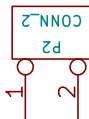


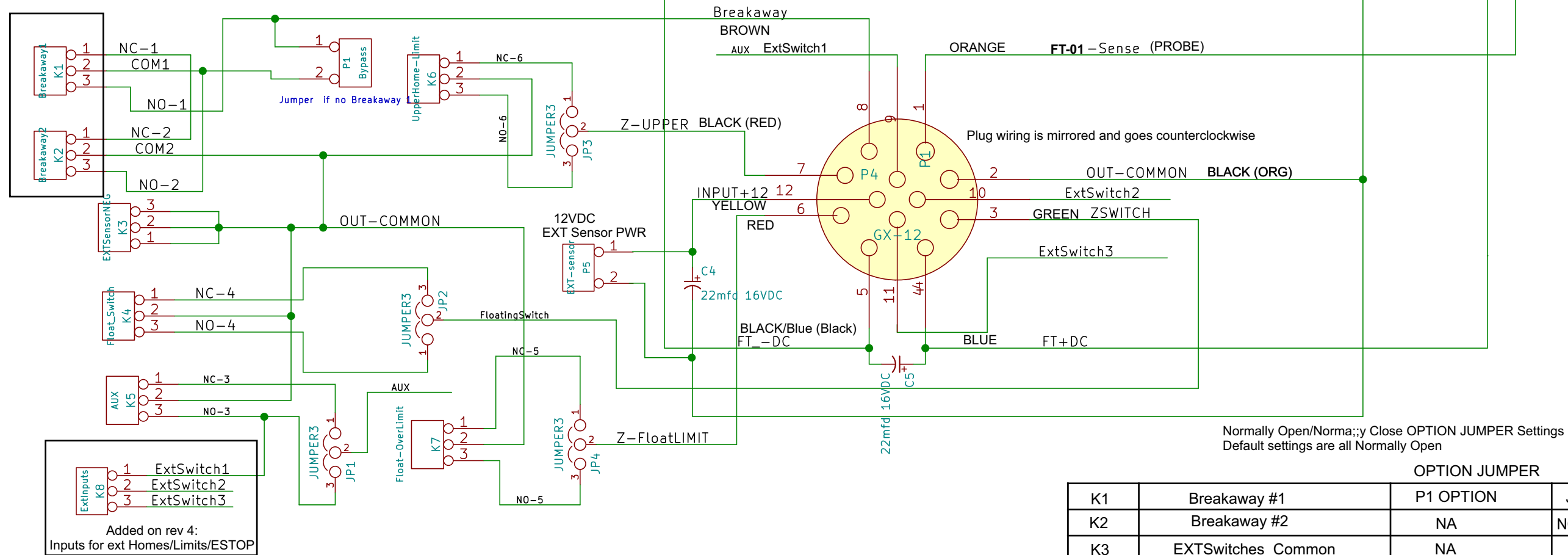
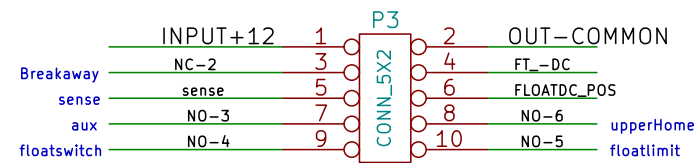
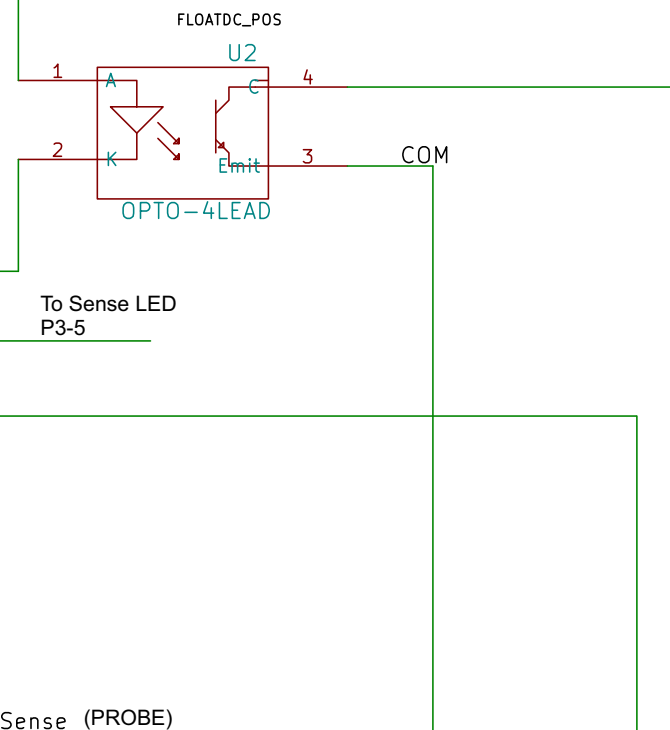
Torch connections



Torch Tip (Ohmic tab)  
WorkClamp Table Frame (plate/material)

### FT-02 Integrated Feather Touch

FT+DC  
DC+12 from Table I/O (wallplug)



Normally Open/Normally Close OPTION JUMPER Settings  
Default settings are all Normally Open

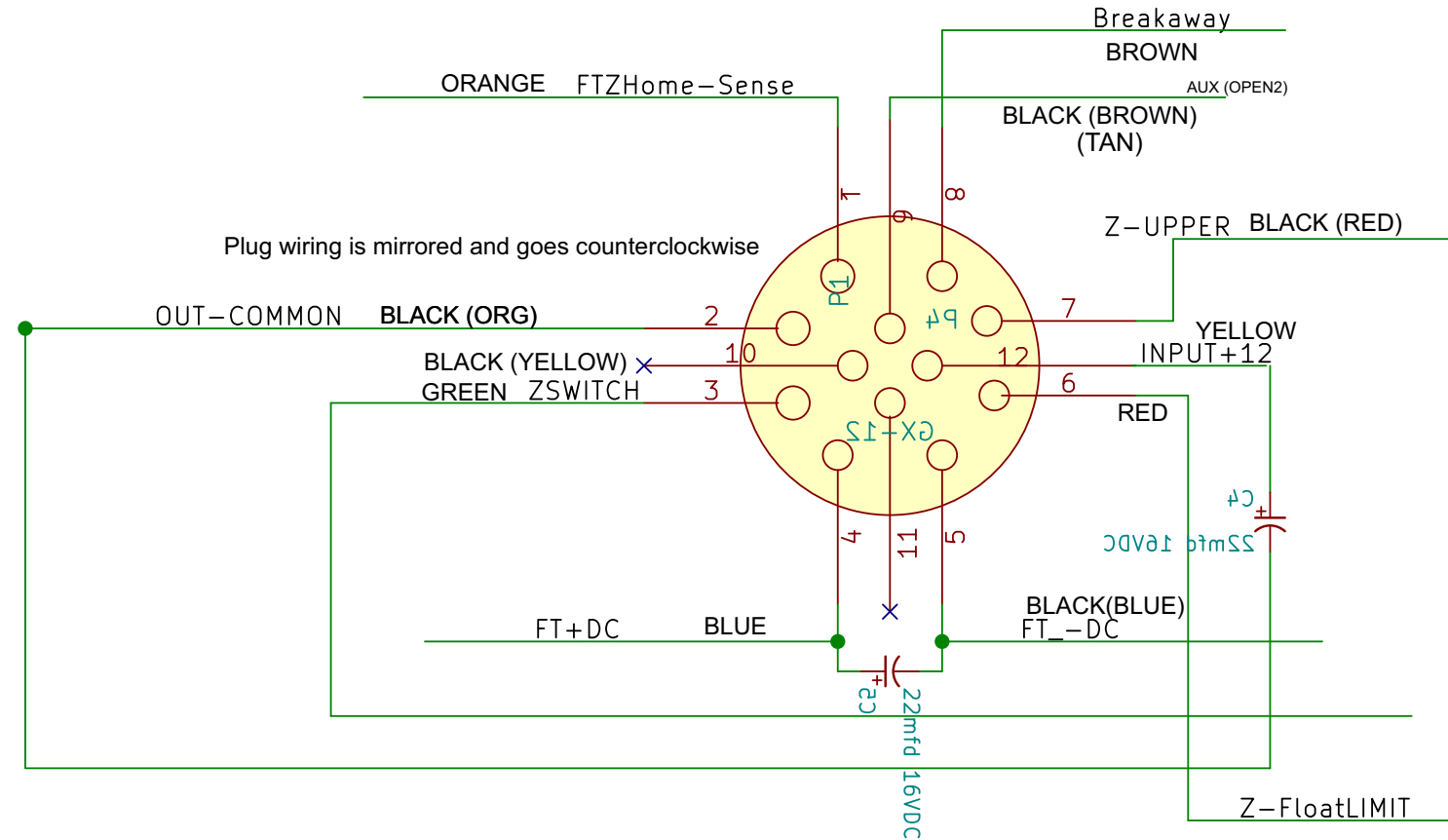
OPTION JUMPER SETTINGS

OPTION	JUMPER	SETTINGS
K1	Breakaway #1	P1 OPTION Jumper if no switch
K2	Breakaway #2	NA NC in series #1 to BAW
K3	EXTSwitches Common	NA
K4	Z SWITCH / Touch off	JP2 1-2 (NO*) 2-3 (NC)
K8-1	AUX SWITCH	JP1 1-2 (NO*) 2-3 (NC)
K6	Upper Z Limit /home	JP3 1-2 (NO*) 2-3 (NC)
K7	Z Switch Overrun	JP4 1-2 (NO*) 2-3 (NC)
K8-2	ExtSwitch 2 Input	NA
K8-3	ExtSwitch 3 Input	NA
P5	EXTERNAL SENSOR PWR +	NA

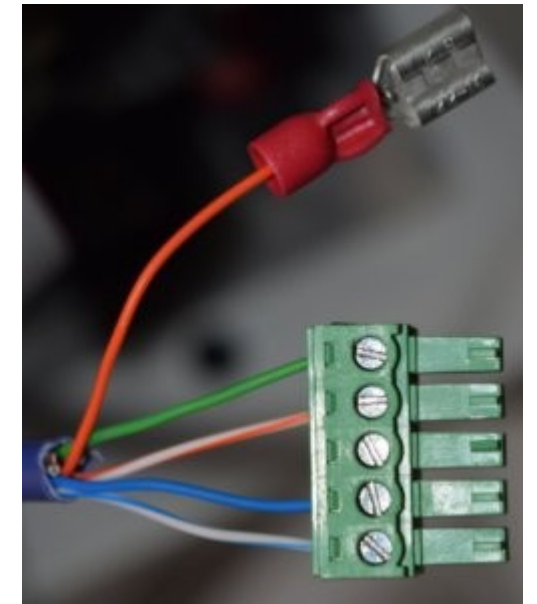
Added on rev 4:  
Inputs for ext Homes/Limits/ESTOP

### OLDER SUPER Z Prior to Feb 2018

Wire colors and signal names have changed after that date

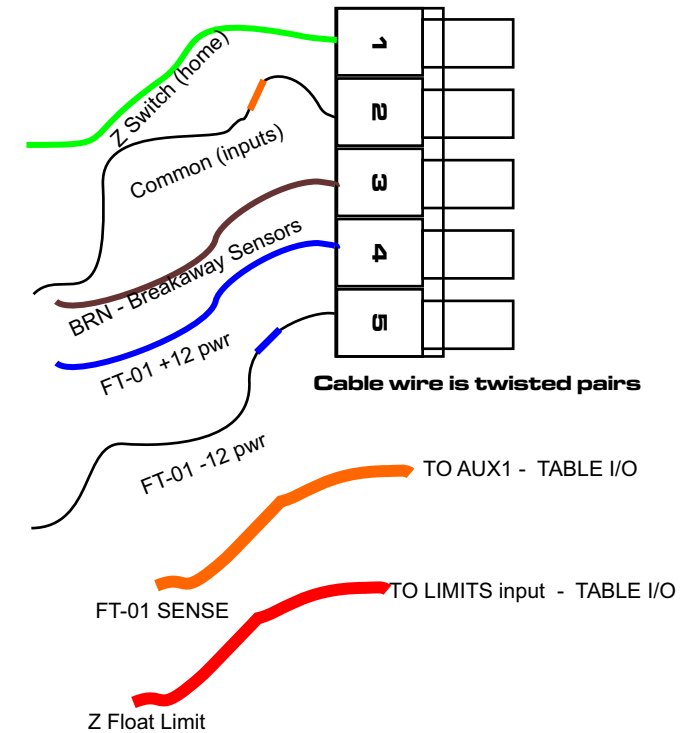


### Old Cable wire colors

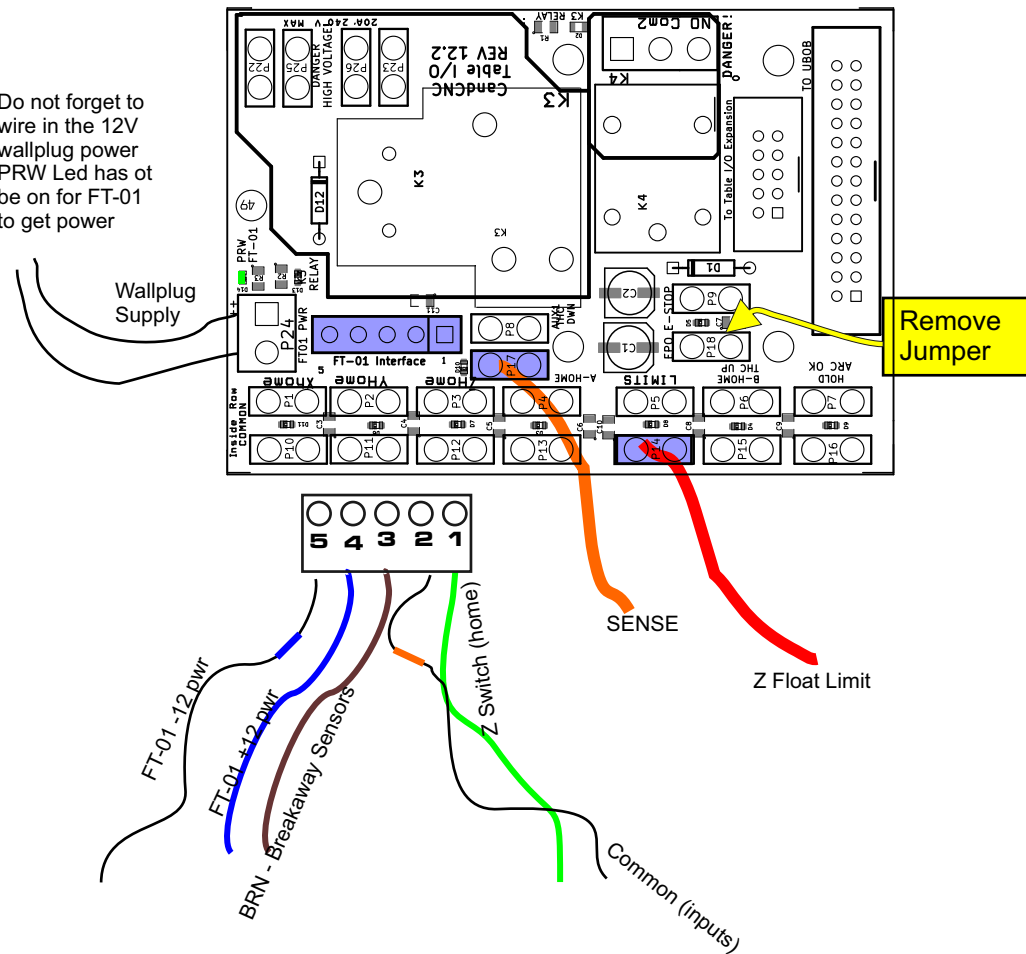


5 wide connector on Table I/O = 5W

NEW Connector wiring for SUPER Z cable .



Do not forget to wire in the 12V wallplug power PRW Led has to be on for FT-01 to get power

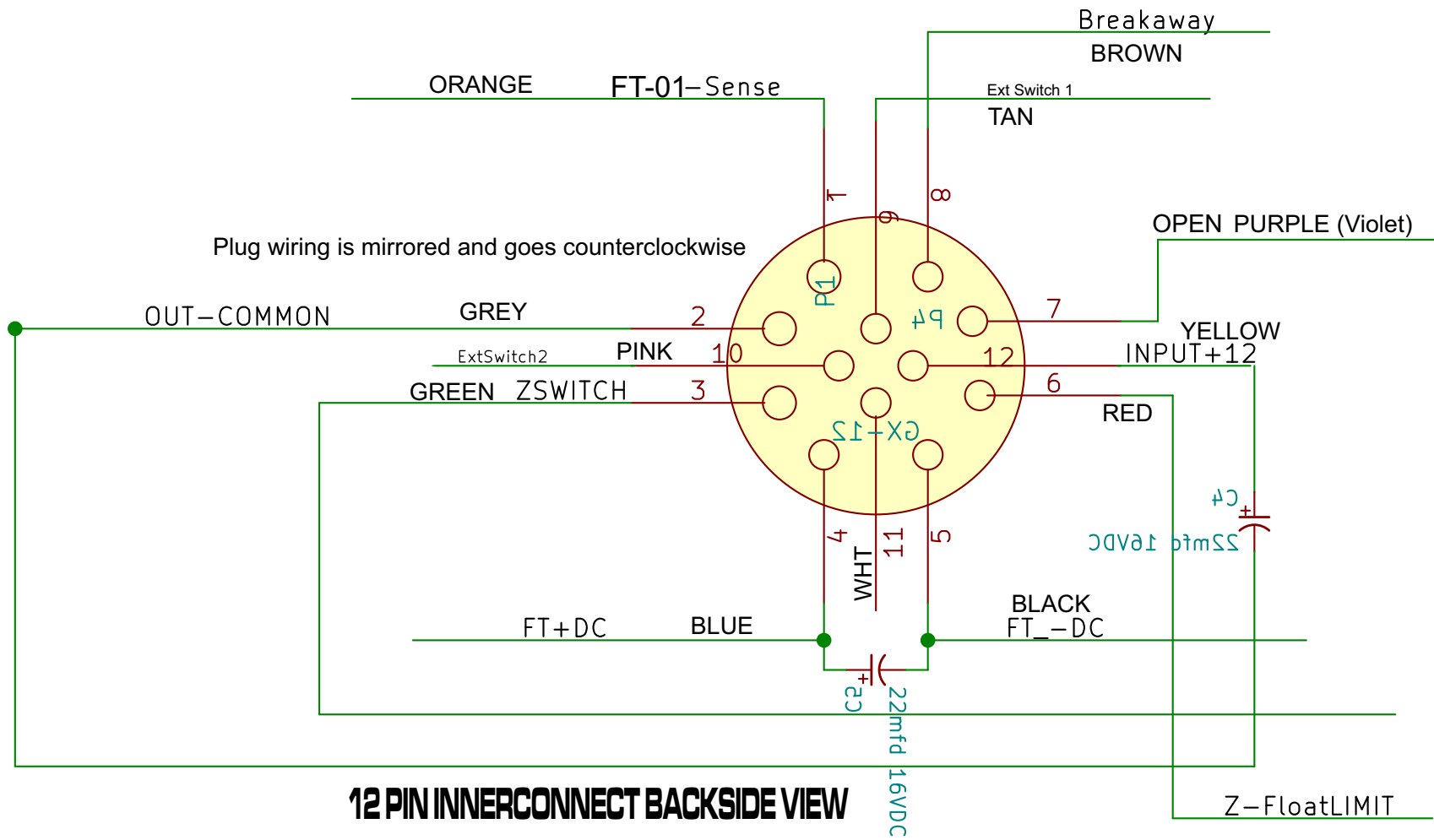


### 12 PIN INNERCONNECT BACKSIDE VIEW

PIN	FUNCTION	WIRE COLOR	TABLE I/O CON
1	SENSE OUT	ORANGE	AUX1 in
2	COMMON OUT	BLACK (ORG)	5W = 2
3	Z - SWITCH	GREEN	5W - 1
4	FeatherT + DC	BLUE	5W - 4
5	FeatherT - DC	BLACK (BLUE)	5W - 5
6	Z FLOAT LIMIT	RED	Limits IN
7	Z UPPER LIMIT (OPEN 1)	BLACK (RED)	Not used
8	BREAKAWAY	BROWN	5W - 3
9	OPEN 2	BLACK(BROWN)	Not Used
10	N/A	BLACK (YELLOW)	Not used
11	+12 Floating	YELLOW	Not Used
12	N/A	WHITE	Not Used

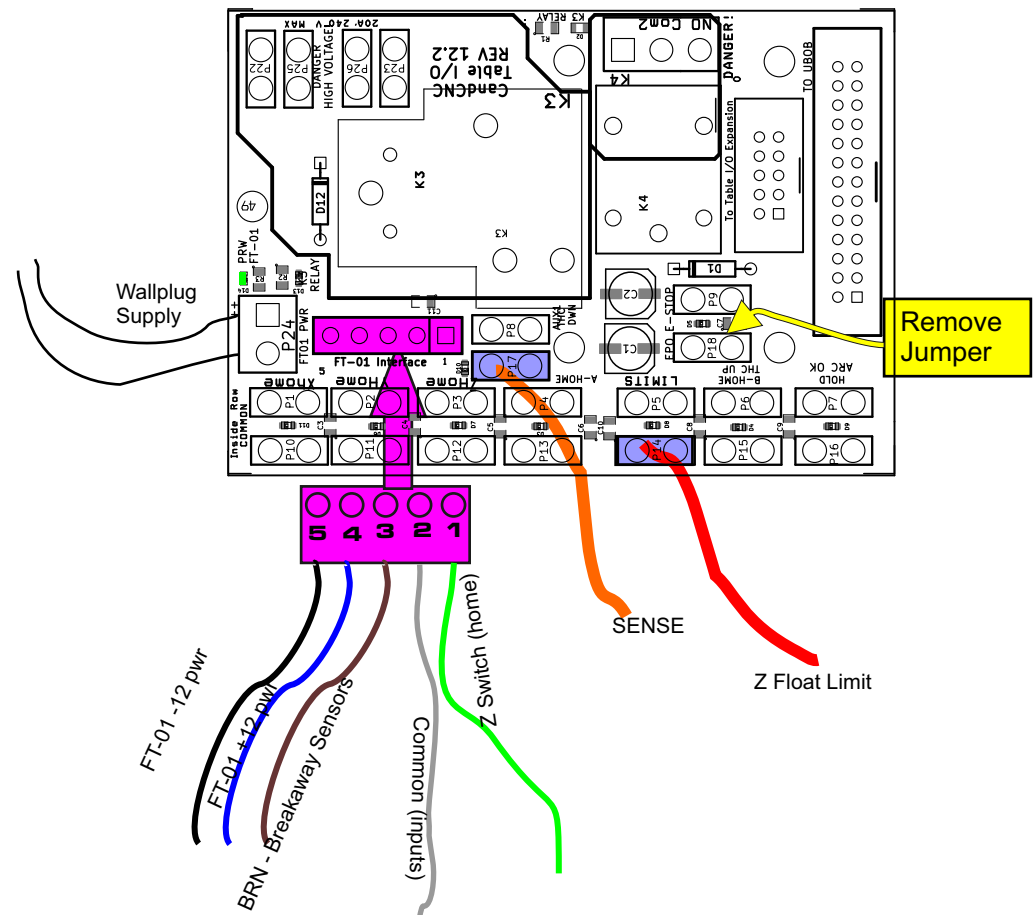
NOT USED : BLACK (WHITE) : BLACK (GREEN)

# UPDATED WIRE COLORS (03/20/18)



Plug wiring is mirrored and goes counterclockwise

## 12 PIN INNERCONNECT BACKSIDE VIEW



## NEW WIRE COLORS AFTER FEB 1 st 2018

PIN	FUNCTION	WIRE COLOR	TABLE I/O CON
1	SENSE OUT (FTP-02)	ORANGE	AUX1 in
2	COMMON OUT	GREY	5W = 2
3	Z - SWITCH	GREEN	5W - 1
4	FeatherT + DC	BLUE	5W - 4
5	FeatherT - DC	BLACK	5W - 5
6	Z FLOAT LIMIT	RED	Limits IN
7	Z UPPER TRAVEL LIMIT	PURPLE(Violet)	Z home (alternate)
8	BREAKAWAY	BROWN	5W - 3
9	Ext Switch 1	TAN	X Home (alt)
10	ExtSwitch2	PINK	Y Home (alt)
11	Ext Switch 3	WHITE	A Home (alt)
12	+12 Ext Sensor Pwr	YELLOW	

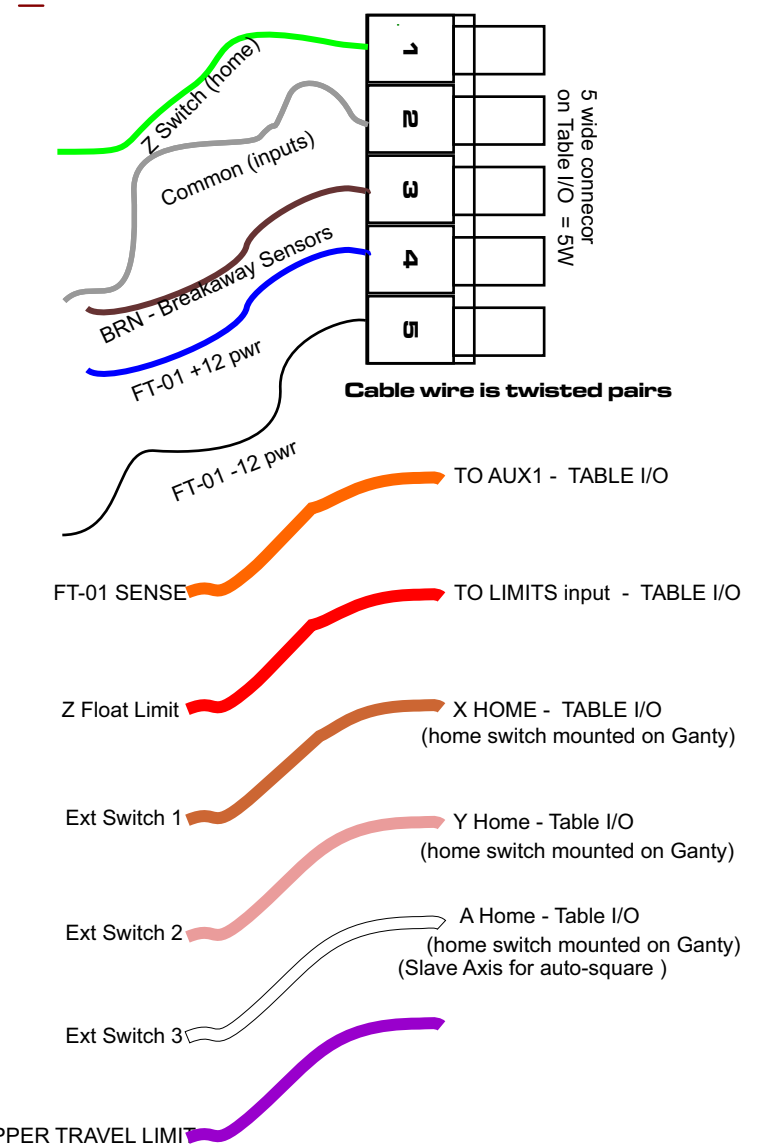
NOT USED : BLACK (WHITE) : BLACK (GREEN)

### IMPORTANT

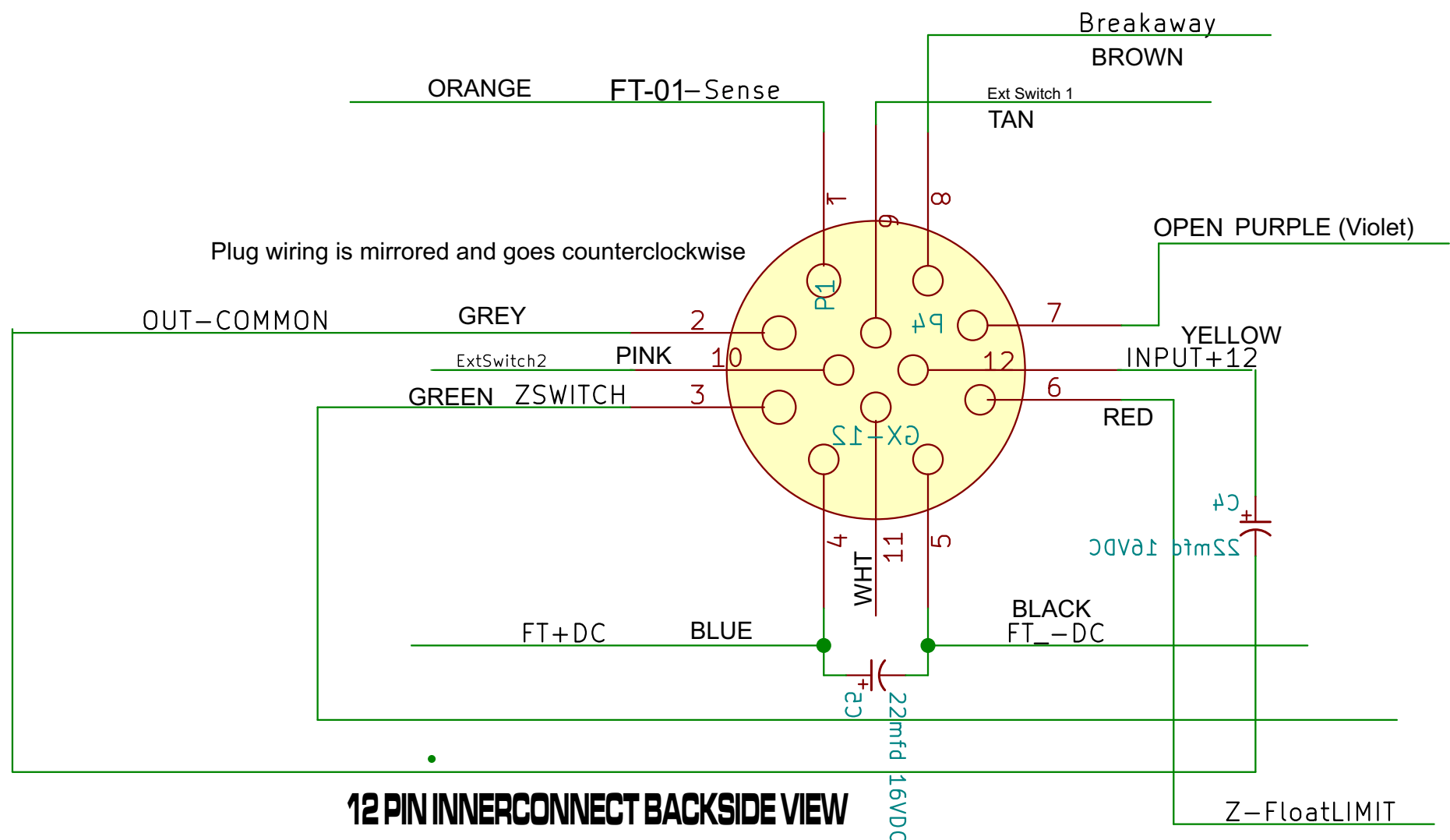
The cable wire colors have been changed

As if Jan 10th 2018 the Super Z axis is being wired with a different cable that has 12 different wire colors instead of pairs look at your cable end with the 5 wide green connector and you can determine if you have the new cable. Use the chart below to make the connections to the Table I/O/

### NEW Connector wiring for SUPER Z cable .



# UPDATED WIRE COLORS (03/20/18)



**IMPORTANT**  
The cable wire colors have been changed  
As if Jan 10th 2018 the Super Z axis is being wired with a different cable that has 12 different wire colors instead of pairs look at your cable end with the 5 wide green connector and you can determine if you have the new cable. Use the chart below to make the connections to the Table I/O/

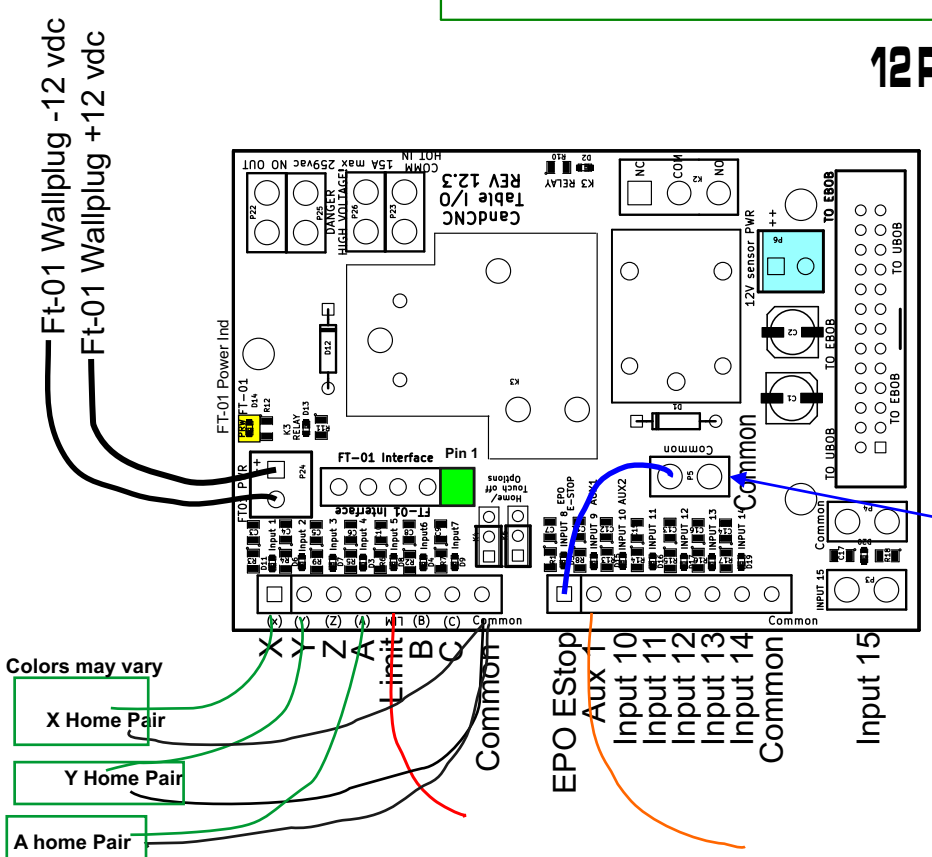
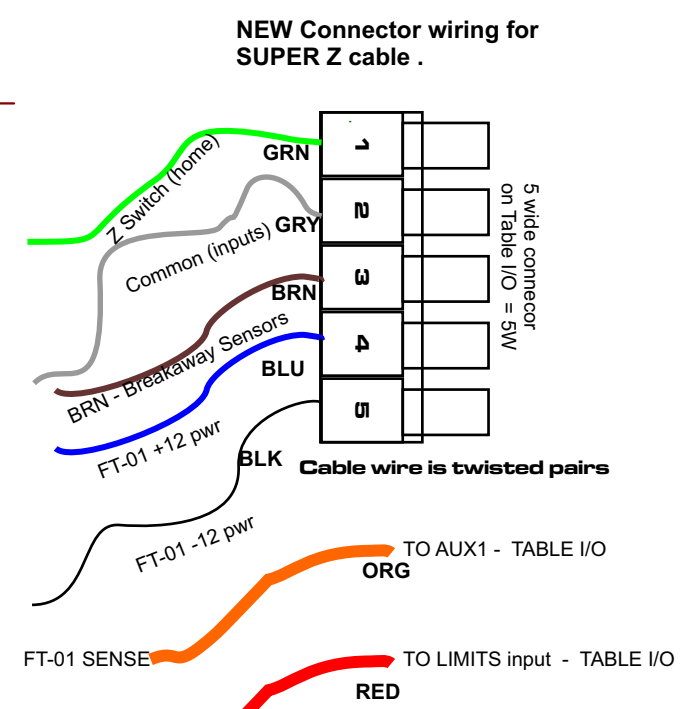


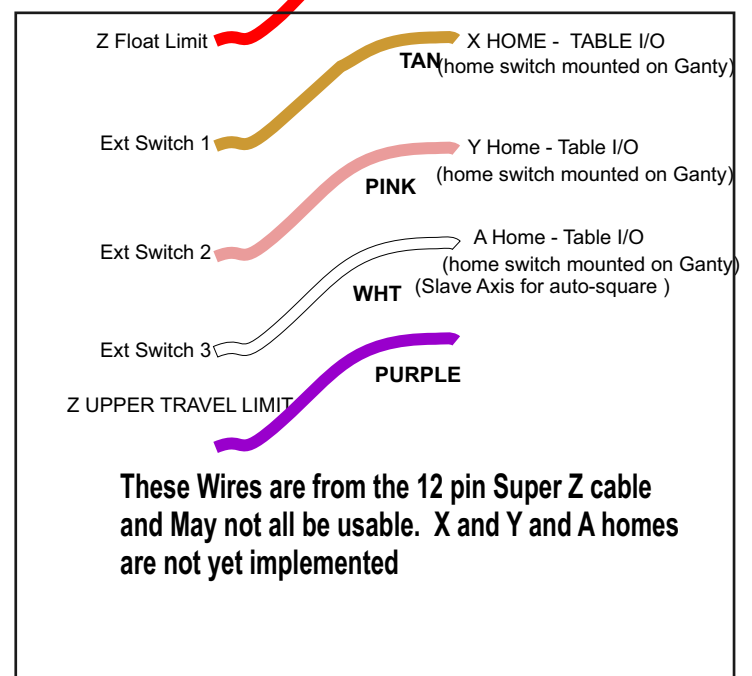
Table I/O REV 12.5 (new rev) Wiring for AC

**NOTE Blue Jumper to from Common to EPO Should be OFF if Super Z not used . This has to be in place to come out of e-stop on a unit with NO external E-stop of the breakaway**

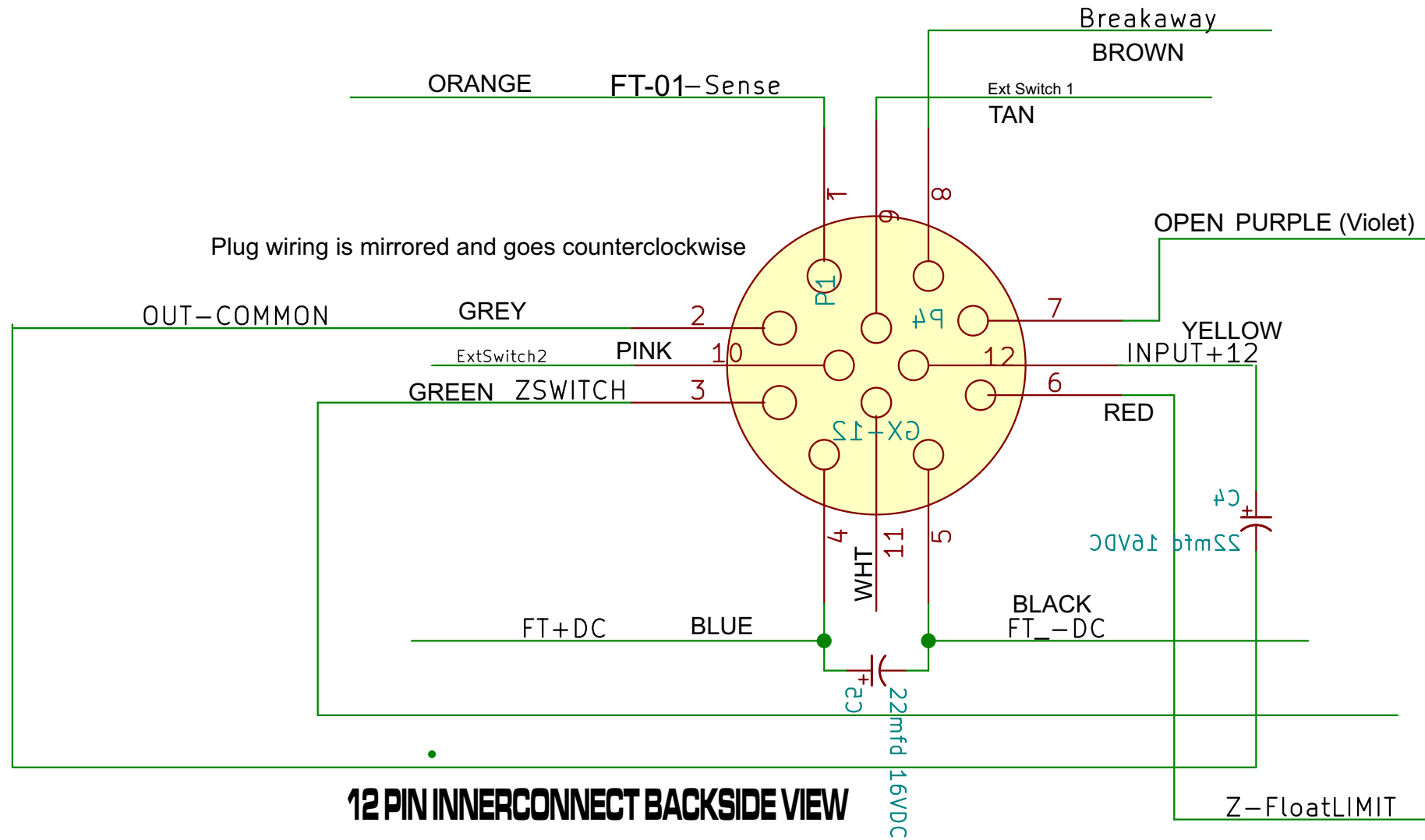
## NEW WIRE COLORS AFTER FEB 1 st 2018

PIN	FUNCTION	WIRE COLOR	TABLE I/O CON
1	SENSE OUT (FTP-02)	ORANGE	AUX1 in
2	COMMON OUT	GREY	5W = 2
3	Z - SWITCH	GREEN	5W - 1
4	FeatherT + DC	BLUE	5W - 4
5	FeatherT - DC	BLACK	5W - 5
6	Z FLOAT LIMIT	RED	Limits IN
7	Z UPPER TRAVEL LIMIT	PURPLE(Violet)	Z home (alternate)
8	BREAKAWAY	BROWN	5W - 3
9	Ext Swich 1	TAN	X Home (alt)
10	ExtSwitch2	PINK	Y Home (alt)
11	Ext Switch 3	WHITE	A Home (alt)
12	+12 Ext Sensor Pwr	YELLOW	

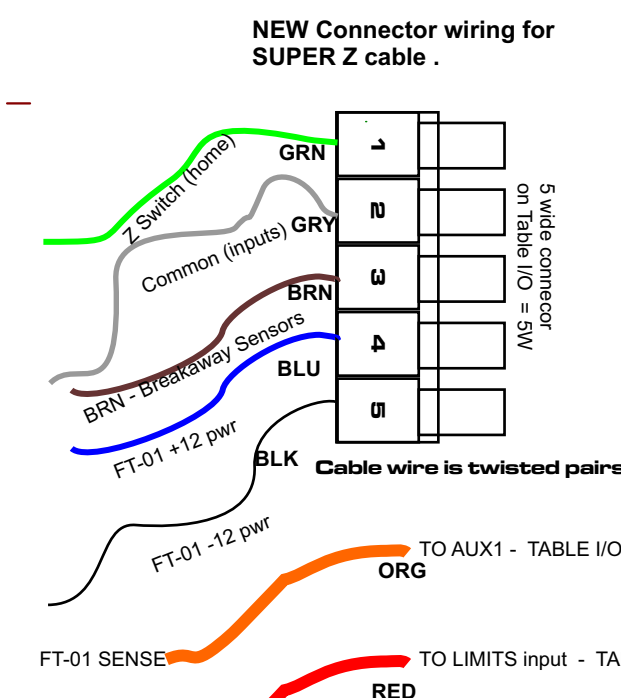
NOT USED : BLACK (WHITE) : BLACK (GREEN)



# UPDATED WIRE COLORS (03/20/18)



**IMPORTANT**  
The cable wire colors have been changed  
As if Jan 10th 2018 the Super Z axis is being wired with a different cable that has 12 different wire colors instead of pairs look at your cable end with the 5 wide green connector and you can determine if you have the new cable. Use the chart below to make the connections to the Table I/O/



Ft-01 Wallplug -12 vdc  
Ft-01 Wallplug +12 vdc

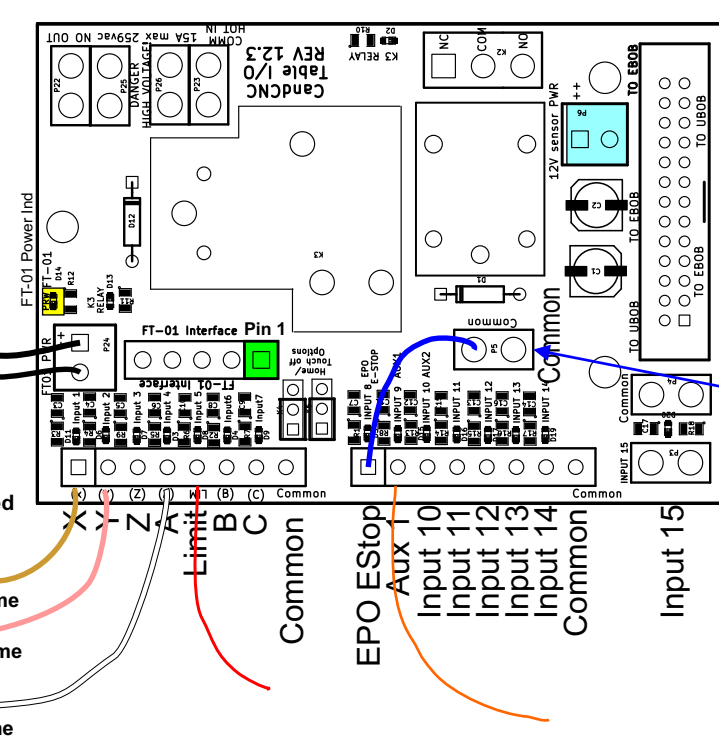


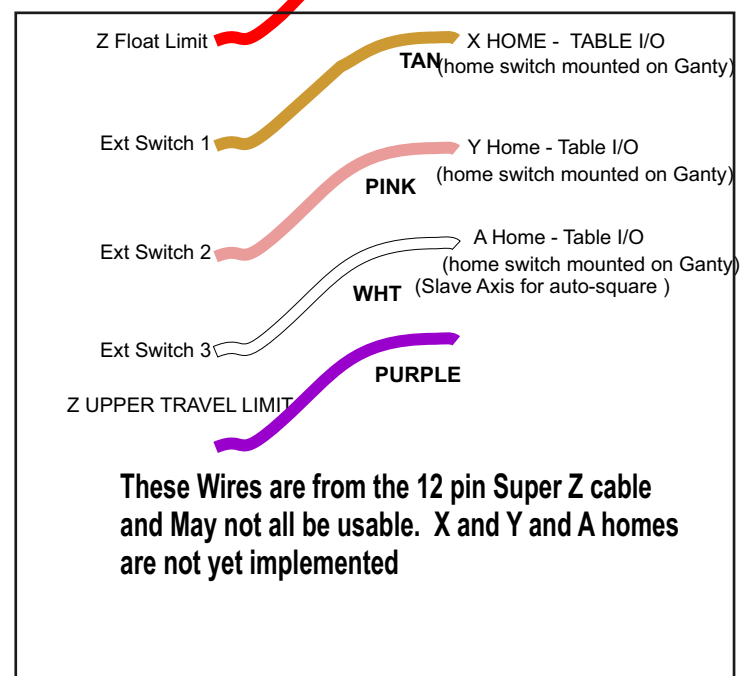
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## NEW WIRE COLORS AFTER FEB 1 st 2018

PIN	FUNCTION	WIRE COLOR	TABLE I/O CON
1	SENSE OUT (FTP-02)	ORANGE	AUX1 in
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12	+12 Ext Sensor Pwr	YELLOW	

NOT USED : BLACK (WHITE) : BLACK (GREEN)

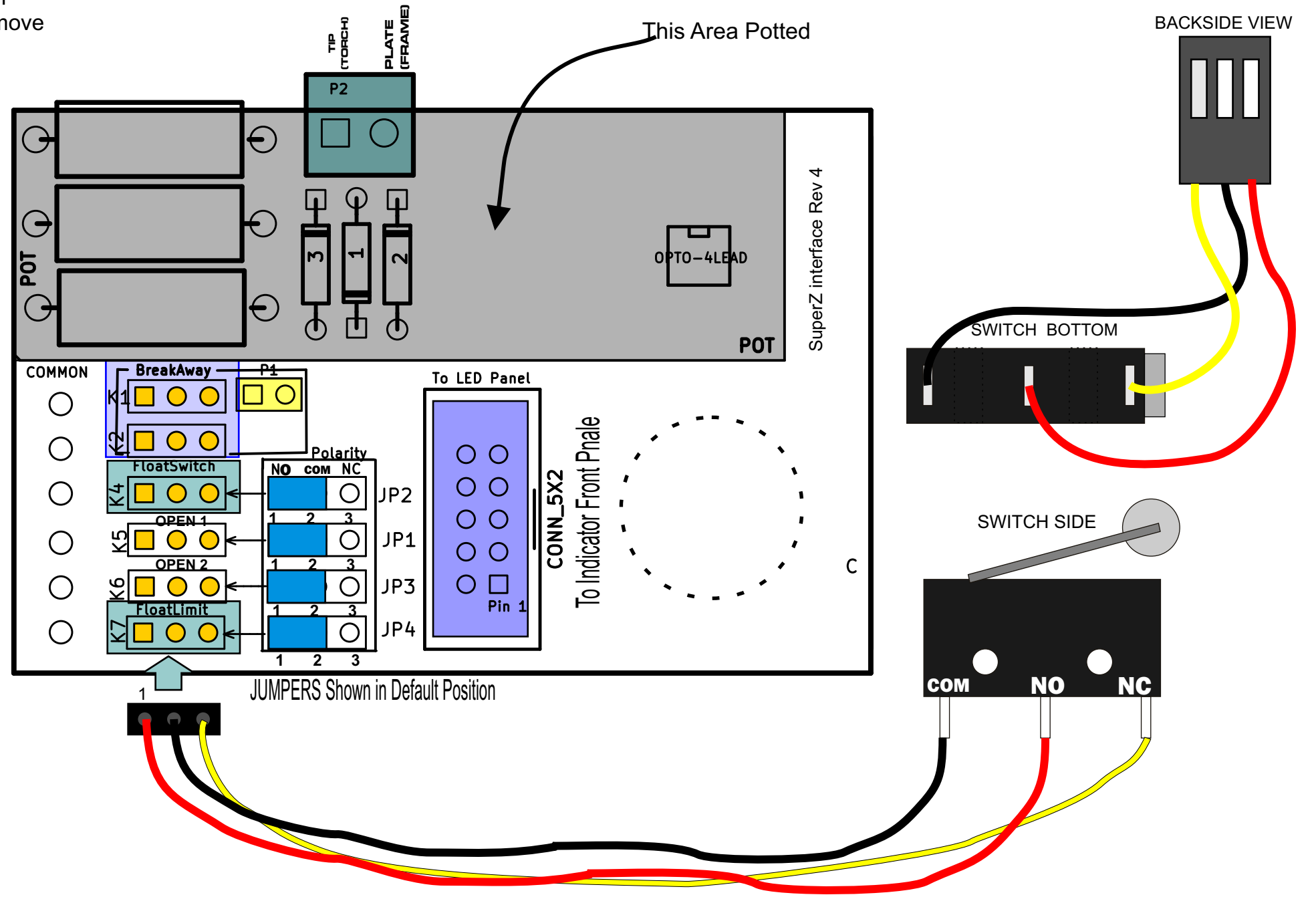




# Z Interface card Located inside Super Z

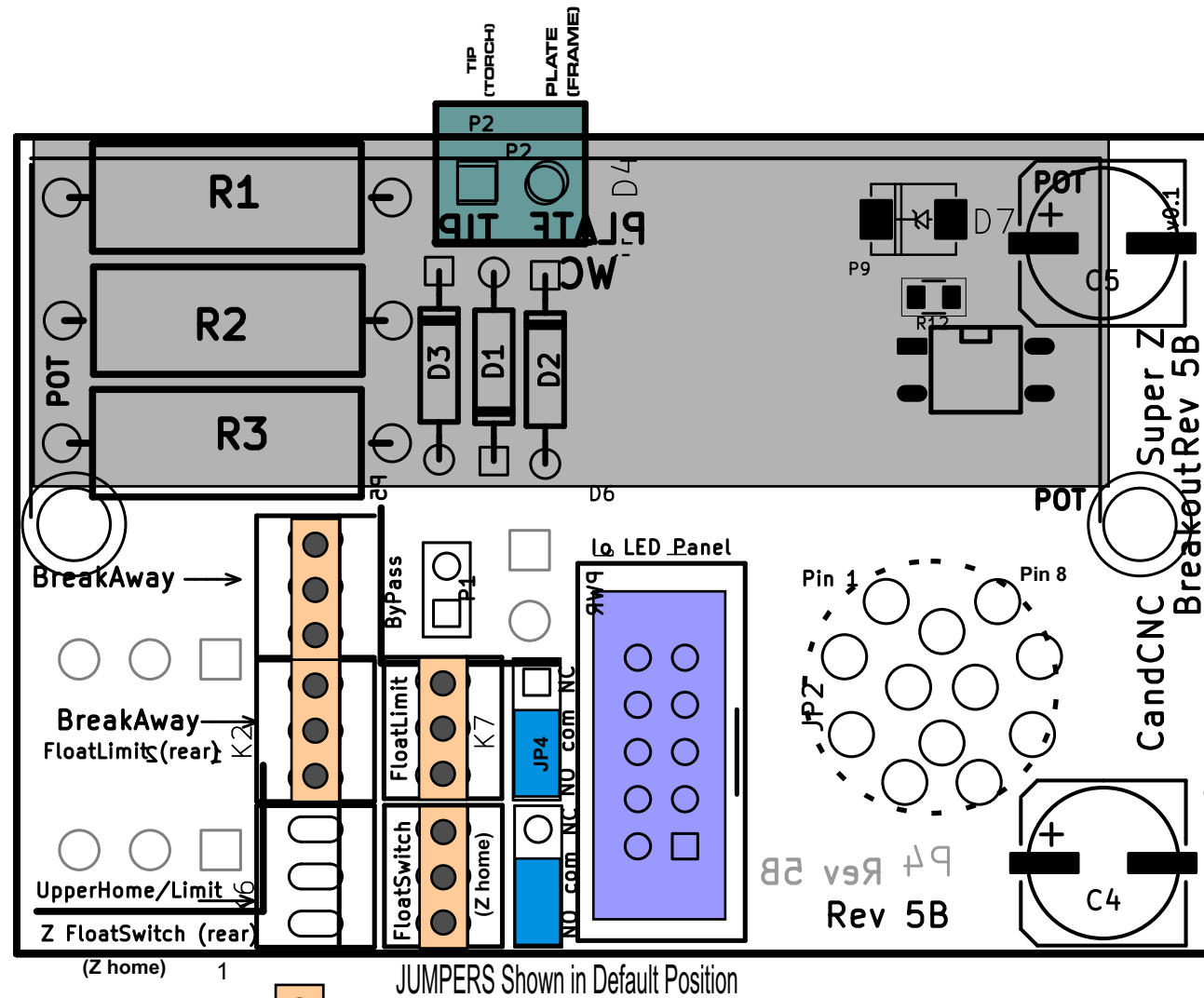
**NOTES:**

- 1 . P1 Jumper allows the use of a single breakaway switch  
When jumpered it makes Bypasses K1 and makes K2 the primary switch
- When using a single switch connect it to K2 and use the jumper P1
- 2. To make any of the other switches Normally Closed (NC) then move the jumper JP1 - JP4 from the default 1-2 pins to the 2-3 pins.



# Z Interface Rev 5B

LOCKING 2.54 MM 3 pin connectors



EXTERNAL SENSORs and wire NOT INCLUDED

**NOTES:**

- 1 . P1 Jumper allows the use of a single breakaway switch  
When jumpered it makes Bypasses K1 and makes K2 the primary switch  
When using a single switch connect it to K2 and use the jumper P1
- 2. To make any of the other switches Normally Closed (NC) then move the jumper JP1 - JP4 from the default 1-2 pins to the 2-3 pins.

JUMPERS Shown in Default Position  
4 switches used on Super Z

