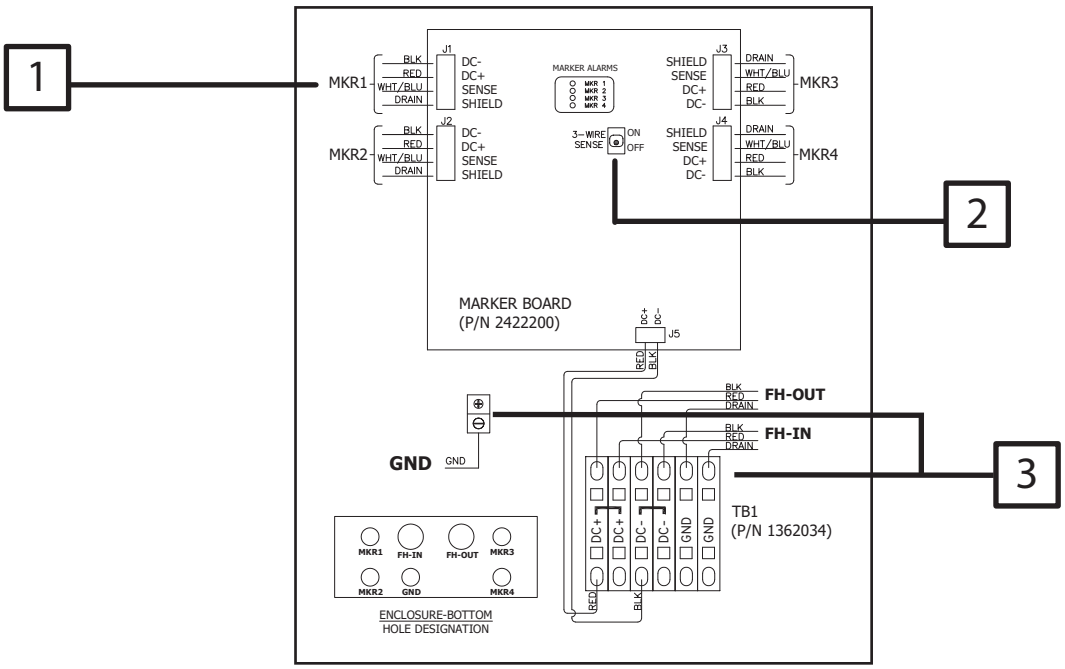
# Vanguard® Marker Junction Box Installation

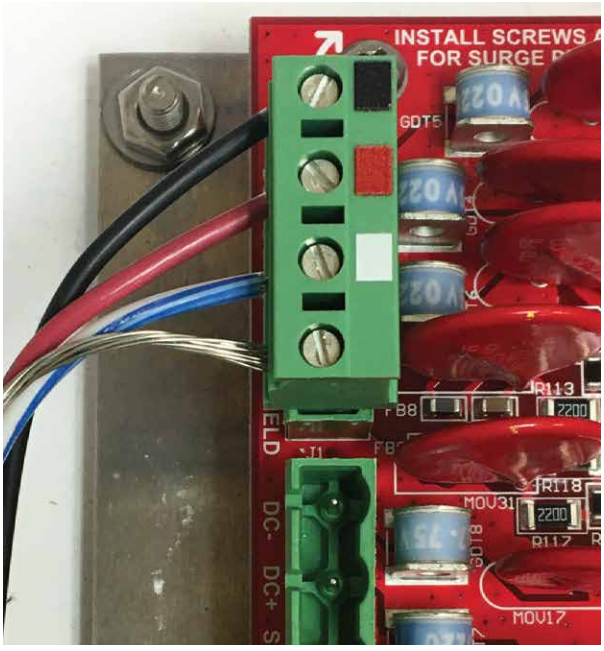
For replacement board installation, see other side.




## 1 Marker Connections (J1-J4)

Ensure each side marker cable connection matches all PCB labels and included wiring diagram found on the inside of the marker box.

**IMPORTANT! The White/Blue wire connection is critical to transfer alarm/status information to the controller.** Connections are polarity sensitive and all wires must be properly terminated to ensure reliable operation.




NOTE!! If using V3.4 Firmware or above the markers can be connected to any of the (4) outputs on the board.

## 2 3-Wire Sense Toggle Switch

Set the switch to ON if ALL connected markers are style with the white/blue sense wire (3-wire).

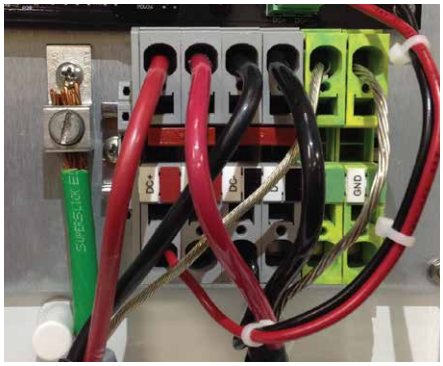
Set the switch to OFF if ANY connected markers are the style without the white/blue sense wire (2-wire).

For new installations, the switch default position is ON.

## 3 Flash Head Cable & Ground Connections (TB1)

The flash head cable will tie into the marker box using the terminal block located in the lower right corner. Ensure the wiring coming from the flash head and from the system controller are wired to match polarity on the color coded terminal block as seen below.

Use a #8 AWG wire to properly ground the marker box. Coat both ends with a corrosion inhibitor.



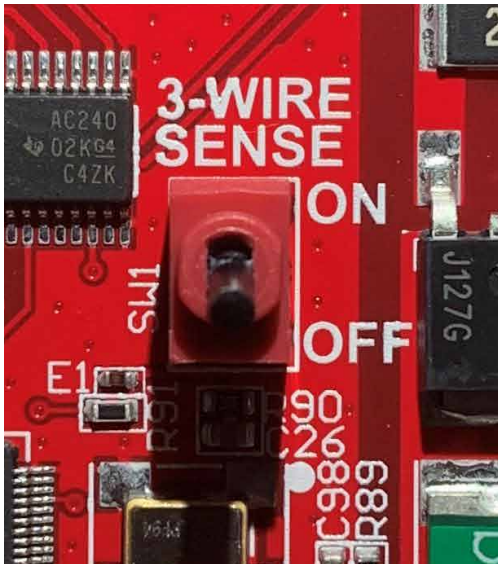
# Replacement Marker Board Installation

WARNING!! Before installing the replacement board, you must ensure the "3-WIRE SENSE" toggle switch is set to the correct position. Failure to correctly set the switch will cause alarms and improper operation. Details below

Set the switch to ON if ALL connected markers are the style with the white/blue sense wire (3-wire).

Set the switch to OFF if ANY connected markers are the style without the white/blue sense wire (2-wire).

Switch position is critical for FAA compliance.




## Replacement Steps

1. Remove power to the lighting system at the source/main breaker panel.
2. Carefully remove all green connectors (plugs), one at a time. The marker connectors (J1-J4) will not be re-used.
3. Remove the four outer screws and remove the marker PCB. Retain the screws, they will be reused.
4. Install the replacement marker board and secure using the four previsouly removed screws. The replacement board will be red in color (legacy/older boards are black).
5. Using a small flatblade screwdriver, carefully remove the wiring from each marker plug (J1-J4 only). Inspect each conductor/wire for damage. Make repairs if neccessary.
6. Wire each marker cable conductor to the newly supplied marker plugs (wire the new plug the same way as the old plug) and re-secure each connector one at a time. Ensure J5 power connector is also re-secured (follow color coded guides & info cards).
7. Verify the "3-WIRE SENSE" switch is in the correct position (see information above).
8. Power the system back ON, place the controller in night mode and visually confirm all of the markers are illuminated.
9. Perform a system test by running a lighting inspection. Additional details found in the FTS 370x product manual.

Call 1-800-821-5825 if additional TECHNICAL or INSTALLATION assistance is needed (Monday - Friday, 7a.m - 7p.m CST).