

SPDRO-4 - 4 Digit Speed Readout



FEATURES

- **4 Digit RPM Readout**
- **Displays 0-9999 RPM**
- **Operates from 12V-48V**
- **Hall input voltage 3.5V-24V**
- **Mode button to change between 1, 2, 4, 6 and 8 poles**
- **Gear ratios from 1-999**



DESCRIPTION

The SPDRO-4 is a digital tachometer that can be used with any of Anaheim Automation's brushless drivers/controllers. It has a power input that ranges from 12-48VDC so it can use the same power supply as the driver/controller. There is one input on the SPDRO-4 that connects to Hall A, Hall B, Hall C, or PG out. This input is rated from 3.5VDC to 24VDC. This tachometer has a 4 digit display so it can show the speed from 0 to 9999 RPM. The SPDRO-4 allows you to verify the speed of any brushless motor without connecting to a computer or using an external tachometer on the motor itself. The SPDRO-4 has a mode button which allows you to change the value of the motor poles between 1, 2, 4, 6 and 8 and the gears from 1-999. A gear ratio of 1 is for no gear box.

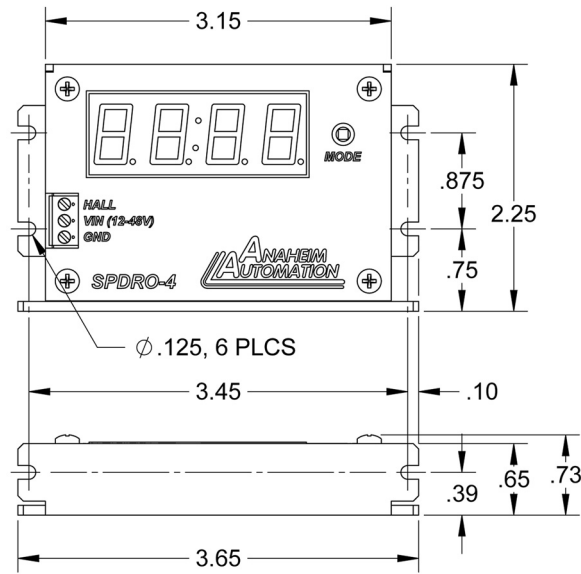
Changing the pole value allows SPDRO-4 to correctly calculate the speed of any BLDC motor with hall sensors. When the mode button is pressed, the device enters program mode which allows you to change the poles. When the device enters program mode it first displays "PoLE" on the 4 digit display for 1 second. It then shows the set value the pole is set for 1 second. It does this three times and then returns to the speed display. If the mode button is pressed when in program mode then it changes the value of the pole. The order is 1, 2, 4, 6 and then 8. After the value is changed it then shows "PoLE" and the new value 3 times allowing you to change it again if desired. The value is stored in the internal EEPROM in the device so when the device is powered off it will wake with the desired pole value.

After the device has finished going through the "PoLE" display it goes into the "gEAR" display. The "gEAR" display changes the gear ratio between 1 and 999. In the "gEAR" display the device will display "gEAR" for 1 second and then the value the gear is set for 1 second. It will do this 3 times. If the mode button is pressed it will increment the value by one. After the value is changed it then shows "gEAR" and the new value 3 times allowing you to change it again if desired. When the mode button is held for 1 second during the "gEAR" display it will increment the gear ratio by 10. The first time it will go to the nearest 10. After incrementing by 10 ten times, the device will increment by 50 until the button is released. The first time it will go to the nearest 50. When incrementing by 50 the device will go from 950 to 1. This allows you to get through the different gear ratios quickly. After the button is released it will display "gEAR" and the value 3 times and return to normal operation if the mode button is not pressed again. The value is stored in the internal EEPROM in the device so when the device is powered off it will wake with the desired gear value.

Ideal Applications:

Connect this to any Hall sensor or PG OUT terminal of Anaheim Automation's brushless drivers/controllers to get the speed of the motor. This would also work with any brushless driver where the hall sensor is available.

L011623



Dimensions are in inches

Position-TB1	Description
1	Hall Input (3.5-24VDC with a max frequency of 670Hz)
2	VIN(12-48VDC)
3	Ground

