

# **6000DC Single 12V Motor Wireless Controller Kits With Extra Options**

**READ ALL DIRECTIONS FIRST BEFORE PROCEEDING**

**NOTE: SEE THE QUICK PROGRAM INSTRUCTIONS BEFORE OPERATING THE FIRST TIME.**  
**DO NOT REMOVE THE TRANSMITTER BATTERY**

Seek the help of someone that has electronics knowledge before proceeding with installation. Please follow programming directions only if you need to reprogram due to troubleshooting, new remote, etc. Always disconnect power and ground cable when not in use. Do not mount the receiver near a vibrator. Use rubber grommets when mounting receiver box. Never jump start or put a battery booster on the vehicle without first disconnecting power to the receiver unit. Failure to do so will permanently damage the unit (no warranty for burnt boards whatsoever). If you plug the unit in and it immediately runs you have the power and ground crossed and have burnt the unit. Always disconnect the power from the unit when not in use. **Never jump start a battery or battery boost with unit connected.**

## **For use with 12-volt dc voltage only**

### **How it Works:**

The 6000DC Dual DC Motor Controller that provides RPM control for up to 1 single, DC motor up to 60AMP (Larger motor or conveyor or auger motor) and an on off circuit for a vibrator or light. The RPM control is done by providing the user 5 speed motor control in 1/5 increments. The 6000DC incorporates an automatic shutdown to protect the motor and electronics.

- Automatic shut down if motor is locked up. Unit will shut down for approx.30-60 seconds before you can attempt a restart.
- Automatic shut off if the current draws do not drop below the rated amps after 5 to 7 seconds. Once again, the receiver will shut down for 30 to 60 seconds. You will need to investigate the problem as if you continue to override the control you will cause permanent damage to the receiver, motor or wiring.

## **6000DC**

- Receiver box with external antenna, power cord with dust cover
- Transmitter with rubber boot lanyard and label
- 24' vehicle Power Ground cable (cut to desired length) Black to battery Ground, Black with Red tracer to "Out" lug on breaker

## **Parts needed to install 6000DC**

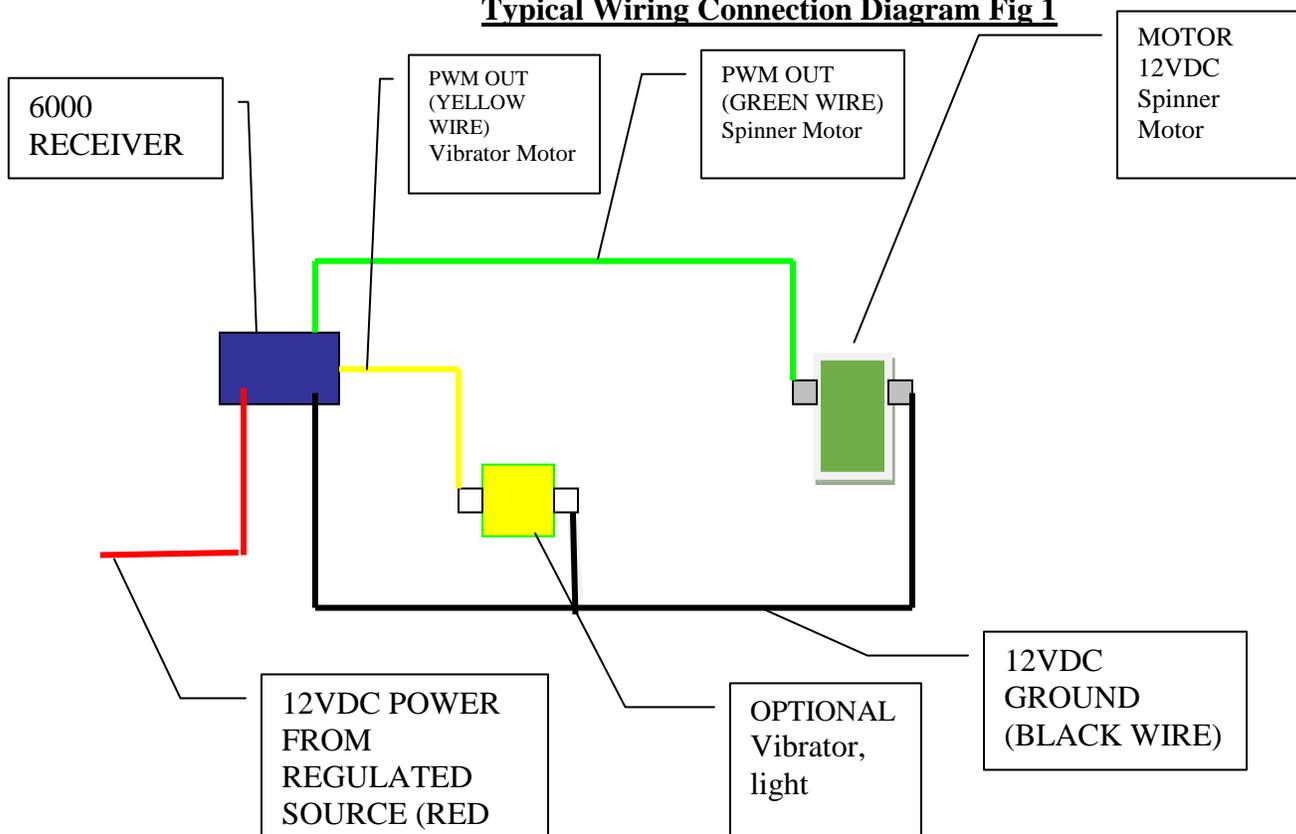
- Breaker
- Short battery cable from positive battery cable to in lug breaker
- 3 seal-tight pre lubed wiring connectors (1) 3-lug, (3) 2-lug
- 4 anti-vibration washers for mounting receiver box
- 4 stainless ¼ x 1" bolts with nylock nuts for mounting between receiver box and spreader
- 2 crimp-on, solder-on truck-side power cord terminal ends

# Wiring Directions for 6000DC 12V Single Motor Wireless Controller

**IMPORTANT you must cap off any wires not used failure to do this will cause damage to the unit.**

1. Remove all current OEM Wiring, module boxes and switches from your salt spreader. You will not need any of it ever again.
2. Use the provided purple seal-tite connectors for all connections at the wireless receiver.
3. Determine which motor controls your auger or conveyor this will connect to the Green wire of the receiver.
4. Connect the “green” receiver wire to the red or “hot” side of the spreader motor.
5. Connect the “black” ground wire to the ground side of the spreader motor.
  - a. Optional vibrator or accessory ground would also tie in here if you are using.
  - b. NOTE: if these are connected wrong, the spinner would simply spin the wrong way. Reverse the wires at the motor to correct.
6. At the truck’s battery supply, use the short power cord to go from the positive battery to the “in” lug of the provided circuit breaker.
7. Connect the red positive of the 24’ truck cable to the “out” lug of the breaker.
8. Connect the black ground of the 24’ truck cable power/ground cable to the negative post of the battery.
9. Secure the breaker under the hood of your truck and away from direct heat. Tape and protect all bare connections.
10. Run and secure the 24’ quick disconnect power/ground cable to the desired location and away from direct heat/sharp objects.
11. Yellow wire would be used for a vibrator on/off, light, or other auxiliary application only and not to a motor. Tape and cap if not used, this is a “hot” wire.
12. Always test the functioning of your motors before closing the lids on the seal-tite connectors. We also suggest tightening all connections twice and adding dielectric grease before closing the covers on the seal-tite connections.
13. Use the included dust covers on each end of the power cords to protect from corrosion.

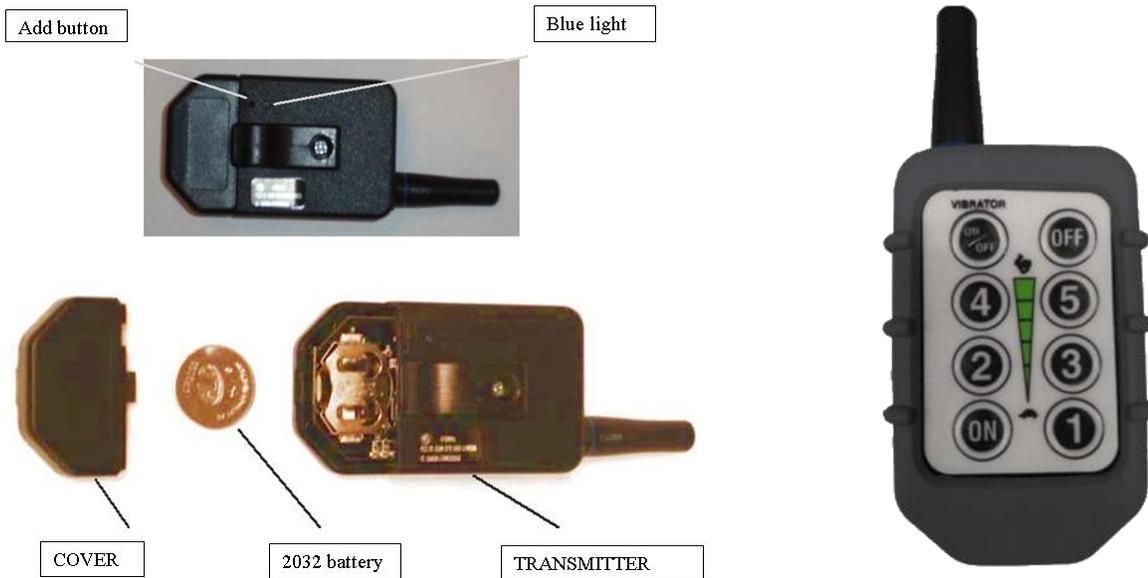
**Typical Wiring Connection Diagram Fig 1**



## IMPORTANT MAINTENANCE INFORMATION Figure 2

- Use dielectric grease and clean connections on a regular basis
- Always unplug the power cords (positive/negative plug) when not in use. If you do not, this will enhance corrosion and cause your connections to fail.
- Do not use the wireless transmitter/key fob if frozen. Warm it up first before use or it may not operate properly.
- **Do not jump-start the vehicle with power connected to the spreader. This could burn up the unit and void warranty**

## OPERATION: STANDARD 6000DC TRANSMITTER SHOWN Fig 2



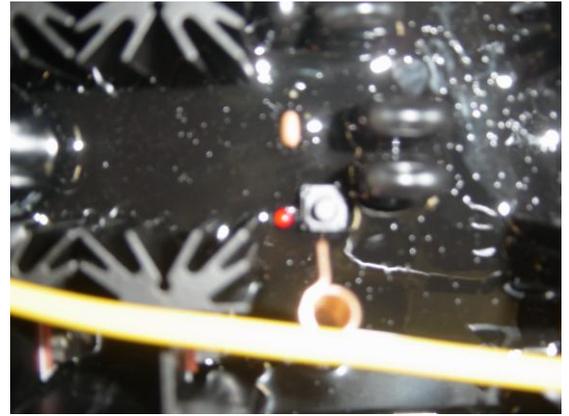
Shown above is a typical transmitter for wireless operation of a 12VDC motor spreader. The button functions are as follows:

- Buttons 1-5 are variable speed controls
- On/Off – button controls on/off power for vibrator/accessory
  - Vibrator on/off single on, off switch can also be sued for an LED light. Each single press of the button turns the accessory on/off.
- On/Off – button controls power for the spreader motor

NOTE: It is recommended that when the DC motors are under high loads, that the control first be started at medium to high speed for the first 1 to 5 seconds of operation to avoid damage to the motor or controller as well as voiding the warranty. Always start your spinner motor first.

## Programming Transmitter to Receiver:

**QUICK SETUP OF NEW UNIT**- with power connected, remove the 4 cover screws from the receiver. Press the black button once (it should begin blinking red. Press and release any button once on the transmitter while the red light is still blinking. The red light will stop flashing after 15 seconds. You are now programmed.



### **If quick programming fails try this**

The following are step-by-step procedures for setting the unique address between the transmitter and receiver or adding extra transmitters to the receiver.

**NOTE:** You need to be next to the receiver and the receiver needs to have verified 12-volt power and ground connected, along with the receiver cover removed.

1. On the backside of the transmitter, use a paperclip and **GENTLY** insert it in the hole next to the clear blue window. See figure 2. Once the button is pressed, a blue LED will begin to flash for 15 seconds. While the blue light is flashing, Flip the Transmitter over and push and release each button individually.
2. Make sure the blue light stops blinking before proceeding.
3. Look inside the receiver box next to the small red LED light and press the black programming button. The red LED will begin to flash for 15 seconds.
  - a. **NOTE:** if the flash is dim, check your power and ground connections, clean connections, or repair.
4. While the red LED is flashing, Push and release any single button on the Transmitter.
5. The red light will go out automatically. Programming is now complete.
6. Re-install the cover on the receiver.

**NOTE:** The transmitter battery can last for years. Before removing the battery, you can check if it's still good by using the paperclip method outlined above. As long as the blue light starts flashing, the battery is fine. If you do attempt this, you will need to complete the rest of the programming process.

## OPTIONAL – MEDIUM AND LARGE TRANSMITTER PROGRAMMING

1. Make sure the receiver and transmitter switches are powered on.
2. Remove cover from receiver
3. Press the black button. It will begin to blink.
4. While blinking, press and release any button on the transmitter.
5. You will now be programmed from the transmitter to the receiver.

## TROUBLESHOOTING – READ THIS

- Do not change your transmitter battery unless you have followed proper troubleshooting for programming and reprogramming your transmitter to the receiver (see above).
- Always test your functions before loading your spreader so you can visually see and hear the different RPM functions.
- Make sure your discharge chutes are open and baffles adjusted to the material you are using.
- Keep the transmitter out of extreme cold or warm up before using.
- To verify power to the receiver, remove the cover and press the black button. If it blinks red, there is power to the unit.
- Keep power/ground connections clean and tight.
- Use dielectric grease and seal backside of all connections.
- Always disconnect power and ground cable when not in use.
- **Do not jumpstart your vehicle while the spreader is connected.**

- If a timeout situation occurs on your spreader and continues to re-occur beyond two times, the operator needs to check for reasons why the spreader motors will not turn. Continually trying to start a jammed motor will cause damage to the receiver and the motor.
- Transmitters are a wearable part. We suggest having a spare in case you would lose it.

### **WARRANTY INFORMATION**

- 1-year warranty on wireless receiver and wireless transmitter. See specific wireless warranty on the website for in depth details.
- User must maintain good, clean and properly connected connections in order for proper operation and to avoid damage to the receiver as well as possibly voiding the warranty. It is recommended that you use a battery disconnect when the unit is not in use, as continuous powered wiring will enhance corrosion of wiring.
- We have no control over the end user's method used to install our wireless controllers. For any warranty consideration, all units must be sent back for inspection and testing. Burnt boards or any modification of factory wires of any type means that failure to follow proper installation has occurred. With electronics, care needs to be taken and directions need to be followed in order to keep your warranty intact. All warranty claims will require pictures of the installation along with battery, fuse or breaker installation.
- All warranty consideration on electronics requires the user to send in pictures of the application showing the connections made from battery, breaker to control and motors. Contact us for a return RMA.