

# Smart ATO Duo G2

## SATO-286P



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# Smart ATO Duo G2

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### ◆ Trouble Shooting

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I have checked the water reservoir and the bubble but there was no problem.



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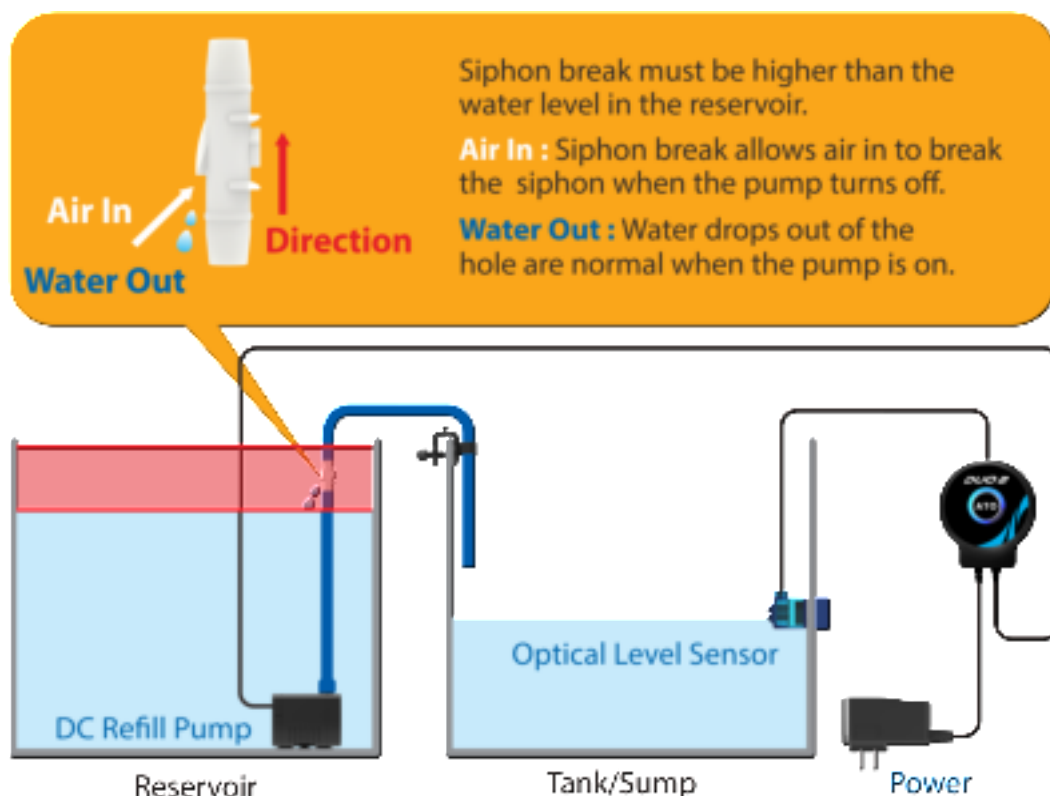


## ➤ How to set up the siphon break properly?

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. The siphon break should be placed in the area between the two red lines as the image below.

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



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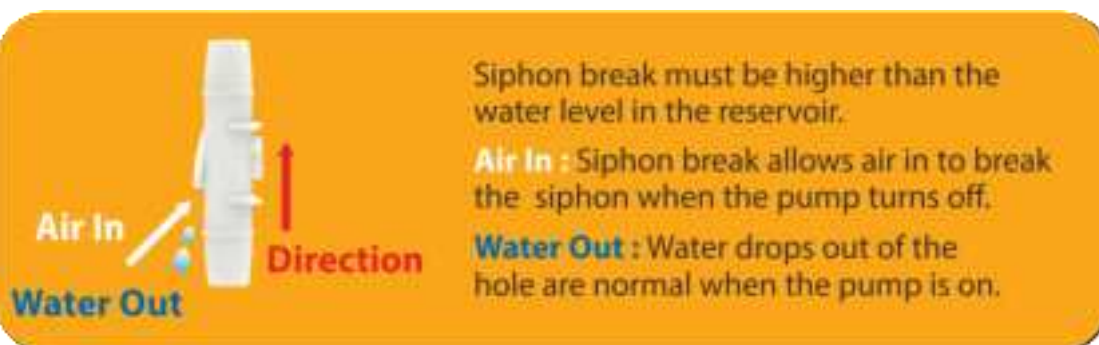


- **Why there is water drops from the siphon break when the pump is on?**

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.



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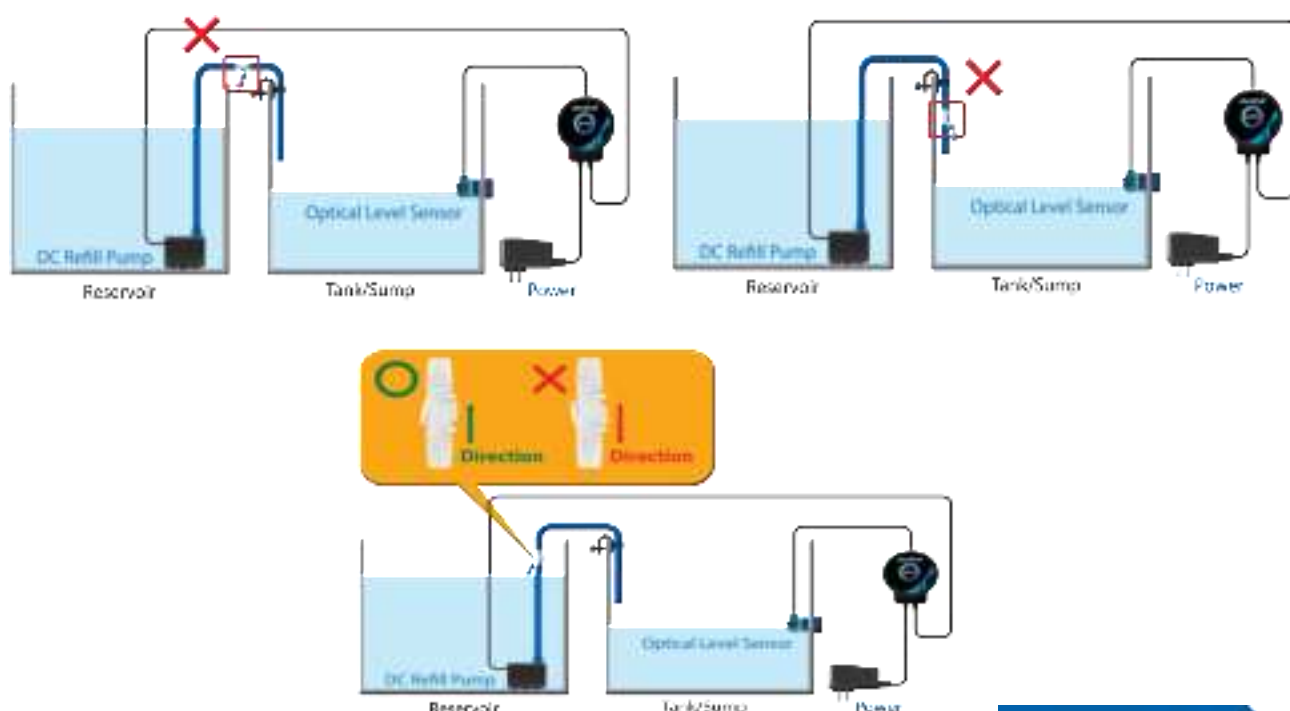
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### ➤ What will happen if the siphon break is not set up properly?

- 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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- **Can Smart ATO Duo G2 still work if the glass is not transparent?**

Yes.

Since the water level sensor of Smart ATO Duo G2 is inside the tank/sump, the glass color will not influence its detection.

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## ➤ 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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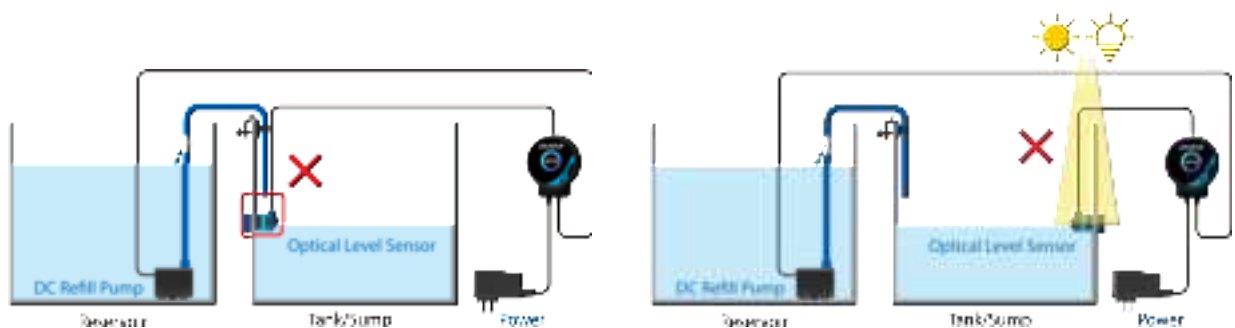
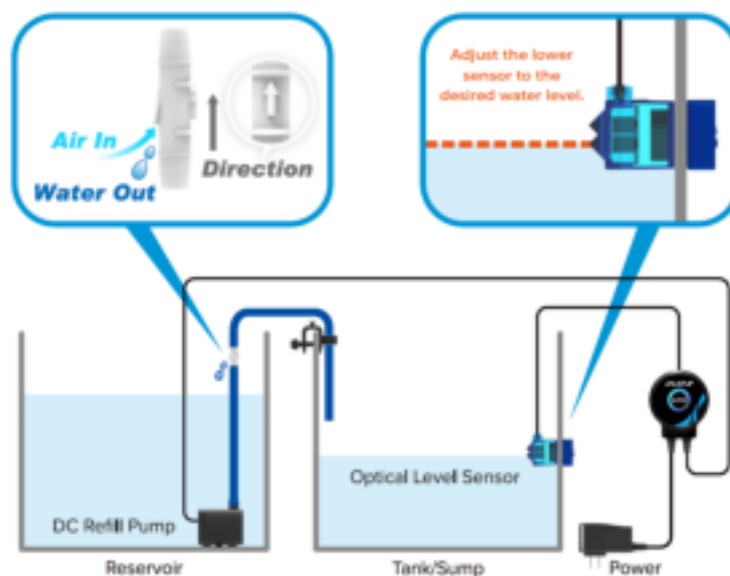
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## ➤ Where should I place the sensor?

Place the sensor to the water level you desired.

**\*Please note :** Set the sensor away from water outlet and direct light to avoid bubble interference or malfunctions.



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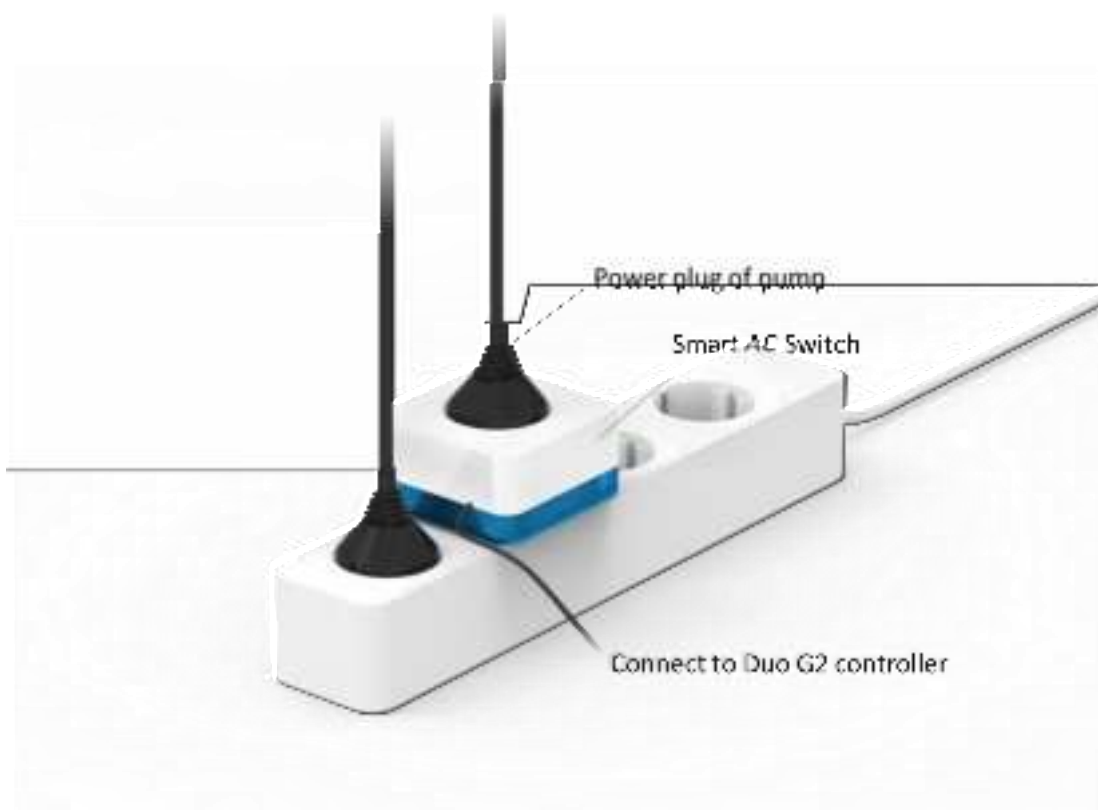
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## ➤ How to use other pumps with Smart ATO Duo G2?

You can use a pump which meets your requirement with our Smart AC Switch: <http://autoaqua.com.tw/en/accessories/SAC-10.html>

Just connect Smart AC Switch with the controller, then plug the pump's power adapter in it.



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### ➤ Can I use the solenoid valve with Smart ATO Duo G2? How to install it?

Yes. The pump can be replaced to solenoid valve.

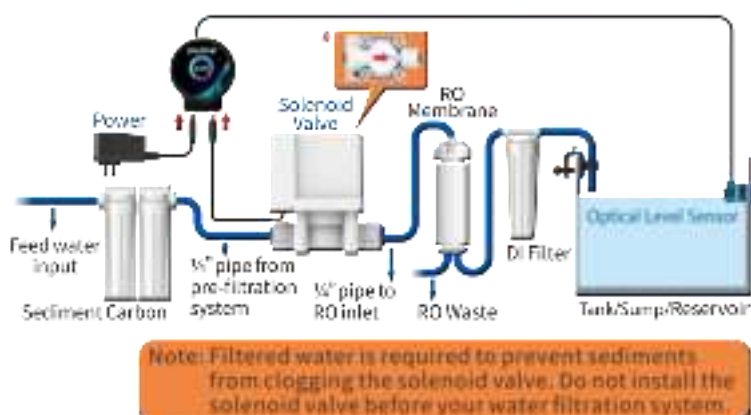
It is recommended using with filtered water instead of tap water, or it will be clogged.

Please refer to the installation diagram below.

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

Cut the tubing between the carbon block filter and the RO membrane.  
Install the solenoid valve.

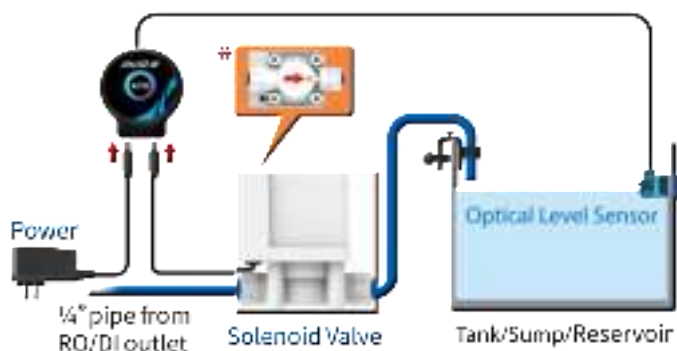
\*Arrow on solenoid valve indicated water flow direction.



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

Connect the solenoid valve at the RO/DI output.

\*Arrow on solenoid valve indicated water flow direction.



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# Smart ATO Duo G2

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### ➤ 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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## ➤ How to purchase accessories?

Please contact our local distributors :

<http://autoaqua.com.tw/en/distributors.html>



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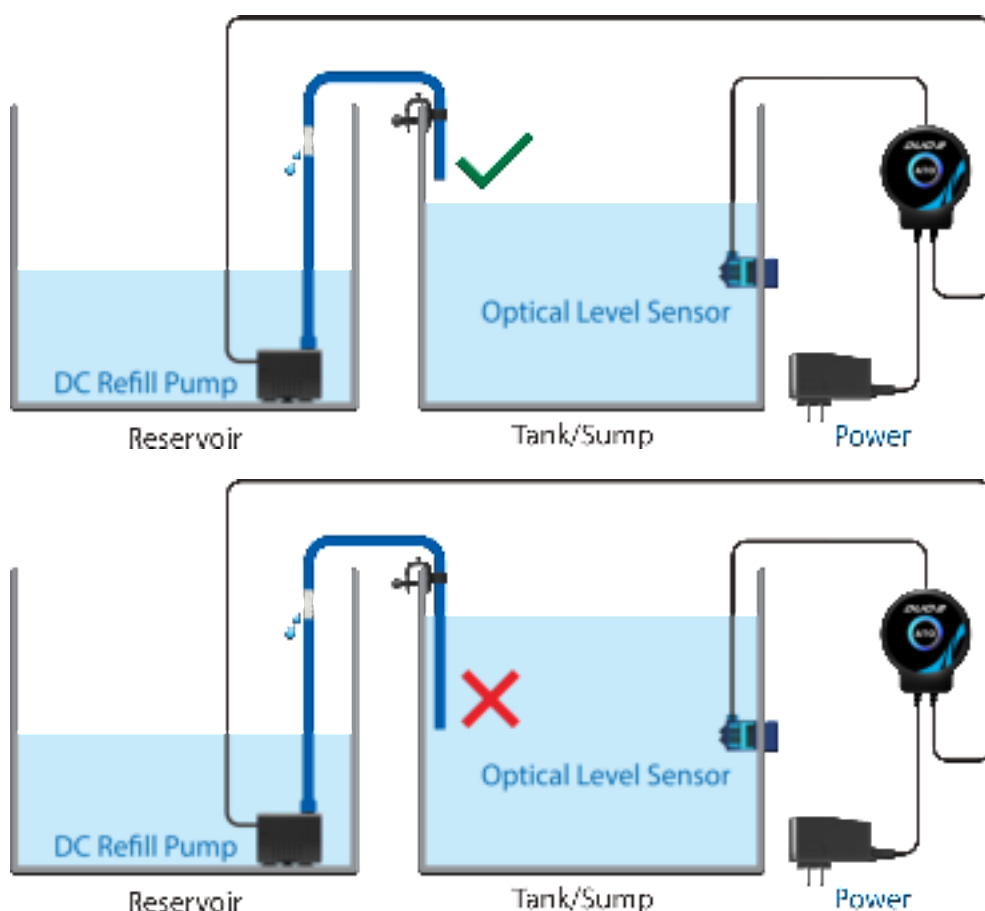
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### ➤ Why does Smart ATO Duo G2 work constantly?

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.

**Please make sure the water outlet is always out of water to prevent back siphon issue.**



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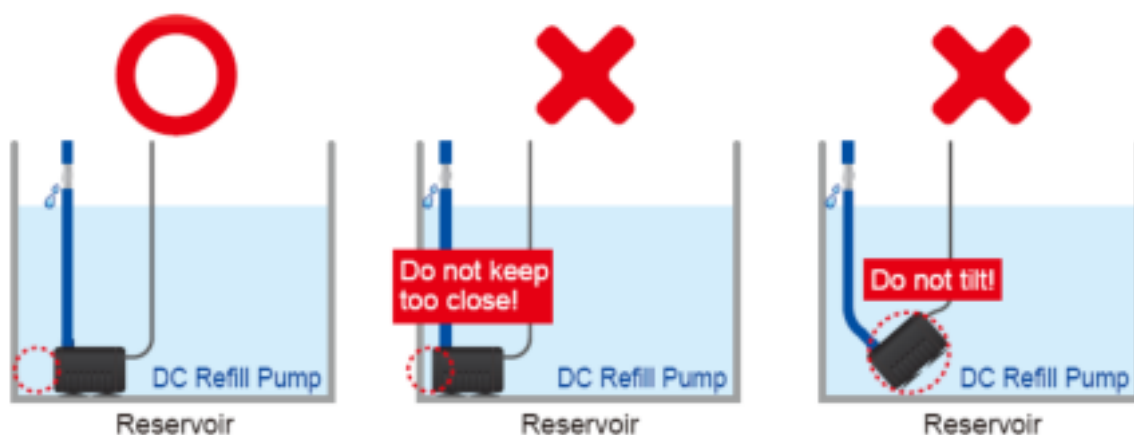
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### ➤ Why is the pump head not high enough?

- 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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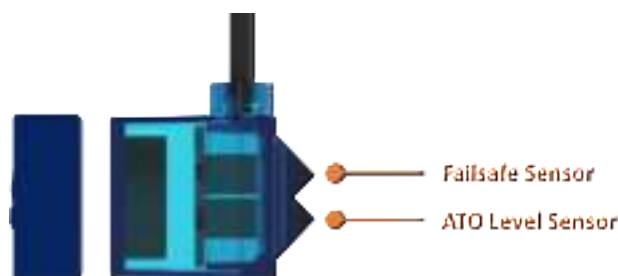
### ➤ Does Smart ATO Duo G2 have a failsafe mechanism?

Yes.

Smart ATO Duo G2 is equipped with a **failsafe sensor** and **Quick Security Technology (QST)** to ensure continuous and safe operation.

- The failsafe sensor: It serves as the main sensor to keep the Smart ATO Duo G2 working properly.
- QST: It will memorize the first refilling time. When a refilling time exceeds six times the duration of the initial refill\*, the system will shut down, preventing water overfilling and the pump running dry.

**\*No security time control for the first refilling.**



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# Smart ATO Duo G2

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### ➤ What can QST do for you?

With AUTOAQUA QST function, it can detect scenarios below without extra setting.

- **Empty Reservoir**

If the reservoir contains little or no water in the reservoir, the QST will be triggered, causing the system to shut down and stop the pump.

- **Pump Failure**

When the pump fails and water replenishment stops, the QST will be triggered, as ATO lasts six times longer than the initial time.

- **Sensor Failure**

If both main and fail-safe sensors fail, the QST will activate to stop the refilling process.

- **Other Device Failure**

If the 3 scenarios above are not the cause, your aquarium equipment (e.g., return pump, skimmer, etc.) might be in an unstable condition.

Please check the other equipment in your aquarium system.

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### ➤ Why is the water level always a little higher than the sensor? Is the sensor broken?

There are several possibilities:

- The siphon break is not installed properly or clogged.
- The water inlet and the sensor are not in the same reservoir.
- The tube is too long, so the water in the tube still fills into the tank after the pump stops.
- The sensor is mounted in a small sump/tank.

It will stop the pump one second after it detects water. However, the one-second filling is obvious in a small sump/tank than in a big one.

You can follow the steps below to test if the sensor works properly.

1. Cut off the power and mount the sensor above the water line.
2. Move the outlet of the tubing to an empty container.
3. Connecting the power, waiting for the pump works.
4. Put the sensor in the water to see if the pump stops.

If the pump stops, it means the sensor works properly.

If it does not, please contact us. We will contact you as soon as possible.

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### ➤ Why isn't work when water level is lower than sensor?

There are several possibilities:

- There is some algae on the sensor.  
Please clean the sensor with soft brush.
- The sensor is too close to the water outlet.  
Please set the sensor away from water outlet to avoid bubble interference.
- The light shines directly to the sensor.  
Please set the sensor away from direct light and the sun to avoid malfunctions.
- If still not working after trying above 3 methods, please contact us. We will contact you as soon as possible.

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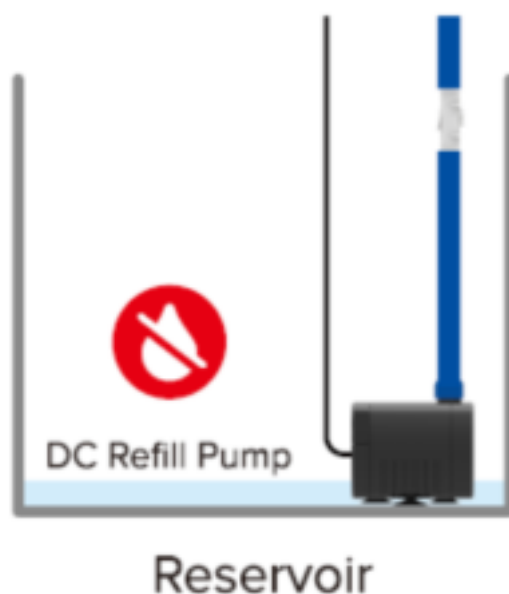


## ➤ Is there an alert when the reservoir is empty?

Yes.

When the reservoir is empty, no water is refilled in the tank/sump which will cause the refilling time 6 times longer than the first time.

Consequently, it will trigger an alarm and shut the pump off.



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- **Why does the controller flash blue and orange with audible alert? I have checked the water reservoir and the bubble but there was no problem.**

The QST memory is not set correct.

Please unplug the power cable, mount the sensor at the normal water level before connecting the power again and do not move it afterwards.

If you want to move the sensor or change the water level, you have to repeat the above steps.

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