

AC LEISURE PRO SHORE COMMANDER

Troubleshooting Guide

(GRAY CONTROL BOX)



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GENERAL INFORMATION

Shore Commander Advantages

Safety

- No fingers getting caught in crank wheel or rubber wheel drive.

- Anyone is able to use the lift with more ease. Eliminating the wheel also allows more room to enter and exit the boat lift.

- Keypad access limits who can operate the lift. Keeps small children from being able to operate (without the key fob).

- A light is included for better night / early a.m. visibility.

- Limit switch is available to prevent over winding the cable.

- Safe and reliable, worm gear drive replaces industry standard, ratchet pawl wheel lock mechanism.

Easy To Operate

- Wireless remote control! No more cranking! Remote has up to 100 feet of range.

- If you forget your remote key fobs or lose them, use your keypad code to access the operating controls.

- If you lose power, a manual backup bit is provided for use with a cordless drill to run the lift up and down.

Quiet

- Commander Product's reliable worm gear drive system eliminates the need for the noisy, ratcheting brake kit.

Maintenance Free

- Gearbox is oil filled and permanently sealed so you never have to drain and refill.

- Both the control box and the motor are designed to withstand the elements.

- It is recommended the unit be removed at the end of the boating season and stored in a cool dry place.

Technology

- Commander Products' *patented* direct drive technology eliminates slippage commonly found with rubber wheel drives, chains that can stretch or rust over time and simplifies installation.
 - The revolutionary variable frequency drive (smart controls) optimizes electrical efficiency, draws minimum amperage and gives the 3 phase motor more startup torque than a single phase motor.
 - Commander's "smart" controls reduce the possibility of damage to the motor due to situations such as seriously overloaded boat lifts and poor power situations by simply shutting down the motor before it is burned out. It is always recommended that, in a poor power situation, a battery powered system is suggested over AC Power.
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1.0 Power recommendations for the AC Leisure Pro Shore Commander

- Licensed Electrician

Warning: Do not plug your AC Leisure Pro Shore Commander into a 220v AC power supply or higher.

Damage will occur resulting in voiding of the manufacturer's warranty.

To prevent serious injury due to electrocution, a licensed electrician is highly recommended by the manufacturer to assess that all AC wiring is correctly installed before the AC Leisure Pro Shore Commander should be used.

1.1 Power recommendations for the AC Leisure Pro Shore Commander

– General Power Recommendation

A. The AC Leisure Pro Shore Commander motor is only as good as the power it is supplied while “**Under Load**” and will cause damage to the AC motor voiding the Manufacturer’s warranty.

The AC motor UL tag indicates that the supply is 240/440 – 3 phase. however, since it is designed to operate as a single phase system, 120v AC is required.

Any voltage over 120v can cause severe damage to the circuit board and void all manufacturers’ warranty.

A 20 amp GFI (ground fault Interrupt) protector “must” be installed on the shore by a licensed electrician.

12–2 awg outdoor wiring is recommended for a distance of 100’ feet or less from the power supply to the AC Leisure Pro Shore Commander.

10–2 awg outdoor wiring is recommended for a distance of 100’ feet or greater from the power supply to the AC Leisure Pro Shore Commander.

*The normal operating voltage “**Under Load**” is between 114v – 120v AC with an amp draw between 6 – 15 amps.*

1.2 System does not work at all when plugged into AC power supply

A. Check power supply to the AC Leisure Pro Shore Commander system.
System requires 120v AC power to work properly – Refer to section 1.0 & 1.1

Plug a separate AC powered device into the outlet where the Commander system is located to make sure that there is power going through the line.

*Power drill, drop light etc. **Note:** This test is not to indicate proper level of current, but only to see if the power line is active.*

If there is no power from the power supply or through the power line.

Contact a licensed electrician

1.3 System has power but no touchpad or wireless key remote operation

- A.** Unplug the AC Leisure Pro Shore Commander from the power supply for approximately 5 minutes to allow the internal capacitor to discharge of all power.
- B.** After 5 minutes, plug the AC system back into the power supply and watch for a red LED light on the touchpad.
- D.** On the touchpad, depress the “code” button on the touchpad, followed by your four digit PIN number.
- E.** Once you depress the “code” button, a green led light should appear on the touchpad followed by a red light once you depress the fourth number of your PIN on the touchpad.

If system still does not work, continue with troubleshooting

Warning: Do not place your fingers inside the control box without unplugging the AC Leisure Pro Shore Commander from the power source. The VFD capacitors do maintain a 120v charge for 5 minutes after unplugged. Wait until all the led lights are off inside the control box before servicing.

- F.** Unplug the AC Leisure Pro Shore Commander from the power supply.
- G.** Loosen the plastic cable gland located on the control box with the wires leading to the canopy light and limit switch. Once the cable gland is loose, slowly push approximately a ½” of black wire into the control box.
- H.** Remove the six small black philip lid screws on the control box and carefully open the lid so you do not accidentally unplug any of the internal wires.
- I.** Visually inspect that all of the internal wire connectors are plugged in. ***Especially the black antenna wire to the circuit board located on the bottom of the control box lid.***
- J.** If the antenna wire is unplugged, the circuit board system will activate showing a red flashing LED light when the system is plugged in, however it will not allow the touchpad or key remotes to work.

K. If the antenna is unplugged, disconnect the power supply from the AC Leisure Pro Shore Commander – wait 3 minutes for all of the power in the VFD to discharge and then you may plug the antenna wire back into the three slotted pin header into the circuit board located on the bottom of the lid.

If you observe a red flashing light on the touchpad, this is a diagnosis light indicating that the circuit board has a direct short – Contact Commander Products

L. Carefully place the lid back on the control box, but make sure “no” wires get pinched or cut. Put the lid screws back into the lid fastening it to the control box and tighten the loose cable gland on the control box.

1.4 Wireless key remotes work but not the Touchpad

A. The only thing that can be done is to visually inspect that the touchpad is plugged into the circuit board by following steps in *section 1.3*

B. If the touchpad is plugged in and still no function, contact the manufacturer and they will send you a replacement touchpad.

1.5 Touchpad works but not the Wireless key remote(s)

A. Open the remote and check for corrosion. If corrosion is found, contact the manufacturer and they will send you a replacement remote.

B. If no corrosion is found and you have no blue flashing light on your wireless key remote – replace the battery.

Note: If a replacement wireless remote is obtained, it must be programmed into the AC system, Refer to section 2.0

1.6 Touchpad activates however motor stops running and will not go again

Torque Adjustment Programming

- A. Inspect boat lift
- B. The motor drive torque may be changed depending on the type of lift, winch and or boat weight.

If your AC system is struggling to bring the boat out of the water, a torque adjustment is needed provided you have the proper power supply and indicated in section 1.2

- C. Press and hold the “down” arrow on the AC touchpad, while pressing the down arrow button, press the 4 key then release both. When the torque changes, the green LED will flash X number of times to indicate what frequency / torque range the system is presently at. The less amount of green flashing LED lights, the more torque the motor has and less speed the unit will have.
- D. This is also in reverse to decrease the torque and increase the motor speed, merely by doing the same process as stated above except you need to press and hold the UP arrow key on the touchpad instead of the down arrow.

Number of flashes	Drive Frequency
1	40 Hz
2	45 Hz
3	50 Hz
4	55 Hz
5	60 Hz
6	65 Hz
7	70 Hz
8	75 Hz

***** **NOTE THE LOWER THE Hz,THE MORE TORQUE** *****

1.7 Programming Wireless remotes

Key Fob Programming

- A. To add / change any Commander Products remote key fob, press and hold the Code key down, then press the 1 Key and release both. The red LED on the touchpad will activate for 5 seconds. Press the “up” button on the key fob. The red LED light will go out once the signal is

received from the key fob remote control. Do the same for additional key fobs.

The unit has the capability to store up to 4 key fobs.

1.8 Canopy Light does not work

A. If bulb is bad, replace it with a 12v DC bulb #912. Do not use a #921 bulb since this bulb over 1 amp resulting in damage to the control board.

1.9 Motor will not pickup the boat Motor Frequency adjustment

See section 1.6

2.0 TOUCHPAD OPERATION

PIN Code Programming

A. To change the PIN code, hold the Code key down, and then press the 2 key. Release both. The red LED will begin to flash. Enter the new 4-digit PIN code. The red led will stop flashing once the 4th digit of the new code is entered.

Normal operation:

B. To unlock keypad, enter "1" "2" "3" "4" the factory default 4-digit code. On the first number key pressed the Green LED lights up to indicate that the keypad is in the code entry mode.

C. When the fourth digit of the programmed code is entered, the Red LED lights to indicate that the keypad is unlocked. You can then operate your lift. A timeout is started after code is entered and systems will auto-lock after 5 min of being dormant.

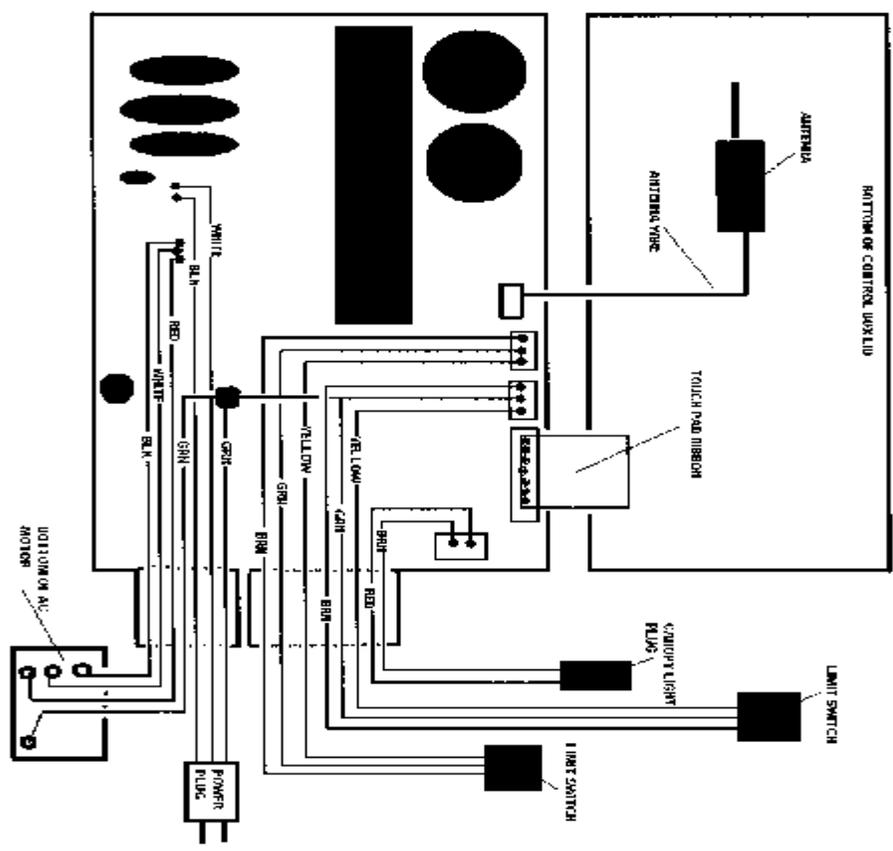
D. Pressing the Code key while the keypad is active will cancel the active mode and lock your system.

To Change Factory Code:

E. To enter your own user defined password , enter the factory default code { "1" "2" "3" "4"}, press & hold the code key button down and then at the same time, press and release the 2 button. Once the red LED starts blinking then enter your own custom 4 digit code. The LED's will automatically go out and your system has accepted the new code.

2.1 WIRING DIAGRAM

2011 AC WASHING DIAGRAM



2001 AC WIRING DIAGRAM

