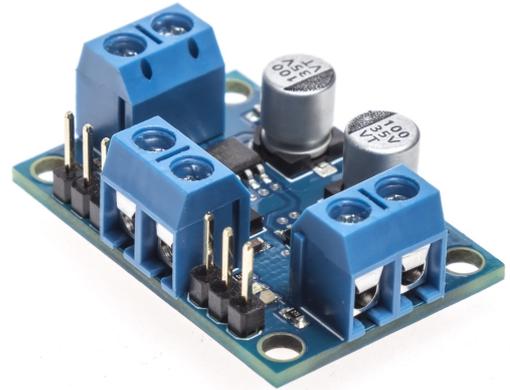Name: **Dual DC Motor Driver 4A V3**
Code: **MR001-004.3**

The *Dual DC Motor Driver 4A V3* allows to indipendently drive two DC motors, controlling both velocity and direction.

The minimum supply voltage allowed is 7V, so you can use also two-cell LiPo batteries (7.4V) that grant small dimensions and low weight characteristics. The maximum supply voltage supported by this board is 30V.

This board also provides direction LED indicators for both channels; this is very usefull during setup stage to verify the firmware behaviour (also without appling a real motor to the output).

INSTRUCTIONS

Two vias terminal blocks are the two outputs for motors (M1 and M2). The 3 pins strip connectors next to the power terminal block are used to control the 2 channels of this *Dual DC Motor Driver 4A V3*. Each of them has signals as reported on table 1.
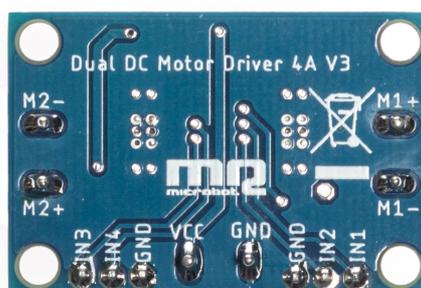
Name	Description
IN1	Input A of channel 1 (TTL input)
IN2	Input B of channel 1 (TTL input)
IN3	Input A of channel 2 (TTL input)
IN4	Input B of channel 2 (TTL input)
GND	ground

Tab.1 – Connections

To understand the meaning of these signals and their use you can read the following table (Tab.2), where all conditions are reported. Note that there are reported only conditions for one channel because conditions for both channels are just the same.

Inputs		M+ e M- output
A	B	
1	1	Motor stopped
1	0	Forward
0	1	Backward
0	0	Motor is in free running

Tab.2 – Conditions

SPECIFICATIONS

Name	Description
Supply voltage	7 - 30V
Supply current (logic)	10mA typ.
Output current	4A (2A per canale)
Data I/O voltage	TTL standard
Dimensions	36 x 24 mm
Weight	9,1g
Operating temperature	-40°C to +85°C

Tab.3 – Specifications