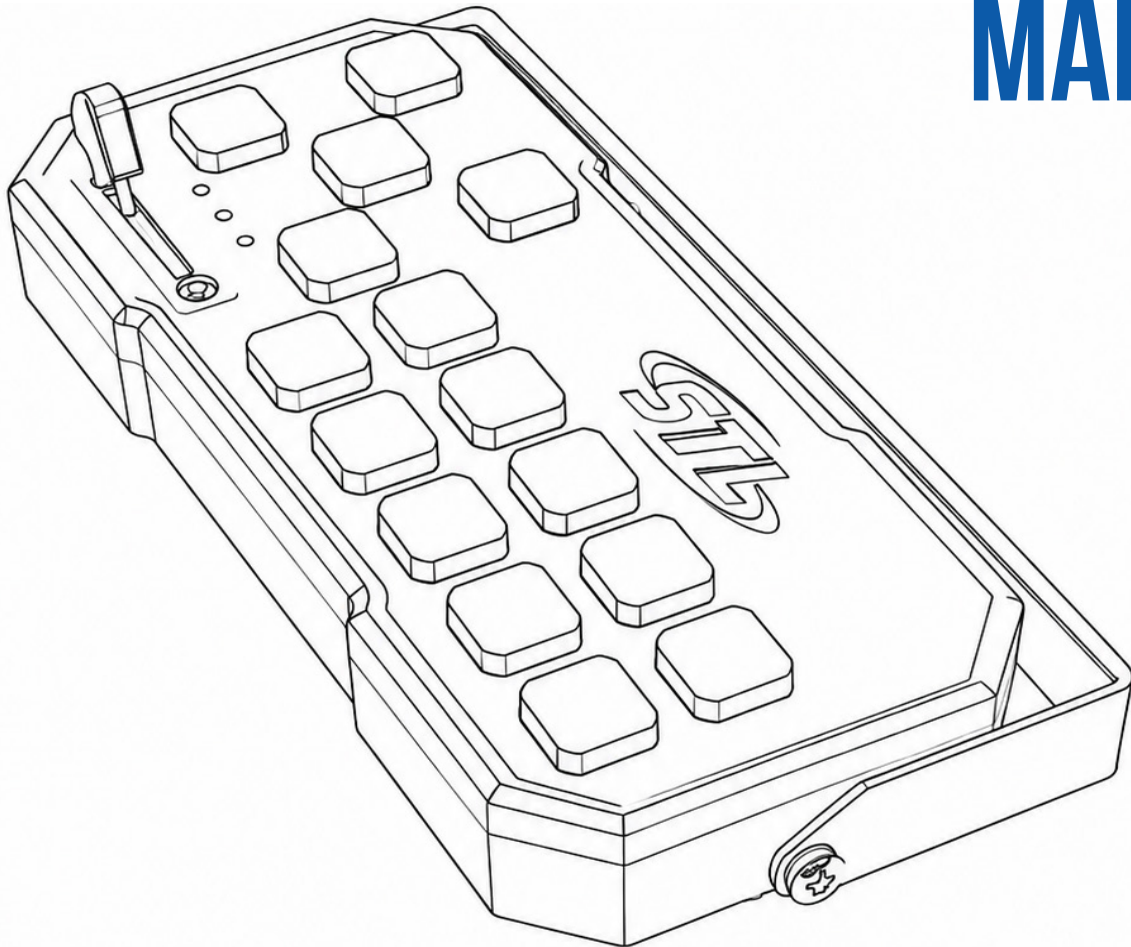


INTELLISIREN™
INTELLIGENCE



This serves as the manual for the IntelliSiren Controller. The manual contains important information for installing and operating the controller. Operating the controller without reading the manual may result in incorrect installation by the user.

INSTRUCTION MANUAL



This is the manual for the IntelliSiren Controller. The manual contains important information for installing and operating



System Specification / Warranty / Safety Regulations

System Specification		
Input Voltage	12 VDC	
Temperature Range	-20C to +45C	
Standby Current with no controller	0.1 Amps Max	
Standby Current with controller	0.2 Amps Max	
Logic Input (Blue)	Horn Ring	
Logic Input (Yellow)	Ignition	
Logic Input (White)	Backlight / Night Mode	
Logic Input (Brown)	Park Kill	
Programmable Logic Inputs	4	
2 Outputs (high side drive)	20 Amps Each	Fused at 20A Each
12 Outputs (high side drive)	5 Amps Each	Each 4 outputs fused at 20A
Siren Output*	100W (1 Speaker) / 200W (2 Speakers)	
Siren Output Overload Protection	Short Circuit Protection	
Radio Rebroadcast	Available	
Maximum Total Input Current	50 Amps	All Combined
Controller Dimensions	6.9" x 3.2" x 1.0"	
Relay Dimensions	9.1" x 5.7" x 2.3"	
Speaker Impedance	Between 9Ω and 12Ω	

SpeedTech Lights Terms and Conditions

It is the user's responsibility to understand and obey all laws regarding emergency warning devices' use and application. The user should check all applicable city, state, and/or federal laws and regulations in order to ensure compliance. SpeedTech Lights Inc. assumes no liability for any loss resulting from the use of the warning lights and products. Proper installation is vital to the performance of the warning devices and the safe operation of the vehicle. SpeedTech Lights upholds the right to adjust or change its policies and/or pricing at any given time without notice. SpeedTech Lights reserves the right to make improvements and upgrades without notice. No dealer, distributor, employee, or individual of the company is authorized to change the return or warranty policy or the conditions of the SpeedTech Lights warranty. For more information, visit our website at: <http://www.speedtech-lights.com/support/us-warranty>

Warnings and Notices for Users and Installers

This document must be delivered to and read by the end user and installer as it serves to provide you with the required information for proper and safe use of your STL product. Before operating this or any STL products the user and installer must read this manual all the way through. You will find important information in this manual that could prevent property damage and/or serious injury to the user and installer.

STL products are intended to alert pedestrians and other operators of the presence of personnel, the operation of emergency vehicles, an emergency site, and any warning needs. This does not ensure that pedestrians or drivers will react, heed, or observe emergency warning signals. Nor does the use of emergency signals grant or ensure you the right of way. It is your responsibility to make sure you can proceed safely before driving against traffic, entering an intersection, responding at a high rate of speed, or walking on or around traffic lanes.

Your STL emergency vehicle devices should be tested daily to ensure the device and all its functions are operating correctly. If you experience a malfunction contact STL's Customer Service immediately for troubleshooting options, or a warranty or service claim. You must ensure that the projection of the visual and audible signal is not blocked by vehicle components (i.e.: open trunks, visors, compartment doors), vehicles, other obstructions, or people.

The effectiveness of your STL equipment is highly dependent upon correct mounting and wiring. Improper wiring and mounting of the warning device will reduce the output and performance of the equipment. Emergency warning devices frequently require high electrical voltages and/or currents. Properly protect and use caution around live electrical connections. Grounding or shorting of electrical connections can cause high current arcing, which can cause severe personal injury and/or serious vehicle damage, including fire.

Driver and/or passenger airbags (SRS) will impact the way you mount your equipment. Any equipment installed in the deployment area of the airbags will damage or dislodge the airbags and sensors. This will also reduce the effectiveness of the airbags to protect the passengers and therefore these areas must be avoided. Installers must make sure that this equipment along with any parts, hardware, wiring, power supplies, and switch boxes do not interfere with the airbags, SRS wiring, or sensors.

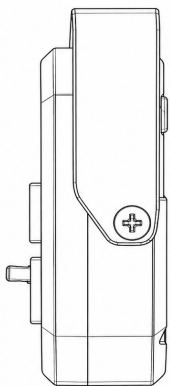
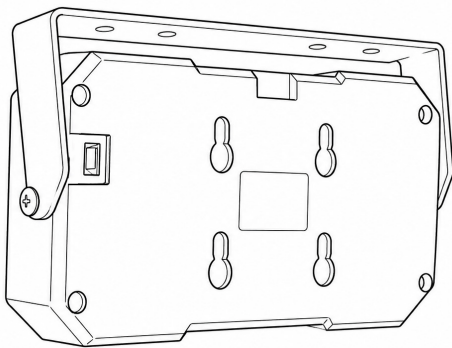
All STL equipment needs to be mounted and installed according to the vehicle manufacturer's instructions and securely attached to a part of the vehicle of sufficient strength to withstand the forces applied by the equipment. This device should be permanently mounted within the zones specified by the vehicle manufacturer. This especially applies to equipment mounted on the exterior of the vehicle to avoid dislodging. Mounting units on the interior of the vehicle by a method other than permanent mount is discouraged as it may become detached under aggressive driving conditions such as sudden braking, collision, or swerving.

PROPER INSTALLATION COMBINED WITH OPERATOR TRAINING IN THE PROPER USE OF EMERGENCY WARNING DEVICES IS ESSENTIAL TO ENSURE THE SAFETY OF EMERGENCY PERSONNEL AND THE PUBLIC.

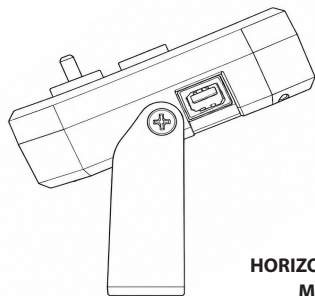
Mounting Controller / Relay

Mounting Controller

See below for mounting options for the IntelliSiren Controller. To avoid warranty concerns, do not mount the relay in an exterior location:



VERTICAL MOUNT



HORIZONTAL MOUNT

Mounting Amp

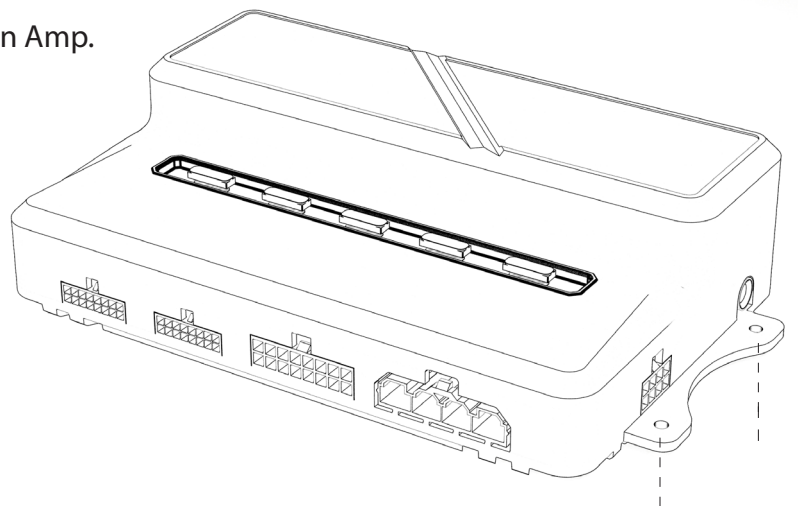
Use the instructions below to mount the IntelliSiren Amp.

Step 1: Mount the Amp to the intended surface utilizing 4 self-tapping screws.

Step 2: Connect each wire into its intended port.

Use the wiring diagram on page 5.

Step 3: Connect the RJ45 cable to the RJ45 port.



Vertical Mount

Step 1: Remove the U-Shaped Bracket by unscrewing the two screws located on either side of the

Step 2: Secure the U-Shaped Bracket in the desired location using 2 self-tapping screws.

Step 3: Using the screws removed in Step 1, secure the control panel head to the U-Shaped bracket.

Step 4: Connect the RJ45 cable to the RJ45 port.

Horizontal Mount

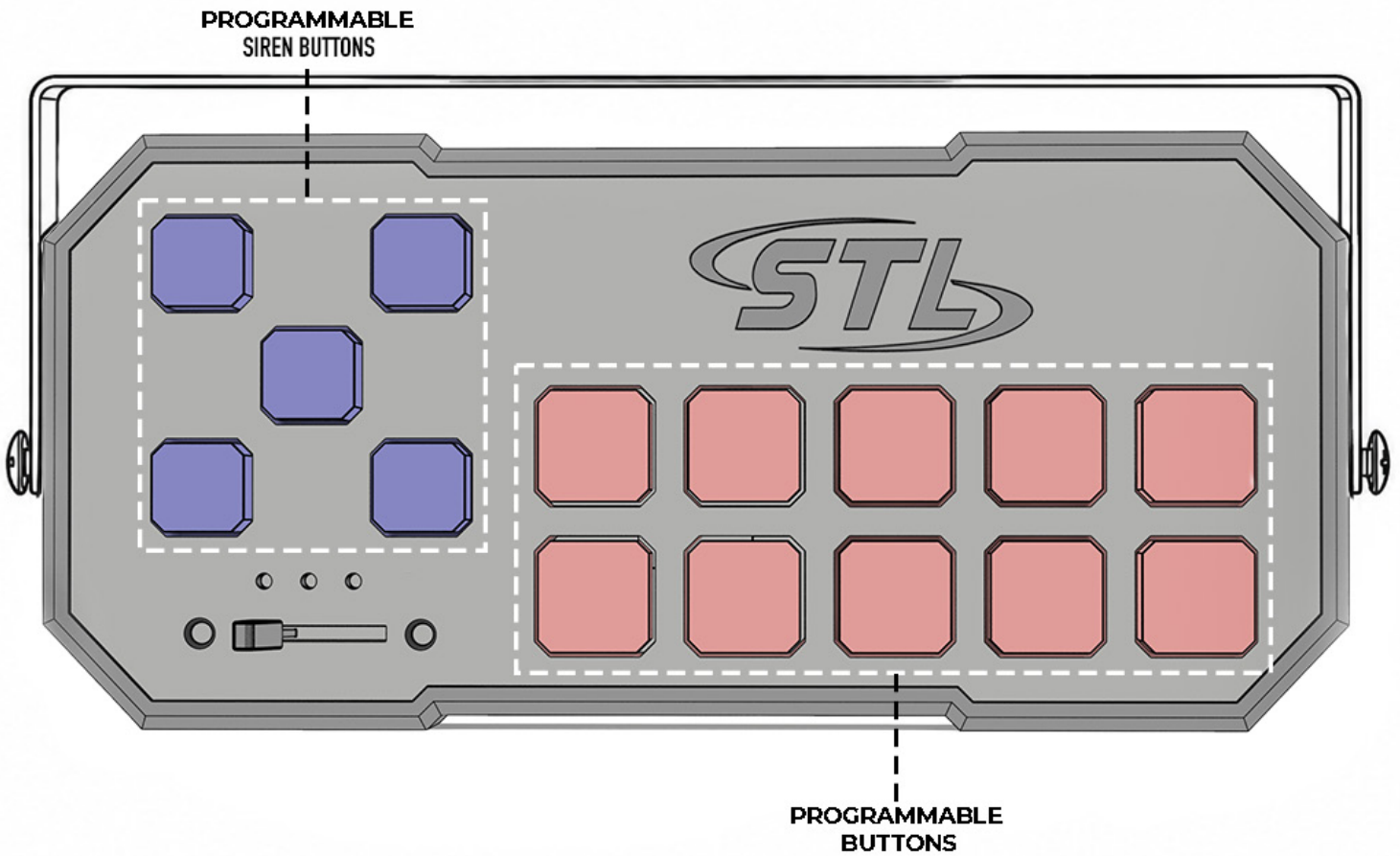
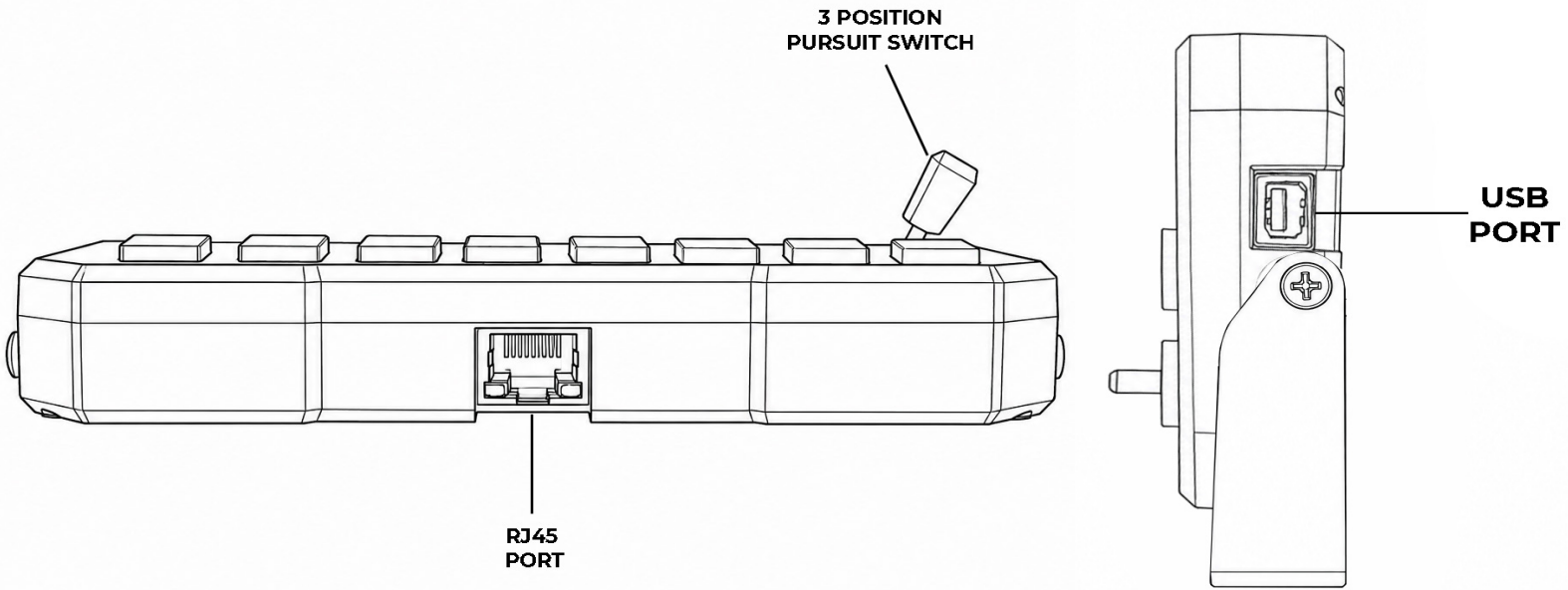
Step 1: Remove the U-Shaped Bracket by unscrewing the two screws located on either side of the controller.

Step 2: Secure the U-Shaped Bracket in the desired location using 2 self-tapping screws.

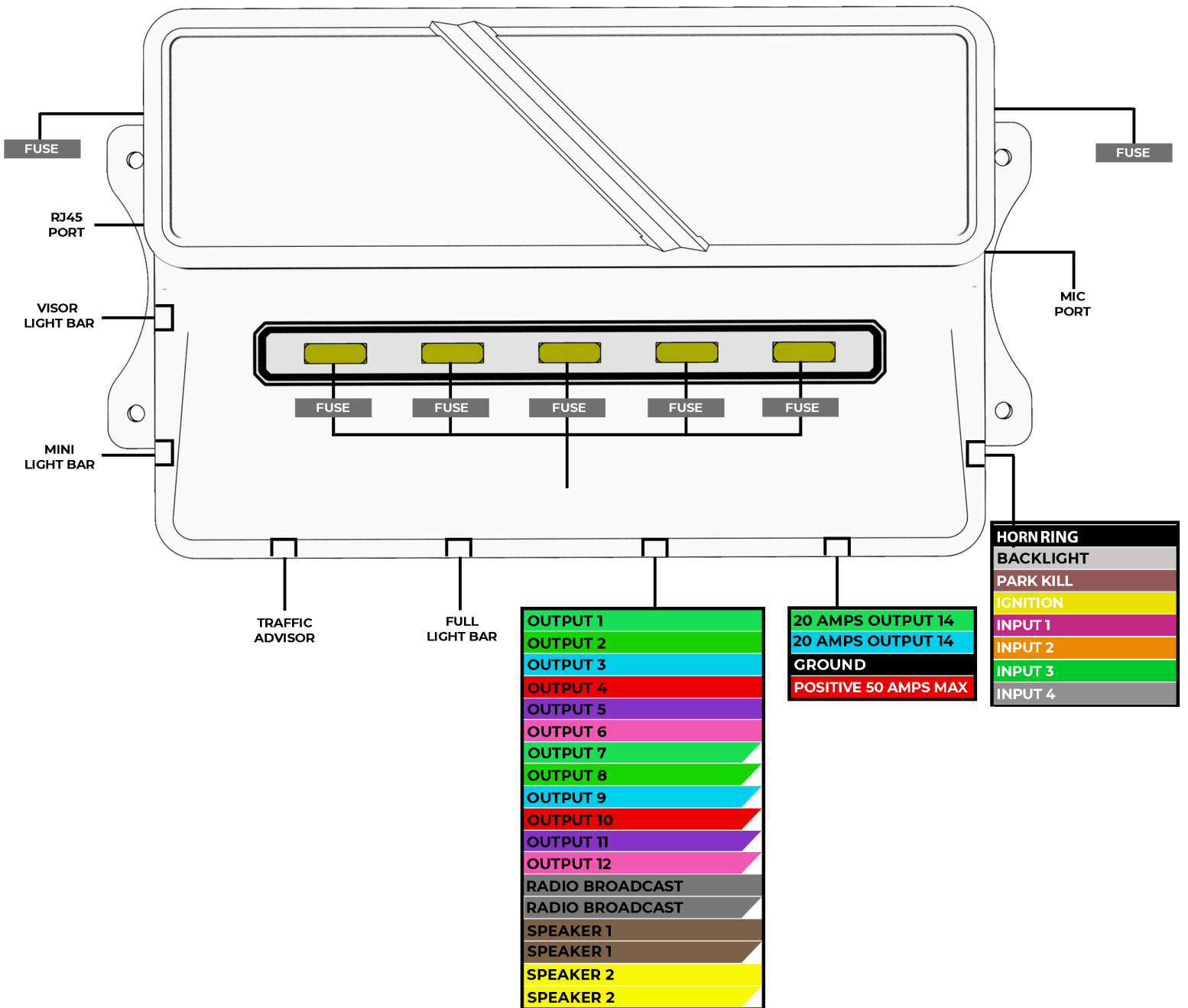
Step 3: Using the screws removed in Step 1, secure the control panel head to the U-Shaped bracket.

Step 4: Connect the RJ45 cable to the RJ45 port.

IntelliSiren Controller Content Diagram

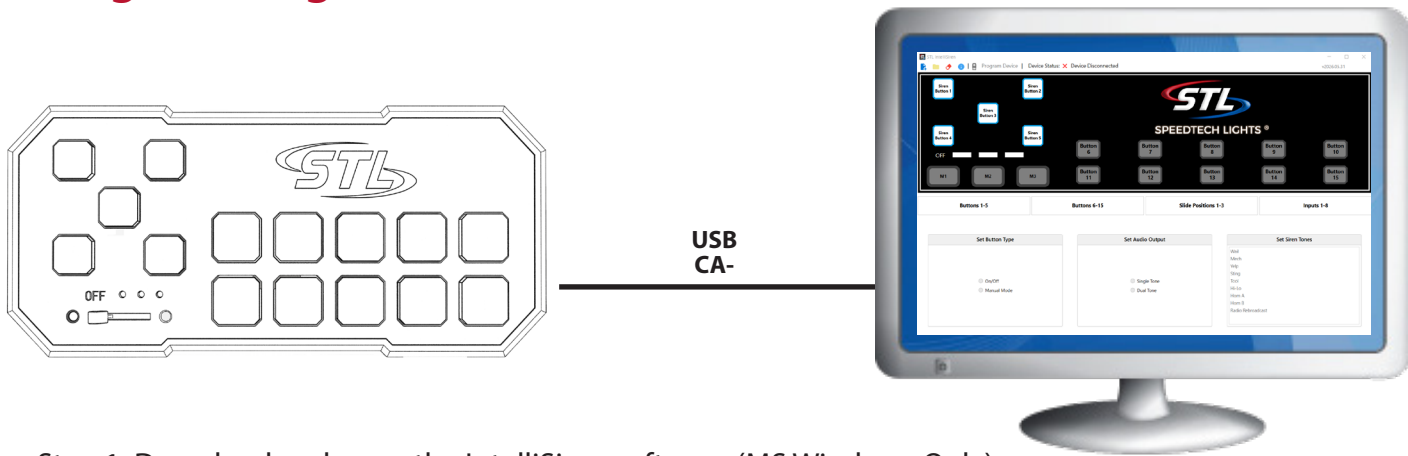


IntelliSiren Wiring Diagram



NOTE: The system will perform an initialization upon first connection. You may notice a flicker of light or a speaker pop.

Programming Controller

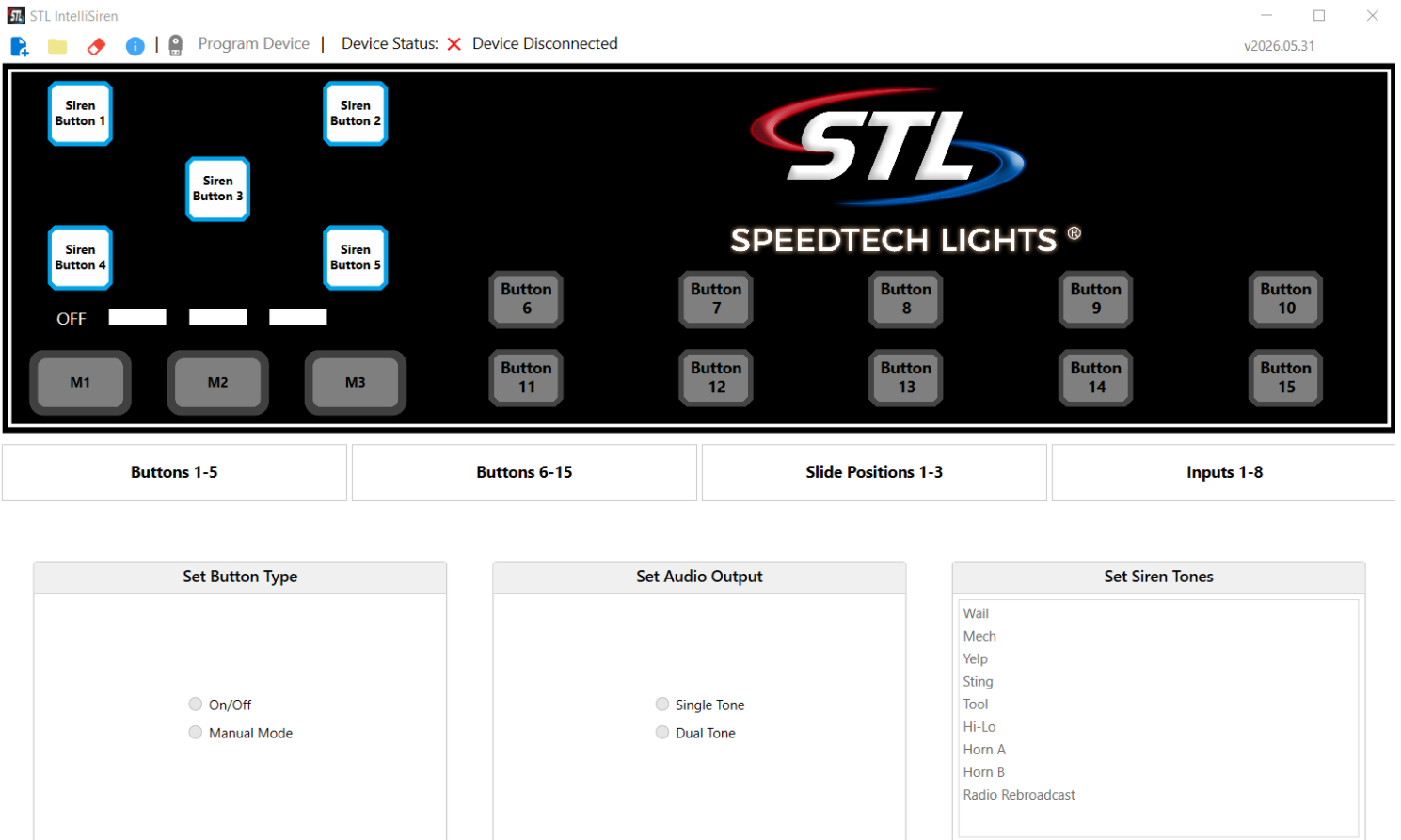


Step 1: Download and open the IntelliSiren software (MS Windows Only)

Step 2: Connect the provided USB cable to the controller and connect the other end of the USB to the computer.

Step 3: Program the buttons using the software.

Step 4: When finished programming the software, click on the save icon in the menu bar.



Step 5: After saving file, select: "Program Device".

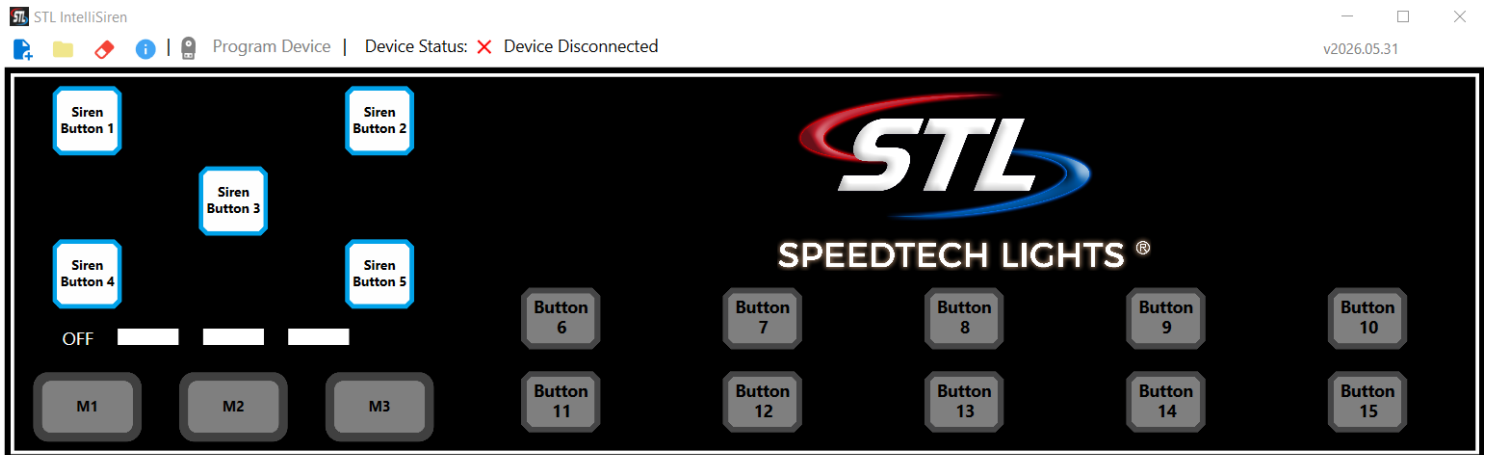
Step 6: Disconnect the controller from the computer when software states: "Programmed Successful!"

(NOTE: If disconnected before seeing the above message, the controller will not receive the programming.)

Step 7: Click the Folder icon to recall previously saved configurations.

Step 8: Click the Eraser icon to clear all programming and start over.

Programming Siren Buttons



Buttons 1-5	Buttons 6-15	Slide Positions 1-3	Inputs 1-8
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Set Button Type

On/Off

Manual Mode

Set Audio Output

Single Tone

Dual Tone

Set Siren Tones

- Wail
- Mech
- Yelp
- Sting
- Tool
- Hi-Lo
- Horn A
- Horn B
- Radio Rebroadcast

Step 1: Decide which siren mode you will be using. Choose either Single Tone or Dual Tone in the Set Audio Output menu. **(NOTE: Dual Tone requires two speakers. Once Dual Tone is selected it will configure all 5 Siren Buttons as Dual Mode functions. Radio Rebroadcast feature will ONLY properly function in Single Tone mode.)**

Step 2: Click a button to program and then choose which tone to program that button from the menu Set Siren Tones. Also choose whether this button will be an On/Off button or a Manual button.

Step 3: Push to talk on the Siren Mic at any time to override siren tone and broadcast Public Address message.

Programming Lighting Buttons

Step 1: Click a button to program and then choose which Output or Light Function that you want to program. Multiple functions can be programmed to the same button.

Step 2: Decide if the button being programmed will be an On/Off button or a Manual button in the Set Button Type menu. **(NOTE: When selecting the Flash Pattern function, the Manual button type will be defaulted.)**

Step 3: Decide when programming an On/Off button if a timer is needed to automatically deactivate. If so, input the appropriate amount of time in the Seconds and Minutes field.

Step 4: Make sure when connecting any lighting products that all +12VDC positive cables are connected to the IntelliSiren +12VDC cable and all connected to the Positive post of your battery.

Step 5: Do the same as above for all -12VDC negative cables. Make sure all Negative cables are connected to the IntelliSiren -12VDC cable and all connected to the Negative post of your battery.

Programming Groups

Step 1: Certain Light Control functions must be programmed as a group. Any time these functions are being programmed on separate buttons for the same product, you must program these buttons as a Group. These functions are Warning Mode 1/Warning Mode 2, Left Arrow/Center Out Arrow/Right Arrow, and Take Down/Super TD functions.

Programming Groups (continued)

Step 2: To program a Group, mouse over and Right Click on the buttons with the functions that need to be grouped. A menu will pop up 0-4. A total of 4 Groups can be programmed. For example, if programming Mini Lightbar Warning Mode 1 on Button 6 and Mini Lightbar Warning Mode 2 on Button 7, you will need to right click on both Buttons 6 and 7 and set them on the same Group as each other. See the example below; you will notice a Group was successfully programmed by the Red number to the right of the Button number.

The screenshot shows the STL IntelliSiren software interface. At the top, the title bar reads 'STL IntelliSiren' and the status bar shows 'Program Device | Device Status: X Device Disconnected' and 'v2026.05.31'. The main control panel features a grid of buttons: Siren Button 1-5, M1-M3, and Button 6-15. Buttons 6 and 7 are highlighted with a red border and a red '1' next to their numbers, indicating they are assigned to Group 1. Below the main panel is a navigation bar with four tabs: 'Buttons 1-5', 'Buttons 6-15' (highlighted with a red border), 'Slide Positions 1-3', and 'Inputs 1-8'. The 'Buttons 6-15' tab is active, displaying several configuration panels:

- Set Ports:** A grid of checkboxes for Output 1 through Output 14.
- Full Lightbar:** A list of checkboxes for various lightbar modes including 360° Warning Mode 1 & 2, Forward Facing Warning, Rear Facing Warning, Take Down, Alley/Tow Work Light, Cruise, Super TD (If Applicable), Left Arrow, Center Out Arrow, Right Arrow, Flash Pattern, and Dim.
- Mini Lightbar:** A list of checkboxes for Warning Mode 1 & 2, Alley, Flash Pattern, and Dim.
- Visor Lightbar:** A list of checkboxes for Warning Mode 1 & 2, Take Down, Super TD (If Applicable), Flash Pattern, and Dim.
- Set Button Timer:** Input fields for Seconds (0) and Minutes (0).
- Set Button Type:** Radio buttons for On/Off (selected) and Manual Mode, with a Clear button.
- Traffic Advisor:** A list of checkboxes for Warning Mode 1 & 2, Dim, Left Arrow, Center Out Arrow, Right Arrow, and Fast T/A Sweep.

Programming Slide Positions

The screenshot displays the STL IntelliSiren software interface. At the top, the status bar shows 'Program Device | Device Status: X Device Disconnected' and the version 'v2026.05.31'. The main control panel features 15 buttons (Button 1-15) and 5 sirens (Siren Button 1-5). Below the control panel, the configuration grid is divided into four tabs: 'Buttons 1-5', 'Buttons 6-15', 'Slide Positions 1-3' (highlighted with a red border), and 'Inputs 1-8'. The 'Slide Positions 1-3' tab is active, showing a grid of configuration options for lightbar and siren functions. The options include:

- Assign Button:** A grid of checkboxes for assigning buttons 1-15 to slide positions.
- Set Ports:** A grid of checkboxes for assigning outputs 1-14 to slide positions.
- Full Lightbar:** A list of lightbar functions such as 360° Warning Mode 1/2, Forward Facing Warning, Rear Facing Warning, Take Down, Alley/Tow Work Light, Cruise, Super TD (If Applicable), Left Arrow, Center Out Arrow, Right Arrow, Flash Pattern, and Dim.
- Mini Lightbar:** A list of lightbar functions including Warning Mode 1/2, Alley, Flash Pattern, and Dim.
- Visor Lightbar:** A list of lightbar functions including Warning Mode 1/2, Take Down, Super TD (If Applicable), Flash Pattern, and Dim.
- Set Button Type:** Radio buttons for 'On/Off' (selected) and 'Manual Mode', with a 'Clear' button.
- Set Button Timer:** Input fields for 'Seconds' and 'Minutes', both set to 0.
- Set Siren Tones:** A list of siren tones including Wail, Yelp, Tool, Horn A, Radio Rebroadcast, Mech, Sting, Hi-Lo, and Horn B.
- Traffic Advisor:** A list of traffic advisor functions including Warning Mode 1/2, Flash Pattern, Dim, Left Arrow, Center Out Arrow, Right Arrow, and Fast T/A Sweep.

Step 1: Click a button to program and then choose which Output or Button or Light Function that you want to program. **(NOTE: Any Light Function that has already been assigned to a Button will not be selectable. To have this function activate using the Slide Positions just use the Assign Button menu. Multiple functions and Buttons can be programmed to the same Slide Position.)**

Programming Inputs

The screenshot shows the STL IntelliSiren software interface. At the top, there's a navigation bar with the STL logo and 'STL IntelliSiren' text. Below that, it says 'Program Device' and 'Device Status: X Device Disconnected'. The main area is a dark-themed control panel with various buttons labeled 'Siren Button 1' through 'Siren Button 5', 'Button 6' through 'Button 15', and 'M1' through 'M3'. There's also an 'OFF' indicator. The STL logo and 'SPEEDTECH LIGHTS' are prominently displayed in the center. Below the main panel, there are tabs for 'Buttons 1-5', 'Buttons 6-15', 'Slide Positions 1-3', and 'Inputs 1-8'. The 'Inputs 1-8' tab is selected, showing a list of inputs on the left (Input 1-4, Ignition, Park Kill, Horn Ring, Backlight) and configuration options on the right for 'Set Ports', 'Full Lightbar', 'Mini Lightbar', 'Visor Lightbar', 'Set Button Timer', 'Set Button Type', and 'Traffic Advisor'.

Step 1: There are 4 Pre-programmed inputs and 4 Programmable inputs.

Step 2: For the Ignition input, connect this +12VDC input cable to the ignition in order to have the IntelliSiren function only when the ignition is activated. **(NOTE: If you want the IntelliSiren to function without the ignition activated, connect this cable directly to the Positive post of the battery.)**

Step 3: The Park Kill is an input that automatically turns off all active siren tones once the vehicle is placed in Park. For the Park Kill input, connect this +12VDC input cable to your transmission Park in your vehicle.

Step 4: The Horn Ring is an input that allows a Siren Tone to be activated by the Horn on the steering wheel. Connect this +12VDC input cable to your horn. Even though this is a pre-programmed input, it still needs to be configured. Click Horn Ring in the Input Menu and you will notice the siren menu appear. Choose the desired siren tone, make sure Single Tone is selected, and choose whether the Horn Ring will be On/Off or Manual type. On/Off means one press of the horn will activate the siren tone and a second press of the horn will deactivate the siren tone. Manual type means the siren tone will only activate while the horn is actively pressed.

Step 5: The Backlight is an input that allows the buttons of the IntelliSiren Controller to be dimly lit for night time use. This +12VDC cable can be connected to an Output or automated by connecting to the vehicle headlights.

Step 6: For the other Input 1-4 +12VDC cables, these can be programmed just like Buttons. Click on the Input you want to program. It will toggle a menu similar to Buttons 6-15. This will allow you to program a specific Function or Output everytime the Input +12VDC cable is activated.