

see page 3 for using new 12.3 or 12.6 TableI/O with FT-01

FT-02 Feather Touch Ohmic Sensor Module



Wired Table I/O Rev 12.3

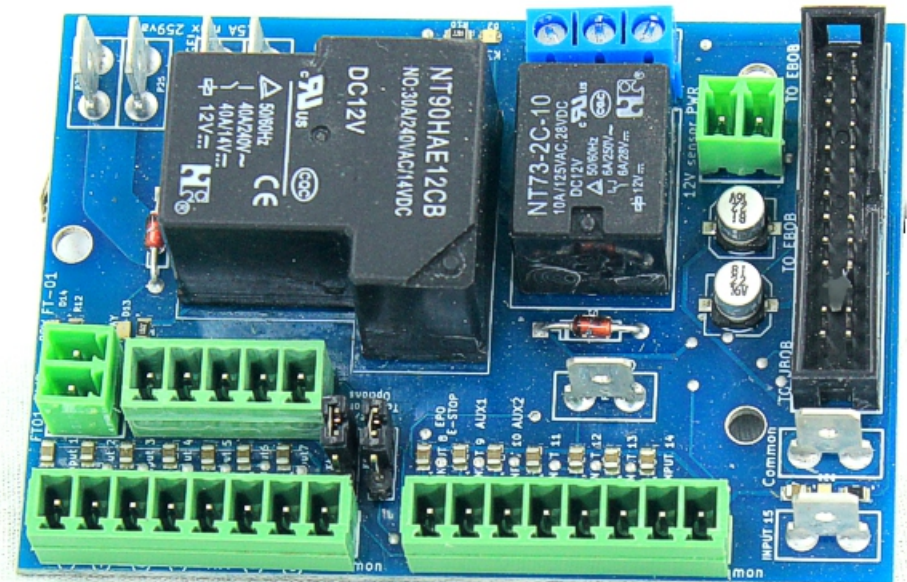


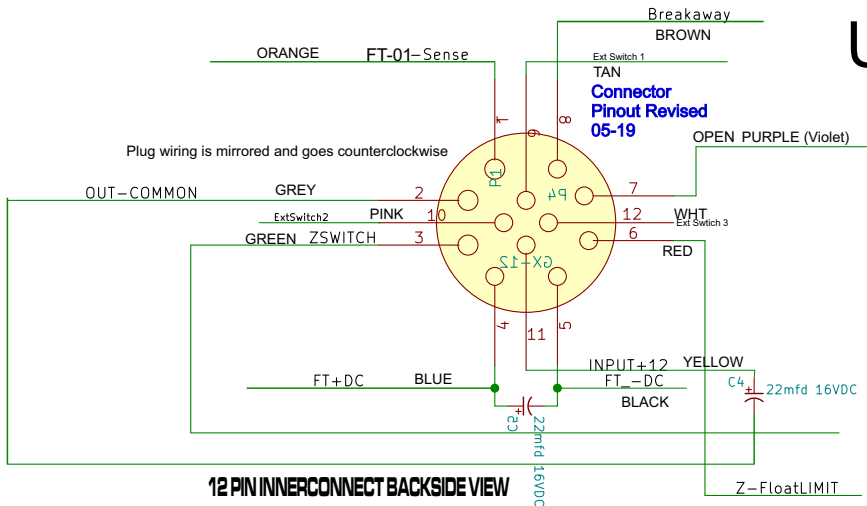
Table I/O Rev 12.3

DISCLAIMER

CandCNC does NOT support the use of the FT-02 with other Breakout Boards or older MACH systems . Table I/O cards are plug compatible with CandCNC BoB's (UBOB and EBOB)

NOTE Table I/O Rev 12.3 and rev 12.6 are designed to plug to the EBOB Direct Ethernet BoB from CandCNC . **A Rev 12.3 can be plugged to an Older UBOB but there is no source for the 12V needed to drive any 12 V sensors or Prox detectors and the front panel status LEDs will not work.**

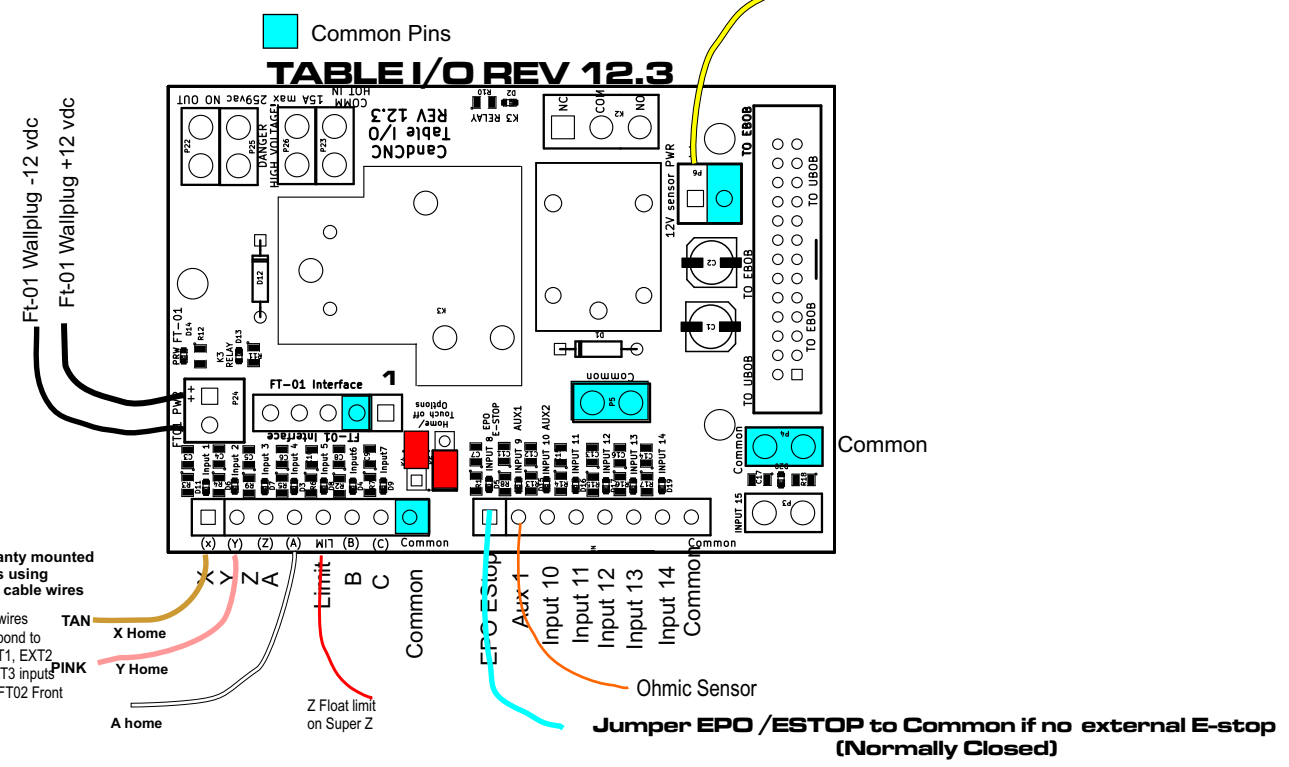
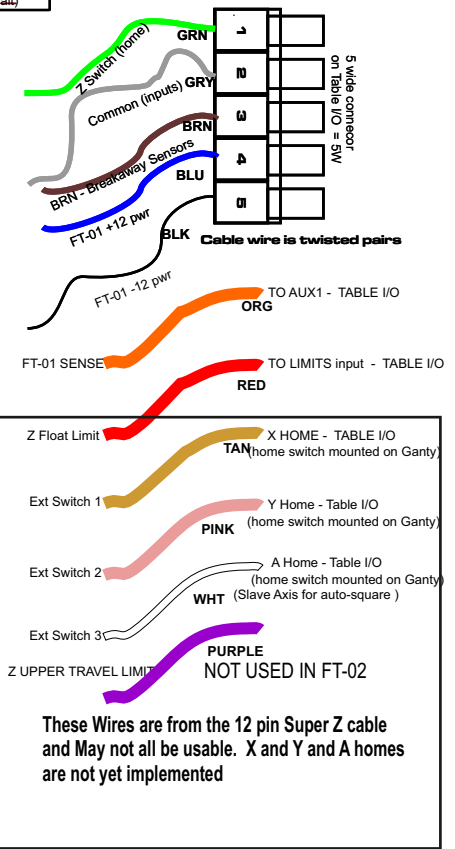
Using FT-02 with Table I/O 12.3



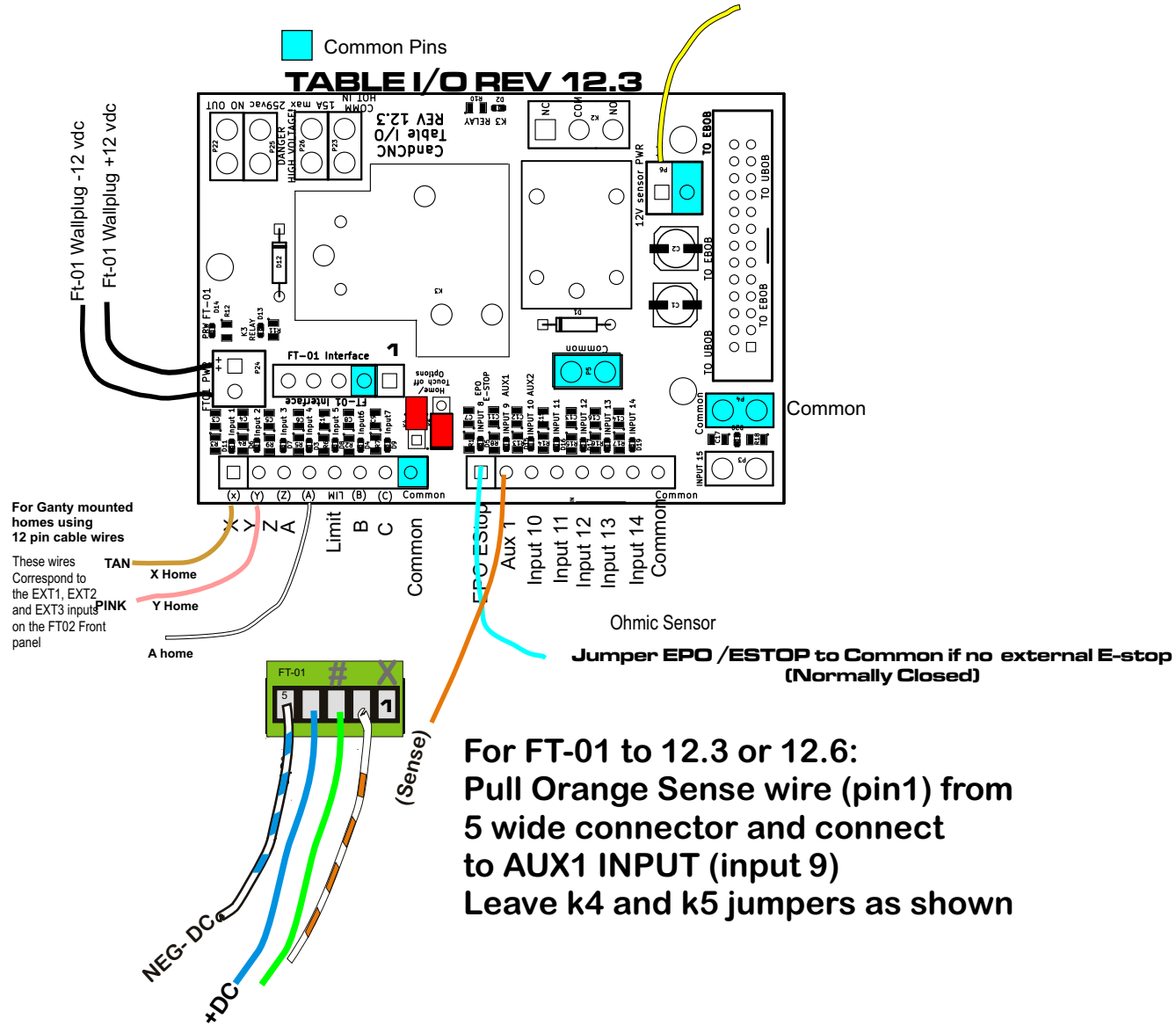
NEW WIRE COLORS AFTER FEB 1 st 2018

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)	
8	BREAKAWAY	BROWN	5W - 3
9	Ext Switch 1	TAN	X Home (alt)
10	ExtSwitch2	PINK	Y Home (alt)
11	+12 Ext Sensor Pwr	YELLOW	P6 Pin1
12	Ext Switch 3	WHITE	A Home (alt)

NEW Connector wiring for SUPER Z cable and FT-02 .



Using FT-01 with Table I/O 12.3

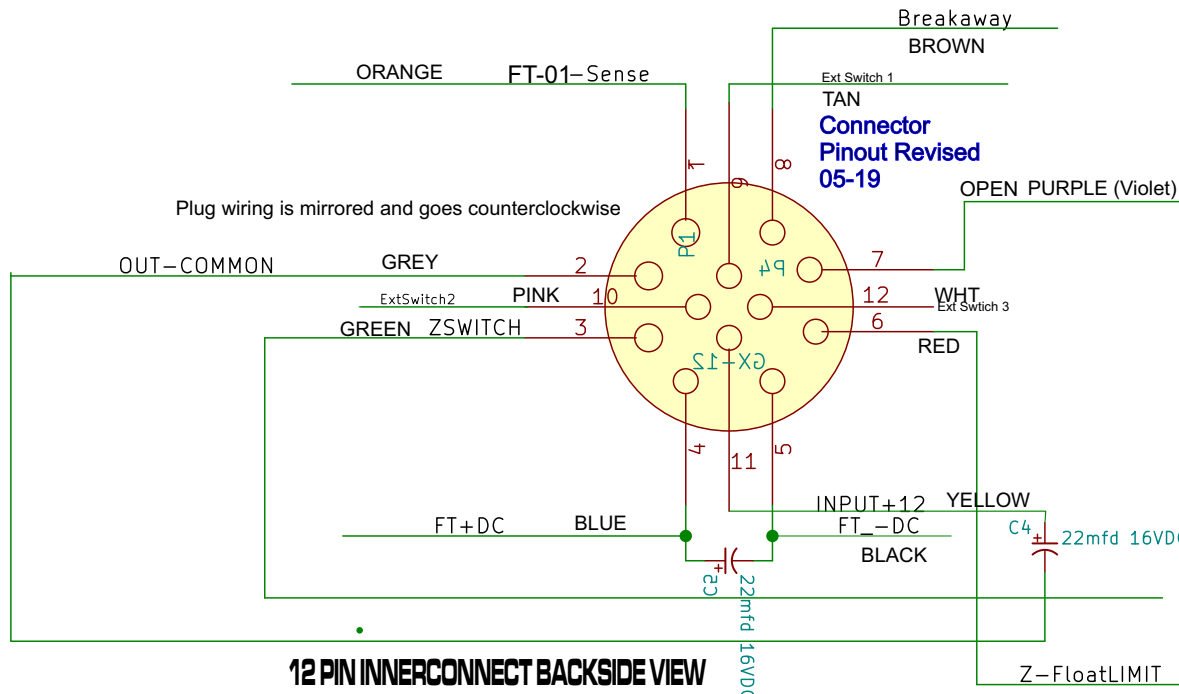


Green wire comes from FT-01 "limits" input and can be used for a Z home connection to a mechanical switch. If it is the K5 needs to be 1-2 and triggers ZHome input

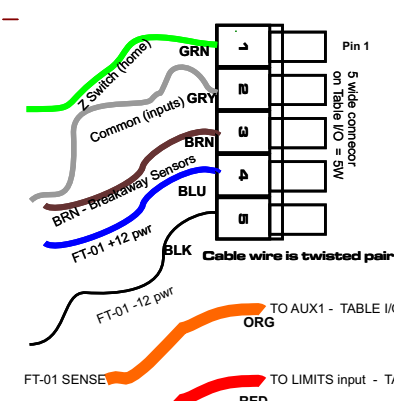
Using FT-02 with Table I/O 12.6

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 .



FT-01 Wallplug -12 vdc

FT-01 Wallplug +12 vdc

For Gantry mounted homes using 12 pin cable wires
These wires correspond to the EXT1, EXT2 and EXT3 inputs on the FT02 Front panel

TAN X Home

PINK Y Home

A home

Z Float limit on Super Z

Common

EPO E-stop

Aux 10

Input 11

Input 12

Input 13

Input 14

Common

Input 15

Ohmic Sensor

12 PIN INNERCONNECT BACKSIDE VIEW

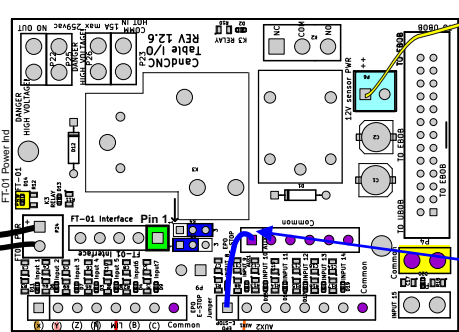


Table I/O REV 12.5/12.6 (new rev) Wiring for AC

IMPORTANT CONNECTION

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

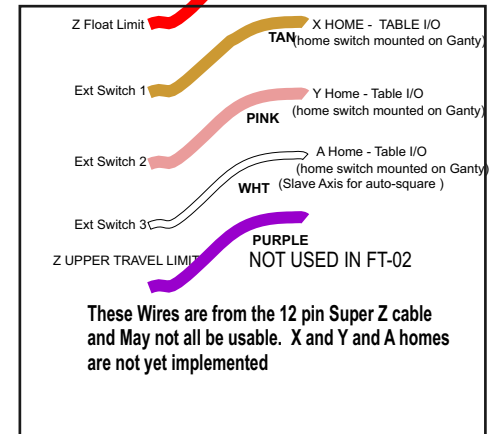
Each input has a COMMON wire . There are 9 open Common terminals. for inputs over 8 use the large tab common D20 and wrap and crimp the added Common wires

To use Breakaway on FT-02 (Brown Wire) Jumper K5 should be 2-3 This depends on the setting of JP1 on FT-02 Main card

Jumper on K4 needs to be 2-3 . Use 1-2 only if Z home switch or Prox Input(s) is used for Mechanical Touch Off (Probe)

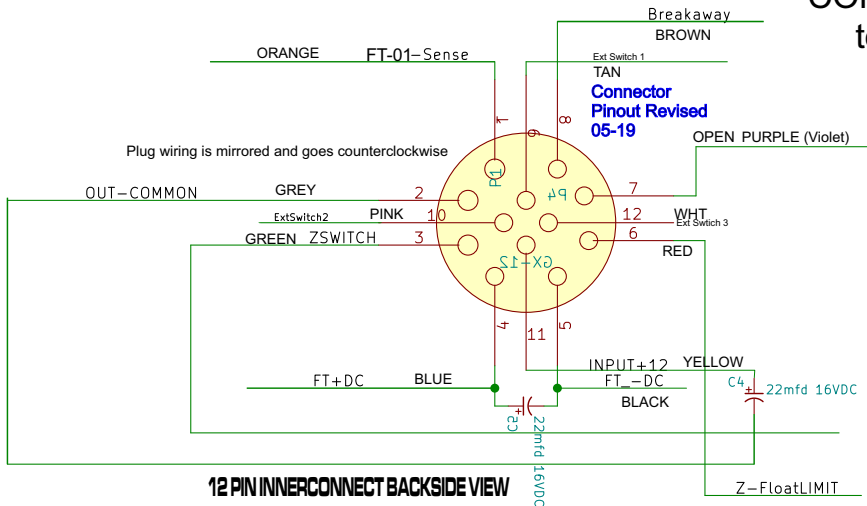
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6	Z FLOAT LIMIT	RED	Limits IN
7	Z UPPER TRAVEL LIMIT	PURPLE(Violet)	
8	BREAKAWAY	BROWN	5W - 3
9	Ext Switch 1	TAN	X Home (alt)
10	ExtSwitch2	PINK	Y Home (alt)
11	+12 Ext Sensor Pwr	YELLOW	P6 Pin1
12	Ext Switch 3	WHITE	A Home (alt)



These Wires are from the 12 pin Super Z cable and May not all be usable. X and Y and A homes are not yet implemented

CONNECTING FT-02 Feather Touch Ohmic Sensor to MP3700 Table I/O card and CORE Table I/O



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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)	
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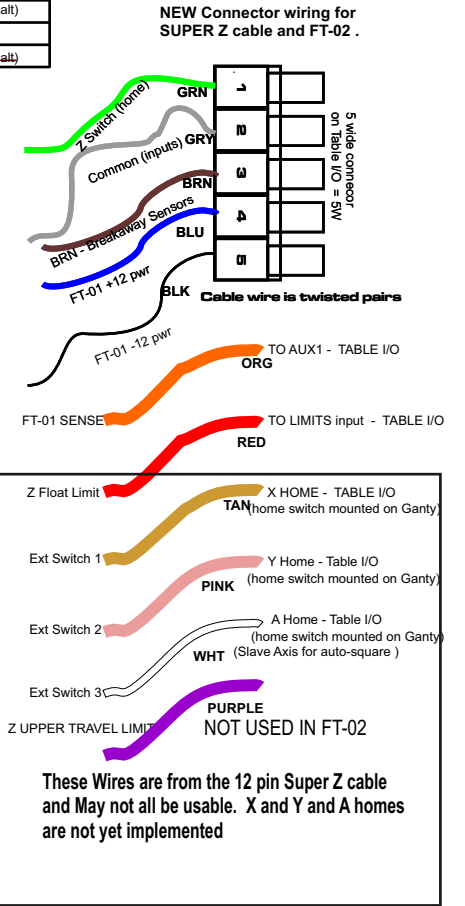
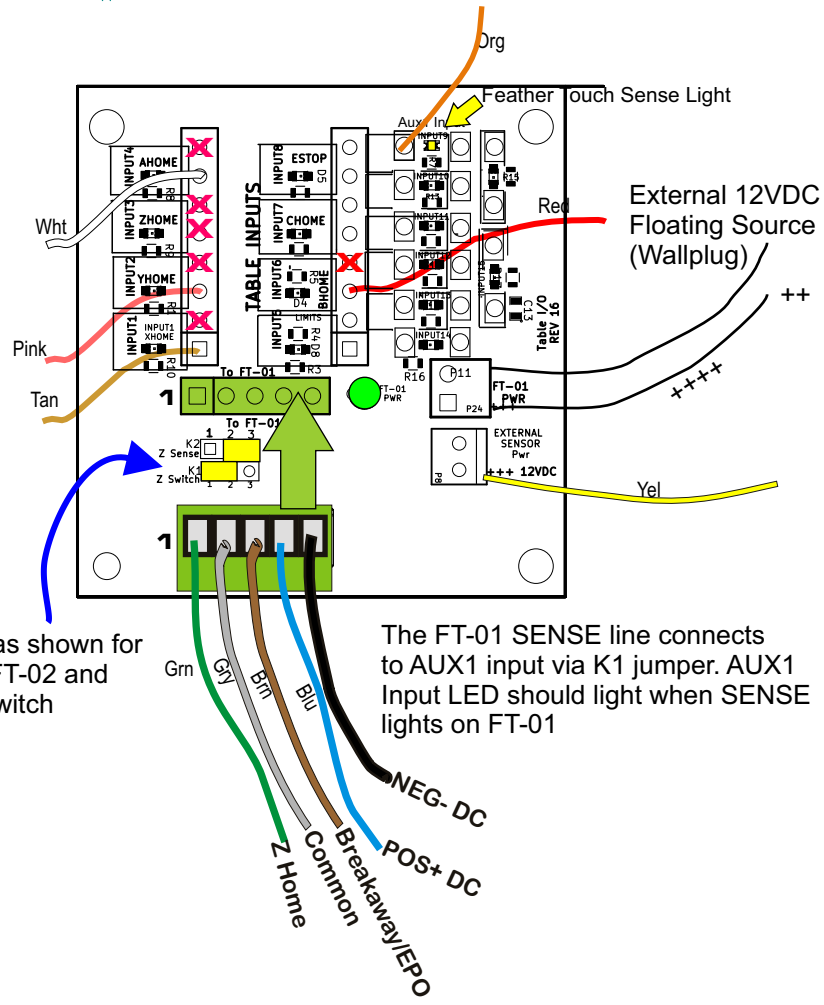


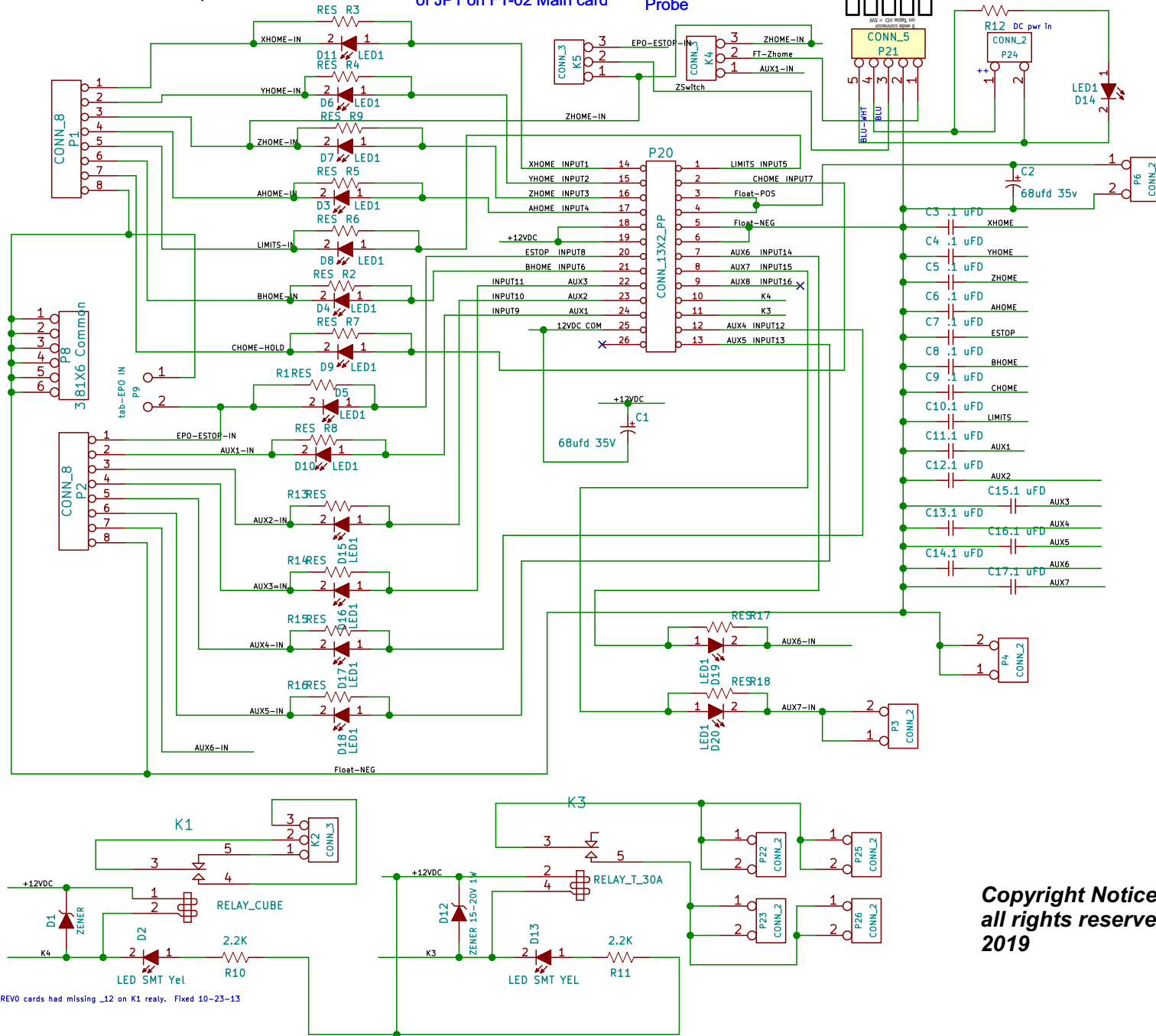
TABLE I/O REV12.6

Note: P8 added to 12.3 to provide More Common inputs

To use Breakaway on FT-02 (Brown Wire)
 Jumper K5 should be 2-3
 This depends on the setting of JP1 on FT-02 Main card

Jumper on all FT02 system needs to be 2-3 . Use 1-2 only if Z home switch or Prox is used for Touch Off Probe

From 12 Pin connection cable



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REV0 cards had missing _12 on K1 relay. Fixed 10-23-13