

# Smart AWC Duo G2 SAWC-406P



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# Smart AWC Duo G2 SAWC-406P



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# Smart AWC Duo G2 SAWC-406P



## ➤ Why there is water drops from the siphon break when the pump is on?

It is a normal phenomenon.

The small hole allows air in to cut the water flow when the pump turns off.

If there is no water drops, please check if the hole is clogged.

The diagram shows a white siphon break component. An arrow labeled 'Air In' points to a small hole on the side. A red arrow labeled 'Direction' points upwards. A blue arrow labeled 'Water Out' points to a hole at the bottom, with a water drop falling from it.

Siphon break must be higher than the water level in the reservoir.

**Air In :** Siphon break allows air in to break the siphon when the pump turns off.

**Water Out :** Water drops out of the hole are normal when the pump is on.

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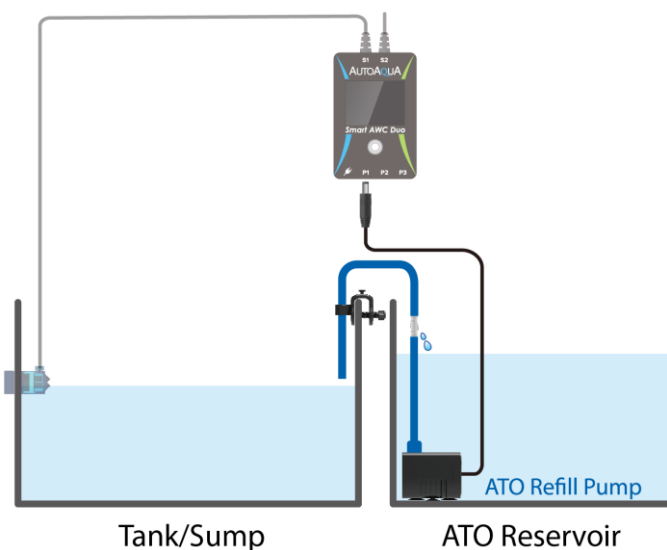
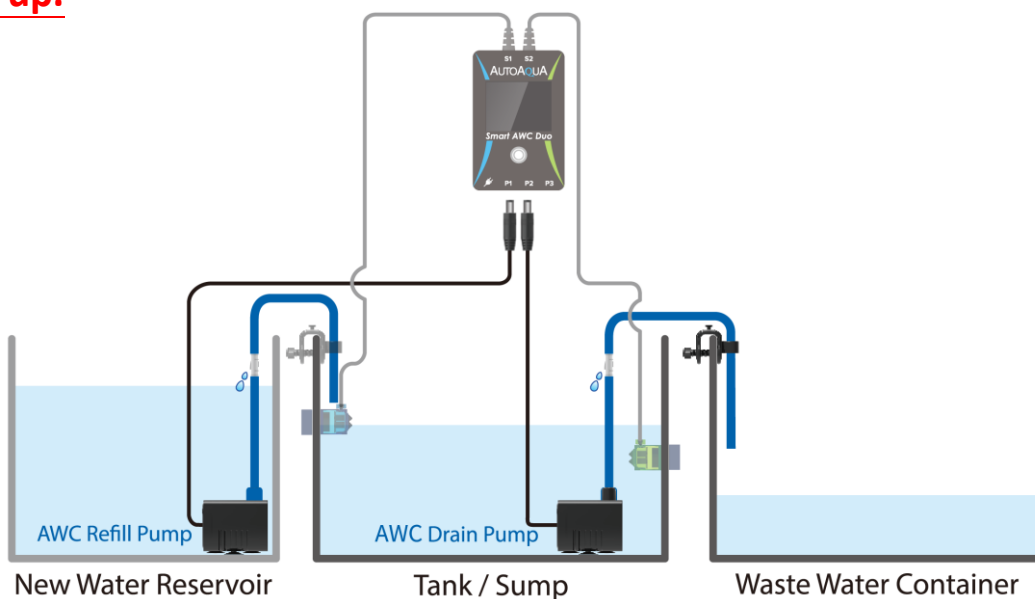


## ➤ How to set up the siphon break properly?

First, **make sure the siphon break is in the reservoir and higher than the water level.**

Therefore, the drops can go back to the reservoir and break the siphon.

Second, **the siphon break must be upright as the arrow icon points up.**

A diagram of a siphon break component. It shows a vertical tube with a hole at the top. An arrow labeled 'Air In' points into the hole from the left. An arrow labeled 'Water Out' points downwards from the hole. A circular inset shows the tube upright with an arrow labeled 'Water Flow Direction' pointing upwards.

Siphon Break must be higher than the water level in the reservoir.

**Air In** : Allow air in to break the siphon when pump off.

**Water Out** : Water drops out of the hole is normal when pump on.

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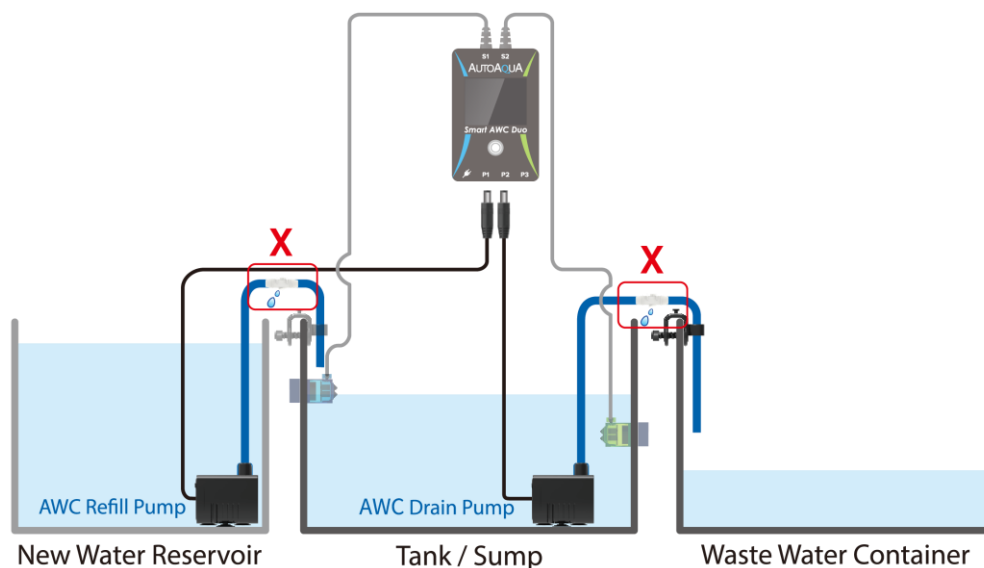
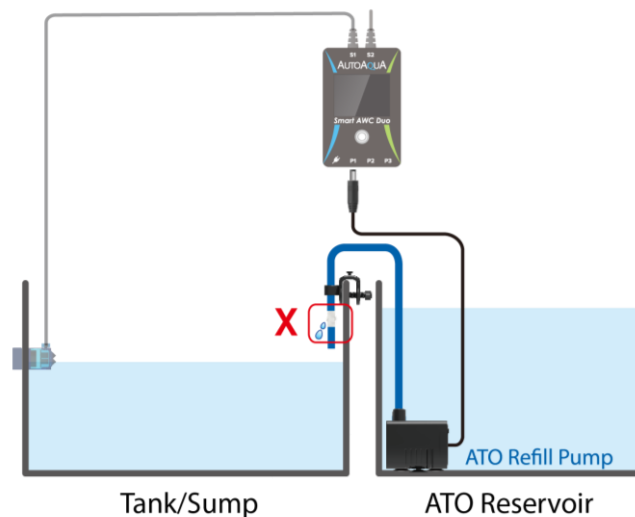


# Smart AWC Duo G2 SAWC-406P



## ➤ What will happen if the siphon break is not set up properly?

- If the siphon break is not set inside the reservoir.  
E.g., between the tank/sump and the reservoir or inside the tank/sump, the water drops from the hole of siphon break cannot flow back into the reservoir.
- If the siphon break is set in the wrong direction.  
E.g., the arrow on the siphon break does not point up, it cannot break siphon.



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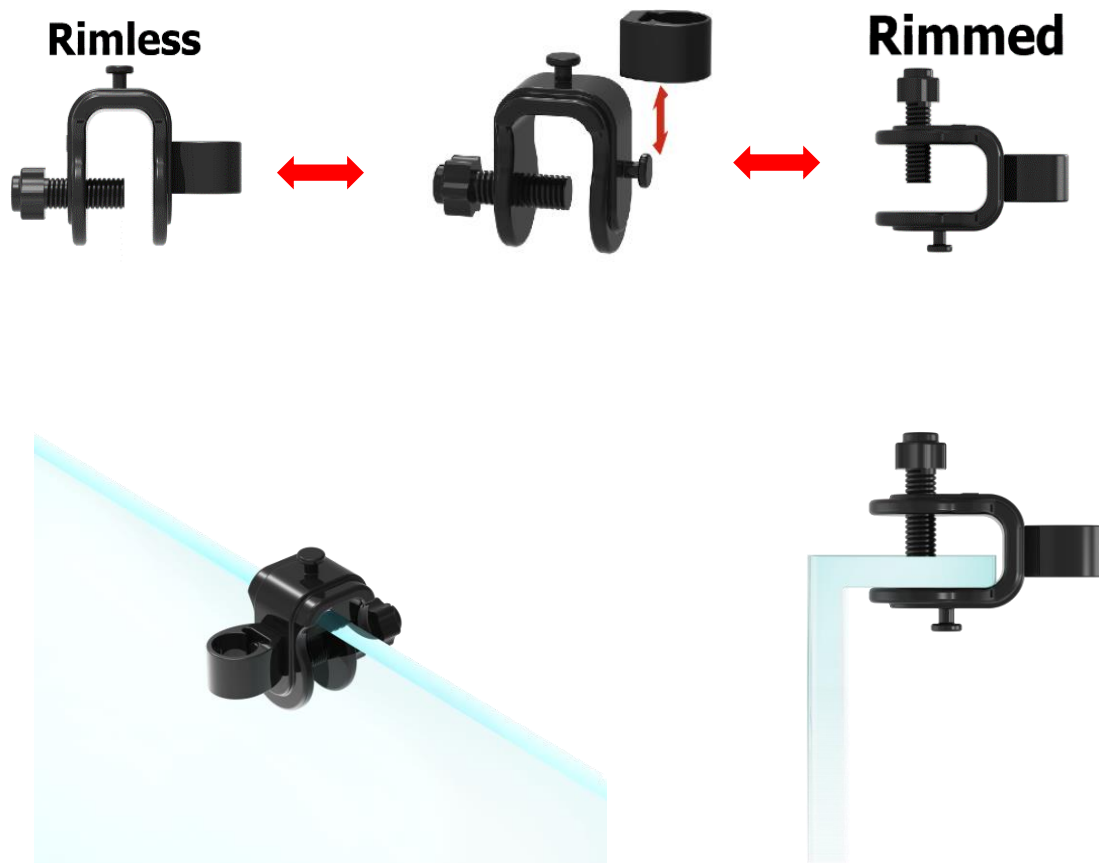
# Smart AWC Duo G2 SAWC-406P



## ➤ Can I fix the tube holder on a rimmed tank/sump?

Yes.

You can pull out the ring of the tube holder and install it on another nail to fix it on a rimmed tank/sump.



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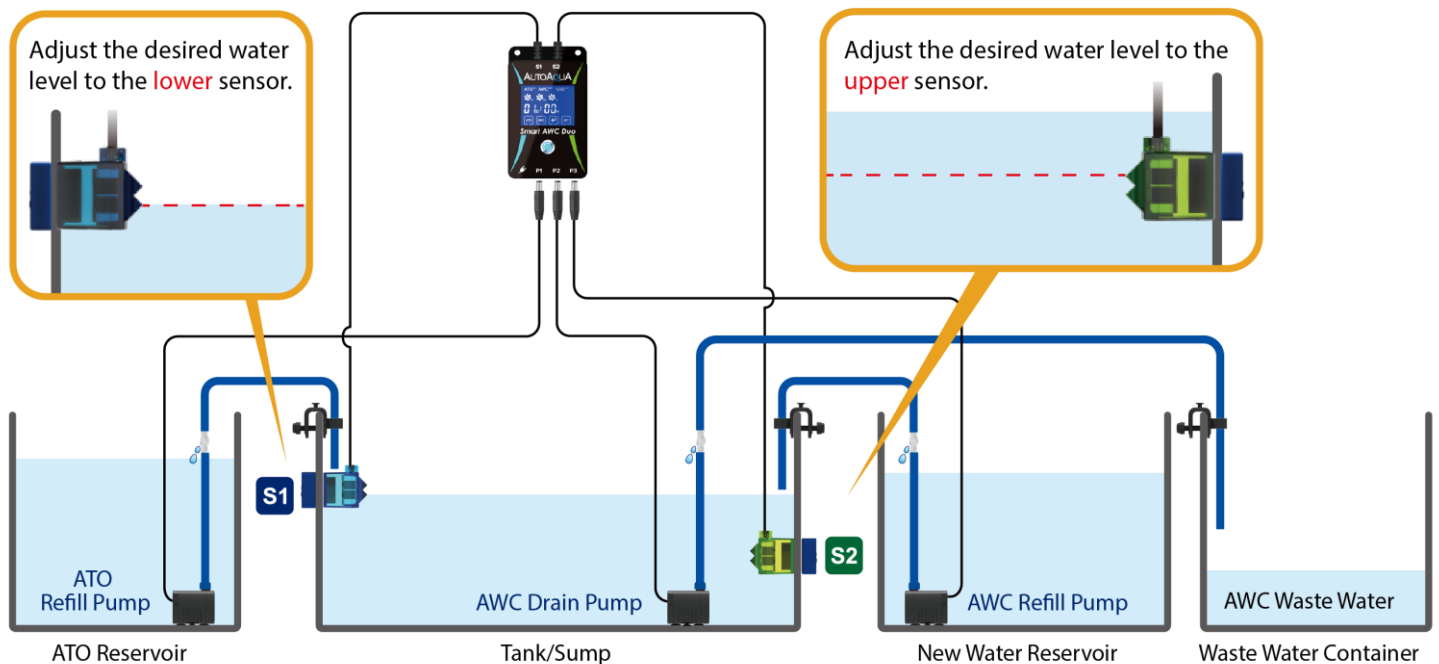
# Smart AWC Duo G2 SAWC-406P



## ➤ Where should I place the sensor?

Place the sensor to the water level you desired.

**\*Please note : Set the sensor away from direct infrared light or sun light to avoid malfunctions.**



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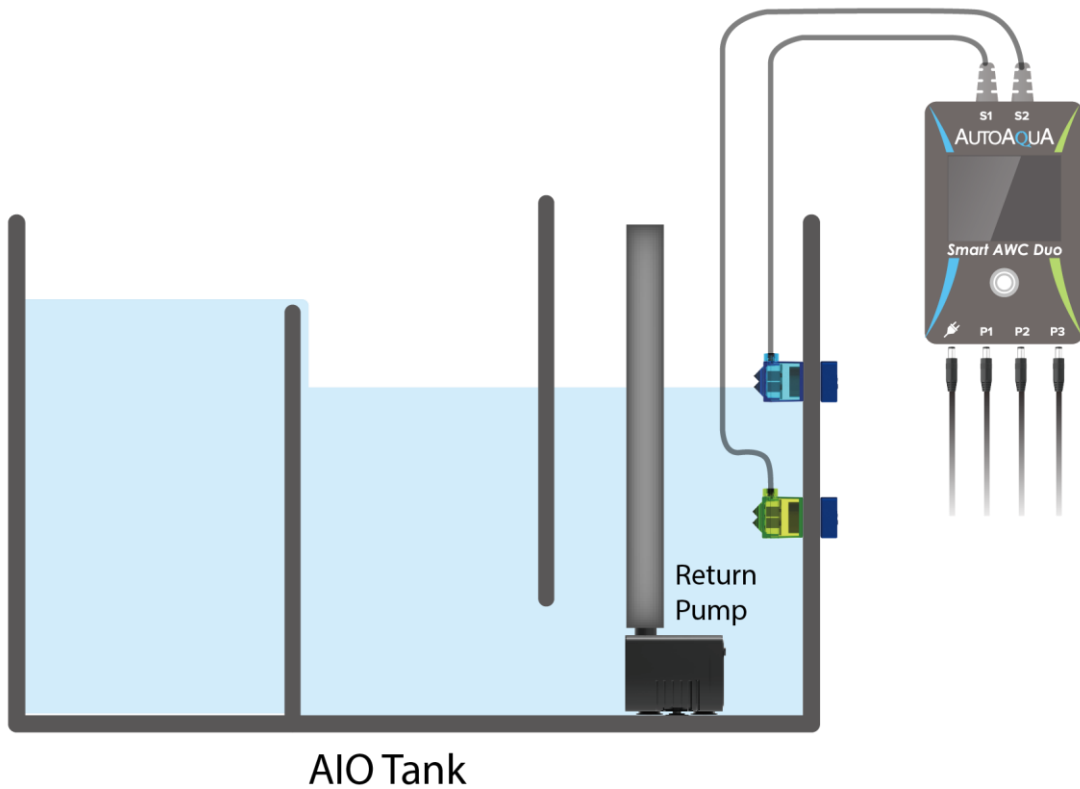


# Smart AWC Duo G2 SAWC-406P



## ➤ Which chamber should I place the sensor in AIO tank?

For AIO Aquarium, the sensors should be placed in the **return chamber**.



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# Smart AWC Duo G2 SAWC-406P



## ➤ I need a higher head pump, what can I do?

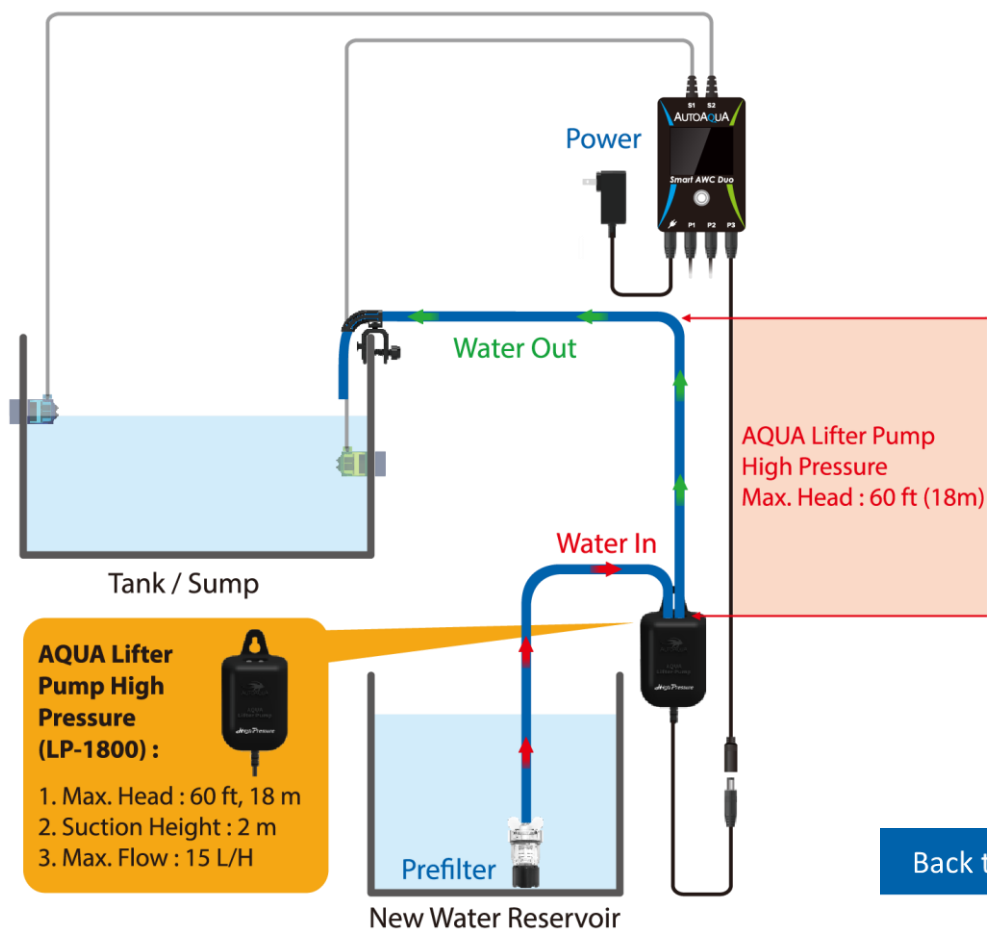
You can purchase **AUTOAQUA Lifter Pump High Pressure** for pump head around 18M height.

Also, we suggest purchase **Extension Cable** for longer cable length or **Prefilter & Prefilter Base** for protect the pump from being clogged and damaged.



For detailed High Pressure Pump information, please check our AUTOAQUA Tips & Trick :

[https://www.autoaqua.com.tw/en/tips\\_article1.html](https://www.autoaqua.com.tw/en/tips_article1.html)



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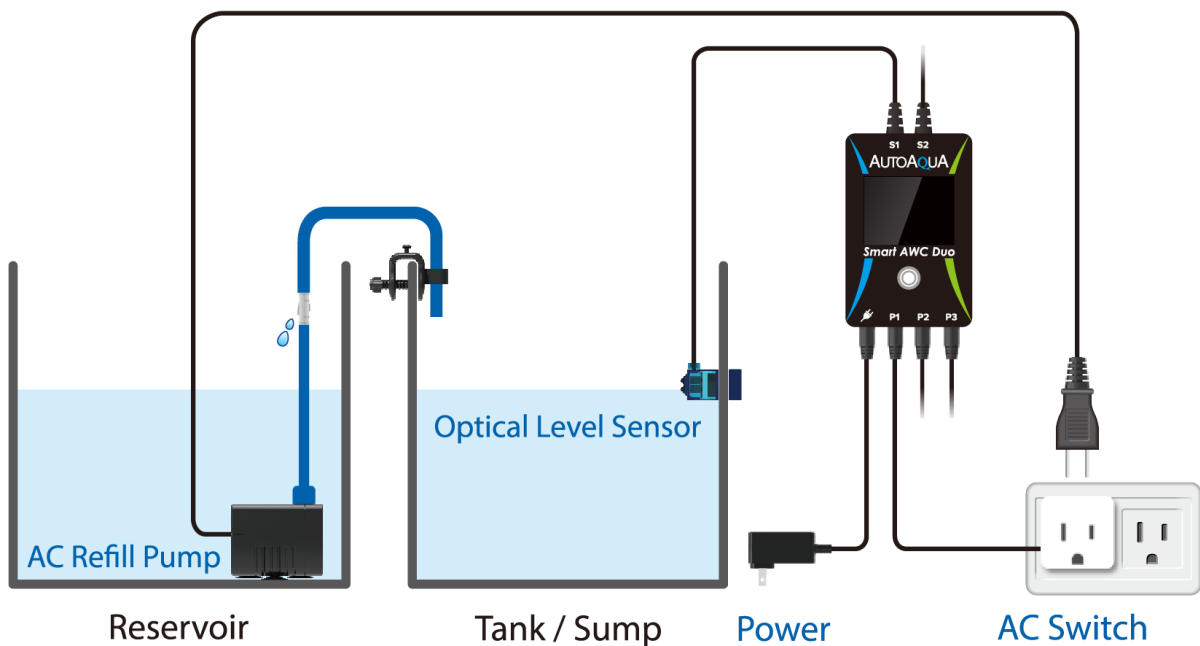


# Smart AWC Duo G2 SAWC-406P



## ➤ Can I use my own AC Pump?

Yes, if you desire using your own AC Pump, you can purchase the AUTOAQUA Smart AC Switch to replace the DC Pump to an AC Pump for a higher output.



### Smart AC Switch (SAC-10) :

1. AC Capacity : 100-240 VAC, 50-60 Hz
2. Max. Load : 10 A / 2400 W @ 240 VAC
3. DC Connector : DC 5.5 x 2.5 mm Male
4. Cable Length : 10 ft (300 cm)

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# Smart AWC Duo G2 SAWC-406P



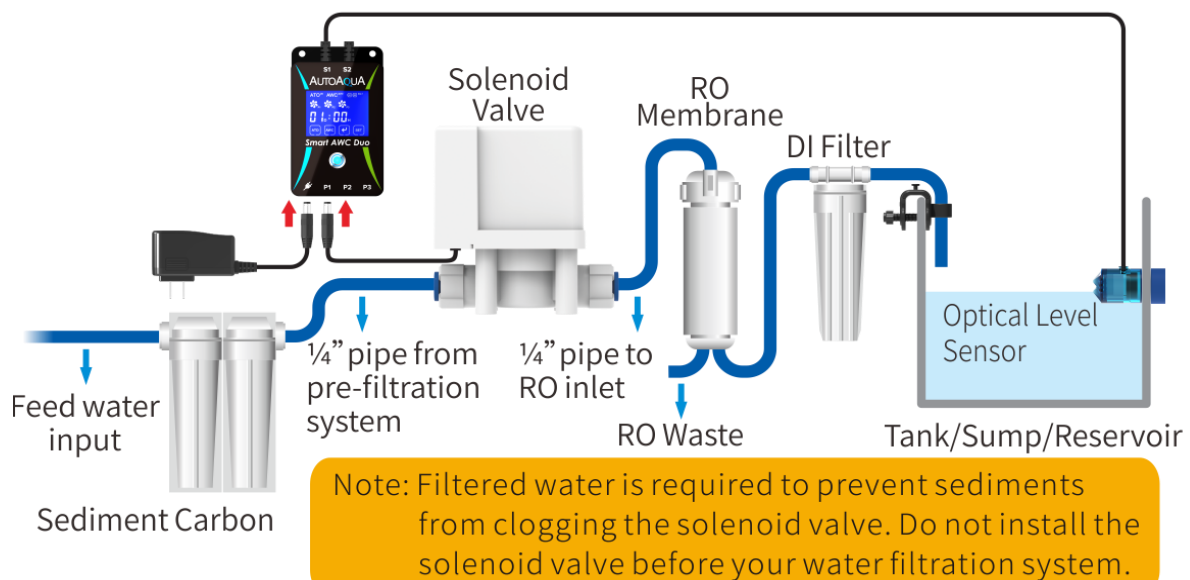
## ➤ Can I use with DC Solenoid Valve?

Yes, you can replace the pump to DC solenoid valve.

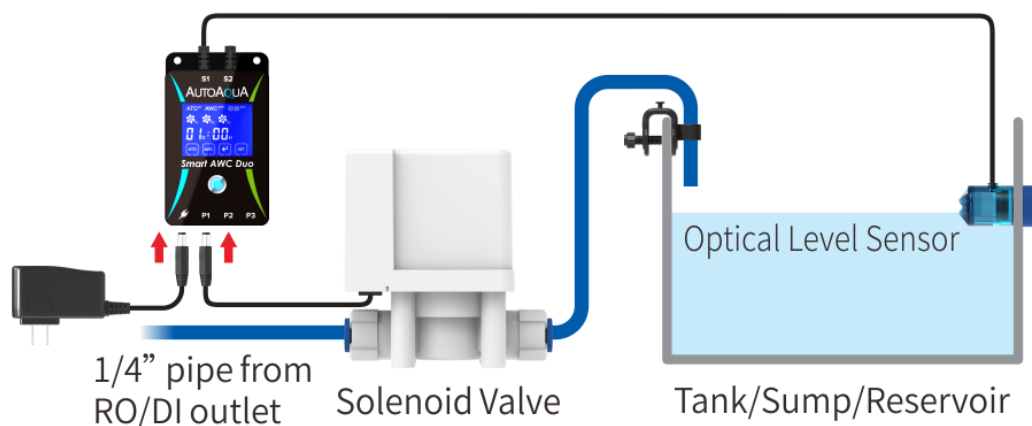
Highly suggest to use solenoid with RO water instead of tap water, or it will be clogged.

Please check installation diagram below.

### a. RO/DI System without Auto Shut Off



### b. RO/DI System with Auto Shut Off



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# Smart AWC Duo G2 SAWC-406P



## ➤ How to extend the cable length of the pump/solenoid valve/power supply?

You can use the extension cable.

We have 6.7 ft (200 cm) and 16.7 ft (500 cm) available.

- Extension Cable of Power Adapter (200cm)  
<http://autoaqua.com.tw/en/accessories/DC-212.html>
- Extension Cable of Power Adapter (500cm)  
<http://autoaqua.com.tw/en/accessories/DC-215.html>
- Extension Cable of DC Refill Pump & Solenoid Valve (200cm)  
<http://autoaqua.com.tw/en/accessories/DC-252.html>
- Extension Cable of DC Refill Pump & Solenoid Valve (500cm)  
<http://autoaqua.com.tw/en/accessories/DC-255.html>



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# Smart AWC Duo G2 SAWC-406P



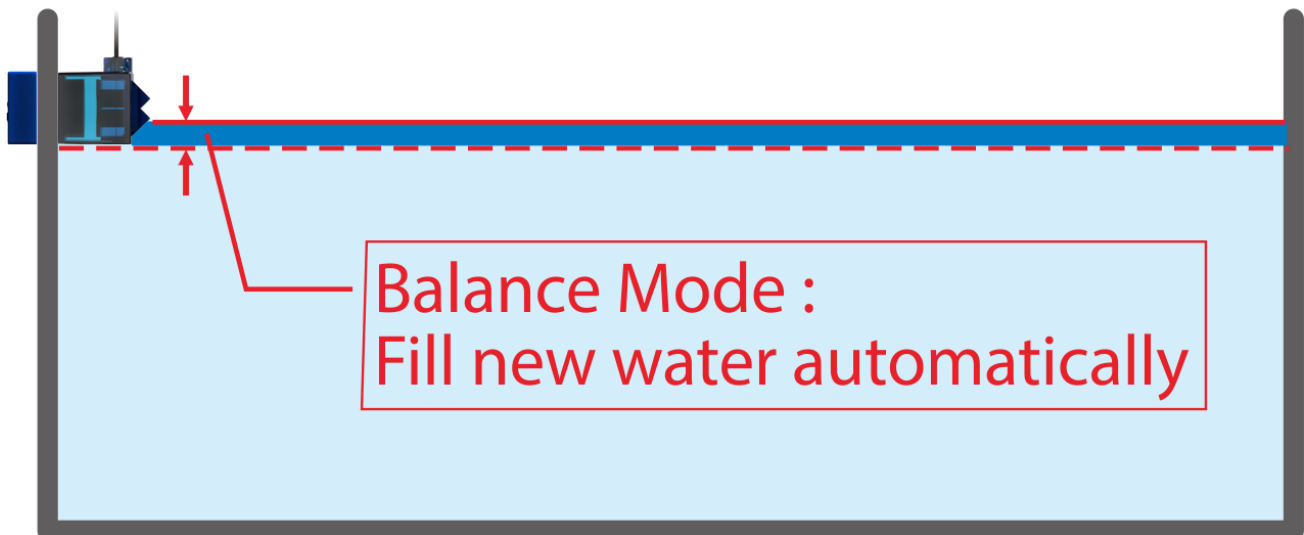
## ➤ What is AWC Balance Mode?

After P3 pumps the new water in the tank, there will be a “AWC Balance Mode” for 3 minutes with AWC flashes.

Water level might get down when refill water distributed goes through the whole tank.

Therefore, in balance mode, it will fill new water automatically if the water level is lower than the sensor.

The final water level will be more accurate.



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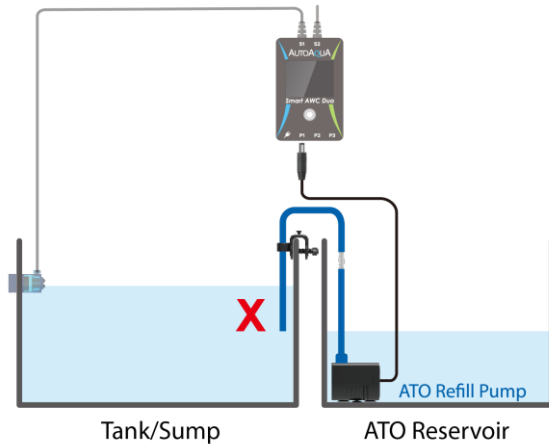
# Smart AWC Duo G2 SAWC-406P



## ➤ Why does ATO or AWC work constantly?

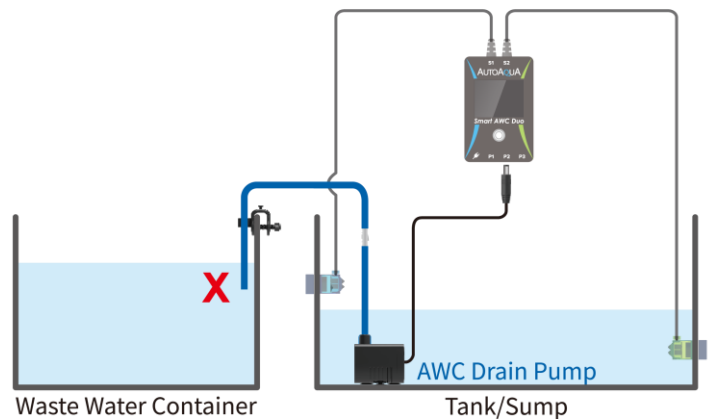
- **ATO**

If the water outlet is in the water and the water level of the tank/sump is higher than level of the reservoir, the water will flow back into the reservoir (back siphon), and trigger the ATO constantly.



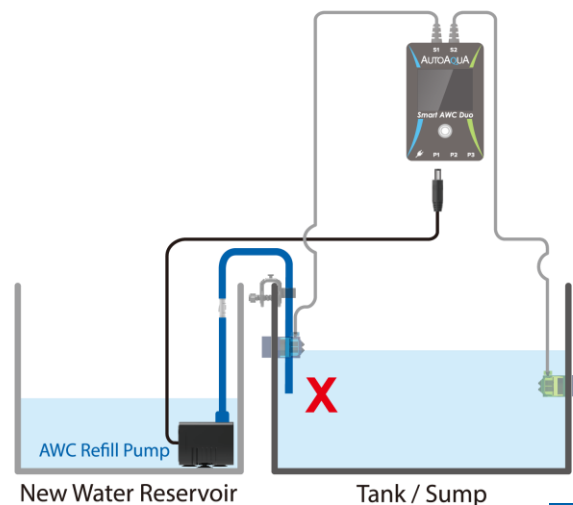
- **AWC - Drain**

If the water outlet is in the water and the water level of the waste water is higher than level of the tank/sump, the water will flow back into the tank/sump (back siphon), and trigger P2 pump drains constantly.



- **AWC - Refill**

If the water outlet is in the water and the water level of the tank/sump is higher than level of the reservoir, the water will flow back into the reservoir (back siphon), and trigger pump refills constantly.



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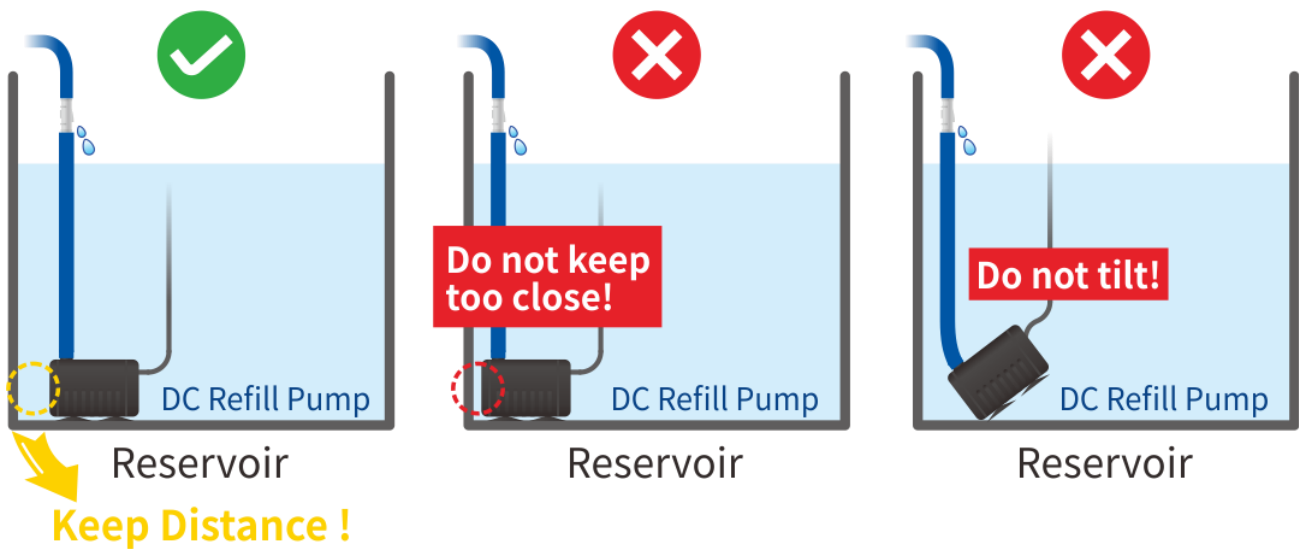


# Smart AWC Duo G2 SAWC-406P



## ➤ Why is the pump head not high enough?

- One of the possibilities is that the water inlet of the pump is too close to the wall of the reservoir. It is recommended to keep the pump away from the wall of the reservoir at least 2 inches.
- The other one is that the pump should stay upright, otherwise less water can go into the pump, which makes the water pressure decrease.



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# Smart AWC Duo G2 SAWC-406P



## ➤ Why is the water level always little higher/lower than the sensor?

	Water Level Higher than Sensor	Water Level Lower than Sensor
Scenario	<p><b><u>Direct Light to the Sensor</u></b> Please set the sensor away from direct light or the sun.</p>	<p><b><u>Water Drop</u></b> Please wipe the sensor with soft towel.</p>
	<p><b><u>Bubble Interference</u></b> Please set the sensor away from micro bubble.</p>	<p><b><u>Algae</u></b> Please clean the sensor with soft brush.</p>
	<p><b><u>Algae</u></b> Please clean the sensor with soft brush.</p>	
	<p><b><u>S1 Normal Sensor Failed</u></b> (If the water level stops at the fail-safe sensor) Highly recommend replace the sensor.</p>	<p><b><u>S2 Normal Sensor Failed</u></b> (If the water level stops at the fail-safe sensor) Highly recommend replace the sensor.</p>



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# Smart AWC Duo G2 SAWC-406P



## ➤ Why does Smart AWC Duo G2 power on for only a short while and give an audible alert?

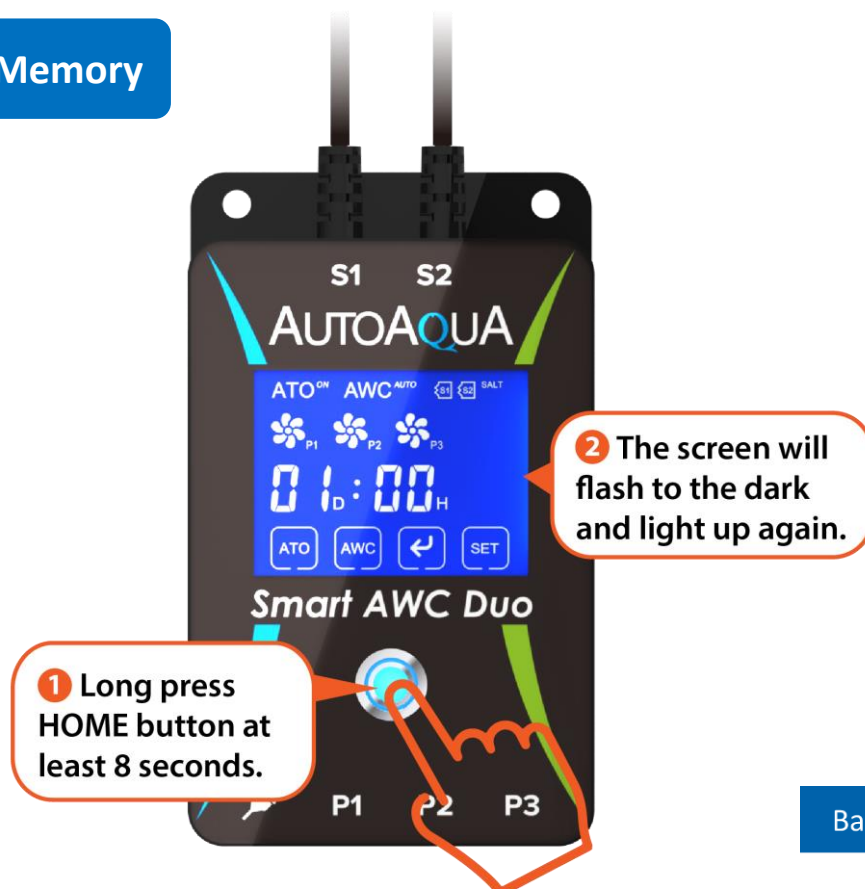
QST is not set correctly.

Please reset Smart AWC Duo G2 according to the reset procedure in user manual, p14.

Next, mount the blue sensor at the normal water level (with lower sensor indicating the water level) before connecting the power and do not move it afterwards.

If you want to move the sensor or change the water level, you have to reset Smart AWC Duo G2 and unplug and plug it back in again.

### Clean QST Memory



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# Smart AWC Duo G2 SAWC-406P



## ➤ Why the pump stops with beeping alarm but the water level hasn't reach the sensor?

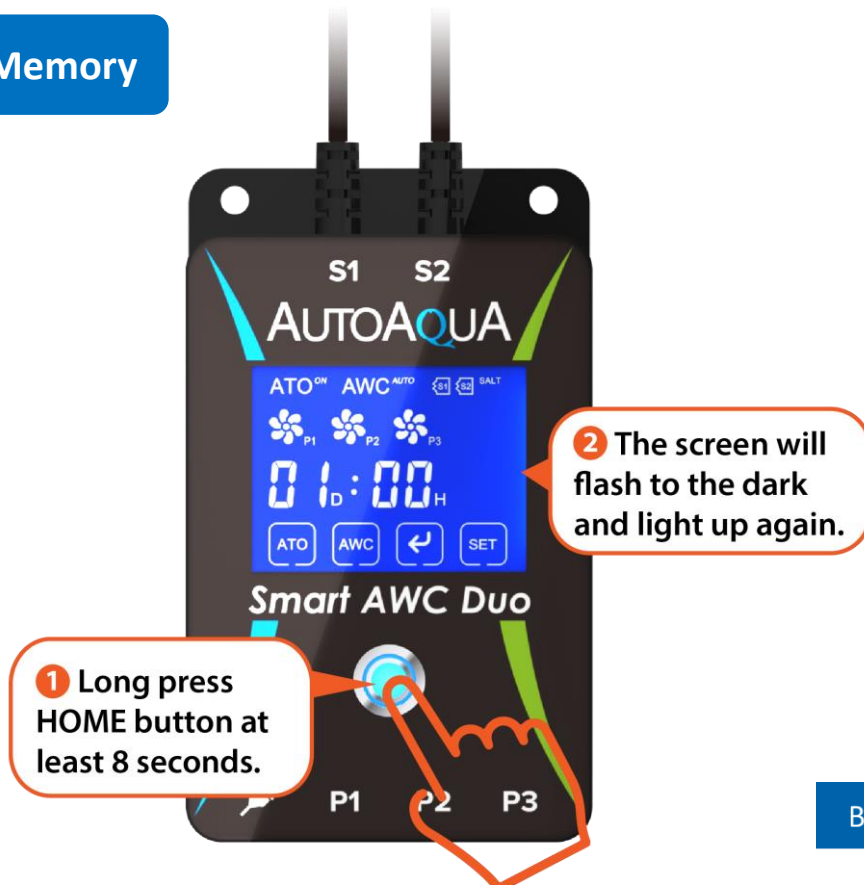
It is QST function.

For ATO, QST will alarm as water refill time is 6 times longer than the first refill time.

For AWC, QST will alarm as water change time is 3 times longer than the first water change time.

If you would like to increase the QST tolerance, please **clear QST memory** and **extend the first time ATO refill time or AWC water change time**.

Clear QST Memory



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# Smart AWC Duo G2 SAWC-406P



## ➤ Can Smart AWC Duo G2 detect empty reservoir?

Yes.

With AUTOAQUA Quick Security Technology (QST), it can detect empty reservoir **without extra sensor**.

If there is too little or no water in reservoir, it will trigger QST. The system will shut itself off and stop the pump.

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# Smart AWC Duo G2 SAWC-406P



## ➤ What can QST do for you?

With AUTOAQUA QST function, it can detect below scenario **sensorless** and without extra setting.

### ● Empty Reservoir Detection

If there is too little or no water in reservoir, it will trigger QST. The system will shut itself off and stop the pump.

### ● Pump Failure

When pump fails, causing no water replenishment, the QST will alarm as ATO is 6 times longer than the first time/ AWC is 3 times longer than the first time.

### ● Sensor Failure

If both normal and fail-safe sensor fail, it will trigger QST and shut itself off.

### ● Others Device Failure

If above 3 scenario have been excluded, it might be other device failure ( ex. Return pump, Skimmer...etc.). Please check others device in your aquarium system.

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# Smart AWC Duo G2 SAWC-406P



## ➤ What is the difference between AWC Duo G2 and AWC Lite?

	Smart AWC Duo G2 SAWC-406P	Smart AWC Lite SAWC-470D
Function	ATO & AWC	ATO & AWC
Ideal Tank	Salt & Fresh Any Size of Tank	Salt & Fresh Tank under 150 gallons
Compatible Reservoir	Lid Opening > 4x4 cm	1. Small Lid Opening 2. Reservoir with 1/4" RO Fitting (Tube size is same as RO Tube)
Pump & Advantages	DC Refill Pump : 1. High Flow Rate 2. High Efficiency 3. Water Level Detection : 1 mm	DC Diaphragm Pump (built-in Anti-Siphon) : 1. Low Flow Rate 2. Lessen Aquarium Pressure 3. Water Level Detection : 0.3 mm
Optical Water Refill Device	1. DC Solenoid → RO water 2. AQUA Lifter Pump High Pressure → Max. Head : 18M 3. Smart AC Switch → AC Pump	All in One Compact Design Diaphragm Pump Inside Only
Controller	LCD Touch-Screen panel	Touchable Controller
Mode	Manual & AUTO	Manual & AUTO
Time Setting	Min. 1H ~ Max. 99D 23H	4H / 12H / 24H / 48H
Built-in QST	YES	YES
Audible / Visual Alarm	YES	YES
Key Benefits	1. Versatile Installation with various water refill device 2. Customized Time Setting 3. Both Salt / Fresh water Mode 4. Suitable for any size of tank 5. No need to turn off return pump during water change	1. Smooth & Consistent Water Flow 2. Pre-Time for easiest & simplest setting 3. All-in-one Design : Clutter Free set up 4. Toolless Design : Screw Free 5. Diaphragm Pump : No Wire in reservoir 6. No need to turn off return pump during water change

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