

# EasyDriver v4.4

[www.schmalzhaus.com/EasyDriver](http://www.schmalzhaus.com/EasyDriver)

An easy to use bipolar stepper motor driver  
Use 4 wire, 6 wire or 8 wire stepper motors  
From about 150mA/phase to about 750mA/phase  
Defaults to 5V for Vcc (logic supply), settable to 3.3V  
Supply 8V to 30V DC power input on JP1  
Do not connect or disconnect motor while EasyDriver is powered

**DEFAULT OPTIONS**  
Short JP5, JP6, JP7 pins to GND or Vcc to override

SLEEP = Vcc (awake)  
MS1 = Vcc (1/8 microstep)  
MS2 = Vcc (1/8 microstep)  
ENABLE = GND (enabled)  
RESET = Vcc (not reset)  
PFD = Vcc (slow decay mode)

DIR is level sensitive  
A rising edge on STEP causes a step  
Both take 0V to Vcc

Coil 1 of motor across OUT1B and OUT1A  
Coil 2 of motor across OUT2B and OUT2A

TP1 - VREF input to driver  
Monitor this test point with meter as you adjust current adj pot  
Valid range 1.0V to Vcc  
At VREF of 5V max current will be 833mA  
At VREF of 3.3V max current will be 550mA  
At VREF of 1V max current will be 166mA  
Minimum current gives smoothest microsteps  
Maximum current gives highest torque

PFD intermediate voltage  
Change R12 and add in R17 to create any voltage on PFD for best high speed performance.  
See datasheet

