

# SC-409 COMMANDER



## THE SC-409 COMMANDER

from

**CARSON**  
SIRENS

### *"The Ultimate Combination of Technology, Styling, and Control"*

Introducing the **SC-409 COMMANDER**: the most technologically advanced and stylish console mount light control siren. The new **COMMANDER** incorporates superior functional versatility with face programmable and dip switch selectable options to control nearly every kind of lightbar, directional light, auxiliary light, and other auxiliary equipment including multiple gun locks and video camera systems.

The **SC-409 COMMANDER** represents the introduction of many new technological advancements including five new patent pending features:

- **Video Trigger:** 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:** Intuitively select each auxiliary switch's function by pushing the button to scroll through different control options. Programmable settings for each switch include the default on/off, Video Trigger activation with on/off, momentary, and 10 or 20 second timed momentary for use as a gunlock timer.
- **Lever Switch Programmability:** Select whether the lever switch activates the outputs progressively, independantly or non-progressive, or a combination of the two in a partially progressive fashion. In addition, the installer may program specific auxiliary switches to be activated and de-activated automatically when the lever switch is activated through the different 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.
- **Splash Resistant Rubberized Face:** The unit incorporates built in auxiliary and siren switches with embedded backlighting and flanges to seal around the lever switch actuators and volume control knob for improved protection for the internal circuitry from common accidental spills.

Take control with the new **SC-409 COMMANDER**.

# SC-409 COMMANDER



## Specifications

<b>Siren</b>	9 - 16 VDC (negative ground) 8 Amps or 16 Amps @14 VDC Less than 300 ma 200Hz - 10kHz +/- 3db Less than 3% (@ 1kHz - single 100W speaker) 40W (@14 VDC per 100W speaker)
Input Voltage	9 - 16 VDC (negative ground)
Input Current	8 Amps or 16 Amps @14 VDC
Standby Current	Less than 300 ma
Audio Frequency	200Hz - 10kHz +/- 3db
Audio Distortion	Less than 3% (@ 1kHz - single 100W speaker)
Audio Output	40W (@14 VDC per 100W speaker)
Radio Input	0.75 VRMS Min., 400 ohms nominal
Output Power	105W RMS Max (@15 VDC - single 100W speaker) 180W RMS Max (@15 VDC - dual 100W speakers)
Siren Frequency	700Hz - 1500Hz (Two-Tone & Air Horn = 435 & 585Hz)
Tones/Cycle Rates	Horn = 109 CPS, Wail = 15 CPM, Yelp = 210 CPM, Phaser = 15 CPS, Two-Tone = 60 CPM
High Voltage Protection	16 - 18 VDC output ceases, resumes at normal level
Short Circuit Current	50 Amps Min. from supply circuit
Operation Temperature	-15F to 140F
Controls	6 Position rotary, push button Horn, push button Manual and Timed Override, noise canceling micro- phone, PA volume control, external radio volume con- trol, auxiliary input for +/- Horn, Manual, HRC2, or Sweep operation, cutout input for +/- latching cutout operation, 2 internal DIP switch option selectors.
Siren Connections	12 Pin connector: 2 positive, 2 negative, 2 speaker, 2 radio, cutout, auxiliary input, enable, and video trigger
<b>Light Control</b>	9 - 16 VDC (negative ground) 4 Position lever switch LED indicators, 6 push buttons
Voltage Controls	9 - 16 VDC (negative ground)
Lever Switch Current	20 Amps per circuit, 60 Amps total
Auxiliary Switch Current	20 Amps per circuit, 80 Amps total
Light Connections	3 Screwdown terminals with exposed fuses, 6 pin con- nector with exposed fuses, & 2 #10 AWG wires
General Size	6 1/8" Wide, 2 3/4" High, 8" Deep
Shipping Weight	6 Lbs
Ratings Met	Class A Sound Level, California Title 13, KKK

## Features

- 100/200 watt amplifier with 140 amps of light control
- Splash resistant rubberized face with built-in push button switches and liquid repelling actuator flanges
- Programmable lever/slide switch for progressive, non-progressive, or partially progressive control
- Program auxiliary switches to activate with the lever/slide switch
- 6 Programmable auxiliary switches for on/off, Video Trigger with on/off, momentary and 10 or 20 second timed momentary
- PA override with noise-canceling microphone and face mounted volume control knob
- Video Trigger automatically initiates a video camera system to record when a programmed switch(es) is activated
- LED backlit for nighttime visibility and auxiliary switches turn red when activated
- Horn Ring Cyclor 2 (HRC2) for hands free siren control when rotary is on Cyclor position for pursuit and rescue situations
- Timed Override toggles up one tone in intensity for 10 seconds
- Sweep & Intersection modes automatically sequence through Yelp, Phaser, and Air Horn at different speeds
- Siren Cutout disables the siren tone when exiting the vehicle
- Exposed fuses on the bottom side of the siren to protect each output
- Detachable connectors with screwdown terminals for siren and auxiliary outputs and screwdown terminals for the lever/slide switch
- No-hassle 5-year limited warranty

	<b>SC-409 COMMANDER</b>	Code 3 MasterCom B	Federal PA640	Unitrol Touchmaster Delta	Unitrol Touchmaster (UTM4)	Whelen 295HFSA5	Whelen 295HFSA6
Splash Resistant Label with Built-In Auxiliary Switches	Yes		Yes				
Diagnostic Indicators for each Siren and Light Output	Yes	Siren Only			Siren Only	Siren Only	Siren Only
Exposed Fusing to protect all Siren and Light Outputs	Yes						
Programmable Lever/Slide Switch	Yes		Yes			Yes	Yes
Programmable Auxiliary Switches	Face Programmable	Remove Internal Pins	Internal Program Codes			1 Switch Only	1 Switch Only
Video Trigger Output with Light Activation	Yes						
Dedicated Rotary Switch position for Horn Ring Mode	Yes					Yes	Yes
Option between Instant On or Ignition Switch to activate unit	Yes	Yes					
Total Light Control Output Capacity	140 Amps	80 Amps	80 Amps	180 Amps	120 Amps	120 Amps	120 Amps
5-Year Warranty	Yes			Yes		Yes	Yes

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