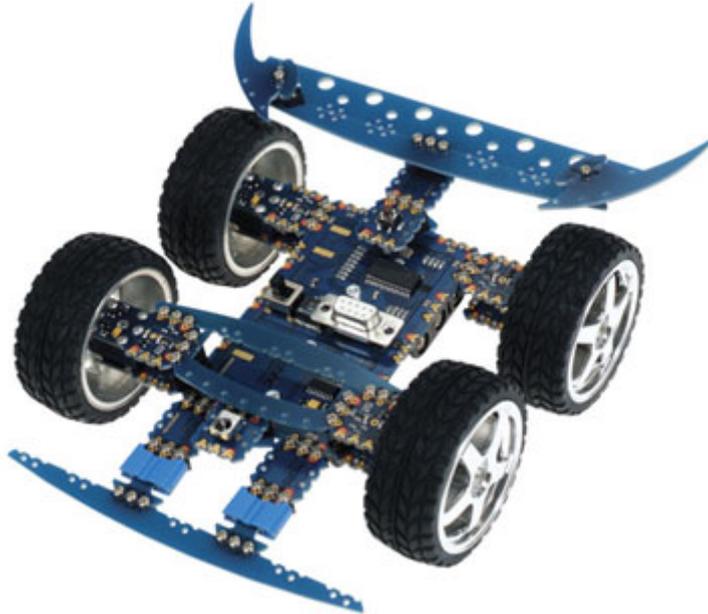


Wheel Pack Expansion Pack



Explanation

The wheel pack “Expansion Pack” gives your Viper the ability to cover more difficult terrain. This additional pack also enables your Viper to travel up steeper inclines. The extra wheels are also a huge benefit for Viper Sumo, giving the Viper greater traction when facing an opponent! Not only does this pack give the Viper excellent manoeuvrability, but makes the Viper look fantastic!

How it Works

The wheel pack is quite simple, it is just a matter of attaching the two extra micromotor modules as pictured above, or in any creative way you choose.

Pack Contents



Item	Qty
MicroMotor Modules	2
Tension Strut (3) 'C Shape'	1
Strip (5)	1
Strip (7)	1
Quarter Cap Modules	4
Plastic Brics	4
L3 MicrobriC Nuts	6
MicrobriC Screws	12
L8 MicrobriC Spacers	6
Rubber Wheel Adaptor	2
Chrome Wheels	2
Rubber Tyres	2

Example Code

Before writing the program, let's have a look at the "serout" and "pulsout" commands in BASIC. The "serout" command allows you to specify such things as the direction and speed of the motor. The pulsout command sends a tiny pulse to brake the motor rapidly for a quick stop.

They are written in the following formats:

Serout *pin*, i2400,["*Direction*", *Speed*]

Pin: This is the pin number the motor is connected to

i2400: This is the baud mode that the data will be sent at

Direction: Either "A" = Anticlockwise or "C" = Clockwise
***Ensure you use CAPITALS for the "A" & "C"

Speed: From 1 to 255. The lowest operable speed setting is around 35 and 0 is a special setting that allows the motor to 'coast' without braking.

Pulsout *pin*, 6000

Pin: This is the pin number the motor is connected to.

6000: The duration of the pulse, measured in microseconds

===Simple Motor Program===

;Initialise Motor output

high p4
pause 50

;Set the output high
;Give the motor module time to get ready

Main

Serout P4,i2400,["C",150]
Pause 5000
pulsout P4,6000

;Drive motor Clockwise at speed 150
;Continue for 5000 milliseconds
;Brake Motor by sending
;a pulse of 6000 microseconds
;to Pin 4

Serout P4,i2400,["A",150]
Pause 5000
pulsout P4,6000

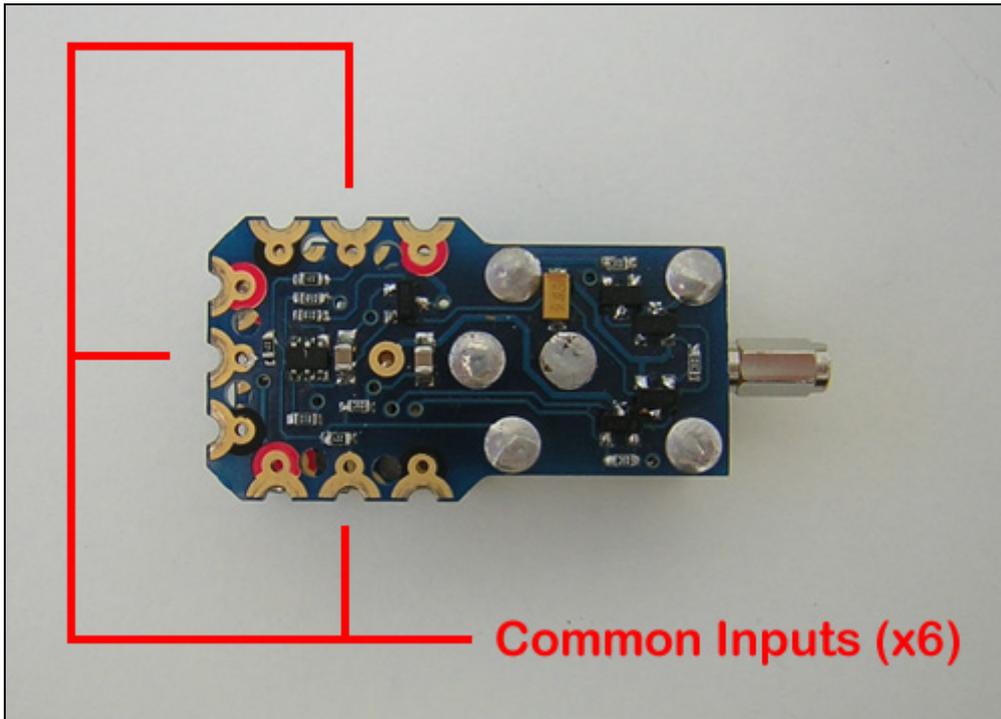
;Drive motor Anticlockwise at speed 150
;Continue for 5000 milliseconds
;Brake Motor by sending
;a pulse of 6000 microseconds
;to Pin 4

goto Main

;loop to repeat the code

End

Connection:



Specifications

Operating voltage	5 volts
Current Consumption:	
Free Running (Full Speed)	50mA
Stall Current	350mA
RPM (No Load Full Speed)	150
Stall Torque	700G.cm

Circuit Diagram

