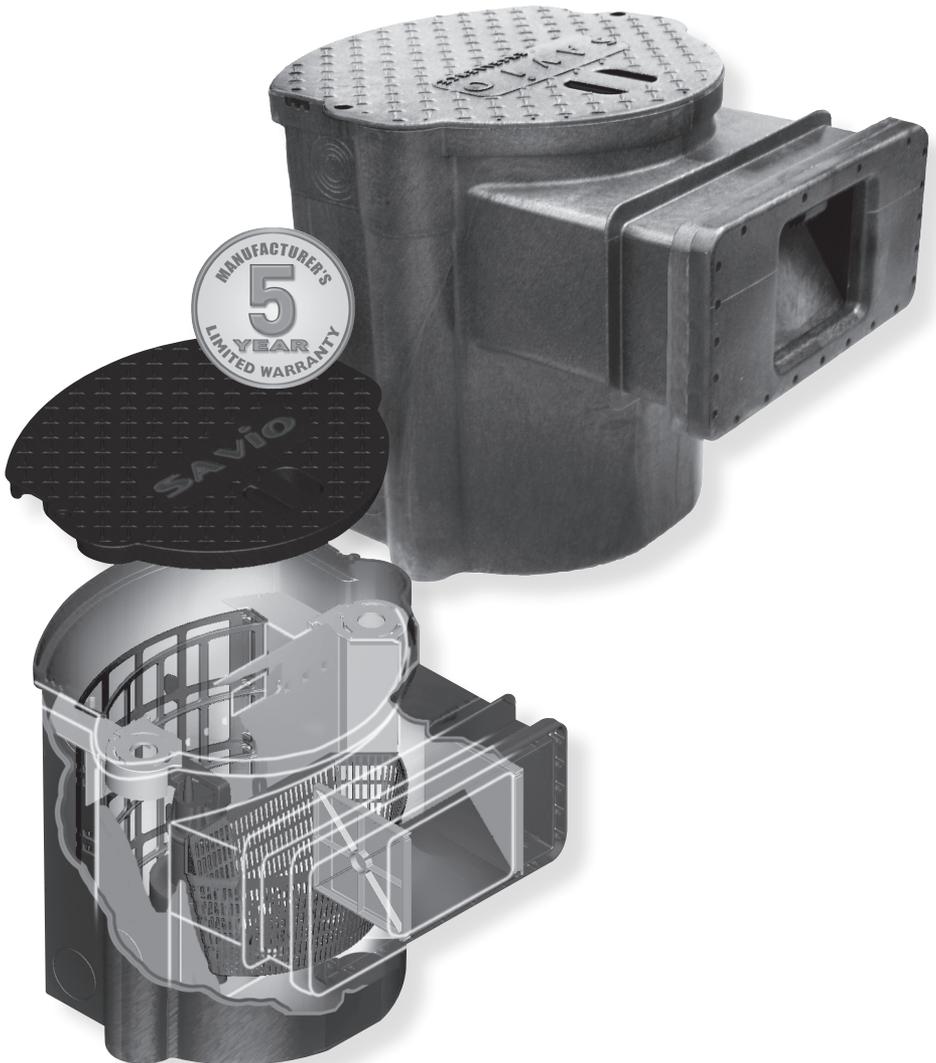


SAVIO Skimmerfilter™

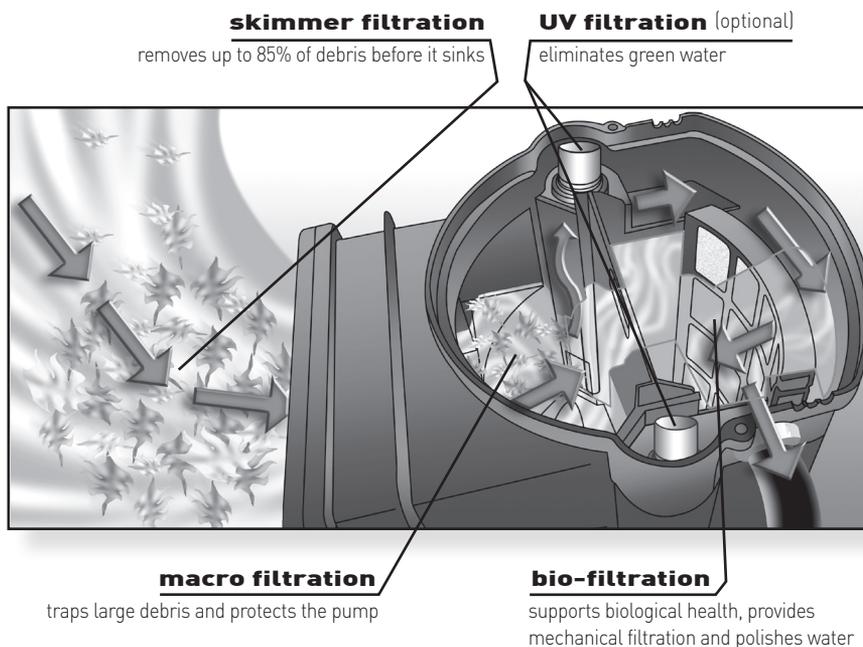
Operating Manual & Specifications

Congratulations on purchasing the highest quality Skimmerfilter™ available. Familiarize yourself with the installation specifications and operating capabilities of your new Skimmerfilter™ prior to installation.



Operating Capacities

The SAViO Skimmerfilter™ provides skimming action for ponds up to 1,200 sq. ft. All models incorporate biological filtration. All models include the capacity for either one or two integral UVinex™. UVs create optimum water quality and can be purchased separately.



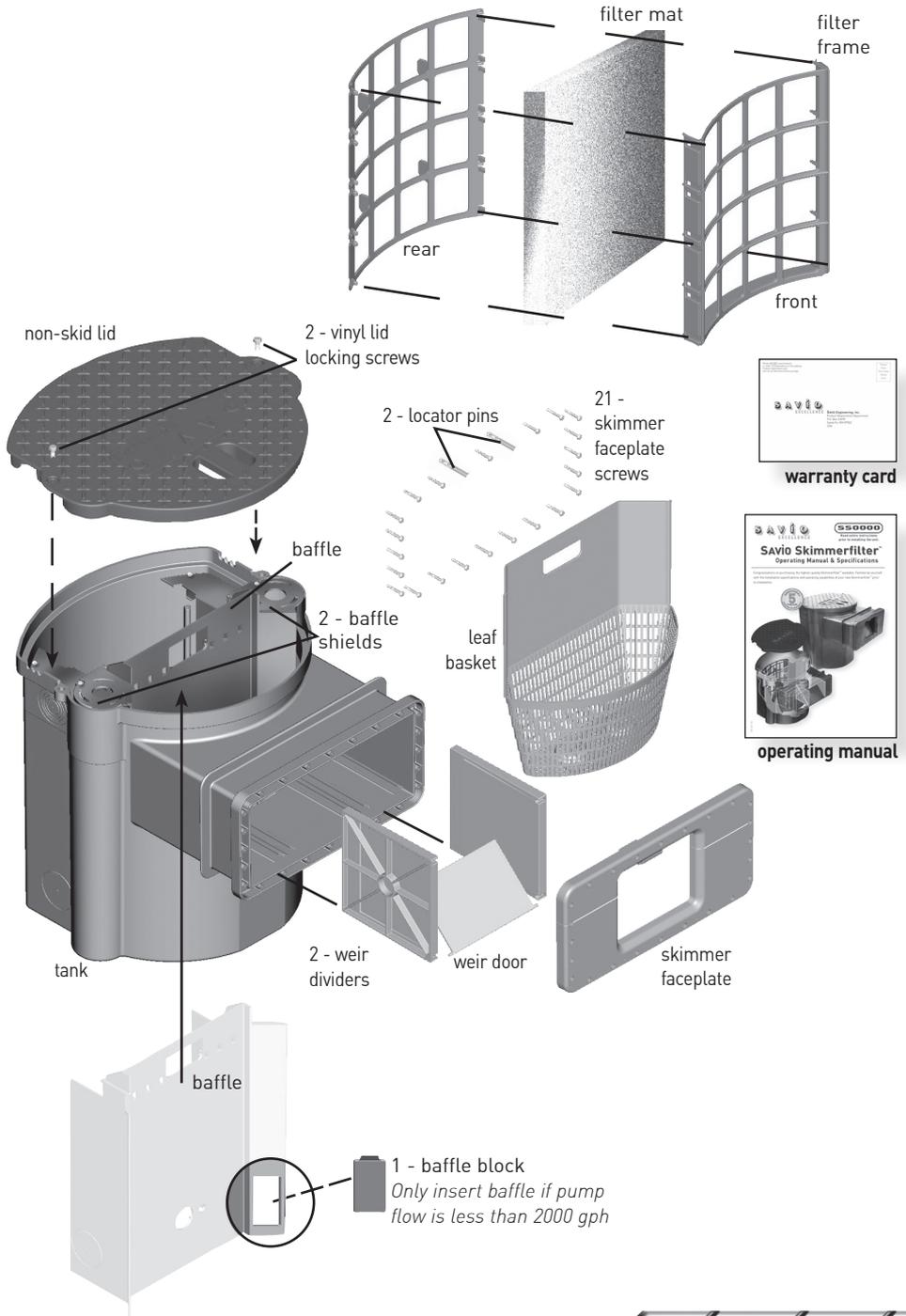
Important Safety Instructions

Locate a GFCI (ground fault current interrupter) protected power source nearby. Typically 4 outlet, 15 amp, 110v, grounded, single phase service is sufficient. Refer to your electrical equipment specifications or consult a qualified electrician to determine power demands for your system.

WARNINGS

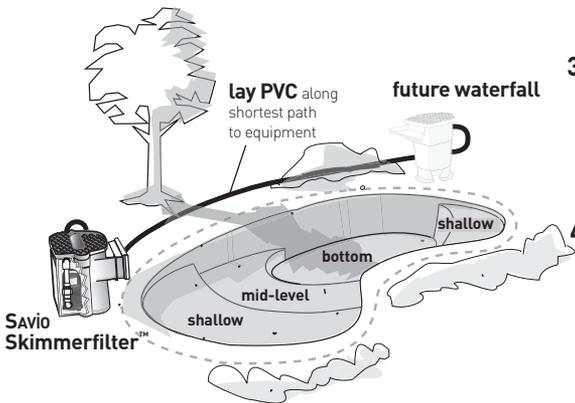
- ✓ To prevent electrical shock disconnect all electrical devices including the UVinex™ before servicing Skimmerfilter.™
- ✓ Do not attempt to operate electrical devices with damaged cords or plugs.
- ✓ Do not attempt to remove any electrical device from the Skimmerfilter™ by pulling on its cord.
- ✓ Units with UV: UV light throws off radiation that can be harmful to skin and eyes. Always unplug all power to the Skimmerfilter™ prior to servicing the UVinex™ unit. Never look at or touch a UV bulb during operation.

Components



1. Placement

- 1) Place the Skimmerfilter™ opposite the waterfall or water return in an easily accessible location.



- 2) Avoid placing rocks or plants in front of the Skimmerfilter™. Anything placed in front will interfere with skimming action.

- 3) Waterfalls generally face the viewing area. Place the Skimmerfilter™ so it faces the waterfall. This hides the Skimmerfilter™ from view and allows easy access.

- 4) Positioning the Skimmerfilter™ on the downwind side of the pond will aid in the effective collection of floating debris. This is less important than placing the Skimmerfilter™ opposite the waterfall but it is a significant design consideration.

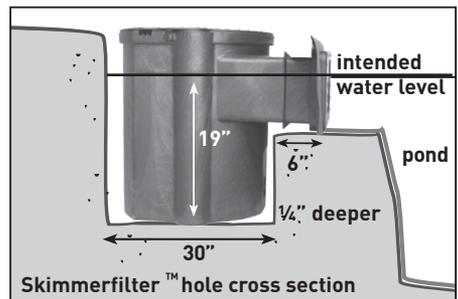
2. Install Skimmerfilter™

Mark Water Level



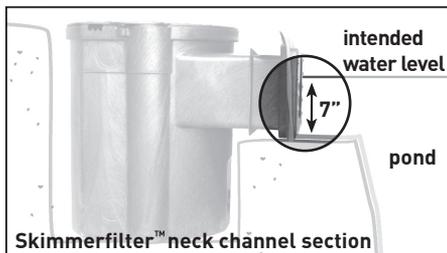
With the pond full, mark position of water level on the liner at the Skimmerfilter™ location. Drain pond partially 8"-10" inches before proceeding.

Dig Skimmerfilter™ Hole



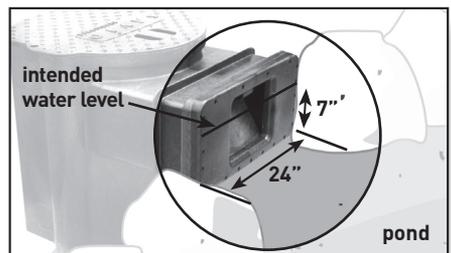
6" back from the coping shelf, dig a round hole measuring 30" across, with a depth of 19" below the marked water line. Dig the front of the hole 1/4" deeper than the back to compensate for settling.

Dig Neck Channel (A)



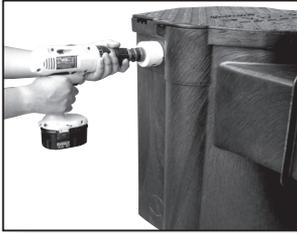
Dig a channel 7" below the water line (see diagram A), measuring 24" wide (see diagram B), from the hole to the pond. The Skimmerfilter™ neck rests on this channel. Compact and level the bottom of excavation. **Do not dig too deeply or the soil may settle unevenly.**

Dig Neck Channel (B)

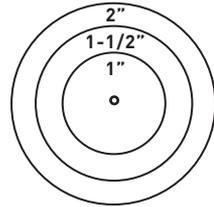


Install Skimmerfilter™ (continued)

Cut Hole for Discharge

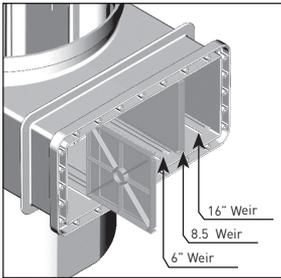


Cut an opening for the pump discharge using a hole saw or jig saw. Use the guides shown on the side of the Skimmerfilter™. Simply select the size that matches the outside diameter of the PVC.



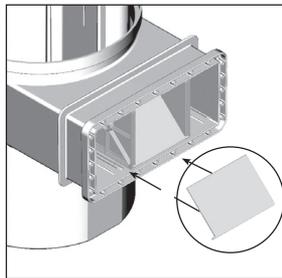
PVC Size	Diameter Hole
1"	1-5/16"
1-1/2"	1-7/8"
2"	2 3/8"

Insert Weir Dividers



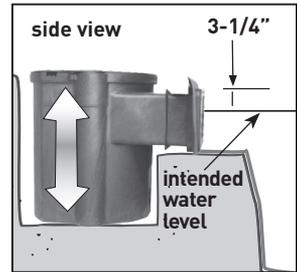
Insert weir dividers for 6" weir into two innermost tracks. 8.5" weir, use two middle tracks as shown in picture above. 16" weir, use outermost tracks.

Insert Weir Door



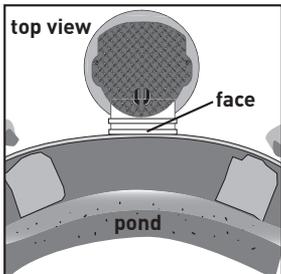
Push the weir door hinge tabs into the notches on the bottom of the weir dividers, using thumbs to hold tabs secure. Lay the door horizontal in the Skimmerfilter™ neck. ***DO NOT ATTACH THE WEIR DOOR TO THE TOP WEIR DIVIDER NOTCHES.**

Place Skimmerfilter



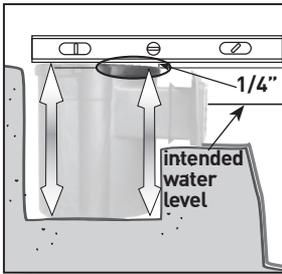
Place the Skimmerfilter™ in the hole. Check to make sure the intended water level meets the skimmer 3-1/4 inches below the top of the neck. Adjust up or down by adding or removing dirt.

Check Position



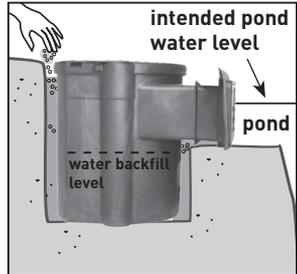
Verify that the face of the Skimmerfilter™ is flush with the back wall of the lined coping shelf. Adjust placement, if necessary.

Verify Water Level



Level the unit front to back and side to side. Make the front edge 1/4" lower than the back edge. **Check water level once again.**

Backfill



Fill Skimmerfilter™ with water to add weight and stability while backfilling, then place lid on top of Skimmerfilter™ and backfill around the entire unit. Use moist sand or pea gravel or, if unavailable, gravel and loose soil (free from clumps). Hand pack every two or three inches. Do not over compact. Lightly moisten the backfill to aid in settling.

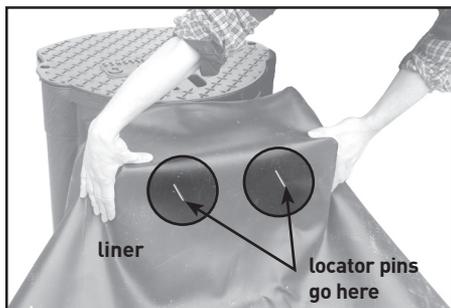
3. Attach Liner

Pull Liner Over Skimmerfilter™



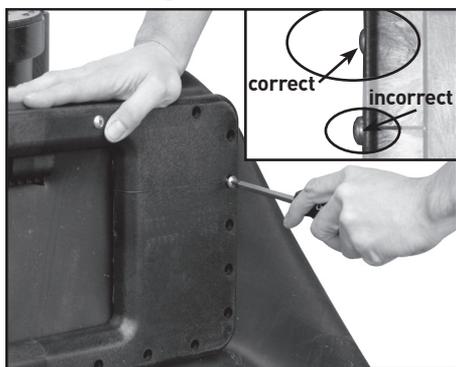
Position pond liner over the Skimmerfilter™ mouth and hold it in place. Smooth liner free of wrinkles and folds. Wipe clean.

Position Locator Pins



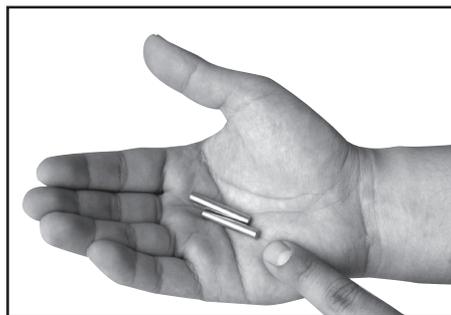
Insert the locator pins through liner into the holes indicated above.

Attach Faceplate



Use the included hex wrench to install screws halfway into all four corners. Install the remaining screws halfway. Tighten top, bottom and sides alternately until screw heads are flush to create a watertight seal. **Do not overtighten, do not use a powerdrill.**

Locator Pins



Select two locator pins from the screw packet provided.

Make Incision



- A) Make a 3" wide incision through the centered liner 3/4" below the top of the Skimmerfilter™ opening.
- B) Slide the faceplate over the locator pins to align the screw holes.
- B) Slide the faceplate over the locator pins to align the screw holes.

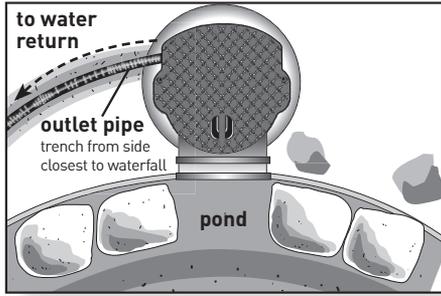
Trim Liner



After the faceplate is properly tightened down, use a knife to trim the liner inside the mouth of the Skimmerfilter.™

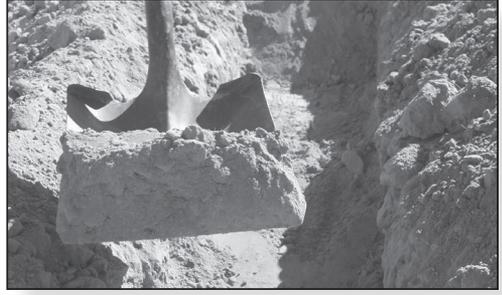
4. Install PVC

Trench For PVC



Dig a trench for the output pipe. Use the side closest to your water return or waterfall. Extend this trench so that it connects to the waterfall filter.

Bury PVC



Bury the SAVIO Aqua Flex PVC™ below freezing level by digging a trench (shovel width) 10" below existing ground level along the pond perimeter from the SAVIO Skimmerfilter™ to the Livingponds Waterfall Filter™ or water return.

5. Connect Pump



Submersible Pump

The Skimmerfilter™ tank protects and hides the submersible pump. The leaf basket protects the pump from large debris and reduces clogging. Use a solids handling pump for water feature applications.

SAVIO Aqua Flex PVC™

Reduces plumbing joints and the leaks that come with them. It's easier to use, saving installation time and increasing productivity. Flexible PVC is more freeze tolerant than rigid PVC, glues to standard PVC fittings and its black color makes it easy to hide.

Install Pump



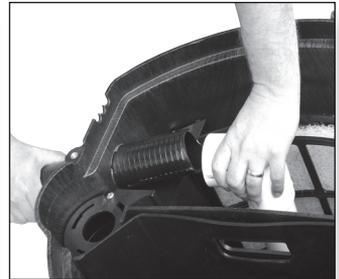
Place the pump and discharge plumbing assembly into the SAVIO Skimmerfilter™.

Glue PVC



Apply the purple primer on the inside of the 90° elbow and on the outside of the SAVIO Aqua Flex PVC™. Repeat, using wet weld glue.

Attach PVC



While the glue is still wet insert the SAVIO Aqua Flex PVC™ through the side hole in the SAVIO Skimmerfilter™. Connect it to the pump plumbing assembly.

6. Finishing Up

Finish Coping



To hide the Skimmerfilter™ from view, extend coping shelf rockwork up to both sides of the Skimmerfilter™ opening.

Hide Neck



Place a flat rock over the Skimmerfilter™ neck to camouflage.

Maintenance

Under normal operating conditions this Skimmerfilter™ will provide years of trouble-free use. Here are a few items which will require periodic maintenance:

- 1) Check and remove debris captured in the leaf basket every week or as needed. The frequency required will vary seasonally, with cleaning required more often in the fall than at other times.
- 2) Check and clean the filter mat as needed using water from the pond. Clean the filter mat when it appears dirty or before there is a noticeable decrease in the flow of water to the pump chamber.

Winterization

Prepare for winterization in mid-to-late November, or when ice persistently develops on the pond. Keep equipment winterized until late February or early March when the water temperature rises to 40° F or higher consistently.

If the pond is to be shut down in Winter:

- 1) Disconnect UVinex™ and store indoors.
- 2) Disconnect submersible pump, clean and store in a dry place.
- 3) Drain any plumbing lines not buried below frost line (18"-24" in agricultural zones 4-6).
- 4) Use plumber's heat tape on pipes and shut off valves. Insulate the pump house and exterior pumps and valves.
- 5) Remove and thoroughly clean filter mat.

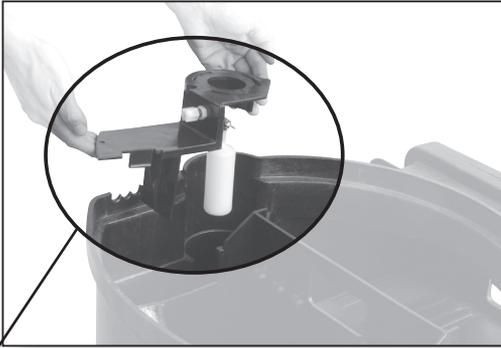
SAVIO Skimmerfilter Accessories

Sold Separately



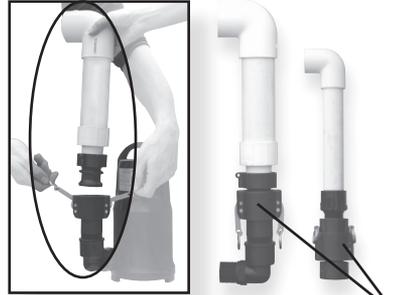
UVinex™ System

The best way to clear green water. Aids in filtration and reduces the need for chemicals to control water clarity. Available in 26 & 50 watt.



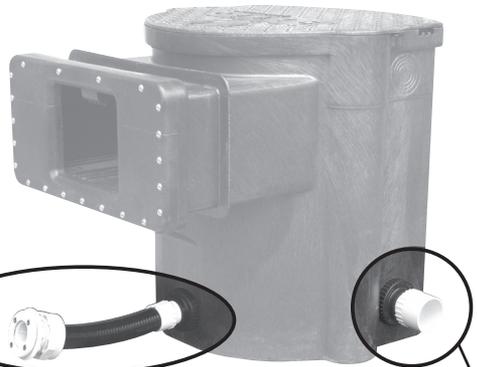
Mini Float Valve Kit

Maintain your pond at its optimum level with this accessory from SAVIO. For use in SAVIO Skimmerfilters™ where only one UVinex is installed. (part no. K1003)



Pump Discharge Kits

Connect SAVIO Water Master Pumps™ to circulation pipe. Kits feature advanced Gator Locks™ for fast, easy disconnect. (part no. K3001 & K3002)



External Pump Kit

Adapts an external pump for use with the SAVIO Skimmerfilter.™ Allows the pump to draw water from the central chamber through its outer housing and internal baffle. (part no. K1002)

Optional Mid-Water Intake Kit

Draw water from below the surface during winter with this optional Mid-Water Intake Kit for SAVIO Skimmerfilter.™ Can also be used to connect to a pond bottom drain (part no. K1001)



Look Out for Other Innovative Products From SAVIO Engineering



SAVIO Skimmerfilters™
 Sturdy, multifunctional filtration reduces maintenance, collects debris, clears water and hides pumps and plumbing.



SAVIO Livingponds Filters™
 Superior water quality with simplified plumbing and maintenance. Livingponds Waterfall Filter™ 22" weir creates an instant waterfall curtain.



SAVIO Pond Packages™
 The best, most complete way to install a water feature. Professional results that will last. Three sizes available.



SAVIO Aqua Flex PVC™
 Rugged flexible PVC simplifies installation and reduces plumbing joints and leaks.



SAVIO Springflo Bio Filter Media™
 Durable, easy to clean and won't clog. Promotes healthy bacteria colonies.



UVINEX™
 Simple drop-in installation. Ultraviolet filtration. Featuring the latest advances in bulb technology.

Troubleshooting

Faults	Possible Causes	Remedies
Pump chamber runs dry during operation.	Low water level in pond. Weir door closed/stuck/obstructed. Weir not large enough for pump flow.	Add water to pond. Water level should be between 3/4" above or below optimum water mark on faceplate. Ensure free movement of weir door/ remove obstruction. Reduce pump flow. Install smaller pump. Install larger weir assembly.
Water leak around faceplate.	Faceplate screws not tight. Faceplate not sealed properly.	Use hex wrench to hand tighten screws snugly. Remove weir face, clean liner of mud or gravel, smooth wrinkles. Reinstall.
Filter pad requires frequent cleaning.	Pump flow rate too high. Heavy waste load in pond due to fish, or plant debris.	Adjust pump flow rate to 5,000 gallons or less. Remove filter pad. Add a SAViO Livingponds™ filter.
No skimming action by Skimmerfilter™	Weir door closed/stuck/obstructed. Pump is not functioning.	Ensure free movement of weir door/ remove obstruction. Check operation of the pump and pump screen (if equipped). Check electrical supply.

Replacement parts for Skimmerfilter™

Code	Item
RS001	Skimmerfilter™ Tank
RS002	Skimmerfilter™ Cover (Black)
RS002G	Skimmerfilter™ Cover (Green)
RS003	Skimmerfilter™ Leaf Basket
RS004	Skimmerfilter™ Center Baffle
RS005	Skimmerfilter™ Baffle Shield Left
RS006	Skimmerfilter™ Baffle Shield Right
RS007	Skimmerfilter™ Face Plate 16"
RS008	Skimmerfilter™ Face Plate 8.5"
RS009	Skimmerfilter™ Face Plate 6"
RS010	Skimmerfilter™ Weir Door 16"
RS011	Skimmerfilter™ Weir Door 8.5"
RS012	Skimmerfilter™ Weir Door 6"
RS013	Skimmerfilter™ 27.5" Seal for 16000
RS014	Skimmerfilter™ 20.25" Seal for 8500

Code	Item
RS015	Skimmerfilter™ 17.5" Seal for 6000
RS016	Skimmerfilter™ Filter Frame Rear
RS017	Skimmerfilter™ Frame Front
RS018	Skimmerfilter™ Divider
RS019	Skimmerfilter™ Baffle Block
RS020	Skimmerfilter™ Filter Mat
RS021	Skimmerfilter™ Brass Insert
RS022	Skimmerfilter™ Screw Packet

Skimmerfilter™ Accessories

SUV025	25 Watt UV Clarifier
SUV057	57 Watt UV Clarifier
K3001	Water Master Pump Discharge Kit 2000-5000
K3002	Water Master Pump Discharge Kit 1200
K1003	Mechanical Float Valve Kit
K1001	Skimmer Mid-Water Intake Kit
K1002	Skimmer External Pump Kit

Customer Service Information



Savio Engineering, Inc.
6701 Jefferson NE
Albuquerque, NM 87109 USA
<http://www.savio.cc> • email: support@savio.cc

Warranty (Send in the enclosed warranty card)

SAVIO Engineering, Inc. provides a manufacturer's limited warranty of 5 years from original purchase date. Warranty is non-transferable. Within the warranty period SAVIO will repair materials with manufacturing deficiencies at their discretion. This warranty does not cover any faults caused by improper use, installation and handling of the device or as a result of wear and tear. SAVIO Engineering, Inc. does not assume liability for consequential damage caused by the failure of the SAVIO Skimmerfilter.™ Warranty is void if the product is not used in accordance with instructions. For warranty claims, please contact your dealership.

Innovative, precision engineered solutions Advanced water gardening products for healthy, clean Livingponds.™



Skimmerfilters™



Livingponds Filters™



Pond Packages™



Uvinex™ System



Water Master Pumps™



Waterfall Well™



Springflo Bio Media™



FilterWeirs™



Radiance™ Lighting



Black Foam™



Pond Free® Packages