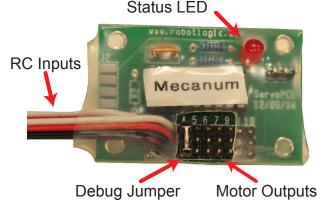
# RobotLogic.com

# **Mecanum Mixer**

The RobotLogic Mecanum mixer allows for simple RC-control of a mecanum drive robot. This mixer supports any combination of fwd-reverse, left-right, and sideways translation commands. It also functions as a failsafe; it immediately shuts off all outputs if an invalid signal is detected and resumes operation as soon as a valid RC signal is re-detected.



#### Connect Mixer to your RC reciever

Connect the servo cables to your RC reciever. The first input is the one closest to the left side of the mixer.

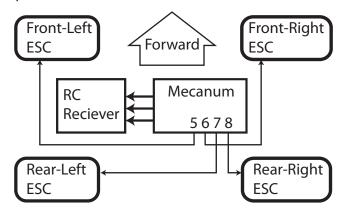
Input 1 Strafe (Left Right translation)
Input 2 Drive (Fwd-Reverse translation)

Input 3 Turn / Rotate

### **Connect Speed Controllers**

There are 4 outputs on the Mecanum mixer:

Output 5 Front-Left Motor
Output 6 Front-Right Motor
Output 7 Back-Left Motor
Output 8 Back-Right Motor



## **Initial Testing**

Put your robot on blocks so the wheels are not touching the ground for these tests. When the debug jumper is installed on output pin 4, the Mecanum mixer will execute a debug sequence to help you verify that each motor is controlled by the correct output and has the correct polarity. Each motor is run one at a time in the forward direction in the following sequence:

Front-Left, Front-Right, Back-Left, Back-Right, Pause

Watch the robot for a couple of times through the sequence and use the pause to identify the front-left motor. If the sequence is incorrect, then you have your speed controllers plugged into the wrong outputs on the mixer.

#### **RC Testing**

With your robot still on blocks, remove the debug jumper and use your transmitter to test the drive functions. If any motors are turning incorrectly you may need to invert channels on your transmitter.

#### **LED Status**

Off	No Power
On Solid	Valid Signal
Blink	Invalid Signal

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