

# Direct Flow Reverse Osmosis Drinking Water System 600 GPD



# Instruction Manual

Manufactured for EPS Group aplos.ie



#### Introduction

Aplos Angel 600GPD is one of the newest drinking water purifiers, with a compact, slim design, 4 stage filtration, large capacity, direct flow (i.e., no storage tank) system, that produces minimum amount of wastewater. Color indicators embedded in the operation panel help monitor the remaining filter lifespan, warning when replacement is required.

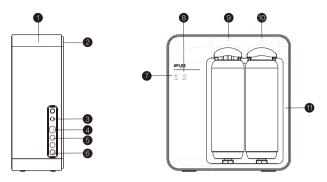
The system utilizes advanced reverse osmosis technology to purify water. It relies on the artificial reversal of the naturally occurring osmosis process. The reverse osmosis membrane with a pore size of 0.0001 micron (0.1 nm), can significantly improve the quality of your tap water by effectively reducing bacteria, viruses, heavy metals, pesticide residue, lead, fluoride, and other harmful substances. Produced water is fresh, pure, and suitable for direct use.

# ▲ Precautions

Please read through the instructions carefully before using or installing the product.

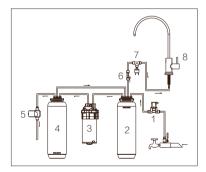
- The system must be properly installed and serviced in accordance with the manual.
- •We recommend that the system is installed by a trained professional.
- The reverse osmosis system should be installed vertically, do not lay down on it's side.
- •Reverse osmosis system must be connected to the cold water supply only
- Install a pressure reducing valve for inlet water pressure above 3 bar
- ◆After reverse osmosis installation, drain water from the RO tap for at least 10 mins. Repeat at least 3 times over the next 24 hours.
- ◆It takes a few seconds for water to emerge after the "purified water" tap is open. If your water supply has a lot of air, you will see bubbles. They float to the top and dissipate after a few seconds. This is expected and it does not affect purified water quality.
- ◆If RO system has not been used for more than 72 hours, press the flush button on the operation panel. Let at least 500 ml of water drain if it smells or tastes bad.
- ◆Do not put magnetic objects close to the water tap, as that may cause an abnormal startup of the machine and create a potential safety hazard.
- Do not install the system where it will be exposed to direct sunlight or harmful chemicals, or any place where it may be damaged.
- ◆Do not install the system near any heat source.
- ◆Do not install the system outdoors.
- ◆Do not use the system with water that is microbiologically unsafe or of unknown quality without adequate disinfection.
- ◆If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- ◆This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Shut off water supply to the unit and unplug if RO system if it will not be in use for more than a week. Upon return, reactivate water supply and power. Let purified water drain for at least 5 minutes before usage.

### Product description



S/N	Name	S/N	Name	S/N	Name
1	Frame	5	RO Purified water port	9	RO membrane life indicator
2	Back housing	6	Drain port	10	CFIII life indicator
3	Power port	7	Flush button		
4	Inlet water port	8	Reset button		

# Water Purification Process Flowchart



S/N	Name			
1	Inlet solenoid valve			
2	CFIII composite filter			
3	Booster pump			
4	RO filter			
5	Wastewater solenoid valve			
6	Check valve			
7	High-pressure switch			
8	Тар			

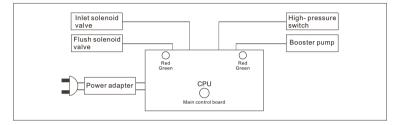
### Parts and materials in contact with water

Part name	Material	Model specifications	Quantity	Service life	
Composite filter element made of PP cotton, phosphate, and activated carbon rods	PP filter housing, PP carbon Phosphate particles, activated carbon rods	1199479	1	6-12months	
RO membrane filter	PP filter housing, PA	1199480	1	2-3years	

\* The service life of the filters are estimated based on the average daily pure water consumption of 20L in ordinary households and the inlet water meets the following conditions: water temperature 5°C-38°C, inlet pressure 1-4 bar, pH 7.5+/-0.5, turbidity <1.0NTU, total dissolved solids (TDS) s500mg/L, total organic carbon (TCC) 51.0mg/L

Filters should be replaced timely according to indicators to ensure high quality of purified water. The service life of the filter varies depending on the inlet water quality and temperature, inlet pressure, daily usage of purified water, and operating environment.

### Electric Control Schematic Diagram



#### Specifications

Product name	Direct flow reverse osmosis drinking
Brand	APLOS
Model	Angel 600 GPD
Filtration stages	4
Rated voltage	220V~
Rated power	60W
Feed water requirements	Municipal tap water or pre-treated well water
Inlet water temperature	5°C-38°C
Operating temperature conditions	4°C-40°C
Inlet pressure	1-3 bar
Operating pump pressure	4-6 bar
Maximum daily production rate	600 GPD
Purified water production rate	90L/h
(Recovery, %)	65%

### Display signal description

#### 1.Filter life indicators

Filter life power indicators (red, yellow, green) display in real time and their color reflects the corresponding filter lifespan.

- 1.1 Green indicates that the life of the filter is normal.
- 1.2 Yellow indicates that the life of the filter is about to expire.
- 1.3 Red indicates that the filter life has expired and needs to be replaced urgently. The system will beep 5 times every 3 hours, until filter is replaced and reset.



2.Flush button:

Press "Flush" to turn the rinsing function on and off.

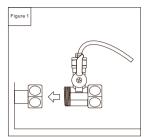
- 3. Reset button:
- 3.1. Press "Reset" to enter the reset mode: the RO filter life indicator stays on and the other goes off, indicating that the RO filter is selected. Press "Reset" again to switch to the CFIII filter life indicator.
- 3.2 If there is no operation within 5 seconds, it will exit the "Reset" mode and return to the regular operating state.
- 3.3 Hold "Reset" for 3 seconds to reset the life of the selected filter to its original life. After reset, it will enter the regular operating state, and the filter life indicator will turn green.

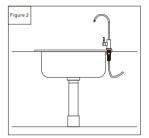
# Filter Replacement

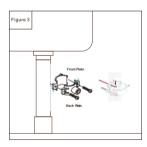
- 1. Shut off water supply to unit.
- 2. Open tap to drain pure water and release pressure. Close tap.
- 3. Isolate power and unplug unit.
- 4. Slightly bend the unit backward. Hold the bottom of the filter that is being replaced and pull it out. The filter will rotate and come off.
- 5. Align the new filter with the corresponding tube inside the unit. Press down firmly on the bottom of the filter until you hear a "click" sound, indicating that it is properly installed.
- 6. Reactivate water supply and power
- 7. Check for any water leakage
- 8. Reset replaced filter lifespan (refer to the procedure described above, steps 3.1-3.3)
- 9. Press "Flush" button to flush the system`s filters

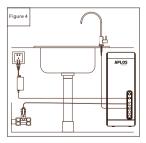
# Installation Step

Before installation, please check that all components are included in the package.









#### I.Install the three-way ball valve (see Figure 1)

- 1.1Take out the three-way ball valve from the accessory box.
- 1.2Close the water inlet valve.
- 3Connect the water inlet three-way valve and the ball valve (note that the threaded connection should be sealed with padding material and seal ring).
- 1.4Reconnect the original water pipe.
- 5Connect the PE pipe to the water outlet of the three-way ball valve and reserve a certain length of the PE pipe.

#### II.Install the tap (see Figure 2)

- 2.1 Confirm the installation location for the RO tap and drill a hole.
- 2.2 Fix the tap in the installation position. Ensure that the tap base does not rotate, the platform and the water pipe connections do not leak.
- Connect the quick fitting with a PE pipe first, then connect the other end of the quick fitting to the tap, leaving sufficient length for the pipe.

#### III. Install the drain saddle (see Figure 3)

- 3.1 Install the drain saddle on the vertical drainpipe, which is the recommended location.
- 3.2 Place the saddle on the drainpipe and align for drilling.
- 3.3 Drill a hole in the drainpipe carefully. Be sure not to penetrate the opposite side of the pipe. Slip the front plate on one end of the tubing and insert the tubing into the drilled hole for about 0.6". Position the back plate on the drain pipe by tightening the screws and nuts evenly while leaving the tubing in the hole

#### IV. Connect pipes and power supply

- 4.1Connect the pipe from the three-way ball valve to the inlet water port and the pipe should be connected securely to avoid leakage.
- 4.2 Connect the PE pipes from the tap to the RO purified water and filtered water ports
- 4.3 Connect the drain water pipe to the drain port. Do not install any valve on the drain water pipe.
- 4.4 Activate power supply. First, connect the power adapter to the unit power port, and then plug it into the socket

#### V. Start up and Inspection

- 5.1 Open the RO tap and the water inlet ball valve. RO system will start working, automatically flushing, and water will be discharged from the drain pipe. After approximately 10 seconds, the flushing will end, and the RO system ill be ready to purify water. Water will flow through the filters directly to the tap.
- 5.2 Stop the unit for inspection. Turn off the tap. The drain pipe will stop draining water, but the system will continue operating until it is full of purified water.
- purified water. 5.3 Pipeline inspection. During the trial operation, check the parts, components, and connections for leakage and looseness.
- 5.4 After installation and inspection drain water from the RO tap for at least 10 min. Repeat at least 3 times over the next 24 hours.

### Repair Guide

Failure description	Possible Cause	Troubleshooting
Purified water isn't coming through the system	Inlet valve is not open CF Composite filter or RO membrane blockage Unit is not powered	Open the water inlet valve Replace the filter Check the power under the sink, as this mostly occurs when the power under the sink is off. Also, check the connection between the plug and the power outlet, and ensure that the system has been plugged correctly into the power outlet
Water leaks at the connection	Damaged connector seal ring Damaged filter cartridge seal ring	Contact the seller for the replacement spare parts
Purified water has an unpleasant taste or smell	The water purifier has not been used for a long time The water purifier was not flushed as required when it was installed Incorrect tubing installation.	Drain at least 500 ml of water before purified water usage Re-Flush as required Make sure the waste water tubing is not connected with RO tap
Wastewater pipe does not drain	Inlet valve is not open Filter blockage Flush solenoid valve blockage	Open the water inlet valve Replace filter. If well water as the source and the feed water has not been pre-treated, the filter get clogged quickly. Ensure that the feed water is pre-treated. Otherwise, large particles in the well water will easily clog the filter and shorten the filter life.
Wastewater pipe keeps draining	Failure of one-way valve Failure of inlet solenoid valve	Contact the seller for the replacement spare parts
Water purifier cannot be stopped	Severe RO membrane blockage Failure of high-pressure switchFailure of inlet solenoid valve	Replace the filter Contact the seller for the replacement spare parts
Loud sound of RO system	Water pressure is lower than 1.5 bar The system is placed against the cabinet. Internal water pipe interference Composite filter blockage	Increase water inlet pressure. The sound will decrease when the water pressure stabilizes Do not place the system against the cabinet. The system may vibrate when in operation Adjust internal pipeline Replace the filter
Water purifier starts frequently	Reversed installation of check valve Check valve missing Failure of check valve	Ensure proper installation of the check valve

# Correct Disposal of this product

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environ ment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased.

They can take this product for environmental safe recycling.



### Packing List

Name	Unit	Quantity	Name	Unit	Quantity
RO System	set	1	User Manual	рс	1
RO tap	package	1	Accessories	set	1
PE tube (1/4")	set	1	Power adapter	рс	1
PE tube (3/8")	set	1			

### After-sales Service Record

Service date	Cause of service	Service description	Service personnel signature	User signature	Remarks

#### Warranty

Product warranty period is 12 months from the date of purchase. Warranty only applies if the system is installed, used and maintained in compliance with instructions and requirements enclosed with this system.

The warranty does not cover:

- · components that require replacement because of normal wear and tear;
- faults and problems that have arisen due to untimely replacement of consumables.

All claims related to taste, smell, and other quality indicators of water purified by this system should be accompanied with a water test report issued by an accredited laboratory.

