PONDMASTER®

SAVE THESE INSTRUCTIONS

PRESSURIZED FILTER SYSTEM CARE AND OPERATING INSTRUCTIONS

CPF SERIES	POND CAPACITY	ITEM NO. (No UV Clarifier)	ITEM NO. (With UV Clarifier)
250	UP TO 250 GAL	05410	05415
500	UP TO 500 GAL	05420	05425
1000	UP TO 1000 GAL	05430	05435
2000	UP TO 2000 GAL	05440	05445



PONDMASTER PRESSURIZED FILTER SYSTEM INSTALLATION AND OPERATING INSTRUCTIONS

SAVE THESE INSTRUCTIONS



MODELS UPC#		FILTRATION	
CPF250U	05415		
CPF500U	05425	Biological, Mechanical and Ultraviolet	
CPF1000U	05435	(UV Clarifier included)	
CPF2000U	05445		
CPF250	05410	Biological and Mechanical	
CPF500	05420		
CPF1000	05430		
CPF2000	05440		

NOTE: This filter is intended to pull suspended solids out of the water column. It is NOT designed to remove leaves and large solids from the pond. It should not be used as a pond vacuum. All pumps used with this filter must be used inside a Pump Bag or with a Skimmer or prefilter to prevent large debris from entering the filter chamber and blocking the biological filtration.

HOW FILTRATION WORKS:

Both biological and mechanical filtration are essential for every pond; without them, your fish would be harmed by ammonia generated by the accumulated fish waste. The beneficial bacteria bed that builds on the filter media nitrifies any ammonia in the pond making it a healthier environment for aquatic life. Mechanical filtration removes debris in suspension in pond water keeping it cleaner and clearer.

Biomechanical filtration depends on the establishment of a colony of bacteria on the surface of the media that converts dissolved toxic nitrogenous waste to harmless compounds. When the bacteria are given the proper environment, they grow in a thin biofilm on the surface of each piece of media. The larger the surface area of the media, the larger the bacterial colony.

The media must first establish itself to handle the load of dissolved ammonia. Depending on the water temperature, it can take 2 - 4 weeks for the filter to establish itself in the pond environment. The ultraviolet filtration should be left off during initial seeding to allow the bacteria colonies to grow. The time required varies depending on climate, weather conditions, fish load and feed rates. Until the colonies grow large enough, the pond owner must take care to monitor levels of ammonia and nitrates in the water and take appropriate measures to correct any dangerously high levels.

The ultraviolet clarifier/sterilizer (UV) produces a wavelength of light that inhibits algae from reproducing by damaging its DNA. Please note that UV light does not kill algae that cling to the sides of ponds. If your pond has string algae you can add Pondmaster Pond Fix with activated barley to inhibit growth of floating Algae and Pondmaster Oxy Scrub to remove algae from rock surfaces.

BEFORE YOU BEGIN:

- **READ ALL CAUTIONS** - Ponds, outdoor electricity and UV lamps can be extremely hazardous if misused.
- **CHOOSE LOCATION** for your POND FILTER ARRANGEMENT - There are several options setting up a pond filter.
- **SELECT THE PROPER SIZE PUMP** - The right pump will ensure safe, quality filtration. The wrong pump will lead to inferior filtration and possibly damage the filter.
- DECIDE ON OPTIONAL ACCESSORIES - It is easier to install accessories BEFORE installing the filter system.
- COLLECT ALL THE ITEMS NEEDED TO COMPLETE THE PROJECT - Avoid 20 trips to the hardware store!
- **READ and KEEP ALL INSTRUCTIONS** - Know how to use and maintain your filter.

WARNING! PONDS ARE DANGEROUS TO SMALL CHILDREN! NEVER LEAVE CHILDREN UNSUPERVISED NEAR A POND.

WARNING

If your filter includes a UV Clarifier please read the following:

Do not attempt to look directly at bulb when lit; the ultraviolet light produced will harm your eyes. Do not allow exposure to your skin by the ultraviolet light as prolonged exposure it will cause burns. The units are provided with a safety switch that disables power to the bulb when the light unit is not assembled. Do not attempt to override this switch.

WARNING

B)

This unit is for seasonal use only. It should not be used in freezing conditions because the quartz tube included with UV Clarifiers will crack, permitting live electrical current to enter the water. If the unit is dropped, unplug it and inspect the quartz sleeve for breakage or small cracks. Do not use until this inspection has been carried out.

OPTIONAL ACCESSORIES for use with your pressurized filter



) PRO BIOLOGICAL FILTER AND FALLS

PROLINE PRO1000, 2000, 3000 AND PRO 5000 BIO FILTER AND FALLS (ITEM #'s 02477, 02478, 02479, 02467, 02468, 02469, 02480, 02481, 02482, 02490 & 02492)

Produces a dramatic waterfall effect with extra wide spillway while providing extra filtration with flow through filter media and/or foam pads. Three sizes are available to make setting up a waterfall foolproof.

PRO SKIMMERS

PROLINE 5000 SKIMMER AND MINI POND SKIMMER (ITEM #'s 02475 & 02450)

Provide an enclosure for the water pump and keep debris away from intake. Pro Skimmers have adjustable weir doors for maximum skimming with fish safe wings and removable leaf baskets. The Proline 5000 is perfect to handle the water flow demands of large ponds and the Mini Skimmer is suitable for use in smaller ponds.



VALVED BYPASS (PROLINE Bypass kit ITEM # 15015)

Use to split and control water flow between the filter and a waterfall or fountain. Useful to prevent overburdening the low pressure filter without losing any water flow to the water feature.



2 CHOOSE FILTER / PUMP LOCATION AND SELECT ACCESSORIES

This filter must be connected to an external water pump. The water pump can be submersible or above ground depending on your preference. Pondmaster makes several perfectly matched powerful pumps and accessories to complete your filter system. Please note the following:

- The intake for the water pump should be positioned at the opposite end of the pond from the water return.
- Pressure Filter should be as close as possible and slightly below the waterfall to reduce back pressure to the filter. Always avoid using a long hose between the Pressure Filter and the waterfall.
- Bury the filter drum to just below the cover latches. If positioned above ground, use the backfill from digging the pond to surround the filter drum.



CHOOSING THE CORRECT PUMP

Your Pressurized Filter System works best within a certain range of flow. See Table below. Exceeding these values will cause leakage or breakage of the filter or its components and void the warranty.

PRESSURIZED FILTER	MAXIMUM PUMP OUTPUT (GAL/HOUR)	INTAKE PORT Fits Tubing I.D.	OUTLET PORT Fits Tubing I.D.
CPF250	500	3/4″	5/8″
CPF500	950	3/4″	5/8″
CPF1000	1200	3/4″	5/8″
CPF2000	1800	1″	3/4″

Note that the hose fittings of your pressure filter vary depending on your model. Be sure to check the fitting sizes on the pump you choose and pick up the necessary adapters. Note that for best flow rates use an adapter that will step up to a larger hose size on the output. This can be made from a short piece of vinyl tubing sleeved over the output port.

Choose a pump that does not exceed the recommended output for your pressure filter. We recommend Pondmaster and Supreme pumps from the chart below:

MAGNETIC DRIVE 2 02512 / 02522 250 21 7 MAGNETIC DRIVE 3 02513 / 02523 350 37 10.5 MAGNETIC DRIVE 5 02515 / 02525 500 49 10.5 MAGNETIC DRIVE 7 02517 / 02527 700 60 11.65 MAGNETIC DRIVE 9.5 02710 / 02720 950 93 12.85 MAGNETIC DRIVE 12 02712 / 02722 1200 110 13.5 MAGNETIC DRIVE 18 02718 / 02728 1800 150 16.85 WFP2000 02650 2000 140 13.15	PUMP	ITEM #	NOMINAL	WATTS/0'	HEAD (ft.)
MAGNETIC DRIVE 5 02515 / 02525 500 49 10.5 MAGNETIC DRIVE 7 02517 / 02527 700 60 11.65 MAGNETIC DRIVE 9.5 02710 / 02720 950 93 12.85 MAGNETIC DRIVE 12 02712 / 02722 1200 110 13.5 MAGNETIC DRIVE 18 02718 / 02728 1800 150 16.85	MAGNETIC DRIVE 2	02512/02522	250	21	7
MAGNETIC DRIVE 7 02517 / 02527 700 60 11.65 MAGNETIC DRIVE 9.5 02710 / 02720 950 93 12.85 MAGNETIC DRIVE 12 02712 / 02722 1200 110 13.5 MAGNETIC DRIVE 18 02718 / 02728 1800 150 16.85	MAGNETIC DRIVE 3	02513 / 02523	350	37	10.5
MAGNETIC DRIVE 9.502710 / 027209509312.85MAGNETIC DRIVE 1202712 / 02722120011013.5MAGNETIC DRIVE 1802718 / 02728180015016.85	MAGNETIC DRIVE 5	02515 / 02525	500	49	10.5
MAGNETIC DRIVE 1202712 / 02722120011013.5MAGNETIC DRIVE 1802718 / 02728180015016.85	MAGNETIC DRIVE 7	02517 / 02527	700	60	11.65
MAGNETIC DRIVE 18 02718 / 02728 1800 150 16.85	MAGNETIC DRIVE 9.5	02710/02720	950	93	12.85
	MAGNETIC DRIVE 12	02712/02722	1200	110	13.5
WFP2000 02650 2000 140 13.15	MAGNETIC DRIVE 18	02718/02728	1800	150	16.85
	WFP2000	02650	2000	140	13.15
MODEL 260c 02615 260 25 7	MODEL 260c	02615	260	25	7
MODEL 375C 02616 375 38 11	MODEL 375C	02616	375	38	11
MODEL 515C 02617 515 48 11	MODEL 515C	02617	515	48	11
MODEL 750C 02618 750 70 12.5	MODEL 750C	02618	750	70	12.5

Note that head height, length and diameter of hose and fittings all add to back pressure that can overburden your pressure filter or lead to low water flow. To maximize your system do the following: Avoid using more tubing than is necessary for your filtration set-up.

Use tubing with a diameter that is equal or greater than the intake and output ports of the filter. Keep tubing as straight as possible to avoid kinks.

90° elbow connectors add to backpressure and should be kept to a minimum.

Use a bypass valve to bypass the optimal flow of water to the filter, allowing excess flow and pressure to return directly back to the water feature.

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ELECTRICAL PRECAUTIONS

Always use a properly grounded outlet. Do not immerse the plug in water. DO NOT REACH INTO THE WATER TO REMOVE THE PLUG. TURN OFF CIRCUIT FIRST. A "drip loop" in the cords should be used. A "drip loop" is a loop in the cord below the level of the receptacle or plug that prevents water from traveling along the cord. The national Electric Code requires that a ground fault interrupter circuit (GFCI) be installed in every branch circuit supplying the fountain or pond equipment. Your dealer can supply GFCI units. NEVER REMOVE GROUND PIN FROM PLUG.

WARNING: FOR YOUR PROTECTION, ALWAYS UNPLUG THE UNIT FROM ITS POWER SOURCE BEFORE INSTALLING OR SERVICING. DO NOT REACH, REMOVE OR DISASSEMBLE BEFORE YOU DISCONNECT POWER.

SET UP FILTER MEDIA

Unpack the Main filter unit. Open the cover by pulling latches out at bottom then pivoting them outward at the top. Then pull straight up on cover. If your filter includes the UV Clarifier, carefully lift the cover and check that UV bulb is connected to the fixture inside the quartz sleeve. If it has become dislodged during shipping see separate sheet included with UV units for instructions to access bulb. Carefully place the cover aside.

Debris Filter Media Pad fits into the top tray. BioMatrix filter ball media is used in the bottom tray or trays depending on your model. If your Biomatrix filter ball media is packed in plastic bags, empty them evenly into the bottom tray(s) and dispose of the bags.



When finished, replace cover paying careful attention to align intake / outlet ports with molded handle in filter drum.

Close latches - - Clip tops first then press bottoms inward.



6 HOSE ASSEMBLY

Connect hoses from pump and to water return as shown using stainless steel hose clamps (not supplied). The thinner hose is for the water return. If you prefer to use matching hose diameter for the intake and outlet see NOTE below. We recommend using an in-line check valve before the pump connection.



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TEST FILTER SET-UP

Once hoses are connected, the filter should be checked with the pump running. Check that hoses are supported well enough to avoid stressing the plastic intake and outlet ports once they are weighted with water during operation. Supporting the hoses will help prevent kinked tubing. Check for leaks and tighten hose clamps if needed.

FILTER MAINTENANCE

The debris filter pad is first to receive the water that is pumped into the filter. When the debris filter begins to clog it can removed and rinsed or replaced completely. If you choose to rinse the debris filter, rinse with water taken from the pond instead of chlorinated tap water. Doing this will avoid killing off the useful bacteria colonies that grew on the fibers.

Conditions vary, but generally the Biomatrix ball media will begin to grow helpful bacteria in a few weeks. Once established, these should not be disrupted during the warm weather season.



WINTERIZATION

These filters are intended for use in non-freezing environments. If used in areas with cold winters, they must be removed from service, dried and stored before the freezing weather occurs. Failure to do so will void the warranty.



Specify the CPF Model. Parts vary in design and included quantity

CPF

Write down your model number here.



14 Filter Case



WARRANTY

Pondmaster Filtration systems are warranted against failure due to defects in materials and/or workmanship for one year from date of purchase. This warranty covers defects occurring under normal use and applies to the original purchaser at retail and may not be transferred. The warranty and remedies set forth herein are conditional upon proper installation, use, maintenance, storage, and conformance with the applicable use. It will be based upon Danner Mfg. discretion as to whether the defects are of manufacturing origin. Any damages due to improper installation are not covered by this warranty. This the defects are of manufacturing origin. Any damages due to improper installation are not covered by this warranty. This warranty does not apply to appearance or accessory items. This warranty does not include damage due to handling, transportation, unpacking, setup, installation, repair or replacement of parts supplied by any other than Danner Mfg.; improper maintenance, modification or repairs by the purchaser; abuse, misuse, neglect, accident, fire, flood, or other acts of God. Any oral statements about this product made by the seller, the manufacturer, their representatives or any other parties do not constitute warranties and shall not be relied upon by the user and are not part of this contract. Neither the seller nor the manufacturer shall be liable for any injury, loss or damages, direct, incidental, or consequential, including but not limited to incidental or consequential damage for lost profits, lost sales, injury, and inability to use the product and the user agrees that no other remedy is available. Before using, the user shall determine the suitability of the product for their intended use and the user shall assume all risk liability what soever in connection therewith. To validate this warranty, keep your proof of purchase (copy of sales receipt). Warranty covers the repair or prorated replacement of the Danner Mfg. products. Danner Mfg. denies all liability for any other loss including but not limited to loss of equipment, income, livestock, or personal injury.

THE FOLLOWING VOIDS WARRANTY: PRODUCT LABELS ARE DEFACED OR REMOVED. PRODUCT IS IMPROPERLY INSTALLED OR MAINTAINED BY USER OR THEIR AGENT. PRODUCT IS ABUSED, MISUSED, OR DAMAGED BY USER OR THEIR AGENT. PRODUCT DAMAGE IS CAUSED BY OVER-TIGHTENING FITTINGS ON VALVE PORTS. USE OF HIGH PRESSURE PUMP WITHOUT UTILIZING A PROPERLY INSTALLED VALVED BYPASS. PRODUCT IS NOT REMOVED FROM SERVICE AND DRIED DURING FREEZING CONDITIONS.