



## QuadLN\_S Stall Motor Driver Board Instructions

The Stall Motor Driver Board is an add-on board for the *QuadLN\_S* that allows users to control low current Stall Motor switch machines (Tortoise, SwitchMaster, etc). The Driver Board also supports Servos and you can use any mix of Servos and Stall Motors desired.

The Stall Motor Driver Board output voltage is 5 VDC which provides more than adequate motor torque for most applications. Two Stall Motor switch machines can be placed in parallel on an output, so only one output is needed for a crossover.

5 Volt Relays with rated coil current up to 40 mA can also be controlled using the Stall Motor Driver Board. The relay snubber diodes are built into the board.

## Plugging Stall Motor Driver Boards into the QuadLN\_S

Stall Motor Driver Boards can be plugged into as many *QuadLN\_S* I/O ports as desired. The *QuadLN\_S* must be running firmware version 3.1 or later. Turn power off before plugging or unplugging a Stall Motor Driver Board.

## QuadLN\_S Configuration

EXPANSION PORT

Relay

Mode  Signaling

Turnout

MAIN and AUX IO PORTS

Both IO

Mode  Main IO, Aux Turnout

Both Turnout

Configure all IO ports used for Stall Motor Driver Boards for **Turnout** mode. This is done on the **Quad-LN\_S** tab of the roster entry.

EXP 1 TURNOUT

Address LT

Lock LT

DRIVE

Type

Change Point

Set the **DRIVE Type** for each *QuadLN\_S* Turnout output that is used with a Stall Motor or Relay to **Stall/Relay**. This is done on the **Group** tab for each Turnout output that is connected to a Stall Motor.



## Connecting Devices to the Stall Motor Driver Board

Wire each Stall Motor or Relay to the Board as shown below using the included cables. Servos just plug in. Standard Servo Extension Cables can be added as needed.

Relays can be wired two ways as shown. It is best to pick the one that results in the coil being powered less often, but this is not required.

