## HYDRAPUMP® SMART DUO

## **INSTRUCTIONAL MANUAL**

# AUTOMATIC ON-OFF PORTABLE WATER REMOVAL PUMP WITH MANUAL MODE





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**IMPORTANT NOTE!** Please read carefully before attempting to assemble, install, operate or maintain the HydraPump® Smart Duo. Protect yourself and others by observing all the safety information. Failure to comply with instructions could result in personal injury and or property damage. Please keep these instructions for future reference.

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#### **WATER HAPPENS**

Unexpected water can really put a damper on your day, but the HydraPump® Smart Duo can help bail you out when jobs require quick, powerful, and a choice of automated pumping or manual operation:

- For pool covers that periodically fill with water, HydraPump® Smart Duo can be on standby for incoming water and adjusted to many heights to suit your needs.
- When pools or other water sources overflow, HydraPump® Smart Duo can start pumping to protect valuable property.
- If local natural water sources like rivers and lakes swell, HydraPump® Smart Duo can help keep yards and patios drier.

HydraPump® Smart Duo can help move water in these and countless other situations!

## THE HYDRAPUMP® SMART DUO

The HydraPump® Smart Duo with HydraDetect™ technology is designed to efficiently transfer water from one point to another. Simply attach to the HydraPump® Smart Duo to a standard garden hose for an out of the box ready-to-go experience. With HydraDetect™ technology, an electrical sensor attached to the pump, water is detected and the pump is automatically activated.

#### Note:

- This pump is meant to be used with clear water.
- The pump is meant to operate independently when sufficient water is detected or in a manual mode.
- The pump is submersible and can operate underwater.
- This pump is often used to move large amounts of water from one basin or location to another.
- Always be cautious when using pumps around water!

#### ARRIVAL AND INSPECTION

Be sure to examine HydraPump® Smart Duo package contents before use.

Your box should include:

- 1pc. HydraPump® Smart Duo
- 1pc. Outlet from 1 1/4 " NPT to GHT thread, and an included check valve
- 1pc. Hoisting rope for positioning the pump
- 1pc. Manual packet

There are circumstances where the pump or its parts can become damaged during shipping. If damaged during shipping, please contact Watershed Innovations customer service.

# **SAFETY FIRST!**

## **SAFETY INFORMATION**

This manual contains information that is very important to read and understand. Information provided is for safety purposes and to prevent equipment problems. The following symbols are used to help identify safety issues and their potential impact.



WARNING

This indicates a potentially hazardous situation, which MAY result in moderate injury.



DANGER

This indicates a hazardous situation that could result in serious injury or death.

#### **GENERAL SAFETY**



WARNING

#### Alert: Contains Chemicals

This product or its power cord may contain chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

#### **Carefully Handle the Pump**

- 1. Wear safety equipment, including eye protection, at all times when working with pumps.
- 2. Use the pump handle or pump sides when making contact. Don't handle the pump by the power cord or you could damage it and make it unsafe.
- 3. Always plug the pump into a Ground Fault Circuit Interrupter (GFCI) that has been properly installed by an electrician.

#### **Take Caution when Pumping**

Never pump gasoline or other explosive liquids. Do not operate the pump where flammable or explosive fumes or gasses are present. This pump should only be used to pump clear water. This pump has only been evaluated to operate with water. Do not run the pump dry. Make sure the pump is cool and the power is disconnected before handling to avoid burns.

#### **Key Pumping Considerations**

1. A 120V AC power source is required for the HydraPump® Smart Duo to operate. It must be a Ground Fault Circuit Interrupter (GFCI) device connection.

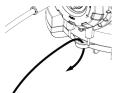


- 2. The circuit breaker and outlet must be properly grounded before installing this pump. If you have questions about this, or are unsure, have the electrical circuit checked by an electrician. The pump must be installed in compliance with all local and national codes.
- 3. The pump will automatically detect water greater than an inch of water.
- 4. Check that the water source and piping are clear of dirt, scale, and sand. Debris will clog the pump. The pump is meant for clean/clear water.
- 5. The pump and its piping cannot operate below freezing and should not be operated in water above 90 degrees Fahrenheit.
- 6. The pump should not operate without water present for extended periods but if it does: unplug the pump and check the pump for damage.

# SETTING UP INSTALLATION AND OPERATION

#### INSTALLATION

1. **Attached** Hoisting Rope (if desired) - In order to adjust the position of the pump on a surface like a pool cover the included hoisting rope can be attached to the front loop of the pump.



- 2. **Connect the adapter** The HydraPump® Smart Duo comes with an outlet adapter for connection to a garden hose or other piping. Please see the adapter connections section for more details.
- 3. **Insert the Check Valve** (if required) An optional check valve is included in application where water is needed to be stopped from coming back into the pump via the outlet.
- 4. **Ensure a tight seal** When attaching to a garden hose make sure that the garden hose has a washer present to ensure a watertight seal.
- 5. **Check for kinks** Make sure that the hose or piping does not have kinks.
- 6. **Place upright** on a hard, flat surface in the water. Do not set the pump directly on muddy or sandy surfaces since this could cause the inlet screen to clog or the pump not to function.
- 7. **Plug in pump** Once the pump has been piped and properly put into position, plug the pump into a 120V GFCI outlet.

#### **AUTOMATIC OPERATION**

To operate the pump in automatic mode turn the front switch to 'Auto' mode:



The pump will operate until the water returns to approximately a depth of 1 inch above the hard surface that the pump is placed on. Once passed below the 1 inch mark HydraDetect<sup>TM</sup> will allow the pump to continue to pump for an additional 15 seconds. The pump should not restart until there is at least 1 inch of water present.

#### MANUAL OPERATION

To operate the pump in manual mode simply turn the front switch to 'Manual' and the pump will begin pumping immediately.



Note: Do not let the pump run without pumping water. This may cause the pump to stop working .

#### **ADAPTER CONNECTIONS**

The pump adapter allows for a 3/4" Garden Hose Thread (GHT) connection.



#### **EXPERT TIP:**

For improved outlet flow larger hoses or adapters can be attached:

 $\bullet$  The entire hose adapter can be unscrewed and a 1¼" NPT pipe or hose can be directly attached to the pump outlet. When attaching directly to this please use plumber's tape when attaching NPT threaded connectors for a better seal.

*Note:* When removing the larger connections from the adapter be careful not to damage the remaining threads.

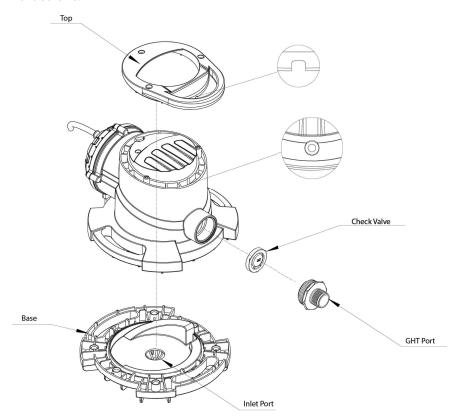
# **CLEANING & MAINTENANCE**

## **IMPELLER CLEANING**



Always disconnect the power source before attempting to clean the impeller.

- 1. Unplug the pump.
- 2. Remove the screws shown in the figure.
- 3. Remove the cover and carefully clean the impeller of all debris.
- 4. Before reattaching the cover, carefully reposition the gasket making sure it will not obstruct the pump openings.
- 5. Reinstall the cover and replace the screws using caution as to not over-tighten or strip the screws.



#### DRAINING FOR STORAGE

After pumping is complete, disconnect the garden hose or other piping from the pump. Empty and remove the outlet hoses. Wipe the pump clean and store in a clean and dry place for next use.



WARNING

The pump may become hot during operation. Be careful when working near or touching the pump.



#### TIP:

Water and electricity do not mix. Make sure to continuously check that the power connections and cables are not in contact with water. Consult an electrician if you have any questions or concerns about the electrical circuit or pump operations.

#### **MAINTENANCE**

Keep the pump inlet clean and free of all foreign objects. Make sure to inspect the inlet at the beginning of each use.



Always disconnect the power source before attempting to clean the impeller.



The motor housing is completely sealed and requires no regular service. As a result, do not disassemble the motor housing or alter the power cord since this could result in serious injury.

# **MORE INFORMATION**



## **SPECIFICATIONS**

These are the technical specifications for the HydraPump® Smart Duo:

- ¼HP Output Power, Single Phase 120V, 60Hz, 3.4A Max
- Pumping Capacity 1,600GPH Max
- Maximum Head 20ft

## **TROUBLESHOOTING**

THOODELSHOOTING			
PROBLEM	POSSIBLE CAUSES	SOLUTIONS	
Pump will not start	No Power or cord not connected	Check outlet power or plug in pump	
	GFCI tripped	Check wiring	
	Impeller Blocked/Inlet Clogged	Unplug and remove debris	
	Sensor not activated	Place pump in always mode or make sure sensor is touching water	
	Thermal Shutdown	Let pump cool down	
Pump Starts and stops Too Frequently	Waters is back flowing from the outlet hose or pipe	Clean and inspect check valve on the outlet	
	Too small a pit opening or suctioning of the surface the pump is place on	Place the pump in a wider pit and make sure it is place on a hard, flat surface	
Pump is very slow or limited	Inlet clogged	Clean debris from the exterior of the pump	
	Restriction in the outlet hose	Check for kinks and restrictions, shorten the length if possible	
	Too much lift	Reduce the outlet hose height to improve the flow rate	



#### "LIQUID LEARNING" VIDEO COLLECTION



Our overview videos can get you started with our products quickly. Visit the "Watershed Innovations" company page on Amazon or capture the QR code to the left.

#### FOR REPLACEMENT PARTS OR TECHNICAL ASSISTANCE

Contact Watershed Innovations® and provide the following information: your order number, model, serial number, and a brief description of the problem.

Watershed Innovations® Email: info@hydrabarrier.com

Phone: 1 (888) 876-4068 9AM to 5PM (M-F) Eastern

#### LIMITED LIABILITY WARRANTY

For warranty information please go to: <a href="https://hydrabarrier.com/pages/warranty">https://hydrabarrier.com/pages/warranty</a>

#### **ABOUT WATERSHED INNOVATIONS**

Watershed Innovations was founded in 2008 with the goal of creating user-friendly products that protect valuable property and land from water damage. Our flagship product was born out of necessity when one of our founders struggled with his backyard pool overflowing during California's rainy season. Today, our products can be found throughout the United States as well as other countries. Our products are used in the homes and yards of consumers for protection from water damage. Our customers also include construction companies, agricultural entities, manufacturing facilities, premiere hotels, the military and other organizations that have large-scale water protection needs.

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