

Control All Wireless

NOTE TRANSMITTER HAS BEEN PRE-PROGRAMMED TO THE RECEIVER.

600DC1 Wireless Variable Speed DC Motor Controller

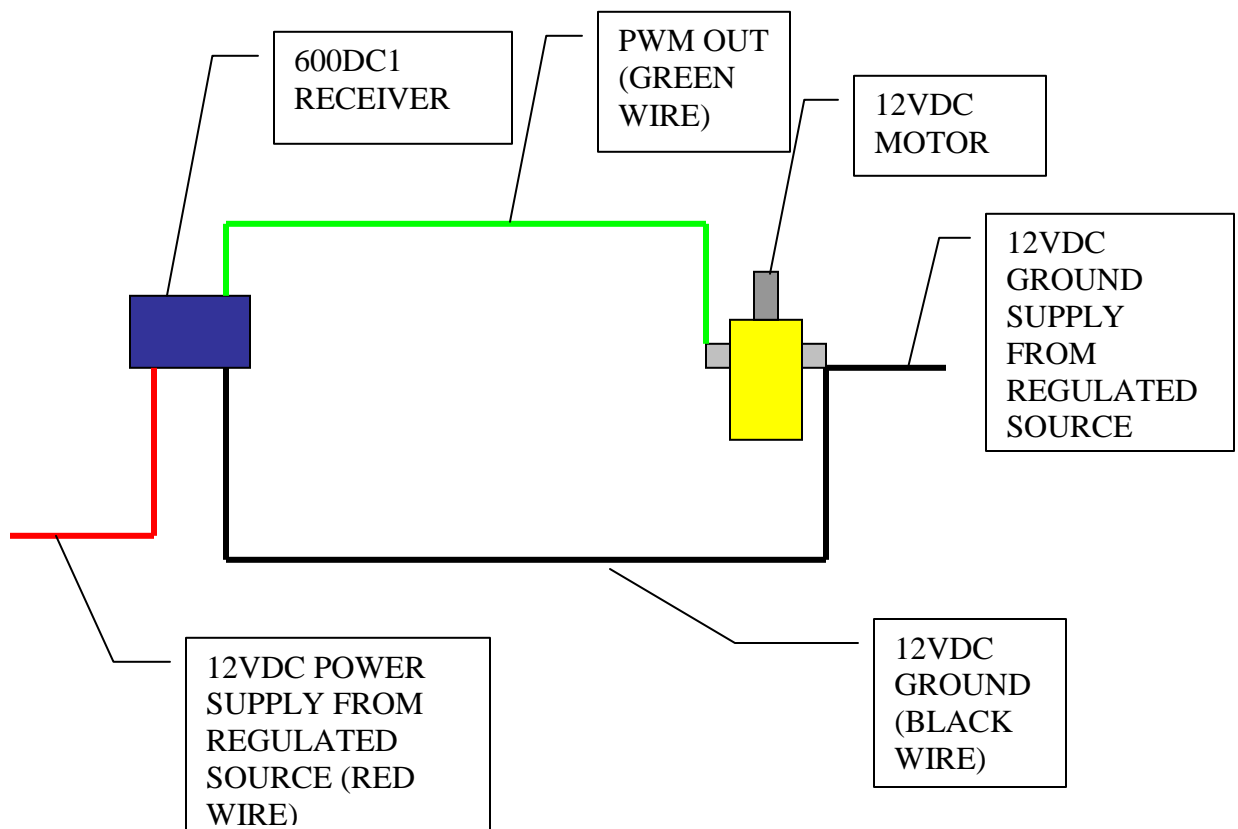
How it Works:

The 600DC1 Wireless DC Motor Controller provides RPM control for a single, 2 pole DC motor that can output up to over 200 amps for up to 1 seconds and a continuous amperage of up to 80 amps. The speed or RPM control is done by providing the user 5 outputs, approximately 1/5 of the maximum motor RPM. The 600DC1 also incorporates a full RPM feature (Blast) that runs the motor full speed for 6 to 8 seconds and then automatically shuts off and an E-Stop.

To protect the motor and electronics, the 600DC1 has built-in safety circuits. These include:

- Automatic shut down if motor is locked up. How this is done is if the receiver senses a current draw of more than 200 amps at start up for more than approximately 1000mS, the unit will shut down from 1 to 30 seconds.
- Automatic shut off if the current draw does not drop below 75 amps after 6 to 8 seconds. Once again, the receiver will shut down for 1 to 30 seconds.

Typical Wiring Connection Diagram



*****User must maintain good, clean connections for proper operation and to avoid damage to the receiver and void the warranty*****

OPERATION:



600DC1 TRANSMITTER

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

1. **ON/** This button turns on the receiver unit and will allow the receiver to function. It also will stop the unit, but does not shut down the receiver.
2. **#1/** Slow speed setting of approximately 1/5th of full motor speed.
3. **#2/** Speed setting or approximately 2/5th of full motor speed.
4. **#3/** Speed setting or approximately 3/5th of full motor speed.
5. **#4/** Speed setting or approximately 4/5th of full motor speed.
6. **#5/** Full Speed.
7. **Blast/** A timed 6 to 8 second full speed with auto shut down.
8. **OFF/** Shuts down the receiver unit. Must be turned on using Button #1

****** It is recommended that when the DC motor/s is 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 control and may void the warranty******

Programming Transmitter to Receiver:

The following are the step by step procedures for setting the unique address between the transmitter and receiver or adding extra transmitters to the receiver (up to 40 transmitters).

1. Disconnect green PWM wire from motor and cover terminal end.
2. On the backside of the standard Transmitter, use a paperclip and insert it in the hole next to the clear blue window. Once the programming button is depressed, a blue LED will begin to blink for 15 seconds. Flip the Transmitter over and firmly depress all 8 buttons starting with the ON button within 15 seconds. Now the Transmitter has acquired a 1 in 16 million address. **MAKE SURE THE BLUE LIGHT GOES OUT BEFORE PROCEEDING.**
3. Next step is to remove the receiver box cover noting the drain hole positions in the cover. With the receiver connected to a 12VDC power source look inside the box next to the red LED depress the black programming button. The red LED will begin to flash for 15 seconds. Take the Transmitter while the red LED is flashing and firmly depress the ON button within the 15 seconds. Now the unique address of the Transmitter will only be recognized by that matched receiver. The red LED will automatically shut off after 15 seconds. To make sure the programming procedure was successful, depress any of the Transmitter buttons and the red LED in the receiver should light. Re-install the cover noting drain hole position, depress the "OFF" button on the transmitter to make sure the unit is off and re-connect the PWM (green wire) to the motor. The RF-600 is now ready to operate the DC motor.

Specifications:

- Up to 200 amp output for up to 1 second.
- Continuous output of up to 75 amps.
- 5 motor speed outputs of approximately 1/5, 2/5, 3/5, 4/5 and 5/5ths of motor current draw.
- Built in E-Stop using OFF button.
- 12VDC with spike protection up to 40VDC
- Built-in over current safety protection. If a lock-up condition occurs at the motor causing the motor to draw more than 200 amps the unit will automatically shut down and must be turned back on using the ON button after the circuit temperature drops to an acceptable range taking 1 to 30 seconds. **Warning:** If this situation continues to re-occur the operator needs to check for reasons why the motor will not turn. Continually trying to start a jammed motor will eventually cause damage to the receiver and motor.