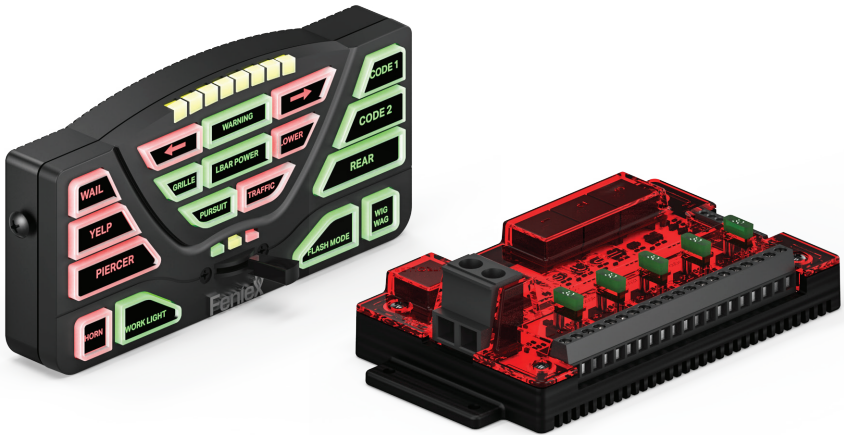


# 4200 DL

## 4200 DL CONTROLLER C-4200-DL



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**Specifications** ▲  
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**Wiring Diagram** ▲  
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# SAFETY REGULATIONS & WARRANTY

## Safety Regulations

The following provides all the information necessary to safely operate the previously listed products of Feniex Industries, Inc. Please read this manual thoroughly before installing or operating your new product in order to prevent any damage or injury. Failure to follow the listed instructions in this manual may result in damage to your products or personal injury.

- Proper installation of this product requires good knowledge of automotive systems, electronics and procedures.
- Please guarantee all vital components of the vehicle are not in danger of being damaged by drilling holes necessary for installation. Check all sides of the mounting surface before drilling any holes into the vehicle.
- Do not install this product in any way that interferes with the deployment of the air bag. Doing so may damage the effectiveness of the air bag and can lead to serious personal and vehicle injury. The installer will assume full responsibility of proper installation of the new unit.
- Please clean the mounting surface before installation of the unit when using tape, brackets, magnet, Velcro or suction cups.
- The product's ground wire must be connected directly to the Negative (-) battery post for effective use of the unit. Please follow all wiring guidelines provided to guarantee long lifespan and productivity. Failing to follow these instructions may result in damage to the product.

## Warranty

Feniex Industries, Inc. warranties to the original purchaser that all our products shall be free from defects in material and workmanship. Feniex Industries' speakers, sirens, rocker panels, AM600 Beacons, Torch Lights, AI lightbars, AI Cubes, AM900 Work Lights, 8.5" Dome Lights, flashlights, Remote Spot Lights and controllers are warranted for 2 years from the manufacturing date. In addition, all other products are warranted for 5 years from the manufacturing date.

If a warranty problem occurs, please contact customer support at 1.800.615.8350 or visit the web site at [www.Feniex.com](http://www.Feniex.com).

If the product needs to be returned for repair or replacement, call our customer support line to receive a return merchandise authorization number.

Operational times are from 10 a.m. to 5 p.m. central time, Monday through Friday. Please do not send in product without contacting support first for a RMA number.

## Service After Expiration

Feniex Industries will still provide service for all products after expiration of the warranty. For any issues, call the customer support line. In some instances it may be necessary for the product to be shipped, freight prepaid and insured for loss or damage to Feniex headquarters.

**Warning!** Utilizing non-factory screws and mounting brackets may result in loss of warranty coverage.

## Copyright

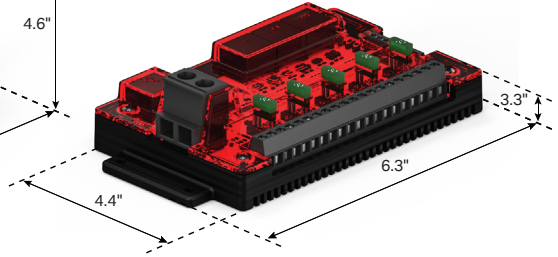
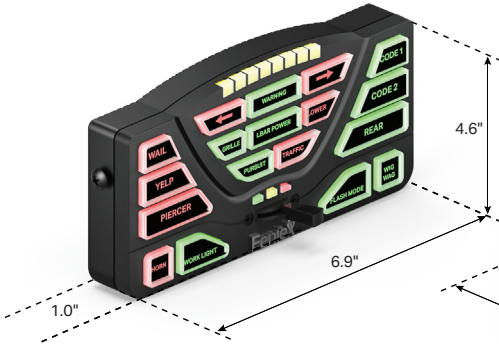
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## EQUIPMENT DIMENSIONS

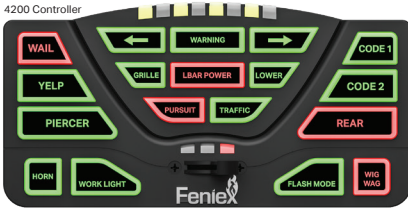


## COMPONENTS

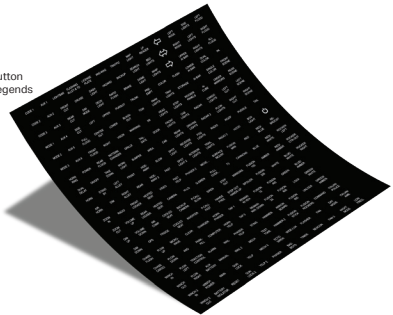
1	4200 Data Link Relay
1	4200 Controller
1	U-Shaped Bracket
2	Ethernet Cable

1	USB Cable
2	Screws
4	Button Legends

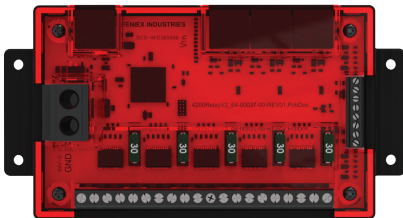
4200 Controller



Button Legends



4200 Data Link Relay





## ▲ SYSTEM SPECS

Input Power	11-16 VDC
Maximum Input Current	60 Amps
Maximum Output	60 Amps
Standby Current	100mA +/-
External Fuse	125% of Circuit Load
Programmable Inputs	2 Ground, 3 Positive
System Inputs	Ignition, Day, Night
Relays	Solid State, Built-in
Switch Type	Latching, Momentary, Timed
Buttons	Rubberized, Backlit, 2 Colors
Warranty	2 years

## ▲ WIG-WAG FLASH PATTERNS

Single Flash (Slow)
Single Flash (Fast)
Single Flash (Combo)
Highbeam Override
Wig Wag Disable

■ **Important:** Provide 12V+ to the "Ignition Input" (Input H)

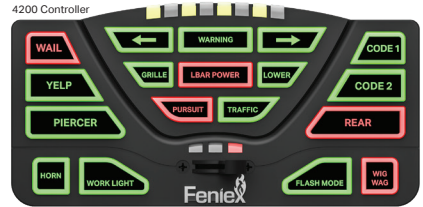
## ▲ MOUNTING INSTRUCTIONS

1. Mount the U-Shaped Bracket in the desired location using 2 self-tapping screws. If you wish to use machine screws, simply drill out the required hole size based on the size of screw choice.



**Important!** Make sure not to damage any vital parts of the vehicle or mounting surface. Do not mount anywhere that interferes with the vehicle air bag.

2. Re-attach the control panel head to the U-Shaped bracket utilizing the factory provided screws.



3. Connect the RJ45 cable to the RJ45 port located on the rear of the controller.



# ▲ CONFIGURATION RECORD

Use this page to record the products connected to each outlet to assist when programming the control head with the provided software package.

**Outputs:**

**Buttons: (1 - 18, P1 - P3)**

1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	P1
20	P2
	<b>P3</b>

**Input/Polarity:**

A (-)	F- Night (+)
B (-)	G- Day (+)
C (+)	H- Ignition (+)
D (+)	
E (+)	

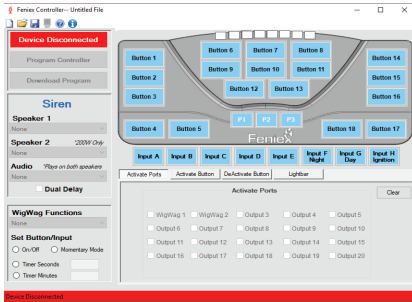


## PROGRAMMING SOFTWARE

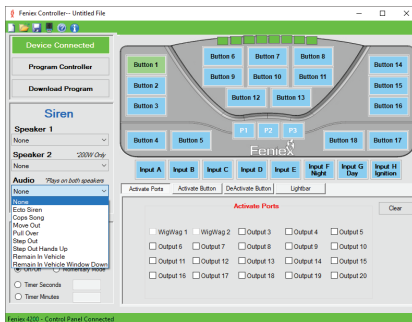
To program the Feniex 4200 Controller, first visit [feniex.com](http://feniex.com) to download the software.

### Help

For assistance on how to use the software, please click the help button located on the top bar in the software interface. You will find informative videos on how to program every function of the 4200 software system.



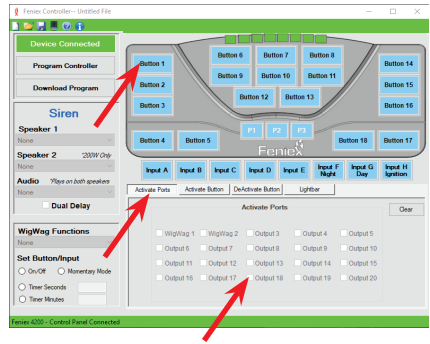
1. Connect the provided USB wire to the controller, and connect the other end of the USB port to the computer.



2. When the controller is plugged in, the red box reading "Device Disconnected" will change from Red to Green will read: "Device connected."

Ports 1-20 can be activated by:

- Button
- Input
- Slide Switch (p1, p2, p3)

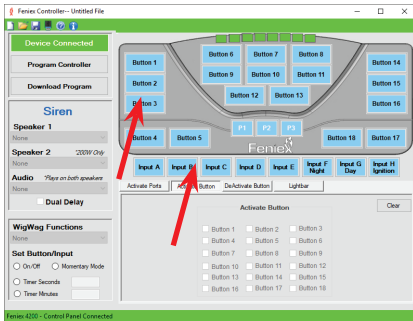


### 3. Activate Ports

Select button, input or slide switch and then check the box of the desired port. You can select as many ports as needed with each button programmed. Each output is capable of 10 amps. For any product requiring more than 10 amps, use multiple ports to split the load. For example: For a spotlight that requires 15 amps, select the desired button on the controller then use 2 ports to split the load. Don't exceed 30 amps per fuse quadrant.

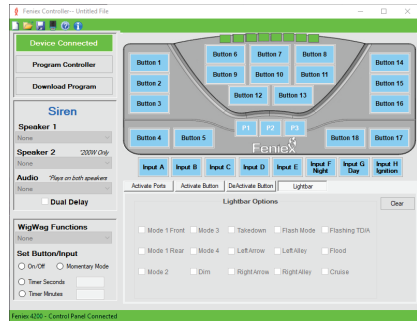


# PROGRAMMING SOFTWARE



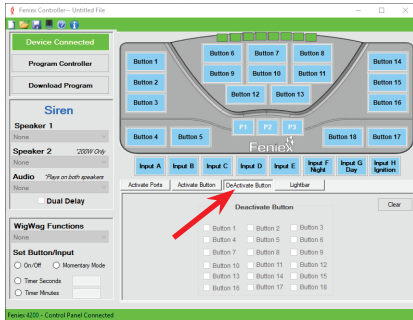
## 4. Activate Button

This function programs the slide switch (p1, p2, p3) or inputs A-E to activate a button. Please note a button cannot activate another button. Multiple buttons can be activated through the slide switch or input set up.



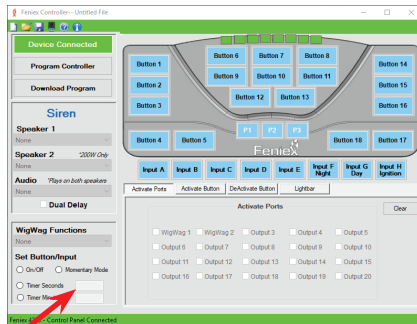
## 6. Lightbar

This function works when you have a full size lightbar connected. To activate a function of the lightbar, select a desired switch (input, slide switch, button) then select the lightbar function. Multiple functions can be selected on 1 switch.



## 5. Deactivate Button

This function allows any input, slide switch or button to turn off an activated button. For example. Arrow function: Left arrow button #6, right arrow button #8, center out button #7. When activating button #6, deactivate button #7 and #8.



## 7. Timer

The timer function allows any button to continue functioning for a set period of time after it's been disabled. Timer can be set for any duration between 1 second to 1 hour. This applies for all inputs A-H and all buttons. The slide switch cannot be programmed for timer or momentary functions.

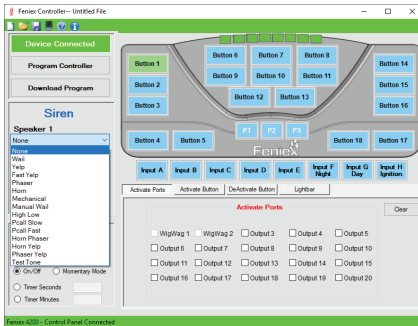
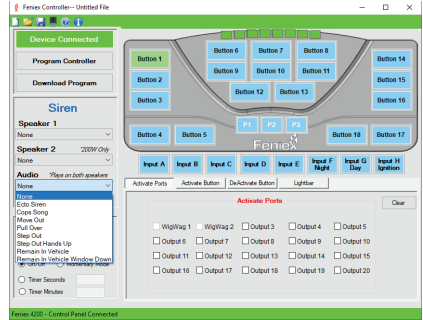




# PROGRAMMING SOFTWARE

The momentary function only applies to buttons and allows a button to activate only when the user holds the button down. It will not remain active once pressure is released.

**Ignition/Day/Night:** These buttons in the software can only be used for their respective functions. Please refer to the wiring diagram on pages 8 & 9 for wiring examples.

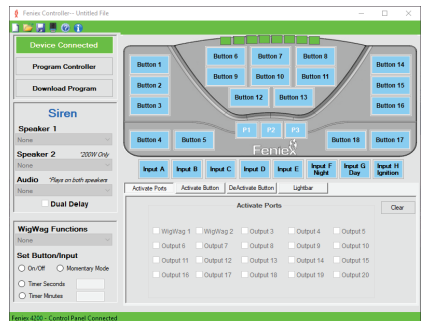


## 8. Siren

This function only works when you have a 100W or 200W Storm siren connected. Select the desired switch (input, slide, or button), then select the tone from the drop down menu. If using a 100W siren, only select speaker 1. For 200W sirens, make sure to highlight speaker 1 and speaker 2.

## 9. Audio (under siren section)

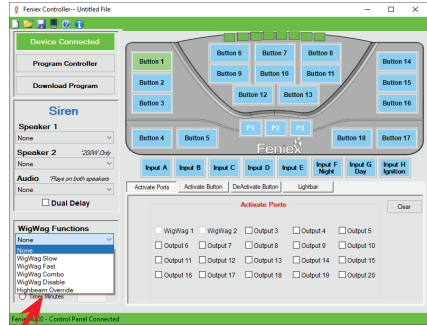
This function only works when you have a 100W or 200W Storm siren connected. This function allows any input, slide switch or button to activate a desired audio tone. Select the desired switch (input, slide switch, or a button) then select the audio tone from the drop down menu. If a 200W Storm siren is installed, the audio tones will always play on both speakers. For example: Tone 1 programmed on speaker 1 will play through both speakers #1 and #2 on a 200W siren.



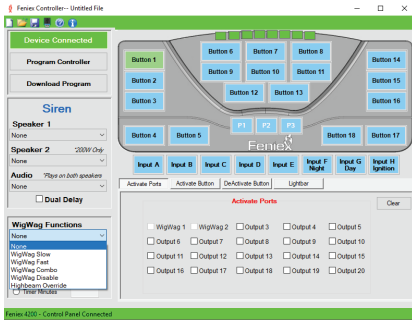
## PROGRAMMING SOFTWARE

### 10. Dual Delay

This function works when a 200W Storm siren is connected to the 4200. Dual delay is a check box at the bottom of the siren section. When using a 200W siren and have one switch activating the same siren tone, dual delay will offset the 2 tones so that they alternate. Note: this is only needed when using the same tone and wanting the dual tone functionality.

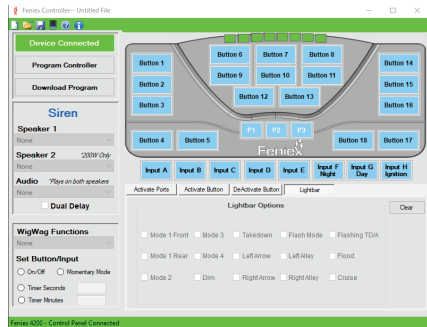


Program the appropriate input (high-beam signal) to override the flashing wig-wag function with a steady-on signal.



### 11. Wig Wag

This function works when output 1 and output 2 are connected to two separate halogen or LED lights. To enable, select the desired switch (input, slide switch, or a button) and select the speed from the drop down menu.



### 12. Lightbar

This function works when you have a full size lightbar tab for the RJ45 connected. To activate a function of the lightbar, select a desired switch (input, slide switch, button) then select the lightbar function. Multiple functions can be selected on 1 switch.



## ▲ FUSION-S/QUANTUM 44", 49" & 60" LIGHTBARS

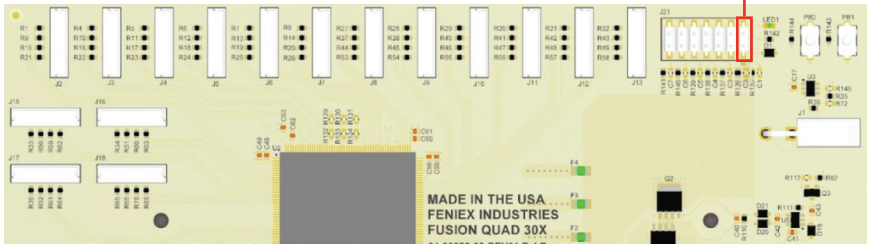
The included RJ adapter and jumpers are to allow for Fusion-S/Quantum lightbars to be plugged into any one of the datalink receptacles on the 4200 relay.

To connect and use this adapter for Fusion-S/Quantum 44" 49" or 60" lightbars follow these steps:

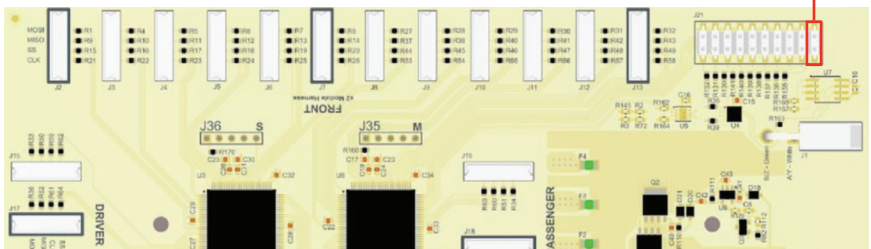
*\*\*Quantum is required to program first through the Quantum Unlock before adding any jumpers to the board\*\**

1. Remove main power of the lightbar.
2. Remove the top cover to expose the main board. Ensure all O-rings, gaskets, washers, and screws are accounted for.
3. Add a jumper that is supplied with the 4200 DL system. The kit consists of (x1) RJ Serial Adapter, (x3) jumpers.
4. Reinstall the top cover ensuring all gaskets and hardware is applied correctly. Failure to do so will result in water inundation and will not be covered by the manufacturer.
5. Add the RJ Serial adapter to the green and white data wires from the lightbar. White-A, Green-B.
6. Reinstall main power.
7. Proceed with programming with the software that is associated with your setup.

### ■ FUSION-S BOARD



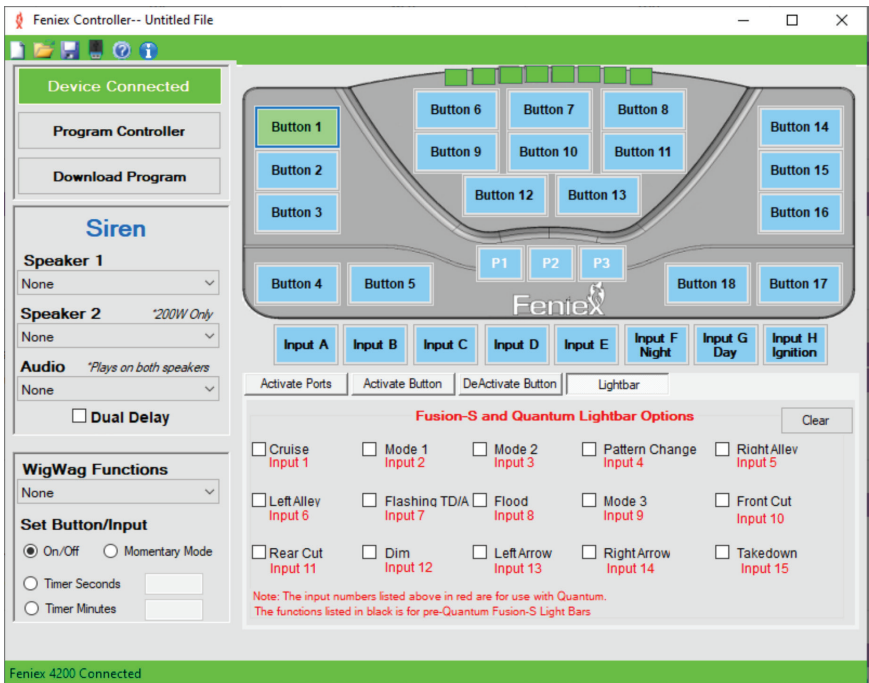
### ■ QUANTUM BOARD





## PROGRAMMING FUSION-S

1. The functions that are associated with Fusion-S is located under the "Lightbar" tab in black text. Select the desired functions to any trigger inputs (i.e., Buttons, Inputs, Slide switch)
2. To achieve center out select both left and right arrow to activate simultaneously.
3. Only Modes 1-3, and arrow functions will display the LED indicator at the top of the controller.



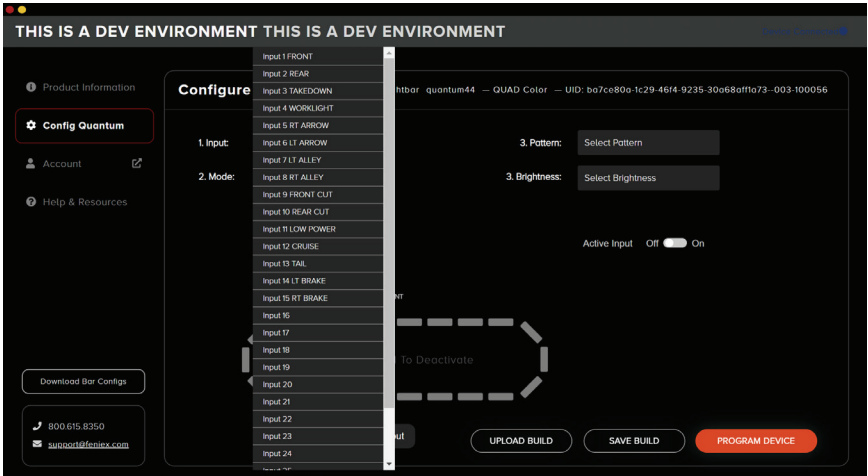
**\*\*The RJ adapter will only work on lightbars that were shipped after 11.15.2021 with a "K" firmware\*\***



# PROGRAMMING QUANTUM:

*\*\*All Quantum products are required to program through the Unlock Quantum Software\*\**

1. Program your lightbar with the Quantum Unlock Software. Configure up to 15 inputs of the desired functions. After successfully programming your lightbar with Unlock Quantum Software please proceed to the next phase of programming through the 4200 DL software.



2. Open the 4200 DL software that should be 6.2 or greater. The Quantum inputs are labeled in red under the "Lightbar" tab. This is correlated with the inputs from the Unlock Quantum Software. Select a trigger function with your desired input(s) in red.





## FREQUENTLY ASKED QUESTIONS

### 1. How do I know if there is power to my 4200 Relay?

A flashing green LED light on the PCBA will indicate if there is power to the board if the firmware is fully operational.

### 2. Why can't I program to outputs 1 - 2?

Outputs 1 - 2 are only for the WigWag Function Box.

### 3. My controller does not turn on after I programmed it?

Make sure to provide 12V+ into the "Ignition Input" (Input H).

### 4. What is the password for Feniex Bluetooth Module?

Android: The password is: 1111

Apple: The password is: 11111111

### 5. Can I still use my high beams with the WigWag function?

Yes, please use the wiring diagram (see fig. 7.1) as a reference.

- To program, select Input C, D, or E
- Select "Highbeam Override" (see right, fig 7.2).

### 6. How do I use my wig wag option?

Each output will support 1 high beam light assembly. This option can be used for low beams. Make sure to wire each output to the positive side of the high beam or low beam. Be sure to completely cut the wire to not splice into it to percent feedback.

### 7. How do I wire the "highbeam" function from the vehicle?

Run the "switch side" wire, after its cut off from the high beam bulb, into the 4200's input (C,D or E). In the programming software, select the input of the vehicle's highbeam wire and on the left column of the programmer under "Wig Wag Function" select "high beam" override.

### 8. My controller button is not illuminating?

Make sure to provide 12V+ into Input G (day mode).

### 9. The program software will not acknowledge my 4200 controller.

Make sure the 4200 control panel is plugged in via provided USB to the computer.

### 10. Can I change button labels on the app for handheld device?

Yes. If using Android app, press and hold button on handheld device. Enter new name for button when text box appears. On Apple app, select "settings" to edit labels on buttons.

