

# SAVIO Livingponds Filter™

## Operating Manual & Specifications

SAVIO Livingponds Filters™ are the highest quality, most advanced technology to help maintain clear water and remove free floating wastes and toxin. Please review entire instructions thoroughly prior to installation or operation.



Model F100  
SAVIO Livingponds  
Waterfall Filter™



Model F200  
SAVIO Livingponds  
Versatile Filter™



Use health - to reduce the risk of disease and injury.

SAVIO Livingponds Filter™

SAVIO Livingponds Filter™





A free copy of **SAViO Livingponds™ Design and Construction Guide** is included with your filter to help you build a beautiful, low-maintenance Livingpond.™

Two models of SAViO Livingponds Filters™ are available: Either one can create a waterfall. Waterfall model F100 creates an instant waterfall drape or curtain. Versatile model F200 can discharge directly into the top of the waterfall or be placed remotely.

## Tools Needed

Phillips Screw Driver	Utility Knife
Shovel	Level
Measuring tape	Large Wrench
Flex PVC Glue	Teflon Tape
Flex PVC Primer	

## Bottom Drain Accessories (See page 7)

Optional bottom drain equipment (purchase separately):

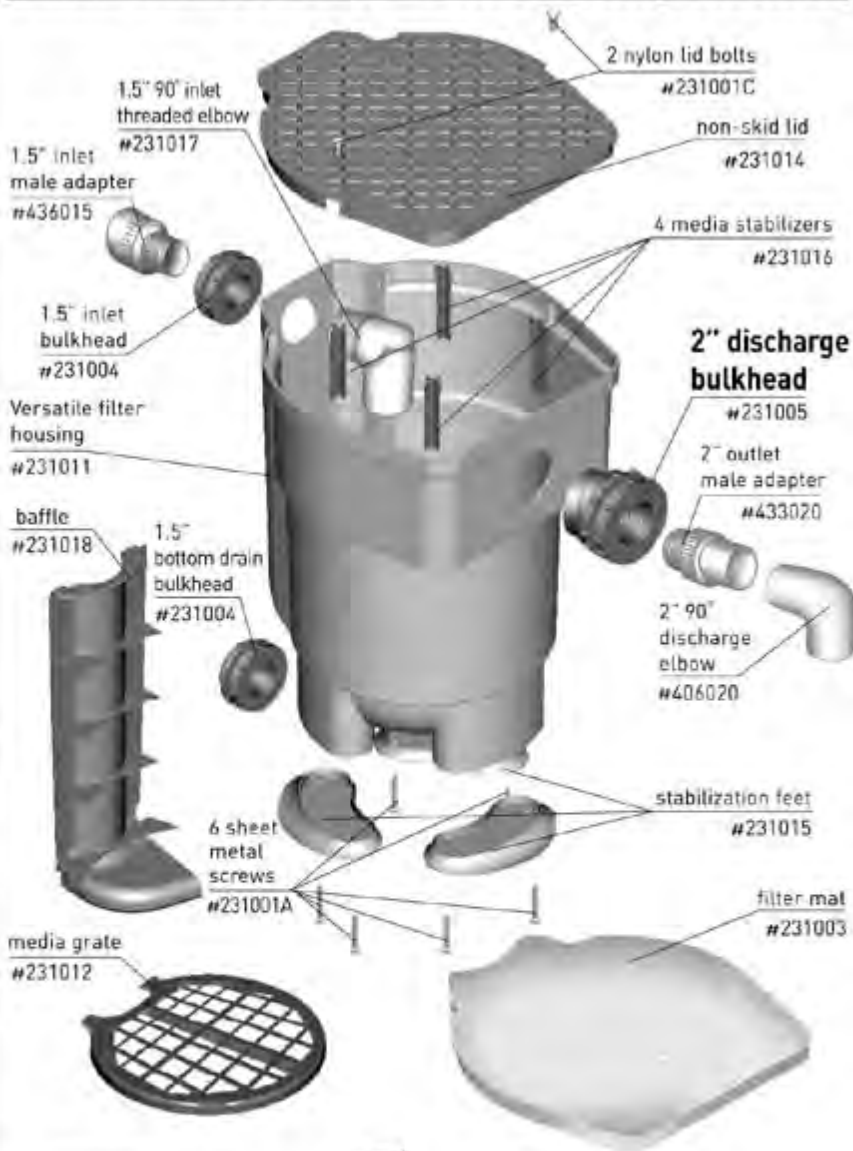
- 1.5" Knife Valve
- 1.5" Male Adapter
- 1.5" SAViO Aqua Flex PVC™
- Teflon Tape

## Operating Capacities

SAViO Livingponds Filter™ models F100 & F200 are effective as the sole source of filtration for ponds up to 5,000 gallons. Operate the filter 24 hours a day throughout the season. Maximum pump flow for SAViO Livingponds Waterfall Filter™ model F100 is 5,000 GPH. Maximum pump flow for SAViO Livingponds Versatile Filter™ model F200 is 4,000 GPH. For expanded filtration use multiple units (illustrated on page 12). Complement your SAViO Livingponds Filter™ with a SAViO Skimmerfilter™ to further reduce maintenance and improve water quality.



# Model F200 Versatile Filter Components



Avio Springflo  
Bio Filter Media™  
#231002



operating  
manual  
#231008



Livingponds™  
construction guide  
#231009



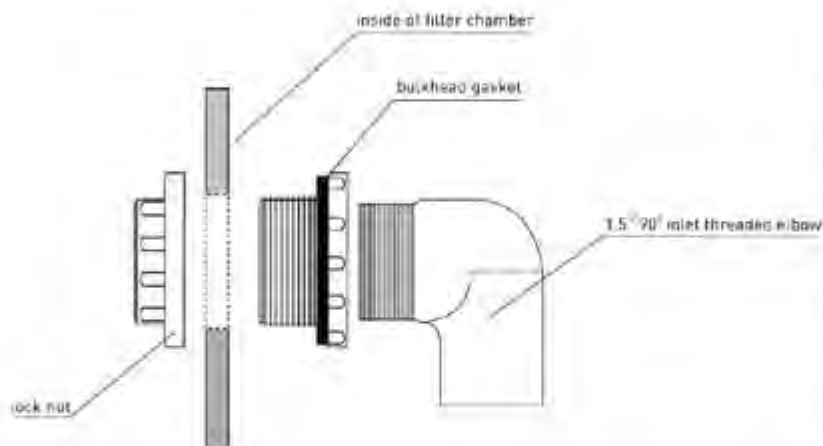
warranty card

# Filter Assembly

Follow the instructions below to attach the bulkheads to the filter housing. Set aside internal components for later installation.

## Attach Bulkheads

To attach inlet and bottom drain bulkheads put the gaskets and large side of the bulkheads on the inside of the filter housing. Install the lock nut on the outside with the smooth surface facing the filter housing. Lock nuts are reverse threaded so tighten with counterclockwise motion.



## Model F200 Versatile Filter Outlet:

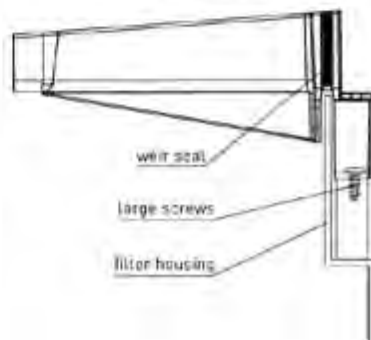
Attach the outlet bulkhead with the gasket and large side of the bulkhead on the **outside** of the filter housing (see page 8 for details).

## Attach Waterfall Weir

*(Model F100 Waterfall Filter Only)*

Put waterfall weir into place. Ensure weir seal (part #231006) is firmly compressed between weir and filter chamber with flat side of seal facing toward filter. Insert and gently tighten 4 large sheet metal screws (part #231001A) into holes in filter. Do not over tighten the screws (weir mounts will *not* contact filter mounts).

## Waterfall Weir Side View



# Filter Placement

- 1) Locate Sawd LivingPonds Filter™ at the top of the waterfall. (To install at a lower point or at a remote location see Remote Installation on page 10.)
- 2) Compact the filter site ¼" lower in front than in back so when the filter is placed it tilts slightly toward the pond.
- 3) Level filter from side to side.

TIP: Use multiple filters to increase filtration (see Alternate Installations page 12)

## Filter Placement Options

**Waterfall Filter**  
Model F100



Filter at top of waterfall.



Filter at top of stream.

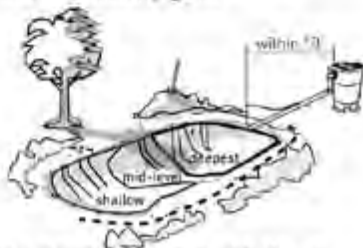
**Versatile Filter**  
Model F200



Filter at top of waterfall attached directly to liner.



Filter with discharge piping attached.  
(Remote Installation page 10)



Filter placed remotely within 10' of pond.  
(Remote Installation page 10)



# Drain Installation

Utilize the filter bottom drain to make maintenance quicker and easier. To integrate this option gather drain components outlined on page 2 and follow instructions below. *(To operate Livingponds Filter™ without a drain simply screw in provided plug to the bottom drain bulkhead.)*

- 1) Dig a 7" wide channel sloped from drain to where water can freely flow from filter during cleanings.
- 2) Attach a threaded male pipe adapter, with teflon tape, to bulkhead.
- 3) Glue a section of 1.5" SAVIO Aqua Flex PVC™ long enough to reach from the bottom drain to drainage area. (TIP: Utilize nutrient rich water from filter cleanings to water nearby plants, shrubs or trees).
- 4) Glue a 1.5" knife valve to drain pipe end. Allow 20 minutes for glue to dry.
- 5) Close knife valve and fill filter 1/2 way with water. Check for leaks.

## Bottom Drain Assembly



1.5" SAVIO Aqua Flex PVC™



1.5" SAVIO Aqua Flex PVC™

1.5" SAVIO Aqua Flex PVC™

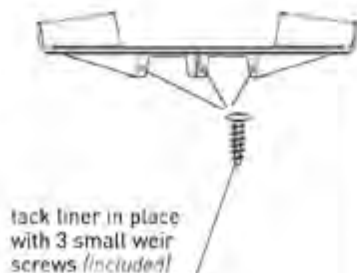
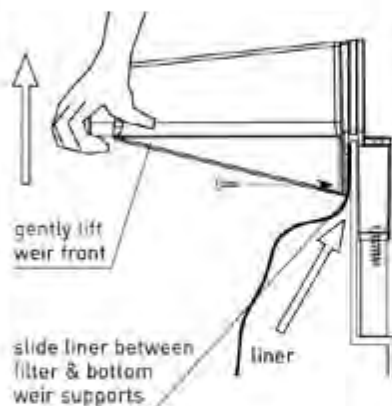
1.5" SAVIO Aqua Flex PVC™

# Bury Filter

Place the lid on LivingPonds Filter.™ Use clump-free loose soil from pond excavation to create waterfall runway and hide filter. Bury unit up to waterfall or pipe discharge but leave accessible for routine maintenance. Hand pack soil every 2"-3". Upon completion lightly moisten soil to aid compaction and reduce settling. Avoid over compaction that could damage or distort the filter housing.

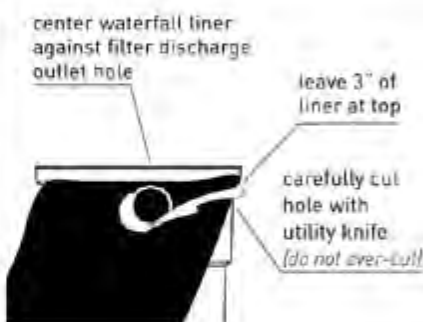
## Attach Liner

### Waterfall Model F100

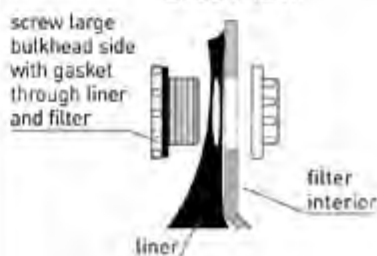


### Versatile Model F200

Attach waterfall liner directly to front of the filter chamber. (Remote & pipe discharged options see page 10).



### Side View



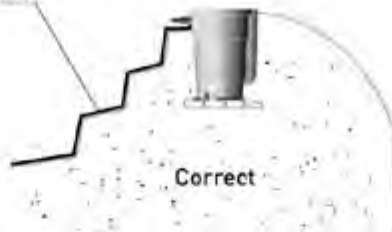


# Attach Liner

leave slack in liner to accommodate waterfall bed cascades, slopes and rocks



Incorrect



Correct

# Connect Plumbing

connect SAVIO Aqua Flex PVC™ to inlet male adapter with flex PVC primer and glue

2nd

screw 1.5" inlet male adapter to filter inlet bulkhead

1st

SAVIO Aqua Flex PVC™  
*(sold separately)*







# Alternate Installations

## Multiple Filters

Run one or more units to increase filtration and/or waterfall effects



Two SAViO Livingponds Waterfall Filters™ operating in tandem.

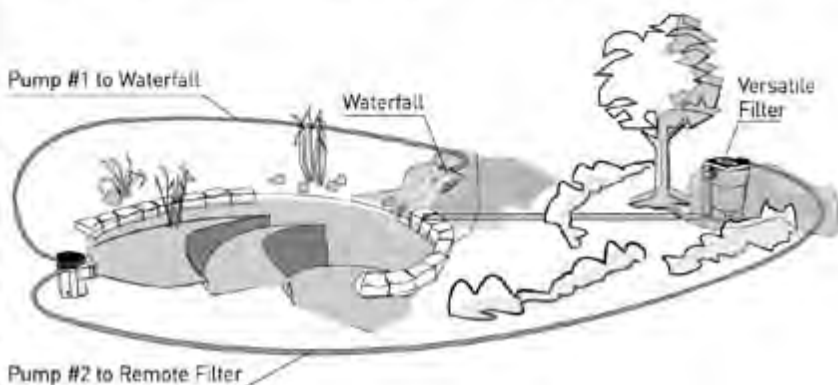
Two SAViO Livingponds Versatile Filters™ operating in series.



SAViO Livingponds Versatile Filter™ operating in series with Waterfall Filter.

## Remote Location

If necessary the SAViO Livingponds Versatile Filter™ can be installed at a lower point, separate from the waterfall, using its own pump.



Pump #2 to Remote Filter

# Start Ecosystem

Once the pond is complete add SAVIO Natural Beneficial Bacteria™ to help establish and maintain the pond (sold separately). The living bacteria develop on filter media, waterfall bed and pond liner. They help control green water, chemical toxins and pond waste. After four days fish can be added.

It takes approximately four weeks for bio-filter establishment. During that time feed lightly and do not add more fish to the original starter group until four weeks have passed and the water is tested for nitrite and ammonia.

Add SAVIO bacteria monthly, when cleaning the filter, after water changes and when handling fish. The unique formulation helps break down waste, remove toxins, reduces maintenance and protects fish.

## Filter Maintenance

Filter cleaning is typically required two or three times a year if the filter is properly sized and the pond is not overstocked. Once the pond is established SAVIO Springflo Bio Filter Media™ (included) is coated with healthy living bacteria. Avoid over cleaning which shocks beneficial bacteria, interferes with filter performance and pond health. Do not use chlorinated water, hot water, chemicals or dry the media.

### Filter Maintenance

- 1) Shut off the pump.
- 2) Remove the Livingponds Filter™ lid.
- 3) Remove filter mat and gently rinse in a bucket of water.  
When possible use water from the pond to clean off the pad.
- 4) Reach in and vigorously shake the Springflo media to dislodge debris.
- 5) Drain or empty dirty water from the filter.
- 6) Return the filter mat to the filter.
- 7) Turn on the pump and re-start system.

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Living Springs  
AUT



Springflo  
Bio Filter Media

See your local PCV

# Equipment Winterization

Prepare for winterization when ice persistently develops on the pond. This generally occurs in mid-to-late November in zones 4-6. Keep equipment winterized until late February or early March when water temperature consistently rises to 40° Fahrenheit or higher.

## Filter Winterization

- 1) Disconnect, clean and store submersible pump.
- 2) Completely clean and drain filter and filter media.
- 3) Drain plumbing lines not buried below frost level (18"-24" in agricultural zones 4-6).
- 4) Use plumber's heat tape on pipes and shut off valves. Insulate pump house and exterior pumps and valves.

## Replacement Parts

part #	Item	Qty
231001A	large sheet metal screws	10
231001B	small weir screws	3
231001C	nylon lid bolts	2
231002	SAVIO Springflo Bio Filter Media™	1
231003	filter mat	1
231004	1.5" bulkheads	2
231005	2" discharge bulkhead (model F200)	1
231006	weir seal (model F100)	1
231007	waterfall weir (model F100)	1
231008	instruction manual	1
231009	Livingponds™ Design & Construction Guide	1
231010	waterfall filter housing (model F100)	1
231011	versatile filter housing (model F200)	1
231012	media grate	1
231013	tower	1
231014	non-skid lid	1
231015	stabilization feet	3
231016	media stabilizers	4
231017	1.5" 90° inlet threaded elbow	1
231018	baffle	1
406020	2" 90° discharge elbow (model F200)	1
433020	2" outlet male adapter (model F200)	1
436015	1.5" inlet male adapter	1

# Troubleshooting

Faults	Possible Causes	Remedies
Water flows slowly from filter	<p>Pump is turned off or obstructed</p> <p>Feed line is obstructed</p>	<p>Check pump operation. Remove any obstruction.</p> <p>Remove obstruction.</p>
Pond water will not clear	<p>Bacteria have not established.</p> <p>Filter is too small for pond</p> <p>Filter media over-cleaned.</p> <p>Pond is overstocked.</p>	<p>Add beneficial bacteria and wait 3-4 weeks.</p> <p>Add another a second filter and/or a UV.</p> <p>See maintenance section for proper care of media.</p> <p>Reduce fish population or increase filtration.</p>
Filter smells.	Filter needs cleaning.	<p>Clean filter media.</p> <p>Add beneficial bacteria.</p>

(9/2)



1 by 1000



Filter media for 1000 l

Filter media for 1000 l

See page 100

# Customer Service Information

**SAVIO**  
EXCELLENCE

Savio Engineering, Inc.

<http://www.savio.cc>

Email: [support@savio.cc](mailto:support@savio.cc)

P.O. Box 23690, Santa Fe, NM 87502 USA

## Warranty (Send in your warranty card)

To activate your warranty and receive free Water Gardening Newsletters (optional) 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 Livingponds Filter™. Warranty is void if the product is not used in accordance with instructions. For warranty claims, please contact customer service. Ship the device in the original packaging to avoid transport damage. Savio is not responsible for damage resulting from shipping.

## Savio water gardening products for healthy, clean Livingponds.™



Savio Skimmer Filters™



Savio Natural Barley Extract™



Savio Springflo Bio Filter Media™



Savio Livingponds Filters™



Savio Beneficial Bacteria™



Savio Mud Sweeper Vacuum™



Savio Aquaflex PVC™



Savio Stainless Steel Submersible Pumps™



Savio Automated Water Level Sensor™