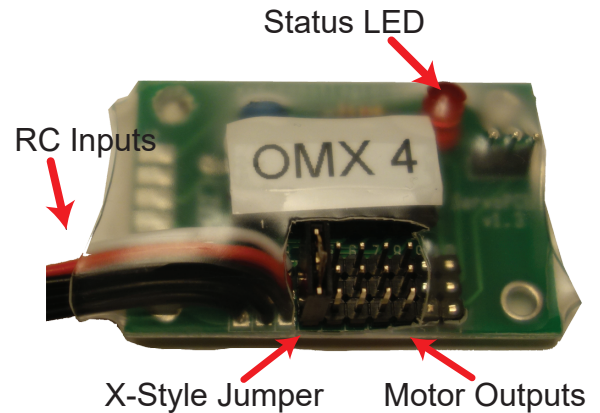


OMX4 Mixer

The RobotLogic OMX4 mixer can control a robot using 4 omni-directional wheels in either the 'X' or 'Plus' configuration. Using it, the driver can use any combination of fwd-reverse, left-right, and sideways translation commands to control their robot. The OMX4 mixer also functions as a failsafe as 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.



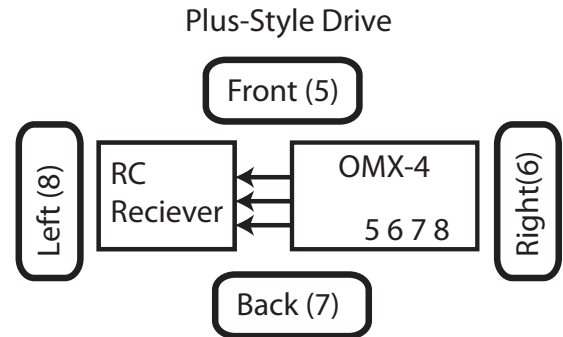
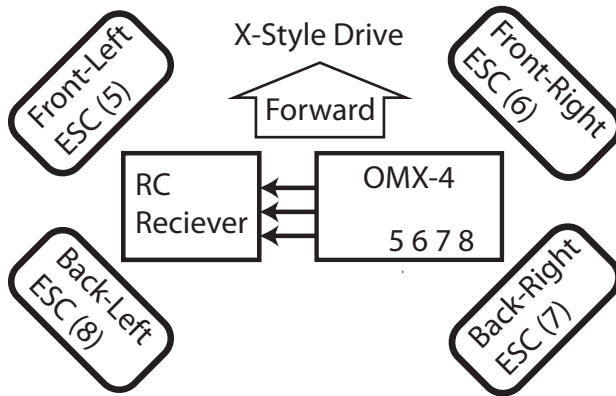
Connect Mixer to your RC receiver

Plug the OMX-4's 3 input cables into your receiver using the following convention

Input 1	Strafe (Left Right translation)	(typically channel 1)
Input 2	Drive (Fwd-Reverse translation)	(typically channel 2)
Input 3	Turn / Rotate	(typically channel 4)

Connect Speed Controllers to the OMX-4

If your drive-train uses an 'X-Style' drive, leave the jumper installed on the OMX-4. If it uses a 'Plus-style' drive then remove the jumper from the OMX-4. Then connect your speed controllers as shown in the corresponding diagram below:



Initial Testing

Put your robot on blocks so the wheels are not touching the ground for these tests. Test each type of input separately. Give a pure forward command and ensure that the wheels spin correctly. Then give a pure strafe command and verify the motors are moving correctly and so on. If any motors are not moving correctly, verify that the motor is being connected to the correct output on the OMX4. You may also need to reverse the polarity of the connection between the speed controller and the motor.

LED Status

Off	No Power
On Solid	Valid Signal
Blink	Invalid Signal

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