



A2O Pure

Troubleshooting Guide

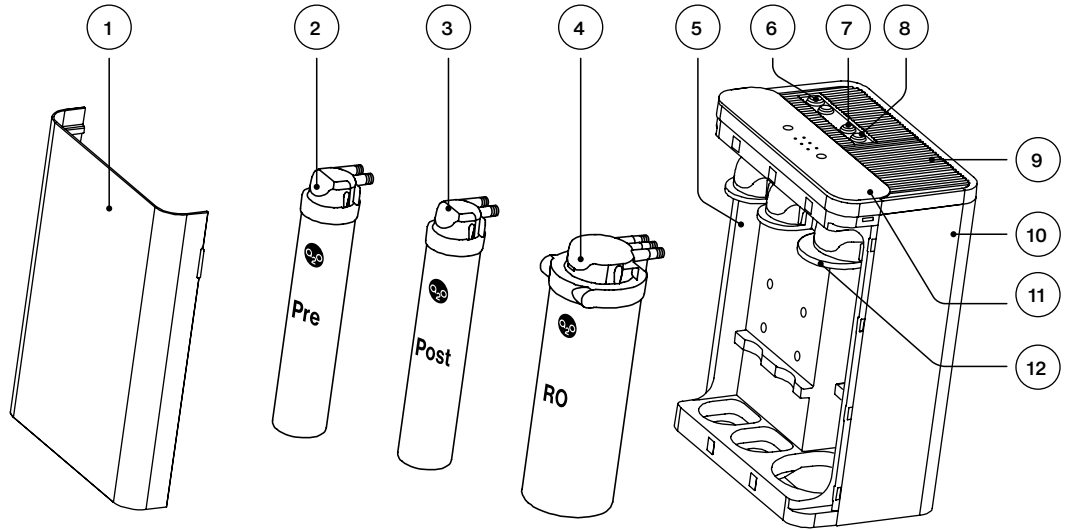


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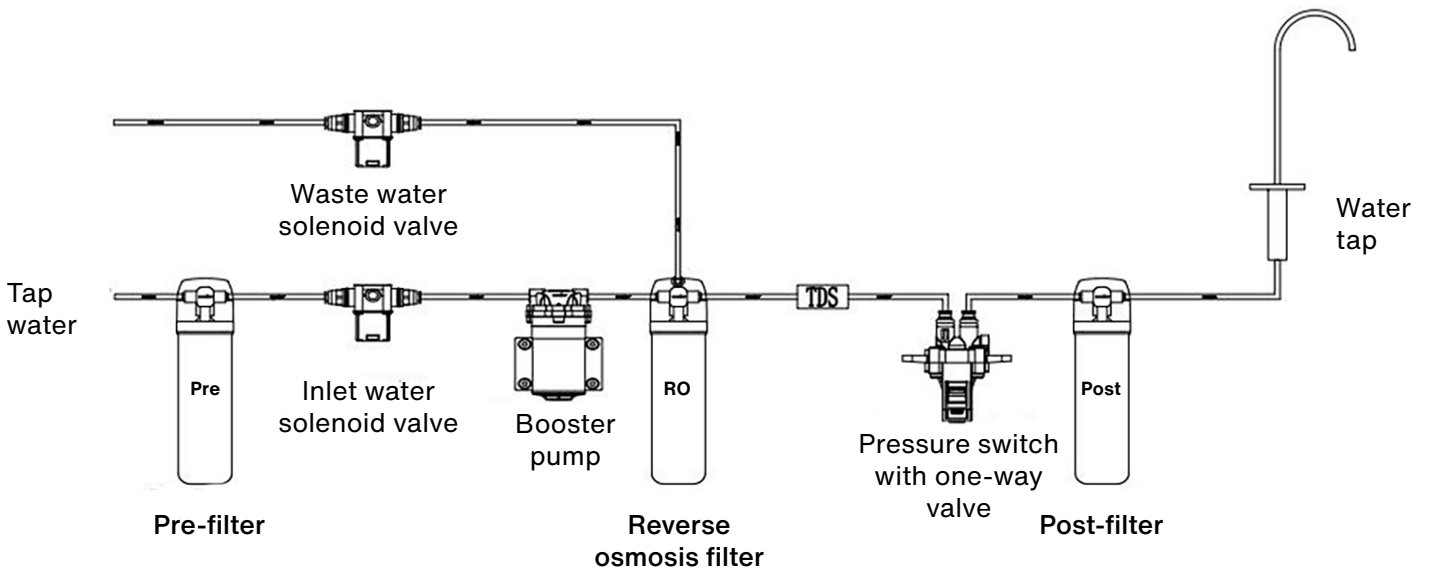
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1 Exploded view

1. Front cover
2. Pre-filter
3. Post-filter
4. Reverse osmosis filter
5. Main support
6. Water inlet
7. Waste water output
8. Pure water output
9. Upper cover
10. Back cover
11. Main support
12. Upper shell pane

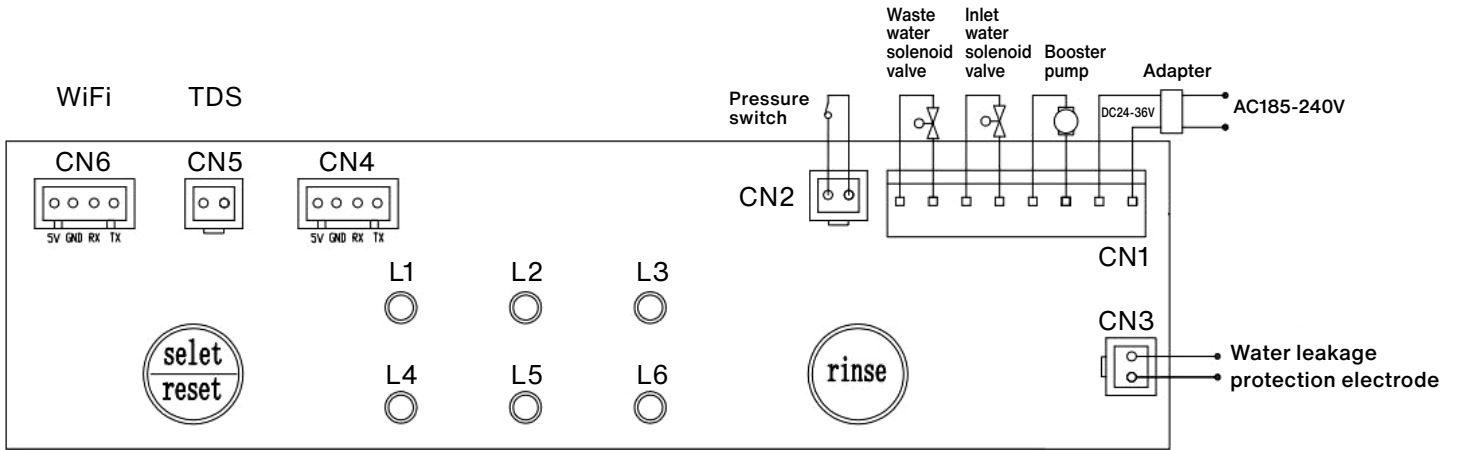


2 Waterway



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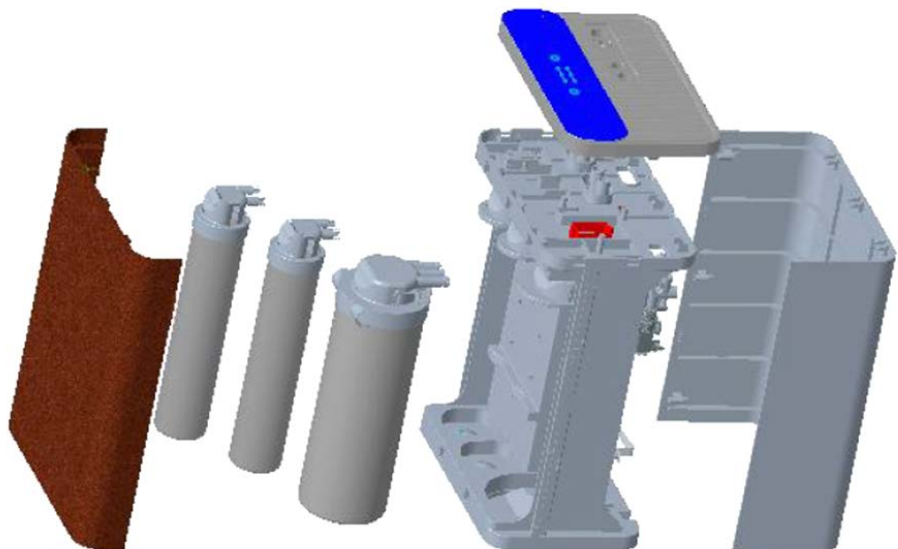
Electronic diagram



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General disassembling order

1. Disassembling front cover
2. Disassembling filter
3. Disassembling back cover
4. Disassembling upper cover
5. Replace PCB



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Error overview

Fault type	Possible causes	Parts involved	Content page
Water leaking	PE pipe not inserted in place	PE pipe	Page 6
	Connector broken	Connector	Page 6
	Valve not assembled in place	Valve and pressure switch	Page 6
	Impurities on the sealing ring surface	Filter or connector	Page 6
No electricity	Adapter without output	Adapter	Page 6
	Connection wire broken	PCB line group	Page 6
	Terminal separation	PCB line group or adapter	Page 6
	PCB broken	PCB	Page 6
Fail to dispense water	Inner wire separation	Pump's connection wire terminal separation	Page 7
	Pump is stuck and does not work or Pump works without pressure	Booster pump	Page 7
	Inlet water solenoid valve is not opened	Inlet water solenoid valve or PCB	Page 7
	unstable output voltage of PCB	PCB	Page 7
	Filter blocked	Filter	Page 7
Continue dispensing water without shutting off	Pressure switch failure	Pressure switch	Page 8
Abnormal flow	Abnormal pump power	Booster pump	Page 8
	Filter blocked	Filter	Page 8

5.1 Red indicator flash

Phenomenon	Cause	Action		
The red maintenance light is flashing, and the unit stopped working	1. Unit's protection after working for a long time	Unplug, then plug and power on the unit again		
	2. Water leakage protection is set off	1. Water splash on upper cover	After the cause is confirmed, the accumulated water on the water leakage protection electrode shall be removed, and then you can turn on the power again	
		2. Water leak from the top cover connector		
		3. Internal pipeline leakage		1. PE Pipe is not plugged in place
				2. Connector leakage
3. Valve or pressure switch leakage				
4. Impurities on the sealing ring surface				

5.2 Water leaking

1. Check if the leakage is from the top cover interface.



2. Check if the leakage is from the filter element interface.



3. Check if the leakage is from the internal components.



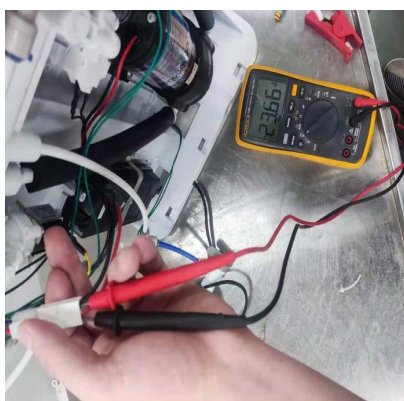
5.3 No electricity

1. Check if the power socket has an electricity supply. If not, the user's home socket must have a standard power supply.



2.1 Remove and check if the power adapter is connected securely to the main control board terminals.

2.2 Plug in power and use a multimeter to measure if the voltage output at the power supply output terminals is standard.



3.1 Remove the top cover to inspect if the main control board voltage is standard.

3.2 Plug in the power, and use a multimeter to measure if the output voltage is normal.



5.4 Fail to dispense water

Phenomenon	Cause	Action		
Fail to dispense water	1. Pump does not work	1. The pump output terminal of the electronic control board has no voltage	Replace PCB	
		2. The pump connection wire terminal is loose.	Re-connect the wire terminal	
	2. Pump works	1. Pump broken	Replace pump	
		2. Pump works with very low pressure	Replace filter	
		3. Blocked Filter	Replace PPC	
	4. The inlet water solenoid valve is not opened	1. Standard voltage input, but no water passing through the inlet valve	1. PPC filter is blocked	Replace PPC
			2. Inlet water valve is blocked	Replace inlet water valve
		2. No voltage input	1. Connection wire is broken	Replace connection wire
2. PCB is broken			Replace PCB	

5.5 How to check if the filter is blocked

Method 1

Check by replacing every element.



Checkpoint C:
Pure water output

Method 2

Check by verifying the connections on the pipeline.

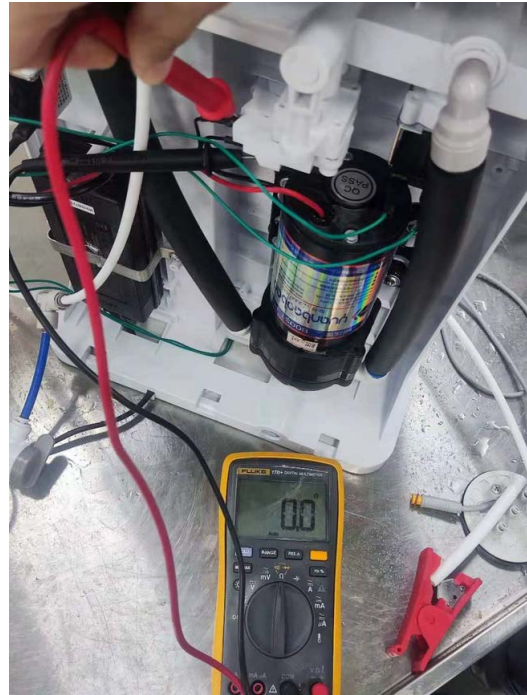
Checkpoint A: PPC
(Assuming that the inlet valve works)

Checkpoint B: RO
(Assuming that the inlet valve/pump/PPC works)



5.6 The water stream continues when shut off

1. Remove the back case, and use a multimeter (resistor) to check whether the high-voltage switch is always closed.
2. If the pump continues to work without stopping after closing the faucet, it is confirmed that the high-pressure switch is faulty.
3. After confirming the issue, replace the high-pressure switch and retest.



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If the permeate water TDS is high

Scenario	Possible causes	Action
High TDS and/or low flow rate	Defect or partially blocked RO filter	Replace RO-filter and flush the unit
High TDS after standby	TDS diffusion during standby	Discard purified water before consumption

What is TDS diffusion during standby?

When your RO purifier is in standby and not producing purified water, some of the dissolved salts of the inlet water can slowly diffuse (seep) into and through the RO-filter. This is due to natural osmosis and sometimes referred to as “TDS creep”. When you turn on the purifier again by opening the faucet, these salts will be flushed out together with the purified water. You will experience a brief spike in total dissolved solids (TDS). This is normal and happens with all RO purifiers unless they have a unique rinsing feature to mitigate this. Note that the TDS in the purified water is always lower than in the inlet water, even during the spike.

Recommendations to avoid high TDS after standby

Follow our recommendations below, if you would prefer to avoid consuming purified water with high TDS after standby:

- **Morning routine:** After standby overnight, we recommend dispensing and discarding min. 1 liter of purified water.
- **Routine during the day:** If your purifier has been idle for shorter periods, we recommend dispensing and discarding ca. 500 ml of purified water.
- **Monitor and adjust:** Depending on your specific usage patterns and local conditions, you might need to adjust the amount of purified water you discard. Consistent monitoring of TDS levels can help finetune this process.

Remember that discarding water before consumption is common practice. Water authorities and faucet manufacturers usually recommend discarding tapped water until lines are flushed and water is cold.

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Permeate water taste

Purified water can taste quite different to your municipal drinking water. It may take some time for you to get used to the new “softer and sweeter” taste of the purified water.

Description	Possible cause	Action
You experience an abnormal or unpleasant taste and smell of the purified water.	This can happen when the purifier has not been used for longer times.	<ol style="list-style-type: none"> 1. Discard purified water for minimum 20 minutes. 2. If this does not help and taste occurs again, exchange the filters, or replace the entire unit.

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Maintenance in case the purifier is not used for a long time

If you use your purifier frequently, no special action is needed. If the purifier has been on stand for 72 hours, it is recommended to open the faucet and dispense water for 30 seconds to rinse the entire device. If purifier is not used for more than three days, it is recommended to turn off the purifier by pulling the plug and to close the ball valve on the T-piece. Follow below instructions when you start using the purifier again:

Standby time	Possible causes
Longer than 3 days	<ol style="list-style-type: none"> 1. Turn the purifier on. 2. Wait until it is ready to use. 3. Discard purified water for minimum 5 minutes.
Longer than 10 days	<ol style="list-style-type: none"> 1. Turn the purifier on. 2. Wait until it is ready to use. 3. Discard purified water for minimum 10 minutes.
Longer than 1 month	<ol style="list-style-type: none"> 1. Turn the purifier on. 2. Wait until it is ready to use. 3. Discard purified water for minimum 20 minutes.

Standby time	Possible causes
Longer than 3 months	<ol style="list-style-type: none"> 1. Replace Pre- and Post-filter. 2. Turn the purifier on. 3. Wait until it is ready to use. 4. Re-set the Pre- and Post-filter lifetimes. 5. Discard purified water for minimum 15 minutes.
Longer than 6 months	<ol style="list-style-type: none"> 1. Replace all three filters. 2. Turn the purifier on. 3. Wait until it is ready to use. 4. Re-set the filter lifetimes. 5. Discard purified water for minimum 15 minutes.

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A2O app troubleshooting

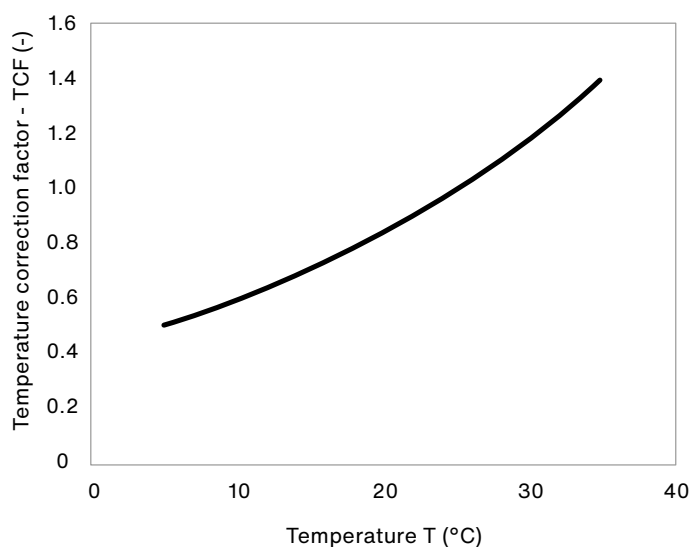
Phenomenon	Troubleshooting & action
Unable to pair with the A2O app	<p>If you have problems pairing your A2O Pure with the app, please follow these troubleshooting steps:</p> <ol style="list-style-type: none">1. Make sure you have written the correct Wi-Fi name and code.2. Make sure you have connected to a 2.4 GHz Wi-Fi. (The A2O Pure does not have a dual-band chip, and therefore, the product cannot connect to 5GHz Wi-Fi. We understand that this limitation can be problematic for some users and are working to solve the issue. Our next generation of purifiers will have a dual band-chip.)
Resetting filters by accident in the app	<p>If the filters' lifetime is reset in the app, it will also reset the filter counter on the A2O Pure. This way, the A2O Pure will measure the lifetime incorrectly. This will increase the risk of product defects, shorten the lifetime of your A2O Pure, and put the quality of your purified water at risk. Therefore, if the filters' lifetime is reset in the app accidentally, we recommend changing the filters in your A2O Pure immediately.</p>
WiFi Indicator keeps flashing	<p>Please follow these troubleshooting steps:</p> <ol style="list-style-type: none">1. Manually reset the device:<ol style="list-style-type: none">a. Power off your A2O Pure for 10 seconds and power on again.b. Hold the CLEAN button for 5 seconds.c. Confirm that the Wi-Fi indicator is flashing.2. It may be that the Wi-Fi signal is too poor to create the connection between the purifier and the Wi-Fi. Try moving your A2O Pure and Wi-Fi router closer together.3. There may be too many devices on the Wi-Fi and there is no more room for your purifier. Try changing your router to a stronger network.
Device is often offline	

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Temperature correction factor

Purifier performance is depending on local water conditions. The water temperature affects the purified water flow rate. Claimed product performance is stated for operation at 25 °C. Below temperature correction factor can be used to calculated temperature-corrected flow rates when operated at temperatures below or above 25 °C.

T (°C)	TCF	T (°C)	TCF	T (°C)	TCF
5.0	0.50	15.5	0.73	26.0	1.03
5.5	0.51	16.0	0.74	26.5	1.05
6.0	0.52	16.5	0.75	27.0	1.07
6.5	0.52	17.0	0.76	27.5	1.08
7.0	0.53	17.5	0.78	28.0	1.10
7.5	0.54	18.0	0.79	28.5	1.12
8.0	0.55	18.5	0.80	29.0	1.14
8.5	0.56	19.0	0.82	29.5	1.16
9.0	0.58	19.5	0.83	30.0	1.17
9.5	0.59	20.0	0.85	30.5	1.19
10.0	0.60	20.5	0.86	31.0	1.21
10.5	0.61	21.0	0.88	31.5	1.23
11.0	0.62	21.5	0.89	32.0	1.25
11.5	0.63	22.0	0.91	32.5	1.27
12.0	0.64	22.5	0.92	33.0	1.29
12.5	0.65	23.0	0.94	33.5	1.31
13.0	0.66	23.5	0.95	34.0	1.33
13.5	0.68	24.0	0.97	34.5	1.35
14.0	0.69	24.5	0.98	35.0	1.37
14.5	0.70	25.0	1.00		
15.0	0.71	25.5	1.02		



$$\text{TCF} (-) = \exp \left[2903 \cdot \left(\frac{1}{298} - \frac{1}{273 + T} \right) \right]$$

$$\text{Corrected Flowrate} = \frac{\text{Measured Flowrate}}{\text{TCF}_{\text{Feedwater Temperature}}}$$

TCF (-) = Temperature correction factor

T (°C) = Temperature in degrees celcius

Aquaporin A/S
 Nymøllevej 78
 2800 Kongens Lyngby
 Denmark

Phone: +45 8230 3082
 sales@aquaporin.com
 aquaporin.com

Aquaporin Inside®