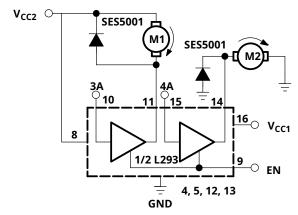
## 9.3.2 DC Motor Controls

Figure 9 and Figure 10 below depict a typical setup for using the L293 device as a controller for DC motors. Note that the L293 device can be used as a simple driver for a motor to turn on and off in one direction, and can also be used to drive a motor in both directions. Refer to the function tables below to understand unidirectional vs bidirectional motor control. Refer to the *Recommended Operating Conditions* when considering the appropriate input high and input low voltage levels to enable each channel of the device.



Connections to ground and to supply voltage

Figure 9. DC Motor Controls

**Table 2. Unidirectional DC Motor Control** 

EN	3A	M1 <sup>(1)</sup>	4A	M2
Н	Н	Fast motor stop	Н	Run
Н	L	run	L	Fast motor stop
L	Х	Free-running motor stop	Х	Free-running motor stop

(1) L = low, H = high, X = don't care

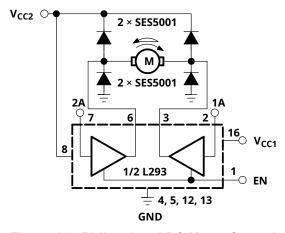


Figure 10. Bidirectional DC Motor Control

**Table 3. Bidrectional DC Motor Control** 

EN	1A	2A	FUNCTION <sup>(1)</sup>	
Н	L	Н	Turn right	
Н	Н	L	Turn left	
Н	L	L	Fast motor stop	
Н	Н	Н	Fast motor stop	
L	X	X	Free-running motor stop	

(1) L = low, H = high, X = don't care