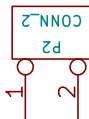


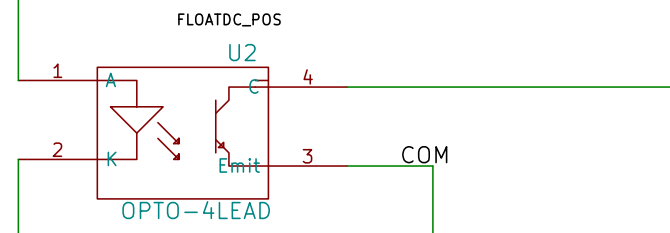
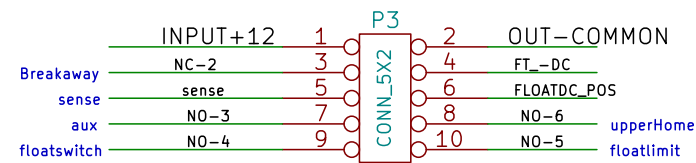
Torch connections



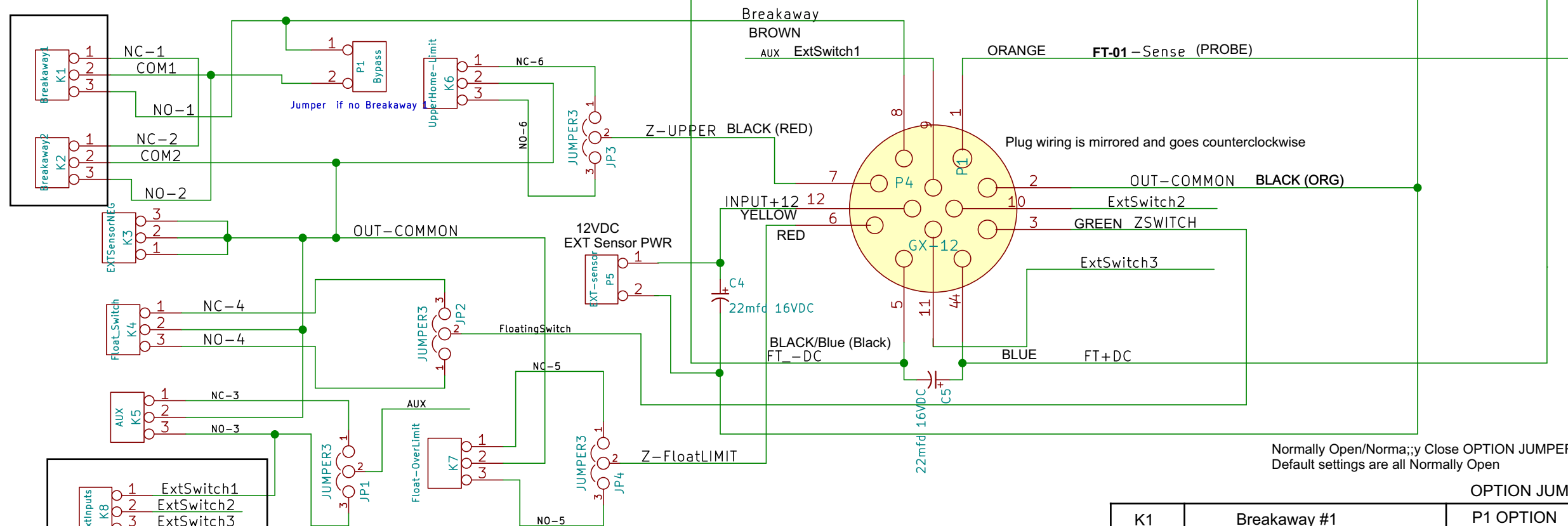
Torch Tip (Ohmic tab)  
WorkClamp Table Frame (plate/material)

### FT-02 Integrated Feather Touch

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

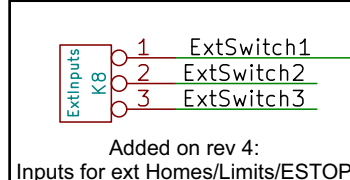


To Sense LED P3-5



Plug wiring is mirrored and goes counterclockwise

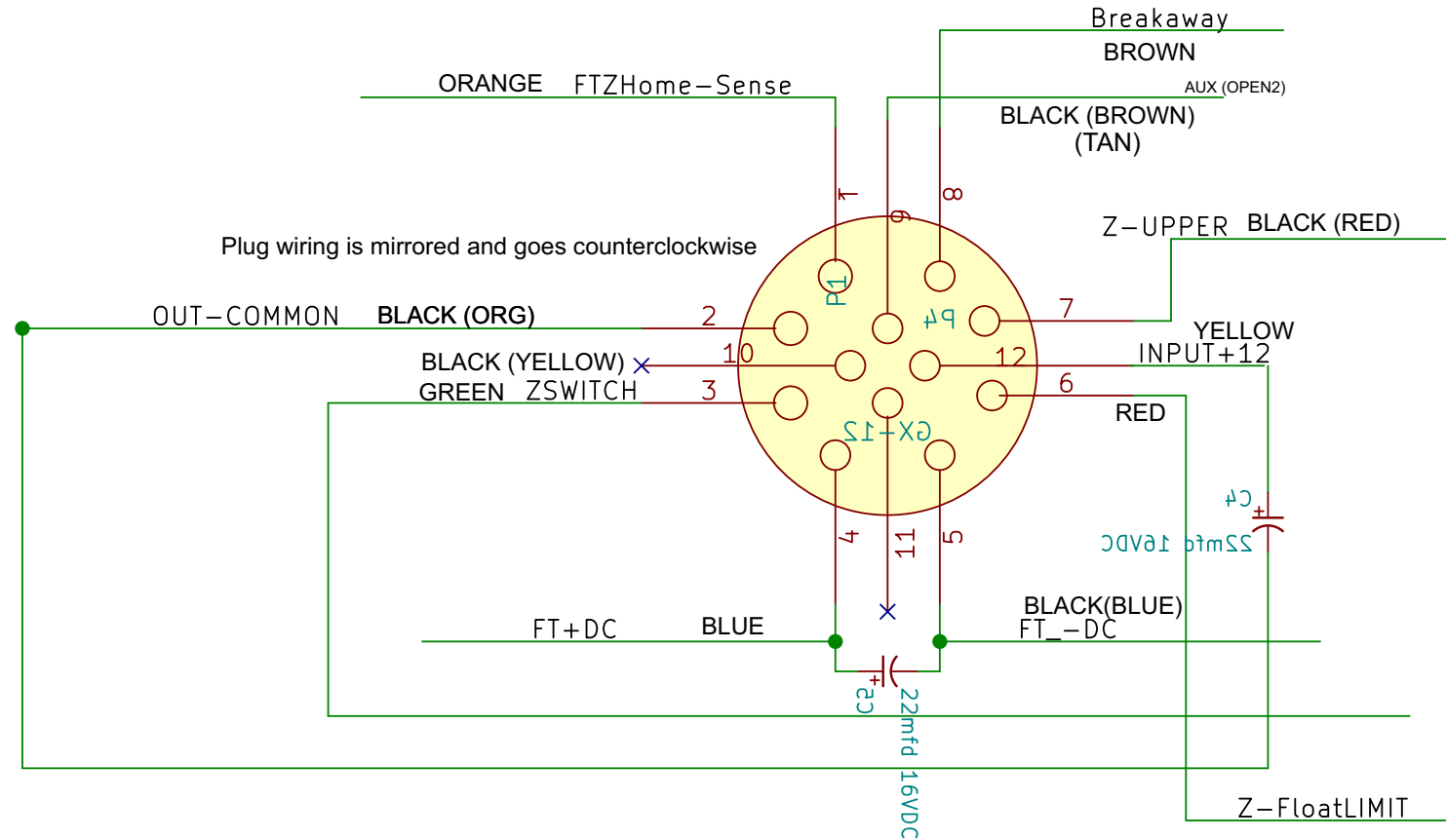
Normally Open/Normally Close OPTION JUMPER Settings  
Default settings are all Normally Open



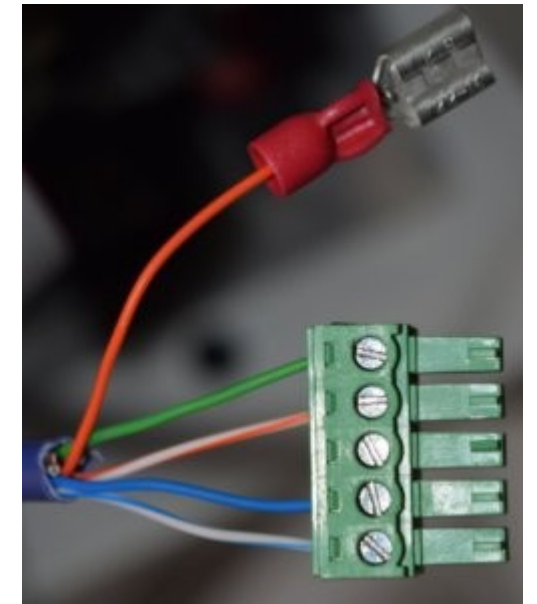
	OPTION JUMPER	SETTINGS
K1	Breakaway #1	P1 OPTION Jumper if no switch
K2	Breakaway #2	NA NC in series #1 to BAW
K3	EXTSwitches Common	NA
K4	Z SWTICH / Touch off	JP2 1-2 (NO*) 2-3 (NC)
K8-1	AUX SWITCH	JP1 1-2 (NO*) 2-3 (NC)
K6	Upper Z Limit /home	JP3 1-2 (NO*) 2-3 (NC)
K7	Z Switch Overrun	JP4 1-2 (NO*)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

### OLDER SUPER Z Prior to Feb 2018

Wire colors and signal names have changed after that date

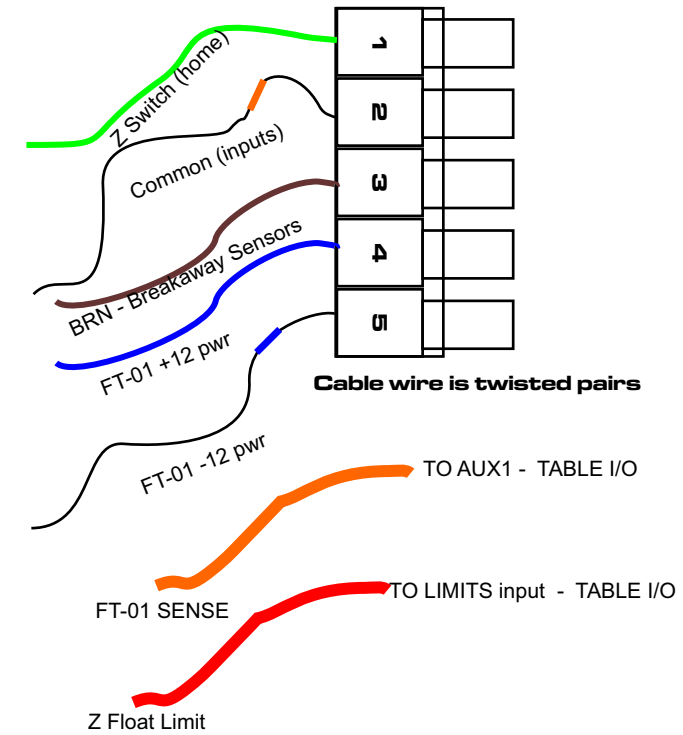


### Old Cable wire colors



5 wide connector on Table I/O = 5W

NEW Connector wiring for SUPER Z cable .

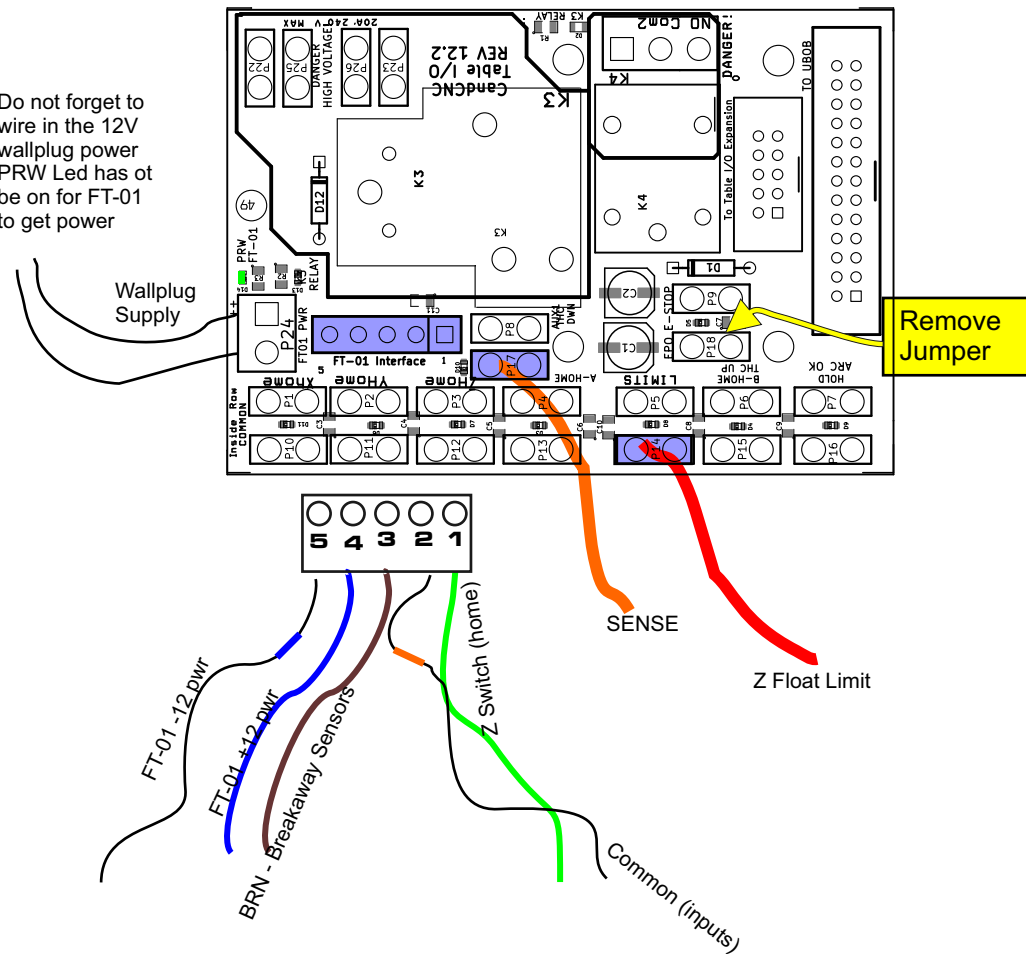


### 12 PIN INNERCONNECT BACKSIDE VIEW

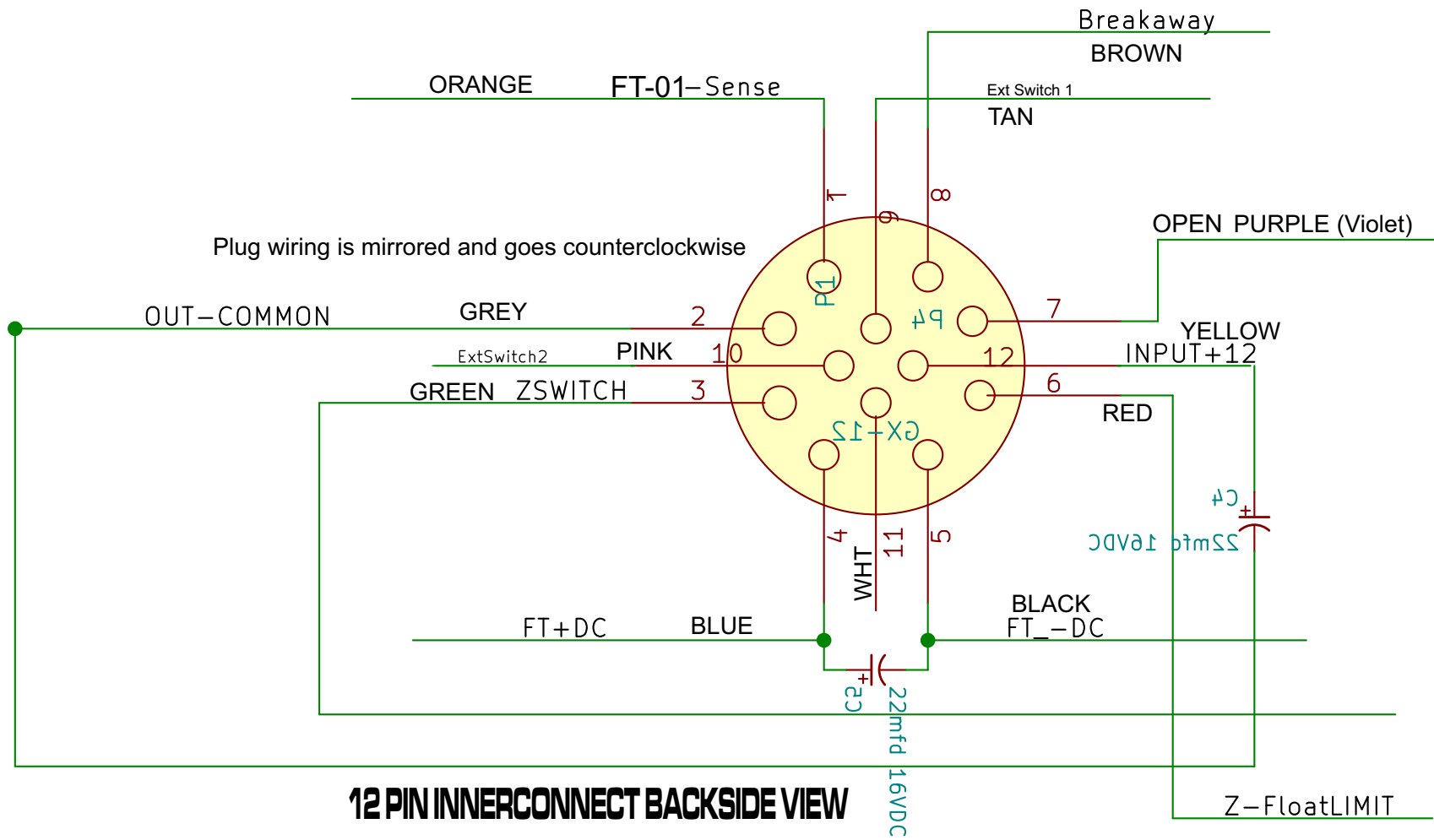
PIN	FUNCTION	WIRE COLOR	TABLE I/O CON
1	SENSE OUT	ORANGE	AUX1 in
2	COMMON OUT	BLACK (ORG)	5W = 2
3	Z - SWITCH	GREEN	5W - 1
4	FeatherT + DC	BLUE	5W - 4
5	FeatherT - DC	BLACK (BLUE)	5W - 5
6	Z FLOAT LIMIT	RED	Limits IN
7	Z UPPER LIMIT (OPEN 1)	BLACK (RED)	Not used
8	BREAKAWAY	BROWN	5W - 3
9	OPEN 2	BLACK(BROWN)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

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



## UPDATED WIRE COLORS (03/20/18)

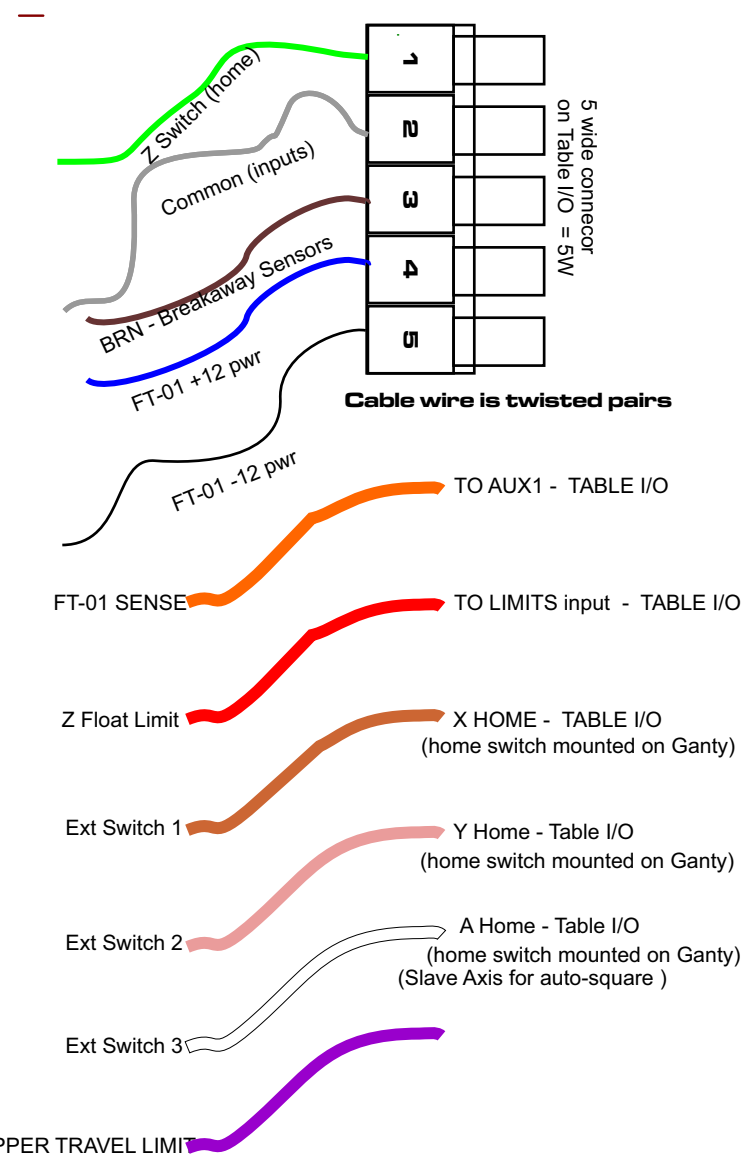


**IMPORTANT**

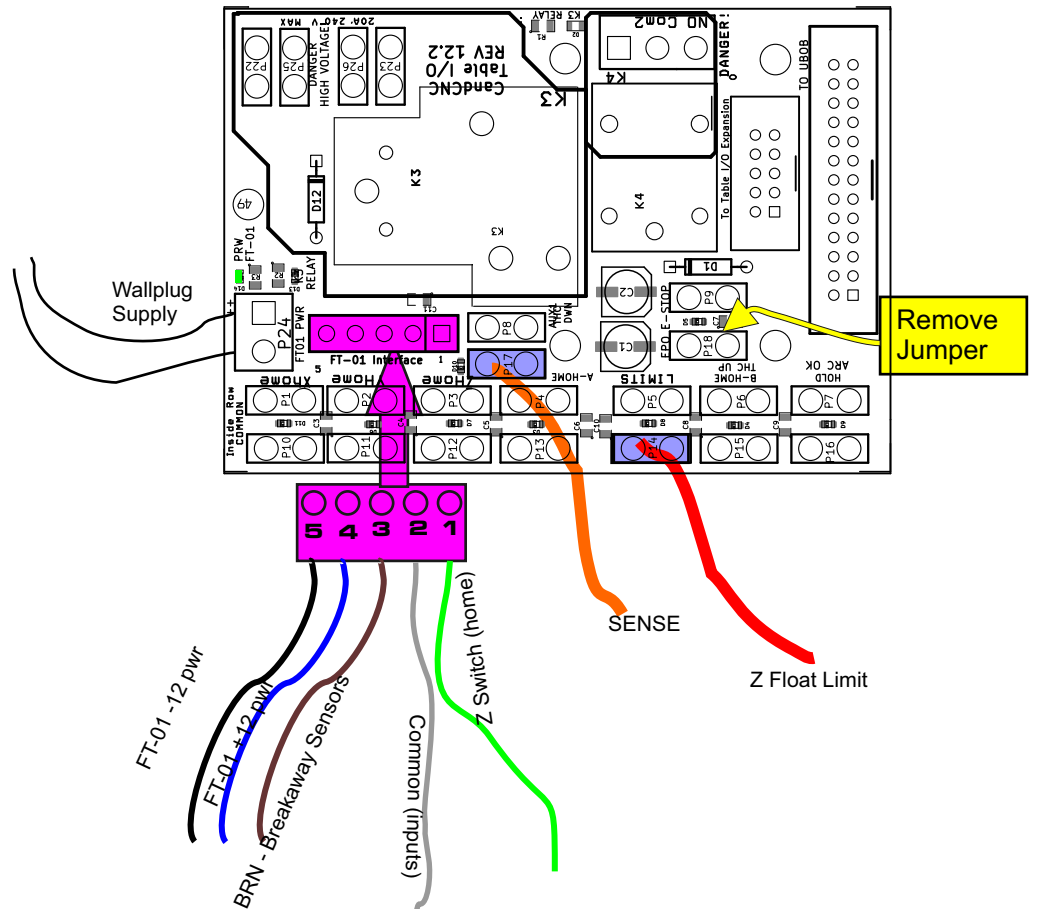
The cable wire colors have been changed

As of 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 .



### 12 PIN INNERCONNECT BACKSIDE VIEW

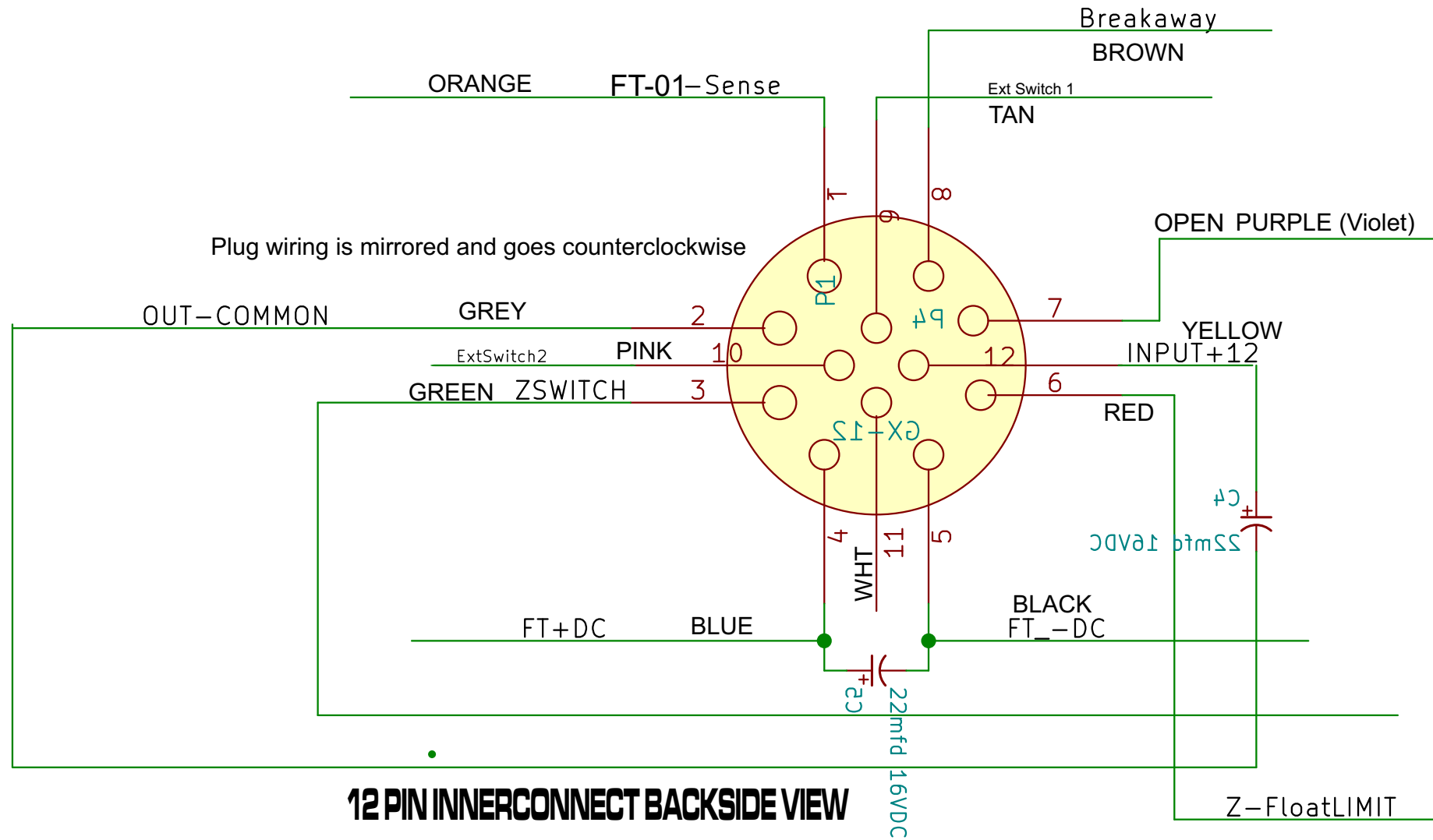


### NEW WIRE COLORS AFTER FEB 1 st 2018

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)

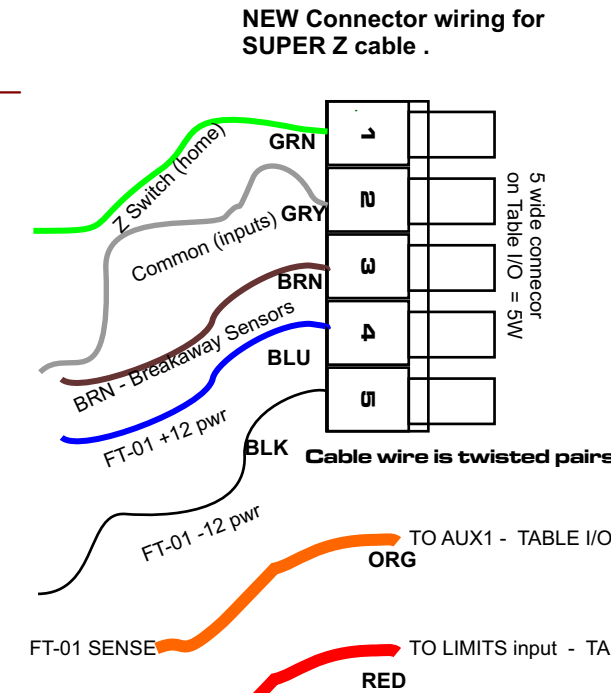
# UPDATED WIRE COLORS (03/20/18)



**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

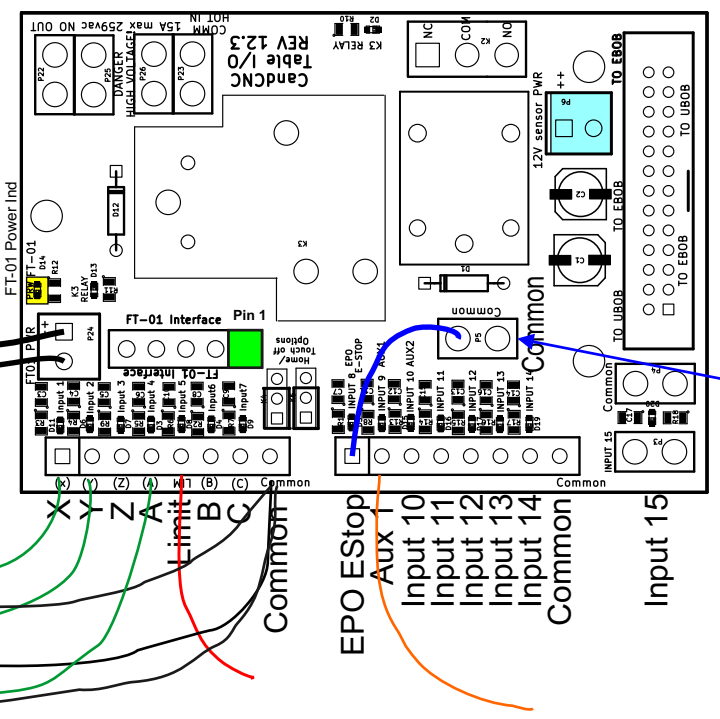


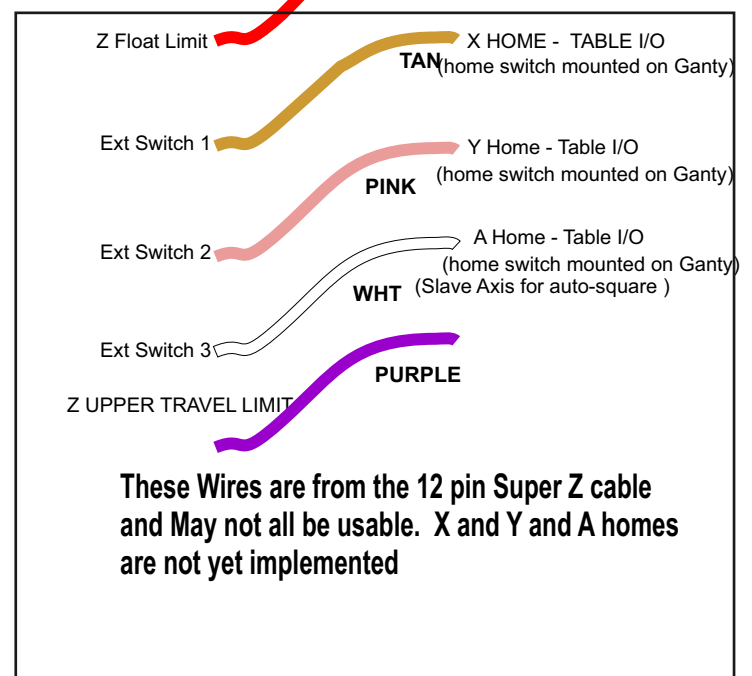
Table I/O REV 12.5 (new rev) Wiring for AC

**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**

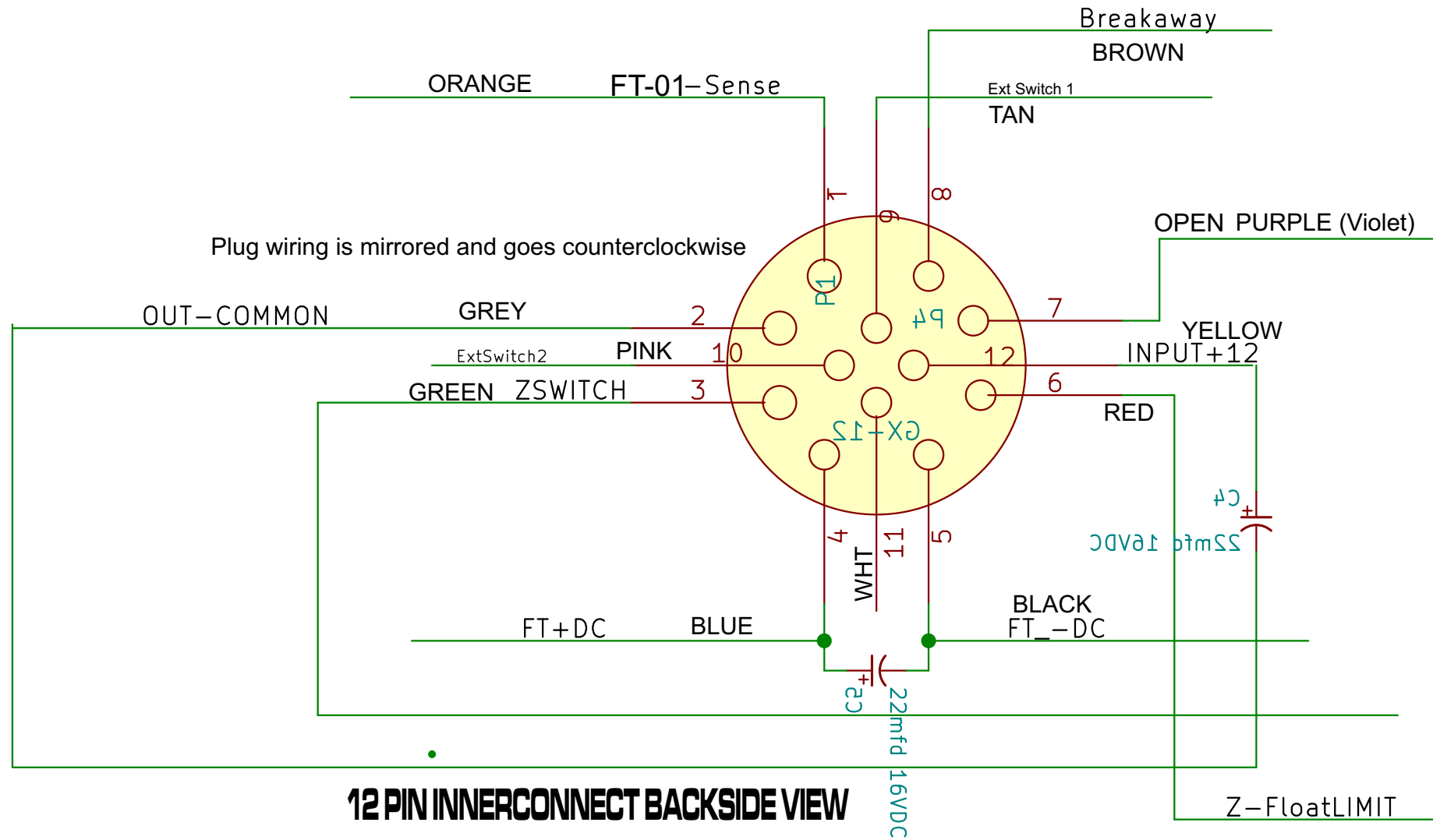
## NEW WIRE COLORS AFTER FEB 1 st 2018

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 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	

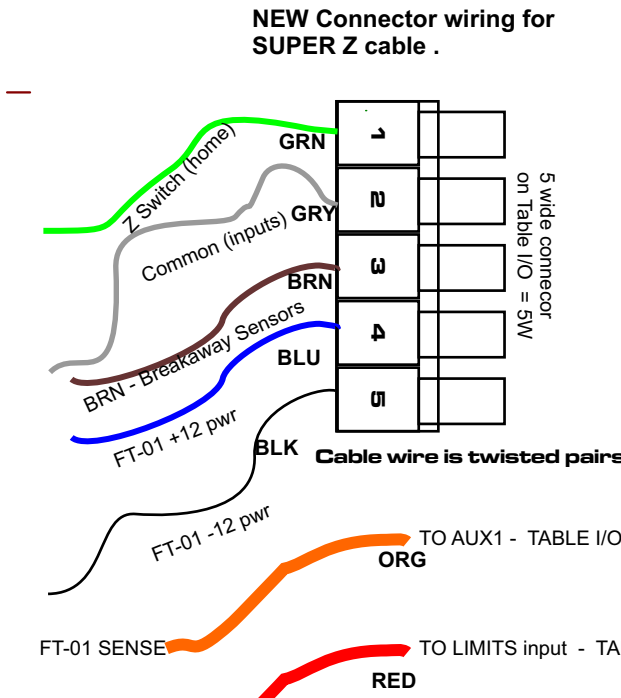
NOT USED : BLACK (WHITE) : BLACK (GREEN)



# 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

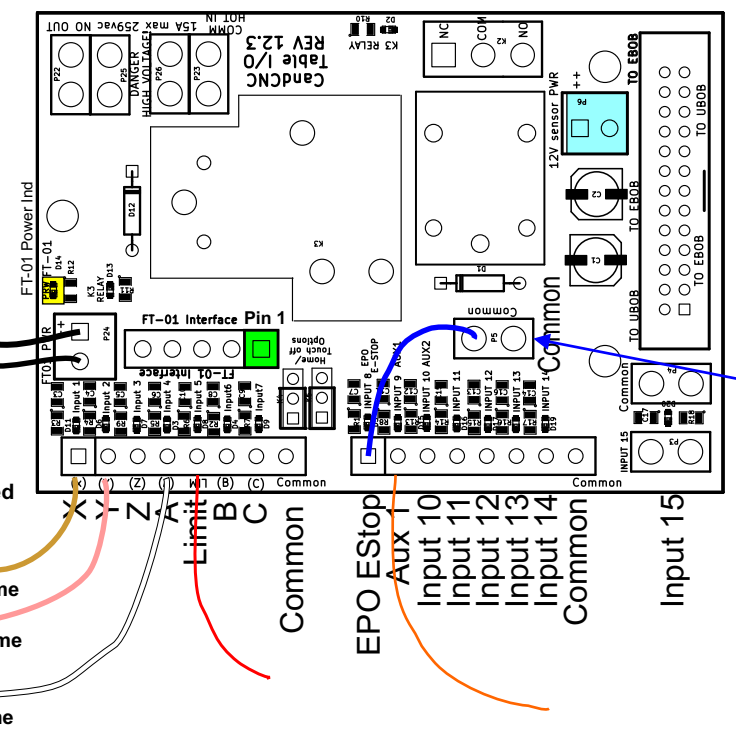


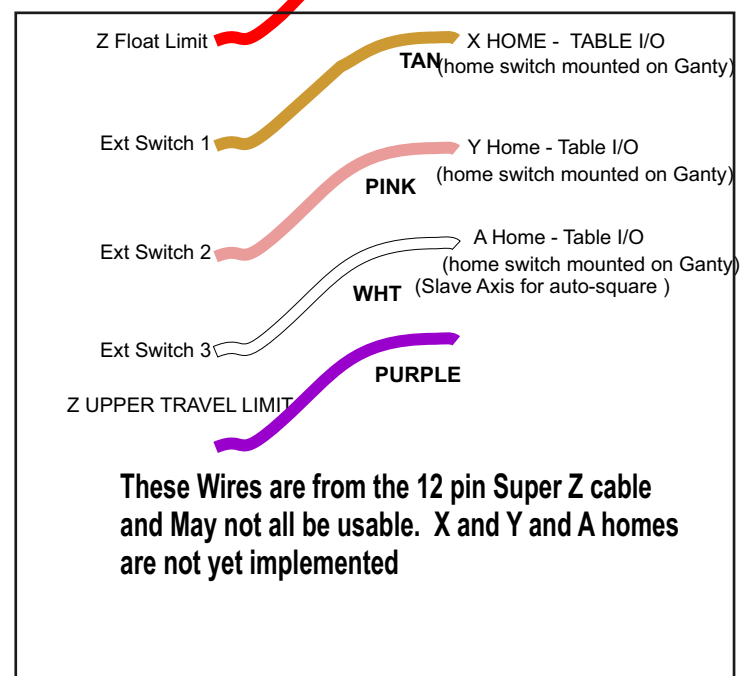
Table I/O REV 12.5 (new rev) Wiring for AC

**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 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)

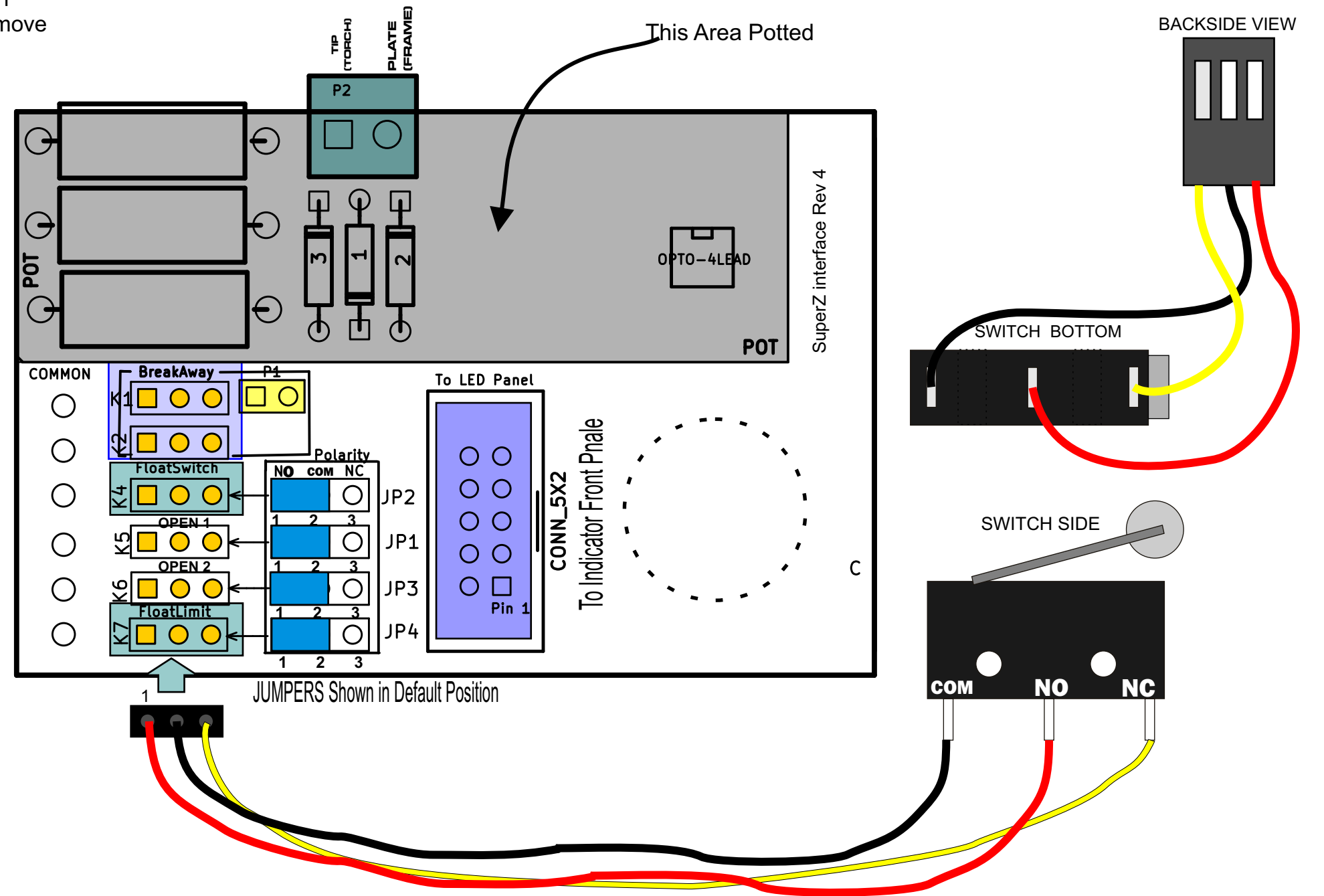




# Z Interface card Located inside Super Z

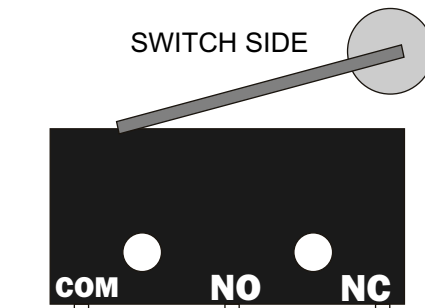
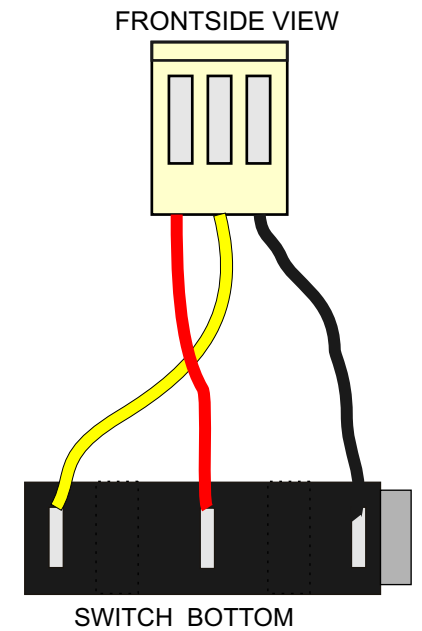
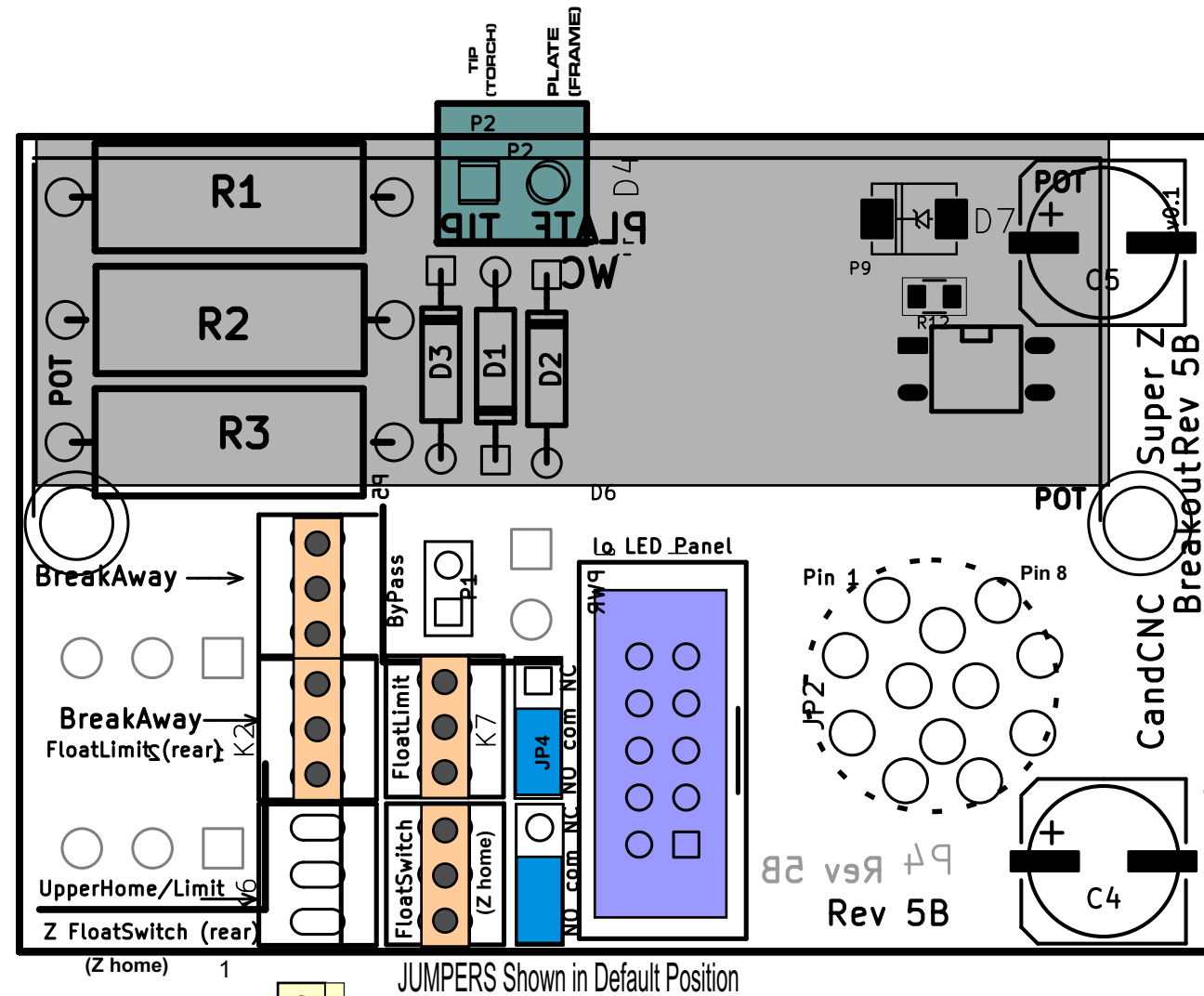
**NOTES:**

- 1 . P1 Jumper allows the use of a single breakaway switch  
When jumpered it makes Bypasses K1 and makes K2 the primary switch
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

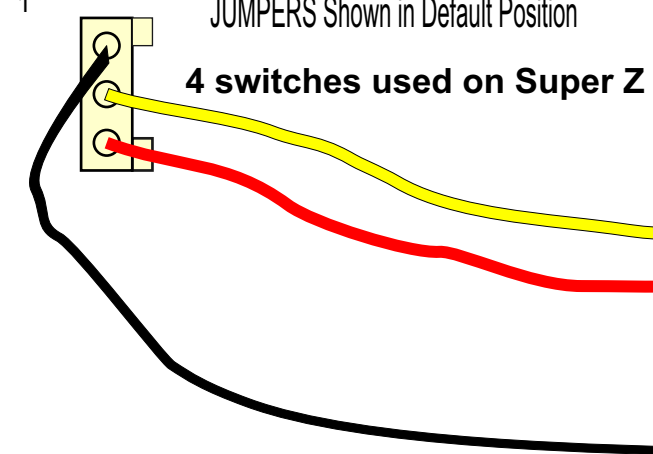
LOCKING 2.54 MM 3 pin connectors



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