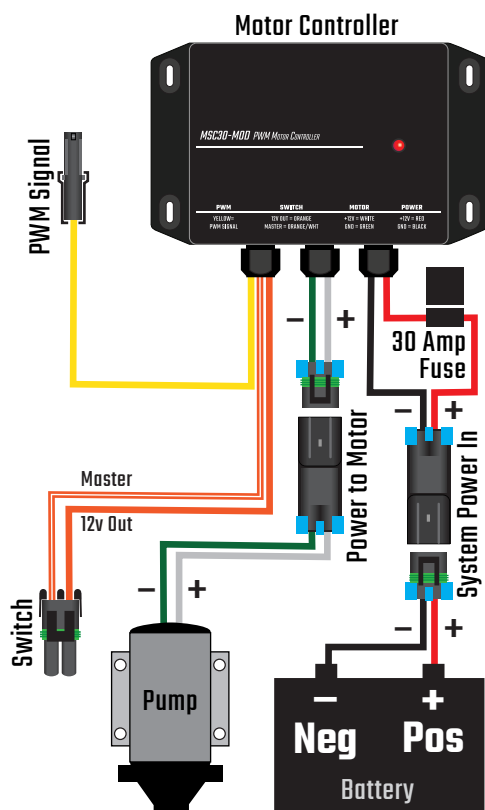


PWM MOTOR CONTROLLER

12V MOTOR CONTROL UNIT

MSC30-MOD Motor Controller Wiring Diagram



INSTALLATION & SETUP INSTRUCTION

- Mount the motor control unit in a location that the power switch can be accessed and the digital display can be seen.
- Connect wiring using description from below:

A) Connect 2 pin Metri-Pack connector with the **RED** and **BLACK** leads to the battery:

NOTE: When extending wires use 12GA wire or recommended power cables from your dealer.

NOTE: Do not power the unit from a battery charger.

NOTE: Do not hook to power strips or convenience plugs.

Wiring Color Code to **Battery**:

12 gauge Red = 12V

12 gauge Black = Ground

**** Ground must be hooked up to BATTERY, NOT to the frame ****

B) Connect 2 pin Metri-Pack connector with the **WHITE** and **GREEN** leads to the 12V motor:

NOTE: When extending wires use 12GA wire or recommended power cables from your dealer.

Wiring Color Code to **Motor**:

12 gauge White = 12V

12 gauge Green = Ground

**** Ground wire on the pump must be hooked up to the Ground wire from the controller, NOT to the frame ****

- Optional power cables and extension cables are available.

C) Connect the implement switch.

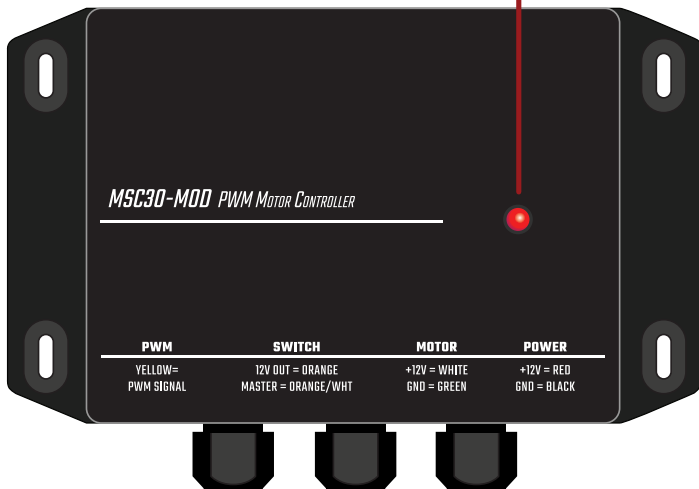
- Disconnect the jumper plug and connect the 3-pin Weather-Pack connector to your implement switch.
- The **solid orange** wire is positive 12V output and the **orange with white stripe** wire is the master or signal wire.
- Optional remote style switches are available.

NOTE: If you are not using a remote switch, use the supplied jumper.

D) Connect the PWM cable.

- Plug the **yellow** PWM signal cable into your PWM controller.

Power Light



Operation of the Motor Control

When it is time to check or test your motor control:

- The **Red light** will light up only if the implement switch wires are plugged together or the implement switch is in the on position. This indicates it has correct power.
- Make sure that the remote switch is activated or on.
- The Red light above the power switch will light when power is being supplied to the pump.
- The pressure will automatically be adjusted by the PWM signal from your rate controller.

Trouble Shooting

If the unit does not turn on:

- Check if implement wires are plugged in and the implement switch is activated.
- Check PWM wire connections and that the rate controller is telling the system to run.
- Check wiring for bad connections.
- Check wiring for correct polarity of battery connections.
- Check 30 AMP Fuse.

Note: If power wires are reversed to the battery it will not damage the control unit or the motor. It will blow the 30 AMP fuse if not hooked up correctly.

Note: If the White and Green wires (Pump wires) are connected to the battery the motor control unit **WILL BE DAMAGED**.

If the pump will not run:

- Check if the red light is on, the remote implement switch is activated, and the PWM controller is also activated.
- Check remote switch.
- Check if PWM signal.
- Check wiring for bad connections.