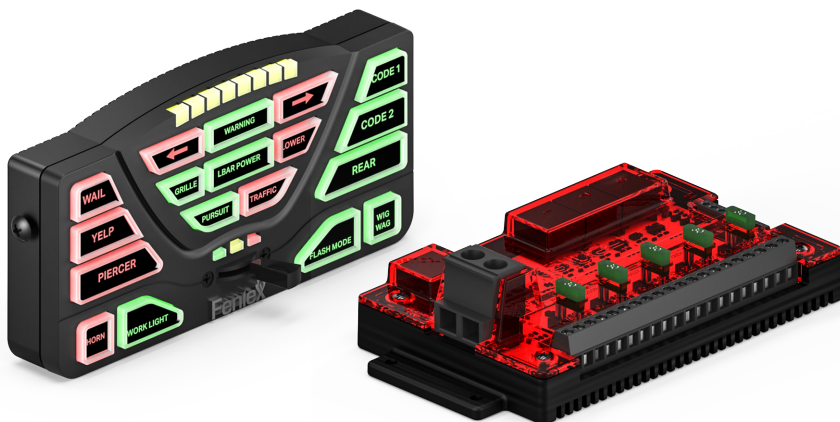


4200 DL

4200-DL CONTROLLER

C-4200-DL



Specifications ▲
pp. 03

Flash Patterns ▲
pp.03

Data Wire Harness ▲
pp.06

16-pin Wire Harness ▲
pp.08-09



Fenix Product Copyrights This price list and the mentioned Fenix products include or describe copyrighted Fenix material. Laws in the United States and other countries preserve for Fenix Industries and its licensors certain exclusive rights for copyrighted material, including the exclusive right to copy, reproduce in any form, distribute and make derivative works of the copyrighted material. Accordingly, any copyrighted material of Fenix and its licensors contained herein or in the Fenix products described in this Price List may not be copied, reproduced, distributed, merged or modified, transmitted, transcribed, stored in retrieval system or translated into any language or computer language, in any form or by any means, without prior written permission of Fenix Industries, Inc. Fenix and the stylized Fenix logo are registered in the U.S. Patent & Trademark Office.



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. warrants 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, Al lightbars, Al Cubes, AM900 Work Lights, 8.5" Dome Lights, Cargo 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 website at www.feniex.com/support.

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 9 a.m. to 6 p.m. central time, Monday through Friday. Please do not send in product without contacting support first for an RMA number.

Service After Expiration

Feniex Industries will still provide service for all products after the expiration of the warranty. 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

This instruction manual and the Feniex products described in this instruction manual may include or describe copyrighted Feniex material. Laws in the United States and other countries preserve for Feniex Industries and its licensors certain exclusive rights for copyrighted material, including the exclusive right to copy, reproduce in any form, distribute, and make derivative works of the copyrighted material. Accordingly, any copyrighted material of Feniex and its licensors contained herein or in the Feniex products described in this instruction manual may not be copied, reproduced, distributed, merged, or modified in any manner without the express written permission of Feniex Industries, Inc.

Feniex Product Copyrights

The products described in this document are the property of Feniex Industries, Inc. It is furnished by express license agreement only and may be used only in accordance with the terms of such an agreement. Products and documentation are copyrighted materials. Making unauthorized copies is prohibited by law. No part of the product or documentation may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, without prior permission from Feniex Industries, Inc.

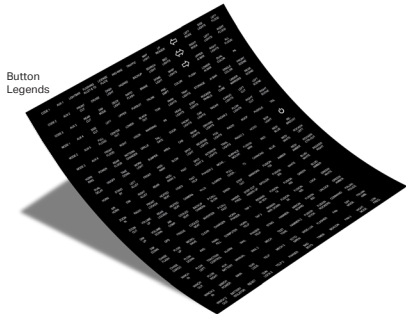
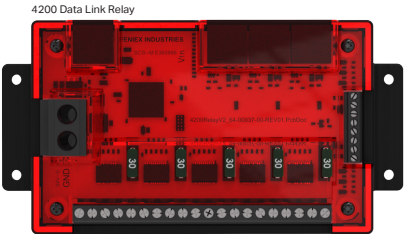
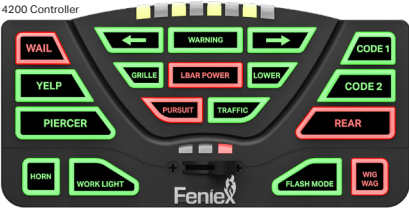


BOX CONTENTS

- 1x - 4200 Data Link Relay
- 1x - 4200 Data Link Relay
- 1x - RJ-45 to 2-Pin Screw
- 1x - U-Shaped Bracket
- 2x - Ethernet Cable

- 1x - USB Cable
- 3x - Jumper Pins
- 4x - Button Legends
- 2x - Mounting Screw

*These items come attached to the product.





▲ SYSTEM SPECIFICATIONS

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

► **IMPORTANT:** Provide 12V+ to the "Ignition Input" (Input H) to turn controller on.

▲ WIG-WAG PATTERNS

- 1 Wig Wag Slow
- 2 Wig Wag Fast
- 3 Wig Wag Combo
- 4 Wig Wag Disable
- 5 Wig Wag Override



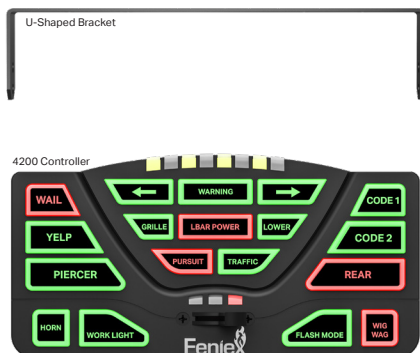
▲ MOUNTING INSTRUCTIONS

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.

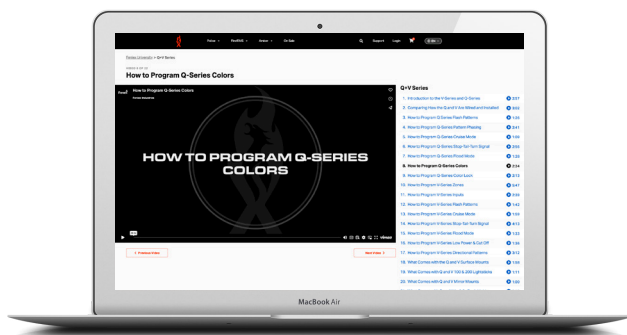
2. Re-attach the control panel head to the U-Shaped bracket utilizing the factory provided screws.

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





FENIEX UNIVERSITY



■ Feniex University

Before installing your Feniex product, watch our instructional video series; Feniex University. Get an in-depth look at how to program and install your products using the 4200-DL Controller.



■ Visit Feniex University

feniex.com/university/



■ Download 4200-DL Software

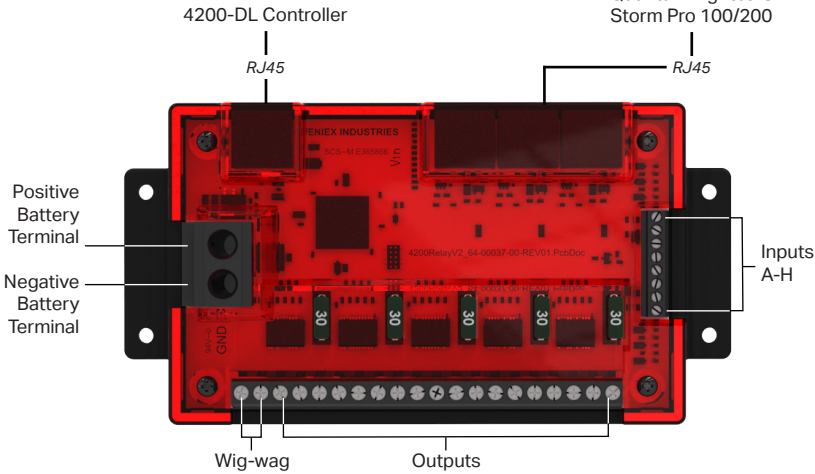
https://feniex.com/p/qmlink_change_logs





CONNECTION DIAGRAM

Data Link Products
Fusion Series Lightbars
Quantum Lightbars
Storm Pro 100/200



PIN	FUNCTION	+/-
1	Headlight Flasher, Channel 1	12V(+)
2	Headlight Flasher, Channel 2	12V(+)
3	Programmable Output #3	12V(+)
4	Programmable Output #4	12V(+)
5	Programmable Output #5	12V(+)
6	Programmable Output #6	12V(+)
7	Programmable Output #7	12V(+)
8	Programmable Output #8	12V(+)
9	Programmable Output #9	12V(+)
10	Programmable Output #10	12V(+)

PIN	FUNCTION	+/-
A	Programmable Input	12V(-)
B	Programmable Input	12V(-)
C	Programmable Input	12V(+)
D	Programmable Input	12V(+)

PIN	FUNCTION	+/-
11	Programmable Output #11	12V(+)
12	Programmable Output #12	12V(+)
13	Programmable Output #13	12V(+)
14	Programmable Output #14	12V(+)
15	Programmable Output #15	12V(+)
16	Programmable Output #16	12V(+)
17	Programmable Output #17	12V(+)
18	Programmable Output #18	12V(+)
19	Programmable Output #19	12V(+)
20	Programmable Output #20	12V(+)

PIN	FUNCTION	+/-
E	Programmable Input	12V(+)
F	Programmable Input (Night)	12V(-)
G	Programmable Input (Day)	12V(+)
H	Programmable Input (Ignition)	12V(+)



▲ 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
	P3

INPUT/POLARITY

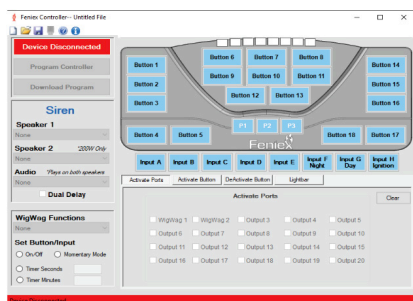
A (-)	E (+)
B (-)	F- Night (+)
C (+)	G - Day (+)
D (+)	H - Ignition (+)



PROGRAMMING SOFTWARE

To program the Fenix 4200-DL Controller, first visit fenixex.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.

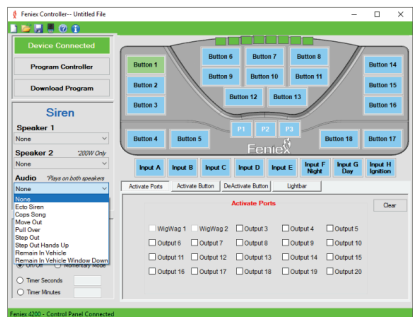


1. Connect the provided USB wire to the controller, and connect the other end of the USB port to the computer.



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.



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)

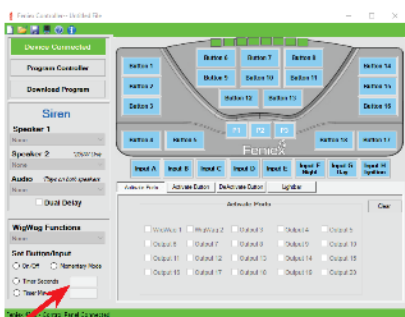


PROGRAMMING SOFTWARE



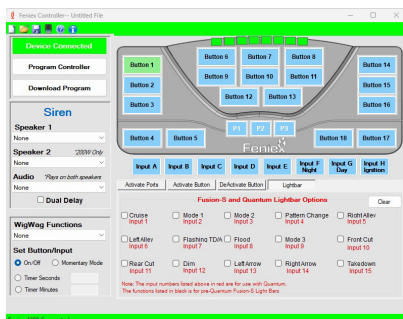
4. Activate Button

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.



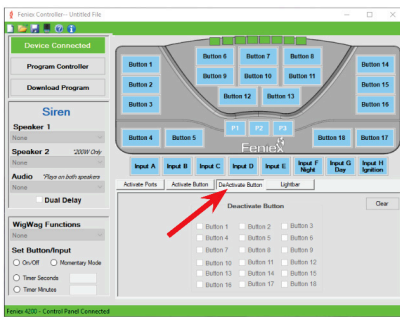
5. Deactivate Button

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.



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.



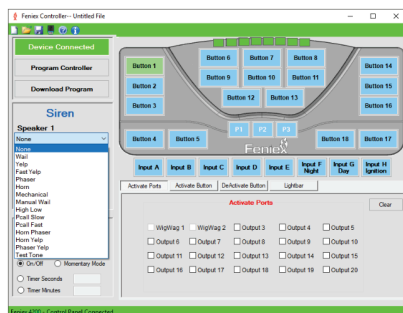
7. Timer

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

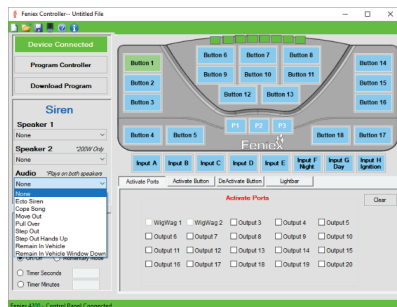
The momentary function only applies to buttons and allows a button to activate only when the user holds the button down. It will not remain active once pressure is released.

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.



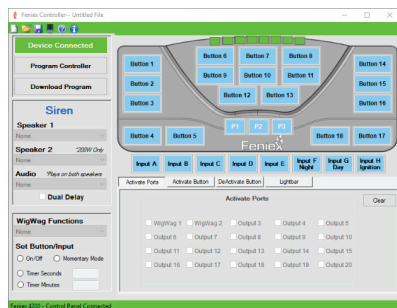
8. Siren

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.



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.



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



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.

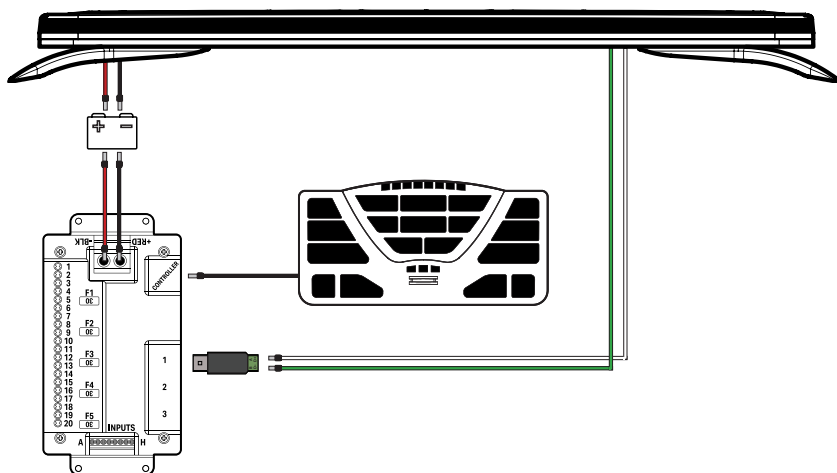
▲ FUSION & QUANTUM FULL SIZE BARS

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.

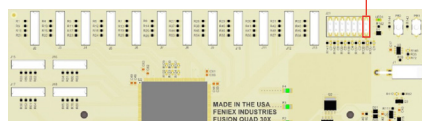
To connect and use this adapter for Fusion-S/Quantum 44", 49", or 60" lightbars follow these steps:

NOTE: Quantum must first be programmed through the Quantum Unlock Software 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 RJ Serial Adapter (1), jumpers (3).
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.

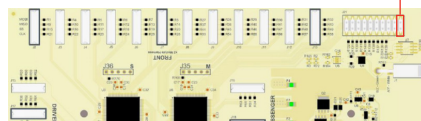


■ FUSION-S BOARD



ADD JUMPER

■ QUANTUM BOARD

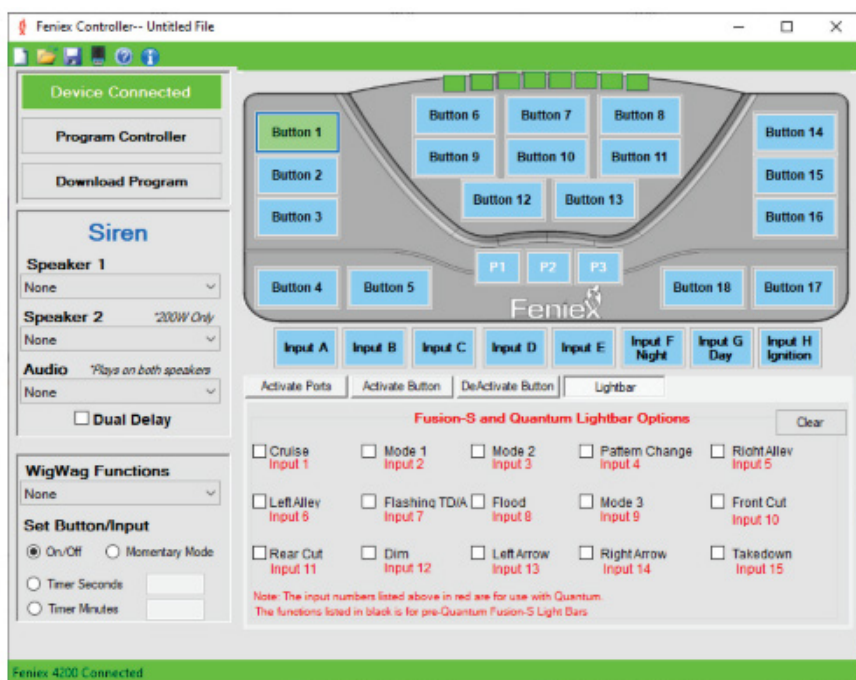


ADD JUMPER



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.



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