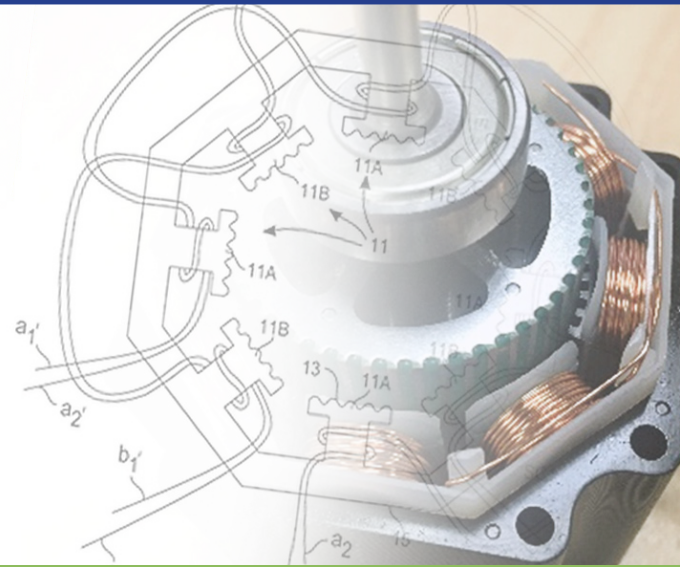


# Wiring

## CONNECTIONS



## Bipolar and Unipolar Operation

*Lin Engineering step motors are available with either 2-coil Bipolar, or 4-coil Unipolar windings. Bipolar motors have 4 leads, while unipolar motors have 6 leads. Additionally, some motors are designed with 8 leads, so they may be connected in a variety of ways.*

### Connection Instructions

By following a series of easy steps, the below charts can be used to properly connect your motor to your drive.

1. Determine how many lead wires your motor has 4, 6, or 8 wires. Locate the proper box below.
2. Next, examine the color code of the lead wires on your motor; find the row of colors that match your wires, this is your "color code". You will have either Code 1, Code 2, or Code 3. For example, if you have 4 wires and the wires are Red, Blue, Green, Black, your color code is 1.
3. Next, connect the proper color to the appropriate terminal on your drive. If you have a Bipolar drive, the terminal on your drive will be labeled A, A-, B, B-.

For example, if using the above 4 wire motor with color code 1, the Red wire would be connected to A, Blue connected to A-, Green connected to B, and Black connected to B-.

If you have a Unipolar drive, the terminal will be labeled A, B, C, D and A/C Common, B/D Common (or comm)

### Notes:



Indicates that the particular wire is not connected to the drive.



Indicates that two particular wires are connected to each other, but not the driver.



Indicates that two particular wires are connected to each other, and then connected to the indicated terminal on the drive. In this example, two wires are connected together, then both wired to terminal A on the drive.

## 4 LEAD WIRES

	1	2	3	4
Color Code 1	Red	Blue	Green	Black
Color Code 2	Brown	Orange	Red	Yellow
Color Code 3	Red	Red White Stripe	Green	Green White Stripe
Bipolar Driver	A	$\bar{A}$	B	$\bar{B}$

## 6 LEAD WIRES

	1	2	3	4	5	6
Color Code 1	Red	White	Blue	Green	Yellow	Black
Color Code 2	Brown	Black	Orange	Red	White	Yellow
Color Code 3	Red	Black	Red White Stripe	Green	White	Green White Stripe
Bipolar Drive Half Coil Connection	A	$\bar{A}$	A	B	$\bar{B}$	B
Bipolar Drive Series Connection	A		$\bar{A}$	B		$\bar{B}$
Unipolar Drive	A	A/C Comm	C	B	B/D Comm	D

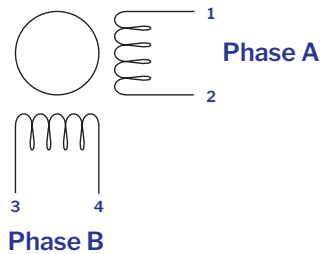
## 8 LEAD WIRES

	1	2	3	4	5	6	7	8
Color Code 1	Blue White Stripe	Red White Stripe	Blue	Red	Green White Stripe	Black White Stripe	Green	Black
Color Code 2	Red	Yellow White Stripe	Red White Stripe	Yellow	Orange	Black White Stripe	Orange White Stripe	Black
Color Code 3	Red	Black White Stripe	Red White Stripe	Black	Green	Yellow White Stripe	Green White Stripe	Yellow
Bipolar Drive Parallel Connection	A		$\bar{A}$		B		$\bar{B}$	
Bipolar Drive Series Connection	A			$\bar{A}$	B			$\bar{B}$
Unipolar Drive	A	A/C Comm		C	B	B/D Comm		D

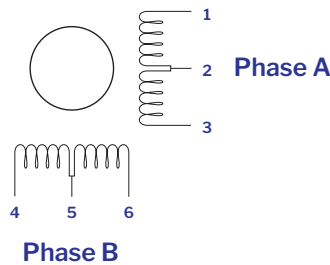
## BLDC Connections

Connections	HALL SENSOR CONNECTIONS					WINDING CONNECTIONS		
	Vcc	Hall A	Hall B	Hall C	GND	Phase A	Phase B	Phase C
Color Code 1	Red / White	Blue	Green	White	Black / White	Yellow	Red	Black

### 4 WIRES



### 6 WIRES



### 8 WIRES

