating switch with a contact separation in all poles.
-  This appliance must be earthed.
-  This appliance is intended to be permanently connected to the water mains and should not be connected by a detachable hose-set.
-  Only connect the appliance to a water supply that meets the min/max pressures specified in the specifications section of this manual.
-  This appliance should not be installed in a location where freezing can occur.
-  This appliance is not designed for outdoor use or use in very damp environments.
-  The appliance should be drained if it will be switched off or unattended for any length of time, particularly during the colder months of the year where a possibility of freezing temperatures exists.

1. Installation

Wall Mounting



Do not locate the appliance where the consequences of a water leak could be unusually serious.



This appliance is not designed for outdoor use or use in very damp environments.



Ensure there are no hidden cables or pipework before commencing any drilling.

- Two cable entry points are available on the appliance. If a concealed cable is required to enter through the back of the appliance the knock out section on the back plate should be removed to allow cable entry.
- Before attaching the appliance to the wall, consider the wiring route to the appliance.
- Select a suitable location for the final positioning of the appliance, ensuring the spray will discharge into a suitable basin/sink during use.
- Remove the front cover by unscrewing the two pairs of screws located at the top and bottom of the appliance.
- Offer the appliance to the wall, ensuring a level, mark the two screw holes onto the desired mounting surface.
- Drill holes and insert wall plugs. Secure the appliance to the wall using the two screws provided.

2. Plumbing Connection

- ⚠ This appliance is intended for open outlet usage, use only the fittings provided/ specified and do not attempt to modify them in any way.
 - ⚠ This appliance is intended to be permanently connected to the water mains and should not be connected by a detachable hose-set.
 - ⚠ Only connect the appliance to a water supply that meets the min/max pressures specified in the specifications section of this manual.
 - ⚠ Do not use pre heated water to supply the inlet of this appliance.
 - ⚠ Do not carry out soldering close to the appliance as heat transfer can cause damage to the appliance.
 - ⚠ Before final connection of the water supply to the appliance, ensure any debris such as loose solder is flushed from the system.
 - ⚠ Do not use jointing compound for the plumbing connections of the appliance.
- Use 15mm copper pipe compression fitting to connect the cold (right hand) inlet side of the appliance to the water supply.
 - To fit the spout push it onto the hot water outlet, ensuring the retaining lugs locate and click into position.
 - To remove the spout gently prise the retaining lugs apart with a pair of screwdrivers and separate the spout from the appliance (see diagram 1).

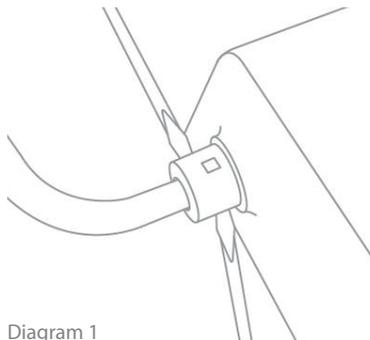


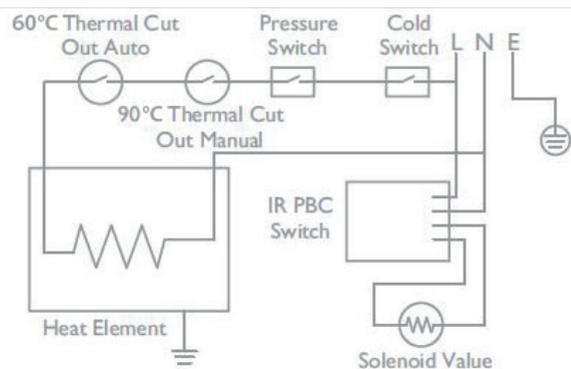
Diagram 1

3. Electrical Connection

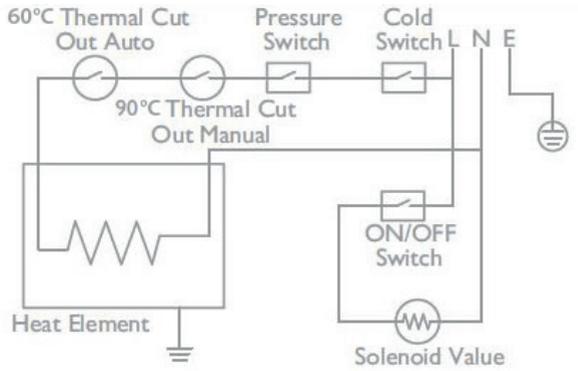
-  Do not commence electrical installation before completing all stages of the plumbing installation.
-  Only connect the appliance to an electrical supply that meets the specification detailed on the rating label.
-  The appliance must be permanently connected to the electrical supply through an appropriately rated isolating switch with a contact separation in all poles.
-  This appliance must be earthed.
 - Select the entry point for the cable; this can be via the concealed entry point in the back plate or through the cable exit at the bottom right of the appliance.
 - When using the bottom right cable entry point the cable grip located directly below the terminal block must be used.
 - Make connections as below;
 - Green/ yellow earth wire to terminal marked ⊕ or 'E'
 - Brown live wire to the terminal marked 'L'
 - Blue neutral wire to the terminal marked 'N'

Wiring Diagrams

HW30A Automatic Model

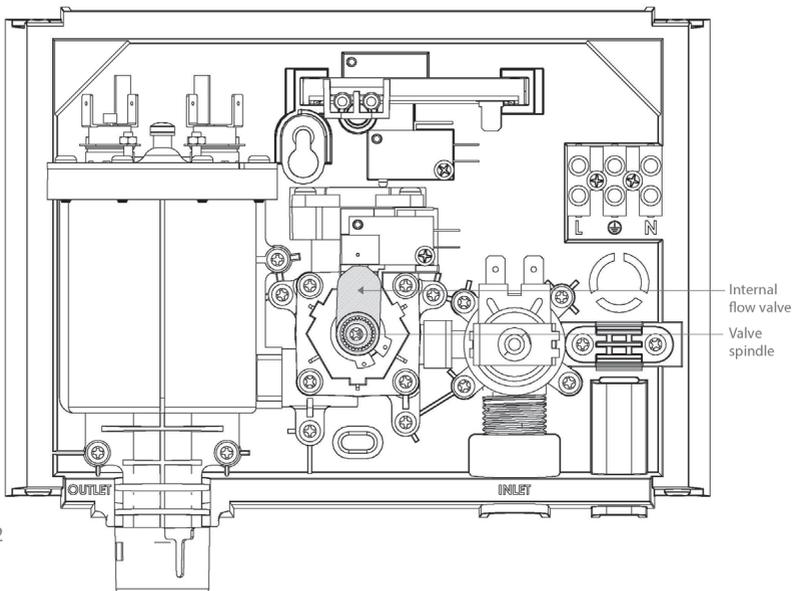


HW30M Manual Model



4. Refitting the Cover

- Ensure the internal flow valve is in the fully closed position, turned clockwise as far as it will go and pointing straight up (see diagram 2).
- When the cover is replaced ensure that the temperature control dial on the front cover indicates that the valve is closed. This ensures the external indication of the valve state (open/closed) as seen by the user corresponds with the true physical state of the valve (open/closed).
- Gently engage the temperature control dial on to the valve spindle (see diagram 2) as you replace the cover. Check that the valve will now operate fully in both directions.
- The manual unit HW30M also features a linking rod that connects the on/off switch with the power dial. The linking rod has a "D" cross section that ensures it will only connect with the rod in the correct orientation.
- Replace the two pairs of screws on the top and bottom of the appliance.



5. Operation

- ⚠ Do not use the appliance in an ambient temperature exceeding 30°C.
- ⚠ Do not switch on if there is a possibility that the water in the appliance is frozen.
- ⚠ On first use the commissioning sequence must be followed to prevent dry operation of the element.

Commissioning

- Turn on the water supply to the appliance.
- Turn the temperature control dial on the front of the appliance fully clockwise to the commissioning setting (°C) (see diagrams 3 and 4). This disables the heating element.
- Turn on the electrical supply and activate the water flow:
 - HW30A** - place your hand close to the circular infrared window
 - HW30M** - turn the power control dial clockwise to the 'ON' position (ON = 1, OFF = 0)
- Allow water to flow through the appliance until a smooth spray is achieved from the spout for several seconds.
- This completes the commissioning cycle. It must be repeated if the tank is ever drained.

HW30M Manual Model

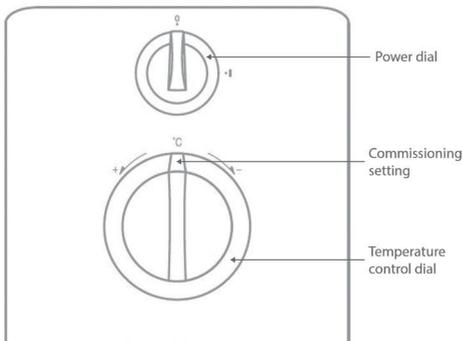


Diagram 3

HW30A Automatic Model

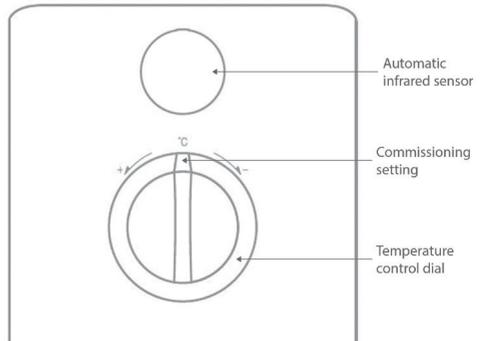


Diagram 4

Normal Operation

HW30M - Manual Model

- Turn on power to the appliance using the power dial (see diagram 2). Adjust the temperature control dial until the desired temperature is achieved. When hand washing is complete turn off using the power dial.

HW30A - Automatic Model

- Turn on by placing the hand near the red infrared sensor. Adjust the temperature control dial until the desired temperature is achieved. The automatic appliance will deliver a timed flow of water for approx. 30 seconds or until the appliance is switched off by again placing the hand near the infrared sensor.

Water Temperatures

- This appliance is an instantaneous water heater consuming a fixed 2.84 kW of power. This power will raise the temperature of the incoming water by an amount that reflects the flow rate. A low water flow results in a higher temperature uplift and a high flow results in a lower uplift.
- E.g. the heater could deliver 42°C water in the summer (with an incoming water supply temperature of 17°C). The same product with the same flow rate would only be able to deliver 38°C in cooler months (due to a lower incoming water temperature of 13°C). Both examples based on 1.6 l/m flow rate.

6. Cleaning and Maintenance



The appliance should only be installed and maintained by a competent person in accordance with any local electrical and plumbing regulations.



Do not use abrasive chemicals or cloths to clean this appliance.



Isolate the appliance from the electrical and plumbing supply before performing any maintenance task.



Ensure the appliance has cooled down before performing any maintenance task.



The appliance should be drained if it will be switched off or unattended for any length of time, particularly during the colder months of the year where the possibility of freezing temperatures exists.



Ensure any future maintenance or modifications to the plumbing system also complies with the guidelines in these instructions.



Keep records of maintenance and ensure any future occupier of the building is fully aware of the content of these instructions.

- Visually inspect the appliance and its immediate surroundings regularly for any signs of water escape that might indicate the product may be nearing the end of its natural life.

Descaling the Spray Head

- The spray head will require descaling periodically. Failure to do so could result in an internal pressure build-up.
- Unscrew the central screw in the sprayhead and remove any solid debris under a running tap. To remove stubborn scale it may be necessary to use a suitable hard brush or to soak the parts in a descaling solution.

Cleaning

- Wipe surfaces with a clean, damp (not wet) cloth. Do not use abrasive compounds.

7. Additional Information

Safety Features

- This appliance is fitted with two levels of thermal protection, the first is an auto reset cutout that will operate at 60°C. The second is a manual reset cutout that operates at 90°C.

Automatic Thermal Cutout

- In the event the auto reset cutout operates the element will not heat until the water temperature cools below approx. 30°C. See section 8. Troubleshooting for more information.

Manual Reset Thermal Cutout



Do not attempt to reset the manual cutout unless the power has been isolated from the appliance.

- In the event the manual reset thermal cutout operates the element will not heat and will not reset automatically. To perform a manual reset it is necessary to remove the front cover in order to access the reset button.
- Once the cover is removed the manual reset thermal cutout can be reset by pushing the reset button (see diagram 5).
- The cause should be established before continuing use if the manual reset thermal cutout operates. A low flow or obstruction in the spray head is the most likely cause and this problem should be rectified prior to restarting use of the appliance.



Diagram 5



This appliance incorporates a safety relief valve; do not attempt to modify this in any way.

Pressure Relief Valve

- In the event of an over pressure event a small silicone ball will be expelled from the appliance which will allow the built up pressure to be released (see diagram 6).
- If the valve does operate the reason for the discharge should be established and rectified before replacing the relief valve ball (a common cause can be a scaled up spout head).

The replacement process is as follows:

- Isolate the appliance from the power and water supply.
- Spare relief valve balls and the required tool are available from Hyco as spare parts.
- Using the appropriate tool, push the ball into the valve at the base of the tank (behind the spout) and push into the valve as far the tool will allow.
- Reconnect the appliance to the power and water supply in turn.
- Commission the appliance (see section 5. Operation) and inspect to ensure the issue is resolved and no water is discharged from the relief valve.

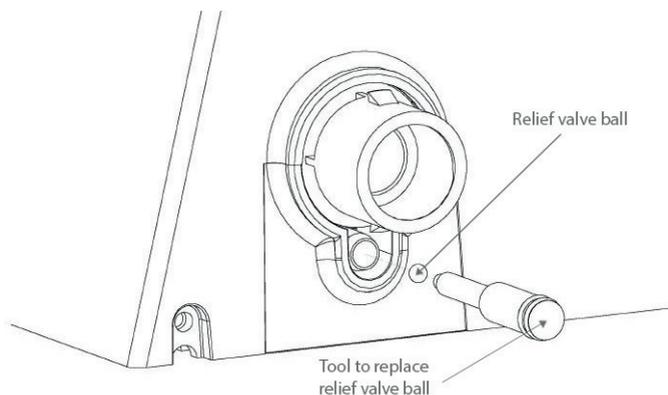


Diagram 6

8. Troubleshooting

Problem	Possible Cause	Solution
Water leaking from behind the spout	Pressure relief valve has discharged	Contact Hyco for replacement pressure relief valve balls and tool
Water too hot	Partial scale blockage in sprayhead	Descale sprayhead (see section 6)
Water too hot	Incorrect flow rate	Check temperature and flow rate information (see section 5)
Water too cold	Incorrect flow rate	Check temperature and flow rate information (see section 5)
No water flow from the appliance	No mains water supply	Turn on mains water supply to the appliance
Water temperature fluctuating from hot to cold during use.	Water temperature too high and operated auto reset cutout.	Check for blockage/ adjust flow rate up
Appliance not heating, water cold.	Manual cut-out has operated.	Reset manual cut-out and establish cause of overheat.

If problems persist contact Hyco Technical Department on 01924 225200.

9. Specification

Model	HW30M	HW30A
Power	2.84 kW	2.84 kW
Voltage	230 V~	230 V~
Rated current	13 A	13 A
Frequency	50 Hz	50 Hz
Max flow rate for light hand wash only	1.7 l/m	1.7 l/m
Min working pressure	0.1 MPa (1 bar)	0.1 MPa (1 bar)
Max working pressure	0.6 MPa (6 bar)	0.6 MPa (6 bar)
Water connection inlet	15 mm compression fitting	15 mm compression fitting
Water connection outlet	Supplied spout only	Supplied spout only
IP rating	IPX4	IPX4
Thermal cutout temperature	Auto - 60 °C / Manual - 90 °C	Auto - 60 °C / Manual - 90 °C
Dimensions (h x w x d)	170 x 240 x 100 mm	170 x 240 x 100 mm
Weight empty	1.5 kg	1.5 kg
Approvals	CE, UKCA	CE, UKCA

10. Guarantee and Service Policy

This product is covered by a standard parts or replacement warranty for a period of 1 year from the date of purchase.

If there is a manufacturing defect within the warranty period we will send spare parts, repair and return the unit or, at our discretion, supply a replacement product. Incorrect installation, frost damage, the consequences of limescale deposits or failure to follow correct operating and maintenance instructions are excluded. Consequential costs such as labour charges or damage to fittings and surroundings are expressly excluded.

11. Contact Us

If you experience a problem with this product you should first contact our customer service department on 01924 225 200 before taking any further action. Experience has shown that issues can often be resolved without the need to return or uninstall the product.



INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH THE EUROPEAN DIRECTIVE 2012/19/EU.

At the end of its working life this equipment must not be disposed of as household waste. It must be taken to a local authority waste collection centre or to a dealer providing this service. Disposing of electrical and electronic equipment separately enables its components to be recovered and recycled to obtain significant savings in energy and resources. In order to underline the duty to dispose of this equipment separately, the product is marked with a crossed out dustbin.

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