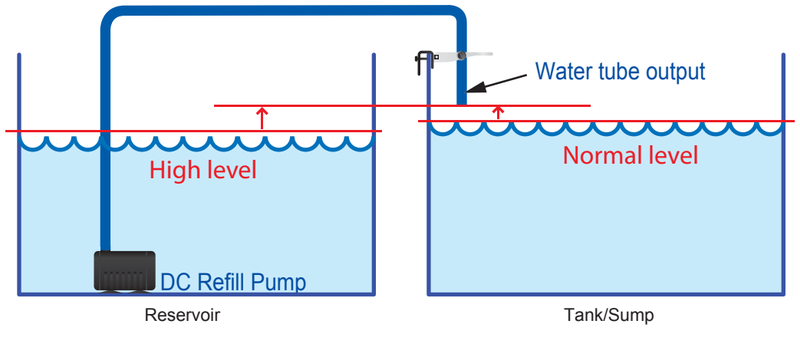
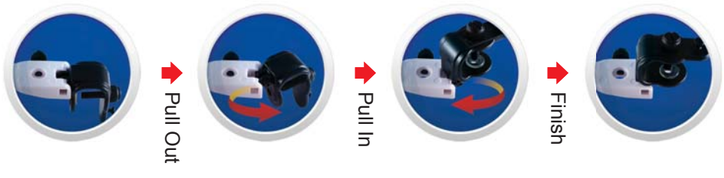
Notice

1. Please read the manual in detail before installation
2. Keep the power adapter dry and away from water to avoid any safety issues.
3. Please clean the sensor every 6 months to prevent non-fill issue.
4. Avoid installing controller in an area with micro bubbles or direct lighting.
5. The “Water Tube Output” must be higher than the “Normal Level” in the Tank/Sump and “High Level” in the reservoir to avoid a siphon issue.



Holder Exchange Procedure (Rimless Tank ➡ Rimed Tank)



Automatic Aquarium Total Solution Provider

Specifications

1. Power Input : 100-240VAC 50-60HZ
2. DC PUMP :
   - Head : 6.5 ft (200 cm)
   - Flow Rate : 74 gph (280 lph)
3. Mounts to Glass or Acrylic walls
   - Max Wall Thickness by Magnet: 1/2 inch (12.7mm)
   - Max Distance to Sense: 1 inch (25.4mm)

Warranty Card

1. This product is guaranteed for two years from the date of purchased at normal operation.
2. The warranty is not transferable.
3. Any incorrect operation will not be warranted and will result in a repair fee.
4. All warranty repairs are performed by the distributor. Please contact the distributor to obtain a Return Authorization number when sending a warranted unit.
5. This guarantee is effective at the date listed on your sales receipt.

Purchased Date	Warranty Period
(Y/M/D)	Two years from the purchased date
Place of Purchase	**Service**
(Store name, phone, email, address)	AUTOAQUA Technologies Co., Ltd. 7F-7.,NO.229,Fuxing 2nd Rd.,Zhubei City, Hsinchu County,Taiwan E-mail : service@autoaqua.com.tw http://www.autoaqua.com.tw

Automatic Aquarium Total Solution Provider

AUTOAQUA

SMART ATO

Intelligent Aquarium Automation

Manual

Model

SATO-100P

Automatic Aquarium Total Solution Provider

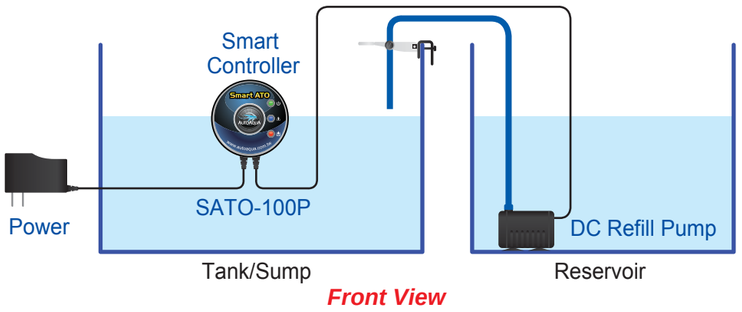
Controller & Accessories

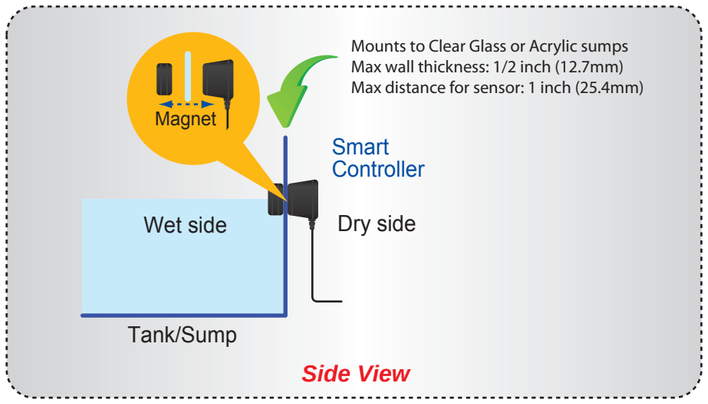
Smart Controller
① Smart Controller Dry side
② Smart Controller Wet side
③ Power DC Jack
④ Pump DC Jack
⑤ Power (Green Led)
⑥ Alarm (Blue Led)
⑦ Pump (Red Led)

Item	Pictures	Description
SMART Controller		Sense & Control AUTO TOP OFF (All In One)
Power Adapter		Universal Power Supply for Controller
DC Refill Pump		Head : 6.5 feet (200 cm)
Water Tube 2M		Used with DC Refill Pump
Universal Holder		Fix the water tube

Installation

1. Mount the Smart Controller (SC) on the clear wall of the tank/sump.
2. Connect the DC pump wire into the SC and install the water tubing (Notice to set the ATO output tubing higher than the tank/sump and the reservoir level to prevent siphon).
3. Connect the power adapter into an AC socket and then into the SC to initialize.
4. Position SC by moving the outside controller under the present water level or 1/5 inch (5mm) higher than the present water level to test the ATO function.





LED Indicator

*Note: Definition of “reset”: unplug and replug the power wire.

LED Color	Status	Meaning	Action
● Green LED (POWER)	Light on	Power on	
	Flashing slowly	Refilling/Pumping	
● Blue LED (ALARM)	Flashing slowly with audible alert	Misalignment	Adjust the alignment of SC, and system will automatically go back to normal after refilling
		Algae	Clean the algae, and system will automatically go back to normal after refilling
● Red LED (PUMP)	Flashing slowly with audible alert	Water empty	Add water to the tank/sump, and then reset
		Bubble noise	Reduce the bubble of the tank/sump, and then reset
	Flashing quickly with audible alert	Bad connection (pump)	Reconnect the pump wire by hand, and then reset
		Pump malfunction	Replace the pump to a usable one , and then reset

Auto Feedback Security (AFS) Technology

AFS Technology is the **SMART ATO** safety function to secure the ATO system dynamically and real-time protection against any failure situation.

● Blue LED(Non-filling alert): SC will alert when it sensed the next non-filling period is 2 times greater than the last period. For example, if the non-filling period was 13 hours, and SC will alert when the next non-filling period is over 26 hours.

Non-filling period	5 h	12 h	13 h	15 h	20 h
Next non-filling alert (Minimum 24 hours)	> 24 h	> 24 h	> 26 h	> 30 h	> 40 h

*Note: SC will alert if non-refilling period is over 48 hours after installation and first refilling.

● Red LED(Over-filling alert): SC will alert when it sensed the next refilling time is 3 times greater than the last one. For example, if the SC refills for 10 seconds, and SC will alert when the next refilling time is over 30 seconds.

Refilling time	4 s	5 s	10 s	15 s	25 s
Next refilling alert (Minimum 15 seconds)	> 15 s	> 15 s	> 30 s	> 45 s	> 75 s

*Note: There is no minimum time control for the first refilling.