



## **System limitations – Do not exceed the system design parameters**

The maximum draw on any single output should be limited to 2.5 amps,

With a total power handling capacity/limit of 5.5 Amps. If you wish to drive higher amperage loads, install a relay, and use the RF system to control the relay. **User induced damage is not covered by warranty.**

- a) If you are using the wireless system in combination with a manual control (toggle switch, wired pendant, etc) you must either install diodes on the RF unit's outputs, or have a switch to disconnect/isolate the RF unit during manual control operation. Failure to do so will allow back-feed current into the RF unit's outputs, and cause permanent damage to the system. **Damage caused by electrical feedback is not covered by warranty.**
- b) Incorrectly connecting the power and ground leads, or output circuit wires may damage the system. Do not reverse polarity on the power & ground wires. Do not connect output wires to any live voltage source. Damage is likely to occur. **Damage caused by incorrect wiring/reverse polarity is not covered by warranty**

## **Basic troubleshooting actions and important information**

To quickly and effectively test/troubleshoot the system, the use of a voltage meter is suggested. It will allow you to quickly and efficiently locate and rectify any problems you are having.



### **#1 rule in troubleshooting: *Insufficient power supply = Insufficient performance***

**Important note:** The LED indicators, on both the transmitter and receiver, will function in low/insufficient power conditions. They are not indicators of ample supply voltage, and should not be viewed as such. . -- Test battery voltage, and replace or fully charge batteries as needed.

- 1) Replace the transmitter battery - (Type CR2032 – 3 Volt) Bar none, the most common cause of erratic, or faulty system operation is low transmitter (remote) battery voltage. This should be the first action taken if/when system behavior issues arise.

Any time the transmitter battery voltage drops below 2.85 volts, the battery should be replaced.



#### **Important information:**

- a) Even in newly purchased units, the installed battery may be partially discharged. Like a car battery, or any other, the battery will slowly discharge over time, even when sitting idle.
- b) **Any unit sent in for warranty service, where the only problem found is a discharged battery, will not be covered under warranty; service charges will apply.** Change your transmitter battery prior to making any other troubleshooting efforts.



- 2) Verify adequate supply voltage \ power to the receiver – The second most common cause of erratic, or faulty system operation is low power supply voltage. Test and or charge the vehicle 12V battery if/when system behavior issues arise.

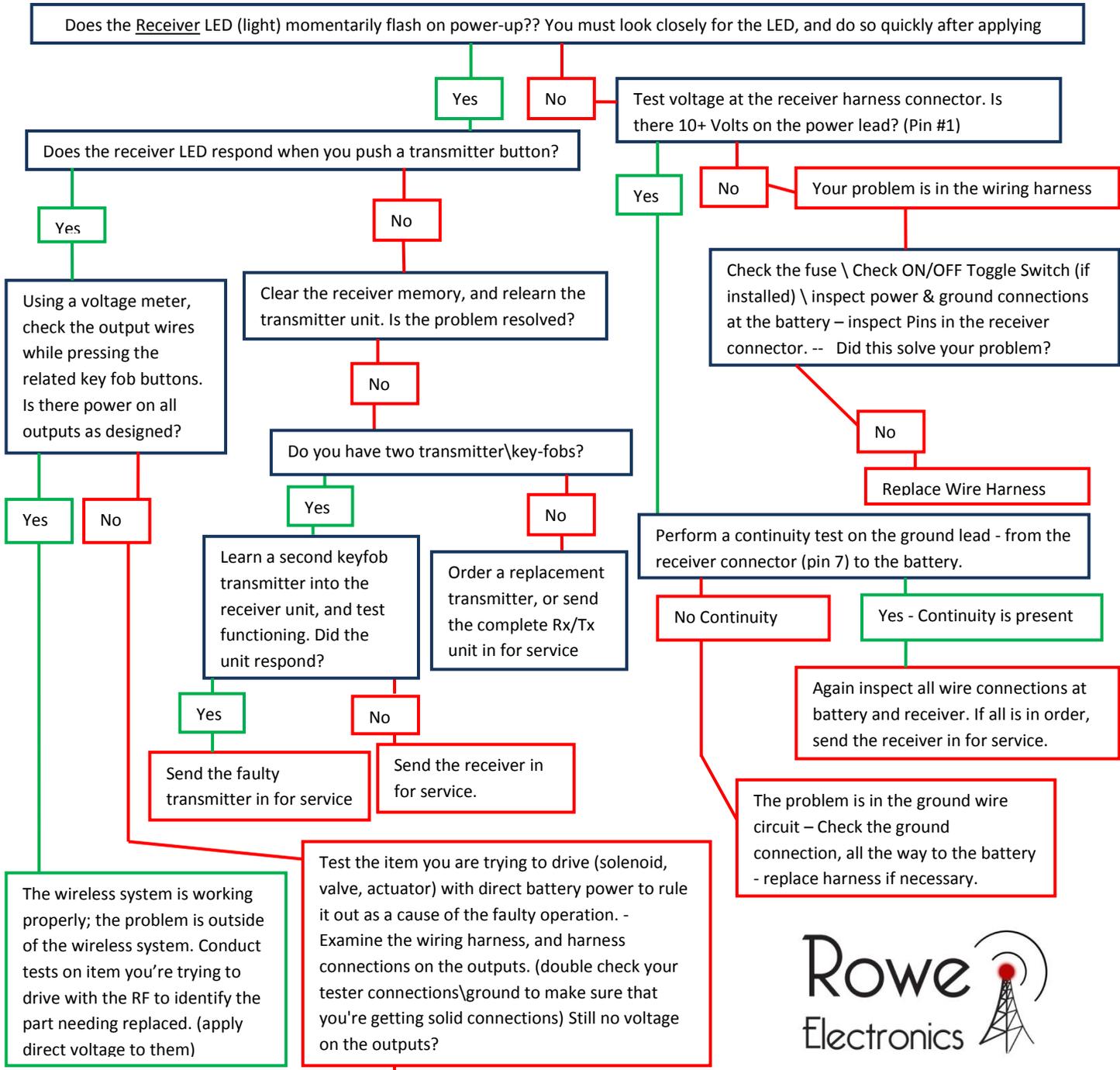
The radio system requires a constant power supply of 10.5+Volts. Any time the vehicle battery voltage drops below 10 volts (under load), the battery should be recharged, or replaced.



#### **Important information:**

- a) a 12V battery may be able to start a small engine, yet not be able to maintain an adequate, constant supply of voltage to the radio unit. **A battery's ability to start a small engine SHOULD NOT be taken as evidence of adequate battery power/voltage.**
- b) If a permanent battery charging system is not on your piece of machinery, and you're having trouble, it's likely that you have a low battery voltage situation. (a battery tender should be used to keep the battery fully charged) Charge your battery.
- c) **Any unit sent in for warranty service where, after a full service inspection, evaluation and performance testing procedure, no problem is found, service charges will be applied.** Test, charge, or change your vehicle battery prior to pursuing additional other troubleshooting efforts.

**If, after testing\changing the keyfob battery (2.85V +), and verifying adequate vehicle battery voltage (10+ Volts), you are still having difficulties, proceed as instructed; your owners/instruction manual will instruct you on battery replacement, clearing memory, and learning.**



Send the system in for service. It's likely that the outputs have suffered damage. -- Over current (drawing more than 3 Amps on an individual output, or more than 5.5 Amps total) will cause this type of failure, as will allowing electrical feedback into the outputs. (most often found in aftermarket situations where a manual control switch has been installed, and no protective diodes have been installed on the outputs. -- While the RE3 units are highly dependable, highly durable units, it is possible that a simple system failure has occurred, with the exact cause unknown. A thorough service evaluation will yield information as to the cause of failure.

*The RE3 RF systems have a one year manufacturer warranty. If your system is less than one year old, contact the vendor\OEM you purchased the unit from for **warranty** service. Per their standard warranty procedure/process, the vendor will provide specific instructions as to how you should proceed.*

*If your system is over one year old, contact your vendor for the purchase of a replacement unit, or contact Rowe Electronics directly for **non-warranty** service. We're able to repair most units, and restore them to full functionality and dependability.*