Owner and Operating Manual for

120VAC Manual Control
12VDC Solar Battery Manual Control

120VAC Remote Control
12VDC Solar Battery Remote Control

GEN2 Remote Versions Only

Boat Lifts

Please read this manual thoroughly before operating your remote control boat lift system.

Contents

Overview

Congratulations on your recent boat lift purchase. This owner and operating manual covers how to operate the following lift control apparatuses. Please refer to the appropriate sections of the document for the specific unit you have purchased. It is strongly advised that you read all relevant sections and familiarize yourself completely with instructions before operating your lift control unit.

120VAC Push Button Control

- Refer to Push Button Operated Lift Controls Overview section of this document.
- Refer to Tips and Maintenance and Troubleshooting sections of this document.

120VAC Remote Control

- Refer to Remote Operated Lift Controls Overview section of this document.
- Refer to Tips and Maintenance and Troubleshooting sections of this document.

12VDC Solar Battery Manual Control

- Refer to Push Button Operated Lift Controls Overview section of this document.
- Refer to Solar Setup and Maintenance Overview section of this document.
- Refer to Tips and Maintenance and Troubleshooting sections of this document.

12VDC Solar Battery Remote Control

- Refer to Remote Operated Lift Controls Overview section of this document.
- Refer to Solar Setup and Maintenance Overview section of this document.
- Refer to Tips and Maintenance and Troubleshooting sections of this document.

Push Button Operated Lift Controls Overview

This section of the document covers how to manually operate a **push button** 120vac or 12vdc solar battery lift control unit. Your push button operated lift control system is designed to be used with a 3-way push button.

Push Button Operation

- To **RAISE** boat lift:
  From the *HOLD* position, move push button to **RAISE** position(s). Blower will turn **ON**.
  After lift is in raised position, move push button(s) back to **HOLD** position.

- To **LOWER** boat lift:
  From the *HOLD* position, move push button to **LOWER** position(s).
  After boat is floating free, move push button(s) back to **HOLD** position.

Do's

- Always raise the lift if it is not used for an extended period of time (more than a day), or in rough waters. By keeping it in the raised position, this will preserve the life of the lift during the winter (stationary ice, etc.), storms, and electrolysis.

- Always secure the boat to the boat dock in case the lift is accidentally lowered in your absence.

- Always keep valves closed (push button in HOLD position) when lift is not in use.

Don'ts

- If valves do not automatically open when boat lift is raising or in the raised position, never allow motor to run more than 5 seconds before opening valves. **FAILURE TO KEEP VALVES OPEN WHEN BLOWER IS ON WILL RESULT IN OVERHEATING AND DAMAGE TO BLOWER.**

Remote Operated Lift Controls Overview

This section of the document covers how to operate a **remote** 120vac or 12vdc solar battery lift control unit. Your remote system is designed with a 3-way push button, enabling you to operate your boat lift without a remote transmitter, if required.

Manual Override Operation

NOTE: The push button must remain in the **REMOTE** (center) position when the lift is not in use or when operating the remote. Remote key fob(s) will be locked out and inoperable while the switch remains in the RAISE or LOWER position.

To raise your boat lift:

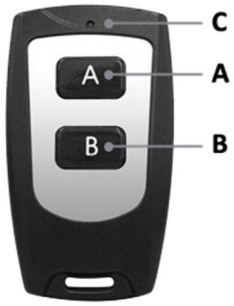
- Move the push button to the **RAISE** position to raise the lift. When done raising the lift to the desired height, move the push button back to the **REMOTE** (middle) position to turn off the lift.

To lower your boat lift:

- Move the push button to the **LOWER** position to lower the lift. When done lowering the boat lift completely into the water and your boat is floating free, move the push button back to the **REMOTE** (center) position to turn off the lift.

Remote Key Fob Operation

The push button must be in **REMOTE** (center) position to operate the lift via remote key fob. Button(s) must be pressed for 1 second in order to transmit a signal to the lift. This is a built-in safety feature to help prevent accidental triggering of the lift.



A. Raise your boat lift. Press button A to raise the lift. When done raising the lift to the desired height, press button A again to turn off the lift. *All other key fob buttons are deactivated while lift is being raised.*

B. Lower your boat lift. Press button B to lower the lift. When done lowering the boat lift completely into the water and your boat is floating free, press button B again to turn off the lift. *All other key fob buttons are deactivated while lift is being lowered.*

C. LED Indicator. The key fob LED light should blink for the duration of each button press. If light does not flash when pressing any key fob button, the key fob battery is likely needs to be replaced. *Refer to the Replacement Battery section of this document on how to replace the battery.*

Programming Your Remote Key Fob(s)

By default, two key fob remotes (Transmitters) are paired with the Receiver at the factory. When the unit is initially purchased, you should not be required to pair up the remote key fobs to the Receiver. If the key fob(s) are not responding and needs to be reprogrammed, the following steps should be performed.

Step 1: Gain access to the remote Enclosure (Receiver).

- Remove external housing of your control unit to access the remote Enclosure for programming.
- Locate the clear small LED button on the white remote Enclosure installed under the control unit housing.

Step 2: Reset (erase) all key fob modes previously programmed to the Receiver.

- Press and hold LED button for ~10 seconds until it begins to blink. An audible beeping from the speaker will be heard.

Step 3: Program the key fob to the Receiver.

- Press LED button 1 time and release. The LED button will stop blinking and maintain a steady light.
- Hold the key fob to close proximity of the Enclosure and press the A button on the key fob. Wait 5 seconds, then press the A button again.
- Mode 2 will be successfully programmed if there are two short beeps and LED light will turn off.

NOTE: Repeat step 3 for each additional key fob you wish to program to the Receiver.

Step 4: Final Step

- Unplug power to the control unit. Wait 5 seconds before plugging and turning unit back on.

Note: Mode 2 (Button A) is the default factory setting for all key fobs. Button B (Mode 1) is reserved for special installations only. Mode 1 will be successfully programmed if there is a long beep and LED light will turn off.

Solar Setup and Maintenance Overview

If you have a waterproof solar battery control unit, each solar panel is equipped with an output of 12V, 2.4W at 200 mA, perfectly designed to recharge and maintain most standard marine 12v batteries.

How it works

Solar panels convert light energy (sun) into 12vdc electricity which is then transported to the rechargeable batteries through lead wires and connectors.

WARNING: This product not designed to re-charge a fully discharged battery. Batteries depleted beyond 80% cannot be fully recharged and fully depleted (dead) batteries will not charge.

Setup

Ensure that the front of the solar panel on your control unit faces the sun with no shadow cast on the solar panel. It is recommended that the long side of the solar panel be positioned towards the South-to-North direction.

The blue LED on the plastic frame will blink whenever the solar panel is generating electricity.

Connecting the Solar Panel to Your Control Unit

Ensure with great care that the + (red wire) and - (black w/ red stripe wire) are connected and fastened to the corresponding positive and negative battery terminals. ***Failure to do so will harm your control unit.***

Caution and Maintenance

- Do not use the solar charger in rain.
- Solar charger uses glass substrate. Please handle with care.
- Always keep the glass surface clean with a soft cloth in order to ensure maximum output.
- Avoid contact with acid and alkali.

Tips and Maintenance

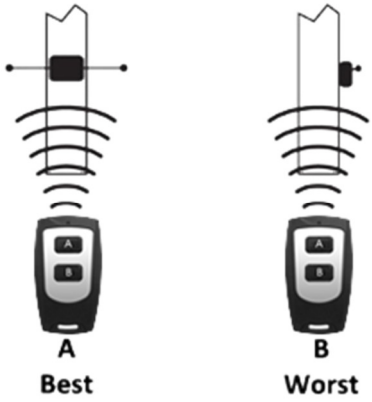
With the proper care, your remote and manual-operated systems will offer you years of trouble free service. The following recommendations will help ensure the longevity of your system.

- It is not necessary to unplug the system when left unattended. False triggering from another remote device is highly unlikely. However, during the winter or when you will be away for an extended period of time, it is a good idea to unplug your system. This will help prevent damage from lightning or other unforeseen conditions.
- All AC lift control units are equipped with a built-in safety GFCI to help protect from voltage fluctuations that are common on many boat docks, especially community docks. Occasionally the system might receive a large enough voltage fluctuation to trip the safety GFCI. If this happens, the system will not respond to the remote transmitter and the GFCI will need to be reset. If this does not solve the issue, the GFCI may need to be replaced.
- It is advised that your boat lift should always be in the raised position even if the lift is not in use or there is no boat on the lift. This preserves the durability of your boat lift and prevents from electrolysis or salt corrosion, which can slowly corrode your boat lift.
- Never operate your boat lift when it is not in view. Occasionally, a lift has unknowingly been triggered from inside of a house or condo leading the owner to believe the system has malfunctioned. It is a good practice to store the transmitter in a safe place when not in use.

- When raising the lift without a boat on it, allow the tanks to just break the surface before shutting off the lift. This will remove stress both from your dock and the lift, and minimize the time it takes your lift to drop when you return.

- **ANTENNA.** Your antenna under the housing should be kept clean and free of cobwebs. Attempt to keep the antenna as straight as possible. If the antenna is broken, it will have to be replaced. Be careful not to pinch or cut the wire connecting the antenna. This will result in poor performance or malfunction. Never wash down the antenna. It is designed to resist moisture, but can be damaged if directly sprayed with water.

- **RANGE.** Your remote system uses the most powerful transmitter and receiver allowed by law. Environmental and atmospheric conditions can affect your range. The system has been tested to over 500 feet. However, not everyone will experience this type of range. Best range is achieved by pointing the remote so that you are facing across the antenna as shown in diagram A. Pointing the remote down the end of the antenna will result in poor range, as shown in diagram B.



- **TRANSMITTER.** Your remote transmitter is waterproof but **will not float.** Caution should be used around the water. If a remote falls in the water or is splashed, **do not** press the buttons. If the remote has been underwater for more than 30 minutes, open the case and let the circuit board dry. If the battery becomes wet, replace it. If the range of the remote becomes weak or the LED fails to light up, replace the battery. The remote uses a 12 volt DC battery, model number 23A, which may be found in most stores that sell consumer electronics.

- **REPLACEMENT BATTERY.** Hold the remote in your hand and twist the keychain portion to help pry the remote halves apart. Take great care to ensure that the membrane is put back into the channel over the lower half. This creates a waterproof seal.

- **MAINTENANCE.** To help ensure the longevity of your boat lift control unit, it is advised that periodic maintenance is performed 2x annually. Like your car or boat, most materials are highly resistant but not completely corrosion-proof in extreme marine environmental conditions, more specifically in geographical areas that have constant salt air and salt water exposure.

    - To help combat corrosion, it is recommended that the following areas of your lift control unit be wiped down with a clean damp cloth (use CLEAN WATER), and a long-term corrosion inhibitor and anti-corrosion spray be applied:

        - Valve nut where the handle attaches to the ball valve
        - Internal and external components of the ball valve
        - Welds around the handle and rod
        - Any additional areas that may show any sign of corrosion

    The following applies to solar units only:

    - As the battery in your lift control unit charges and discharges, it creates gases that escape through the vents in the top of the battery. As the gases escape, an acid residue also escapes and carries to the top of the battery. Over time, residue builds up around the battery terminals, cable ends and battery tray. Removing the residue without damaging the battery takes just a few minutes and will restore the connection between the battery terminal and battery cable end. This ensures that your lift control unit always operates under maximum performance conditions possible.

Troubleshooting

Sometimes, unplanned or unforeseen events can cause either the remote or boat lift to fail. Read through the list of possible problems before calling your lift dealer for service. Most situations can be resolved by following the steps below.

1. The remote will neither raise nor lower the lift.
   a. *Check to see if the manual push button works. If it does, continue below. If not, go to #2.*
   b. *Make sure you are pressing the remote for at least 1 second.*
   c. *Make sure the red LED is lighting on the remote (if not, replace the battery).*
   d. *Make sure you are within range of the lift (500' in most cases).*

2. Neither the manual push button nor the remote will operate the lift.
   a. *Make sure there is power at the dock.*
   b. *If equipped with a GFCI, make sure it is working properly. See #7.*

3. The range on my remote is not as good as it used to be.
   a. *Check to make sure that the antenna wire is not bent or if the wiring to the antenna has any breaks or cuts.*
   b. *Clean off cobwebs or dirt (they can affect your range). Do not apply water or chemicals.*

4. My remote works but the strobe light is not flashing.
   a. *Make sure the wires to the strobe have not been pulled loose.*
   b. *The strobe light can and will burn out, please call for a replacement.*

5. The strobe is flashing but my lift is not lowering. These conditions are not remote related and are characteristic of this type of boat lift.
   a. *Make sure nothing has floated into the lift that could prevent it from lowering, such as sticks, trash, or a tree branch.*
   b. *If you raise the lift all of the way up without a boat on it, it can take a very long time to drop.*
   c. *If the water is rough, the waves can cause the water in the tanks to block the air hose. This will cause an "air lock" which will prevent the lift from lowering. Turn blower on to blow air into the air hose to clear proceed in continuing lowering the lift.*

6. The lift will not stop raising/lowering with the remote.
   a. *Make sure the manual switch is in the remote position.*
   b. *See #1.*

The following is applicable to only AC-powered units (does not apply to DC Solar units)

7. Checking for GFCI failure.

*GFCIs are susceptible and purposely **designed** to fail a specific number of times in protecting the end-user and blower/pump equipment before experiencing total failure. This does not necessarily mean that the boat lift control unit is defective. Environmental factors such as power surges, moisture, etc. can cause GFCI failure.*

Check and ensure your dock still has power and reset the GFCI by pushing on the RESET button on the top plate. If your system still fails to have power, the GFCI may have reached a point of "total failure" status. Most common solution is simply purchasing a replacement 20amp GFCI which can be purchased at most hardware stores.

If the steps above do not fix the problem, call your local dealer for service. Your remote system has been designed using a plug-n-play feature allowing the remote module to be easily swapped out without sending back the entire lift control unit.