ver.1

Late Night Works

1 Overview

- 3 separated channels
- Treshold on input for better filtered output
- Headers with screws
- Compact design
- Built-in optoisolation

2 Description

- The limit switches filter has the role of removing noise that come from switches (as they are magnetic, IR, mechanical and so on);
- Built-in optocouplers will remove noise: because of the minimum current needed to operate, they will not be triggered with noise;
- Optocouplers will also provide at the same time, fisical isolation bewteen your control board and switches because of their operating principle;
- Three separated channel, one for each axis;
- The board will provide as output, a logic LOW (GND) when the input terminal of the same channel are connected together (closed circuit). Otherwise the output will be HIGH (a stable +5 because of pull-up resistor) when inputs of the same channel are not connected together (open circuit). In this way, this board can be use both with normally-open and normally-closed switches.

3 Wiring

Both for normally closed and normally opened switches, the connections are pretty straightforward:





Limit Switch Filter

4 Technical specification

	Unit	Value
Power voltage	V	5.0
Maximum current through the board	A	0.07
Voltage range signal input	V	$1.4 \div 5$
Dimensions	mm * mm * mm	70*46*14.5
Weight	g	22
Temperature range	°C	-55 ÷ 110
n° of inputs		3

5 Pinout

Pin	Signal
GND	GND
+5	+5V Input (from power supply)
Z	Output signal for Z axis
Y	Output signal for Y axis
Х	Output signal for X axis
LIMIT-Z	Z axis limit switch terminal 1
GND-Z	Z axis limit switch terminal 2
LIMIT-Y	Y axis limit switch terminal 1
GND-Y	Y axis limit switch terminal 2
LIMIT-X	X axis limit switch terminal 1
GND-X	X axis limit switch terminal 2

6 Measures



