WATER LOGIC®

waterlogic 4

FIRE UV WALL

Technical Manual

CE

MEMBER Water Quality Association

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MACHINE OVERVIEW

WATERLOGIC 4 FIREWALL

The FIREWALL is available in the following options:

a) Cold, Hot & Sparkling (Full Option)
b) Cold & Hot
c) Cold & Ambient
d) Cold & Sparkling
e) Cold Only
f) Cold Sparkling & Ambient

When reading this manual, note the differences between the options and focus on the particular sections that concern the unit installed.

HIGH CAPACITY COLD TANK (4,5 Litres).

The high capacity cold tank is a unique combination of ice bath and direct chill, and is manufactured from 304 Stainless Steel which is noncorrosive and inert. The temperature of the Cold Tank is controlled by a microprocessor and can be set between 3°C and 5°C. We recommend the cold water to be set at 5°C, this being ideal temperature for a cold drink. The capacity of the tank is 4.5 litres.

STANDARD COLD TANK (2 Litres).

The standard cold tank is manufactured from 304 StainlessSteel which is noncorrosive. The temperature of the Cold Tank is controlled by a microprocessor and can be set between 3 degrees and 12 degrees °C.We recommend the cold water to be set at 5 degrees °C, this being ideal temperature for a cold drink. The capacity of the tank is 2 litres.

HOT TANK

The hot water temperature is controlled by the Microprocessor and can be set between 70°C and 93°C.It is recommended that the hot temperature is set at 87°C, this being the ideal temperature for instant drinks. A thermal cut out is fitted to the Hot Tank to prevent overheating. The tank is fed water via a polyphosphate filter to increase the tank life. Setting the hot water temperature at 87°C also helps stop scale forming in the Hot Tank, prolonging the 500w heating element and Hot Tank prolonging the 500w heating element and Hot Tank.

FILTERS

The filtration system on the WL4 FIREWALL is designed to reduce dirt and sediment particles from the water. Furthermore, the Activated Carbon process will remove a whole range of contaminants e.g. chlorine, pesticides. It is important for the UV sterilization system to be supplied with clean water in order to achieve maximum efficiency. There are many kinds of different filter combinations available from Waterlogic to suit local water conditions.

FIREWALL CHAMBER

The Firewall chamber incorporates the in Faucet UV and is made of stainles steel and is highly reflective.The Chamber houses the UV lamp and quarts spiral as well as the faucet

IN FAUCET UV

The Unique design allows the faucet area to be steralised before and during and after every dispense. There are two types of sensors available, the CDS UV sensor that detects if the UV lamp is working and the UV sensor that monitors the UVC intensity from the UV lamp.

UV LAMP

The UV light is an 11Watt germicidal lamp at a wavelength of 253.7 NM, which is very efficient at destroying bacteria in water. The UV lamp is situated in the Firewall Chamber surrounded by a quartz spiral that attains NSF standard 55 purification of water. The lamp must be replaced at 6 months intervals, and the quartz spiral cleaned by using a ultrasonic bath if needed

PCB

The PCB (Printed Circuit Board) is the control unit for the WL4 FIREWALL; it is responsible for the functions of all the mechanical and electrical parts (24V DC). The microprocessor drives the display (at the top of the WL4 FIREWALL) which informs the user of the status of the unit. There are two different Models of the display PCB depending on the UV sensor type used.

COMPRESSOR

The compressor operates at 220-240V at 50Hz. It uses 75 gramms of R134a non-Ozone depleting refrigerant gas for the High Capacity cold tanks and 45 gramms of R134a gas for the Standard cold Tank.

WATER PIPE AND FITTINGS

The inlet and the internal water circuit pipe size is 1/4" and 5/16". The entire internal water circuit and all the components which come in contact with water are food grade NSF / WRAS approved.

WATER VALVES

Dispensing of water to the customer is achieved by means of a 24V DC electrical solenoid valve. The valves are energized every time the customer pushes the dispense button for a drink. DC voltage is used to give a positive and quieter action of the solenoid valve.

PLASTIC PANELS

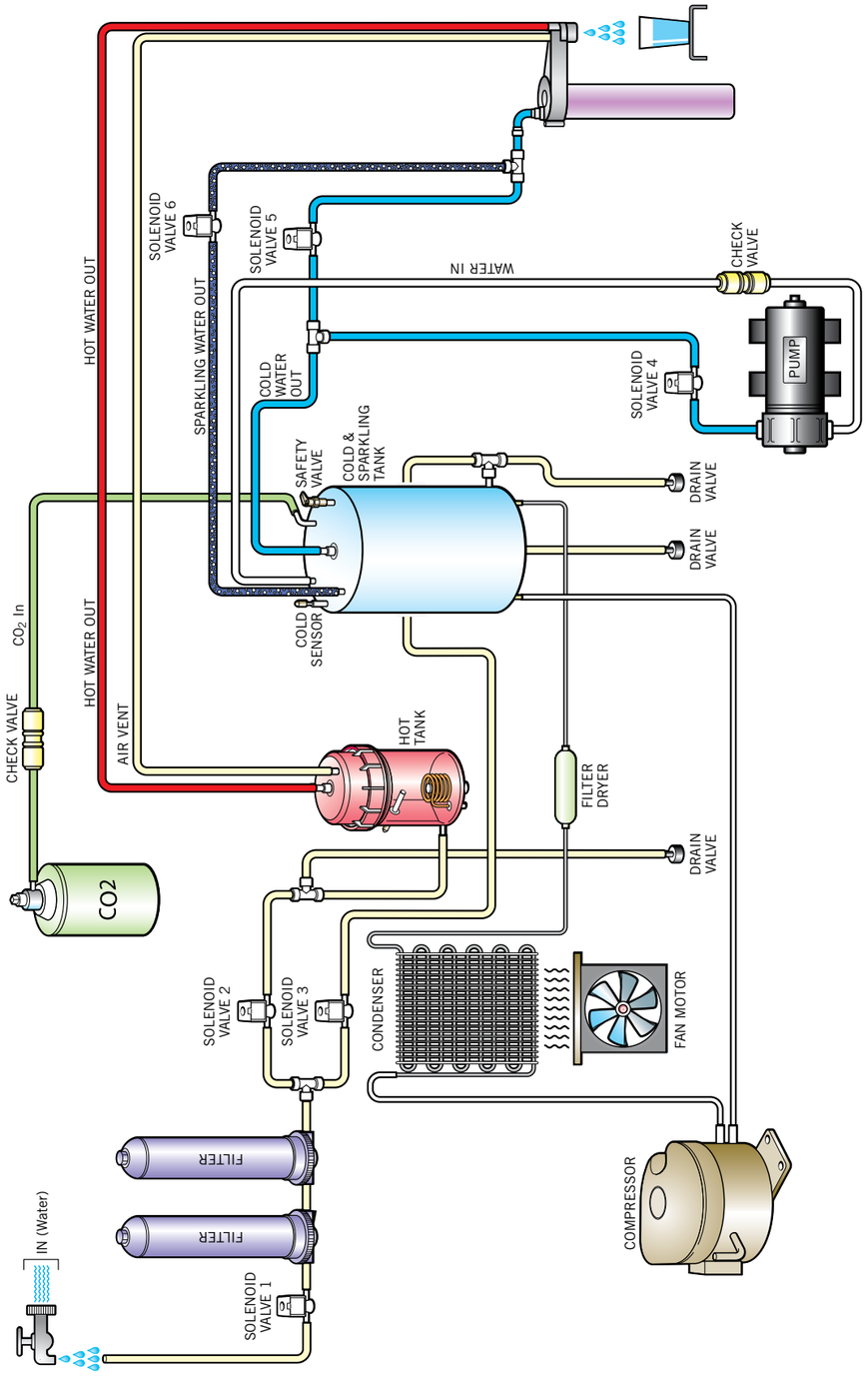
The moulded panels are made from recyclable ABS plastic. All the ABS plastic panels are UV resistant and meet the standards of CE and UL. Please note that the WL4 Firewall should not be exposed to direct sunlight. Placing the WL4 Firewall in direct sunlight from a window, close to a radiator, or in a room of high ambient temperature, will affect the efficiency of the refrigeration circuit.

PARTS REQUIRED FOR SPARKLING WATER

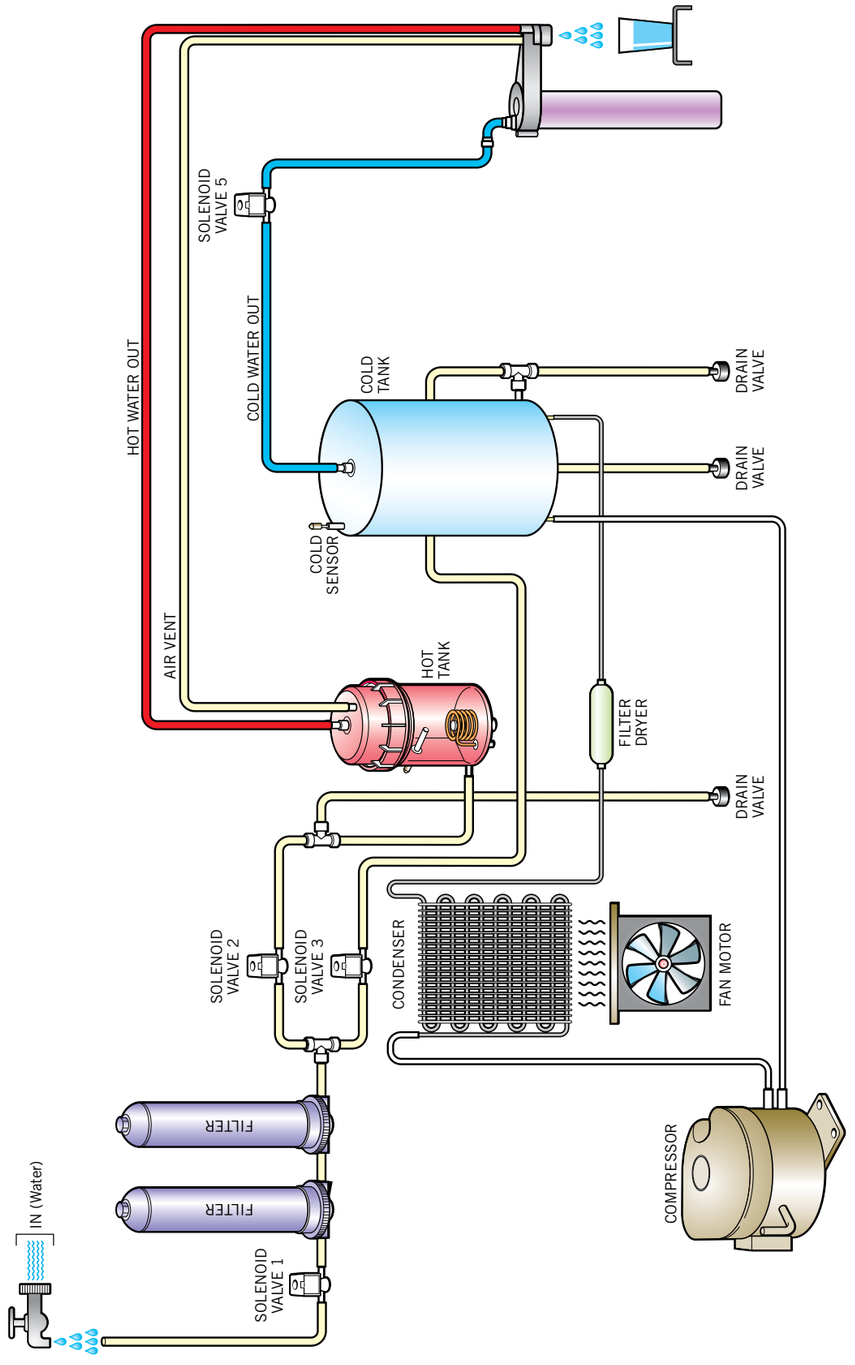
CO_2 Cylinder & Gas Regulator: The units with the option of sparkling water will need CO_2 gas, food grade carbon dioxide. This gas is stored in cylinders in a liquid form. The cylinders are usually painted grey or black (regulation requirement for CO_2). The gas regulator, which comes with the unit, controls the flow of CO_2 to the carbonation tank; it reduces the pressure of the CO_2 gas to 45PSI which is needed to make high quality sparkling water.

Water Pump: The water pump is 24V DC and forces the pre-chilled cold still water into the carbonation tank at a minimum pressure of 45PSI. This pressure is required to overcome the internal pressure from the CO_2 gas which is in the tank and will give a average of 4.8 grams of C02 per litre of water.

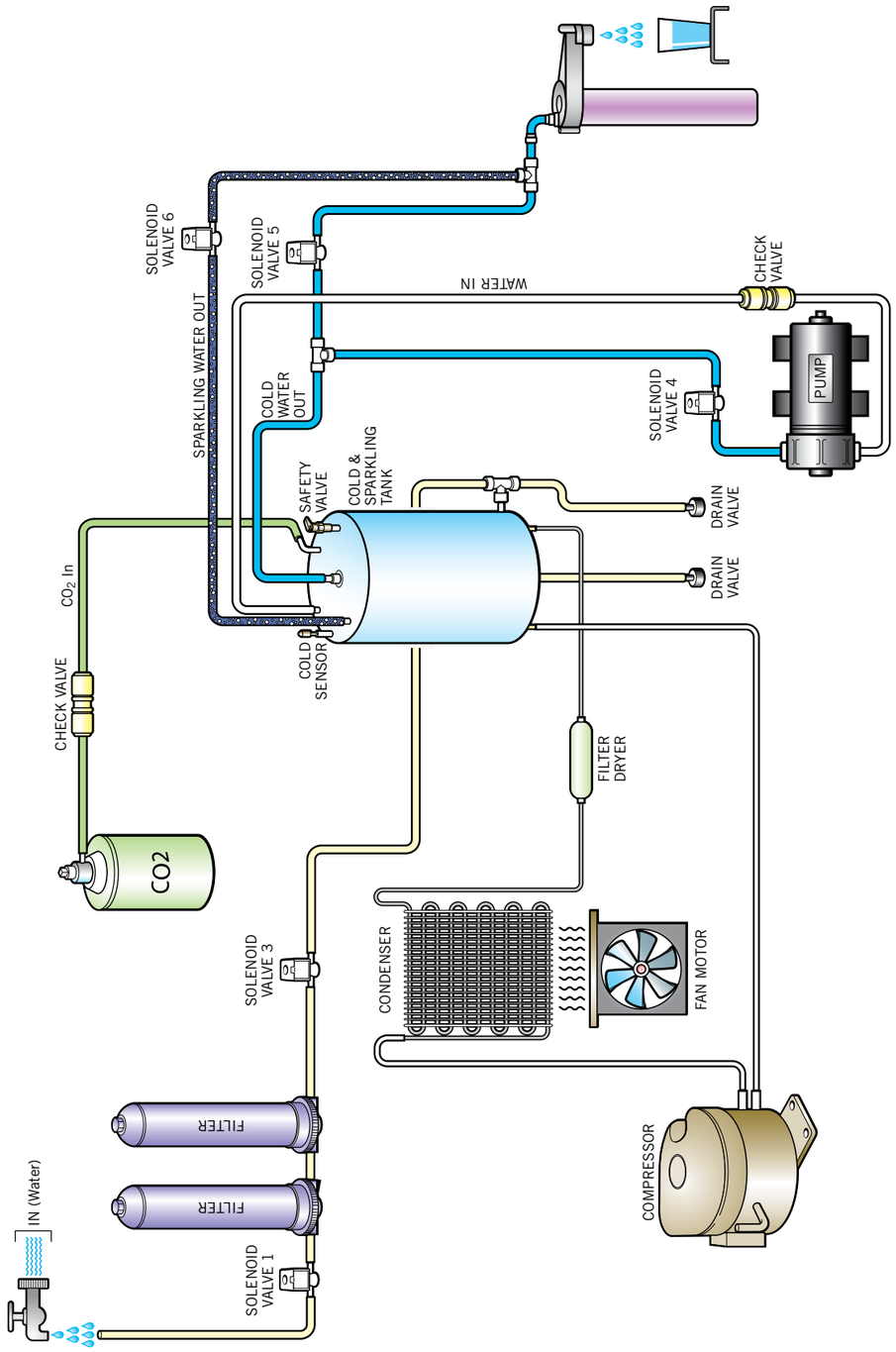
MAIN PARTS LAYOUT - HOT, COLD AND SPARKLING



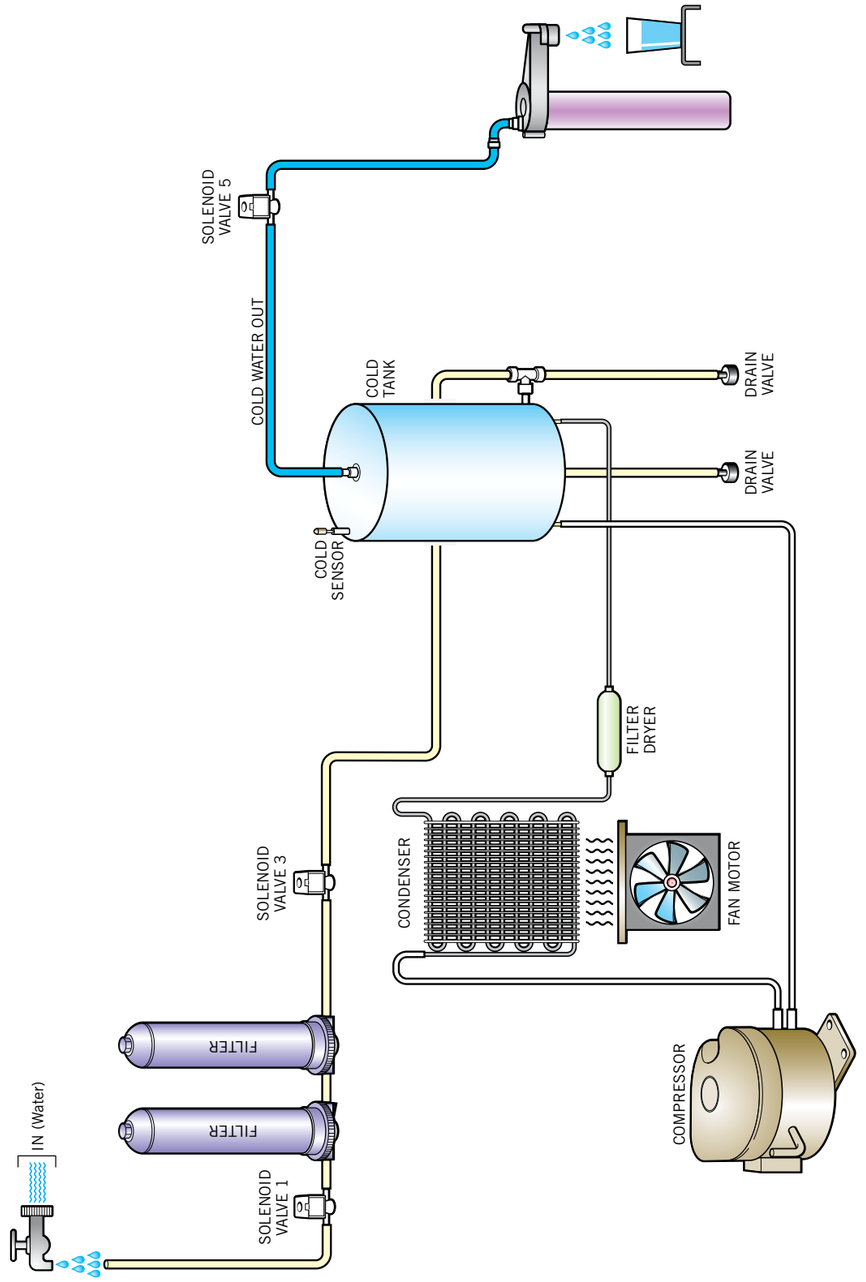
MAIN PARTS LAYOUT - HOT AND COLD



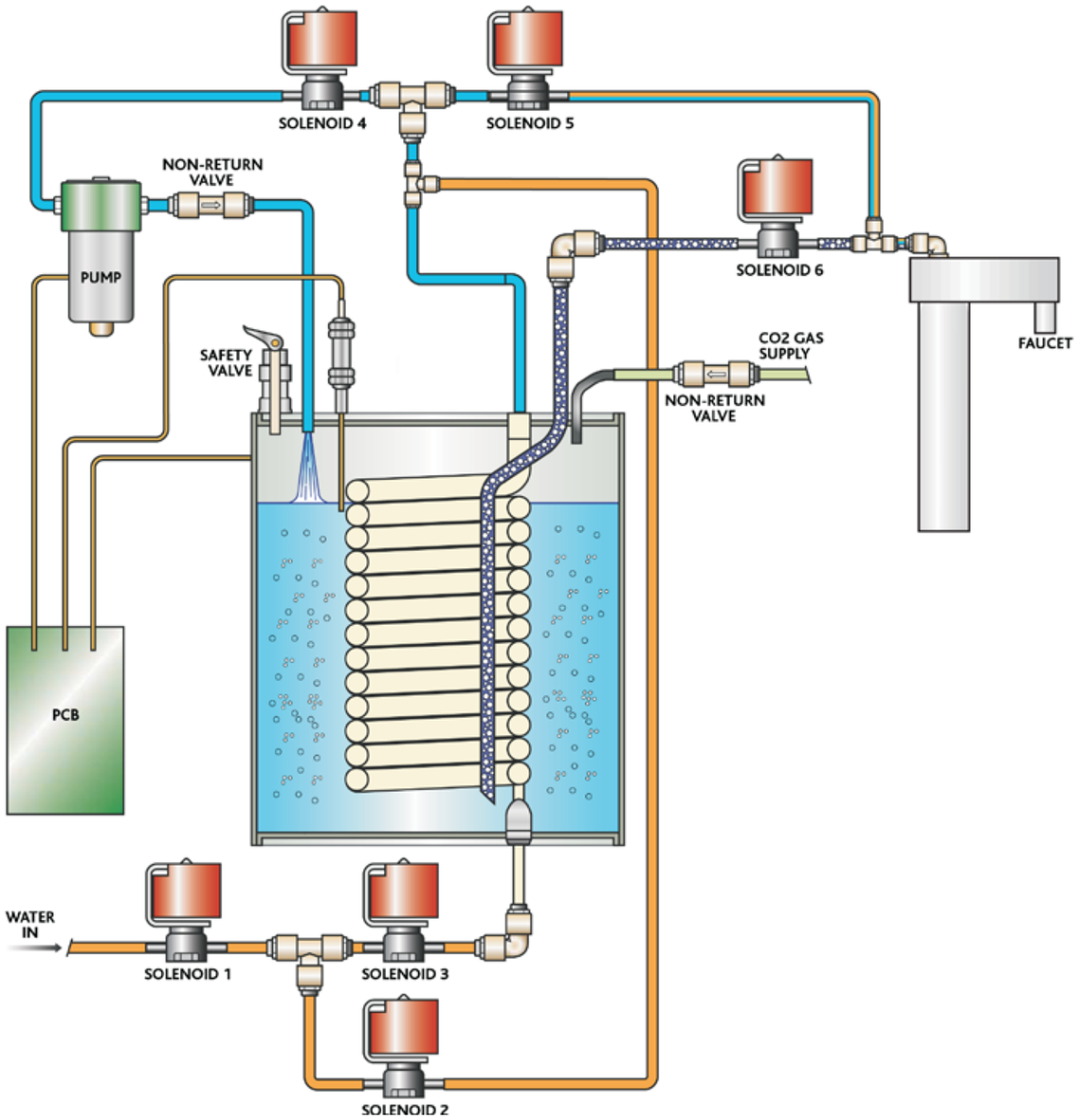
MAIN PARTS LAYOUT - COLD AND SPARKLING



MAIN PARTS LAYOUT - COLD ONLY



CARBONATION TANK



PRE DELIVERY INSPECTION PROCEDURES (PDI)

CAUTIONS:

Only competent trained technicians should work on Waterlogic products.

Waterlogic units may weigh over 25KG. We recommend caution when lifting.

Packing materials could present a trip hazard. Keep them off the floor.

Take care not to allow the power lead to get wet. If the lead gets wet it must not be used.

CO_2 gas used for sparkling units is under high pressure. Follow cylinder safety instructions.

For Hot and Cold units, omit section 8,10, 12.

For Cold Only units, omit section 8, 10, 12, 13, 15.

For Cold and Sparkling units, omit section 13, 15.

1. Remove packing straps and unpack unit and visually inspect for any damage. (Report any defects to Waterlogic as soon as possible).
2. Place the unit on a suitable work bench.
3. Open top cover by removing the screws and releasing the 2 clips in the dispense area then slide the lid forward and lift up. Use the top support bar to hold top open.
4. Visually inspect all electrical connections and power lead.
5. Visually inspect all water connections.
6. Remove the three screws on top of the Firewall Chamber and inspect the quartz spiral for Damage and re-assemble.
7. Connect to a potable drinking water supply via a 1/4" John Guest tube limited to 3 bar.
8. Connect to a CO_2 regulator via a 1/4" John Guest tube and set to 3 bar.
9. Connect to an appropriate power supply.
10. Turn CO_2 on and lift yellow safety valve for 5 seconds.
11. Close top cover and turn on water then the power switch. (Note the unit will not operate with the top cover open)
12. The unit will auto fill the sparkling water tank.
13. Note the telephone icon might flash if the hot tank is not full of water. The icon will extinguish as you continue through this PDI procedure.
14. Select the cold button until water flows clearly.
15. Select hot + extra hot button until water flows clearly.
16. After cold/hot has filled,turn on heater/compressor switch,Allow up to an hour for the unit to heat and chill. Test water temperatures and ensure the water tastes acceptable.
17. Check WL4 FIREWALL functions.
18. Turn off power, water and CO_2 if a sparkling unit.
19. Turn unit around and drain from rear drain valves.
20. Clean and repack ready for despatch.
21. Waterlogic recommend that all units are fully electrically (PAT) tested on site by the commissioning engineer as damage may have occurred during transit to the unit's final destination.

INSTALLATION PROCEDURE

Important notice: This procedure should only be carried out by a technician trained by Waterlogic International or by an approved distributing agent.

Note: This appliance is intended for indoor use only. Cleaning of Waterlogic products should not be carried out using a jet washer.

1. Build the WL4 Firewall base cabinet if required using the separate instructions found in the base cabinet box.
2. Mount the WL4 Firewall on a firm flat surface so that it cannot topple or fall from a counter top. Level the WL4.
3. It is advisable that the water and electricity supply are within two meters of the WL4 Firewall and that the water isolation valve and power supply are accessible. The WL4 Firewall should not be installed using an extension lead. The water supply should be from a potable source.
4. Open the top cover by removing the screws and sliding the two locking lugs, located on the underside front of the top cover either side of the faucet, inwards.
5. Slide the top cover slightly forward to release the locks and then lift from the front upwards. Use the top cover support strut, located on the left hand side panel, to hold the top cover safely open.
6. If installing a sparkling water WL4 Firewall then please read the following section. If not then proceed directly to paragraph 7. Prepare the CO_2 gas bottle by removing the dust cover (if fitted). Face the bottle away from you and momentarily turn on the gas to purge any dirt or dust from the bottle fitting prior to attaching the CO_2 pressure regulator. Attach the CO_2 pressure regulator to the CO_2 bottle and then attach to the WL4 Firewall CO_2 'IN' bulkhead connector using 1/4" flexible pipe. Turn on the CO_2 gas bottle. The pressure regulator should be pre-set at 45 PSI (3 bar). If the pressure reading is higher or lower than 45 PSI, then please adjust it to the correct setting. The CO_2 bottle should be secured inside the base cabinet, or secured within a cabinet adjacent to the WL4 Firewall, so the bottle cannot topple over.

   The CO_2 system in the WL4 Firewall will pressurise. It is required to purge some CO_2 gas through the system to remove any trapped air. This is achieved by lifting the WL4 Firewall pressure release valve (yellow), located beside the UV lamp assembly, for approximately 2 seconds.
7. Connect the water supply. All water sources should be potable. Allow the water supply to run clear of any sediment before connecting to the WL4 Firewall. The minimum pressure for the WL4 Firewall to function correctly is 30 PSI (2 bar). The ideal pressure is 45 PSI. The maximum pressure 60 PSI.
8. Check the electrical wall socket (polarity) and then make the electrical connection to the WL4 Firewall by plugging the power lead in to the socket on the rear of the WL4. Then connect to the electrical feed wall power outlet. Turn on the power supply to the WL4 Firewall.
9. Close the top cover and turn on the red power switch. The WL4 Firewall will go through a self test cycle and light the WL4 Firewall icons automatically. When the self test cycle completes, the sparkling water model will automatically fill with water, whilst still water models will need to be manually flushed through with water by depressing the cold water dispense button. **(Please note carbon filters should be pre-flushed before commissioning the WL4 Firewall so that excessive carbon fines do not get into the WL4 Firewall tanks and solenoids)**. When the WL4 Firewall stops filling, flush 10 litres of water through the WL4 Firewall by depressing the cold, sparkling and hot buttons. Turn on the green heater and compressor switch (rear) and the WL4 will start to heat and cool.
10. The water temperature of the WL4 Firewall is factory set at 5°C for still and sparkling water, and 87°C for hot water. The temperature can be adjusted - see page 38 **'PCB Programming Procedures'**.
11. Lift the top cover (power is isolated by top cover switch) and carry out a visual inspection for any water or CO_2 gas leaks.
12. Replace any covers and now test the water for taste. Any hint of plastic taste in the water means the WL4 Firewall needs to be flushed with an additional 10 litres.
13. The WL4 Firewall should be sanitised at installation. **'Sanitising or Descaling'**.
14. The WL4 Firewall must not be installed in direct sunlight, adjacent to a heat source, or in an ambient room temperature above 30°C or below 5°C.

INSTRUCTIONS ON CHANGING THE CO_2 BOTTLE

Removing empty bottle

Turn off the empty bottle and disconnect from gas regulator.

Connecting new bottle

Before connecting new Co2 bottle, remove dust cap.

Face the gas bottle away from yourself and purge the bottle for 2 seconds to release any air and clean any dirt or dust from the top of the bottle.

Connect bottle to gas regulator, and turn on. The pressure should read 3 Bar. Adjust if needed.

Purging the WL4 FIREWALL

Lift the yellow lever under top cover for 5-10 seconds to purge the gas line and carbonator.

Place a container of at least 5 litre under the faucet and dispense sparkling water until just gas is dispensed from the faucet. The WL4 Firewall will now refill. This takes about 4 minutes. When the pump has stopped turn the gas bottle off.

Record the regulator pressure, normally 3 Bar. After 5 minutes check the gauge for any pressure drop as this indicates a leak. Remember to turn on the CO_2 bottle!!

INSTALLATION KIT

1-20 metres of 6mm 5/16 inch water pipe, PRV (pressure reducing valve) set at 3 bar or 42 psi, Non return valve, Self-cutting saddle valve or isolating valves, Moulded plug fitted, CO_2Gas (if required), CO_2 Regulator, Customer Handbook Allow 1 Hour

- **The WL4 Firewall must be installed according to the local guidelines.**
- **Waterlogic strongly recommend that a pressure reducing valve is set at 3 bar and a non-return valve be used on all WL4 Firewall installations.**
- **The WL4 Firewall should not be connected to water supplies of unknown bacterial quality or those are not already fit for human consumption. The WL4 Firewall should only be connected to a Potable drinking water supply.**
- **The filter on the WL 4 Firewall must be changed every 6 months.**
- **The UV lamp on the WL 4 Firewall must be changed every 6 months.**
- **The cold tank should also be flushed and sanitised every 6 months.**
- **Waterlogic International strongly recommends the use of an anti-flood device.**
- **Figure 1 is the recommended installation kit.**

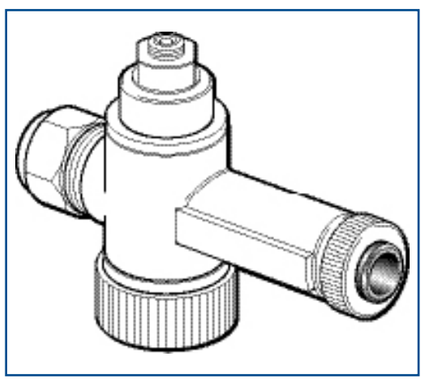


Fig 1. Waterlogic Installation Kit

OPERATING INSTRUCTIONS

Your Waterlogic 4 Firewall is generally ready for use. If the sleeping cat symbol is illuminated, the WL4 Firewall has entered sleep mode, pushing any button will bring the WL4 Firewall out of sleep mode. Sleep mode is an energy saving feature that minimizes power consumption when the WL4 Firewall is not in use over extended periods.

Dispensing your choice of water is very simple, as follows:

1. Place your cup centrally in the dispensing area
2. Select the type of water you wish to be dispensed and press the corresponding button.
3. Keep the button depressed until your cup has reached the desired level, and then release the button.
4. Whist the dispense button is depressed, a coloured light will illuminate the dispensing area of your Firewall.

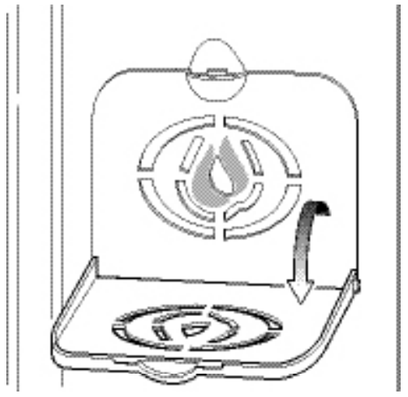
HOT WATER CAUTION

- Always place cup / mug in the centre of the drip tray.
- Always use a ceramic cup or a cup suitable for use with hot water.
- Do not hold cup or place hands in dispensing area whilst dispensing water.
- Do not dispense water in a stop start style of vending (hold button continuously until cup is full).
- Never try to fill more than one vessel at a time.

FOLD DOWN CUP HOLDER

The fold down cup holder should be used to reduce splashing when smaller receptacles are in use. It is only intended for small/plastic cups when filled which do not exceed 500 grams (16 ounces).

Please fold up when not in use.



OPERATING INSTRUCTIONS

COLD WATER

Press the cold water button. Cold water will be dispensed immediately.

AMBIENT WATER

Press the ambient water button and water will be dispensed.

SPARKLING WATER

Press the sparkling water button. Sparkling water will be dispensed immediately.

HOT WATER

Press and hold the hot water and extra hot water buttons together for 3 seconds (This safety feature prevents hot water from being dispensed accidentally, especially by children). Amber lighting will illuminate the dispensing area to confirm your selection, and hot water will be dispensed following a 3 second pause.

EXTRA HOT WATER

Press the extra hot water button and the hot water icon on the display panel will light to indicate that the water is heating. Once the icon turns off, the water is at the correct temperature and extra hot water can be dispensed following the same method as Hot Water.

MAINTENANCE AND SERVICING

6 Month Service Procedure

This procedure should only be carried out by persons trained by Waterlogic International or their approved distributors.

The following instructions cover models that can include Hot, Cold, Ambient and Sparkling water.

- ***Every six months the filters and UV lamp must be changed.***
- ***The Firewall quartz spiral must be removed, checked and cleaned every six months if needed.***
- ***A WL4*** Firewall ***with a hot water option may require the having any calcium build up inside the hot tank removed, depending on local water conditions.***
- ***No paperwork or cleaning records should ever be stored inside the WL4 Firewall.***

1. Isolate the power to the FIREWALL by turning off the green and red switches at the rear of the WL 4 FIREWALL and by removing the power cord.
2. To access the filters slide the locking lugs located adjacent to the water dispensing faucet inward, then slide the top cover forward and lift it upward and back onto its hinges. Hold the top cover open using the top cover support strut located on the left hand side panel.
3. The two Waterlogic twist filters are at the front left hand side protruding through the WL4 Firewall's upper metal shelf. Grip the 1st filter on the left and twist it clock wise to release it. This action will also isolate the water supply. Please remember that all Waterlogic twist filters are left handed thread. Pull the filter body upward when it releases and take precautions not to allow the used filter to drip water inside the WL 4 FIREWALL or you can use the filter tool available from Waterlogic loosen and tighten the filter.
4. Turn off the CO_2 supply (if servicing a sparkling water WL 4 FIREWALL and drain the WL4 FIREWALL through the drain valves located at the rear. Have an adequate size container to drain the tanks into. (5L of water)
5. Remove the top cover of the Firewall chamber and remove the UV lamp first and then release the water feed fittings to the quartz spiral, remove the the quartz spiral. Clean the spiral removing any lime scale that may have adhered to the quartz surface. It is important to clean the quartz to allow maximum UV purification to take place.
6. To santise the cold tank add introduce sanitisation fluid at the back of the machine and fill the cold tank with a mix of water and sanitisation fluid.
7. Replace the UV lamp and reconnect the UV loom. Do not touch the UV lamp with your bare hands as this will shorten the lamp life.
8. Machines with the Hot Option Remove and inspect the faucet. If the faucet is cracked or has excessive build of calcium that cannot be easily cleaned then replace the faucet. Please ensure that you wear cleaning gloves when handling the faucet.
9. Pre flush the carbon filters outside the WL 4 FIREWALL to waste and then fit into the WL 4 FIREWALL screwing in anti clockwise.
10. De-scale the hot tank if required.
11. Carry out a visual inspection of the WL 4 FIREWALL's water and electrical connections and components and take any remedial action required to prevent a fault. Clean the refrigeration condenser and fan if required.
12. If servicing a sparkling water unit turn back on the CO_2 and purge the system by lifting the yellow CO_2 relief valve lever located beside the UV lamp assembly for 1 second. Check the regulator pressure is set at 45 PSI and there are no CO_2 leaks.
13. Close the top cover, reconnect the power cord and turn on only the red switch at the rear of the WL4 FIREWALL. The WL4 FIREWALL will go through a self test cycle, the icons will light up. The sparkling water will fill automatically. But if it is a Cold only or Hot & Cold WL4 FIREWALL then you will need to manually fill the WL4 FIREWALL by depressing the cold water button.You will also need to fill the Hot Tank manual by depressing the two hot dispense buttons untill water is dispensed.
14. Flush the sparkling and still or ambient water for about 10 litres to generate the filters or until all traces of Chlorine have been removed. This can be checked by using Chlorine test strips. Flush the hot tank to ensure it is full of water and then turn on the green switch at the rear of the WL 4 FIREWALL. The unit will now heat and cool.
15. Wipe the outside surfaces (non abrasive cleaner), clean the drip tray, check there is a 5 cm air gap around the WL 4 FIREWALL
16. Taste the water, ensure there are no carbon fines in the water, check the WL 4 FIREWALL functions to the customer's satisfaction. Should there be any taste issues or carbon fines still in the water then flush the WL 4 FIREWALL again.

SANITISING OR DE-SCALING

Please ensure that you do not accidentally drop santiser or de-scale on any of the WL 4 FIREWALL's water or electrical connections.

1. An empty filter housing, as used on the AMETEK filter system fitted with in and out pipe fittings, will be needed to mix the sanitizing solution. Flush the solution into the machine from the rear bulkhead. Sanitising the machine using this method will allow the whole cold water system from entry to exit to be sterilised, including the carbonation pump.
2. Mix a solution of santiser in the empty filter housing.
3. Turn off the water supply to the WL 4 FIREWALL, release the internal water pressure by momentarily pushing the cold water button. Disconnect the water feed pipe from the rear water in bulkhead of the machine.
4. Fit the water feed pipe to the inlet side of the filter housing with the sanitiser in. Connect a length of 1/4" inch water pipe from the outlet of the filter housing to the water 'IN' bulkhead at the rear of the machine.
5. Release the top cover of the machine by sliding the top cover locking lugs, located either side of the faucet nipple, inward. Slide the top cover forward and then lift it upward and back onto it hinges. Hold the top cover open using the support strut located on the left hand side panel. The internal power to the WL 4 FIREWALL is isolated when you lift the top cover.
6. Bypass the WL 4 FIREWALL internal twist filters as no santiser should enter the filters. These can be bypassed by using dummy (empty) filters. (same applies for de-scale)
7. Close the top cover, the WL 4 FIREWALL will go through a self test cycle, when this is completed flush the cold water until the santiser exits the faucet. If sanitizing a sparkling water WL 4 FIREWALL flush the sparkling water again until the santiser exits the faucet. Please ensure not santiser is allowed to enter the hot tank. Let the WL 4 FIREWALL stand for a minimum of 15 minutes and then flush out the sanitizing solution. Replace or refit the filters, remove the empty filter housing and reconnect the water supply to the WL 4 FIREWALL.
8. Replace the faucet nipple if it is scratched, cracked, or has calcium build up on it.
9. Clean all outside surfaces of the machine, including the fold down cup stand. Remove and clean the WL 4 FIREWALL's drip tray and grill.
10. The above method can be used to remove calcium from the hot tank by using a non toxic de-scale solution or powder (citric acid based) and flushing the hot water buttons instead of cold. Please read de-scale packet instructions.

FAULT FINDING

All fault finding procedures must be carried by a technician trained by Waterlogic International or their nominated distributor.

Please take great care and suitable health and safety measures when fault finding on live electrical parts.

ADVISORY ICONS

The UV lamp is operating

Extra hot water has been selected

The cold tank is chilling

The hot tank is heating up

Sleep Mode - press any button to bring machine out of sleep mode

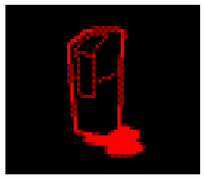
MALFUNCTION ICONS

No water supply - check the water supply is turned on, if fault persists please call your authorised service agent

A fault has been detected - please call your authorised service agent

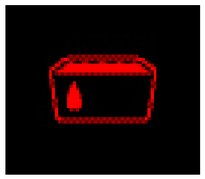
The UV lamp has failed - please call your authorised service agent

A leak has been detected - please turn off the water supply and call your authorised service agent



Filter needs replacing - please call your authorised service agent

The drip tray is full- please empty the drip tray



Note - If all the icons should flash and an audible alarm sounds, please switch the machine off immediately and call you authorised service agent.

1. No flow of water: Ensure that there iswater supply to the WL 4 FIREWALL from the building and that the installation isolation valve is turned on. If the installation kit has an anti-leak device included in it (as Waterlogic Installation kit) then make sure it has not tripped.
2. No flow of water: Check that the water filters are not blocked and that they are in date and are screwed home securely into the filter head. Waterlogic recommend filters are changed at 6 months. Check that the internal leak detection tray has not filled with water.
3. The hot water not hot and cold water not cold: Make sure the green heater compressor switch is turned on.
4. There is hot water flow but cold water is not flowing: This may be due to the cold water tank being frozen. If so disconnect power supply for one hour to allow the tank to defrost, and then flush the cold water system. Check the temperature settings are correct. If the cold tank is not frozen then check the solenoid valve is operating correctly and being turned on and off when you push the cold button.
5. There is cold water flow but hot water is not flowing: This may be due to calcium build up in the hot tank or the hot water outlet. De-scale the hot tank. Check the hot water solenoid valve functions correctly and turns on and off when you hold the hot and extra hot buttons together for 3 seconds.
6. Low flow of cold water or hot water or both: Check the building water pressure to the WL 4 FIREWALL is 45 PSI. Check the filters are not partially blocked, that the solenoid vales function correctly, hot tank calcium build up need to be de-scaled, cold tank ice build up needs to be defrosted.
7. No sparkling water: Ensure the CO_2 bottle is full and turned on and set at 45 PSI. Turning the gas pressure above 45 PSI can stop the production of sparkling water. Check the pump Icon if flashing turn the power to the WL 4 FIREWALL off for 1 minute and then back on to reset the carbonation pump. The pump will time out if it runs for more than 5 minutes continuously.

8. Bad or plastic taste: If the WL4 Firewall is new it may need flushing for a longer period..
9. Water leaks: Most leaks will be detected by either the internal WL 4 FIREWALL leak detection system that will trigger an alarm, or it will trip the Waterlogic block located on the installation kit. Should you see water leaking from the WL 4 FIREWALL, isolate the supply and start normal fault finding procedures.
10. No power: Check the building electrical supply to the WL 4 FIREWALL is on and that the power cord is plugged in. Ensure the red power switch at the rear of the WL 4 FIREWALL is on. Test the WL 4 FIREWALL fuse. Check that the top cover isolation switch is being activated by the top cover being locked in place correctly. If all these points are OK then start normal fault finding procedures.
11. All Icons flashing and audible alarm: An over heat fault has been detected please switch the WL 4 FIREWALL off immediately and start fault finding procedures.

TECHNICAL SPECIFICATIONS AND WARRANTIES

SAFETY

Subject to the standard terms and conditions of sale (a copy of which has been provided to you), neither Waterlogic International Limited ("Waterlogic"), nor any affiliated companies shall be liable for any damage which could affect, directly or indirectly, any person or property.

Please be aware that any warranties accompanying the sale of our products will be invalidated by any of the following:

- *Incorrect installation*
- *Incorrect use of the WL 4 FIREWALL*
- *Unsuitable electrical and water supply*
- *Major short-coming of maintenance*
- *Technical interventions or alterations of an unauthorised nature*
- *Adoption and use of unapproved spare parts*
- *Engagement of untrained personnel*

Waterlogic has a policy of constant and continual improvement and therefore reserves the right to change specifications without prior notice, other than in the case of significant changes.

DESCRIPTION	WL4 HCS	WL4 HC	WL4 CS	WL4 CA	WL4 C	WL4 CAS	WL4 HC	WL4 CA	WL4 C
Machine Size	417mm(W) x 439mm(D) x 470mm(H)								
Base Cabinet Size	418mm(W) x 803.4mm(D) x 467.3mm(H)								
Mini & BC Size	418mm(W) x 1238mm(D) x 470mm(H)								
Machine Weight	35kg	27kg	34kg	26kg	26kg	34kg	25kg	24kg	24kg
Base Cabinet Weight	18kg								
Power Supply	220-240 Volt / 50Hz								
Heater	500W	500W	N/A	N/A	N/A	N/A	500W	N/A	N/A
Fan	16W	16W	16W	16W	16W	16W	16W	16W	16W
Compressor	114W	114W	114W	114W	114W	114W	114W	114W	114W
Pump	12W	N/A	12W	N/A	N/A	12W	N/A	N/A	N/A
UV Lamp	11W	11W	11W	11W	11W	11W	11W	11W	11W
Control Units	15W	15W	15W	15W	15W	15W	15W	15W	15W
Unit Total	668W	656W	168W	156W	156W	168W	656W	156W	156W
Refrigeration Gas R134a	75g	75g	75g	75g	75g	75g	45g	45g	45g
Cold Tank Capacity	4.5 Litre	4.5 Litre	4.5 Litre	4.5 Litre	4.5 Litre	4.5 Litre	2 Litre	2 Litre	2 Litre
Hot Tank Capacity	1.2 Litre	1.2 Litre	N/A	N/A	N/A	N/A	1.2 Litre	N/A	N/A
CO_2 Bottle (Max)	10kg	N/A	10kg	N/A	N/A	10Kg	N/A	N/A	N/A
Water Connection	1/4" Hose	1/4" Hose	1/4" Hose	1/4" Hose	1/4" Hose	1/4" Hose	1/4" Hose	1/4" Hose	1/4" Hose
Minimum Water Pressure Megapascal (Bar)	0.15 (1.5)	0.15 (1.5)	0.15 (1.5)	0.15 (1.5)	0.15 (1.5)	0.15 (1.5)	0.15 (1.5)	0.15 (1.5)	0.15 (1.5)
Maximum Water Pressure Megapascal (Bar)	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)	0.35 (3.5)
Recommended Water Pressure Megapascal (Bar)	0.30 (3.0)	0.30 (3.0)	0.30 (3.0)	0.30 (3.0)	0.30 (3.0)	0.30 (3.0)	0.30 (3.0)	0.30 (3.0)	0.30 (3.0)
Hot Water Temperature	87°C	87°C	N/A	N/A	N/A	N/A	87°C	N/A	N/A
Cold Water Temperature	6°C	6°C	6°C	6°C	6°C	6°C	6°C	6°C	6°C
Sparkling Water Temperature	6°C	N/A	6°C	N/A	N/A	6°C	N/A	N/A	N/A

END OF LIFE

NON EU COUNTRIES

At the end of this products life, please ensure that it is disposed of in an environmentally friendly manner which is in line with your Country requirements/guidelines.

WEEE (EU ONLY)

Please be aware that our products are covered by the Waste Electrical and Electronic (WEEE) directive (2002/96/EC). The symbol shown above denotes that the product should not be disposed of with general/household waste. Please contact your supplier/service agent who will arrange for the collection and disposal of this product.

ROHS

All Waterlogic machines comply with EC Directive (2002/95/EC) on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electrical Equipment (RoHS).

BioCote® (ANTI-MICROBIAL SOLUTION)

For your added protection this product incorporates BioCote® antimicrobial technology. Silver, in the form of silver ions, is the active ingredient utilised in BioCote®. This silver technology is manufactured into the surface of our products, giving them built-in sustainable antimicrobial protection.

BioCote's silver technology has been tested by an independent laboratory to show its ability to inhibit the growth of bacteria, mould and fungi by up to 99.9% over a 24 hour period and for the duration of the machine life.

FREQUENTLY ASKED QUESTIONS ABOUT BioCote®:

Why use BioCote®? BioCote® will help reduce the risk of cross-contamination. You may not want to think about it, but every surface in the working environment is a potential breeding ground for Bacteria.

How is it applied? BioCote® is applied via an additive into the manufacturing process and will, therefore, be present throughout the moulded or painted parts.

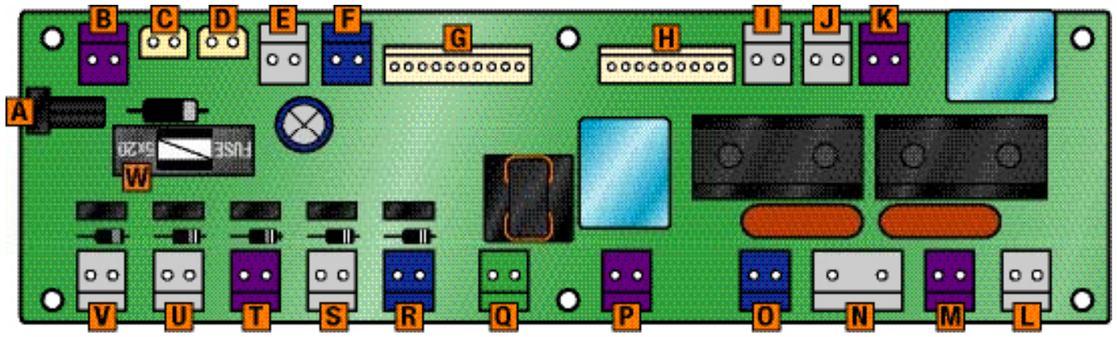
How long will BioCote® last? BioCote® will last for the usual life expectancy of your water dispenser. It will not wear or wash out with use or cleaning.

What bacteria is BioCote® effective against? BioCote® is effective against most common bacteria, moulds and fungi.

Please note:

BioCote® is an additional line of defence to protect between cleaning routines, it is not a replacement for your normal cleaning and sanitisation processes.

MAIN PCB SCHEMATIC DIAGRAM - Hot, Cold and Sparkling



A	24V in
B	Leak Detector
C	UV Detector
D	Drip Tray Sensor
E	Hot Tank Level Control
F	Sparkling Water Level Control
G	10 Pin Ribbon Cable
H	9 Pin Ribbon Cable
I	Hot Sensor
J	Cold Sensor
K	Ambient Sensor
L	UV
M	To Hot Tank

N	230V AC In
O	To Compressor
P	Solenoid 4
Q	Pump
R	Solenoid 6
S	Solenoid 5
T	Solenoid 3
U	Solenoid 2
V	Solenoid 1
W	Fuse 1 Amp
X	
Y	

DANGER HIGH VOLTAGES PRESENT ON THIS PCB
CARE MUST BE TAKEN WHEN LIVE TESTING

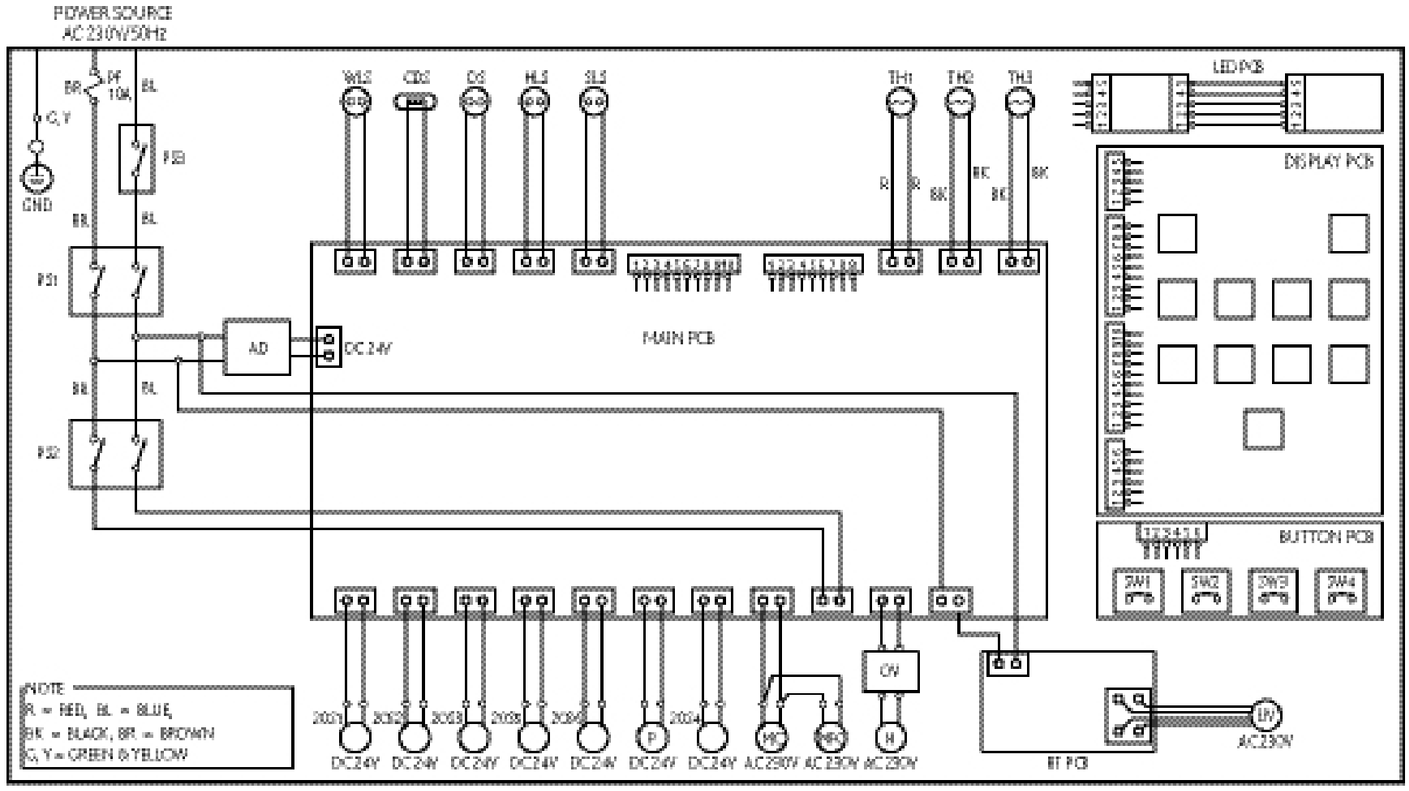
ELECTRICAL WIRING DIAGRAM 230V - Hot, Cold and Sparkling

MARK	DESCRIPTION
20S1	Solenoid valve (for in water)
20S2	Solenoid valve (for hot water)
20S3	Solenoid valve (for cold water in)
20S4	Solenoid valve (for cold water)
20S5	Solenoid valve (for cold water out)
20S6	Solenoid valve (for sparkling water)
0V	Thermostat for overheat (hot tank)

MARK	DESCRIPTION
AD	Adaptor 24V DC
BT PCB	Ballast PCB
CDS	UV sensor
DS	Drip tray sensor
H	Hot water heater
HLS	Hot water level check
MC	Motor for compressor

MARK	DESCRIPTION
MFC	Fan motor for compressor
P	Pump
PF	Power Fuse (250V/10A)
PS1	Control power switch
PS2	Comp & heater power switch
PS3	Top cover power switch
SLS	Sparkling water level check

MARK	DESCRIPTION
TH1	Thermistor (hot water)
TH2	Thermistor (cold water)
TH3	Thermistor (over-heat)
UV	UV lamp
WLS	Water leak sensor



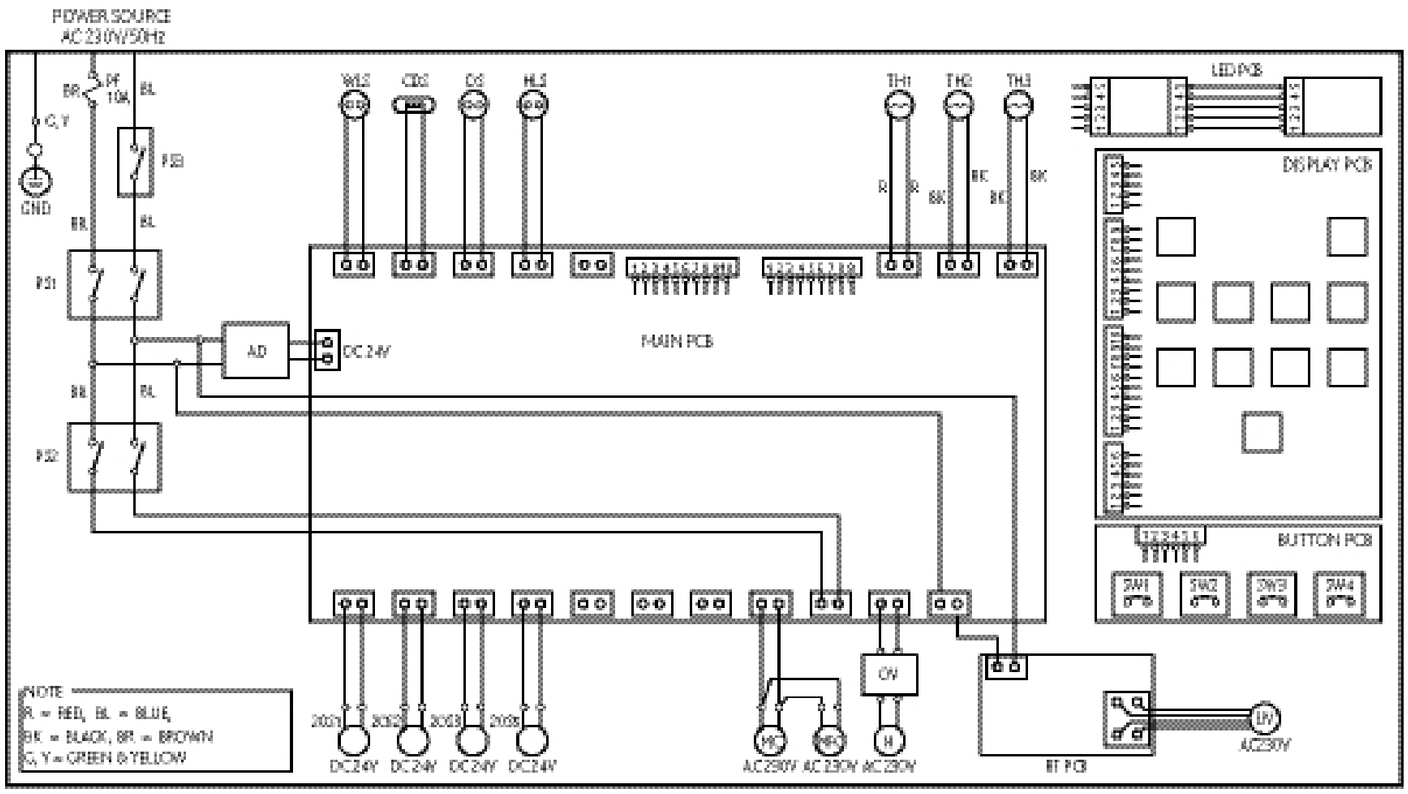
ELECTRICAL WIRING DIAGRAM 230V - Hot and Cold

MARK	DESCRIPTION
20S1	Solenoid valve (for in water)
20S2	Solenoid valve (for hot water)
20S3	Solenoid valve (for cold water in)
20S5	Solenoid valve (for cold water out)
0V	Thermostat for overheat (hot tank)
AD	Adaptor 24V
BT PCB	Ballast PCB

MARK	DESCRIPTION
CDS	UV sensor
DS	Drip tray sensor
H	Hot water heater
HLS	Hot water level check
MC	Motor for compressor
MFC	Fan motor for compressor
PF	Power Fuse (250V/10A)

MARK	DESCRIPTION
PS1	Control power switch
PS2	Comp & heater power switch
PS3	Safe power switch
TH1	Thermistor (hot water)
TH2	Thermistor (cold water)
TH3	Thermistor (over-heat)
UV	UV lamp

MARK	DESCRIPTION
WLS	Water leak sensor

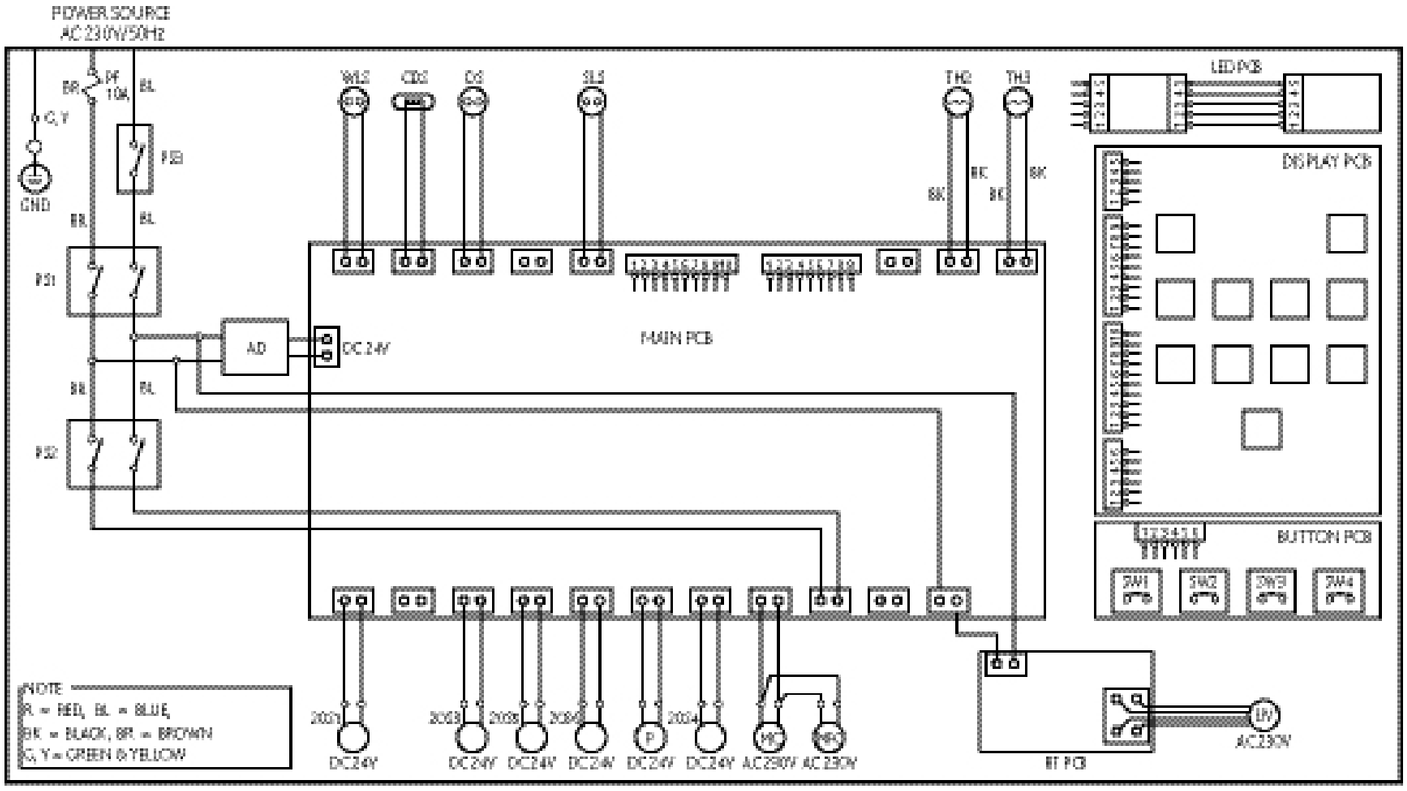


ELECTRICAL WIRING DIAGRAM 230V - Cold and Sparkling

MARK	DESCRIPTION
20S1	Solenoid valve (for in water)
20S2	Solenoid valve (for ambient water)
20S3	Solenoid valve (for cold water in)
20S5	Solenoid valve (for cold water out)
AD	Adaptor 24V
BT PCB	Ballast PCB
CDS	UV sensor

MARK	DESCRIPTION
DS	Drip tray sensor
MC	Motor for compressor
MFC	Fan motor for compressor
PF	Power Fuse (250V/10A)
PS1	Control power switch
PS2	Comp & heater power switch
PS3	Safe power switch

MARK	DESCRIPTION
TH2	Thermistor (cold water)
TH3	Thermistor (over-heat)
UV	UV lamp
WLS	Water leak sensor

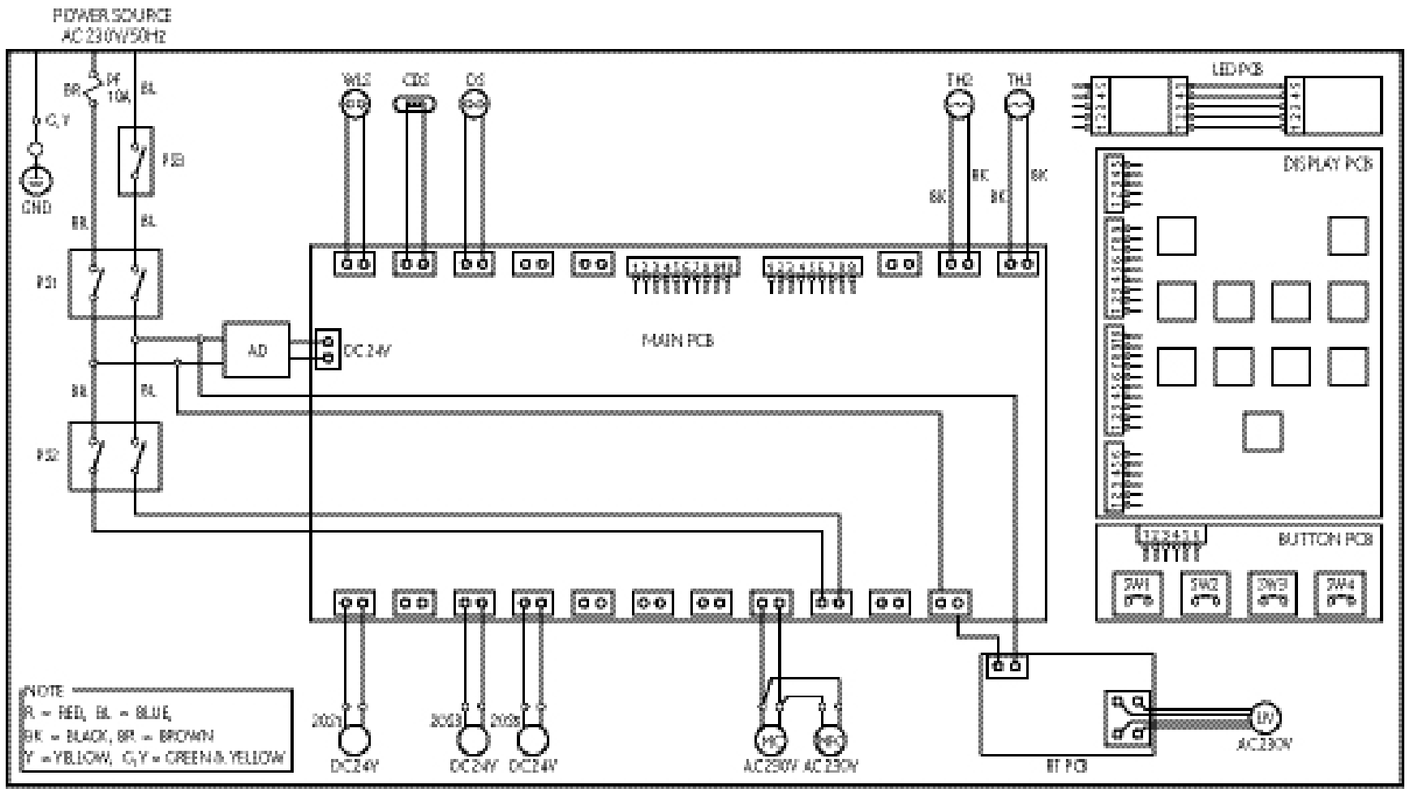


ELECTRICAL WIRING DIAGRAM 230V - Cold Only

MARK	DESCRIPTION
20S1	Solenoid valve (for in water)
20S3	Solenoid valve (for cold water in)
20S4	Solenoid valve (for cold water)
20S5	Solenoid valve (for cold water out)
20S6	Solenoid valve (for sparkling water)
AD	Adaptor 24V
BT PCB	Ballast PCB

MARK	DESCRIPTION
CDS	UV sensor
DS	Drip tray sensor
MC	Motor for compressor
MFC	Fan motor for compressor
P	Pump
PF	Power Fuse (250V/10A)
PS1	Control power switch

MARK	DESCRIPTION
PS2	Comp & heater power switch
PS3	Safe power switch
SLS	Sparkling water level check
TH2	Thermistor (cold water)
TH3	Thermistor (over-heat)
UV	UV lamp
WLS	Water leak sensor

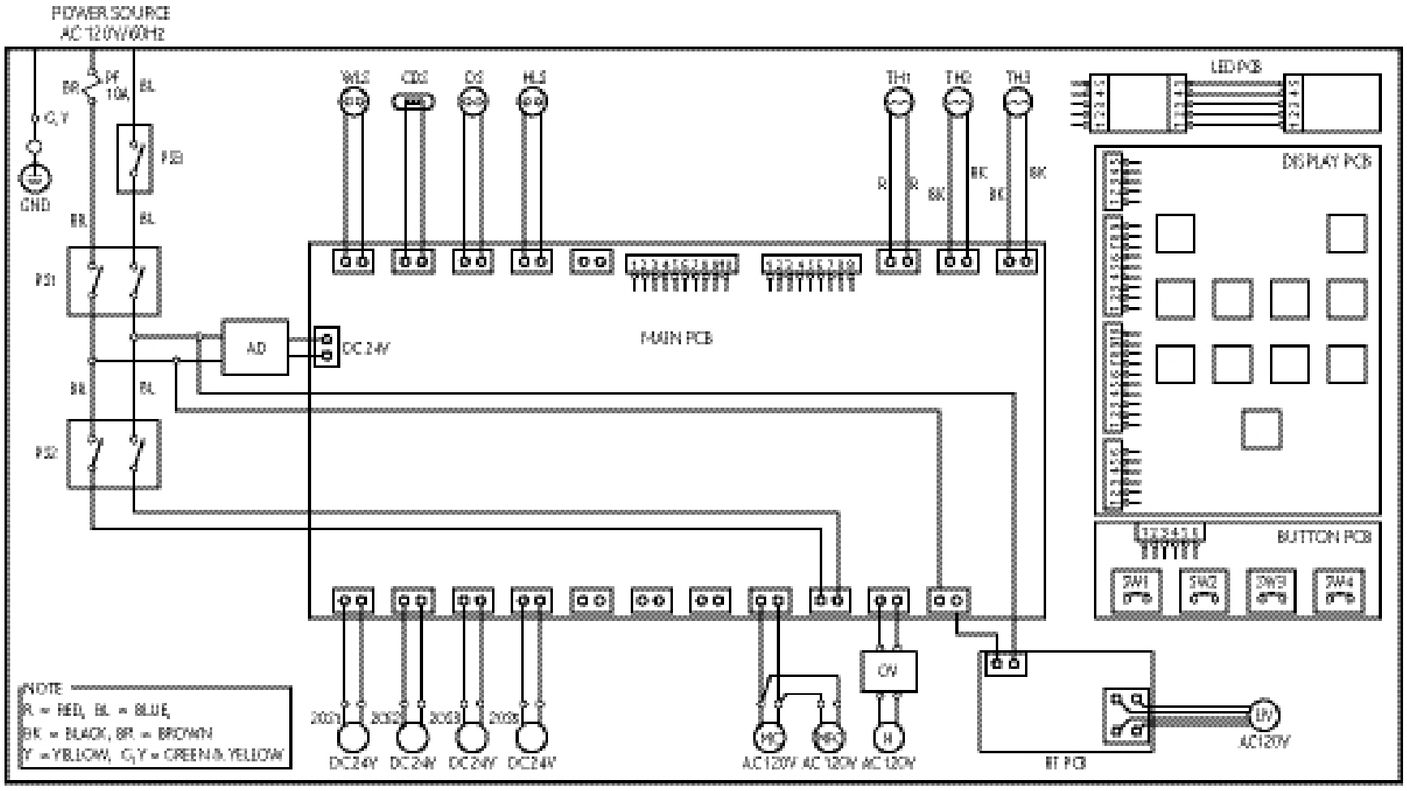


ELECTRICAL WIRING DIAGRAM 120V - Hot and Cold

MARK	DESCRIPTION
20S1	Solenoid valve (for in water)
20S3	Solenoid valve (for cold water in)
20S5	Solenoid valve (for cold water out)
AD	Adaptor 24V
BT PCB	Ballast PCB
CDS	UV sensor
DS	Drip tray sensor

MARK	DESCRIPTION
MC	Motor for compressor
MFC	Fan motor for compressor
PF	Power Fuse (250V/10A)
PS1	Control power switch
PS2	Comp & heater power switch
PS3	Safe power switch
TH2	Thermistor (cold water)

MARK	DESCRIPTION
TH3	Thermistor (over-heat)
UV	UV lamp
WLS	Water leak sensor

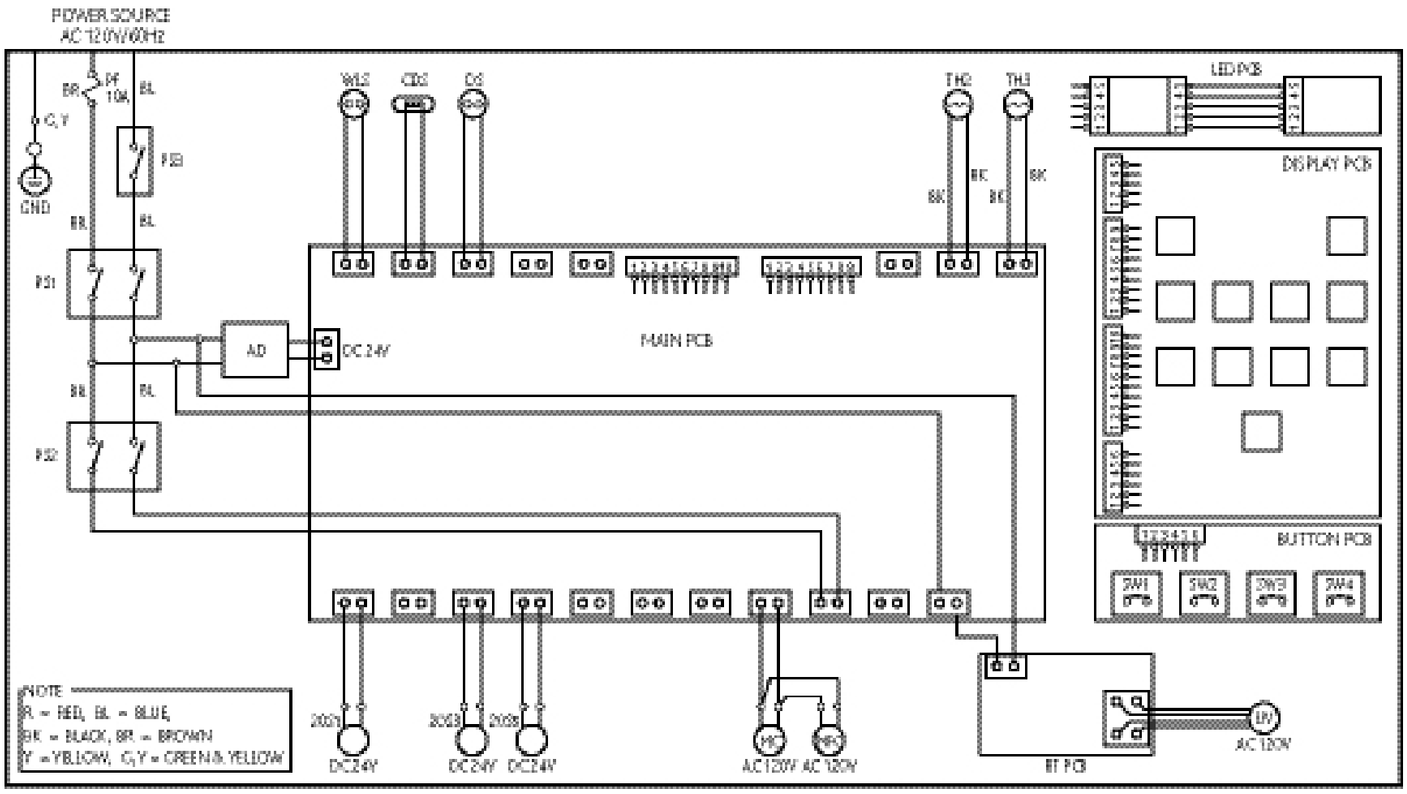


MARK	DESCRIPTION
20S1	Solenoid valve (for in water)
20S3	Solenoid valve (for cold water in)
20S5	Solenoid valve (for cold water out)
AD	Adaptor 24V
BT PCB	Ballast PCB
CDS	UV sensor
DS	Drip tray sensor

MARK	DESCRIPTION
MC	Motor for compressor
MFC	Fan motor for compressor
PF	Power Fuse (250V/10A)
PS1	Control power switch
PS2	Comp & heater power switch
PS3	Safe power switch
TH2	Thermistor (cold water)

MARK	DESCRIPTION
TH3	Thermistor (over-heat)
UV	UV lamp
WLS	Water leak sensor

ELECTRICAL WIRING DIAGRAM 120V - Cold Only



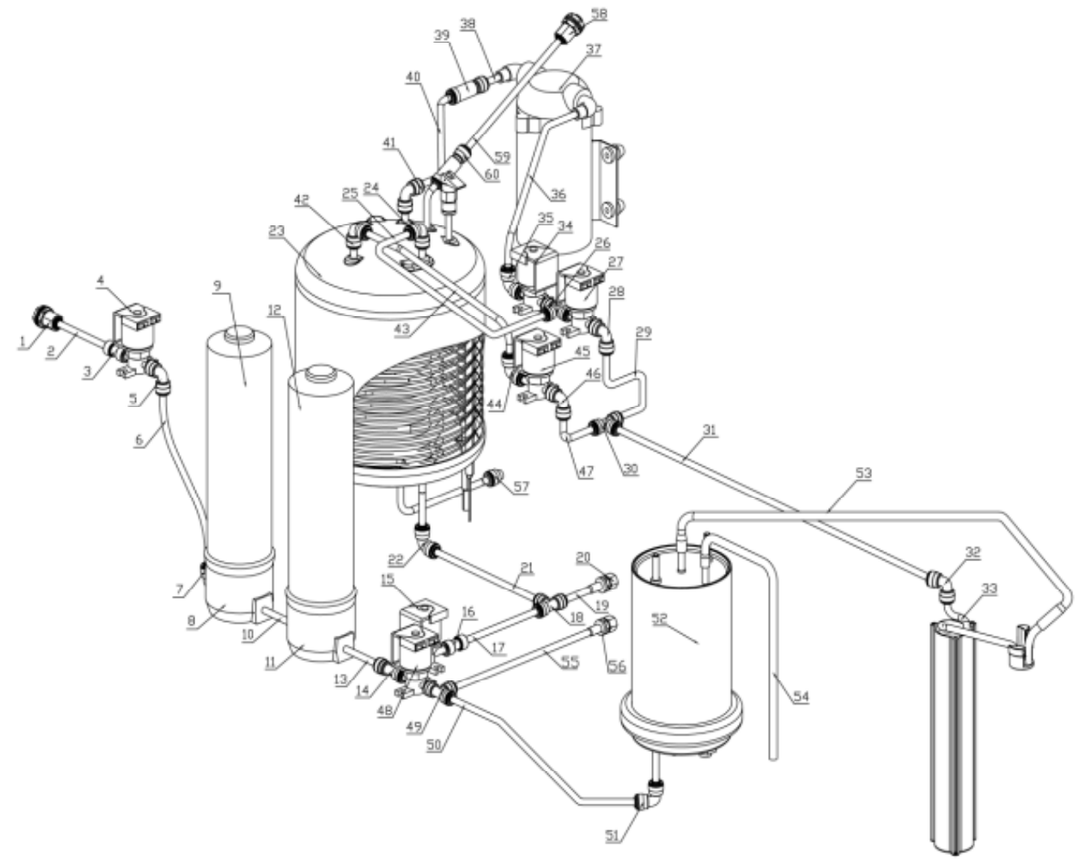
WETTED PARTS LIST - Hot, Cold and Sparkling

ITEM	PART NUMBER	DESCRIPTION
1	PU-4028	JG Bulkhead Connector Union 1/4" * 1/4"
2	PU-4031	JG LLD PE Tube - Blue O.D.1/4" 240mm
3	PU-4010	JG Equal Straight Connector 1/4"
4	PU-4016	Solenoid Valve DC24V 1000mm
5	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
6	PU-4031	JG LLD PE Tube - Blue O.D.1/4" 285mm
7	PU-4066	JG Stem Elbow Connector 1/4" * 1/4"
8	PU-4022	OmnipureFilter Head Valved (Q VALVED HEAD JJ)
9	PU-4076	Omnipure Twist GAC 10" with Polyphosphate (WL5540-P)
10	PU-4031	JG LLD PE Tube - Blue O.D.1/4" 48mm
11	PU-4075	Omnipure Non-Valved Head(Q NON VALVED HEAD JJ)
12	PU-4029	WL5520 10" CBC (WL5520)
13	PU-4031	JG LLD PE Tube - Blue O.D.1/4" 41mm
14	PU-4011	JG Equal Tee Connector 1/4" (PI0208S)
15	PU-4016	Solenoid Valve DC24V 1000mm
16	PU-4010	JG Equal Straight Connector 1/4"
17	PU-4031	JG LLD PE Tube - Blue O.D.1/4" 55mm
18	PU-4011	JG Equal Tee Connector 1/4" (PI0208S)
19	PU-4031	JG LLD PE Tube - Blue O.D.1/4"
20	CT-2039	Drain Valve and Cap Ass'y 1/4
21	PU-4031	JG LLD PE Tube - Blue O.D.1/4"
22	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
23	CT-2073-A	Waterlogic 4 H2CP C&S tank without UV Holder -Firewall
24	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
25	PU-4031	JG LLD PE Tube - Blue O.D.1/4" mm
26	PU-4011	JG Equal Tee Connector 1/4" (PI0208S)
27	PU-4016	Solenoid Valve DC24V 1000mm

ITEM	PART NUMBER	DESCRIPTION
28	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
29	PU-4031	JG LLD PE Tube - Blue O.D.1/4"
30	PU-4011	JG Equal Tee Connector 1/4" (PI0208S)
31	PU-4031	JG LLD PE Tube - Blue O.D.1/4"
32	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
33	FU-0007-A	Faucet uv sprial quartz
34	PU-4016	Solenoid Valve DC24V 1000mm
35	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
36	PU-4031	JG LLD PE Tube - Blue O.D.1/4" 220mm
37	CT-2035-D	AQ&Q pump with connector & fitting
38	PU-4031	JG LLD PE Tube - Blue O.D.1/4"
39	PU-4057	JG Non-Return Valve 1/4"
40	PU-4031	JG LLD PE Tube - Blue O.D.1/4" 150mm
41	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
42	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
43	PU-4031	JG LLD PE Tube - Blue O.D.1/4" 70mm
44	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
45	PU-4016	Solenoid Valve DC24V 1000mm
46	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
47	PU-4031	JG LLD PE Tube - Blue O.D.1/4"
48	PU-4016	Solenoid Valve DC24V 1000mm
49	PU-4011	JG Equal Tee Connector 1/4" (PI0208S)
50	PU-4031	JG LLD PE Tube - Blue O.D.1/4" mm
51	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
52	HT-3036-A	1.2L 230V 800W Steel None-Open Type Hot Tank(Sensor)
53	PU-4064	Silicon Tube 5/16" for hot water mm
54	PU-4064	Silicon Tube 5/16" for hot water Air Vent 460mm

**Customer specific*

WETTED PARTS ILLUSTRATION - Hot, Cold and Sparkling



MAINS PARTS LIST

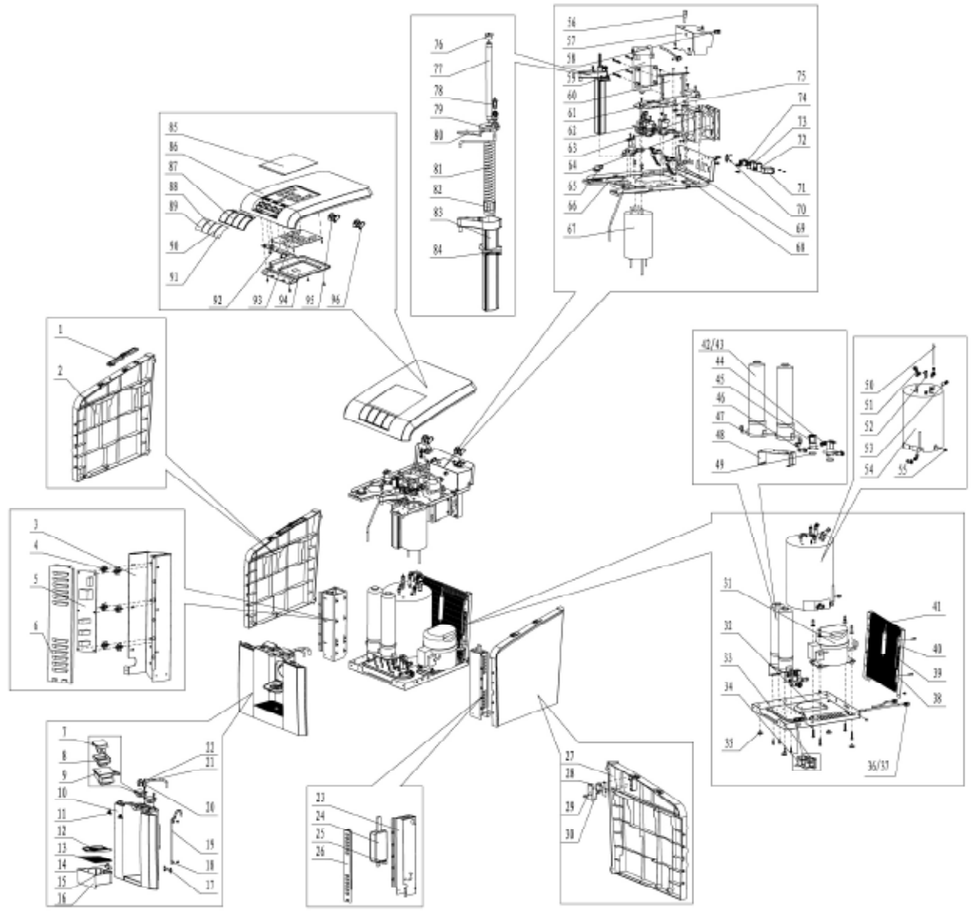
ITEM	PART NUMBER	DESCRIPTION
1	PL-1321	WL-4 Top Cover Safety support
2	PL-1328	WL-4 Mini Side Panel-L
3	ST-8260	WL-4 PCB Holder Bracket
4	*EN-6059*	*Plastic PCB Support*
5	EN-6117	Main PCB WL4000
6	ST-8285	WL4 Main PCB metal cover
7	EN-6119	LED PCB
8	PL-1335	WL-4 LED PCB Holder sealing Rubber
9	PL-1318	WL-4 LED hold Plate
10	PL-1312-C	WL-4 Firewall Front Upper Panel Silver
11	PL-1317	WL-4 Top Cover Lock with screw hole
12	PL-1344-A	WL-4 Adjustable drip tray grill Silver
13	PL-1320-A	WL-4 Drip Tray gill Silver (Biocote)
14	ST-8267-A	WL-4 Drip Tray-sensor Pin(L)
15	ST-8267-B	WL-4 Drip Tray-sensor Pin(R)
16	PL-1319-B	WL-4 Drip Tray Silver (Biocote)- WL Logo
17	ST-8266	WL-4 Drip Tray sensor Holder
18	*CU-0055*	*WL-4 Air Vent Clip*
19	PU-4064	Silicon Tube 5/16" for hot water
20	PL-1354	WL4 Firewall hot water faucet
21	*PU-4064*	*Silicon Tube 5/16" for hot water*
22	PL-1354-A	WL4 Firewall hot water faucet Insert Pipe
23	ST-8261	WL-4 Adaptor Holder Bracket
24	EL-5128	WL4 Power adopter 2A UNIVERSAL with ST-8264-A
25	ST-8264-A	WL-4 Adaptor Fixing bracket Ver2 replaced ST-8264
26	ST-8284	WL4 adaptor metal cover
27	PL-1327	WL-4 Mini Side Panel-R
28	ST-8286	WL4 Micro SW metal cover
29	PL-1329	WL-4 Safety Micro Switch Cover
30	EL-5027	Micro Door Lock S/W only
31	CO-9001	Compressor (R134a 1/8HP) 230V/50Hz thermally protected
32	ST-8258	WL-4 Mini Down Base
33	PL-1311	WL-4 Leak Detection Sensor Bracket
34	ST-8207CN	WL3000 Leak containment tray Clip (sensor 0.5mm)
35	*PL-1251CN*	*Unit Rubber Feet of BOA WL2000 Mini*
36	CT-2028	Drain valve cap only (for 5/16" & 1/4" size)
37	CT-2039-A	Drain valve body only for 1/4"

ITEM	PART NUMBER	DESCRIPTION
38	ST-8256	WL-4 Mini Front support Frame-R
39	CO-9041	Wire Condenser for WL4
40	CO-9008	Domestic Filter Dryer (Chinese) WL650&WL2000
41	ST-8255	WL-4 Mini Front support Frame-L
42	PU-4022	OmnipureFilter Head Valved (Q VALVED HEAD JJ)
43	PU-4029	WL5520 10" CBC (WL5520)
44	PU-4010	JG Equal Straight Connector 1/4"(PI0408S)
45	PU-4016	Solenoid Valve DC24V 1000mm
46	PU-4011	JG Equal Tee Connector 1/4" (PI0208S)
47	PU-4066	JG Stem Elbow Connector 1/4" * 1/4" Acetal(PI220808S)
48	ST-8276	WL-4 Omnipure filter fixing bracket
49	*CU-0001*	*Cushion for solenoid valve*
50		Water level sensor
51	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)
52	*CT-2037*	*Upper Safty Valve 1/4" for Sparkling Unit*
53	PU-4057	JG Non-Return Valve 1/4"(1/4SCV)
54	CT-2073-A	Waterlogic 4 H2CP C&S tank without UV Holder -Firewall
55	PU-4140	JG End Stop 1/4" (PI4608S)
56	EL-5100	Brown Wire from Fuse holder to red S/W Including Fuse(WL-4)
57	ST-8283	WL-4 Electronics Cover Bracket
58	EL-5122	WL4 Wire from Philips Ballast to UV Lamp
59	CT-2035-D	AQ&Q Pump With Connector & Fitting
60	ST-8257	WL-4 Pump Bracket
61	EN-6120-B	Philips Ballast 220V 11W
62		double Solenoid Valve DC24V 1000mm
63	ST-8265	WL-4 Fan Bracket
64	CT-2005	Fan Motor 230V/50-60Hz (AC Axial fan) UF12B-23B-WL
65	PL-1336	WL-4 Upper panel wire route hole Silicon Cover
66	ST-8259-D	WL-4 Mini Firewall Upper shelf & Back panel
67	HT-3036-A	1.2L 230V 800W Steel None-Open Type Hot Tank(Sensor)
68	PL-1330	WL-4 Back panel-Hinge-A-4
69	PL-1331	WL-4 Back panel-Hinge-A-1
70		PCB setting connector

Items shown in italics are not shown

continued on page 37

WL4 MAINS PARTS ILLUSTRATION

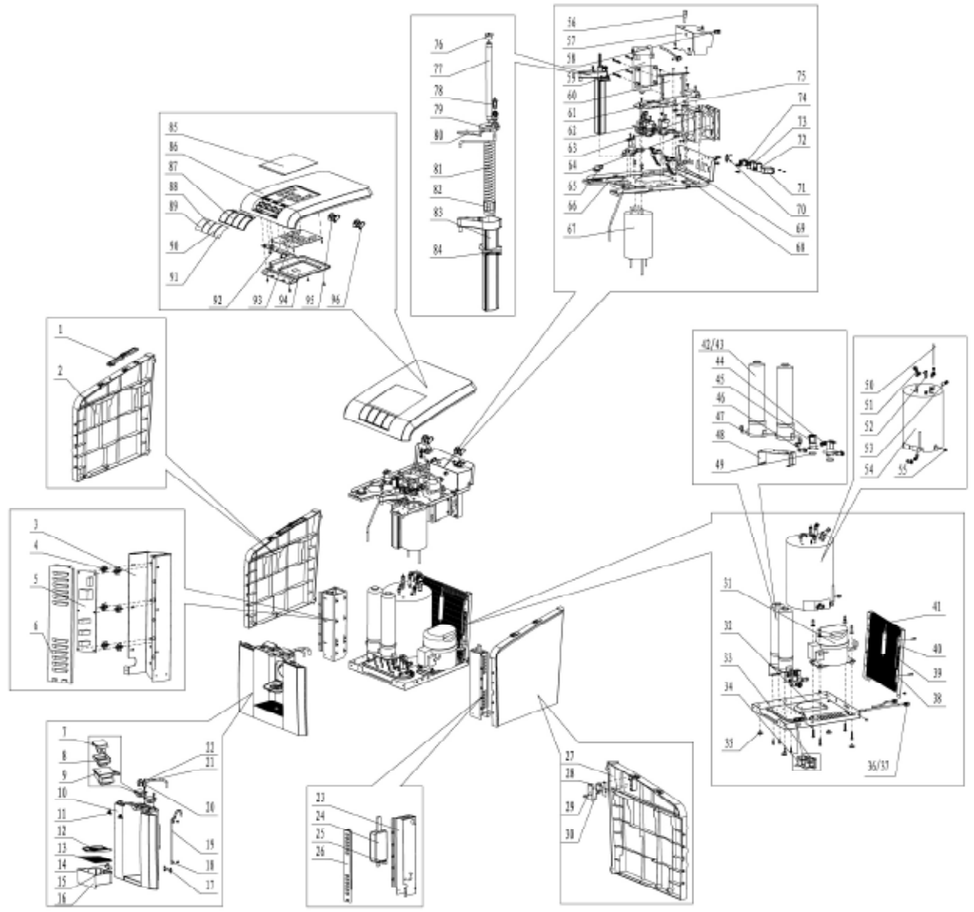


WL4 MAINS PARTS LIST - *continued*

ITEM	PART NUMBER	DESCRIPTION
71	EL-5016	Socket with EMI Filter 110V/60Hz
72	EL-5004	Switch - Power (Red)
73	EL-5005	Switch - Heater/Compressor (Green)
74	PU-4028	JG Bulkhead Connector Union 1/4" * 1/4"(PI1208S)
75	ST-8300	WL4 Firewall C&S fixing bracket to upper shelf.
76	CT-2001-B	UV Lamp Fixing Rubber (Silicon)
77	CT-2074	UV Lamp 11W
78	CT-2010	CDS Fixing Rubber (Silicon)
79	CT-2078-A	WL-4 Firewall UV Lamp Fixing Rubber
80	FU-0005-A	WL4 Firewall -AL Top Case Cover
81	FU-0007-A	WL4 Firewall -Sprial Quartz
82	CT-2077-A	WL-4 Firewall Spiral Quartz spacer to Outer quartz sleeve
83	FU-0001-A	WL4Firewall -Al Housing
84	ST-8298	WL4 Firewall system fixing bracket to the upper shelf
85	PL-1337	WL-4 LCD Cover Panel(WL Logo)
86	PL-1322-C	WL-4 Top Cover Silver with FirewallLogo
87	PL-1323	WL-4 4 Button Panel
88	LP-7240	Sparkling Button Label in four option model
89	LP-7237	Cold Button Label in four option model
90	LP-7238	Hot Button Label in four option model
91	LP-7241	Extra hot Button Label in four option model
92	EN-6118	Button PCB
93	EN-6116-A	WL-4 Display PCB for Firewall(CDS)
94	PL-1334	WL-4 PCB Cover
95	PL-1333	WL-4 Back panel-Hinge-A-3
96	PL-1332	WL-4 Back panel-Hinge-A-2

Items shown in italics are not shown

WL4 MAINS PARTS ILLUSTRATION



WL-4 PCB PROGRAMMING PROCEDURE

The Service PCB has been developed to allow the WL 4 FIREWALL PCB to be reset using an external PCB.

BUTTON DESCRIPTIONS

UP	Menu Up
DOWN	Menu Down
ENTER	Enter and Modify
SELECT	Select and Enter/Exit
READ/SEND	Read/Send Data

LED DISPLAY

TEMP	Actual temperature and filter use hours
READ	Read PCB Data
SET	Setting PCB Data
SEND	Sending Data to Machine
FILTER	Filter Reset

WL-4 SERVICE PCB KITS

Service PCB

RS232

Power Adaptor

PCB SETTING PROCEDURE

STEP 1: CONNECT THE SERVICE PCB TO THE MACHINE

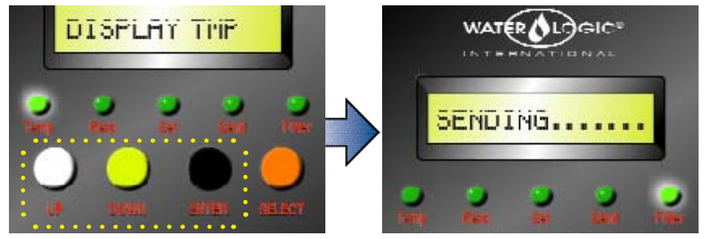
- **Before you connect the Service PCB to the WL 4 FIREWALL machine, turn the machine power off.**
- **Connect the RS232 connector from Service PCB to the machine.**
- **Switch ON the WL4 machine.**
- **Switch ON Plug the power adaptor of switch PCB in to the socket of the Service PCB.**

STEP 2: INITIAL MODE & LCD DISPLAY

- **When the Service PCB is powered up it will display, in order, as below:**
  `WL4 FIREWALL TOOL`
  `SOFT V1.0` **(Version)**
  `DISPLAY TMP`
- **When the above display mode has finished, the word** `DISPLAY` **will appear on the screen and only the green TEMP LED will remain illuminated.**

- **When the screen shows** `DISPLAY TMP` **and TEMP LED light is illuminated, the current data information of the WL 4 FIREWALL can be checked.**

  Cold Water Actual Temperature, Hot Water Actual Temperature and/or Filter Timer as of now
- **Press any one of the three buttons - Up, Down or Enter, the screen will show** `SENDING.` **This shows the Service PCB is communicating with the WL 4 FIREWALL to read its actual data.**

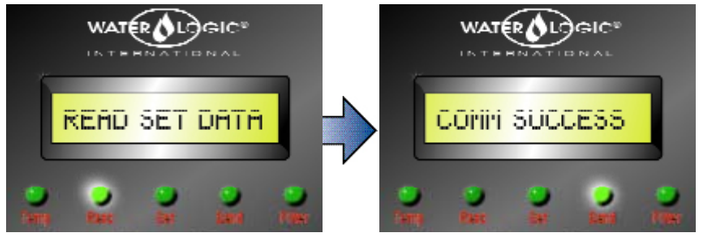


- **To view the actual data for cold water temperature, hot water temperature and filter timer, press either the "Up" or "Down" button.**

Note: This data is not the WL 4 FIREWALL setting information but the WL 4 FIREWALL actual current data.

STEP 3: FACTORY(OR ORIGINAL) PCB SETTING CHECK

- **Press the "Select" button and READ LED will illuminate. The screen will show READ SET DATA. Then press any of the three buttons (Up, Down or Enter) and screen display will change to PRESS SEND KEY.**

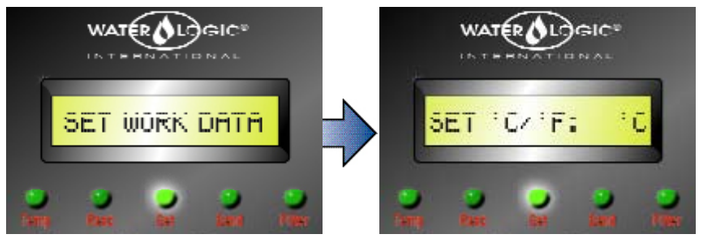


- **Press the "Send" button, SENDING will show on the screen. This will be followed by COMM SUCCESS which indicates that the Service PDCB is communicating with the WL 4 FIREWALL and reading the original setting data.**
- **Press the "Down" button to read whole PCB setting and press "Up" button to read back from the top setting.**

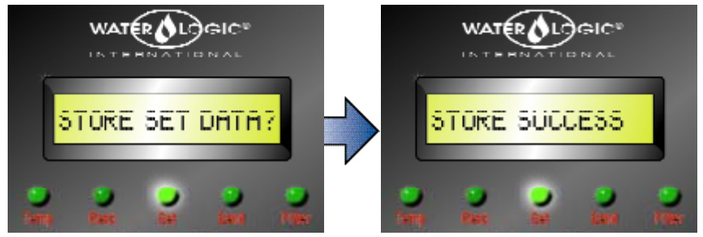
  Note: At this stage, the Service PCB can read the actual settings and cannot change these settings. Settings can be changed in the next step, Step 4.

STEP 4: RESET PCB SETTING

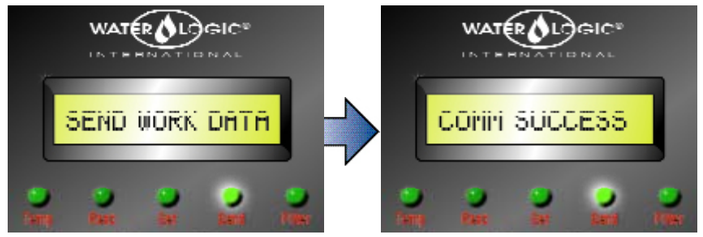
- **Press the "Select" button and SET LED will illuminate. The screen will display SET WORK DATA. Now press the "Enter" button and the display will change to the first setting menu SET °C/°F: °C or °F".**



- **To change the setting on the display, keep the "Enter" button pressed until the setting you require appears on the screen.**
- **To go to the next setting, press the "Down" button, press the "Enter" button until what you need to set. Repeat this for other setting.**
- **When all the setting have been correctly set, the final display will show STORE SET DATA?. Press the "Enter" button and the screen will diaplay STORING. The screen will then change to display STORE SUCCESS. The new setting data is now stored in the Service PCB only and is not within the WL 4 FIREWALL PCB as yet.**



- **To send the new setting data to the WL 4 FIREWALL PCB, press the " Select" button, the screen will display SEND WORK DATA and SEND LED will be illuminated. The Service PCB is now ready to re-program the PCB in the WL 4 FIREWALL. Press the "Send" button on the Service PCB and the screen will display COMM SUCCESS. This connfirms the successful transfer of the data.**



- **THE WL 4 FIREWALL PCB is now set to new settings.**

STEP 5: FILTER TIMER RESET

- **Whenever the filter needs replacing and want to reset, press the "Select" button and set LED Light at "Filter".**
- **When FILTER LED is illuminated and the screen will display will show FILTER RESET.**

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