31306-MS

3A FULL BRIDGE STEPMOTOR DRIVER

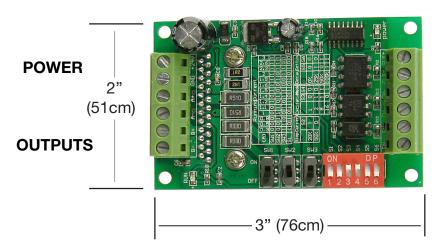
INPUT: 10-35VDC (24 Nominal) **OUTPUT:** Selectable up to 3A max. **STEP:** Full & 1/2-1/8-1/16 Microstep

Full bridge driver for 4 or 6 wire hybrid stepmotors. Automatic drop to Hold

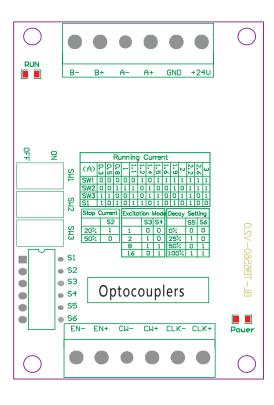
current with no step Input. Switch Selectable output current. .3A-3A Over temperature & current Protected. Under Voltage Shutdown

Opto isolated Step, Direction & Enable Inputs. (+5V Level) Terminal strips in/out.

Power and Run LEDs





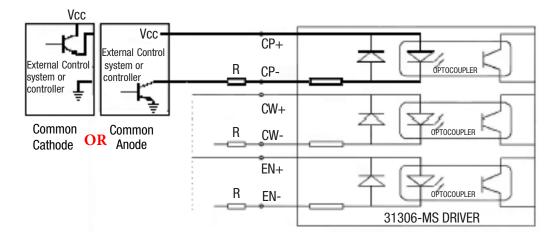


| Wiring Terminal symbol | Description |
|------------------------|---------------------------------|
| +24V, GND | Power positive and negative |
| A+, A- | Motor phase A |
| B+, B- | Motor phase B |
| CLK+, CLK- | Pulse positive and negative |
| CW+, CW- | Direction positive and negative |
| EN+, EN- | Enable positive and negative |

Warning:

- 1: Check the connection twice! The6560 chipset can be damaged if the motor or the power supply are not connected properly.
- 2: Don't connect a motor with a rated current in excess of 3A to this driver.
- 3: Do not set the current higher than the motor rated current!

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Note:

- 1: 6 input terminals can be connected as common anode or cathode.
- 2: The normal input voltage is 5V. If more than 5V, then a series resistor **R** is needed For 12V this resistance is 1K, For 24V the resistance is 2.4K..
- 3: When pulses are applied to **CP**, the motor will rotate.

 Motor will stop when there is no **CP** pulse, and the driver will change to a holding current of 50% or 20% of the Running Current & S2 setting
- **4:** Motor will rotate clockwise when **CW** is low level and counter clockwise when **CW** is a High level
- 5: Motor is enable when **EN** is low level and disable when **EN** is high level.

| Running Current | | | | | | | | | | | | | | |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| (A) | 0.3 | 0.5 | 8.0 | 1 | 1.1 | 1.2 | 1.4 | 1.5 | 1.6 | 1.9 | 2 | 2.2 | 2.6 | 3 |
| SW1 | OFF | OFF | OFF | OFF | OFF | ON | OFF | ON |
| SW2 | OFF | OFF | ON | ON | ON | OFF | ON | OFF | OFF | ON | OFF | ON | ON | ON |
| sw3 | ON | ON | OFF | OFF | ON | OFF | ON | ON | OFF | OFF | ON | ON | OFF | ON |
| S1 | ON | OFF | ON | OFF | ON | ON | OFF | ON | OFF | ON | OFF | ON | OFF | OFF |

| Stop Current | | | | |
|--------------|-----|--|--|--|
| | S2 | | | |
| 20% | ON | | | |
| 50% | OFF | | | |

| Excitation Mode | | | | |
|-----------------|-----|-----|--|--|
| Step | S3 | S4 | | |
| whole | OFF | OFF | | |
| half | ON | OFF | | |
| 1/8 | ON | ON | | |
| 1/16 | OFF | ON | | |

| Decay Setting | | | | |
|---------------|-----|-----|--|--|
| | S5 | S6 | | |
| 0% | OFF | OFF | | |
| 25% | ON | OFF | | |
| 50% | OFF | ON | | |
| 100% | ON | ON | | |