



## Smart ATO Duo (SATO-280P) FAQ

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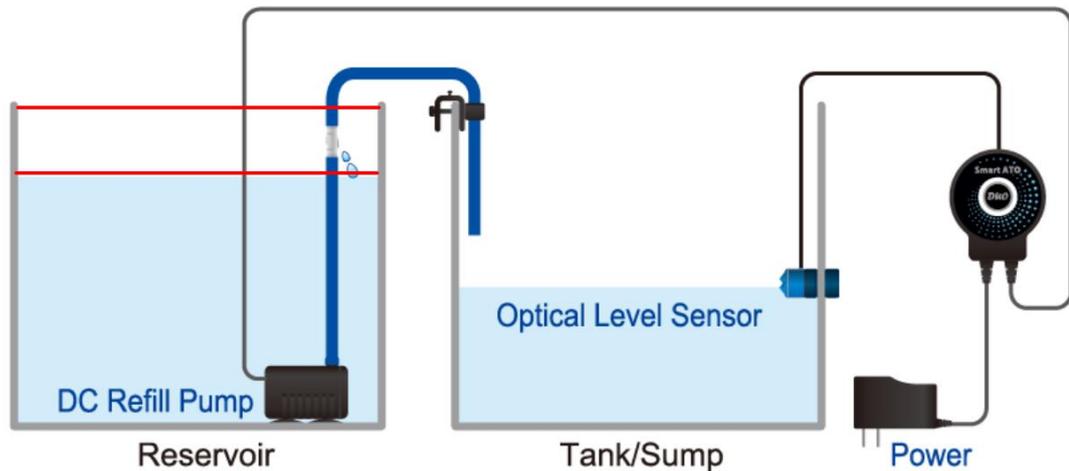
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### 1. How to set up the siphon break properly?

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



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

It is normal that water drops from the small hole of a properly-installed siphon break when the pump is working. 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.

### 3. 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 (the arrow on the siphon break does not point up), it cannot break siphon.

**4. Can Smart ATO Duo still work if the glass is not transparent?**

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

**5. 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.

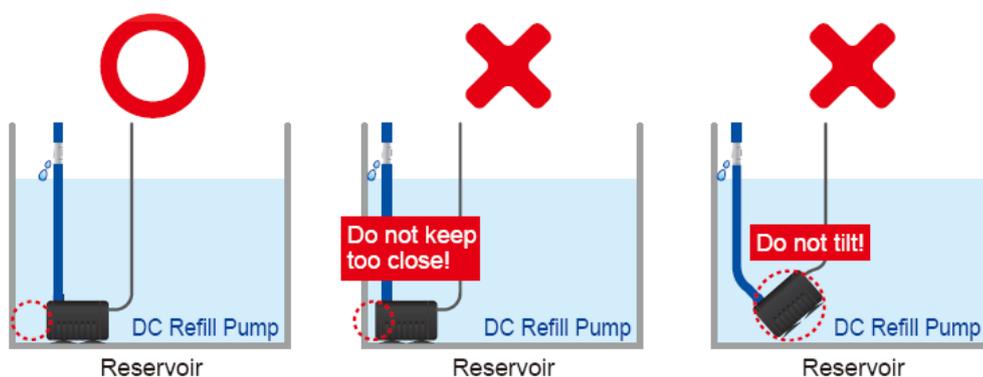


**6. Why does Smart ATO Duo work constantly?**

If the water outlet is in the water, and the water level of the tank/sump is higher than that 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.

**7. 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.





**8. Is there an alert when the reservoir is empty?**

Yes. When the reservoir is empty, no water is refilled in the tank/sump which causes the length of the refilling is 6 times longer than that of the first filling. Consequently, it will trigger an alarm.

**9. Does Smart ATO Duo have a failsafe mechanism to prevent overfilling?**

Yes. Smart ATO Duo has a failsafe sensor (top sensor) and Quick Security Technology (QST) to prevent overfilling. Once the failsafe sensor detects water, it will stop the pump and flash orange with 3 beeps as a reminder\*. Meanwhile the controller will remember the length of the first refilling time\*\*. When it detects the length of any other refilling time is six times longer than that of the first filling, it will stop refilling and give an audible and visual alert. For example, if the first filling time is 10 sec, it will alert when any other refilling time is over 60 sec.

\*For very small aquariums, the top sensor may be triggered after each top off. This is normal and no action is required.

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

**10. Why is the water level always a little higher than the sensor? Is the sensor broken?**

There are several possibilities.

- 1) The siphon break is not installed properly or clogged.
- 2) The water inlet and the sensor are not in the same reservoir.
- 3) The tubing is long, so the water in the tubing still fills into the tank after the pump stops.
- 4) The sensor is mounted in a small sump/tank. It will stop the pump one seconds after it detects water, but the one-second filling is more obvious in a small sump/tank than that in a big one.

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

- i. Cut off the power and mount the sensor above the water line.
- ii. Move the outlet of the tubing to an empty container.
- iii. Connecting the power, waiting for the pump works.
- iv. 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 fill in the contact us form. We will contact you as soon as possible.

**11. 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.

**12. How to use other pumps with Smart ATO Duo?**

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.

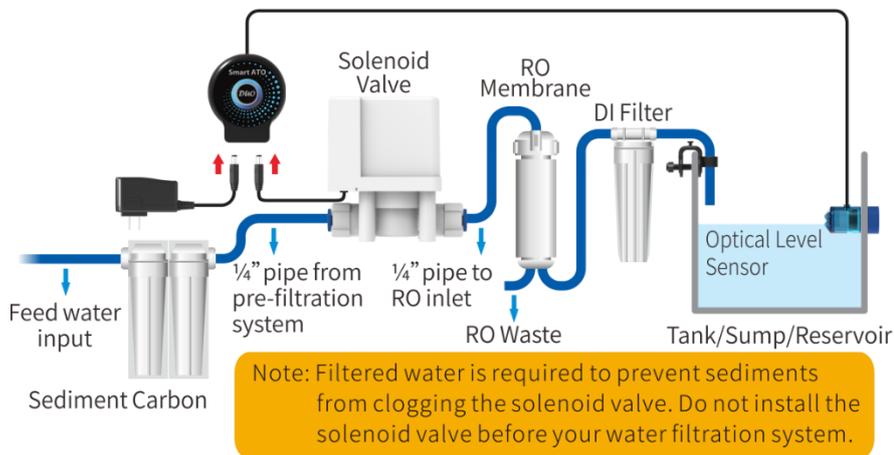
**13. Can I use the solenoid valve with Smart ATO Duo? How to install it?**

Yes. The solenoid valve can be in ATO pump's place. 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.

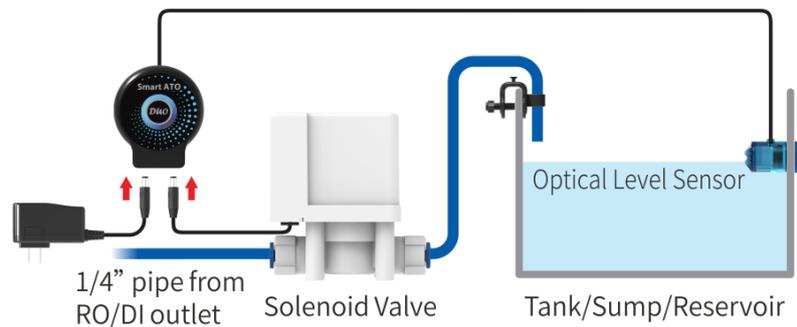
*\*Arrow on solenoid valve indicated water flow direction.*



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

Connect the solenoid valve at the RO/DI output.

\*Arrow on solenoid valve indicates water flow direction.



## 14. 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.

## 15. How to purchase accessories?

Please contact our local distributors:

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