



SureFlow Touch-Free

Model: WMS6TF (DB600-WTF)

Auto-Fill, Wall Mounted Boiler with 'Touch-Free' Dispense



INSTALLATION AND USER INSTRUCTIONS

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INTRODUCTION

Dear Customer,

Thank you for purchasing this Instanta product.

Your new water boiler is designed to give you years of trouble-free service provided that the instructions contained in this manual are followed.

All new series Instanta products are energy efficient, simple to operate and easy to service. Find out more about Instanta products at www.instanta.com

SAFETY INFORMATION

Please read the following carefully before starting work on this equipment.

A competent person should install this appliance in accordance with the installation instructions for this appliance and all relevant local and national standards including the following:

- Health & Safety at Work Act
- IEE Regulations
- Local & national Building Regulations
- BS Codes of practice
- Water Supply Regulations

All personnel should be provided with sufficient training in the safe use of this appliance. A warning notice displayed next to the machine is often helpful in notifying users that the appliance contains and dispenses near boiling water.

- Care should be taken to avoid potential injury from burns & scalding whilst operating this appliance.
- In line with Health and Safety requirements we recommend a risk assessment be carried out after the boiler has been installed.
- This appliance is not intended for use by persons (Including Children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure they do not play with the appliance
- Always disconnect the unit from the power supply before servicing.
- The unit must be earthed.
- Keep these instructions in a safe place near the unit for future reference

ENVIRONMENTAL (Information on Disposal for Users of Waste Electrical & Electronic Equipment)

The “crossed out wheelie bin” symbol on this product means that discarded electrical and electronic products should not be mixed with general waste. Disposing of the product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. For proper treatment, recovery and recycling of end-of-life products, please contact your dealer or supplier for further information, or local authority for details of your nearest designated collection point.

DELIVERY CHECKLIST

Before starting installation, check that you have the following parts;

1. Catering Boiler Unit
2. Paper wall-mounting template
3. Fitting Kit (screws & wall plugs etc.)
4. 3/4” Water Inlet Fitting (plastic nut, brass tube and rubber washer)
5. 2 x 15mm Push-fit couplings (use coupling c/w copper tube on waste/drain fitting)
6. Installation & User Instruction Book

TECHNICAL SPECIFICATION

Model:	DB600-TFW (WMS6TF)
Width:	340 mm
Height:	478 mm
Depth:	260 mm
Power Rating:	3.0 Kw
Weight-Empty:	9.8 KG
Weight-Full:	18.5 KG
Water Inlet Pressure:	2 to 7 Bar

FEATURES & BENEFITS

- Touch-Free Dispense (Smart Sensor activated) – avoids cross infection.
- Choice of water dispense modes: standard push & hold (free-flow) or metered/timed dispense (programmable to suit cup/vessel size)
- Top-up feature – ‘top-up’ drink following a measured dispense.
- Quick and easy set-up of metered dispense, using memory function.
- Safety light beam (boiler will not dispense until safety light-beam has been broken by placing a vessel in the cup aperture).
- Flashing safety message in LC Display (‘Caution Boiling Water’) – safety warning flashes as dispense is activated
- Includes easy-fit, spill-tray & bracket kit (place cup on spill-tray – no need to hold whilst boiling water is dispensed)
- Adjustable Water Temperature (80 to 98°C) – lower temperatures ideal for other drinks e.g. Green Tea.
- Integral, programmable filter-monitor - optional if an external filter or softener has been fitted.
- High Grade (‘rust free’ 304 Stainless steel construction throughout)
- WRAS Approved

INSTALLATION

a) POSITIONING THE UNIT

The heater should be positioned in a convenient place, on a wall that is capable of supporting it safely (refer to Technical Specification above for weight of boiler). Use the mounting template and fitting kit provided.

Locate in an area where there is adequate space to use the boiler safely (e.g. free from risk of congestion and tripping hazards).

Position the boiler so that the tap is approximately 400mm above a draining board. Leave sufficient space around the unit to enable access for servicing, paying particular attention to the position of the top-centre fixing screw that holds the case in place.

When mounting on wall...screw in the top two screws leaving about 6mm protruding and hang the machine using the keyhole slots provided. Once the machine is positioned, tighten the top screws and insert the bottom screw.

Do not block ventilation holes in boiler case

b) ELECTRICAL CONNECTION

The circuit should be protected by its own 13amp double-pole connection unit with flex outlet to BS5733, alternatively the circuit should have a means of disconnection incorporated in fixed wiring, having a contact separation of at least 3mm in all poles. Minimum cable size is 1.5mm². The use of an ELCB is recommended.

- WARNING: This appliance must be earthed.
- Electrical installation should conform to current I.E.E. wiring regulations.
- When using fixed wiring, the bare section of earth must be sleeved to within 8mm of the end.
- Only a qualified electrician should carry out this work.

BASE ENTRY OF CABLE: Use the cable gland. Loosen cable-gripping nut and pass cable through gland, leaving enough free cable to connect to terminal block. Tighten cable gland grip nut.

DO NOT SWITCH ON UNTIL THE INSTALLATION IS COMPLETE AND THE CASE IS IN PLACE

c) WATER CONNECTION

NOTE: Although it will not harm the boiler, it should not be operated with water supply turned off.

- Water supply must have a pressure not exceeding 7 bar and no lower than 2 bar. **(If the mains water pressure is below 2 bar a fault situation could arise)**
- If water pressure exceeds 7 bar a suitable water pressure reducing valve will need to be fitted to the water supply to bring it to a level that the machine can cope with. **Failure to do so could result in the boiler overflowing.**

THE MANUFACTURERS CANNOT BE HELD RESPONSIBLE FOR ANY MACHINE MALFUNCTION IF THE WATER PRESSURE IS NOT WITHIN THE RANGE STATED. IF IN DOUBT, CONSULT YOUR WATER SUPPLY COMPANY.

Connect to a suitable cold water drinking supply as below;

- Fit the 15mm push-fit coupling onto the water inlet solenoid pipe and connect to cold water mains supply using 15mm copper pipe.
NOTE: If micro-bore pipe is used instead of copper pipe, the size must be minimum OD 3/8" (10mm).
- A 15mm stop valve must be fitted between the water supply and the boiler so that it can be isolated.

Water purification filters are available from Instanta to ensure fresh tasting water. In hard water areas, scale can cause problems. Fitting a scale reducer will help minimise scale but will not eliminate scale completely.

NOTE: To avoid damage to the appliance, do not use any solder connections whilst pipes are connected to the boiler.

NOTE: *Water that has been treated by the Reverse Osmosis process can become aggressive (due to lack of minerals or ions), and in extreme cases can cause leaching and corrosion of pipes, fittings and other metal parts within the appliance.*

If the appliance is being fed by water treated by Reverse Osmosis, we strongly recommend that the water is tested regularly.

If you have any queries in this respect, please contact our customer services team.

d) OVERFLOW / DRAIN

The fitting kit includes a 15mm, straight push-fit coupling with a small piece of 15mm copper pipe pushed into it. This connector must be pushed onto the corresponding brass overflow connection on the services-bracket (alongside the solenoid).

If the overflow is to be extended, remove the copper pipe (supplied) and replace with 15mm pipe of your chosen length. The pipe must have a continuous fall and should not be longer than 300mm (if a longer run is required, use 22mm pipe to avoid airlocks. The overflow pipe should have no more than four right angle bends and should discharge to a safe, visible position.

Under certain conditions the overflow pipe could vent steam, hot water or cold water and the manufacturers cannot be held responsible should damage occur from such discharge if the overflow pipe has not been directed to a suitable position where overflowing water can run away safely.

Failure to connect the overflow-outlet to a permanent waste or drain, could lead to property damage from flooding.

If in all circumstances, it is absolutely not possible to direct the boiler overflow-outlet to a permanent waste or drain, then the mains water supply to the boiler should be isolated and the unit switched off whenever it is left unattended for long periods (e.g. overnight).

Whilst every reasonable precaution is taken to prevent an overflow, Instanta cannot be held responsible for any damage caused as a result of incorrect installation or blockage of the overflow or failure to direct the overflow to a safe outlet.

VENT PIPE:

A small silicone rubber tube connects the tank-lid to the back panel. Ensure this is connected (and hasn't come off in transit) and that the outlet fitting in the back-panel is not obstructed.

e) FITTING CASE:

- Attach the Earth wire connection to bottom of stainless steel boiler-case using M4 screw & washer supplied.
- Position the case close to the wall-mounted boiler and plug-in the FOUR communications-leads:
 - 1) From LCD screen to main circuit board (white cable with 6-pin plug)
 - 2) From circular Sensor-PCB to small circuit board (black cable – 4-pin plug)
 - 3) From side of plastic cup-aperture to small circuit board (black cable – 3-pin plug)
 - 4) From other side of plastic cup aperture to small circuit board (black cable – 2-pin plug)
- With the communications leads and Earth wire connected, carefully offer up the boiler case to the wall-mounted boiler chassis, ensuring that the water-valve outlet pipe locates into the slot-opening in the plastic cup aperture. (Check that no cables are trapped)
- Secure case in position using M4 screw (supplied) at top and bottom of the case.

f) FITTING SPILL-TRAY AND BRACKET:

- Attach spill-tray bracket to under-side of boiler case (use 3 x M4 screw provided)
- Slide spill-tray into position

OPERATION

First use (once water and electrical connections have been made);

- Switch the power and water supply on. Screen will light up Red and will run through an initial self-diagnostic check before starting to fill with water (screen reads; “NOT READY FILLING”).
- Once primed with water, the boiler will begin to heat (screen reads; “NOT READY HEATING”).
- When the correct temperature is achieved, the display will change from Red to White and will read “READY”, displaying the water temperature in degrees C.
A warning message (CAUTION HOT WATER) will also be displayed and the ‘touch-free’ sensor will illuminate.
- The boiler will then continue in a heat/fill cycle until the tank is at full capacity. (During the heat/fill cycle, small amounts of water are added to ensure the water is always at the correct temperature).

IMPORTANT NOTE: In normal daily use, the boiler may be used as soon as the READY indicator comes on, but on first install, wait 15 minutes before starting to use.

- The boiler is now ready for use.
- Place cup/teapot on spill-tray within cup recess, breaking the safety light-beam (illuminated touch-free sensor will glow brighter to indicate that it is ready to dispense).
- Place hand in front of the ‘touch-free’ sensor to dispense hot water. “CAUTION BOILING WATER” message will flash reminding the user to exercise caution.

NOTE: The boiler will dispense “on-demand” which is the default setting (e.g. hold hand in front of sensor to dispense hot water – remove hand to stop dispensing). See below for optional “TIMED” dispense:

OPTIONAL “TIMED” DISPENSE:

This function is appropriate when the cup/teapot being filled is always the same size/capacity.

To change boiler from “on-demand” default setting to “Timed” dispense:

- 1) Place vessel on spill-tray, within cup aperture (breaking safety light-beam).
- 2) Switch off on front of unit
- 3) Isolate from mains power supply and wait 10 seconds.
- 4) Switch boiler back on and at the same time, hold hand in front of ‘touch-free’ sensor.
The ‘touch-free’ sensor will begin to flash rapidly, or the boiler will start to fill with water (depending on water level in tank).
- 5) Set the required level within the cup/vessel by holding hand in front of sensor to dispense water. Release button to stop dispense (NOTE: This can be repeated as many times as necessary, to get the level correct).
- 6) Once level in vessel is correct, press the ON/OFF button (below display) to save the measured dispense amount (this saves the setting and puts the boiler into standby mode).
- 7) To continue, switch boiler back on by pressing the ON/OFF button again.
- 8) The boiler will now dispense the measured amount into the cup/teapot, each time the ‘touch-free’ sensor is activated.

Top-up feature:

- At the end of the timed dispense cycle, the “CAUTION” message will continue to flash for a further 5 seconds. During this 5-second window, the water level in the cup or teapot can be topped-up by simply activating the dispense via the ‘touch-free’ sensor, as described above. NOTE: Once the “CAUTION” message stops flashing, the top-up facility ends and the boiler reverts back to timed dispense mode.

To change back from “Timed” to standard “on-demand” dispense:

- Follow steps 1 to 4 (as above) then; ...
- Wave hand in front of sensor very briefly (for less than 1½ seconds), to activate the “on-demand” function again.
- Press ON/OFF button (below display) to save the new setting (boiler will go into standby mode).
- To continue, switch boiler back on again by pressing the ON/OFF button. The boiler will now dispense for as long as the sensor is activated.

REGULAR DAILY USE

Switch boiler on and wait for the screen to turn white and show “READY” message and touch-free sensor to illuminate. The water will then be at the correct temperature. (the unit will not dispense until the water has reached temperature and button is illuminated)

Dispense water by holding hand in front of the touch-free sensor.

FILTER COUNTER (Optional if a filter or softener has been fitted):

If an external filter/softener is fitted to the unit there is an optional filter-counter installed in the software. This counter measures the water passing through the boiler and reminds the customer (via the display screen) to change the filter when required. **Note: This counter is set to 'Off' as standard.**

To enable filter-counter, proceed as follows:

- Turn machine off on front panel.
- Press & hold "on/off" button (for approximately 12 seconds) until red screen shows "PR" in centre of screen, then release button. Temperature setting is displayed.
- Press & hold button (long push) for approximately 5 seconds until screen changes to show "empty filter symbol" (default filter setting).
- Press button (short push) to scroll between the different filter settings;
SOFT (13001 litres)
MEDIUM (9001 litres)
HARD (6001 litres)
EMPTY FILTER SYMBOL (No Filter counter)
- With the required filter setting selected, Press & hold button (long push) for 4 seconds to save.
- Press & hold button (long push) for approximately 6 seconds until display goes blank.
- Turn machine back on again.
- TO RE-SET & CONFIRM NEW SETTINGS; ...Press & hold button, screen will go blank but continue to hold, until "READY" message is displayed on a red screen.
- The unit can then be switched back on and used.

If in doubt as to the hardness of water supplied in your area, consult your local water authority

PREVENTATIVE MAINTENANCE:

AQ35/KIT – The Instanta AQ35 high-flow multi-filter delivers the best quality of water by removing sediment and impurities such as chlorine. The filter also reduces scale build-up which results in lower running costs, improved energy efficiency and longer life expectancy. Filter capacity: up to 13,500 litres

Available from Instanta Spares Department: 01704 501114

CLEANING

Clean the external surfaces of the boiler regularly to maintain good hygiene

Wipe external surfaces of the boiler with a damp cloth. Do not use abrasive materials on the outer surfaces.

MAINTENANCE & SERVICE INFORMATION

Descaling:

The boiler should be periodically checked for scale build-up...see below:

In hard water areas, the boiler should be descaled on a regular basis to maintain efficient operation, minimise energy consumption, and also retain the water quality.

To de-scale:

- Isolate machine from power supply and allow to cool
- Remove the boiler case (2 screws)
- Remove tank-lid (four fixing screws). The tank is now accessible.
- Lift out the evaporation plate (inside of tank – Remember which way round it is fitted).
- Empty water from tank by removing drain plug (remember to replace drain plug).
- Remove as much scale as possible by hand. Any scale which is difficult to remove can be dissolved by using a de-scaling solution.
- Wipe clean the level sensing probes.
- Flush with copious amounts of cold water to ensure all traces of de-scaler are removed before

SERVICE/TECHNICAL SUPPORT & SPARES:

To ensure your service enquiry is handled as efficiently as possible, please have the following information available;

- Brief description of problem
- Product Type (model)
- Serial Number (label on under-side of boiler case). This is essential.

For technical support, spare parts, filters and other accessories: Tel: 0345 600 5005

SERVICE WARNINGS AND FAULT DIAGNOSIS

Your boiler is fitted with an intelligent fault diagnosing system and is able to detect various fault conditions. Some of these are less serious and the machine will continue to operate as normal, while others are more serious and will disable the unit.

Before calling for service, isolate the machine at the mains supply and then switch back on after 10 minutes. If the fault does not clear, call technical support for advice.

SCREEN MESSAGE	POSSIBLE CAUSES:	ACTION;
<p>READY CHECK WATER</p> <p>WHITE SCREEN</p>	<ul style="list-style-type: none"> • Water turned off • Low in-coming water pressure 	<ul style="list-style-type: none"> • Check water supply and stop-cock • Check in-coming water is at minimum of 2-bar
<p>READY CLEAN PROBES</p> <p>WHITE SCREEN</p>	<ul style="list-style-type: none"> • Low-water level probe scaled up 	<ul style="list-style-type: none"> • De-scale inside of tank and level sensors
<p>NOT READY OF</p> <p>RED SCREEN - FLASHING WITH WARNING TRIANGLES</p>	<ul style="list-style-type: none"> • Normal operating probe has scaled up 	<ul style="list-style-type: none"> • De-scale level sensors
<p>NOT READY TH</p> <p>RED SCREEN – FLASHING WITH WARNING TRIANGLES</p>	<ul style="list-style-type: none"> • Over-boiled (due to excessive lime-scale in tank). • Faulty Element • Thermistor disconnected, wires cut or faulty • Boil-dry safety switch tripped or faulty 	<ul style="list-style-type: none"> • De-scale tank and level-sensors • Isolate machine and wait 10mins, then turn back on again. • Reduce temperature setting • Call service if fault persists.
<p>READY CHANGE FILTER (OPTIONAL)</p>	<ul style="list-style-type: none"> • Filter cartridge is exhausted and should be replaced as soon as convenient 	<ul style="list-style-type: none"> • Replace Filter/softener

GUARANTEE

Your boiler is guaranteed for two years from date of installation.

Our guarantee includes on site labour and parts for problems caused by fault of manufacture and component failure **with the following exclusions:**

- 1 Problems caused by hard water and lime scale. We regret that we cannot be held responsible for problems caused by hard water
- 2 Accidental damage, misuse or use not in accordance with these instructions and damage caused by incorrect installation.

The manufacturer disclaims any liability for incidental, or consequential damages.

