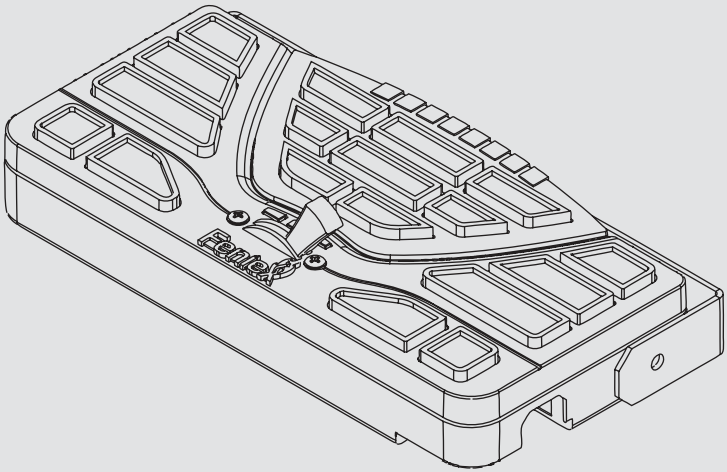
4200-DL CONTROLLER
Instruction Manual
V.2.0



4200-DL
Model # C-4200-DL

This instruction manual serves as a guide for the **4200-DL Controller**.

IMPORTANT! Please read through all provided instructions and any listed warnings in regards to product use.

MADE IN THE USA

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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. warrants to the original purchaser that the product shall be free from defects in material and workmanship for 5 years from the date of purchase for all LED products. Feniex Industries warranties speakers, sirens, flashers, and controllers for 2 years.

If a warranty problem occurs, please contact customer support at 1.800.615.8350 or visit the web site at 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.

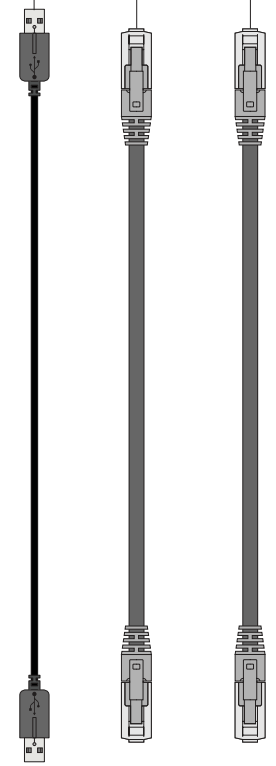
Service After Expiration
Feniex Industries will still provide service for all products after expiration of the warranty. For any issues, call the customer support line. In some instances it may be necessary for the product to be shipped, freight prepaid and insured for loss or damage to Feniex headquarters.

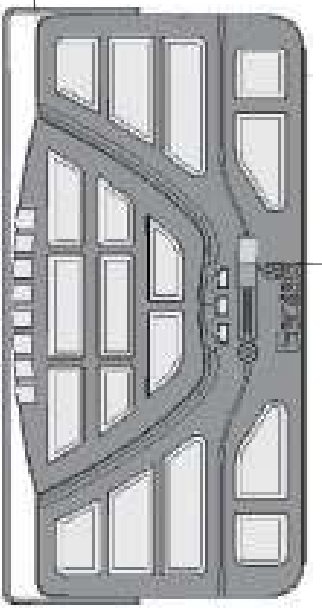
Warning! *Utilizing non-factory screws and mounting brackets may result in loss of warranty coverage.*

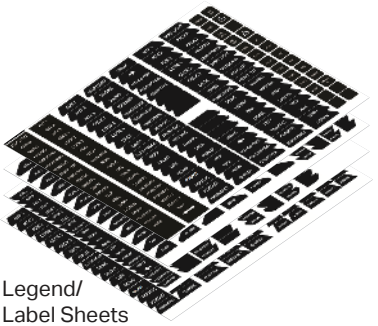
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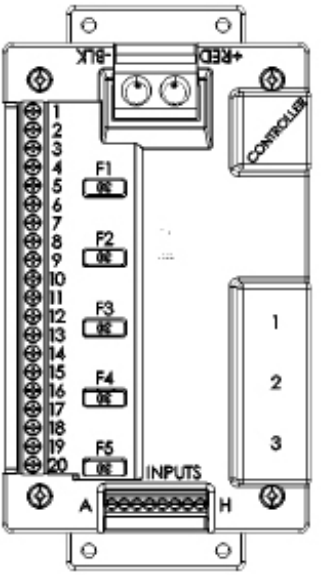
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BOX CONTENTS






Legend/
Label Sheets



4200 Relay

Below you will find the key specifications for the 4200-DL system. Review the information to better determine your installation needs.
Warning! Do not deviate from the specified voltage.

System Specification:

Input Voltage:	11VDC to 16VDC
Temperature Range:	-40C° to +70CV°
Stand By Current:	> 100m Amps
Logic Input A-B	Ground
Logic Input C-D-E	Positive
Logic Input F	Night Mode (+)
Logic Input G	Day Mode (+)
Logic Input H	Ignition (+)
Output 1-2	WigWag 10 Amps (+)
Outputs 3-20	10 Amps (+)
Max Input Current	60 Amps
Controller Dimensions	6.8″ x 3.5″ 1.3″
Power Supply Dimensions	6.33" x 3.3" x 1.48"
Bluetooth Range	40ft (+/- 5ft)

Decide which mounting option you would like to implement for the 4200 controller: **Option A** is a vertical mount, allowing the controller to hang down. **Option B** is a surface mount; with the bracket mounting from the rear of the controller. The controller can also be mounted with a custom face on a console mount. Please contact your preferred console manufacturer for a 4200 console faceplate (option not shown).

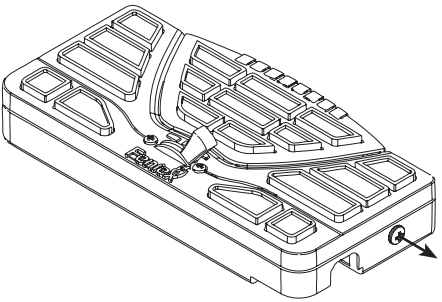
Option A: Vertical Mount

Step 1: Select a dry, cool location to mount the control head

Step 2: Remove the two factory provided screws located on either side of the controller.

Step 3: Place the U-Shaped bracket into place and screw the two factory provided screws back on each side of the controller.

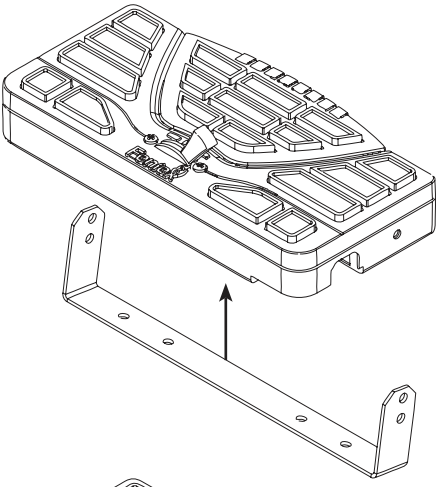
Step 4. Connect the RJ45 cable to the RJ45 port located on the rear of the controller.



Option B: Surface Mount

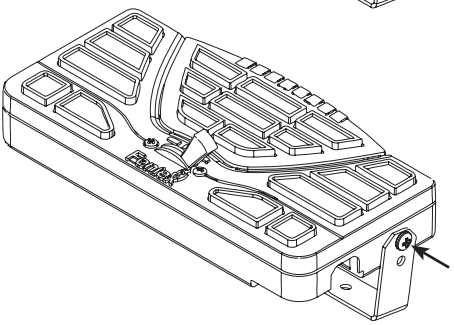
Step 1: Mount the U-Shaped Bracket in the desired location using 2 self-tapping screws. If you wish to use machine screws, simply drill out the required hole size based on the size of screw choice.

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.

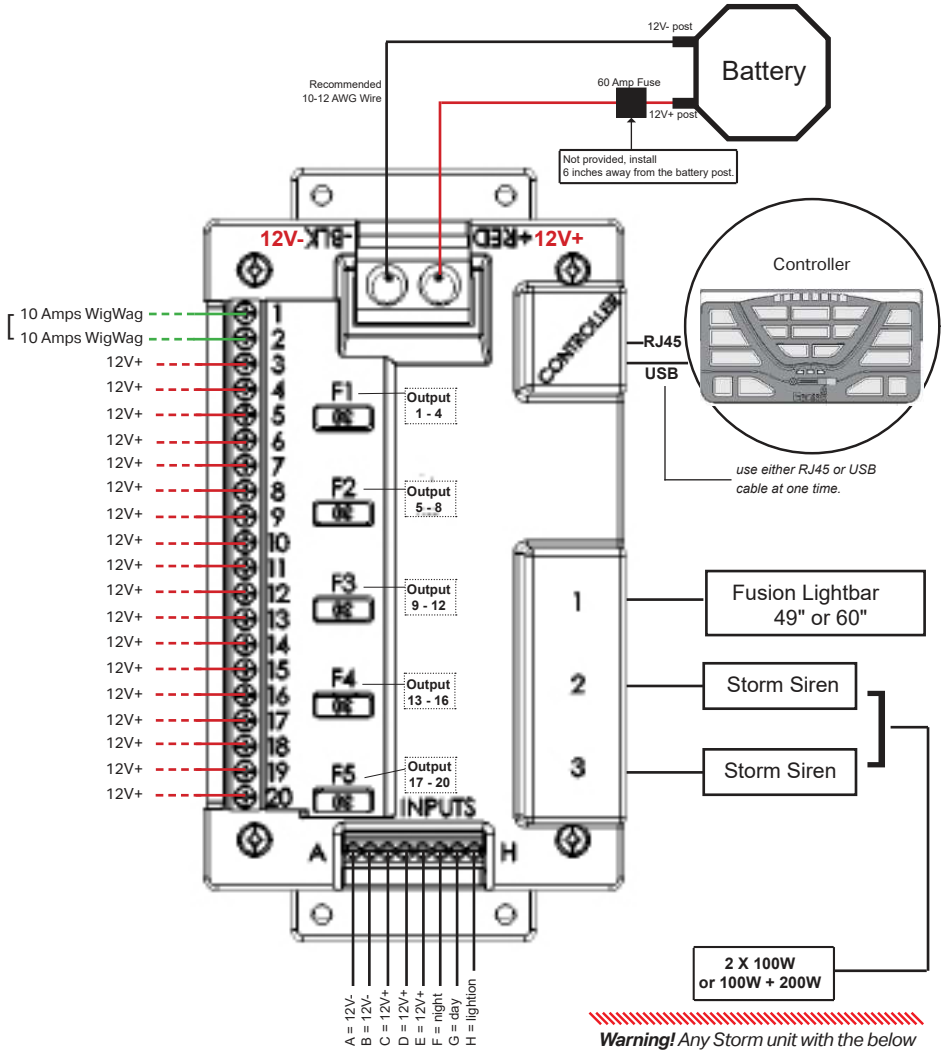


Step 2: Re-attach the control panel head to the U-Shaped bracket utilizing the factory provided screws.

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



The below is an example illustration of an installation with the 4200



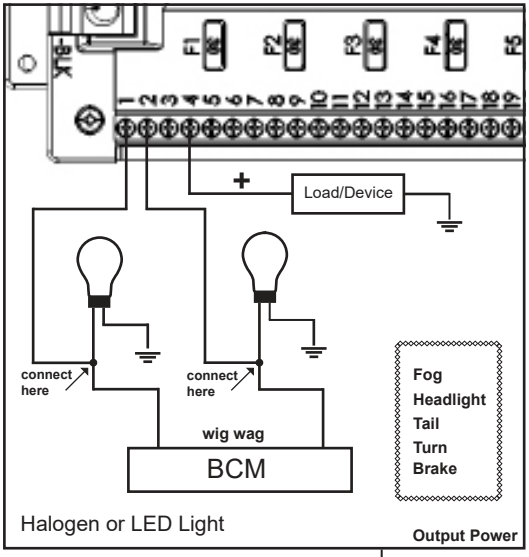
Warning! *Utilizing non-factory screws and mounting brackets may result in loss of warranty coverage.*

Warning! *Any Storm unit with the below label is not compatible with the 4200 Data link model. Do not connect the RJ45 port on this unit to a 4200 datalink unit*

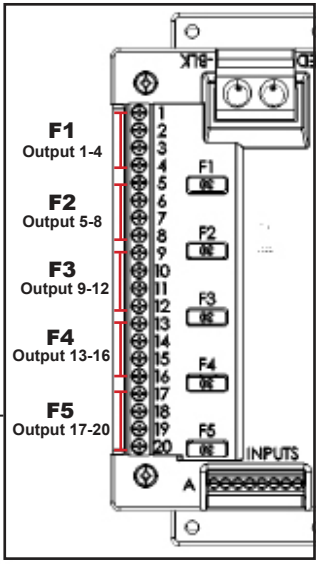


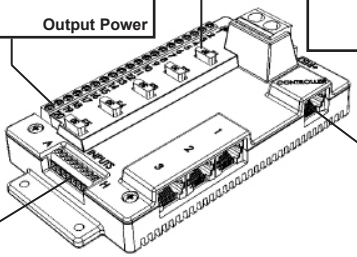
RELAY WIRING DIAGRAM

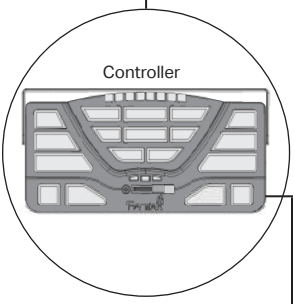
The below image indicates the use of outputs 1 and 2 for wig wag functionality.



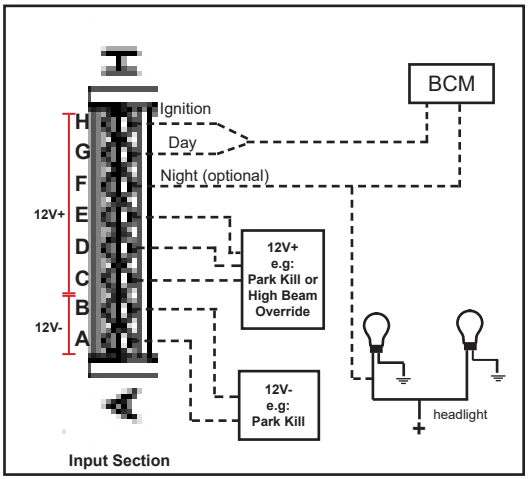
The below image shows the location of the X5, 30 amp Fuses on the relay.

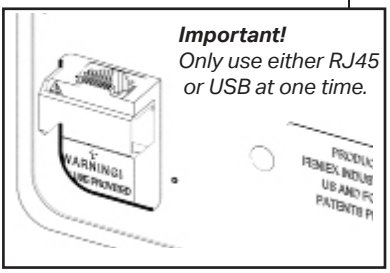






The below image illustrates the multiple, potential functionality for inputs A-H.

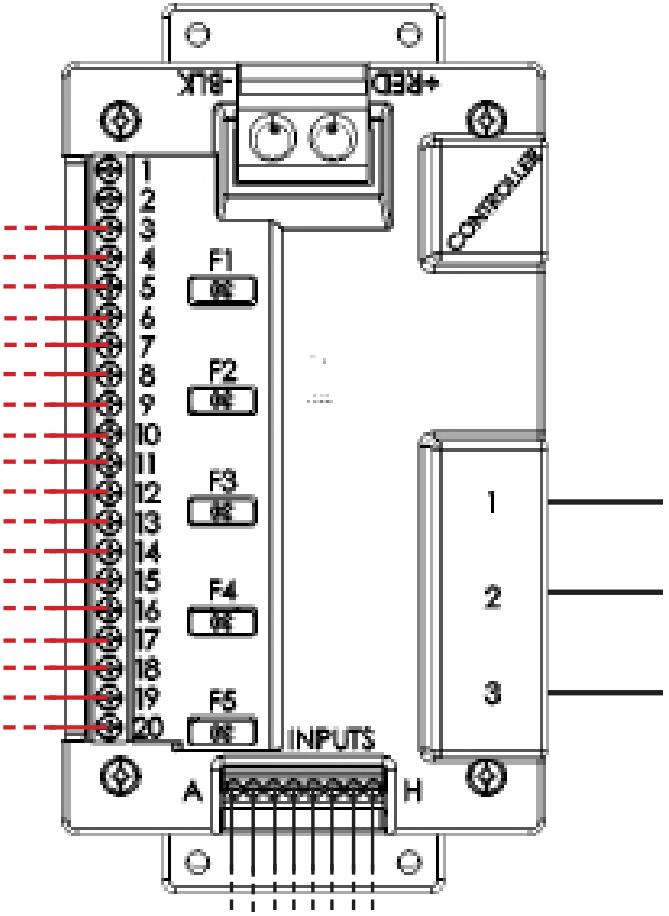




CONFIGURATION RECORD

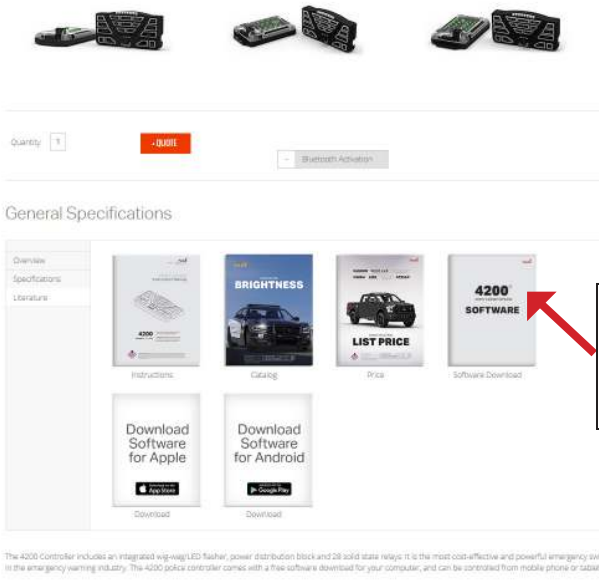
Use this document to record the products connected to each outlet to assist when programming the control head with the provided software package.

Outputs:	**Buttons:** (1 - 18, P1 - P3)
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
Inputs:	**Outputs / Buttons:**
A (-)	
B (-)	
C (+)	
D (+)	
E (+)	
F (+Night)	
G (+Day)	
H (+Ignition)	

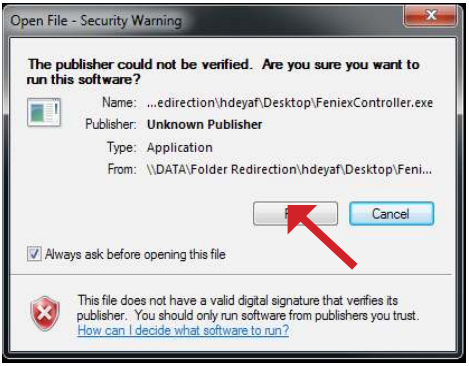

-BLK
+RED
CONTROLLER
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
F1
F2
F3
F4
F5
INPUTS
A
H
1
2
3

CONTROL HEAD PROGRAMMING

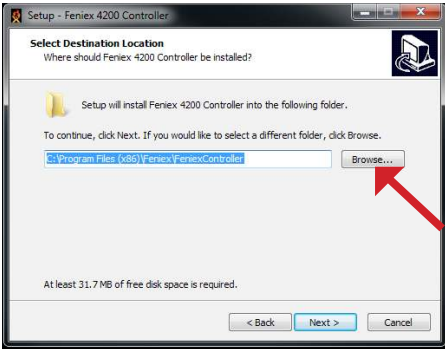
To program the Feniex 4200 Controller, first visit www.feniex.com/s-4200 to download the software.



Click on "Literature" and select "Software Download"



Step 1: Click Run to continue



Step 2: Select your location to Install

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.

Figure 5.1

Step 3: Open the Feniex 4200 Controller software.

Step 4: Connect the provided USB wire to the controller, and connect the other end of the USB port to the computer.



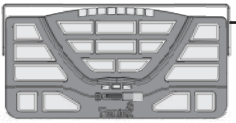
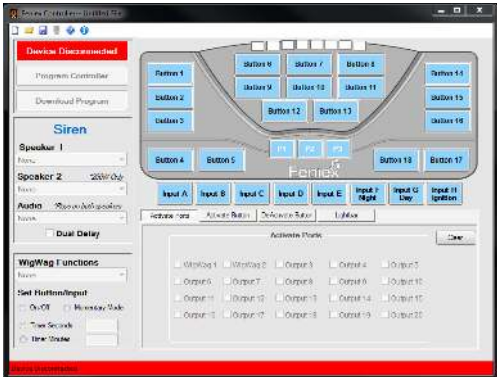
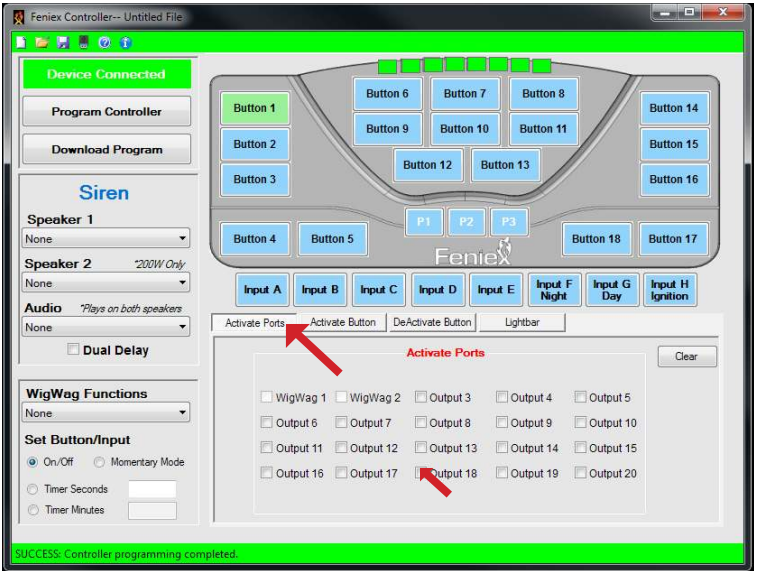


Figure 5.2





Step 5:
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:

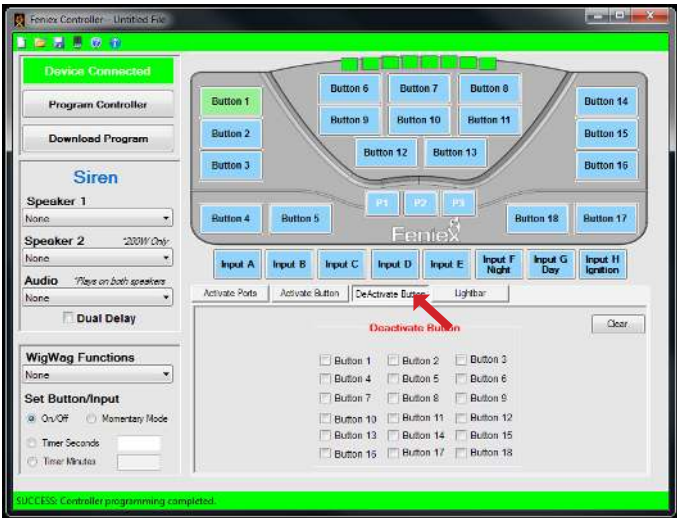
- Button
- Input
- Slide Switch (p1, p2, p3)

Step 6: 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.



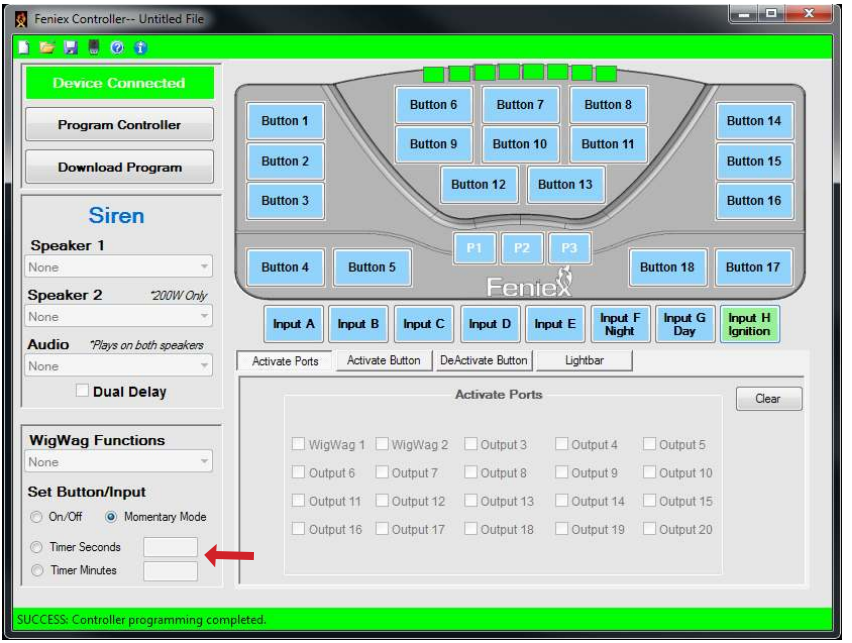
Step 7: Activate Button

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.



Step 8: 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.



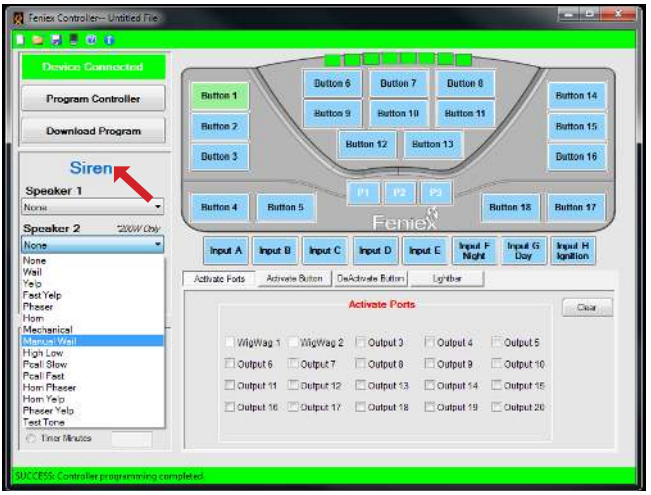
<u>Step 9</u>: Timer
The timer function allows any button to continue functioning for a set period of time after it's been disabled. Timer can be set for any duration between 1 second to 1 hour. This applies for all inputs A-H and all buttons.

The slide switch cannot be programmed for timer or momentary functions.

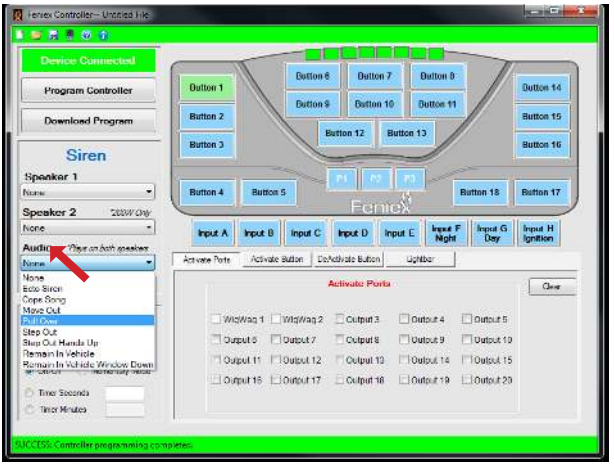
The momentary function only applies to buttons and allows a button to activate only when the user holds the button down. It will not remain active once pressure is released.

Ignition/Day mode/Night mode: These buttons an only be used for these functions. Please refer to the wiring diagram on page 18 for BCM wiring diagram.

Example of setting timer function: **Ignition:**
1. Hit program controller button.
2. Click on ignition (H).
3. Set duration/times (bottom left corner) can be set from 1 second to 1 hour.
4. To save function you must click off the button so it's not highlighted.



<u>Step 10</u>: 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.



<u>Step 11</u>: 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.



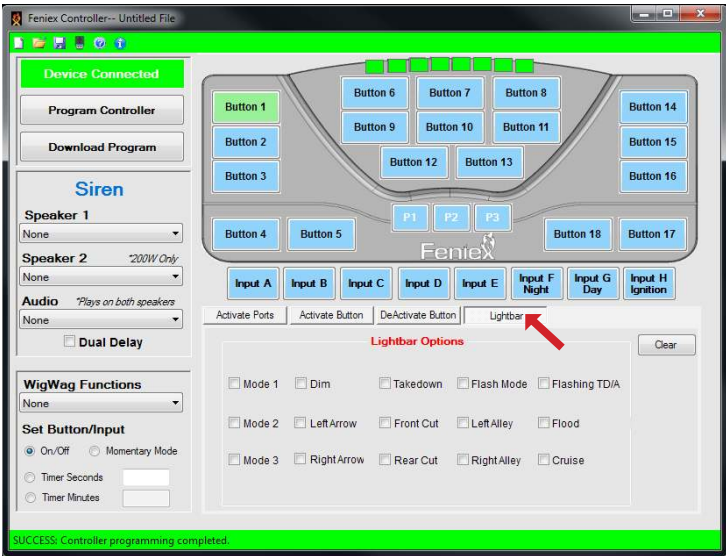
Step 12: Dual Delay

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.



Step 13: Wig Wag

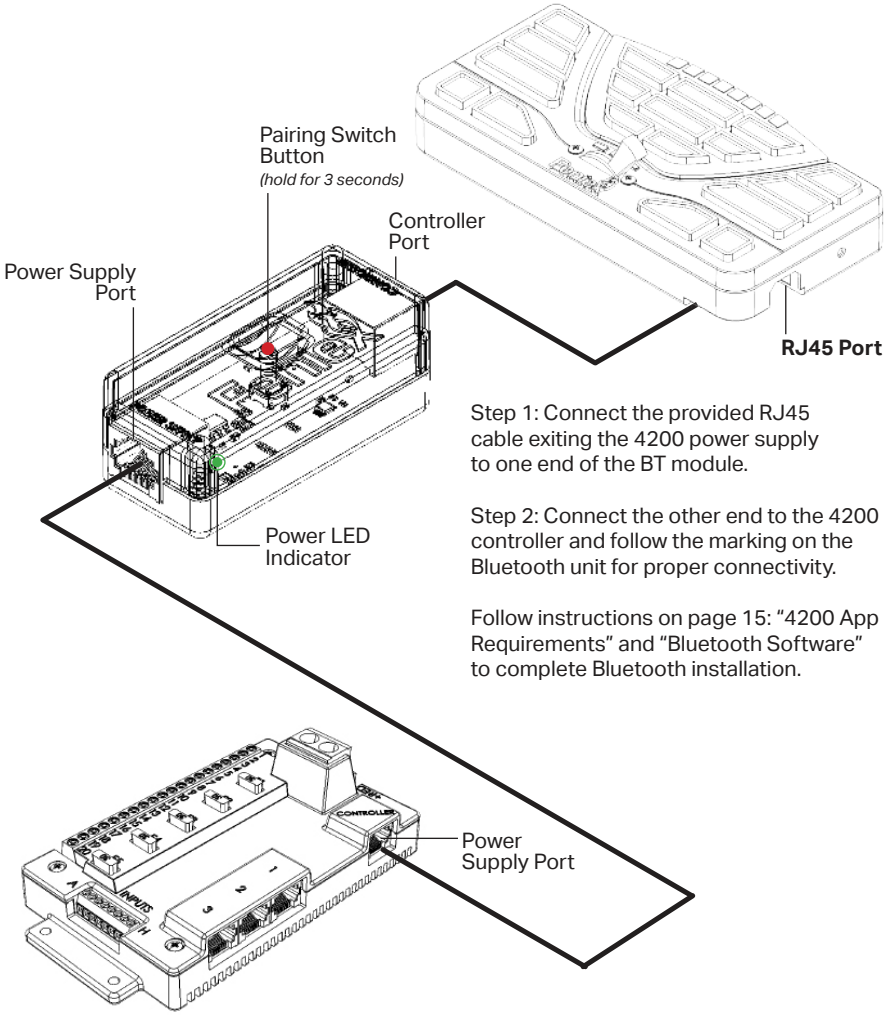
This function works when output 1 and output 2 are connected to two separate halogen or LED lights. To enable, select the desired switch (input, slide switch, or a button) and select the speed from the drop down menu.



<u>Step 14</u>: Light Bar
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.

Bluetooth Hardware

The Feniex 4200 has the option of being controlled via a smart phone or tablet. To enable this feature you will require the Feniex in-line Bluetooth module (part #: C-4200WB-AD for Android Bluetooth; C-4200WB-AP for Apple Bluetooth). Follow the installation instructions below to pair the 4200 with a smart phone or tablet.



Step 1: Connect the provided RJ45 cable exiting the 4200 power supply to one end of the BT module.

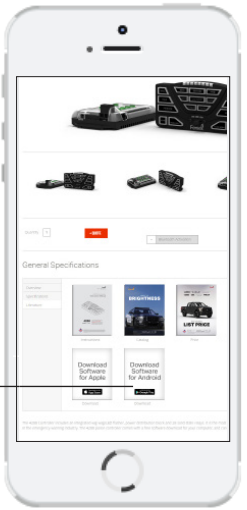
Step 2: Connect the other end to the 4200 controller and follow the marking on the Bluetooth unit for proper connectivity.

Follow instructions on page 15: "4200 App Requirements" and "Bluetooth Software" to complete Bluetooth installation.

Bluetooth Software

Step 3: Upload software to your handheld device.

- To download for apple devices, go to the App Store.
- To download for android devices, visit the Feniex website at: http://www.feniex.com/s-4200



*The app is not yet available on Google Play

Step 4: Turn Bluetooth on using handheld device.

Step 5: Press and hold pairing switch button on Feniex Bluetooth device for 3 seconds.

Step 6: In the 4200 app, select "connect" in the upper right corner.

Step 7: Select "Search for device" for Android or "Scan" for Apple

Step 7: Enter password:

- For android devices, select Feniex 4200 and enter password: 1111.
- For apple devices, select Feniex 4200 and choose enter 8 digit password: 11111111

Step 8: When the app is successfully paired with the Bluetooth module, the circle next to "connect" changes from red to green.

4200 App Requirements:

Android App minimum requirements are the following:

- Android 2.2 or higher
- Bluetooth 2.0 EDR with SPP support

The app should be compatible with most phones made in 2011 or after. The current Android version is 4.4.

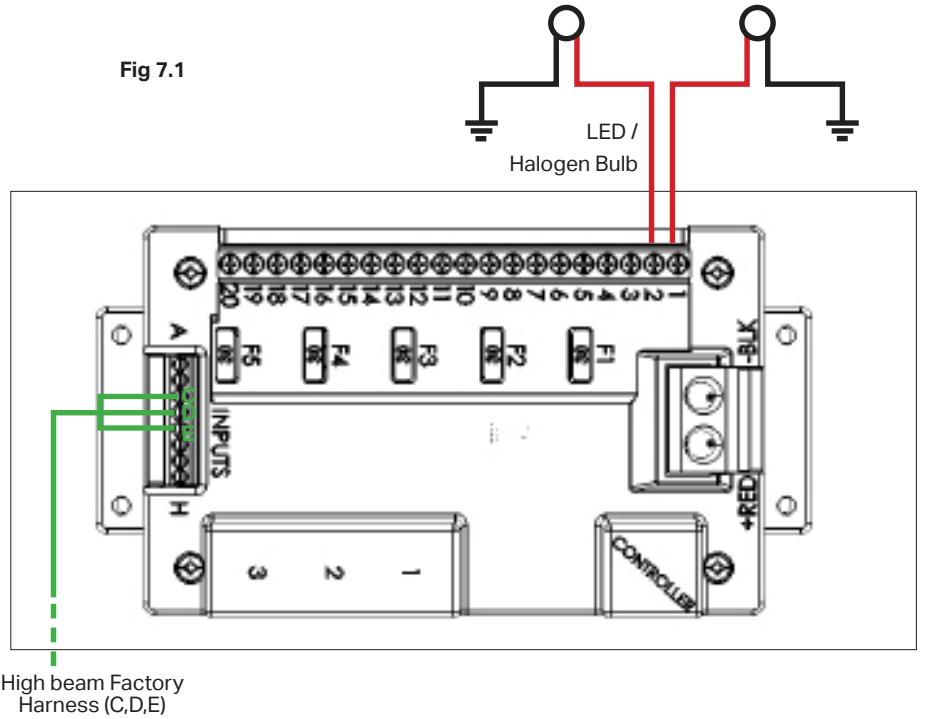
Apple App should work on the following devices:

- iPhone 5/5C/5S
- iPhone 7/7Plus
- iPhone 6/6Plus
- iPad Air
- iPod Touch 5th Generation
- iPad 3rd & 4th Generation

Devices must have Bluetooth 4.0 and iOS 6.0 software or newer.

Important: Use the video link below to use the correct settings before installing application: http://howto.cnet.com/8301-11310_39-57602654-285/how-to-install-apps-outside-of-google-play/

Fig 7.1



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.

Fig 7.2

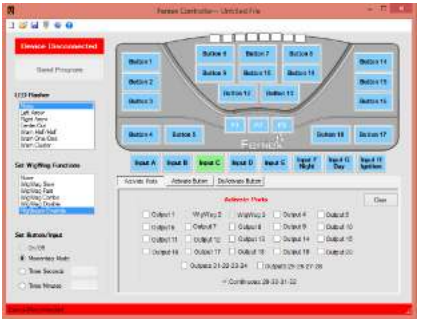


Fig 7.3



Important! Do not reverse-connect the 4200 relay, by switching the red positive 12V(+) wire with the ground 12V(-) wire.