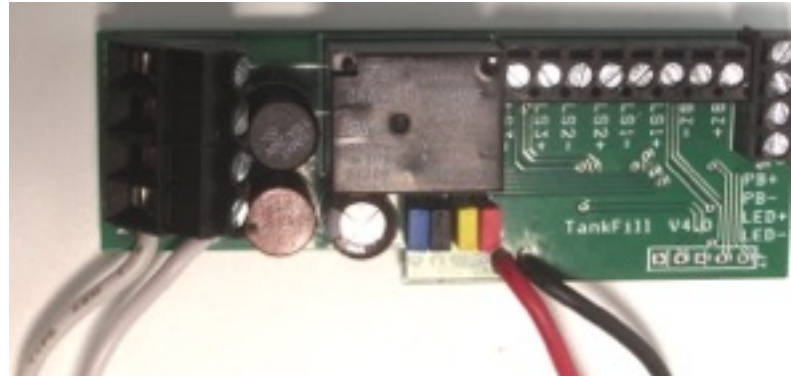


PCB INSTALLATION -LEVEL CONTROLLER

1. PCB PREPARATION

- This PCB runs from line power only. (not battery)
- Solder power supply to the board as shown for 110VAC.



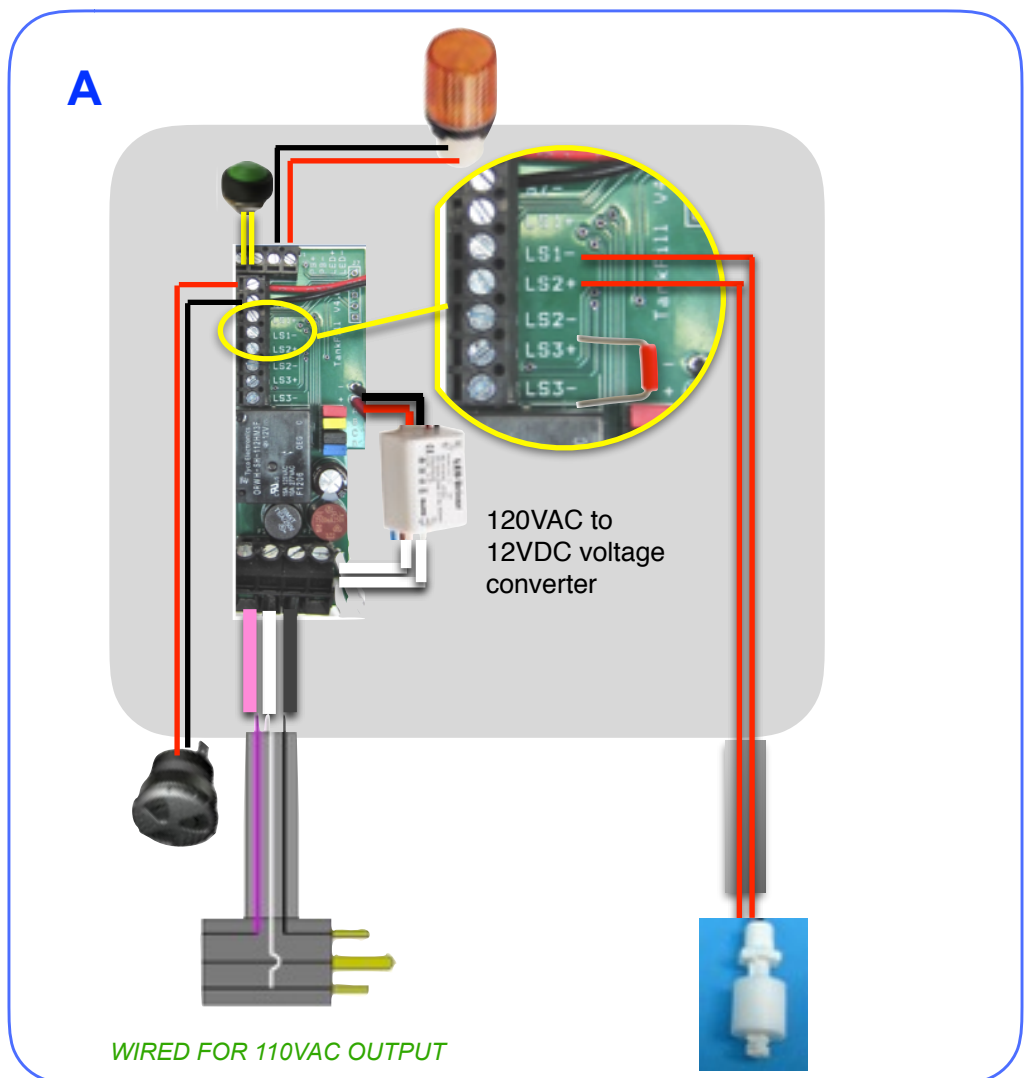
PCB PREPARED FOR 110VAC OUTPUT

2. FIRMWARE

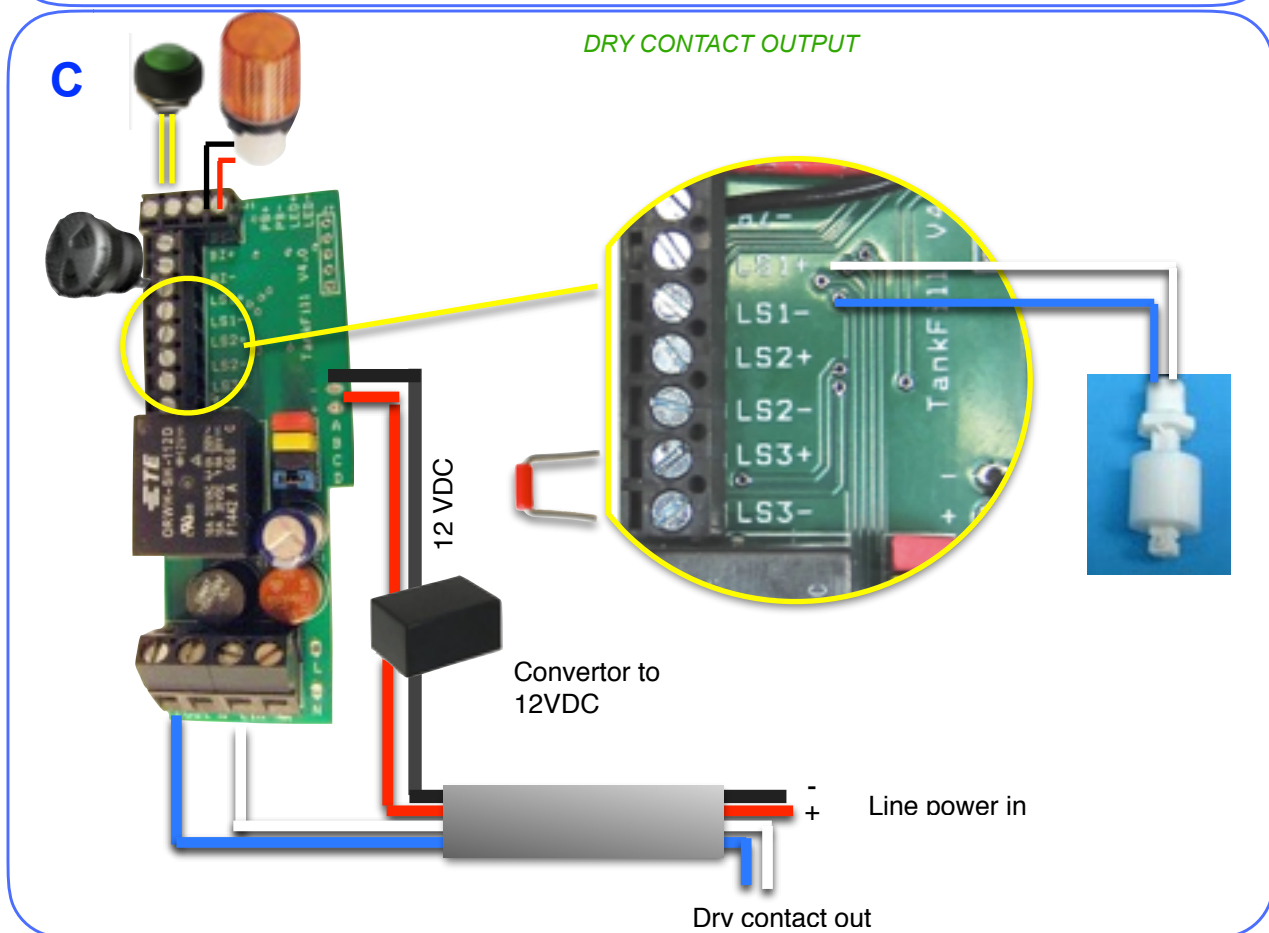
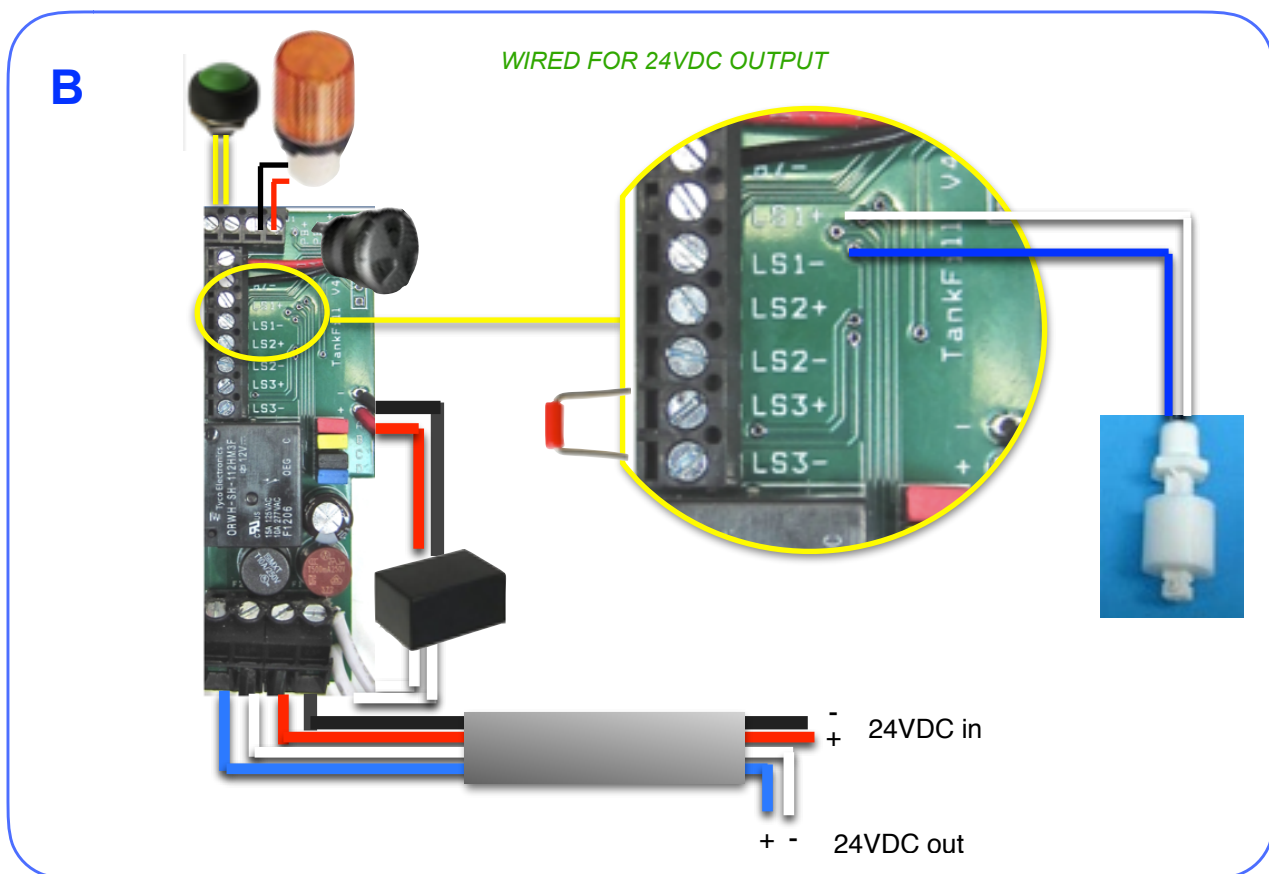
- There are two programs for the same pcb: either Drumalarm or Level Controller.
- For a Relay Output option use the Drumalarm program and wire float to LS1, and jumper or second float to LS3. Floats must be N.C. and open when there is an alarm.
- For Level Controllers, use Level Controller program. Float switches are wired in order: lowest switch=LS3, middle=LS2, highest or emergency overfill =LS1 Floats must be N.O. and close when there is an alarm.

3. WIRING

- The PCB can be wired for either 110VAC, DC output or dry contact.



PCB INSTALLATION -LEVEL CONTROLLER



PCB INSTALLATION -LEVEL CONTROLLER

4. BEHAVIOR

DRUM ALARM PROGRAM

- LS2 terminals not used.
- LS3 is used for "plug detection". If no continuity then an alarm is given. Alarm pattern should be different from level alarm:BZ and LED on 3 seconds/ off 3 seconds but LED blinks 1000ms on/1000s off instead of strobing. LS3 also activates relay.
- When liquid level on LS1, an alarm is given consisting of a continuous BZ output and the LED flashes in a strobe pattern. Relay switches state.
- PB tests buzzer / LED / relay. (relay should momentarily switch state then reset when PB released)

DRUM ALARM PROGRAM			
JUMPER	DESCRIPTION	JUMPER ON	JUMPER OFF
A	RELAY RESET	AUTO	MANUAL
B	SNOOZE	30 MINS	NO SNOOZE
C	RELAY ORIENTATION	N.C	N.O.
D	FLOAT ORIENTATION	N.C.	N.O.

LEVEL CONTROLLER PROGRAM

- LS1= overfill float, LS2= top LC float, LS3= bottom LC float.
- If LS2 AND LS3 floats are both open, then button pushes alternately switch the relay state.
- If LS2 and LS3 switches are closed at the same time, an alarm is given.
- If not in alarm state, PB tests buzzer/LED and switches relay state. Subsequent presses alternate relay state.
- LS1 produces an alarm and shuts off relay, independent of LS2 or LS3.
- If floats are both open circuit, then button pushes alternately switch the relay state.

LEVEL CONTROLLER PROGRAM			
JUMPER	DESCRIPTION	JUMPER ON	JUMPER OFF
A	FUTURE USE	—	—
B	SNOOZE	30 MINS	NO SNOOZE
C	LEVEL CONTROL	TANK FILLING	TANK EMPTY
D	BUZZER BEHAVIOR	CONTINUOUS	4s ON /10 mins OFF (REPEATING)