

# Pat's Uno Drop In Motor Driver Shield, for the Mecanum 4WD IR/BT Robot Buggy – Connections

Design Brief— Using 4 x Mecanum Wheels, 2 x L298N Motor Drivers, Arduino Uno, build a IR/BT Independent Drop In Shield.

Pat McMahon V1 4/6/2024

Uno Pin No	Connection to	Wire Colour	Wire Length (mm)	Connected/Done
D0	Bluetooth	Orange	40	
D1	Bluetooth	Yellow	40	
D2	Infrared	White	60	
D3	to L298N left side IN1	Black	150	Female Dupont Socket
D4	to L298N left side IN2	Orange	150	Female Dupont Socket
D5	to L298N left side IN3	Blue	150	Female Dupont Socket
D6	to L298N left side IN4	Red	150	Female Dupont Socket
D7	to L298N right side IN1	Brown	150	Female Dupont Socket
D8	to L298N right side IN2	Green	150	Female Dupont Socket
D9	to L298N right side IN3	Yellow	150	Female Dupont Socket
D10	to L298N right side IN4	Purple	150	Female Dupont Socket
D11	Buzzer +	Grey	30	
D12	Front LED's socket	Blue	40	*see wire connection lengths sheet
D13	Middle LED's socket	Orange	40	*see wire connection lengths sheet
A0	Back LED's socket	Red	40	*see wire connection lengths sheet
1st Gnd	LED Gnd socket	Black	20	
Vin	from L298N 5V	Red	100 + 60	
2nd Gnd	from L298N Gnd	Black	100 +60	
3rd Gnd	to – Rail	Black	60	
5V	to + Rail	Red	60	
3V3	to 330R to LED +	use 330R leg	—	

**\*Note– See the Wire Connection Sheet for detailed colour wire lengths and large Shield Connections Sheet.**