

6000DC A-1047 Single 12V Motor Wireless Controller Kits With Extra Options

READ ALL DIRECTIONS FIRST BEFORE PROCEEDING

NOTE: SEE THE 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, ect. 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. Before connecting this device to equipment make absolutely sure the equipments components are operating properly and freely. **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.

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 Kit Contains- not receiver or transmitter/ receiver only orders do not come with accessories

- Receiver box with external antenna, power cord with dust cover
- Transmitter
- Breaker (**must be used**)
- Short battery cable from positive battery cable to in lug breaker
- 24' vehicle Power Ground (cut to desired length) cable Black to Positive battery Red to "Out" lug on breaker
- 3 seal-tite pre lubed wiring connectors
- 4 anti-vibration washers for mounting receiver box
- 4 fasteners for mounting between receiver box and spreader
- 2 crimp-on, solder-on truck-side power cord terminal ends

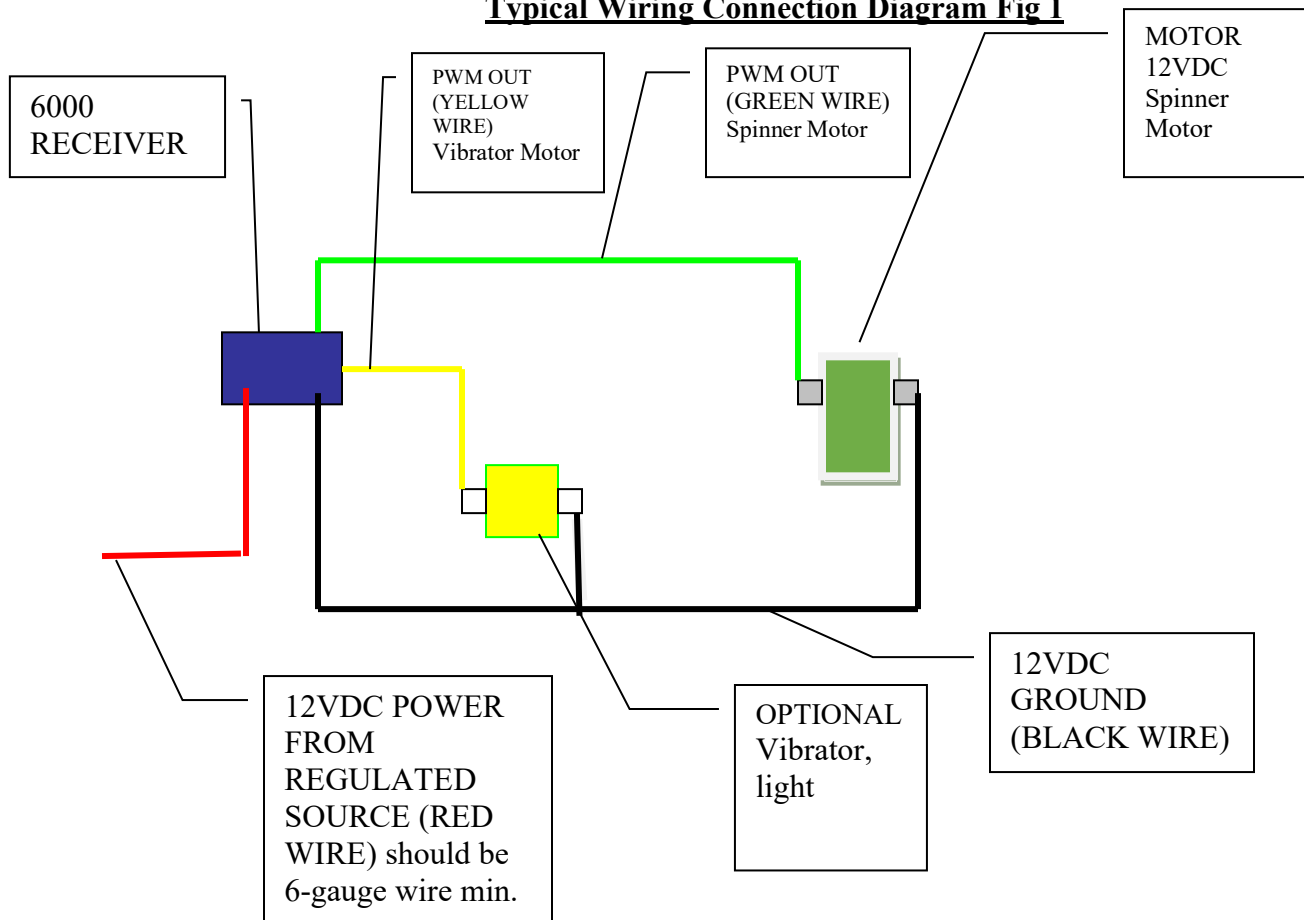
WARNING – spreader vibrators are made for momentary use only. Extended use will cause the vibrator to heat up and require more amperage which will damage the wiring, and eventually the receiver unit. As a safety precaution you may install a 10 amp in line fuse on the yellow wire between the vibrator and the receiver.

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.
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



6000 DC 3 EXTRA 14GA WIRES

NOTE THERE WILL BE 3 OPTIONAL POWER SUPPLY WIRES

- (1) RED WITH BLACK STRIPE AND (2) RED WIRES. **TAPE AND TUCK ANY OF THESE UNUSED WIRES**

THESE ARE ALWAYS HOT WIRES WHICH MAY BE USED ONLY WITH ACCESSORIES THAT DRAW NO MORE THAN 5 AMPS OR CAN BE USED WITH A RELAY TO PROVIDE MORE AMPERAGE. THESE WIRES IF USED ARE TO BE USED WITH A MANUAL SWITCH AS THE TRANSMITTER WILL NOT CONTROL THESE OPTIONAL WIRES.

MT-8 Wireless Transmitter

The MT-8 wireless transmitter is 2.87" x 4.65" in size. This industrial unit can be mated with Control All Wireless's current lineup of wireless receivers. All MT-8 transmitters come from the factory with a pre-install address (1 in 16 million). The MT-8 will transmit up to 8 individual signals to the wireless receiver using buttons 1 thru 8.

Button Indicator LED.

This LED will light up when you press any of the 8 buttons, and go off when you release the button. If the LED doesn't light up the MT-8 will still work but it's time to change batteries



Programming indicator LED.

This LED will light up for 15 seconds after you press the programming button on the back and will go out on its own.

Programming

- Turn on the transmitter by toggling the switch on top to the right
- Make sure receiver has power and the cover of the receiver is off. You can test if the receiver has power by depressing the black button inside. The right red led will begin to flash if power is present. Wait until the light goes out before continuing with programming.
- You will want to program the MT-8 remote within a couple feet of the receiver
- MT-8 programming hole is found on backside of MT-8
- Using a paperclip carefully depress the button threw the hole on the backside of the MT-8
- Flip the MT-8 over and you will see a red LED flashing on the upper right side of the transmitter. While the LED is flashing, push and release each of the 8 buttons one at a time.
- LED will stop flashing after 15 seconds of pushing programming button. Wait until the light quits flashing before continuing.
- Next depress the black button inside the receiver. The receiver led will begin to flash. Again depress each button one at a time on the transmitter. When finished wait until the receiver light stops blinking. You are now programmed test all functions. Note if a function seems to be missing. Reprogram.

Buttons 1-5 are variable speed controls. Vibrator or accessory on off.



Programming Hole

Battery

Battery Cover

Replacement

The MT-8 uses 2 standard Alkaline AA batteries. If the MT-8 is going to be used in below 0 Fahrenheit conditions, we recommend changing the batteries to Lithium. In normal use it will provide 1 to 2 years of operation. To replace the battery, remove the cover on backside of MT-8. Observe the battery polarity when replacing.

In rare instances the batteries may lose connection with the terminals and need to be rolled.

IMPORTANT MAINTENANCE INFORMATION Figure 2

- Use dielectric grease and clean connections on a regular basis. Use anti-seize on receiver screw cover.
- 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**

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. Use anti-seize on receiver cover screws
- Always disconnect power and ground cable when not in use.
- **Do not jumpstart or use a battery charger or booster on 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

- 90 day limited warranty on wireless receiver and wireless transmitter. See specific wireless warranty on the website for in depth details.
- Check online for any updated directions at <https://www.controlallwireless.com>
- 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.
- Due to the corrosive environment these units are operated you must keep all electrical components clean.
- 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 in tact. 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.