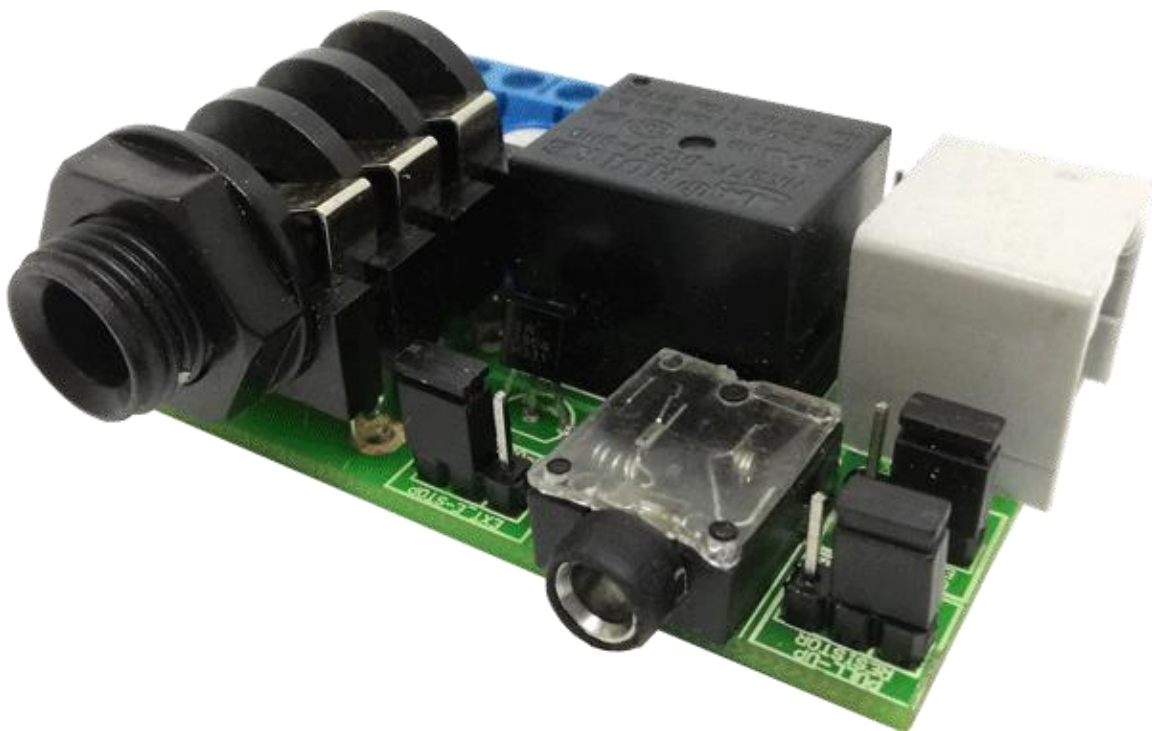


**C48 – EXTERNAL E-STOP AND  
PROBE Rev. 3.5**



FEBRUARY 2022

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## USER'S MANUAL

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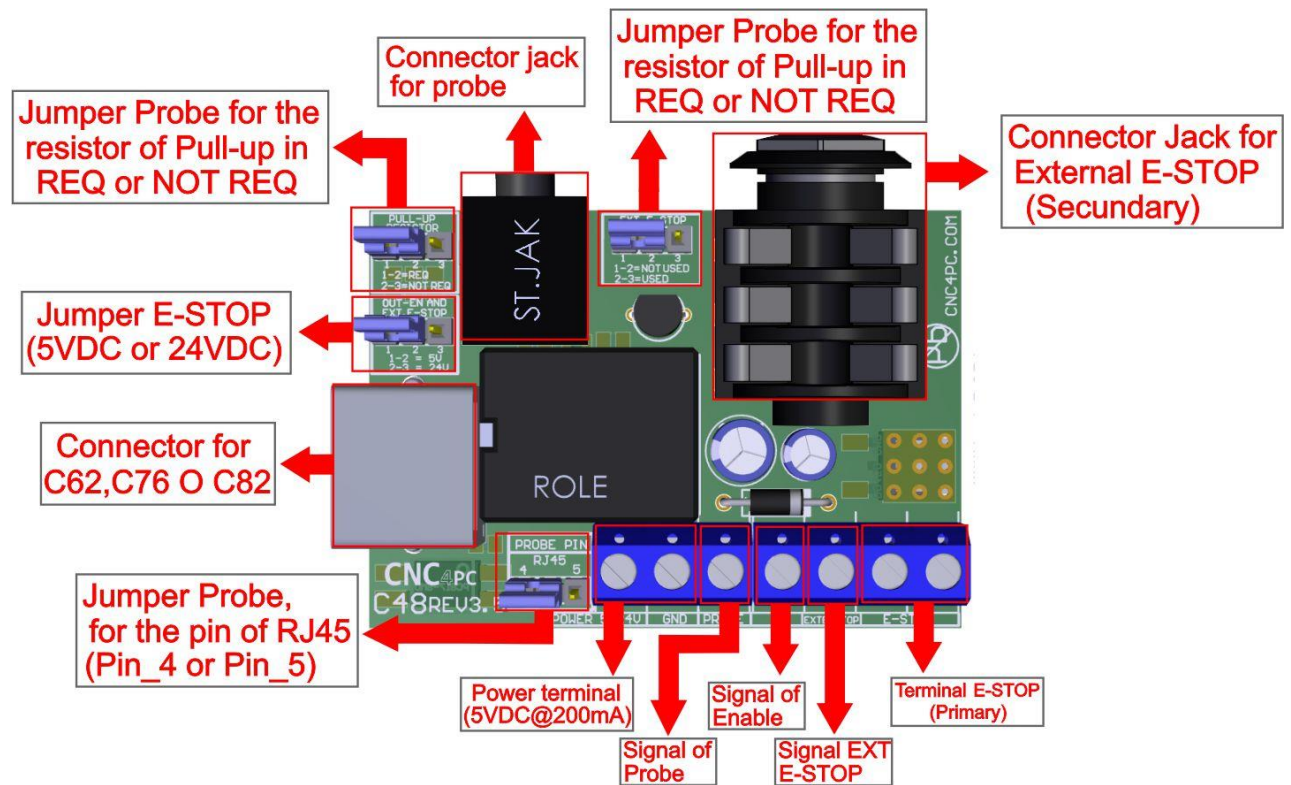
## 1.0 OVERVIEW

This board provides the interface to easily interconnect 1 Probe and 1 external E-Stop to CNC4PCbreakout board.

## 2.0 FEATURES

- 1x 3.5mm jack connector for 1 Probe and Anti-Collision Feature **New\***
- 1x 1/4" jack connector for 1 External E-Stop (Secondary- Optional E-Stop)
- RJ45 and Terminal for all I/Os and Power lines
- Easily mountable in the panel of CNC Control Boxes

### 3.0 BOARD DESCRIPTION

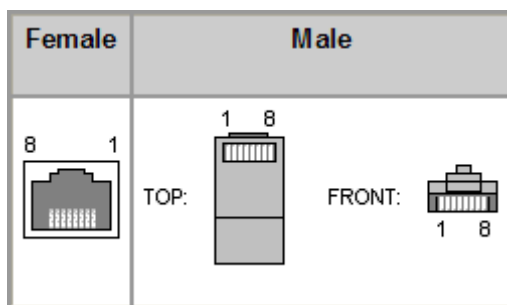


### Requirements:

It requires a power supply of 5 to 24VDC@200mA to operate.

## 4.0 CONNECTOR RJ45

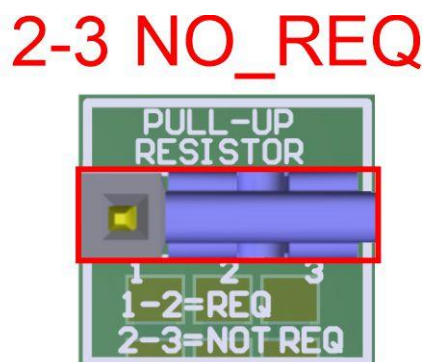
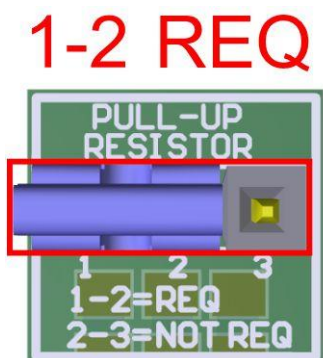
This connector allows an easy connection with C62, C76, or C82, boards. These RJ45 connectors are used not just to carry the INPUT/OUTPUT signals placed in terminals, but also to power board.



RJ45	
DESCRIPTION	PIN
GND	1
NOT USED	2
EXT. E-STOP/EN	3
PROBE	4
INDEX	5
EXT. E-STOP/EN	6
5V/24V	7
NOT USED	8

## 5.0 PROBE JUMPER FOR RESISTOR

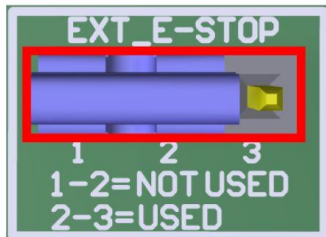
Set jumper in REQUIRED position if the input used in the breakout board to connect the probesignal is pulled to DOWN



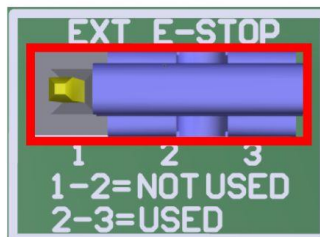
## 6.0 JUMPER EXTERNAL E-STOP

If an External E-STOP (Secondary) is connected set jumper in USED position, if not set jumper in position NOT USED.

1-2 NOT USED



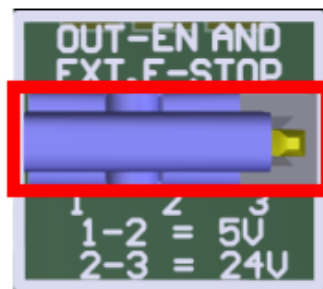
2-3 USED



## 7.0 JUMPER E-STOP

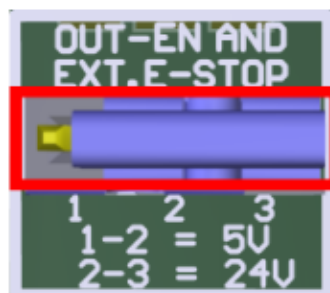
If used a power supply of 5VDC, set the two jumper as sample in the image

1-2 = 5V



If used a power supply of 24VDC and in the output of terminal de EN and EXT E-STOP work with 24V, set jumper as sample in the image.

2-3 = 24V

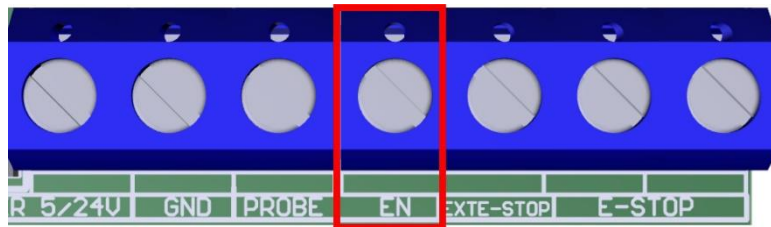


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## 8.0 TERMINALS

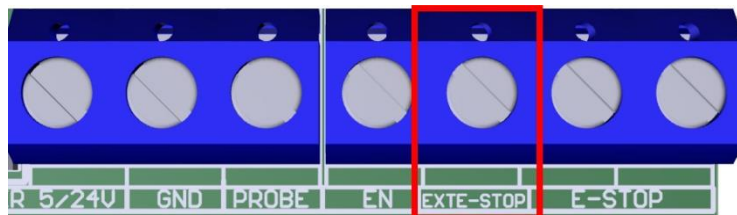
### 8.1 Signal of Enable

Signal internally wired to the EXT. E-STOP signal. It can be used as an external enable for a breakout board.



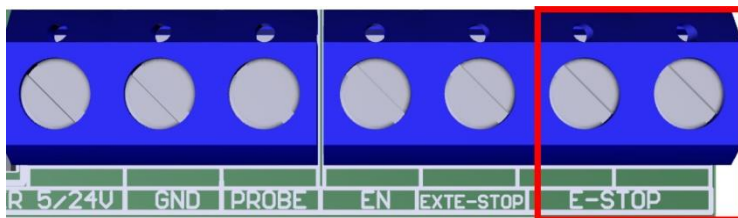
### 8.2 Signal EXT. E-STOP

This signal is the result of the series between E-STOP (Primary) and EXT. E-STOP (Secondary).



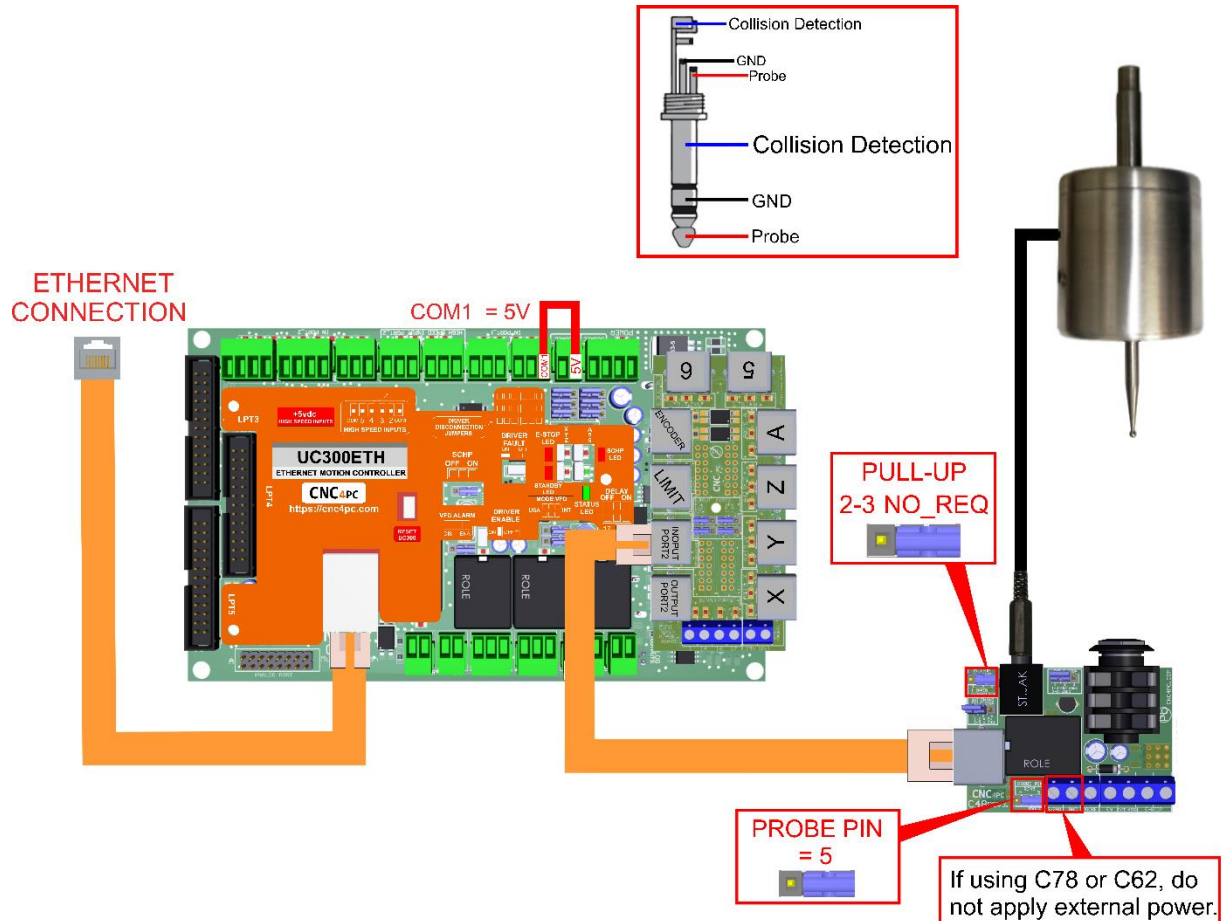
### 8.3 E-STOP (Primary)

An E-STOP must be connected to those terminals in order to get any E-STOP signal in the EXT. E-STOP terminal.



## 9.0 WIRING SAMPLE

### 9.1 Connection probe



Note :

This wiring is just to illustrate a sample product application.  
Specific wiring may vary from system to system.  
It is the users responsibility to implement it correctly.

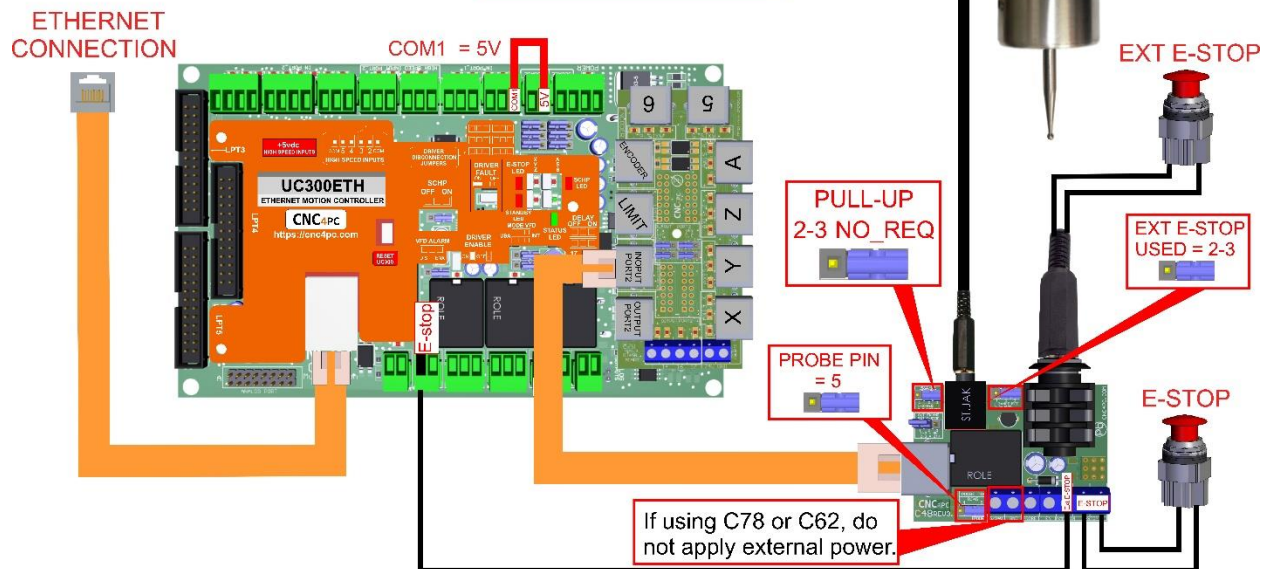
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Integration Solutions for CNC Projects  
<http://www.cnc4pc.com>

Designed: HVM	Date: March-1-2022
Revised: KPG	Status: Preliminary
Item: WS_328	Ver.: 2
Description: Connection CNC4pc probe with C48	





The diagram shows a vertical probe with two sets of sensors. The top set consists of a blue 'Collision Detection' sensor and a red 'Probe' tip, with a 'GND' connection. The bottom set also consists of a blue 'Collision Detection' sensor and a red 'Probe' tip, with a 'GND' connection. Labels with leader lines point to each component.

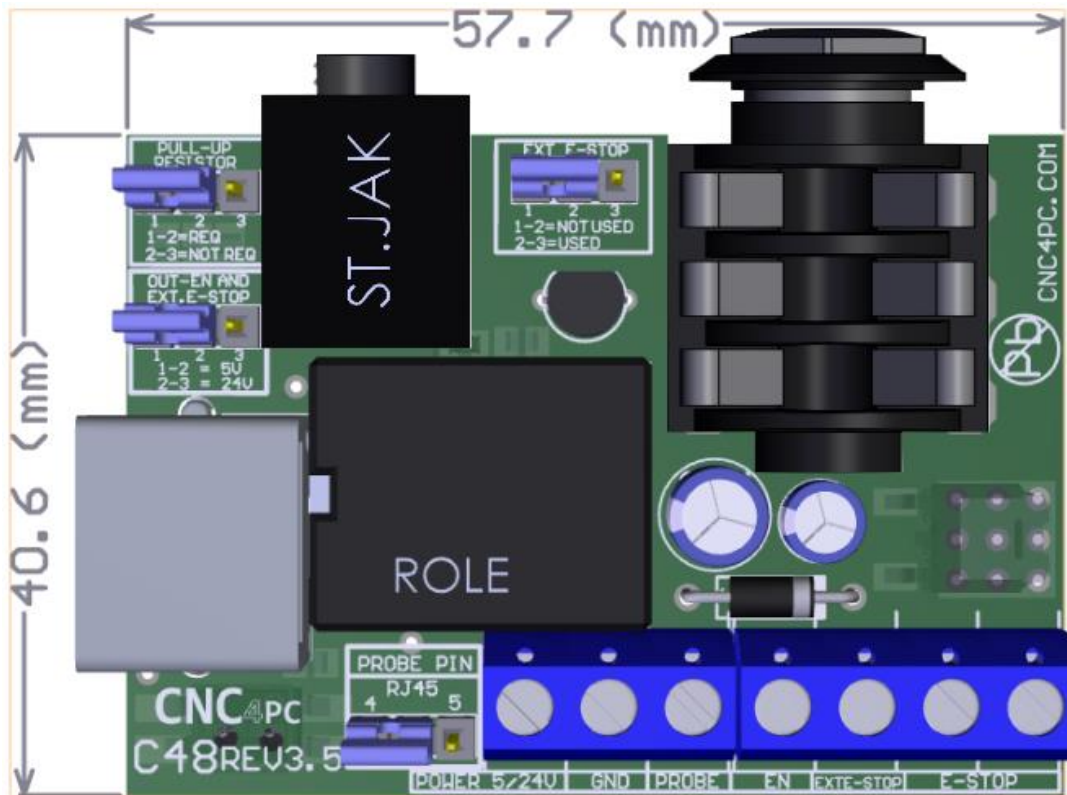


This wiring is just to illustrate a sample product application. Specific wiring may vary from system to system. It is the users responsibility to implement it correctly.

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<http://www.cnc4pc.com>

Designed: HVM	Date: March-1-2022
Revised: KPG	Status: Preliminary
Item: WS_330	Ver.: 1
Description: Collision Detection connection and external E-STOP CNC4pc probe with C48	

## 10.0 DIMENTIONS



## DISCLAIMER

Use caution. CNC machines can be dangerous machines. Neither DUNCAN USA, LLC nor Arturo Duncan is liable for any accidents resulting from the improper use of these devices. This product is not a fail-safe device and it should not be used in life support systems or in other devices where its failure or possible erratic operation could cause property damage, bodily injury or loss of life.