

# **///CODE 3** Installation and Operation Instructions


## **V-CON SIREN**

**IMPORTANT!** Read all instructions before installing and using. Installer: This manual must be delivered to the end user.



**WARNING!**

Failure to install or use this product according to manufacturer's recommendations may result in property damage, serious injury, and/or death to those you are seeking to protect!

 **Do not install and/or operate this safety product unless you have read and understood the safety information contained in this manual.**

1. Proper installation combined with operator training in the use, care, and maintenance of emergency warning devices are essential to ensure the safety of emergency personnel and the public.
2. Emergency warning devices often require high electrical voltages and/or currents. Exercise caution when working with live electrical connections.
3. This product must be properly grounded. Inadequate grounding and/or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.
4. Proper placement and installation is vital to the performance of this warning device. Install this product so that output performance of the system is maximized and the controls are placed within convenient reach of the operator so that they can operate the system without losing eye contact with the roadway.
5. Do not install this product or route any wires in the deployment area of an air bag. Equipment mounted or located in an air bag deployment area may reduce the effectiveness of the air bag or become a projectile that could cause serious personal injury or death. Refer to the vehicle owner's manual for the air bag deployment area. It is the responsibility of the user/operator to determine a suitable mounting location ensuring the safety of all passengers inside the vehicle particularly avoiding areas of potential head impact.
6. It is the responsibility of the vehicle operator to ensure daily that all features of this product work correctly. In use, the vehicle operator should ensure the projection of the warning signal is not blocked by vehicle components (i.e., open trunks or compartment doors), people, vehicles or other obstructions.
7. The use of this or any other warning device does not ensure all drivers can or will observe or react to an emergency warning signal. Never take the right-of-way for granted. It is the vehicle operator's responsibility to be sure they can proceed safely before entering an intersection, drive against traffic, respond at a high rate of speed, or walk on or around traffic lanes.
8. This equipment is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws regarding emergency warning devices. Therefore, the user should check all applicable city, state, and federal laws and regulations. The manufacturer assumes no liability for any loss resulting from the use of this warning device.

### Specifications:

**Input Voltage:** 10-16VDC

(Note: Operation above 14 VDC for an extended period of time may result in speaker damage.)

**Operating Current:** (1x 58W speaker) 5A @ 13.6V w/ 19ohm load  
(1x 100W speaker) 8A @ 13.6V w/ 11ohm load  
(2x 100W speakers) 16A @ 13.6V w/ 5.5ohm load

**Standby Current:** 18mA (excluding backlighting)

**Cycle Rate:** WAIL 13 cycles/min.  
YELP 200 cycles/min.



Sirens are an integral part of an effective audio/visual emergency warning system. However, sirens are only short range secondary warning devices. The use of a siren does not insure that all drivers can or will observe or react to an emergency warning signal, particularly at long distances or when either vehicle is traveling at a high rate of speed. Sirens should only be used in a combination with effective warning lights and never relied upon as a sole warning signal. Never take the right of way for granted. It is your responsibility to be sure you can proceed safely before entering an intersection driving against traffic, or responding at a high rate of speed. The effectiveness of this warning device is highly dependent upon correct mounting and wiring. Read and follow the manufacturer's instructions before installing this device. The vehicle operator should check the equipment daily to insure that all features of the device operate correctly.

To be effective, sirens must produce high sound levels that potentially can inflict hearing damage. Installers should be warned to wear hearing protection, clear bystanders from the area and not to operate the siren indoors during testing. Vehicle operators and occupants should assess their exposure to siren noise and determine what steps, such as consultation with professionals or use of hearing protection should be implemented to protect their hearing.

This equipment is intended for use by authorized personnel only. It is the user's responsibility to understand and obey all laws regarding emergency warning devices. The user should check all applicable city, state and federal laws and regulations. Code 3, Inc., assumes no liability for any loss resulting from the use of this warning device.

Proper installation is vital to the performance of the siren and the safe operation of the emergency vehicle. It is important to recognize that the operator of the emergency vehicle is under psychological and physiological stress caused by the emergency situation. The siren system should be installed in such a manner as to: A) Not reduce the acoustical performance of the system, B) Limit as much as practical the noise level in the passenger compartment of the vehicle, C) Place the controls within convenient reach of the operator so that he can operate the system without losing eye contact with the roadway.

Emergency warning devices often 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 personal injury and/or severe vehicle damage, including fire.

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

## Standard Features:

**3672S** Full feature siren with HyperYelp, hardwire mic, and air horn  
**3672L4S** Same as 3672S plus light controls

**3692S** Full feature siren with Hi-Lo, hardwire mic, and air horn  
**3692L4S** Same as 3692 plus light controls

**Automatic Short Circuit Protection** - The siren will sense a short circuit on the speaker terminals and automatically go to standby until the fault is removed. Once the fault is removed the siren will return to normal operation.

**Hit-n-Go Mode** - Setting the slide switch (DETAIL B, 4) inside, on the V-CON amplifier board toward the front panel will put the siren in the Hit-n-Go mode. This mode will be most familiar to existing V-CON users. A seven second override is standard for all tones when activated by the Manual button or the Remote input. See OPERATION section for details.

**Siren Tones** - Industry standard Wail, Yelp, and Hi-Lo tones.

**AIR HORN Tone** - Electronic AIR HORN sound.

**Public Address** - Public Address override of all siren functions when the microphone Push-to-Talk key is pressed.

**Auxiliary Switch, Status LED** - An indicator LED, visible on the front panel that informs the operator of the status of the A,B,C & D Auxiliary switches (LED on indicates a switch is on).

**Radio Rebroadcast** - Broadcast Two-way radio reception over siren speakers. These inputs are transformer coupled to prevent loading of the radio.

**Remote Siren Switching** - The siren can be connected to the vehicle's horn switch (or other user supplied switch) and remotely activates either the MANUAL or AIR HORN function (if equipped). Selection is made via the front panel slide switch. The siren is factory set as a Tri-State input and will accept a positive (+12V) signal or a ground (earth) signal, but may be reconfigured to accept a positive only signal or a ground only signal. See SET-UP AND ADJUSTMENT section for details.

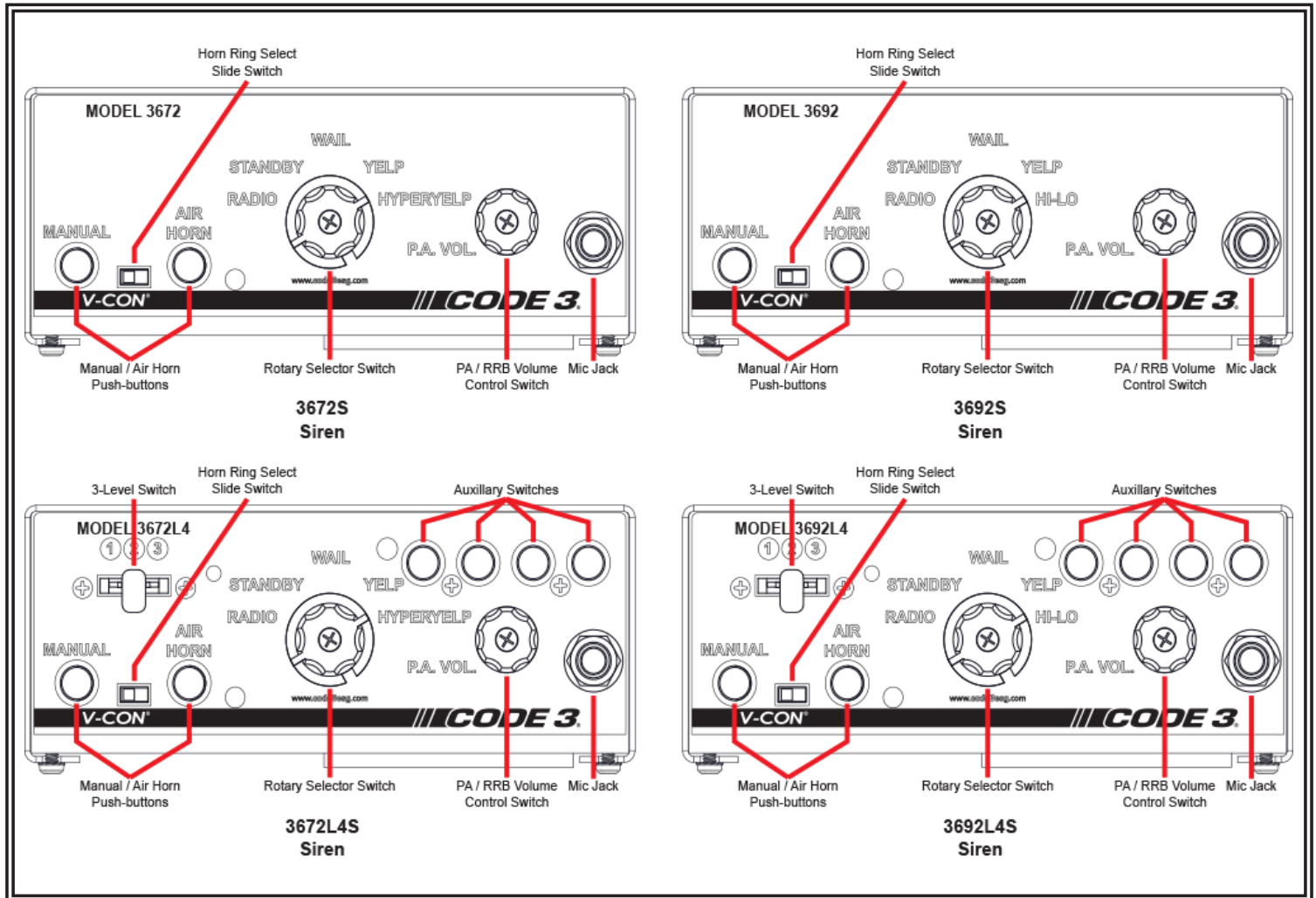
**Tone Priority/Manual Wail** - The following tones are produced while pushing the MANUAL Push-button or triggering the user-supplied REMOTE siren switch:

**Manual Wail** when the MANUAL Push-button is depressed while the rotary switch is in the STANDBY position.

**Yelp** when the MANUAL Push-button is depressed while the rotary switch is in the WAIL, YELP, HYPERYELP or HILO position.

**Noise Cancelling Microphone** - Wired in microphone that is easily unplugged internally for service or replacement.

**Power Distribution Section (L4 Models only)** - A three level progressive switch for primary warning light system control plus 4 auxiliary switches.



**Figure 1**

### Unpacking & Pre-installation:

After unpacking your siren, carefully inspect the unit and associated parts for any damage that may have been caused in transit. Report any damage to the carrier immediately.



All devices should be mounted in accordance with the manufacturer's instructions and securely fastened to vehicle elements of sufficient strength to withstand the forces applied to the device. Ease of operation and convenience to the operator should be the prime consideration when mounting the siren and controls. Adjust the mounting angle to allow maximum operator visibility. Do not mount the Control Head Module in a location that will obstruct the drivers view. Mount the microphone clip in a convenient location to allow the operator easy access. Devices should be mounted only in locations that conform to their SAE identification code as described in SAE Standard J1849. For example, electronics designed for interior mounting should not be placed underhood, etc. Controls should be placed within convenient reach\* of the driver or if intended for two person operation the driver and/or passenger. In some vehicles, multiple control switches and/or using methods such as "horn ring transfer" which utilizes the vehicle horn switch to toggle between siren tones may be necessary for convenient operation from two positions.

*\*Convenient reach is defined as the ability of the operator of the siren system to manipulate the controls from their normal driving/riding position without excessive movement away from the seat back or loss of eye contact with the roadway.*

## Installation and Mounting:

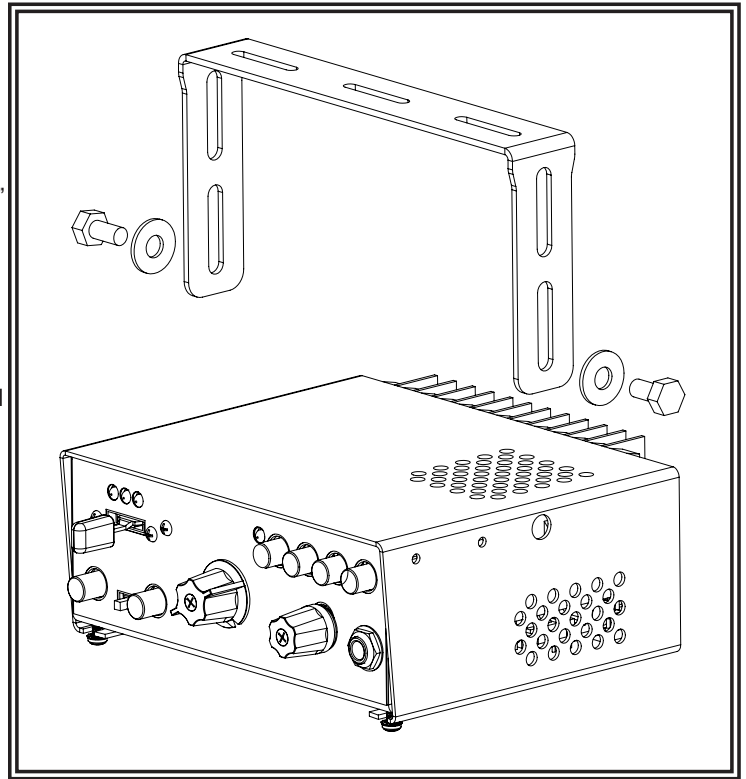
The siren may be mounted above the dash, below the dash, on a tunnel or in a rack with the mounting bracket (bail) and the hardware supplied (see Figure 2). Ease of operation and convenience to the operator should be the prime consideration when mounting the siren and controls.

Install the siren on the bail bracket using the 1/4-20 x 1/2" bolts and 1/4" flat washers supplied. Longer bolts will prevent removal of the chassis from the cover and may damage internal components. See Figure 2 for assembly and positioning details.

**Note: Set-ups and adjustments will be made in subsequent steps, depending upon the model and options purchased, that may require access to the rear area of the unit. Plan the installation and wiring accordingly.**

### Siren Amplifier Connections:

As a standard feature, the Siren and Auxiliary sections (L4 models) of your unit come equipped with a screw terminal block. To terminate the wires, strip approximately 1/4" of insulation from the end of each wire and insert it in the appropriate terminal. Tighten the screw and proceed to the next connection.



**Figure 2**

#### 8-Position Terminal Block Connections - (See Wiring Diagram)

**S1 - +12VDC** - connect to a positive +12 volt DC source. It is recommended that the user protect this wire with a 20 Amp fuse or circuit breaker located at the source. Use #14 gauge wire.

**S2 - GROUND** - connect to the negative terminal of the battery. This supplies ground (earth) to the siren. Use #14 gauge wire.

**S3 - Speaker Common** - connect to one of the wires from speaker.

**S4 - 58W Speaker** - connect to the remaining speaker lead for 58W speaker only.

**S5 - 100/200W Speaker** - connect to the remaining speaker lead for 100/200W operation (1-100W, 11 ohm speaker or 2-100W, 11 ohm speakers connected in parallel).


**S6 - Remote input** (Horn Ring or foot switch) is factory set as a Tri-State input (accepts a positive (+12V) signal or a ground (earth) signal). It can be reconfigured to accept a positive only signal or a ground only signal. See SET-UP AND ADJUSTMENT section for details.

**S7 - RRB** - connect to one side of the two-way radio speaker.

**S8 - RRB** - connect to the second side of the two-way radio speaker.

#### Notes:

1. Larger wires and tight connections will provide longer service life for components. For high current wires it is highly recommended that terminal blocks or soldered connections be used with shrink tubing to protect the connections. Do not use insulation displacement connectors (e.g., 3M Scotchlock type connectors).
2. Route wiring using grommets and sealant when passing through compartment walls. Minimize the number of splices to reduce voltage drop. All wiring should conform to the minimum wire size and other recommendations of the manufacturer and be protected from moving parts and hot surfaces. Looms, grommets, cable ties, and similar installation hardware should be used to anchor and protect all wiring.
3. Fuses or circuit breakers should be located as close to the power takeoff points as possible and properly sized to protect the wiring and devices.
4. Particular attention should be paid to the location and method of making electrical connections and splices to protect these points from corrosion and loss of conductivity.
5. Ground termination should only be made to substantial chassis components, preferably directly to the vehicle battery.
6. Circuit breakers are very sensitive to high temperatures and will "false trip" when mounted in hot environments or operated close to their capacity.

 The use of this or any warning device does not ensure that all drivers can or will observe or react to an emergency warning signal. Never take the right-of-way for granted. It is your responsibility to be sure you can proceed safely before entering an intersection, driving against traffic, responding at a high rate of speed, or walking on or around traffic lanes.

The effectiveness of this warning device is highly dependent upon correct mounting and wiring. Read and follow the manufacturer's instructions before installing or using this device. The vehicle operator should insure daily that all features of the device operate correctly. In use, the vehicle operator should insure the projection of the warning signal is not blocked by vehicle components (i.e.: open trunks or compartment doors), people, vehicles, or other obstructions.

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### Power Distribution Connections ("L4" Models):

A #8 stud is provided on the rear of the unit and is intended for use ONLY as a convenient ground (earth) "tie-point" for the light bar wiring. **Note: It is not an adequate ground (earth) for the siren or the light bar. It is recommended all ground (earth) wires attached here be terminated with a crimp-on ring terminal.**

#### 11-Position Terminal Block Connections - Lighting Control - (See Wiring Diagram)

**IMPORTANT! Remember auxiliary outputs A, B & D on L4 models can supply a maximum of 20 Amps each for a combined total of 30 Amps. Install appropriate fuses in each output wire as close to the siren as possible.**

**T1 - SW C COM** - Common or power feed for Auxiliary Switch "C". Terminals are a SPDT circuit that may be connected as a momentary (or latching depending on the switch ordered) ignition controlled circuit, or used for switching auxiliary circuits. It will Handle 10 Amps, and should be protected with a fuse at the battery if individually fed.

**T2 - SW C NC** - Connect to the load to be controlled by the normally-closed contact on Auxiliary Switch "C".

**T3 - SW C NO** - Connect to the load to be controlled by the normally-open contact on Auxiliary Switch "C".

**T4 - AUXILIARY SW A** - connect to the load to be controlled by Auxiliary Switch "A".

**T5 - AUXILIARY SW B** - Connect to the load to be controlled by Auxiliary Switch "B".

**T6 - AUXILIARY SW D** - Connect to the load to be controlled by Auxiliary Switch "D".

**IMPORTANT! The total combined current for the auxiliary outputs A,B & D Must not exceed 30 Amps total.**

**T7 - +12VDC** - Connect to the positive terminal of the battery with 30 Amp circuit protection. Locate the fuse or circuit breaker at the battery and use size 10 AWG wire minimum. This terminal powers switches A,B & D only.

**T8 - LEVEL 1** - connect to the first level of warning lights (Green LED) position "1" on level switch.

**T9 - LEVEL 2** - connect to the second level of warning lights (Yellow LED) position "2" on level switch.

**T10 - LEVEL 3** - connect to the third level of warning lights (Red LED) position "3" on level switch.

**T11 - +12VDC** - Connect to the positive terminal of the battery with 30 Amp circuit protection. Locate the fuse or circuit breaker at the battery and use size 10 AWG wire minimum. This terminal powers the 3-Level lighting control switch only.

**Note: LEVEL 1, LEVEL 2, LEVEL 3, switch progressively. Switch position 1 provides +12 volts at terminal T8. Switch position 2 provides +12 volts at terminals T8 & T9. Switch position 3 provides +12 volts at terminals T8, T9 & T10.**



## Set-up and Adjustment:

Make these adjustments and position the set-up switches prior to final mounting.

### Audio Adjustments:

**PA/RRB Volume Adjustment** - This is the main volume control located on the right side of the front panel. This control sets the PA and RRB volume. Set the front panel volume control to the point that the PA volume from the siren speaker is such that there is no feedback and the PA audio is intelligible.

**Radio Re-broadcast Adjustment** - Place the selector switch in the RADIO position. The MAX RRB trimmer located on the rear panel of the siren and is accessible through the small hole labeled RRB. This control sets the maximum RRB level that will reach with the front panel volume control. To adjust properly, set the volume knob fully clockwise and adjust the RRB trimmer such that with the two-way radio volume inside the vehicle set to it's normal level, the the desired volume level is produced outside the vehicle by the siren speaker.

### Remote Input Adjustments:

The Remote input can be configured to activate in one of three modes: 1) Tri-State Input - accepts a positive (+12V) signal or a ground (earth) signal, 2) Positive Only Input – accepts only a positive (+12V) signal or 3) Ground Only Input – accepts only a ground (earth) signal. All 3600 series sirens are factory set as a Tri-State Input. To reconfigure the Remote input to accept a Positive Only Input, power up the siren while pressing the MANUAL button and holding it for approximately three (3) seconds. When the MANUAL button is released the siren will be reconfigured to accept a Positive Only Signal. To reconfigure the Remote input to accept a Negative Only Input, power up the siren while pressing the AIR HORN button and holding it for approximately three (3) seconds. When the AIR HORN button is released the siren will be reconfigured to accept a Negative Only Signal. To restore the Remote input to the factory setting, power up the siren while pressing the MANUAL and AIR HORN buttons and holding them for approximately three (3) seconds. When the MANUAL and AIR HORN buttons are released the siren will be restored to the factory setting (Tri-State Input). **Note: The siren will not generate the MANUAL or AIR HORN tones during the configuration process.**

### Configuration Switch Adjustments:

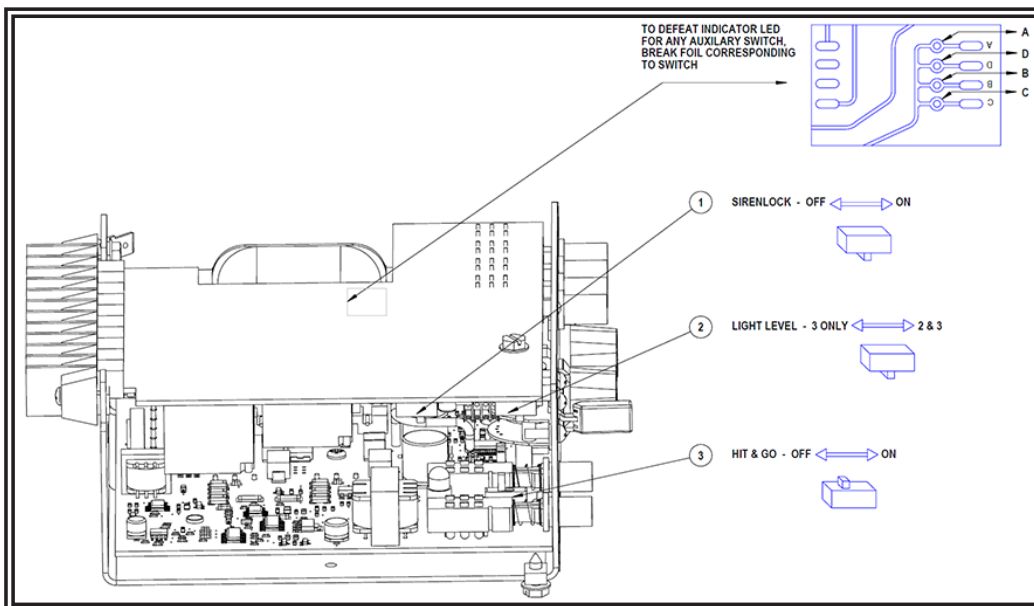
Referring to Figure 3, gently set the **Hit & Go**, **LightAlert**, and **SirenLock** set-up switches to the desired position. These switches are present even if the options were not purchased. If the SirenLock option was purchased and is switched on, all of the tones except AIR HORN, are disabled until the 3-Level Warning Light Switch is moved to either the Level-2 or the Level-3 positions.

**Hit & Go** - Slide the switch (#4) forward to allow the feature to operate, to the rear to defeat it.

**SirenLock** - The SirenLock option, when not defeated by means of the internal switches, allows siren tones (Wail, Yelp, and Hi-Lo) to be produced only when the 3-Level Warning Light Switch is in the Lighting Level 2 (Green and Yellow LED's) or Lighting Level 3 (Green, Yellow, and Red LED's) position. Air Horn, Radio Rebroadcast, and Public Address are unaffected by this option.

Slide the switch (#1) forward to allow the feature to operate, to the rear to defeat the feature.

To select SirenLock in level 3 only, slide the level select switch (#2) toward the rear of the siren; slide it toward the front of the siren to enable siren tones operation in both Levels 2 and 3.



**Figure 3**

## Operation:

### Rotary Function Selector Switch:

**RADIO** - In the RADIO position, the audio from the 2-way radio is rebroadcast over the siren speaker. The siren tones (Wail, Yelp, & Hi-Lo) do not operate in this position.

**STANDBY** - This is the standby mode. If the MANUAL button is depressed, the Manual wail tone will ramp up until it reaches a peak then ramp down when released. If the AIR HORN button is depressed, the Air Horn sound will be produced.

**WAIL** - This position produces the Wail tone. Depressing the MANUAL button will now produce the Yelp tone for 7 seconds. Depressing the AIR HORN button will produce the Air Horn sound and when released will return siren to Wail tone.

**YELP** - This position produces the Yelp tone. Pushing the MANUAL button will continue to produce the Yelp tone. If the AIRHORN button is pushed, the Airhorn sound will be produced and when released will return the siren to Yelp.



**IMPORTANT WARNINGS TO USERS OF SIRENS:** "Wail" and "Yelp" tones are in some cases (such as the state of California) the only recognized siren tones for calling for the right of way. Ancillary tones such as "Air Horn", "Hi-Lo", "Hyper-Yelp", and "Hyper-Lo" in some cases do not provide as high a sound pressure level. It is recommended that these tones be used in a secondary mode to alert motorists to the presence of multiple emergency vehicles or to the momentary shift from the primary tone as an indication of the imminent presence of any emergency vehicle.

**HI-LO** - This position produces the Hi-Lo tone. Pushing the MANUAL button will now produce the Yelp tone for 7 seconds. If the AIRHORN button is pushed, the Airhorn sound will be produced and when released will return siren to Hi-Lo.

**P.A. VOLUME Knob** - This control adjusts the level of the P.A. audio produced when keying the microphone and speaking into it. This control also controls the Radio Re-broadcast level when in the "Radio" position (see SET-UP, Radio Rebroadcast Adjustment).

**Push-to-Talk (PTT) Microphone Switch** - Keying the microphone will automatically override whatever mode the siren is in and broadcast public address messages over the siren speaker. PTT operates in all positions of the Selector switch.

**MANUAL Push-button Momentary Switch** - Has no effect when the selector switch is in RADIO, produces the effects described above for each selector position.

**AIR HORN Push-button Momentary Switch (Models 3692 and 3692L4 only)** - Produces the Air Horn tone in all selector switch settings except RADIO.

**Slide Switch (Models 3692 and 3692L4 only)** - The slide switch located between the AIR HORN and MANUAL buttons selects the function for the REMOTE (external switch) circuitry. When the switch is to the right, the Horn Ring circuitry remotely "depresses" the AIR HORN button and generate the AIR HORN tone. When the slide switch is to the left, it allows the REMOTE circuitry to remotely "depress" the MANUAL pushbutton and generate the MANUAL tone.

### Lighting Controls (For L4 Models Only):

**Auxiliary Switch "A"** - Supplies power to the load connected to terminal SW A.

**Auxiliary Switch "B"** - Supplies power to the load connected to terminal SW B.

**Auxiliary Switch "C"** - Operates circuit connected to terminals SWC NO, SWC NC, SWC COM. Functions as a latching or momentary output, depending on the type of switch installed.

**Auxiliary Switch "D"** - Supplies power to the load connected to terminal SW D.

**SirenLock** - The SirenLock option, when not defeated by means of the internal switches, allows siren tones (Wail, Yelp, and Hi-Lo) to be produced only when the Warning Light Switch is in the Lighting Level 2 (Green and Yellow LED's) or Lighting Level 3 (Green, Yellow, and Red LED's) position. Air Horn, Radio Rebroadcast, and Public Address are unaffected by this option.

### Warning Light 3-Level Progressive Slide Switch -

**Position 1** - Supplies power to Lighting Level 1. Illuminates Green LED. Activates LightAlert if supplied

**Position 2** - Supplies power to Lighting Levels 1 & 2. Illuminates Green and Yellow LED's. Activates LightAlert and SirenLock options if supplied.

**Position 3** - Supplies power to Lighting Levels 1,2, & 3. Illuminates Green, Yellow, AND Red LED's. Activates LightAlert and SirenLock if supplied.





# Wiring Instructions:

## Lighting Section (“L4” Models Only):

**Warning Light Control:** Progressive switching, 3 levels  
 30A maximum combined total for Levels 1,2 & 3

- Level 1**            30A maximum  
                           Green LED Indication
  
- Level 2**            30A maximum  
                           Yellow LED Indication
  
- Level 3**            30A maximum  
                           Red LED indication.

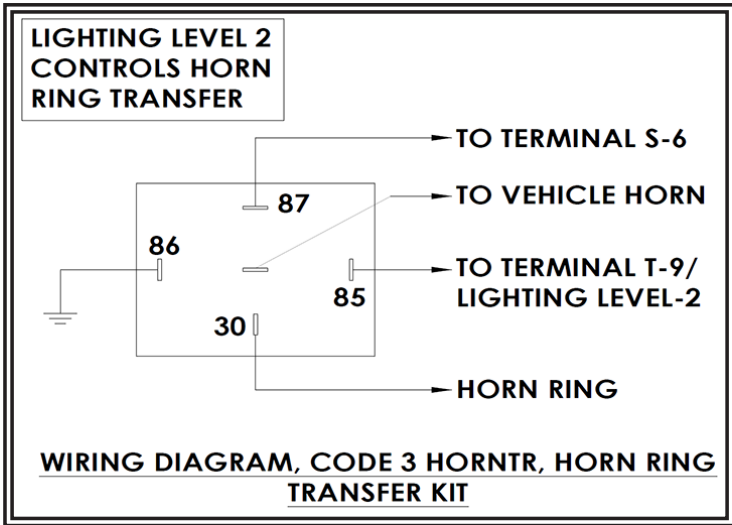
## Auxiliary Controls A, B, C, D switches:

A,B, C & D switches are latching, Push-on/off (standard). They may be ordered as momentary Independent circuits.

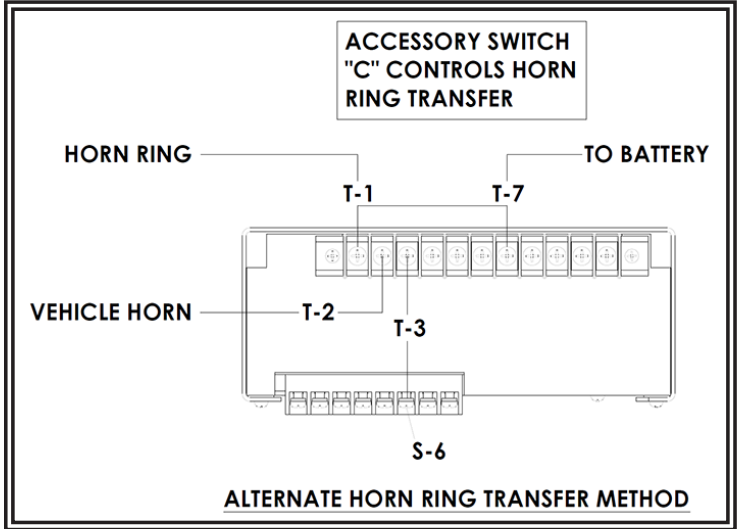
**A,B & D switches**            30A maximum combined total

**A,B, C, or D switches**        20A maximum load for any single output

Audible alarm (optional)



**Figure 4**



**Figure 5**

## Options:

**SirenLock™ (L4 and L6 Models Only)** - An interlock circuit between the siren and the light control circuits that permits automatic siren tones only when the progressive switch is in Level 3 or in Level 2 or 3 (user selectable - works in conjunction with the horn transfer relay). This feature is used in jurisdictions that require warning lights to be on before the siren is activated.

**InterClear®** - This unique feature can be used to activate additional warning lights for 7 seconds when in an Hit-N-Go override or “scrolling” by pushing a single button or the vehicle horn ring, thus allowing an additional level of warning in situations such as intersections without the operator having to take his hands off the wheel or his eyes off the road.

**Pluggable Microphone** - A plug-in microphone jack in lieu of the standard wired-in microphone may be specified. A plug-in noise-canceling microphone must be ordered separately if needed.

## Replacement Part and Accesories:

PART NO.	DESCRIPTION
CR3606	Hardwire Mic
CR3601	Mic w/ Phono Jack
CR3602	Selector Knob
CR3603	Volume Control Knob
CR3604	Mounting Bail Bracket

## Troubleshooting:

PROBLEM	PROBABLE CAUSE	REMEDY
NO SIREN OUTPUT	A. SHORTED SPEAKER OR SPEAKER WIRES. SIREN IN OVER CURRENT PROTECTION MODE	A. CHECK CONNECTIONS
EXTERNAL 20A FUSE BLOWS	A. AMPLIFIER POWER WIRES REVERSED POLARITY	A. CHECK POLARITY B. REPLACE SPEAKER(S)
NO OUTPUT FROM SPEAKER, TONES HEARD INSIDE AMP MODULE	A. SPEAKER NOT CONNECTED/ OPEN CIRCUIT IN SPEAKER WIRING	A. CHECK SPEAKER WIRING
	B. DEFECTIVE SPEAKERS	B. REPLACE SPEAKER(S)
SIREN TONES VOLUME TOO LOW/GARBLED	A. LOW VOLTAGE TO SIREN AMPLIFIER	A. CHECK WIRING FOR BAD CONNECTIONS/ CHECK VEHICLE CHARGING SYSTEM
	B. HIGH RESISTANCE IN WIRING/DEFECTIVE SPEAKER	B. CHECK SPEAKER(S) WIRING/REPLACE SPEAKER(S)
	C. SPEAKERS PHASED IMPROPERLY	C. REFER TO PAGE 5 FOR PROPER PHASING
HIGH RATE OF SPEAKER FAILURE	A. VEHICLE BATTERY VOLTAGE TOO HIGH	A. CHECK VEHICLE CHARGING SYSTEM
	B. 58 WATT SPEAKER CONNECTED TO 100 WATT TERMINAL	B. USE CORRECT SPEAKER
		C. CHECK TERMINALS
SIREN CONTINUES TO OPERATE FOR 7 SEC. AFTER MANUAL BUTTON/HORN RING IS RELEASED	A. "HIT-N-GO" FEATURE ENGAGED. NORMAL OPERATION	
INTERCLEAR WILL NOT POWER AUXILIARY DEVICES	A. THERE IS A SHORT IN THE WIRING, OR THE LOAD IS GREATER THAN 1 A	A. CHECK FOR SHORTS. INSTALL INTERCLEAR BOOSTER KIT (PART #INTBS)
P.A. VOLUME LOW OR NO P.A. AT ALL WITH VOLUME CONTROL FULLY CLOCKWISE	A. DEFECTIVE MICROPHONE	A. REPLACE MICROPHONE
	B. MICROPHONE NOT COMPLETELY PLUGGED IN	B. PLUG MICROPHONE IN SECURELY
	C. COMMON MICROPHONE CIRCUIT NOT PROPERLY WIRED	C. CHECK WIRING
	D. INCORRECT MICROPHONE	D. CALL PSE FOR LIST OF ADAPTABLE MICROPHONES
RRB VOLUME LOW, OR NO RRB AT ALL WITH VOLUME CONTROL FULLY CLOCKWISE	A. MAXIMUM RADIO REBROADCAST TRIMMER MIS-ADJUSTED	A. REFER TO SET-UP AND ADJUSTMENT SECTION
	B. RRB WIRES NOT CONNECTED TO TWO-WAY RADIO EXTERNAL SPEAKER	B. CHECK RRB CONNECTIONS
SIREN SOUNDS BY ITSELF	A. REMOTE SWITCH (HORN RING) WIRING FROM TERMINAL REMOTE SHORTING TO POSITIVE OR TO GROUND (EARTH)	A. CHECK WIRING FOR ANY SHORTING
POWER DISTRIBUTION SECTION NOT WORKING	A. SUPPLY FUSE OPEN	A. REPLACE FUSE
	B. SIREN TERMINAL NEGATIVE NOT GROUNDED	B. RECONNECT TERMINAL NEGATIVE TO GROUND
SIREN RUNS PROPERLY BUT SHUTS DOWN WHILE RUNNING, THEN STARTS RUNNING AGAIN AFTER A FEW MINUTES	A. VEHICLE CIRCUIT BREAKERS NOT RATED PROPERLY, AND ARE OVERHEATING, OR ARE NOT FUNCTIONING PROPERLY	A. REFER TO SPECIFICATIONS SECTION, PAGE 18. USE A BREAKER WITH 1.25x THE AMPERAGE RATING FOR THE WATTAGE BEING USED

**Warranty:**

**Manufacturer Limited Warranty Policy:**

Manufacturer warrants that on the date of purchase this product will conform to Manufacturer's specifications for this product (which are available from the Manufacturer upon request). This Limited Warranty extends for Sixty (60) months from the date of purchase.

**DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UNAPPROVED MODIFICATIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SET FORTH IN MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS VOIDS THIS LIMITED WARRANTY.**

**Exclusion of Other Warranties:**

MANUFACTURER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE IMPLIED WARRANTIES FOR MERCHANTABILITY, QUALITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE ARE HEREBY EXCLUDED AND SHALL NOT APPLY TO THE PRODUCT AND ARE HEREBY DISCLAIMED, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ORAL STATEMENTS OR REPRESENTATIONS ABOUT THE PRODUCT DO NOT CONSTITUTE WARRANTIES.

**Remedies and Limitation of Liability:**

MANUFACTURER'S SOLE LIABILITY AND BUYER'S EXCLUSIVE REMEDY IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR UNDER ANY OTHER THEORY AGAINST MANUFACTURER REGARDING THE PRODUCT AND ITS USE SHALL BE, AT MANUFACTURER'S DISCRETION, THE REPLACEMENT OR REPAIR OF THE PRODUCT, OR THE REFUND OF THE PURCHASE PRICE PAID BY BUYER FOR NON-CONFORMING PRODUCT. IN NO EVENT SHALL MANUFACTURER'S LIABILITY ARISING OUT OF THIS LIMITED WARRANTY OR ANY OTHER CLAIM RELATED TO THE MANUFACTURER'S PRODUCTS EXCEED THE AMOUNT PAID FOR THE PRODUCT BY BUYER AT THE TIME OF THE ORIGINAL PURCHASE. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR LOST PROFITS, THE COST OF SUBSTITUTE EQUIPMENT OR LABOR, PROPERTY DAMAGE, OR OTHER SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES BASED UPON ANY CLAIM FOR BREACH OF CONTRACT, IMPROPER INSTALLATION, NEGLIGENCE, OR OTHER CLAIM, EVEN IF MANUFACTURER OR A MANUFACTURER'S REPRESENTATIVE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. MANUFACTURER SHALL HAVE NO FURTHER OBLIGATION OR LIABILITY WITH RESPECT TO THE PRODUCT OR ITS SALE, OPERATION AND USE, AND MANUFACTURER NEITHER ASSUMES NOR AUTHORIZES THE ASSUMPTION OF ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH PRODUCT.

This Limited Warranty defines specific legal rights. You may have other legal rights which vary from jurisdiction to jurisdiction. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages.

**Product Returns:**

If a product must be returned for repair or replacement\*, please contact our factory to obtain a Return Goods Authorization Number (RGA number) before you ship the product to Code 3®, Inc. Write the RGA number clearly on the package near the mailing label. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit.

\*Code 3®, Inc. reserves the right to repair or replace at its discretion. Code 3®, Inc. assumes no responsibility or liability for expenses incurred for the removal and /or reinstallation of products requiring service and/or repair.; nor for the packaging, handling, and shipping; nor for the handling of products returned to sender after the service has been rendered.



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