

# Gate Operator Trouble Shooting Procedure

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If the gate is not open/close, then disconnect all the input device(s). Next press and hold the RESET button for 5 second to reset the operator. Wait for 10 seconds. Next press and hold OPEN, or CLOSE button to open the gate, or close the gate respectively. If operator works, then the problem most likely is from the input device(s). Connect the input device one by one to check which input device is defected.

## 1. Motor Does Not Run

### a. AC/SOL LED is OFF:

- Disconnect all external devices.
- Check battery breaker switch to make sure it is ON.
- Check the motor breaker to make sure it is turned to ON position.
- Make sure the AC Switch is ON and if necessary use a multi meter to check the input voltage to make sure it is 115VAC/220VAC.
- Using a multimeter to check the DC28V input voltage from J5 white connector on the main control board to measure it is 28 volt.

### b. AC/SOL LED is ON:

- Use a piece of clean dry cloth to clean and dry the photo eye sensor receiver and lens if it is a raining day, or check the photo eye sensor lens is pointed directly to its receiver.
- Check the motor breaker to make sure it is turned to ON position.
- Check the motor wire connection to make sure every wire is firmly connected inside the terminal connector.
- Check limit switch wires to make sure the close limit switch wire is connected to Common/GND, and the other wire is connect to the normal close position.
- Check Limit Switch spring level. The spring level may be stocked and can't go back to original position. Then need to replace the spring, or fix the spring to let it move freely.
- Using a multimeter to check the DC28V input voltage from J5 white connector on the main control board to measure it is 28 volt.
- Make sure to press down the remote control button down completely to open/close the gate. Sometime if you do not press down hard the button, then it might not get a good contact to send a command to the radio receiver.

- Disconnect all the external accessories first. Then check it to see if the motor can run. Sometime the Photo beam sensor, edge sensor, loop detector, or other safety sensor prevents the motor from running.
- Turn OFF the AC switch, Turn OFF the battery breaker. Wait for 30 seconds. Then turn the battery breaker and AC switch ON. Then reset the operator(s). This is a hard reset.
- Press and Hold OPEN, or CLOSE button on the main board to open, or close the gate. If the gate is moving normally, then the issue is most likely from the photo eye sensor that maybe is bad, or the wiring is not correct, or the alignment is not correct. Please fix this issue(Please see Photo Eye manual, and Platinum Photo Eye Installation manual for help to install the photo eye correctly).
- If you use the Multi Code 1090 receiver, please make sure the connection is correct. Connect from the receiver common pin to operator main board +28Vpin, and connect the receiver 24V pin to operator main board GND pin. If your connection is wrong, it can freeze the operator. Next turn the AC switch and battery breaker switch OFF. Wait for 30 seconds. Then turn these two switches back ON. Then reset the operator.

**c. Power Failure:**

- Check battery connection, and check each battery voltage (12VDC) to make sure the battery is still at good condition.
- Using a multimeter to check the DC28V input voltage from J5 white connector on the main control board to measure it is 28 volt.

**d. Overload Sensor and Alarm are ON:**

- Press STOP button once to silence the alarm. Check the gate path to make sure everything is clear of obstructions. Double check to GATE SNS is set correctly. Normal SNS setting is at 2 O'clock. If needed, set sensor to 11 O'clock, 9 O'clock.
- Go back to steps 1a & 1b if need.

## **2. Problems While in Motion**

**a. Stops then Reverse, or stop when opening.**

- Disconnect all external devices.
- Please check the gate path to make sure the path is clear with obstructions.

- Double check the GATE SNS is set correctly. Normal setting is at 2 O'clock. If need, set sensor to 11 O'clock, 9 O'clock.
- Check the gate hinge, or wheels, or other hardware to make sure everything is working normally.
- For Swinger. In the Winding date the gate may stop when it is opening, or closing. In order to add more drive force the operator. It needs set the sensitivity lower and may need to modify the longer swing arm to be more longer toward the other end of the gate(The longer of the longer swing arm, it mean more drive force). And please make sure have the latest revision of software rev-110.
- For Slider. Make sure set the sensitivity to lower, or to minimum. Please make sure it is the latest revision of Software Rev-110. You may also need to reposition the two UHMW idler pulley to make the chain as flat as possible when route from the sprocket. And modify the track to be more flat. Sometime is the gate is heavy, and if it is Uphill/DownHill track. Then sometime the gate may happen like this.
- Reset the gate operator to learn again.

**b. Travel over the Limit Switch:**

- Check the limit switch to make sure it is good.
- Check the limit switch wire to make sure the connection is correct.

**c. Does Not Close Automatically:**

- Disconnect all external devices.
- Plug in two Platinum Photoeye Bypass Relay Testers at CL-EYE and UL2 terminals. Then reset the operator. Wait 15 seconds. Next press down OPEN button, or CLOSE button to check the operator is working, or not. If it works, that means it is photoeye sensor problem. Please make sure photoeye sensor is aligned, clean, and functional.
- Use a piece of clean dry cloth to clean and dry the photo eye sensor receiver and lens if it is a raining day, or check the photo eye sensor lens is pointed directly to its receiver.
- Check TIMER pot to make sure the setting is correct, or not. Normally set to 2 O'clock.
- Check other external safe devices like Loop Detector, Bad Ground Loop, Photo Beam sensor, Edge Sensor, Radio to make sure none of them are activated.
- If using reflector type of photo eye sensor, please cover up the lens with a 4" inside diameter and 4" in length pipe to prevent rain, or sun light that can confuse the photo eye sensor. Please make sure the lens & the receiver front cover are both clean.

**d. Gate open by itself:**

- Check the Radio receiver to make sure it is good. Disconnect the radio receiver after the gate has been closed. Then wait to see if the gate still opens by itself.
- For slide gate. Make sure the gate does not hit the pole when it is at fully close position.

### **3. Primary / Secondary Gate Configuration**

**a. Gates Open and/or Closes in Opposite Direction (Swing Gate).**

- Switch the OPEN DIR LEFT/RIGHT switch to the other direction.

**b. Gates Do Not Close at the Same Time (Swing Gate).**

- Check the P/S SYNC pot to make sure it set to 12 O'clock. Then press reset button to reset the operators.

**c. Gates Do Not Close in Preset Order (Swing Gates).**

- Check P/S SYNC pot to make sure the setting is correct. If it is correct, press rest button to reset the operators.
- Check DIR switch to make sure one operator is set to secondary.
- Please make sure that every external device only connects to the Primary gate operator. Nothing should connect to Secondary gate operator. If any input device is connected to the Secondary unit, please change it to connect to the primary unit. Then press Reset to rest the operators.

**d. Sometime One Gate is Much Slower than the Other Gate.**

- Please make sure that every external device only connects to the Primary gate operator. Nothing should connect to Secondary gate operator. If any input device is connected to the Secondary unit, please change it to connect to the primary unit. Then press Reset to rest the operators.

**e. Gates Hit Each Other (Master/Slave Slide Gate ).**

- One gate over traveled. Make sure the limit nut has set correctly.
- Please make sure the end user never use pad lock to lock the gates together. Only maglock can be used to lock the gates. Please correct this problem then reset the operators.

**f. One gate is working and the other gate is not working.**

- Please make sure that every external device only connects to the Primary gate operator. Nothing should connect to Secondary gate operator. If any input device is connected to the Secondary unit, please change it to connect to the primary unit. Then press Reset to rest the operators.
- Check the limit switch to make sure it is good.
- Check the limit switch wire to make sure the connection is correct.
- Check Limit Switch spring. The spring may be stocked, can not go back to original position. Then need to replace the spring, or fix the spring to let it move freely.
- Check the motor breaker to make sure it is turned to ON position.
- Check the motor wire connection to make sure every wire is firmly connected inside the terminal connector.

#### 4. Others

##### a. Gate does not open at times and Alarm is ON (Swing Gate).

- Please make sure the arm position is set up correctly. Make sure the arm does not put a lot of pressure on the output shaft when the gate starts to open.
- Check Limit switch to make sure it is good. Then check the limit switch spring level to make sure it moves freely.

##### b. Gate(s) Does not Open or Close and Alarm is ON.

- Please make sure there is a 4-pin terminal plug into the J8 GUARD connector with a short wire that short GND & STOP pins.
- Check Limit switch to make sure it is good. Then check the limit switch spring level to make sure it moves freely.

##### c. Operator Makes Beeping Sound.

- Check battery. Battery voltage is low. Please make sure the battery breaker is ON, and the battery wire connection is good, and the charge led light is ON in the main board.
- If these steps are OK and the unit is still making the beep sound, then it is time to replace the batteries. Please replace both batteries at the same time.

**d. Operator does not work when AC LED is ON.**

- 1. Using a multimeter to check the DC28V input voltage from J5 white connector on the main control board to measure it is 28 volt DC.**
2. Next step is to remove all the input devices from the main board. The only terminal should connect to the board are Power Source white connector, Guard Connector, Limit connector, Motor CTL connector, and Motor Power red connector.
3. Then take the power source connector off. Wait for 10 seconds and put the power connector back to the main board.
4. Make sure the motor breaker on the PCB box is turned ON.
5. Press and hold Open button, or Press and hold Close button on the board to see if the motor runs, or not.
6. If the motor is running. Then the operator is good. And next you need to plug in the device back to the board one at a time to check the motor still can run by pressing and hold the Open/Close button on the board. By doing this you can figure out which input device prevents the motor not to run.
7. Fix the input device, or call our technical support to see if the device can work with our machine.
8. Use a piece of clean dry cloth to clean and dry the photo eye sensor receiver and lens if it is a raining day, or check the photo eye sensor lens is pointed directly to its receiver.