

CARSON

SIRENS





POLICE, AMBULANCE & FIRE RESCUE



TOUGH TO THE CORE

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Protected by a
No Hassle Warranty



Meets Class A Sound Level
Requirements



California Title 13 Configurable



Meets KKK requirements



Meets SAEJ1849 Acoustic Requirements

Rugged & Reliable...It must be a Carson!

Carson is the sound choice for emergency vehicle sirens, electronic air horns, speakers and switch boxes. We manufacture rugged, reliable, customer-driven products backed by one-to-one service and a 5 year no-hassle warranty. Carson is a sound performer in an industry driven by the need for consistent results.

Today's Carson audible warning products are built on a legacy that started in 1972 when Jerry Smith, the inventor of the original electronic siren, came to Carson to develop a new line of sirens for the emergency vehicle industry. His rugged, reliable designs laid the foundation for the SA siren line, our premium siren amplifier that all others are measured against.



Carson Manufacturing Company, Inc.'s headquarters and 47,000 square foot manufacturing facility located in Indianapolis, Indiana.

In 2002, after 30 years of manufacturing sirens behind the scenes for several industry-leading name brands, the Carson brand was born. With this change came the development of a new generation of premium products for law enforcement, ambulance/EMS, volunteer and fire rescue vehicles labeled under the Carson name. While our competition spreads their efforts over several product lines, we continue to focus on what we do best – sirens and audible warning equipment. This approach enhances our development of more innovative customer-driven products and offers a better price-to-value relationship for our customers.

Company History

Carson Manufacturing was started in 1946 by Harold Carson and remains solely owned and operated by the Carson family as a Woman-owned Business Enterprise (WBE Certified). For over 65 years, Carson has built its reputation on designing, manufacturing, and marketing rugged, reliable mechanical and electronic components and products for the emergency vehicle, HVAC, and government elections industries. We continue to promote and expand our contract manufacturing partnerships to other industries utilizing our spacious 47,000 square foot manufacturing facility, highly skilled workforce, and more than half a century of manufacturing experience. We employ LEAN practices and have UL and CSA recognized products. All Carson products are proudly **Made in the U.S.A.**

To learn more about Carson's contract manufacturing services, please contact us at 888.577.6877 or visit our website at www.carson-mfg.com.



Barbara Carson-Ferguson
President/Co-Owner

WBE Certified





SC-409 COMMANDER



CONSOLE MOUNT SIRENS

The **SC-409 Commander** combines advanced technology and full emergency warning system control with premium style and design. The **Commander** incorporates superior functional versatility with face programmable and dip switch selectable options to control virtually all emergency lighting and auxiliary equipment including multiple gun locks and video camera systems.

- **Rugged** 100/200 watt electronic siren amplifier with light controls
- **Pursuit ready** four position slide switch with the flexibility to be progressive, non-progressive, or partially progressive; and to activate or deactivate the auxiliary switches; up to 60 amps total
- **Video trigger** capability that signals the video camera system to record when the lever switch or selected auxiliary switches are activated
- **Face programmable** auxiliary switches for on/off, on/off with video trigger, momentary, and 10 or 20 second timed momentary all through 6 outputs with up to 80 amps of total auxiliary control
- **Reliable** six position rotary switch features Radio-Repeat, Wail, Yelp, and Phaser or optional Two-Tone/HiLo siren tones with push-button override for Manual and Air Horn
- **Output diagnostics** built-in to alert the user of problems
- **Splash resistant** rubberized face with built-in membrane push-button switches and liquid repelling actuator flanges
- **Hands-free Horn Ring Cyclor 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Automatic Siren Cutout** disables the siren when the driver's door opens
- **Noise canceling microphone** with P.A. override and volume control
- **LED backlit** for nighttime visibility with auxiliary switches that change color when activated
- **Dip switch programmable** options allow siren to be customized for each installation
- **Detachable** microphone option (DM) also available





SC-407 ENFORCER



The **SC-407 Enforcer** is an affordable, full-featured light control siren specifically designed for applications where console space is at a premium. Standing at 2¾" high, the reliable **Enforcer** combines 200 watts of siren output and 140 total amps of light control capacity in one efficiently sized unit. Oversized, simple-to-operate controls provide easy use even in the most demanding driving situations.

- **Rugged** 100/200 watt electronic siren amplifier with 140 amps of total light control
- **Pursuit ready** four position progressive slide switch for up to 60 amps of primary light control and four lighted rocker switches for auxiliary light control
- **Reliable** rocker switch control features Radio-Repeat, Wail and Yelp with push-button override for Manual, Air Horn, and Phaser or optional Two-Tone/HiLo siren tones
- **Hands-free Horn Ring Cyclor 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Automatic Siren Cutout** disables the siren when the driver's door opens
- **Noise canceling microphone** with P.A. override and volume control
- **LED backlit** for nighttime visibility with auxiliary switches that light-up when activated

SA-500M CRUISER MECHANICAL



The **SA-500M Cruiser Mechanical** siren is the smallest full featured Mechanical tone siren on the market today. With its authentic Mechanical tone and replica "Stutter" Air Horn, the **Cruiser Mechanical** creates the perception of a large emergency vehicle approaching causing drivers to instinctively pull over. This effectiveness at clearing traffic is key to helping reduce call response time, emergency vehicle near-misses, accidents, and injuries when en route to calls.

- **Rugged** 100/200 watt amplifier
- **Reliable** four position rotary switch features Radio-Repeat, Wail, Yelp, Phaser or optional Two-Tone/HiLo, and Mechanical siren tones with push-button override for Manual and "Stutter" Air Horn
- **Dip switch programmable** options allow siren to be customized for each installation
- **Carson "Stutter" Air Horn** provides that distinctive "Big Engine" air horn sound without the need for bulky air tanks and compressors
- **Output indicator light** for diagnostics
- **Hands-free Horn Ring Cyclor 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Noise canceling** microphone with P.A. override
- **Face accessible** Radio and P.A. volume controls
- **LED backlit** for nighttime visibility
- **Automatic Siren Cutout** disables the siren when the driver's door opens
- **Detachable plug connector** with screw-down terminals
- **28 volt** option also available

SA-500 CRUISER



The **SA-500 Cruiser** is one of the most efficient, rugged, reliable, and functional sirens on the market today. And at only 2 1/8" high, the **Cruiser** is also one of the smallest! This self-contained siren easily fits into the dash or console of any emergency vehicle using significantly less space and leaving plenty of room for other equipment.

- **Rugged** 100/200 watt amplifier
- **Reliable** four position rotary switch features Radio-Repeat, Wail and Yelp siren tones with push-button override for Manual and Phaser or optional Two-Tone/HiLo sound and Air Horn
- **Dip switch programmable** options allow siren to be customized for each installation
- **Output indicator light** for diagnostics
- **Hands-free Horn Ring Cyclor 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Noise canceling** microphone with P.A. override
- **Face accessible** Radio and P.A. volume controls
- **Automatic Siren Cutout** disables the siren when the driver's door opens
- **LED** backlit for nighttime visibility
- **Detachable plug connector** with screw-down terminals for easy installation and service
- **28 volt** option also available

SA-400M CLASSIC MECHANICAL



The **SA-400M Classic Mechanical** is aptly named. Building on the foundation of the "industry standard" SA-400 Classic, this next generation siren combines the rugged dependability of its predecessor with a classic Mechanical tone, powerful, new Carson "Stutter" Air Horn and distinctive silver look. The result...a premium siren that effectively clears intersections by delivering that "Big Engine" sound that makes drivers instinctively pull over.

- **Rugged** 100/200 watt amplifier
- **Reliable** six position rotary switch features Radio-Repeat, Wail, Yelp, Phaser or optional Two-Tone/HiLo, and Mechanical siren tones with push-button override for Manual and "Stutter" Air Horn
- **Dip switch programmable** options allow siren to be customized for each installation
- **Carson "Stutter" Air Horn** provides that distinctive "Big Engine" air horn sound without the need for bulky air tanks and compressors
- **Splash resistant** face is ideal for demanding environments by protecting internal circuitry from liquids
- **Hands-free Horn Ring Cyclor 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Noise canceling** microphone with P.A. override and volume control
- **LED** backlit for nighttime visibility
- **Detachable microphone (DM)**
- **28 volt** option also available

CONSOLE MOUNT SIRENS

SA-400 CLASSIC



With over 40 years of history as the industry's "workhorse", the **SA-400 Classic** has justly earned its reputation as one tough siren. Longevity and reliable service are the hallmarks of this timeless veteran. The **Classic's** rugged design has been, and continues to be, the standard against which all other sirens are measured.

- **Rugged** 100/200 watt amplifier
- **Reliable** six position rotary switch features Radio-Repeat, Wail, Yelp, and Phaser or optional Two-Tone/HiLo siren tones with push-button override for Manual and Air Horn
- **Dip switch programmable** options allow siren to be customized for each installation
- **Splash resistant face** protects internal circuitry from liquids
- **Hands-free Horn Ring Cycler 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Noise canceling** microphone with P.A. override and volume control
- **LED** backlit for nighttime visibility
- **Additional options** include detachable microphone (DM) and 28 volt unit

SC-1002 VOLUNTEER



Built to overcome the challenges volunteers face when responding to calls, the **SC-1002 Volunteer** light control siren incorporates traditional siren tones with the Carson Mechanical Tone. This powerful, full coverage tone safely clears traffic by delivering that instinctive reaction that makes drivers pull over. With the **Volunteer**, you can Run Small, SOUND BIG, and Arrive Safe!

- **Compact** 100 watt amplifier with light controls
- **Reliable** three position rocker switches feature Wail, Yelp, Manual and Mechanical siren tones with momentary push-button override for Phaser or optional Two-Tone/HiLo and Air Horn
- **Illuminated** rocker switches (2) provide up to 20 amp capacity auxiliary light control
- **Mechanical Tone:** Deep, gutsy and authentic, this powerful tone gives you that "Big Engine" sound to effectively clear traffic
- **Dip switch programmable** options allow siren to be customized for each installation
- **Output indicator light** for diagnostics
- **Hands-free Horn Ring Cycler 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **LED** backlit for nighttime visibility

SA-385

ALERT



The **SA-385 Alert** siren gives you just what you need...and more! Engineered from the design of its predecessor, the original SA-380 Alert siren, the SA-385 continues with the concept of offering only the most highly desired features and functionality, while eliminating those price inflating “bells and whistles” that are common on many sirens today.

The new **Alert** incorporates the same full-featured siren options as the original SA-380, with new features designed to enhance operation and increase ease of installation. These features include making Instant-On operation a standard requiring no enable input, terminal block wiring which offers simple plug-in connection at a significantly smaller size.

- **Compact** 100 watt amplifier
- **Reliable** four position rotary switch features Wail, Yelp, Phaser or optional Two-Tone/HiLo siren tones and push-button override for Manual and Air Horn
- **Dip switch programmable** options allow siren to be customized for each installation
- **Instant-On** provides automatic power when a siren function is selected
- **Output indicator light** for diagnostics
- **Terminal block wiring** offers easy installation and serviceability
- **Hands-free Horn Ring Cycler 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Noise canceling** microphone with P.A. override

SA-365

DEFENDER



Simplicity is the key to the new **SA-365 Defender**. Simple to install, simple to operate and simple to afford! This basic, straightforward design is matched only by its rugged durability and reliable performance. This unit is small, but still had the popular features and functionality that makes it an industry leader. It has been engineered with a reduced internal electronics footprint, resulting in a significantly smaller console. This makes it an ideal choice for law enforcement, security and volunteer firefighter applications where mounting space is limited.

- **Compact** 100 watt amplifier
- **Reliable** three position rocker switches feature Wail, Yelp, and Phaser, or optional Two-Tone/HiLo siren tones with Manual and Air Horn override
- **DIP switch programmable** options allow siren to be customized for each installation
- **Instant-On** provides automatic power when a siren function is selected
- **Output indicator light** for diagnostics
- **Hands-free Horn Ring Cycler 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations

CONSOLE MOUNT SIRENS

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NEW SC-411-RD ELITE FORCE



The **SC-411RD-10 14 Elite Force** remote dual tone siren is one in a series of sirens developed for smaller spaces with the same options as a full console unit. This new remote siren introduces the new **QuickClone™** duplication technology making it easy to transfer option settings from one unit to another without the need for an external computer, ideal for fleet installations. The splash resistant rubberized control head face offers programmable siren tones, light and arrow stick controls and our patented video trigger capability.

- **Dual Tone:** Just like having two sirens going at the same time. And with two distinct tones being produced at the same time, it really captures your attention. The siren may produce Dual Wail, Dual Yelp, Dual Phaser, Dual Air Horn and combine Wail and Yelp at the same time. These tone pairs are programmable for each siren switch position.
- **Patented Video Trigger Output:** A dedicated line to a video system that signals it to record when the lever switch or selected auxiliary switches are activated. This provides complete control to insure that the video system is prompted to record with activating a combination of any specified light output as well as any switch programmed as a gunlock timer.
- **Face Programmability:** All options are programmed using the lever switch and buttons on the control head in a special programming mode, including:
 - **QuickClone™** setting duplication technology – Options are automatically synchronized between the control head and amplifier, allowing easy copy from vehicle to vehicle without the use of an external computer for simplified fleet installations
 - Lever switch operation – progressive, non-progressive and semi-progressive with or without automatic siren activation
 - Auxiliary switch operation – On/Off, momentary or momentary with 10 or 20 second delay for gun lock timer
 - Auxiliary switch association – linked activation by specific lever switch positions
 - Control inputs – enable/disable and polarity
 - Siren options – various operations and tone selections
 - 2nd tone selection - changes 2nd tone with various switch positions
- **Face Diagnostic Indicators:** Each light and siren output is individually protected with externally exposed fuses and have independent diagnostic sensors at the connectors that display the status of each output on the face of the unit. Audible and visual alerts are transmitted when the sensor detects an output that is not functioning properly.
- **Adjustable Backlighting** – with the press of a button the user can tailor the brightness to their personal preference.
- **Splash Resistant Rubberized Face:** The unit incorporates built in auxiliary and siren switches with backlighting and flanges to seal around the lever switch actuator and volume control knob for improved protection for the internal circuitry from common accidental spills.
- **Noise canceling** microphone with P.A. override and volume control
- **Hands-free Horn Ring Cyclor 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Automatic Siren Cutout** disables the siren when the driver's door opens
- **Field replaceable** slide switch

SA-441M

MAGFORCE MECHANICAL



The SA-441 MagForce Mechanical takes warning sound performance to the next level by combining a classic Mechanical tone and new Carson “Stutter” Air Horn with the power of an independent 2 channel, 200 watt amplifier. The dual tone feature of this siren creates alternating sweeps of sound giving the perception of two sirens operating at the same time for maximum clearing power. The SA-441M is also an effective alternative to costly mechanical sirens and air horns that are traditionally installed on fire rescue apparatus.

- **Rugged** 200 watt, 2 channel amplifier with remote control head
- **Reliable** six position rotary switch features Radio-Repeat, Wail, Yelp, Phaser or optional Two-Tone/HiLo, and Mechanical siren tones with push-button override for Manual and “Stutter” Air Horn
- **Dip switch programmable** options allow siren to be customized for each installation
- **Carson “Stutter” Air Horn** provides that distinctive “Big Engine” air horn sound without the need for bulky air tanks and compressors
- **Dual Tone Mode** produces two distinct tones operating at the same time i.e. Mechanical and Yelp
- **Noise canceling** microphone with P.A. override and volume control
- **Hands-free Horn Ring Cyclor 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **LED backlit** for nighttime visibility
- **Extended microphone** option (FX) also available

SA-441

MAGFORCE



As the original dual tone siren, the SA-441 MagForce is like having two sirens in one. Its independent 2 channel amplifier produces 200 watts of traffic clearing output through two distinct tones being produced at the same time. No other electronic siren is as powerful or is as attention grabbing as the Magforce.

With the onset of improved sound resistant driver compartments, increased driver distractions, and louder more high-fidelity car stereos, many first responders have found that the increased output capacity of this true 200 watt siren is significantly more effective in gaining drivers’ attention and clearing traffic.

- **Rugged** 200 watt, 2 channel amplifier with remote control head
- **Reliable** six position rotary switch features Radio-Repeat, Wail, Yelp, and Phaser or optional Two-Tone/HiLo siren tones with push-button override for Manual and Air Horn
- **Dip switch programmable** options allow siren to be customized for each installation
- **Dual Tone Mode** produces two distinct tones operating at the same time i.e. Wail and Yelp
- **Noise canceling** microphone with P.A. override and volume control
- **Hands-free Horn Ring Cyclor 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **LED backlit** for nighttime visibility
- **Extended microphone** option (FX) also available

REMOTE MOUNT SIRENS

SA-430M PATRIOT MECHANICAL



The **SA-430M Patriot Mechanical** is small in stature, but big in traffic clearing power! This truly unique siren offers the versatility of a compact, easy-to-install, flush mount control head with the strength of the new Carson “Stutter” Air Horn and dedicated Mechanical siren tone. Designed to address the space constraints of today’s emergency vehicles, the **SA-430M Patriot Mechanical’s** control head is just 1” in depth offering minimal intrusion into factory or custom made dashes or consoles.

- **Rugged** 100/200 watt amplifier with remote control head
- **Reliable** six position rotary switch features Radio-Repeat, Wail, Yelp, Phaser or optional Two-Tone/HiLo, and Mechanical siren tones with push-button override for Manual and “Stutter” Air Horn
- **Dip switch programmable** options allow siren to be customized for each installation
- **Carson “Stutter” Air Horn** provides that distinctive “Big Engine” air horn sound without the need for bulky air tanks and compressors
- **Space saving** 1” deep control head design is easy to install in minimum clearance areas with only a single 22 AWG serial data line connected to the amplifier
- **Noise canceling** microphone with P.A. override and volume control
- **Hands-free Horn Ring Cycler 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Automatic Siren Cutout** disables the siren when the driver’s door opens
- **LED backlit** for nighttime visibility
- **Extended microphone** option (FX) also available

SA-430 PATRIOT



The **SA-430 Patriot** full featured remote siren is a strong, effective traffic mover. Its versatility and durability make it ideal for installations where mounting space is limited and consistent performance is a must. The **Patriot** is designed to power one or two 100 watt speakers and features a space saving control head that protrudes just 1” into the mounting space.

- **Rugged** 100/200 watt amplifier with remote control head
- **Reliable** six position rotary switch features Radio-Repeat, Wail, Yelp, and Phaser or optional Two-Tone/HiLo siren tones with push-button override for Manual and Air Horn
- **Dip switch programmable** options allow siren to be customized for each installation
- **Space saving** 1” deep control head design is easy to install in minimum clearance areas with only a single 22 AWG serial data line connected to the amplifier
- **Noise canceling** microphone with P.A. override and volume control
- **Hands-free Horn Ring Cycler 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Automatic Siren Cutout** disables the siren when the driver’s door opens
- **LED backlit** for nighttime visibility
- **Extended microphone** option (FX) also available

NEW *SC-411-RS*
ELITE FORCE



REMOTE MOUNT SIRENS

The **SC-411RS-10 14 Elite Force** single tone siren is one in a series of sirens developed for smaller spaces with the same options as a full console unit. This new remote siren introduces the new **QuickClone™** duplication technology making it easy to transfer option settings from one unit to another without the need for an external computer, ideal for fleet installations. The splash resistant rubberized control head face offers programmable siren tones, light and arrow stick controls and our patented video trigger capability. This unit is small in size, but large in options.

- **Patented Video Trigger Output:** A dedicated line to a video system that signals it to record when the lever switch or selected auxiliary switches are activated. This provides complete control to insure that the video system is prompted to record with activating a combination of any specified light output as well as any switch programmed as a gunlock timer.
- **Face Programmability:** All options are programmed using the lever switch and buttons on the control head in a special programming mode, including:
 - **QuickClone™** setting duplication technology – Options are automatically synchronized between the control head and amplifier, allowing easy copy from vehicle to vehicle without the use of an external computer for simplified fleet installations
 - Lever switch operation – progressive, non-progressive and semi-progressive with or without automatic siren activation
 - Auxiliary switch operation – On/Off, momentary or momentary with 10 or 20 second delay for gun lock timer
 - Auxiliary switch association – linked activation by specific lever switch positions
 - Control inputs – enable/disable and polarity
 - Siren options – various operations and tone selections
- **Face Diagnostic Indicators:** Each light and siren output is individually protected with externally exposed fuses and have independent diagnostic sensors at the connectors that display the status of each output on the face of the unit. Audible and visual alerts are transmitted when the sensor detects an output that is not functioning properly.
- **Adjustable Backlighting** – with the press of a button the user can tailor the brightness to their personal preference.
- **Splash Resistant Rubberized Face:** The unit incorporates built in auxiliary and siren switches with backlighting and flanges to seal around the lever switch actuator and volume control knob for improved protection for the internal circuitry from common accidental spills.
- **Noise canceling** microphone with P.A. override and volume control
- **Hands-free Horn Ring Cycler 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Automatic Siren Cutout** disables the siren when the driver's door opens
- **Field replaceable** slide switch



SC-1012 VOLUNTEER



The **SC-1012 Volunteer** remote, 100 watt siren with light controls was designed specifically to meet the needs of volunteer firefighters. Its compact size is ideal for any volunteer POV, offering increased flexibility in the placement of the remote control head and amplifier. The **SC-1012** might be small, but it will transform any POV into a "Big Engine" with its powerful Mechanical tone and safe, effective traffic clearing ability.

- **Compact** 100 watt amplifier with light controls and remote switch panel
- **Reliable** three position rocker switches feature Wail, Yelp, Phaser or optional Two-Tone/HiLo, Mechanical, Manual and Air Horn siren tones
- **Illuminated** rocker switches (2) provide up to 20 amp capacity auxiliary light control
- **Mechanical Tone:** Deep, gutsy and authentic, this powerful tone gives you that "Big Engine" sound to effectively clear traffic
- **Dip switch programmable** options allow siren to be customized for each installation
- **Output indicator light** for diagnostics
- **Hands-free Horn Ring Cyclers 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations

SA-361 DEFENDER



The **SA-361 Defender** combines simple operation, reliable performance and full-featured siren options. Size and user-friendly serviceability were the motivating factors in the redevelopment of this industry favorite. These key factors were achieved through the addition of terminal block wiring which offers simple, plug-in connection to the amplifier; and the reduction of the internal electronics footprint resulting in a smaller amplifier with more-versatile installation capabilities. The rugged SA-361 Defender remains the affordable choice for law enforcement, security and volunteer firefighters.

- **Compact** 100 watt amplifier with remote switch panel
- **Reliable** three position rocker switches feature Wail, Yelp, Phaser or optional Two-Tone/HiLo, Manual and Air Horn siren tones
- **DIP switch programmable** options allow siren to be customized for each installation
- **Instant-On** provides automatic power when a siren function is selected
- **Output indicator light** for diagnostics
- **Hands-free Horn Ring Cyclers 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **NEW SA-361-22 AMP** for motorcycle application



SC-1022 VOLUNTEER



The **SC-1022 Volunteer** provides the power to change perception! Instantly transform any first response vehicle into a “Big Engine” with this compact, hand-held, full-featured light control siren with powerful Mechanical tone. Drivers will respond more quickly to get out of your way when they hear the distinctive cycle of this authentic Mechanical tone siren. The completely enclosed hand control with rubberized face provides total siren and light control right at your finger tips. It is easy to operate and ideal when you want it out of your way when not in use.

- **Compact** 100 watt remote amplifier with light controls
- **Rugged** LED backlit hand-held control unit with six membrane push-button switches for Mechanical, Wail, Yelp, Phaser or optional Two-Tone/HiLo, Manual, and Air Horn siren tones and two membrane switches for light control
- **Mechanical Tone:** Deep, gutsy and authentic, this powerful tone gives you that “Big Engine” sound to effectively clear traffic
- **Dip switch programmable** options allow siren to be customized for each installation
- **Splash resistant** rubberized face with built-in push-button switches protects internal circuitry from liquids
- **Hands-free Horn Ring Cycler 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Output indicator light** for diagnostics



SC-550 STEALTH



The **SC-550 Stealth** puts the traffic clearing power right in the palm of your hand. Featuring a rugged hand-held control unit and remote 100/200 watt amplifier with 140 amps of light control output, this siren is ideal for undercover and unmarked vehicles, as well as other applications where being inconspicuous is desired, or where console or dash space is limited

- **Rugged** 100/200 watt remote amplifier with up to 140 amps of total light control
- **Pursuit** ready four position slide switch for up to 60 amps of primary light control and four membrane on/off switches for up to 20 amps each of auxiliary light control
- **Reliable** six position rotary switch features Radio-Repeat, Wail, Yelp, and Phaser or optional Two-Tone/HiLo siren tones with push-button override for Manual and Air Horn
- **Dip switch programmable** options allow siren to be customized for each installation
- **Splash resistant** rubberized face with built-in push-button switches that protect internal circuitry from liquids
- **Hands-free Horn Ring Cycler 2 (HRC2)** enables siren tone selection through the horn ring for pursuit or rescue situations
- **Automatic Siren Cutout** disables the siren when the driver's door opens
- **Built-in** microphone with P.A. override and volume control
- **LED** backlit for nighttime visibility with auxiliary switch legends that turn red when activated
- **28 volt** option also available

HPK-100 IN-CAB STUTTER HORN SYSTEM



Tired of being seen and not heard? Carson has the answer... the **HPK-100 In-Cab Stutter Horn System**. This loud and legal* audible warning solution bundles 3 professional grade Carson products, the **HA-100 In-Cab Stutter Horn Amp**, the **SP-200 Switch Panel**, and the **CSP-100B Basic Speaker**, into one affordable, easy-to-install horn kit. The HPK-100 combines the traffic clearing power of a simulated "stutter" air horn with auxiliary light control to provide the attention you need to make it quickly and safely on scene.

HA-100 IN-CAB STUTTER HORN AMP

- 100 watt electronic air horn amplifier
- ➔ **Compact for interior-mount installation on any vehicle**
- Legal* for POV use
- "Stutter" air horn sound
- Wires to horn ring or separate switch (customer supplied)
- ➔ **High voltage protection**
- ➔ **Output indicator light for diagnostics**
- No-hassle 5 year warranty

SP-200 SWITCH PANEL

- Easily switch between standard vehicle horn and louder, more powerful "Stutter" air horn
- Illuminated rocker switch for up to 15 amp capacity auxiliary light control
- Simple, easy installation to amplifier and vehicle horn

CSP-100B BASIC SPEAKER

- Slim, hexagonal shape for versatile installation options
- 100 watt, 11 ohms
- Integrated, universal mounting bracket design
- Black, corrosion-resistant metal structure
- Weighs only 6 lbs.
- No-hassle 1 year warranty

HPK-150 UNDER HOOD STUTTER HORN SYSTEM



The **HPK-150 Under Hood Stutter Horn System** offers the same loud and legal* features and functionality as the HPK-100 In-Cab Stutter Horn System, but utilizes the **HA-150 Under Hood Stutter Horn Amp** for exterior, all-weather installations. Compact and easy-to-install, the HPK-150 is ideal for any volunteer POV, motorcycle, ATV, or marine craft. It is also a cost-effective alternative for other service vehicles that are not equipped with compressed air horn systems.

HA-150 UNDER HOOD STUTTER HORN AMP

- 100 watt electronic air horn amplifier
- ➔ **Waterproof**
- ➔ **Ultra-compact for exterior-mount installation on any vehicle**
- Legal* for POV use
- "Stutter" air horn sound
- Wires to horn ring or separate switch (customer supplied)
- ➔ **Power indicator light for diagnostics**
- No-hassle 5 year warranty

SP-200 SWITCH PANEL

- Easily switch between standard vehicle horn and louder, more powerful "Stutter" air horn
- Illuminated rocker switch for up to 15 amp capacity auxiliary light control
- Simple, easy installation to amplifier and vehicle horn

CSP-100B BASIC SPEAKER

- Slim, hexagonal shape for versatile installation options
- 100 watt, 11 ohms
- Integrated, universal mounting bracket design
- Black, corrosion-resistant metal structure
- Weighs only 6 lbs.
- No-hassle 1 year warranty

Wire harness accessories available. See the Accessories & Replacement Parts Catalog on the Carson website for more information.

*Legal in most states. Please consult your state/local vehicle codes to ensure compliance with vehicle horn regulations.

HA-100

IN-CAB STUTTER HORN AMP



The **HA-100 In-Cab Stutter Horn Amp** is the low-cost electronic air horn alternative for volunteer firefighter POV's, especially in states that restrict POV siren use. This professional grade, 100 watt amplifier is a loud and legal* enhancement to any POV light package, providing the traffic clearing attention needed to make it quickly and safely on scene.

The **HA-100** features the power of a simulated "stutter" air horn contained in a compact, easy-to-install, chassis. Designed for interior-mount (non-waterproof) applications, this versatile amplifier offers flexible installation options where mounting space is limited. This space-saving feature makes the **HA-100** ideal for any volunteer POV. It is also a cost-effective alternative for escorts, towing, recovery, DOT, or other service vehicles that are not equipped with compressed air horn systems.

- **Rugged** 100 watt electronic air horn amplifier
- ➔ **Compact for interior-mount installation on any vehicle**
- **Legal*** for POV use
- **"Stutter" air horn** sound allows you to RUN SMALL, SOUND BIG and ARRIVE SAFE!
- **Easy operation using horn ring** or separate switch (customer supplied)
- ➔ **High voltage protection**
- ➔ **Output indicator light for diagnostics**
- **Economically priced**

HA-150

UNDER HOOD STUTTER HORN AMP



If you work in a state or region that restricts POV siren use, then courtesy is really all you can rely on when responding to emergency calls. The **HA-150 Under Hood Stutter Horn Amp** gives courtesy a boost by providing a loud and legal*, all-weather, audible warning component to your POV light package.

This professional grade, 100 watt amplifier incorporates the power of a simulated "stutter" air horn with the reliable quality not found in other aftermarket horn products. Its compact, waterproof design offers flexible, easy installation options for any vehicle. And at roughly the size of a bar of soap, the **HA-150** is perfect for volunteer POV's, as well as, motorcycles, ATV's, and marine craft.

- **Rugged** 100 watt electronic air horn amplifier
- ➔ **Waterproof**
- ➔ **Ultra-compact for exterior-mount installation on any vehicle**
- **Legal*** for POV use
- **"Stutter" air horn** sound allows you to RUN SMALL, SOUND BIG and ARRIVE SAFE!
- **Easy operation using horn ring** or separate switch (customer supplied)
- ➔ **Power indicator light for diagnostics**
- **Economically priced**

Bundle with a Carson **SP-200 Switch Panel** and the **CSP-100B 100 watt speaker** to create a complete "horn system" featuring light control and horn tone selection

Wire harness accessories available. See the Accessories & Replacement Parts Catalog on the Carson website for more information.

*Legal in most states. Please consult your state/local vehicle codes to ensure compliance with vehicle horn regulations.

SB-008 PHANTOM



The SB-008 Phantom switchbox signifies major advancements in emergency vehicle light control technology. It boasts intuitive face programmability and DIP switch locking to easily manage all of your lighting and auxiliary equipment systems. Each switch has the capability to be programmed as on/off, momentary, or timed momentary for multiple gunlocks. A new “grouping” feature has also been incorporated that provides slide switch functionality by activating multiple switches with a single Master Switch.

- **High-powered** for up to 160 amps of total output with all 8 membrane switches generating up to 20 amps of control each
- **Sleek** rubberized face features completely enclosed controls and legends for additional splash resistant protection and greater durability over traditional rocker or open-sided membrane switches
- **Face programmable** settings to select the function of each individual switch between on/off, on/off with Master Switch control, momentary and timed momentary
- **Space saving** compact design, under 1½” high, is less than half the size of a regular switch box
- **LED** backlit for nighttime visibility with switches that turn red when activated
- **Enhanced protection, installation and serviceability** with an exposed fuse for each output and detachable plug connectors
- **Output diagnostics** built-in to alert the user of problems

SPEAKERS



LBH-100 “Behind the Grill” Speaker

- 100 Watt Output
- 11 Ohms Impedance
- Ultra thin solid cast aluminum construction
- Designed for “behind the grill” mounting
- 750Hz to 2.7KHz operational frequency spectra
- 6.5” Diameter / 2.25” Depth
- Non-fatiguing, self-aligning sound chamber assembly
- Weighs 6 lbs.
- **NEW** Vehicle specific Ford Crown Victoria mounting bracket available.
- **NEW** Vehicle specific Dodge Charger mounting bracket kit available. Uniquely designed to increase speaker performance and sound output with simple, easy installation.

WARNING Sound Hazard - Sound level from speaker (>120dBA @ 10 feet) may cause hearing damage. Do not operate unit without adequate hearing protection for you and anyone in immediate vicinity. (Ref. OSHA 1910.95 for occupational noise exposure guidelines)



CSP-100B Basic Speaker

- Ultra-compact, hexagonal shape for flexible installation on any vehicle
- 100 Watt Output, 11 Ohms Impedance
- Integrated, universal mounting bracket design
- Black, corrosion-resistant metal structure
- 400Hz to 3500Hz operational frequency spectra
- 6.34” W x 5.10” H x 2.36” D
- Weighs 6 lbs.
- Certifications not applicable



HPG-100N Versatile Speaker

- Bell constructed of high impact plastic
- 100 Watt Output
- 11 Ohms Impedance
- 450Hz to 3800Hz operational frequency spectra
- 7” Length / 7.31” Width / 5.38” Height
- Non-fatiguing, self-aligning sound chamber assembly
- Patented AS100N driver
- Replacement parts available
- Weighs 6.5 lbs.

ACCESSORIES

SWITCH PANEL



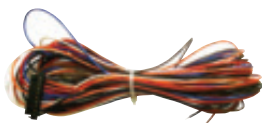
SP-200
HA-100 & HA-150 Switch Panel with Horn Selection and Light Control

CABLES



ED1924
SP-200 15FT Amp Power Cable with 6 - 13/16" Quick-Connect Terminals

ED1914
HA-100 15FT, 4 Pin Plug Amp Power Cable



ED1758
SA-441 8FT, 10 Pin Plug Amp Power Cable

ED1753
15FT Hand Control Extension Cable



CP3850
18FT Microphone Extension Cable for SA-430/441 FX Control Head

MOUNTING BRACKETS



CP5005
SC-409 Flush Mounting Bracket



CP4872
SA-430/441 Control Head Console Mounting Bracket



CP4899
SA-400 Flush Mounting Bracket



CP5065
LBH-100 Speaker Mounting Bracket for Ford Crown Victoria



ED1928
LBH-100 Speaker Mounting Bracket Kit for Dodge Charger



CP5003
SC-1022 Hand Control Holster Bracket



ED1865
Bracket Kit - Microphone Hanger & Holder with Mounting Hardware
(Note: control head will not be stationary in cradle)

For a detailed list of all Carson accessories, please visit our website at www.carsonsirens.com and click on the Accessories and Replacement Parts Catalog link.

Specs CHART

Amplifier Specifications	<i>SC-411-RD</i> ^{-10 14} ELITE FORCE	<i>SC-409</i> ^{-10 14} COMMANDER	<i>SC-550</i> ^{-10 14} STEALTH	<i>SC-407</i> ^{-10 14} ENFORCER
Input Voltage	9-16VDC (-ground)		11-16VDC (-ground)	9-16VDC (-ground)
Input Current	16AMPS @ 14VDC	8AMPS or 16AMPS @ 14VDC		
Standby Current	<340ma	<300mA	<200mA	<300mA
Audio Frequency	200Hz-10kHz +/- 3db			
Audio Distortion	<7% (@ 1kHz single 100W speaker)	<3% (@ 1kHz single 100W speaker)		
Audio Output	40W (@ 14VDC per 100W speaker)			
Radio Input	0.75VRMS Min, 400 ohms nominal			
Output Power	210W RMS Max (@ 15VDC dual 100W speakers)	105W RMS Max (@ 15VDC single 100W speaker) 180W RMS Max (@ 15VDC dual 100W speakers)		
Siren Frequency	700Hz-1500Hz			700Hz-1450Hz
Tones/Cycle Rates	Horn = 109 CPS, Wail = 15 CPM, Yelp = 210 CPM, Phaser = 15 CPS, Two-Tone = 60 CPM	Horn = 109 CPS, Wail = 13 CPM, Yelp = 190 CPM, Phaser = 15 CPS, Two-Tone = 60 CPM		Horn = 109 CPS, Wail = 15 CPM, Yelp = 210 CPM, Phaser = 15 CPS, Two-Tone = 60 CPM
High Voltage Protection	16-18VDC siren output ceases to protect speaker, resumes when at a normal level			
Short Circuit Current	50AMPS Minimum from supply circuit (supply circuit must provide for 1 second until fuse blows)			
Operating Temperature	-15F to 140F			
Siren Controls	6 Position rotary, push button Horn, push button Manual and Timed Override, noise canceling microphone, PA volume control, external radio volume control, auxiliary input for +/- Horn, Manual, HRC2, or Sweep operation, cutout input for +/- latching cutout operation, face programmable option selection	6 Position rotary, push-button Horn, push-button Manual, attached noise canceling microphone, PA volume control, Radio volume adjust, +/- auxiliary input, cutout input for +/- latching cutout operation, DIP switch options (See Light Control Specs)	Control: 6 Position rotary, push-button for Horn and Manual, Power/PA volume control Amplifier: Radio volume adjust, +/- auxiliary siren input, cutout input for +/- latching cutout operation, DIP switch options (See Light Control Specs)	3 Position siren rocker, 3 position power rocker, push-button Horn, push-button Manual/Phaser, PA and Radio volume control, +/- auxiliary input, and cutout input for +/- latching cutout operation (See Light Control Specs)
Siren Connections	12 Pin connector: 2 negative, 3 speaker, 2 radio cutout, 2 auxiliary input, 3 enable, and dimming input	12 Pin connector: 2 positive, 2 negative, 2 speaker, 2 radio, cutout, auxiliary input, enable & video trigger	Control: Connected to amplifier with coiled cable Amplifier: 10 Pin connector: 2 negative, 2 speaker, 2 radio, 2 outputs, cutout and auxiliary	10 Pin connector: 2 positive, 2 negative, 2 speaker, 2 radio, cutout and auxiliary
Size	Control: 6 $\frac{1}{8}$ "W x 2 $\frac{1}{2}$ "H x 1 $\frac{1}{4}$ "D Amplifier: 8 $\frac{1}{4}$ "W x 8 $\frac{3}{8}$ "H x 2 $\frac{1}{4}$ "D	6 $\frac{1}{8}$ "W x 2 $\frac{3}{4}$ "H x 8"D	Control: 2 $\frac{3}{4}$ "W x 6"H x 1"D Amplifier: 7 $\frac{1}{2}$ "W x 2 $\frac{1}{2}$ "H x 6 $\frac{3}{4}$ "D	6 $\frac{1}{8}$ "W x 2 $\frac{3}{8}$ "H x 5 $\frac{1}{8}$ "D
Shipping Weight	7 LBS	6 LBS	5 $\frac{1}{2}$ LBS	
Ratings Met	Class A Sound Level, California Title 13, KKK	Class A Sound Level California Title 13 Configurable, KKK for Ambulance	Class A and SAEJ1849 Sound Level California Title 13 Configurable	Class A and SAEJ1849 Sound Level, California Title 13 Configurable, KKK for Ambulance

Light Control Specifications	<i>SC-411-RD</i> ^{-10 14} ELITE FORCE	<i>SC-409</i> ^{-10 14} COMMANDER	<i>SC-550</i> ^{-10 14} STEALTH	<i>SC-407</i> ^{-10 14} ENFORCER
Light Control Voltage	9-16 VDC (- ground)		11-16 VDC (- ground)	9-16 VDC (- ground)
Light Controls	4 Position lever switch with LED indicators, 8 push buttons	4 Position lever switch with LED indicators and an optional auto siren in the last position & 6 membrane push buttons for auxiliary device control	4 Position slide with optional auto siren in the last position & 4 membrane push buttons for auxiliary device control	4 Position lever with LED indicators and an optional auto siren in the last position & 4 illuminated on/off rockers
Current (Lever Switch)	20 AMPS per circuit, 50 AMPS total	20 AMPS per circuit, 60 AMPS total		30 AMPS per circuit, 60 AMPS total
Current (Auxiliary Switches)	10 AMPS per circuit, 30 AMPS total	20 AMPS per circuit, 80 AMPS total		20 AMPS per switch, 80 AMPS total
Light Connections	3 pin connector with exposed fuses, 10 pin connector (9 for light controls and 1 for video output) with exposed fuses, & 2 screw down terminal for positive #6 AWG wires	3 Screw down terminals with exposed fuses, 6 pin connector with exposed fuses, & 2 #10 AWG wires for power	7 Fused pressure terminal outputs & 2 pressure terminals for up to 2 #6 AWG wires for power	8" Minimum wire leads, lever - (1) #10 AWG input and (3) #14 AWG outputs, rockers - (1) #14 AWG input and (1) #14 AWG output per switch, EXTERNAL FUSING REQUIRED

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Specs CHART

Amplifier Specifications	<i>SA-441</i> ^{-10F} MAGFORCE	<i>SC-411-RS</i> ^{-10F} ELITE FORCE	<i>SA-430</i> ^{-10F} PATRIOT	<i>SA-400</i> ^{-10 14} CLASSIC
Input Voltage	11-16VDC (-ground)	9-16VDC (-ground)		
Input Current	17AMPS @ 14VDC	8AMPS or 16AMPS @ 14VDC		
Standby Current	<250mA	<340mA	<150mA	
Audio Frequency	200Hz-10kHz +/- 3db			
Audio Distortion	<3% (@ 1kHz dual 100W speakers)	<7% (@ 1kHz single 100W speaker)	<3% (@ 1kHz single 100W speaker)	
Audio Output	80W (@ 14VDC dual 100W speakers)	40W (@ 14VDC per 100W speaker)		
Radio Input	0.75VRMS Min, 400 ohms nominal			
Output Power	210W RMS Max (@ 15VDC dual 100W speakers)	105W RMS Max (@ 15VDC single 100W speaker) 180W RMS Max (@ 15VDC dual 100W speakers)		
Siren Frequency	700Hz-1500Hz			
Tones/Cycle Rates	Wail = 13 CPM, Yelp = 190 CPM, Phaser = 15 CPS, Two-Tone = 60 CPM	Horn = 109 CPS, Wail = 15 CPM, Yelp = 210 CPM, Phaser = 15 CPS, Two-Tone = 60 CPM	Wail = 13 CPM, Yelp = 190 CPM, Phaser = 15 CPS, Two-Tone = 60 CPM	
High Voltage Protection	16-18VDC siren output ceases to protect speaker, resumes when at a normal level			
Short Circuit Current	50AMPS Minimum from supply circuit (supply circuit must provide for 1 second until fuse blows)			
Operating Temperature	-15F to 140F			
Siren Controls	Control: 6 Position rotary, push-button for Horn and Manual, PA volume control, dual tone toggle, +/- auxiliary input Amplifier: Radio volume adjust, DIP switch options	6 Position rotary, push button Horn, push button Manual and Timed Override, noise canceling microphone, PA volume control, external radio volume control, auxiliary input for +/- Horn, Manual, HRC2, or Sweep operation, cutout input for +/- latching cutout operation, face program-mable option selection	Control: 6 Position rotary, push-button for Horn and Manual, PA volume control, +/- auxiliary input Amplifier: Radio volume adjust, cutout input for +/- latching operation, DIP switch options	6 Position rotary, push-button for Manual and Horn, PA volume control, radio volume adjust, +/- auxiliary input, and DIP switch options
Siren Connections	Control: 5 Pin connector with #22 AWG leads: positive, negative, control output, backlighting input, and auxiliary input Amplifier: 10 Pin connector: 2 positive, 2 negative, 3 speaker, 2 radio, and control input	12 Pin connector: 2 negative, 2 speaker, 2 radio cutout, 2 auxiliary input, 3 enable, and dimming input	Control: 5 Pin connector with #22 AWG leads: positive, negative, control output, backlighting input, and auxiliary input Amplifier: 10 Pin connector: 2 positive, 2 negative, 2 speaker, 2 radio, control input and cutout input	9 Pin connector: 2 positive, 2 negative, 2 speaker, 2 radio, and auxiliary input
Size	Control: 6¼"W x 2½"H x 1"D Amplifier: 8"W x 2¼"H x 6¾"D	Control Head: 6½"W x 2½"H x 1¼"D Amplifier: 8¼"W x 8½"H " x 2¼"D	Control: 6¼"W x 2½"H x 1"D Amplifier: 8"W x 2¼"H x 6¾"D	6½"W x 2½"H x 5¾"D
Shipping Weight	6 LBS	7 LBS	5½ LBS	
Ratings Met	Class A and SAEJ1849 Sound Level, California Title 13 Configurable & KKK for Ambulance	Class A Sound Level, California Title 13, KKK	Class A and SAEJ1849 Sound Level, California Title 13 Configurable & KKK for Ambulance	

Light Control Specifications	<i>SC-411-RS</i> ^{-10F} ELITE FORCE
Light Control Voltage	9-16 VDC (- ground)
Light Controls	4 Position lever switch with LED indicators, 8 push buttons
Current (Lever Switch)	20 AMPS per circuit, 50 AMPS total
Current (Auxiliary Switches)	10 AMPS per circuit, 30 AMPS total
Light Connections	3 pin connector with exposed fuses, 10 pin connector (9 for light controls and 1 for video output) with exposed fuses, & 2 screw down terminal for positive #6 AWG wires

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Specs CHART

Amplifier Specifications	<i>SA-500</i> ^{-20 14} CRUISER	<i>SA-385</i> ^{-10 14} ALERT	<i>SA-365</i> ^{-10 14} DEFENDER	<i>SA-361</i> ^{-20 14} DEFENDER
Input Voltage	9-16VDC (-ground)	10-16VDC (-ground)		
Input Current	8AMPS or 16AMPS @ 14VDC	8AMPS @ 14VDC		
Standby Current	<150mA	0mA (20mA for backlight lamp)	NA	
Audio Frequency	200Hz-10kHz +/- 3db			NA
Audio Distortion	<3% (@ 1kHz single 100W speaker)			NA
Audio Output	40W (@ 14VDC per 100W speaker)			NA
Radio Input	0.75VRMS Min, 400 ohms nominal	NA		
Output Power	105W RMS Max (@ 15VDC single 100W speaker) 180W RMS Max (@ 15VDC dual 100W speakers)	105W RMS Max (@ 15VDC single 100W speaker)		
Siren Frequency	700Hz-1500Hz			
Tones/Cycle Rates	Wail = 13 CPM, Yelp = 190 CPM, Phaser = 15 CPS, Two-Tone = 60 CPM			
High Voltage Protection	16-18VDC siren output ceases to protect speaker, resumes when at a normal level			
Short Circuit Current	50AMPS Minimum from supply circuit (supply circuit must provide for 1 second until fuse blows)			
Operating Temperature	-15F to 140F			
Siren Controls	4 Position rotary, push-button Horn, push-button Manual/Phaser, +/- auxiliary input, PA and Radio volume control, cutout input for +/- latching cutout operation, and DIP switch options	4 Position rotary, push-button for Manual and Horn, +/- auxiliary input, PA volume control, and DIP switch options	3 Position siren rocker, 2 position momentary rocker for Horn and Manual, +/- auxiliary input, DIP switch options	
Siren Connections	10 Pin connector: 2 positive, 2 negative, 2 speaker, 2 radio, cutout, auxiliary	6 Pin connector: positive, negative, 2 speaker, backlight lamp, auxiliary	6 Pin connector: positive, negative, 2 speaker, auxiliary	10 Pin connector: positive, negative, 2 speaker, auxiliary + and auxiliary - inputs, and 4 tone switch inputs
Size	6 ¹ / ₈ "W x 2 ¹ / ₈ "H x 5 ¹ / ₈ "D	4 ¹ / ₂ "W x 1 ¹ / ₈ "H x 5 ¹ / ₈ "D	4 ¹ / ₂ "W x 1 ¹ / ₈ "H x 4 ¹ / ₈ "D	Control: 3 ³ / ₄ "W x 1 ¹ / ₄ "H x 1 ¹ / ₄ "D Amplifier: 5 ¹ / ₂ "W x 1 ¹ / ₈ "H x 4 ¹ / ₈ "D
Shipping Weight	4 ¹ / ₂ LBS	4 LBS	3 LBS	
Ratings Met	Class A and SAEJ1849 Sound Level, California Title 13 Configurable & KKK for Ambulance	Class A Sound Level, California Title 13 Configurable		

CARSON SIRENS offers the following options on certain siren models. Check the preceding siren information pages for option availability.

- Detachable microphone (DM)
- Extended microphone (FX)
- 28 volts

To find a **CARSON SIRENS** Dealer near you, go to our website at www.carsonsirens.com and click on the "Siren Dealers" link

Due to continuous improvements, we reserve the right to change any specification and/or information contained in this brochure at any time without notice.

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Specs CHART

Amplifier Specifications	<i>SA-441M-17F</i> MAGFORCE MECH	<i>SA-430M-17F</i> PATRIOT MECH	<i>SA-400M-17 14</i> CLASSIC MECH	<i>SA-500M-27 14</i> CRUISER MECH
Input Voltage	11-16VDC (-ground)		9-16VDC (-ground)	
Input Current	17AMPS @ 14VDC	8AMPS or 16AMPS @ 14VDC		
Standby Current	<250mA		<150mA	
Audio Frequency	200Hz-10kHz +/- 3db			
Audio Distortion	<3% (@ 1kHz dual 100W speakers)	<3% (@ 1kHz single 100W speaker)		
Audio Output	80W (@ 14VDC dual 100W speakers)	40W (@ 14VDC per 100W speaker)		
Radio Input	0.75VRMS Min, 400 ohms nominal			
Output Power	210W RMS Max (@ 15VDC dual 100W speakers)	105W RMS Max (@ 15VDC single 100W speaker) 180W RMS Max (@ 15VDC dual 100W speakers)		
Siren Frequency	700Hz-1500Hz			
Tones/Cycle Rates	Mech = 6 CPM, Wail = 13 CPM, Yelp = 190 CPM, Phaser = 15 CPS, Two-Tone = 60 CPM			
High Voltage Protection	16-18VDC siren output ceases to protect speaker, resumes when at a normal level			
Short Circuit Current	50AMPS Minimum from supply circuit (supply circuit must provide for 1 second until fuse blows)			
Operating Temperature	-15F to 140F			
Siren Controls	Control: 6 Position rotary, push-button for Horn and Manual, PA volume control, dual tone toggle, +/- auxiliary input Amplifier: Radio volume adjust, DIP switch options	Control: 6 Position rotary, push-button for Horn and Manual, PA volume control, +/- auxiliary input Amplifier: Radio volume adjust, cutout input for +/- latching operation, DIP switch options	6 Position rotary, push-button for Manual and Horn, PA volume control, radio volume adjust, +/- auxiliary input, and DIP switch options	4 Position rotary, push-button Horn, push-button Manual/Phaser, +/- auxiliary input, PA and Radio volume control, cutout input for +/- latching cutout operation, and DIP switch options
Siren Connections	Control: 5 Pin connector with #22 AWG leads: positive, negative, control output, backlighting input, and auxiliary input Amplifier: 10 Pin connector: 2 positive, 2 negative, 3 speaker, 2 radio, and control input	Control: 5 Pin connector with #22 AWG leads: positive, negative, control output, backlighting input, and auxiliary input Amplifier: 10 Pin connector: 2 positive, 2 negative, 2 speaker, 2 radio, control input and cutout input	9 Pin connector: 2 positive, 2 negative, 2 speaker, 2 radio, cutout, auxiliary	10 Pin connector: 2 positive, 2 negative, 2 speaker, 2 radio, cutout, auxiliary
Size	Control: 6¼"W x 2½"H x 1"D Amplifier: 8"W x 2½"H x 6¾"D	Control: 6¼"W x 2½"H x 1"D Amplifier: 8"W x 2½"H x 6¾"D	6½"W x 2½"H x 5¾"D	6½"W x 2½"H x 5¾"D
Shipping Weight	6 LBS	5½ LBS		4½ LBS
Ratings Met	Class A and SAEJ1849 Sound Level & KKK for Ambulance			

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Specs CHART

Amplifier Specifications	<i>SC-1002</i> ^{-10 14} VOLUNTEER	<i>SC-1012</i> ^{-10 14} VOLUNTEER	<i>SC-1022</i> ^{-10 14} VOLUNTEER	<i>SB-008</i> ^{-25 14} PHANTOM
Input Voltage	10-16VDC (-ground)			NA
Input Current	8AMPS @ 14VDC			NA
Standby Current	<100mA			NA
Audio Frequency	NA			
Audio Distortion	NA			
Audio Output	NA			
Radio Input	NA			
Output Power	105W RMS Max (@ 15VDC single 100W speaker)			NA
Siren Frequency	700Hz-1500Hz			NA
Tones/Cycle Rates	Mech = 6 CPM, Wail = 13 CPM, Yelp = 190 CPM, Phaser = 15 CPS, Two-Tone = 60 CPM			NA
High Voltage Protection	16-18VDC siren output ceases to protect speaker, resumes when at a normal level			NA
Short Circuit Current	50AMPS Minimum from supply circuit (supply circuit must provide for 1 second until fuse blows)			NA
Operating Temperature	-15F to 140F			
Siren Controls	3 Position siren rockers, push-button for Horn and Phaser, +/- auxiliary input, DIP switch options	3 Position siren rockers, 2 position momentary rocker for Horn and Phaser, +/- auxiliary input, DIP switch options	6 Membrane push-buttons, +/- auxiliary input, DIP switch options	NA
Siren Connections	Screw-down positive and negative terminals; 6 Pin connector: 2 speaker, enable, auxiliary, 2 light outputs	Screw-down positive and negative terminals; 6 Pin connector: 2 speaker, enable, auxiliary, 2 light outputs, 10 Pin connector for remote panel	Screw-down positive and negative terminals; 6 Pin connector: 2 speaker, enable, auxiliary, 2 light outputs, hand control connected to amplifier with coiled cable	NA
Size	6"W x 2"H x 6"D			6½"W x 1½"H x 6½"D
Shipping Weight	3 LBS	3½ LBS		2½ LBS
Ratings Met	Class A Sound Level & California Title 13 Configurable			NA

Light Control Specifications	<i>SC-1002</i> ^{-10 14} VOLUNTEER	<i>SC-1012</i> ^{-10 14} VOLUNTEER	<i>SC-1022</i> ^{-10 14} VOLUNTEER	<i>SB-008</i> ^{-25 14} PHANTOM
Light Control Voltage	10-16VDC (-ground)			
Light Controls	2 Lighted rockers		2 Membrane Push Buttons	8 On/off push buttons with LED indicators, backlighting of legends changes colors when activated, switches are programmable for on/off, grouped with master button, momentary, and 10 second timed momentary starting on switch 8
Current (Lever Switch)	NA			
Current (Auxiliary Switches)	20 AMPS per switch, 20 AMPS total			20 AMPS per circuit, 160 AMPS total
Light Connections	2 Light outputs, see 6 pin connector under Siren Connections			2 #10 AWG wires for positive power input, 2 four position connectors for outputs with exposed fuses, positive and negative plug #22 AWG wire for enable and backlighting

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Specs CHART

Specifications	<i>HA-150</i> ^{-10,14} UNDER HOOD STUTTER HORN AMP	<i>HA-100</i> ^{-10,14} IN-CAB STUTTER HORN AMP
Speaker Load	Single 100W 11 ohm	
Input Voltage	9-16VDC (-ground)	
Input Current	8AMPS @ 14VDC	
Output Power	105W RMS Max (@ 15VDC single 100W speaker)	
High Voltage Protection	NA	16-18VDC output ceases to protect horn, resumes when at normal level
Short Circuit Current	50AMPS Minimum from supply circuit (supply circuit must supply for 1 second)	
Operating Temperature	-22F to +200F	-15F to 140F
Controls	Vehicle horn ring or separate switch (customer supplied)	
Connections	4 wire leads: positive with in-line fuse, negative, 2 speaker	4 Pin removable terminal block: positive, negative, 2 speaker
Size	1½" H x 4½" W x 2½" D	1⅜" H x 4¼" W x 3⅝" D
Shipping Weight	1 LB	

CARSON SIRENS offers the following accessories for the H-Series electronic air horn models. Check the Accessories page for more detailed information.

- HA-100 Wire Harness
- SP-200 Switch Panel
- SP-200 Wire Harness

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