

Operating Manual Number : WS-004E

Revised : January 1998

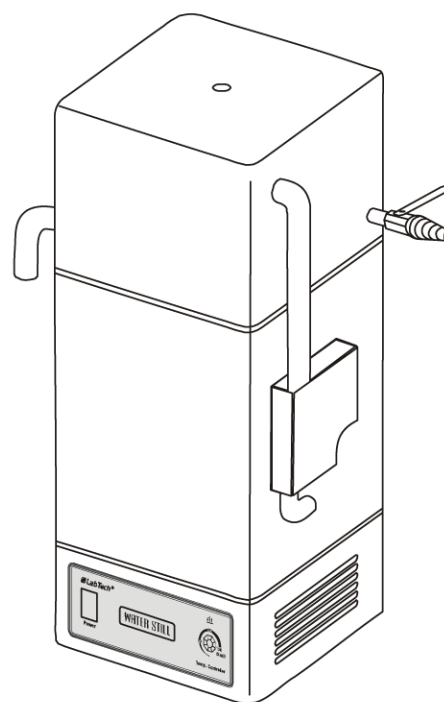
December 1999

April 2001

Basic Water Still

Covering Model Numbers

WD-2004 / WD-2004F / WD-2008 / WD-2008F



Before operating this unit,
please read and understand
this manual completely
and keep it for future
reference.

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1.2. Getting Started

Thank you very much for purchasing HumanLab Product

Your Water Still has been designed with function, reliability, and safety in mind. It is your responsibility to install it in conformance with local electrical codes. For safe operation, please pay attention to the alert symbols through the manual.

This manual contains important operating and safety information. You must carefully read and understand the contents of this manual prior to the use of this equipment.



Warning

Warning alert you to a possibility of personal injury



Caution

Caution alert you to a possibility of damage to the equipment.



Note

Notes alert you to pertinent facts and conditions.



HOT

Hot Surface

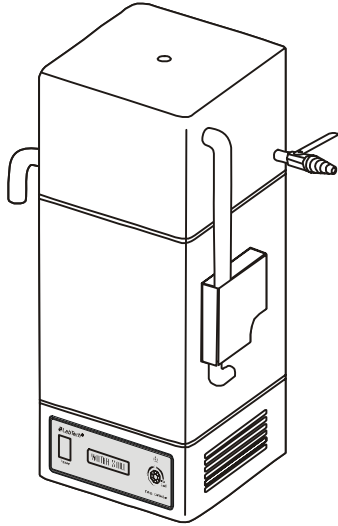
Hot surface alert you possibility of burning injury by hot instrument surface



Explosive

Explosive alerts you to possibility of explosion by high pressure.

1.3. Product Overview



HumanLab Basic Water Still produce distilled water from tap water with space saving design and effective distilled water production.

Unique design and safety feature with hydraulic temperature controller and a water float switch provides automatic operation. By lack of water, the heating is automatically switched off to protect heater from over heating.

Water still is easy to clean-up by just removing upper part of the body (condenser unit). By controlling cooling water flow, you can save a lot of water wasted before.

Model WD-2004F and WD-2008F equipped with Pre-filter, protect water still from lime deposit.

1.4. Product Specifications

Model		WD-2004	WD-2008
		WD-2004F	WD-2008F
Capacity		3.5 ℓ / hour	7.5 ℓ / hour
Dimensions (mm)		250(W) x 222(D) x 542(H)	260(W) x 260(D) x 610(H)
Heater		3 kW	6 kW
Cooling Water		Approx. 30 ℓ	Approx. 60 ℓ
Material	Inner	Stainless Steel	
	Outer	Stainless Steel /w Powder Coating	
	Heater	Stainless Steel Pipe	
Controller		Hydraulic Thermostat	
Electrical Requirements		220V, 50/60 Hz	
Switch		Main Power with Pilot Lamp and Water Float Switch	
Sealing		Silicone Gasket	
Safety		Low Water & Over Heating Cut-Out	

1.5. Parts and Functions

1.5.1. Main Controller



✂ Main Power

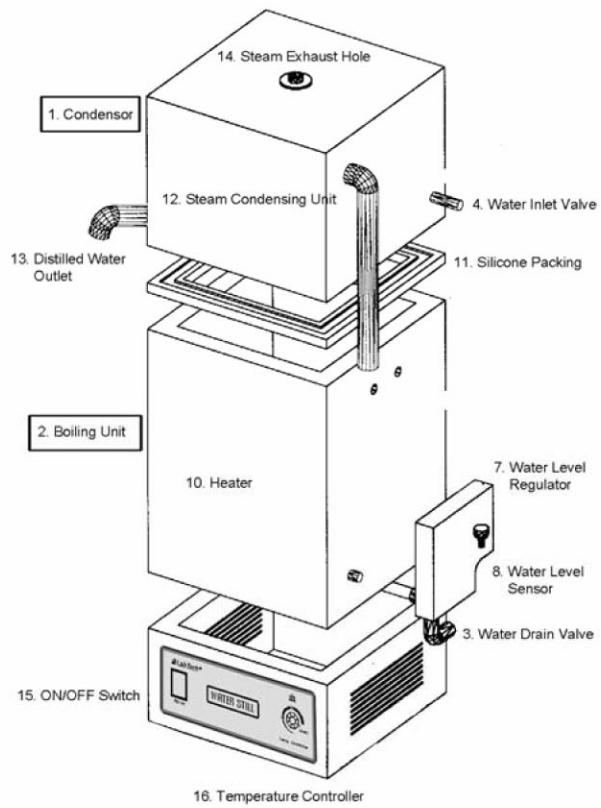
Main electrical power supply switch



✂ Temperature Controller

Control heating temperature

1.5.2. Main Body



1.6. Operating

■ Before Operation

1) The main voltage must correspond to the voltage given on the name-plate

1) Place Water Still on the flat surface

2) Place Water Still near by water supply

■ Tubing Connection

1) Connect the water inlet tap (4) with a hose to the water mains. Fasten hose with hose tie firmly.

2) Connect a hose to the water outlet (3) and place its end in a drain on a lower level.

3) Connect a hose to the distilled water outlet (13) and place its end in a distilled water reservoir on a lower level.

■ Operation

1) Turn the water supply on and check if there is any water leakage between the tubing connections.

2) Slightly turn on water inlet tap (4).

3) Switch on (15). The pilot lamp in the main switch will glow.

4) Set the temperature controller (16) over 100°C.

5) The Water Still will automatically starts when water in the chamber reaches appropriate level.

1.7. Warning



HOT



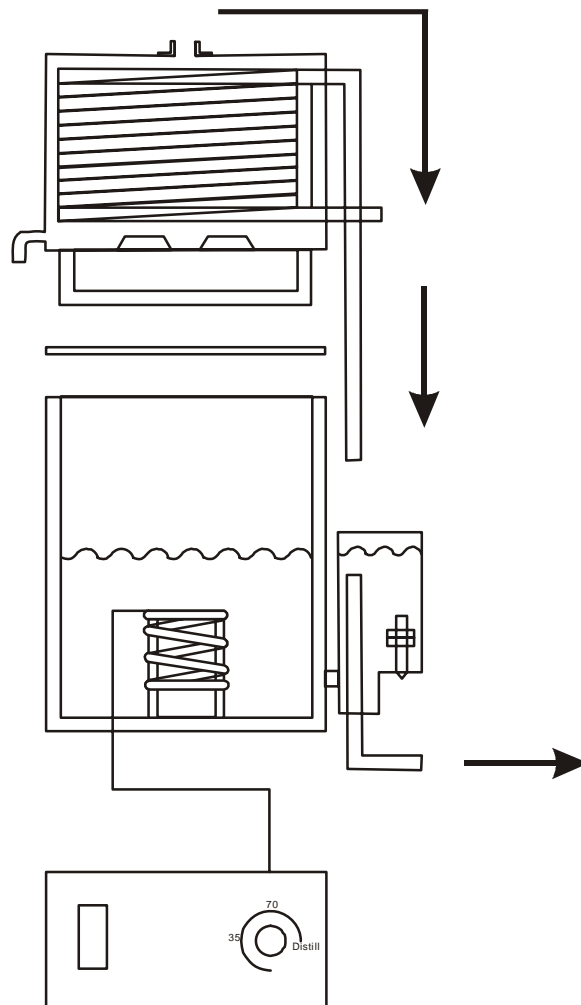
1. Make sure the electric supply is AC 220V , 50/60Hz , Single Phase.
2. Place Water Still on the flat surface
3. Do not touch top of the instrument. During operation, surface of the top of the water still and steam exhausted from the hole is very hot.
4. Lime deposit should be removed from the evaporator once or twice a month depending on the degree of hardness of the tap water. Take of the upper part of the water still and remove the silicone packing. A mixture of 10% formic acid, 10% acetic acid and 80% distilled water is recommended for cleaning the apparatus. Fill the solvent into the evaporator to just above the highest lime deposit and heat to approx. 70°C. The evaporator is clean after approx. 15 to 20 minutes. pour out the lime and solvent mixture thoroughly rise with water.

1.8. Trouble Shooting

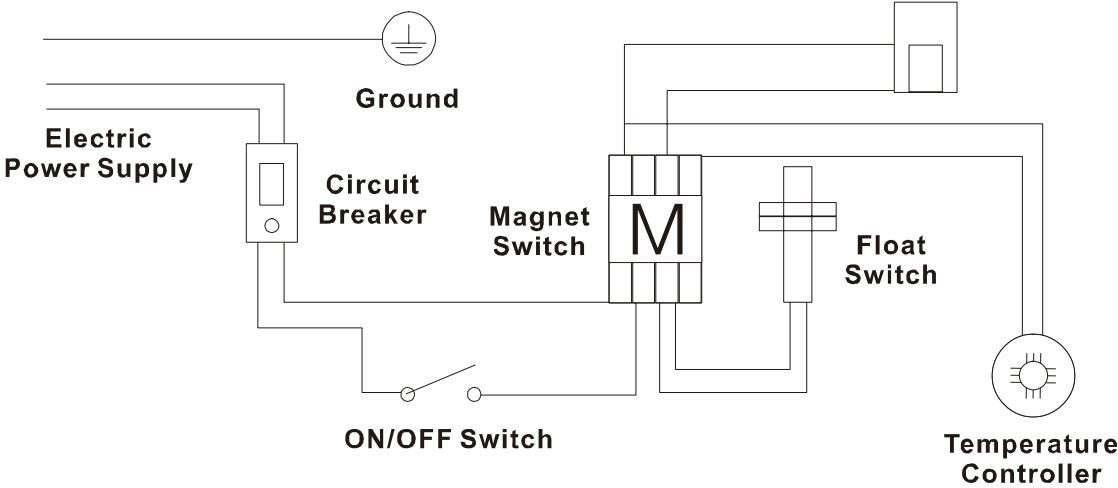
Trouble	Check First	Trouble Shooting
Power Failure	Check Electric Supply	Plug firmly into the electric supply
	Check fuse	Replace fuse
Power on but water do not boil	Check water supply	Supply water enough and appropriate pressure
	Check heater	Replace heater

Contact sales representative or customer service department

1.9. Water Flow Diagram



1.10. Circuit Diagram





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INSPECTION LOG

AMB. TEMPERATURE	℞ °C ℞ °F
VOLTAGE	Volts Hz

WATER STILL	
MODEL No.	WD-
SERIAL No.	
CLIENT	

Inspection Item	Article	Judgement		Remarks
		Passed	Rejected	
Appearance	Chassis	℞	℞	
	Powder Coating	℞	℞	
	Chamber	℞	℞	
	Control Panel	℞	℞	
Assembly	Heater	℞	℞	
	Sensors	℞	℞	
	Water Leakage	℞	℞	
Circuit	Correspond to Circuit Diagram	℞	℞	
Test Run	Run Hours	℞	℞	
Electric Insulation	Check Electrical Insulation (∞)	℞	℞	
Operating Manual	Included	℞	℞	
Safety Marks	Attached	℞	℞	

HumanLab Instrument Co. hereby certifies that this equipment is judged to be up to manufacturer's standard and satisfy manufacturing specifications. This equipment has been tested using standards whose accuracies are traceable to the manufacturer.

MANUFACTURING

QUALITY ASSUARANCE

CHECKED BY

DATE

CHECKED BY

DATE

A4(210X297mm)



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