Spartan

ISBFS

Installation instructions
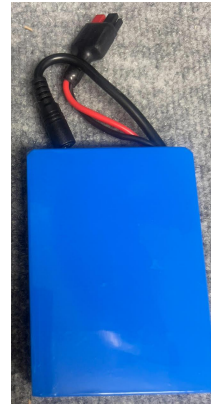
ALWAYS ON GUARD

SENTINEL
TRANSPORTATION SYSTEMS, LLC

Components

1) Red LED
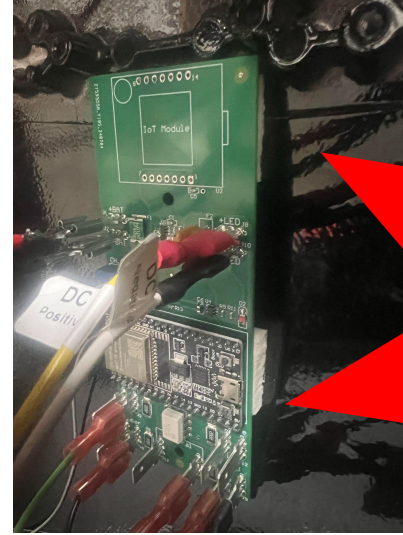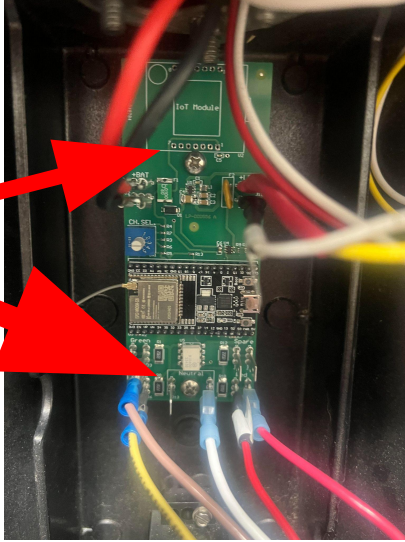2) Spartan Control Board
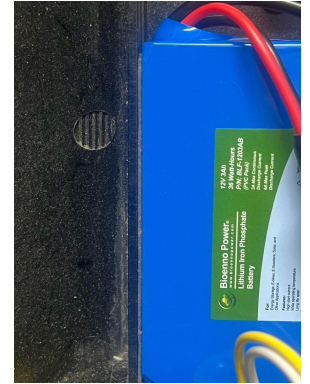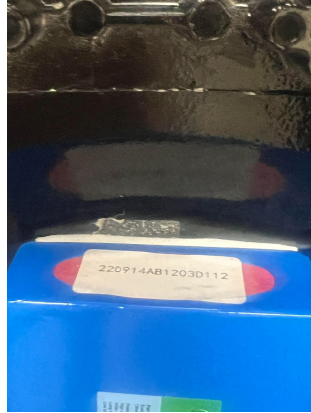3) Battery
4) Battery maintainer

1. LED install

1) Replace the old LED with the Spartan LED
2) Run both sets of leads into the yellow housing

2. Spartan Control Board (SCB) mounting

1) Using the provided screws mount the SCB above the terminal block
2) If mounting holes are not available use the UHB tape to mount to the back of the signal head. Make sure to clean the surface before mounting with the UHB tape.

3. Battery mounting

Because of the countless different heads being used today we rely on UHB as the most versatile way to mount the batteries. See examples above
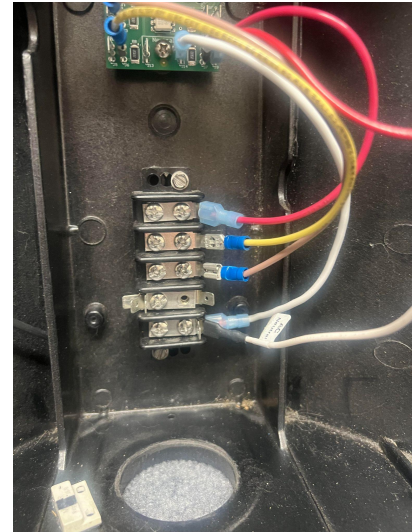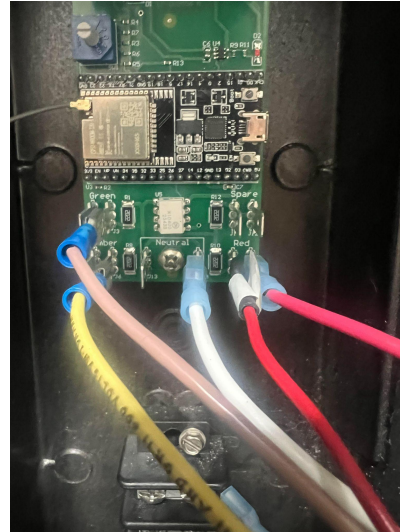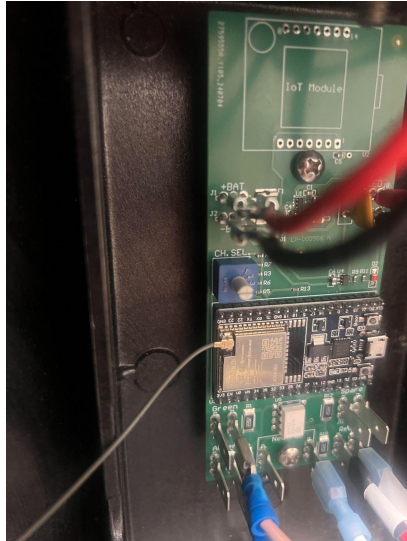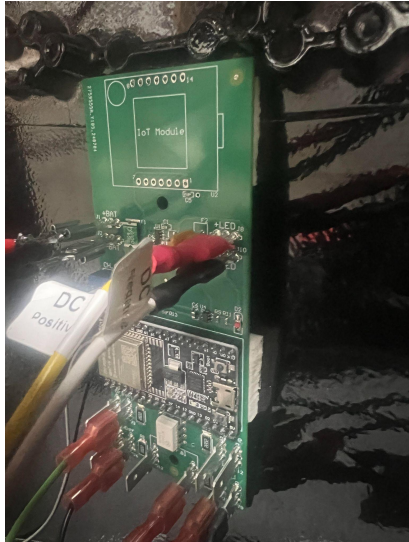
4. Battery Maintainer
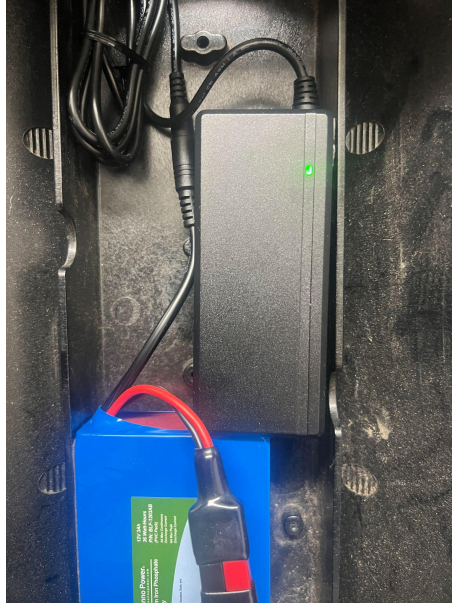
Similar to the batteries, utilize the provided UHB tape to mount the maintainer per the examples.

5. Wiring up the system

1) LED leads connect to the upper right hand corner of the SCB
2) Battery connects to the upper left hand corner of the SCB
3) Connect wires from the terminal block to the SCB red to red yellow to yellow

6. Battery Maintainer Wiring.

1) Typical install calls for the AC leads of the maintainer to attach to the Red LED terminals so that the battery remains charged.
2) ATC cabinets will require the utilization of a separate charging circuit to maintain the battery. The load switch for ATC cabinets is rated for 500 milliamps and adding the load of the battery maintainer could lead to an overload and burn out the load switch. This charging circuit can be created by using a spare wire on the 5 conductor already in the head and attaching it to the AC bus in the cabinet.

7. Antenna
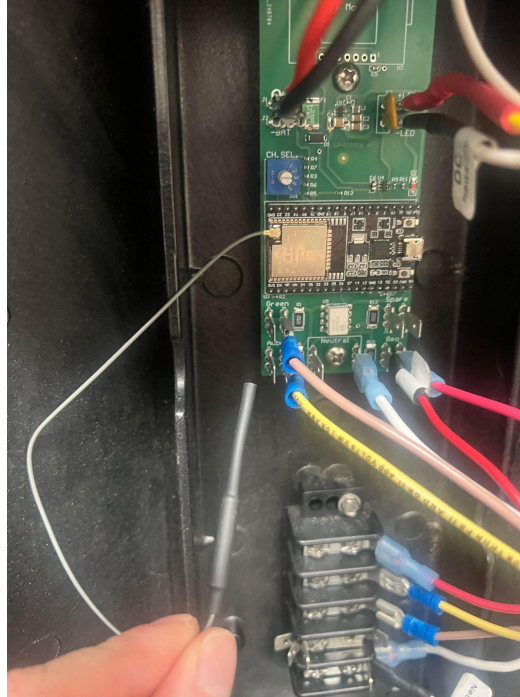
1) Antenna attaches by press on and must be installed for proper system operation.

8. Setting the sequencing channels
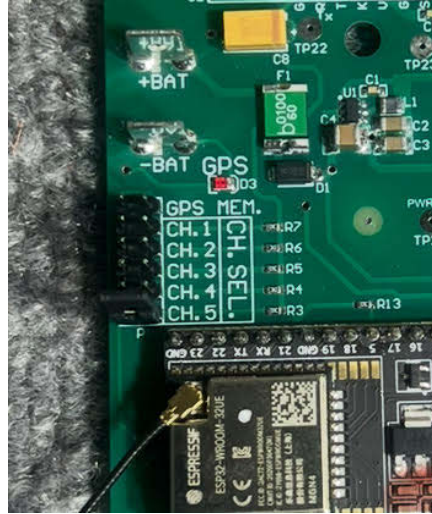
1) All units in a selected direction should be on the same channel. For example all units for Northbound should be on channel 1 so they flash in sequence.
2) Move the jumper peg to the desired channel of operation. Channel 5 is in use in the above picture.

Troubleshooting

1) Before installing in the field we recommend taking the units you intend to install and set them up on a table.
2) Connect the Spartan LED to their SCB
3) Attach the antennas to the SCB
4) Set all the SCBs to the same channel
5) Plug in battery supply to the SCB
6) All units should flash in sequence with one another.
7) If any units do not begin flashing check the following possible issues

9) Troubleshooting System on

1) If the system does not come on after installation check to see that the board operating LED is on. If not on check the battery connectors to the board. If wires are secure check battery voltage.
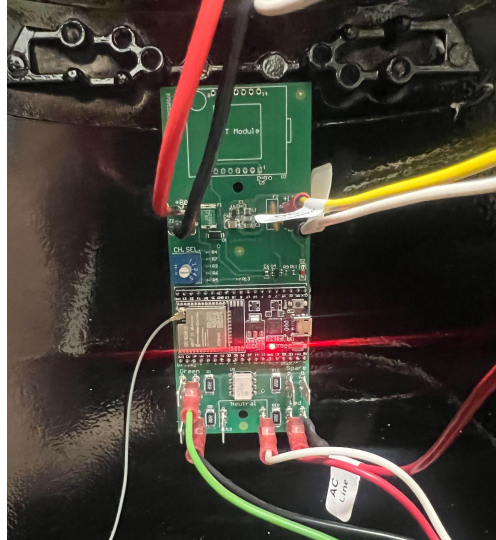
10) Troubleshooting no flash

1) If the board is on but the Spartan LED is not flashing make sure another unit is also on and on the same channel.
2) If still not operating check the antenna on both units disconnect the batteries and allow them to reset on the same channel.
3) If the SCB board is flashing but the Spartan LED is not check wiring from the LED to the board
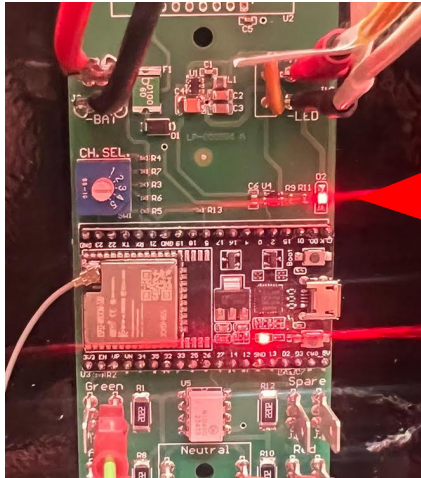
This LED flashing means the board is communicating with a partner board and is flashing. If your field LED is not flashing when this LED is flashing means you have a wiring issue between the board and the field LED

Still have questions?

Contact Sentinel @ info@sentinelts.net