

MANUAL FOR BREAKOUT BOARD KK01



CNC4YOU Ltd.

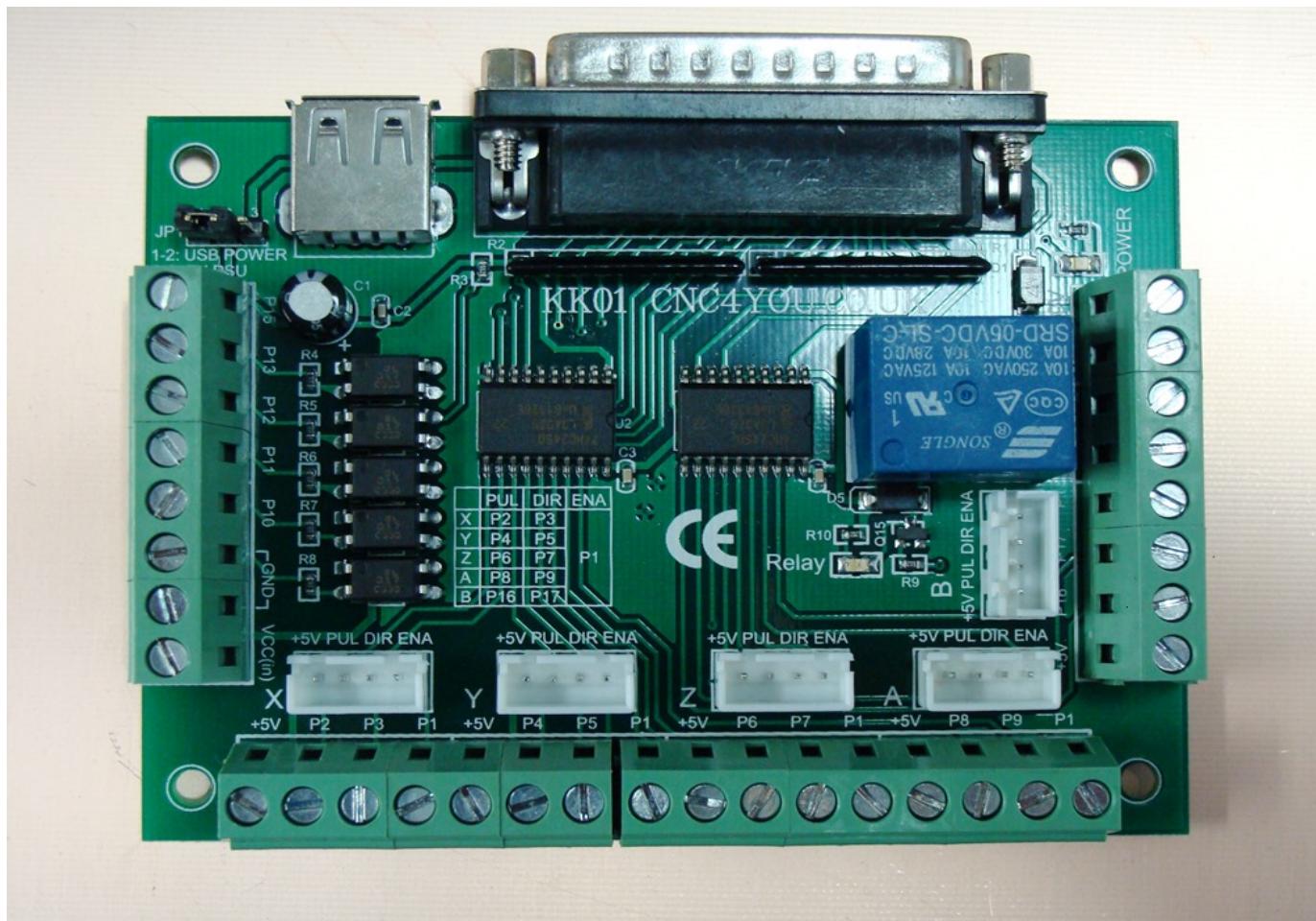
01908 315011

sales@cnc4you.co.uk

**INFORMATION IS SPECIFIC TO OUR PRODUCTS AND CAN CAUSE
DAMAGE IF USED WITH NONE COMPATIBLE PRODUCTS SO PLEASE
CHECK WITH YOUR SUPPLIER FOR COMPATIBILITY**

These drawings are supplied as a guide no guarantees are implied or given.
Caution when wiring and check with a qualified professional if unsure.
Documentation will be updated amended at the discretion of CNC4YOU Ltd.

MANUAL FOR BREAKOUT BOARD KK01



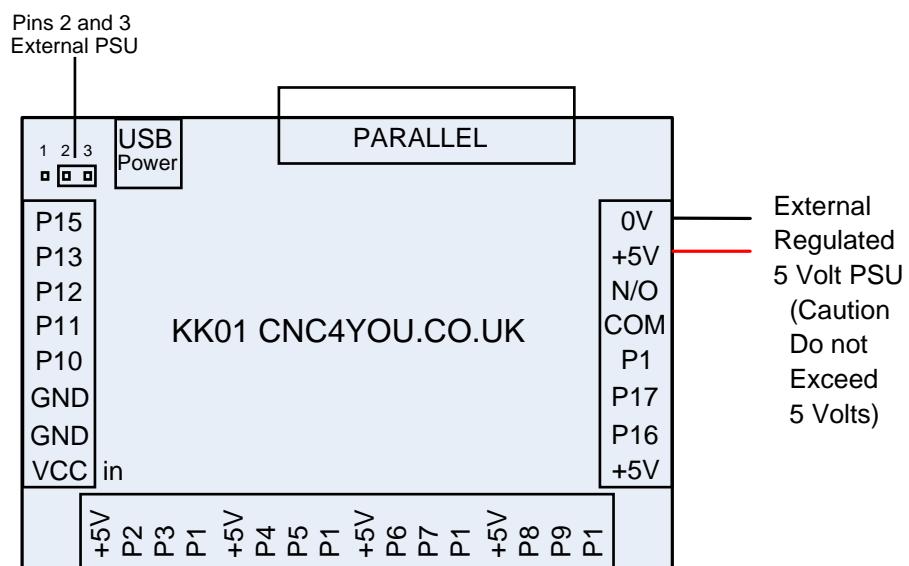
1. FUNCTION INTRODUCTION

Our KK01 breakout board is a 5 Axis system with on-board relay with normally open contact and 5 optoisolated inputs for use with Estop, limit and home switches etc. please see wiring diagram. These optoisolated inputs in conjunction with mach3 debounce settings can give a high degree of noise immunity. This board can be powered from external 5 volt regulated PSU (Preferred option) or powered by supplied USB cable, this is selected by an on board jumper JP1. Input circuit is independent of rest of breakout board allowing for separate higher voltage inputs as shown in this document with limiting resistors to reduce current, this can give a higher degree of noise immunity if required. In most applications using on-board 5Volts as shown in this document will give satisfactory results.

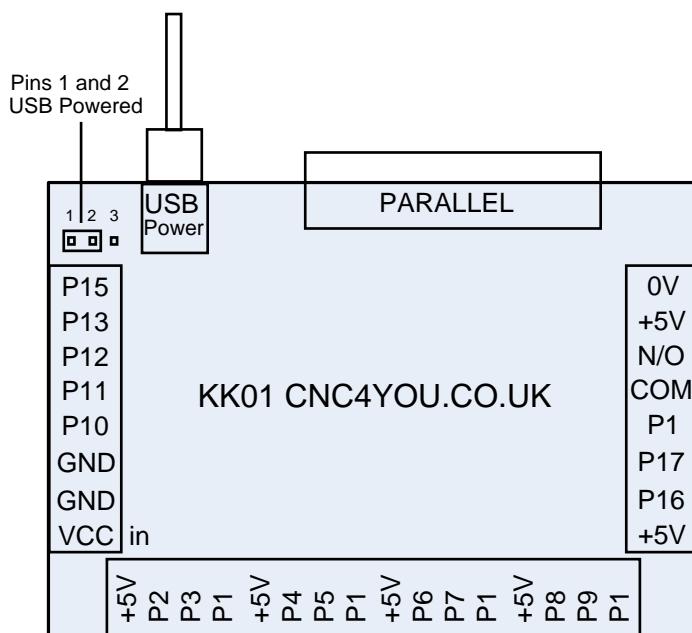
For ease of setup board has silkscreen printed information for ease identification and wiring.

Breakout Board Power Supply Source

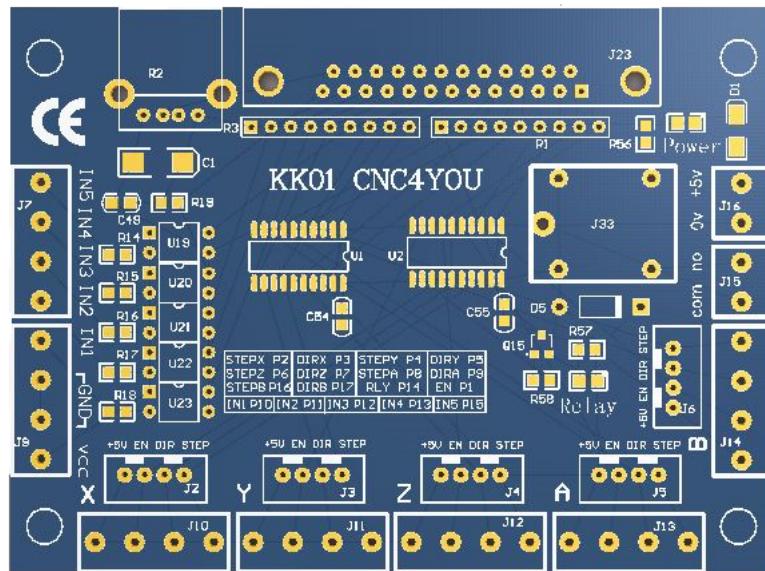
Powered by External Regulated 5Volt Supply



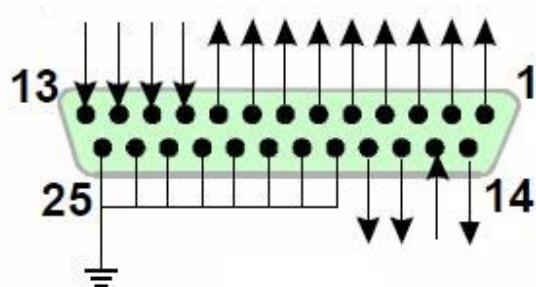
Powered by USB Cable



Board Silk Screen



OUTPUT DEFINE FOR 25 PINS

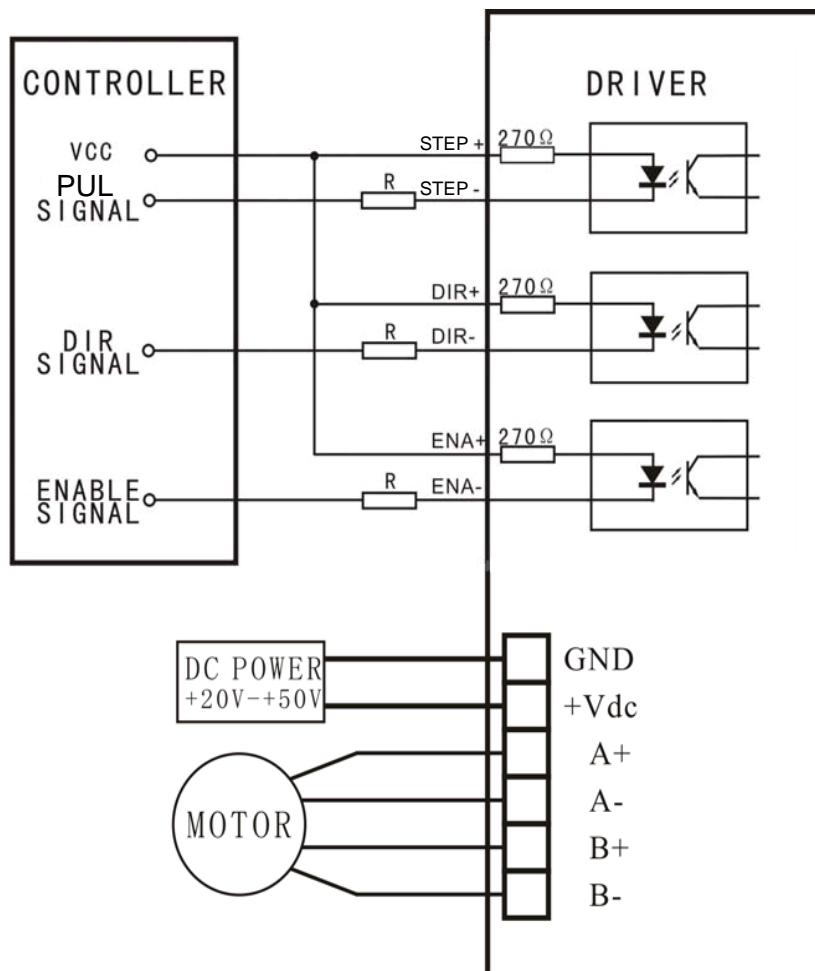


Breakout board input and output signal definition

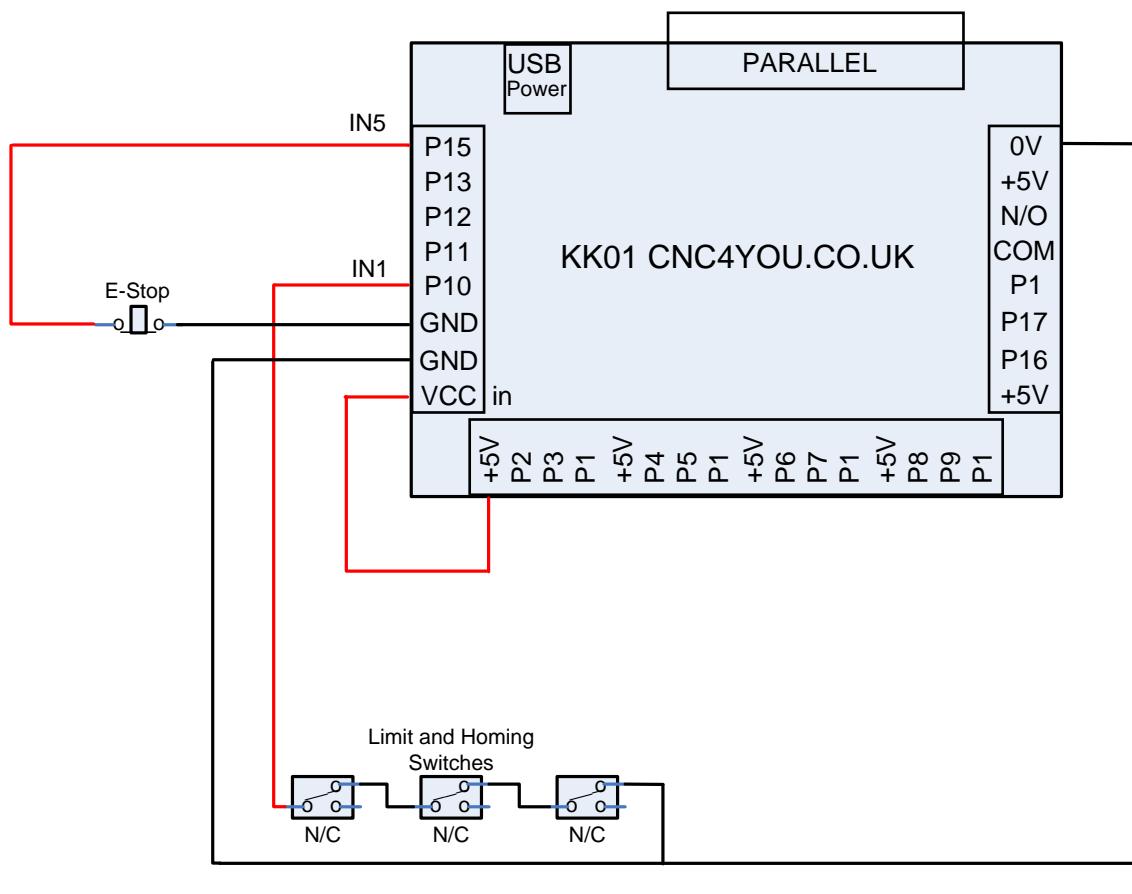
Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
ENA	DIR	PUL	DIR	PUL	DIR	PUL	DIR	PUL
ENABLE	Step X	Dir X	Step Y	Dir Y	Step Z	Dir Z	Step A	Dir A
Pin 10	Pin 11	Pin 12	Pin 13	Pin 14	Pin 15	Pin 16	Pin 17	Pin 18-25
P10	P11	P12	P13	P14	P15	DIR	PUL	Gnd
Input 1	Input 2	Input 3	Input 4	Relay	Input 5	Step B	Dir B	0 Volts

TYPICAL WIRING DIAGRAM

VCC	R
5V	0
12V	680 Ω
24V	1. 8K Ω

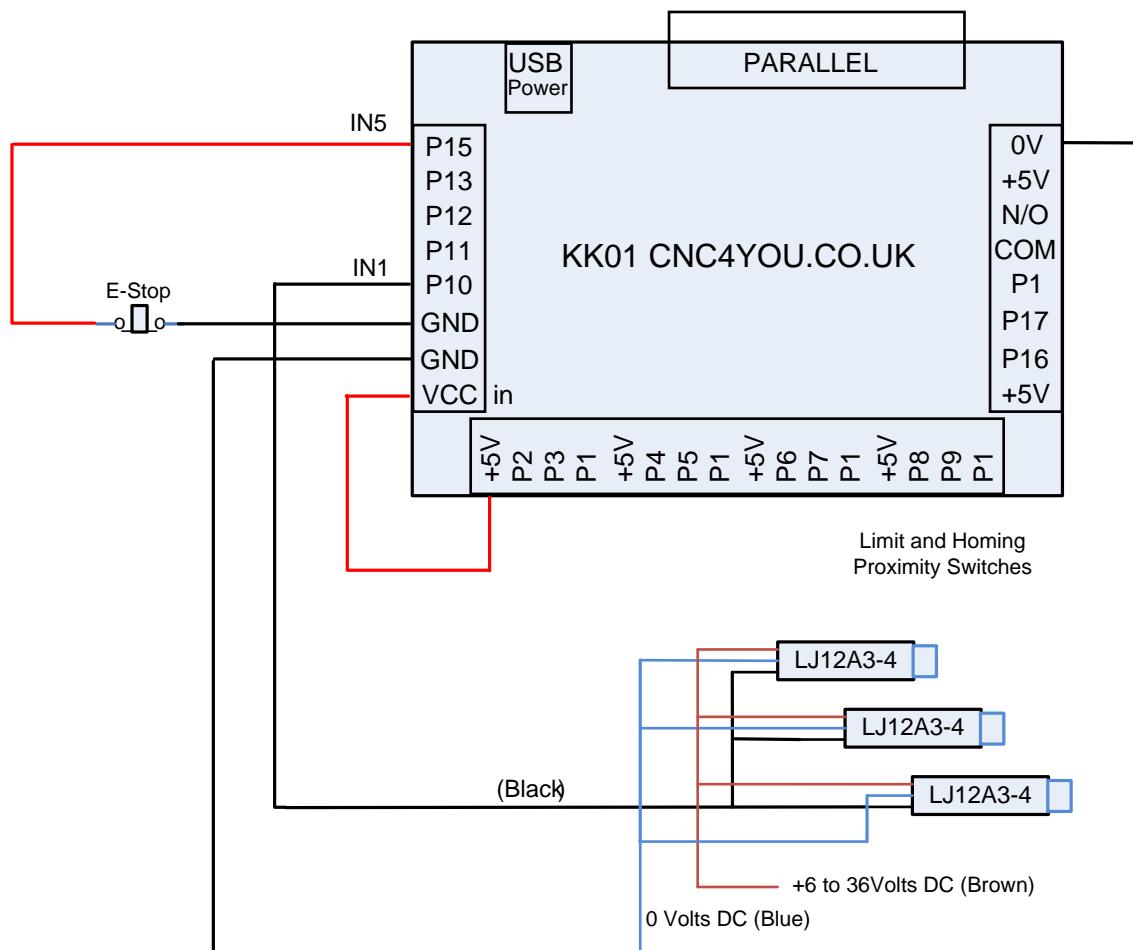


TYPICAL ESTOP AND LIMIT / HOME SWITCH WIRING



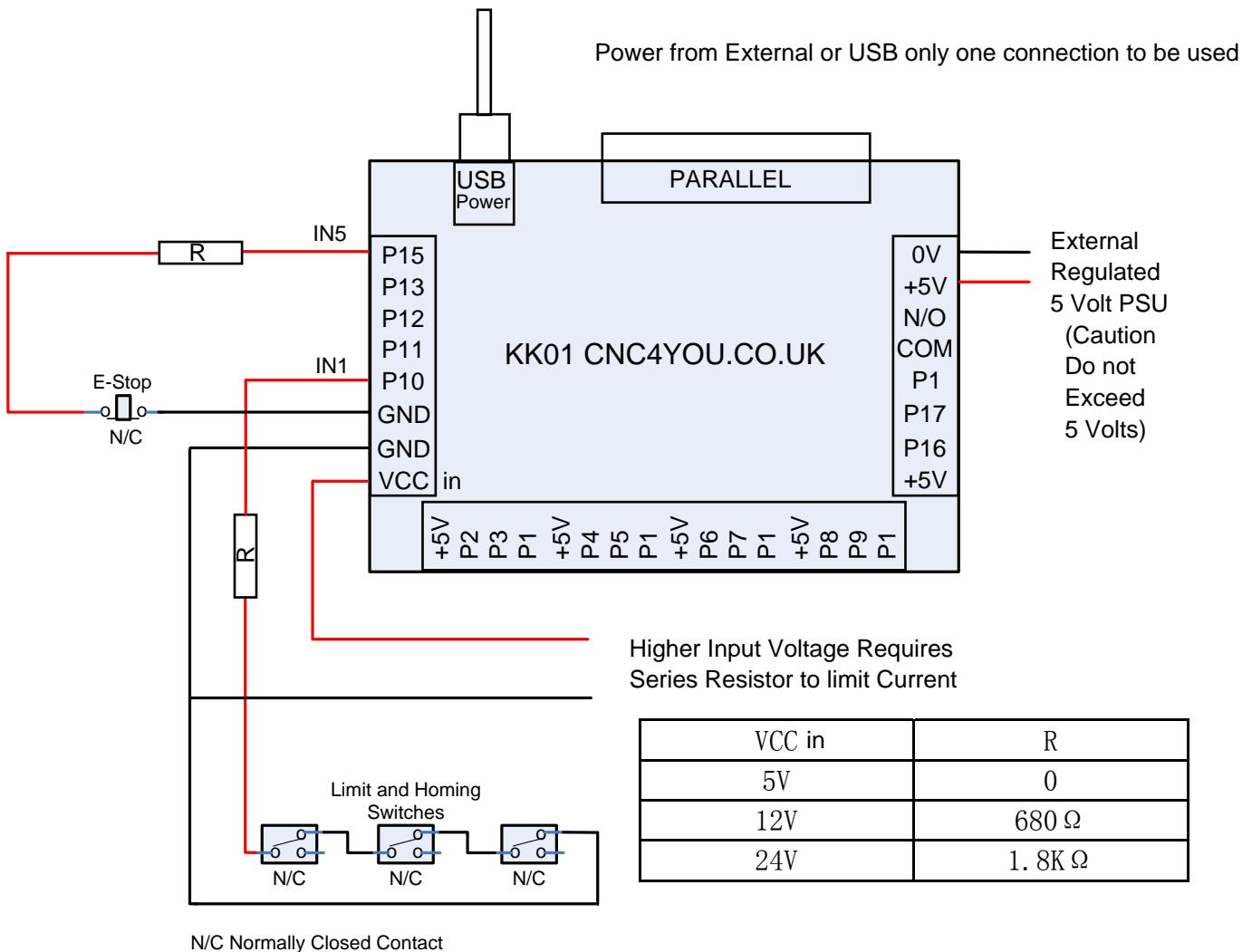
Inputs IN1 to IN5 are general input signals and can be used as such.
 Limit switch and EStop are just examples of use only and not pre-defined.
 We would normally recommend using one input for all limit switches and wire them through normally closed contacts in series when using mechanical limit switches and parallel for normally open or open collector proximity switches etc.
 please see our wiring diagrams for options.

TYPICAL ESTOP AND PROXIMITY LIMIT / HOME SWITCH WIRING



Inputs IN1 to IN5 are general input signals and can be used as such.
 Limit switch and EStop are just examples of use only and not pre-defined.
 We would normally recommend using one input for all limit switches and wire them through normally closed contacts in series when using mechanical limit switches and parallel for normally open or open collector proximity switches etc.
 please see our wiring diagrams for options.

High Voltage Input for Estop and limit/Home Switches



Relay Output

