



Sumpless ATO²

Manual



Model

SATO-202P

Thank you for purchasing the XP Aqua Sumpless ATO².

Not only is the XP Aqua Sumpless ATO² the first and only ATO designed specifically for aquariums without sumps, it also doubles as a surface skimmer and media reactor.

With XP Aqua's proprietary dual-optical sensor, the Sumpless ATO² dependable keeps your aquarium topped off and saves you the hassle of daily water additions.












Working together with the dual-optical sensor is the included Flexi Surface Skimmer & Media Reactor. The Flexi draws the oily water from the aquarium surface and process the water through its chambers where activated carbon can be used to clean/polish water. Other filtration media can also be used based on your preference and goals.

The new Controller features updated circuitry that further protects the controller from electrical variances. The new square sensor features improved protection against moisture intrusion: making your Sumpless ATO² more reliable and more durable than ever!

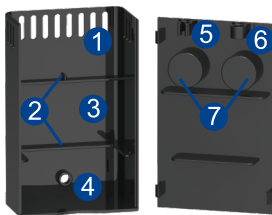
These instructions will guide you through the installation and operation of the Sumpless ATO².

Thank you for choosing XP Aqua!

List of Parts

Item	Picture	Description
Duetto ² ATO Controller		Auto Top Off with Dual Sensors and a dry side magnet*
Power Adapter for Sumpless ATO ²		<ol style="list-style-type: none"> 1. Universal Power Supply : 110 V-240 V 2. Male connector- Duetto² ATO Controller Female connector- Flexi Overflow Box DC Pump
ATO DC Pump x2		<ol style="list-style-type: none"> 1. Refill overflow box 2. Drain the water from the overflow box 3. Head : 8.2 feet (250 cm)
Flexi Overflow Box		Box x1 Flexi Filter Plate x2
Carbon Sponge		Free filter media SAMPLE, great for clarifying and polishing water!
Outer Waterproof Magnet		Max. mounting thickness : 1/2 inch (12.7 mm) 
Universal Tube Holder*		For rimmed or rimless aquariums up to 1/2 inch (12.7 mm)
Siphon Break		A connector to break the siphon
Elbow Adapter		Connect tubes
Tubing 6.5 feet (200 cm)		Used with ATO DC Pump

*The dry side magnet and the universal tube holder are needed only if you use Duetto² ATO solely, i.e. without the overflow box.



Flexi Overflow Box

1. Overflow Weir
2. Brackets for Flexi Filter Plates
3. Media Chamber
4. Water Outlet



ATO DC Pump

5. Cable Clamp
6. Tube Holder
7. Magnets ⚠
8. Water Inlet
9. Water Outlet



Caution : Risk of Injury from Strong Magnets

Notice

1. Please read the manual before installation. Keep the power adapter dry and avoid any contact with water to prevent malfunctions.
2. Rinse the Carbon Sponge filter media before use. It is great for clarifying and polishing water. It should be replaced after 1-2 month (depending on bioload). * Note, you can also use a media bag and your filter media of choice, filter floss or other filter media in place of the Carbon Sponge.
3. It is normal that there are small bubbles coming out of the overflow box when initially installed. They will disappear over time.
4. Please note the water level must always be higher than the overflow weir, or the pump will run dry. Damage in such manner is not covered by warranty.

Quick Security Technology (QST)

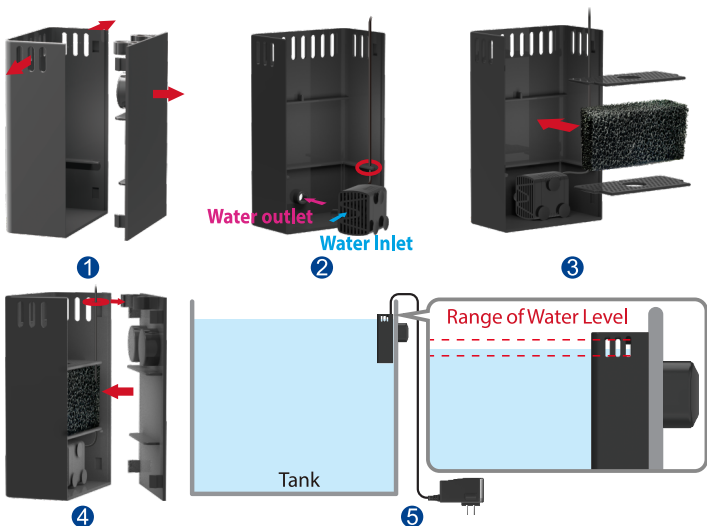
Duetto ATO² uses QST for real-time protection against any failure situation. The controller will give an audible and visual alert when it senses any other refilling time is 6 times longer than the first refilling time.* For example, if the first refilling time is 10 sec, it will alert when any other refilling time is over 60 sec.

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

Installation

I. Overflow Box (Surface Skimmer)

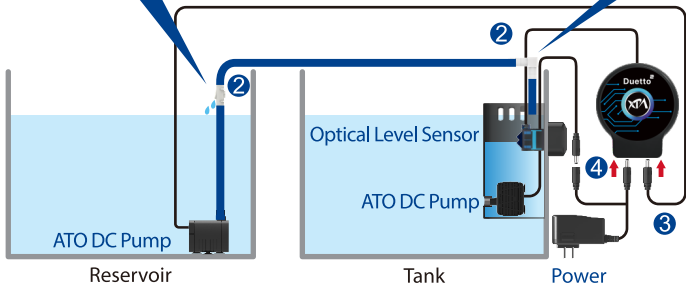
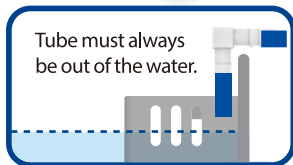
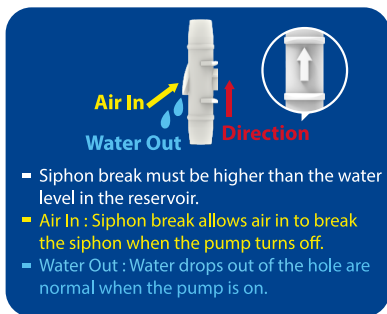
- ① Open the overflow box by spreading two short sides a little and pulling out the back cover.
- ② Check if ATO DC Pump is installed correctly. The water outlet should be connected to the box with the water inlet facing the left side. Then fix its power cable in the gap on the right side.
- ③ Put the filter plates on the brackets in the overflow box (short side outwards) and the Carbon Sponge between the plates.
- ④ Close the overflow box, then fix the power cable of the pump with the cable clamp.
- ⑤ Mount the overflow box on the wall of the tank with the magnetic box holder. The best water level is about 1/4 inch (64 mm) higher than the lower edge of the overflow weir to keep its balance in the tank and the overflow box.



II. Auto Top Off

- 1 Mount the Dual Optical Level Sensor with the magnet in the overflow box and fix its cable with the cable clamp.
- 2 Connect ATO refill tube (ATO DC Pump ↔ siphon break ↔ elbow adapter ↔ tube holder in the overflow box).
- 3 Connect the ATO DC Pump with the controller.
- 4 Connect the male connector of the power adapter with the controller, and the female connector of it with the ATO DC pump. Then connect power.

***Please avoid setting up the sensor in an area with micro bubbles or direct light.**



LED Indicator

LED Color	Status	Description	Action
Blue LED	Solid	Power on	N.A.
	Circulating	Refilling / Pumping	N.A.
	Flashing with audible alerts	Pump connection failure	Check the connection of the pump and the controller.
	Flashing quickly for a short time**	The fail-safe sensor detects the water level changes.	1. Clean the sensor 2. Check the set-up of siphon break and tubes.
Alternating Blue & Orange LED*	Flashing with audible alerts	QST alarm: 1. Bubble interference 2. Empty reservoir	1. Clean the sensor or move it to an area away from micro bubbles. 2. Refill the reservoir.
Orange LED	Flashing	72-hour non-filling reminder	1. Clean the sensor. 2. Check if the pump functions properly.

*Please follow the instruction above to fix issues and then unplug the power and plug it back in.

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

Touch Button



● Touch Button : Switch off the QST alarm.

*Note : Touching the button will not clear the QST memory. Please unplug the power and plug it back in to clear the QST memory.

Specifications

1. Power Input : 100-240 VAC 50-60 Hz
2. ATO DC Pump : Head : 8.2 ft (250 cm) / Flow Rate : 74 gph (280 lph)
3. Flexi Overflow Box : 3.94 x 2.17 x 6.3 inch (100 x 55 x 160 mm)
4. Max. Volume of Media Chamber : 3.74 x 1.99 x 1.97 inch
(95 x 50.5 x 50 mm)
5. Carbon Sponge Filter Media (Free Sample) : 40x40x85mm
6. Max. Mounting Thickness : 1/2 inch (12.7 mm)

Limited Warranty

Notice: Read the entire Limited Warranty prior to purchasing, installing or using this product. By purchasing, installing or using this product, you are acknowledging that this Limited Warranty is part of the sale terms.

XP Aqua products are warranted to be free from defects in defects and workmanship for one year from the date of original purchase from an authorized reseller to the original purchaser. This Limited Warranty is not transferable.

XP Aqua is not responsible for, and the Limited Warranty does not cover the following: product failures or damage due to normal wear and tear, damages caused by heat/moisture/neglect/improper installation/misuse/abuse/modifications/corrosive chemicals.

Limitation of Liability – this Limited Warranty covers only the repair or replacement of the product when damage or failure is a direct result of a defect of the materials or workmanship. In no event will XP Aqua be liable to you or any other party for any direct, indirect, incidental, consequential or other damages arising out of the use of the product. XP Aqua does not cover personal injury, personal loss, or other damages associated with the use of the products. In no case will XP Aqua's liability exceed the amount you paid for the product. If you disagree with these terms and conditions, do not use the covered products.

All warranty repairs or replacements are performed by the authorized distributor in the region where the Product was first shipped by XP Aqua. To request warranty service, please email us through our website, www.xpaqua.com or service@xpaqua.com. You will receive instructions on how to return the Product for repair or replacement. A copy of the original purchase receipt will be required and buyer shall be responsible for shipment and insurance costs to send the Product to XP Aqua for warranty service. International and/or expedited shipping are not covered under your XP Aqua warranty.

