

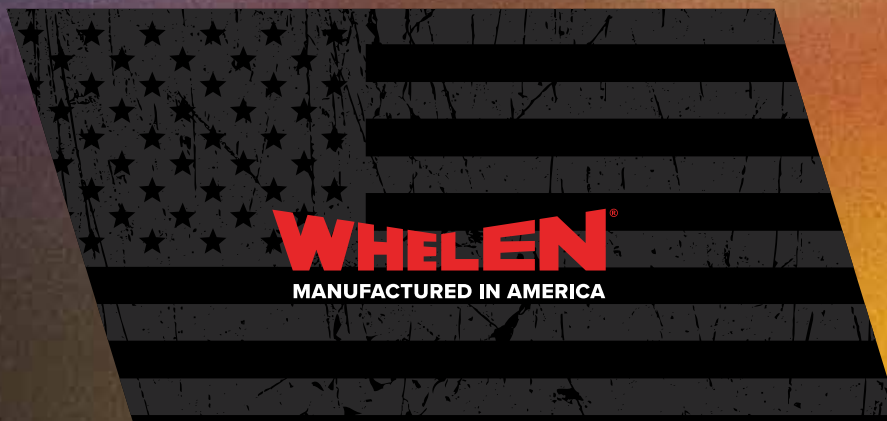
MANUFACTURED IN AMERICA

# MUNICIPAL SYSTEMS

PROFESSIONAL WARNING AND LIGHTING

A comprehensive guide to Whelen's lighting and warning products

WHELEN ENGINEERING COMPANY, INC.



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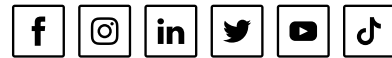


**Visit us at whelen.com**  
To learn about our full line of emergency lighting and warning products.



To download WeCad™, Whelen Command®, and Pioneer™ Designer go to [whelen.com/software-downloads](http://whelen.com/software-downloads)

@WhelenENG



# ABOUT WHELEN



Whelen Engineering designs and manufactures reliable and powerful warning lights, white illumination lighting, sirens, controllers, and high-powered warning systems for Automotive and Mass Notification industries worldwide. Whelen products have been proudly designed and manufactured in America since 1952. With quality as the foundation, Whelen celebrates innovative engineering with every product made.

**Manufactured in America for Over 70 Years**  
We never left and we're here to stay.



**Chester, Connecticut facility**



**Charlestown, New Hampshire facility**

# TECH GLOSSARY

**BroadBand Blue™**  
BroadBand Blue delivers a higher intensity, creates a larger optical image, and produces a more consistent color, all while being easier on the eyes - especially at night.

**Conformal Coating**  
A thin material that conforms to the contours of the PCB to protect the electronic components from harsh environments and impact.

**DUO™**  
Two-color interleaved LEDs

**DUO+™**  
Two-color interleaved LEDs with independent control of color one and color two

**DVI™**  
DVI patterns gradually increase and decrease warning light intensity, which better conveys visual information to approaching motorists at night. These patterns clearly indicate when a vehicle is parked and improves a driver's ability to safely navigate around a work zone.

**DYAD™**  
Two-level technology

**Encapsulated**  
Lighthoods are fully encapsulated for moisture and vibration resistance.

**Hard-Coat**  
Whelen's industry-first innovative Hard-Coating process counteracts the effects of environmental and chemical damages to our lenses and domes.

**Linear-LED® - (Super-LED®)**  
Whelen's optimized use of the latest generation of LEDs and unique reflector optics to produce highly intense light that has superior wide-angle visibility and rivals strobe in performance.

**Low Current**  
Low current function wires require less than 0.25 amp to operate, allowing for simple operation of each lightbar function.

**ProFocus™**  
Whelen's innovative single optic LED technology that can be customized and programmed as a spotlight or floodlight, with no moving parts.

**Proclera® Silicone Optics**  
Whelen's innovative and efficient solution to distorted optical shape and fringe lighting. Proclera Optics feature 100% internal silicone optic technology, an increased ability to harness LED output and better direct and focus light, and a fully-filled square TIR optic to increase optic efficiency compared to a conventional circular TIR.

**Rota-Beam™**  
Solid-state "rotating" technology, simulating the appearance of a rotating beacon without any moving parts or motors for long-life reliability.

**Scan-Lock™**  
Whelen's advanced method of changing a products flash pattern. Scan-Lock utilizes an external wire to allow the user to cycle through the entire range of flash patterns, allowing for full customization.

**Scan-Lock™+**  
The Scan-Lock+ app is the simplest way to change Whelen flash patterns. Designed for optimal convenience, Scan-Lock+ features an easy to use interface and utilizes a Bluetooth connection. Download the Scan-Lock+ app and browse, test, and assign Whelen flash patterns right from your phone.

**SmartLED®**  
Whelen's distinctive use of self-contained electronics to power and flash a particular LED product. These products require no external flasher, ballast, or power supply to operate.

**SOLO™**  
Single-color LEDs

**Split**  
Two-color lighthood where each color fills half of the reflector

**Standard Current**  
Lightbar functions are wired directly to the switching device and require switches that are matched to the current draw of the desired functions to be activated.

**Steady-Lock™**  
A new feature in warning lighthoods that allows an installer to set the flash pattern to Steady automatically, when used with one of Whelen's CenCom Core® control systems.

**Super-LED®**  
Whelen's innovative LED technology

**Sync**  
Sync provides the ability to connect multiple Whelen devices to flash together or in alternating patterns. Products with this capability allow the user to create coordinating flashing schemes.

**TIR™ (Total Internal Reflection)**  
Whelen's optimized use of the latest generation of LEDs and unique reflector optics to produce highly intense light that can be directional in nature.

**TRIO™**  
Three-color interleaved with independent control of color one, color two, and color three

**WeCad™**  
Engineered for optimal accessibility, WeCad lightbar designer delivers the ability to design custom Whelen lightbars with every available option. Adding R65 compliant options is simple, and a bill of materials will be generated to make ordering fast and easy.

**WeCan®**  
Whelen's proprietary CAN-based communication system

**WeCanX®**  
Whelen's smartest and most powerful CAN-based communication system. WeCanX provides true system synchronization, greater speed capabilities, expanded peripheral add-ons, and full support of diagnostics.



## INCREASE OPERATOR SAFETY WITH CORE-R™ DOT!

Core-R DOT is a vehicle control system engineered to increase operator and motorist safety with intelligent control features and is designed specifically for municipal vehicles!  
(See page 11 for details)

# MUNICIPAL SYSTEM COMPONENTS

## OPTICS

- Certified by an AMECA-accredited testing laboratory to meet or exceed SAE warning lighting requirements in the appropriate specified safety colors
- Lighting profile easily defines the width and height of a highway vehicle
- Wide-angle Super-LED® lighthoods ensure visibility when dump body is raised or lowered, including forward dump bodies

- All warning lighthood colors are Amber. For other colors, contact factory
- Multiple flash patterns and sequence options provide improved reference for motorists in determining the distance to and location of maintenance vehicles

## DESIGN

- Pure copper stranded conductors used in all TPE cables are tin coated, providing superior longevity
- A 12" protective section of flex-tubing and coupling to the housing prevents cable chafing
- All rear lighthoods are furnished with Deutsch® waterproof connectors

- Each system includes a complete installation kit, including cable harnesses
- 400 and 700 Series lighthood housings are 7-gauge welded stainless steel

## FRONT SYSTEM COMPONENTS

Front system components are offered in four Super-LED models with combined 360° warning visibility. Includes 60' of heavy-duty TPE cable.

Micro Freedom®



4.67" (119mm) H x 8.20" (208mm) W x 10" (254mm) L

Micro 400



4.67" (119mm) H x 10.72" (272mm) W x 10" (254mm) L

Stainless Steel Micro 400



3.63" (92mm) H x 8.25" (209mm) W x 8.25" (209mm) L

Remote L31 Beacon



4" (102mm) H x 7.19" (182mm) Dia.

## REAR LIGHTHEADS

Rear lighthoods are offered in three sizes. Super-LED lighthoods have specially designed lenses for wide light output. All lighthoods are supplied with Deutsch® waterproof connectors.



4.94" (124mm) H x 3.19" (77mm) W x 2.75" (69mm) D



3.07" (78mm) H x 7.27" (185mm) W x 1.28" (33mm) D

## REAR HOUSINGS

Rear mounted lighthoods include 30' heavy-duty, oil resistant TPE jacketed cable with strain relief flex-tubing, and couplings that provide added safeguard against the elements.



400 Series  
Height: Single: 5-7/8" (149mm)  
Double: 11-3/8" (290mm)  
Triple: 17" (430mm)  
Width: 3-1/2" (88mm)  
Depth: 4-3/4" (120mm)

700 Series  
Height: Single: 8-3/8" (213mm)  
Double: 16-1/4" (412mm)  
Triple: 24" (608mm)  
Width: 3-1/2" (88mm)  
Depth: 5" (127mm)

# LIGHT SYSTEMS



## SYS401 & SYS701

**4-Light System**  
Two Micro Freedom® lighthouse assemblies with extended corner modules and two rear lighthouse options

**SYSTEM 401**  
with 400 Series Lighthoods

<b>SYS401A</b>	Warning
<b>SYS401B</b>	Warning and Brake/Tail/Turn
<b>SYS401D</b>	Warning, Brake/Tail/Turn, and Back-Up



**SYSTEM 701**  
with 700 Series Lighthoods

<b>SYS701A</b>	Warning
<b>SYS701B</b>	Warning and Brake/Tail/Turn
<b>SYS701D</b>	Warning, Brake/Tail/Turn, and Back-Up

## SYS402 & SYS702

**3-Light System**  
One L31 remote beacon and two rear lighthouse options

**SYSTEM 402**  
with 400 Series Lighthoods

<b>SYS402A</b>	Warning
<b>SYS402B</b>	Warning and Brake/Tail/Turn
<b>SYS402D</b>	Warning, Brake/Tail/Turn, and Back-Up



**SYSTEM 702**  
with 700 Series Lighthoods

<b>SYS702A</b>	Warning
<b>SYS702B</b>	Warning and Brake/Tail/Turn
<b>SYS702D</b>	Warning, Brake/Tail/Turn, and Back-Up

## SYS103

**2-Light System**  
Two Micro Freedom® lighthouse assemblies with extended corner modules

**SYSTEM 103**

<b>SYS103</b>	Two Front Amber Warning Lights
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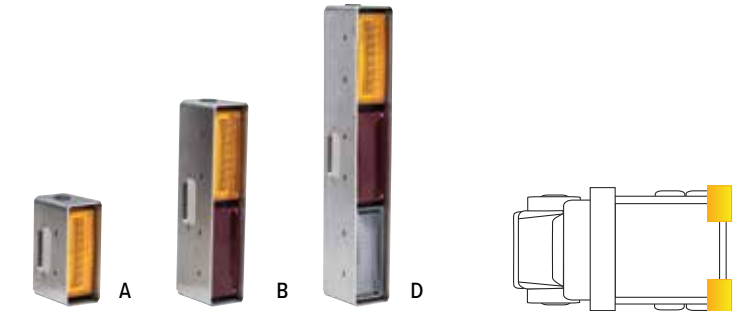


## SYS404 & SYS704

**2-Light System**  
Two rear lighthouse options

**SYSTEM 404**  
with 400 Series Lighthoods

<b>SYS404A</b>	Warning
<b>SYS404B</b>	Warning and Brake/Tail/Turn
<b>SYS404D</b>	Warning, Brake/Tail/Turn, and Back-Up



**SYSTEM 704**  
with 700 Series Lighthoods

<b>SYS704A</b>	Warning
<b>SYS704B</b>	Warning and Brake/Tail/Turn
<b>SYS704D</b>	Warning, Brake/Tail/Turn, and Back-Up

## SYS405 & SYS705

**4-Light System**  
Two Micro 400s and two rear lighthouse options

**SYSTEM 405**  
with 400 Series Lighthoods

<b>SYS405A</b>	Warning
<b>SYS405B</b>	Warning and Brake/Tail/Turn
<b>SYS405D</b>	Warning, Brake/Tail/Turn, and Back-Up



**SYSTEM 705**  
with 700 Series Lighthoods

<b>SYS705A</b>	Warning
<b>SYS705B</b>	Warning and Brake/Tail/Turn
<b>SYS705D</b>	Warning, Brake/Tail/Turn, and Back-Up

## SYS406 & SYS706

**4-Light System**  
Two L31 remote beacons and two rear lighthouse options

**SYSTEM 406**  
with 400 Series Lighthoods

<b>SYS406A</b>	Warning
<b>SYS406B</b>	Warning and Brake/Tail/Turn
<b>SYS406D</b>	Warning, Brake/Tail/Turn, and Back-Up



**SYSTEM 706**  
with 700 Series Lighthoods

<b>SYS706A</b>	Warning
<b>SYS706B</b>	Warning and Brake/Tail/Turn
<b>SYS706D</b>	Warning, Brake/Tail/Turn, and Back-Up

# CONTROL SYSTEMS

## SWITCH CONTROL PANELS

### FEATURES

- Compact rocker style single-pole/single-throw switches
- Black epoxy-finished steel housing
- Individual spade-type fuses conveniently located on rear mounted fuse strip
- Active LED indicators light up to indicate function in use
- Ignition controlled backlighted legend windows for easy visibility in any light
- Backlight circuit can be connected to vehicle dimmer switch to control backlight intensity
- Includes 72 commonly used press-on switch function legend tabs
- 25 Amps peak



<b>PCC4W</b>	Four 25 Amp Switches, 2.25" (57mm) H x 3.25" (83mm) W x 4" (102mm) D
<b>PCC6W</b>	Six 25 Amp Switches, 2.25" (57mm) H x 6.63" (168mm) W x 3.63" (92mm) D

## SMARTLOGIC™ PROGRAMMABLE FLASHER

Engineered to maintain situational awareness of the operator, the SmartLogic Programmable Flasher houses numerous innovative technologies that deliver highly effective visual warning.



### FEATURES

- Housed in a junction box for easy mounting, along with wiring and connection protection
- Software is configurable via USB port
- All 8 outputs are internally protected and fused
- Each solid-state output is rated for 5 amps
- 8 total inputs
  - 5 activating inputs
  - 3 non-activating inputs for low power, photocell, and brake/tail/turn cut-off
- Default flash pattern
- LED onboard diagnostic indicators signify active outputs and blown fuses
- Day and night mode truck set-ups

### SYS107

2-Light System  
Two L31 Beacons

#### SYSTEM 107

<b>SYS107</b>	Two Front Amber Warning Lights
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### SYS108

2-Light System  
Two Micro 400s

#### SYSTEM 108

<b>SYS108</b>	Two Front Amber Warning Lights
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### SYS109

2-Light System  
Two stainless steel Micro 400s

#### SYSTEM 109

<b>SYS109</b>	Two Front Amber Warning Lights
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### SYS410 & SYS710

4-Light System  
Two stainless steel Micro 400s and two rear lighthouse options

#### SYSTEM 410

with 400 Series Lightheads

<b>SYS410A</b>	Warning
<b>SYS410B</b>	Warning and Brake/Tail/Turn
<b>SYS410D</b>	Warning, Brake/Tail/Turn, and Back-Up



#### SYSTEM 710

with 700 Series Lightheads

<b>SYS710A</b>	Warning
<b>SYS710B</b>	Warning and Brake/Tail/Turn
<b>SYS710D</b>	Warning, Brake/Tail/Turn, and Back-Up

# CONTROL SYSTEMS

## CENCOM CORE®

Created to enhance first responder safety, CenCom Core redefined control systems by providing the greatest configurability, speed, and expansion yet. Built to scale with your needs, Core is highly configurable and offers advanced automation, remote connectivity, and true system synchronization.

- Powered by WeCanX®
- Supports any combination of up to 99 WeCanX devices
- Seamlessly integrates with Whelen Command® software
- Remote firmware updates through USB-C with Whelen Command or over-the-air with Whelen Cloud Platform®
- Vehicle-to-Vehicle Sync
- Dynamic Variable Intensity™ light patterns
- 17 total inputs
- 23 total outputs



## CENCOM CORE-S™

The newest addition to Whelen's industry-leading Core family of control systems, Core-S is a true one-box solution. Its space-saving design allows for installation in tight spaces like in a console or under a dash. And installation has never been easier with connector placement specifically designed for hard-to-reach areas. Core-S features a siren, input/output, and control functionality in one compact box along with an integrated control head.

- Powered by WeCanX
- Seamlessly integrates with Whelen Command software
- Remote firmware updates through USB-C with Whelen Command or over-the-air with Whelen Cloud Platform
- Vehicle-to-Vehicle Sync
- Dynamic Variable Intensity light patterns
- 11 total inputs
- 16 total outputs
- 5-year warranty



## CENCOM CORE-R™

Core-R is a vehicle control system engineered to enhance first responder and motorist safety with complete configurability, advanced automation, and remote connectivity.

- Powered by WeCanX®
- Supports any combination of up to 99 WeCanX devices
- Seamlessly integrates with Whelen Command® software
- Remote firmware updates through USB-C with Whelen Command or over-the-air with Whelen Cloud Platform®
- Vehicle-to-Vehicle Sync
- Dynamic Variable Intensity™ light patterns
- 8 total inputs



## CENCOM CORE-C™

Core-C is the heart of a sophisticated warning light system for work trucks. Delivering enhanced WeCanX safety features with plug-and-play ease of installation, it combines the intelligence of a WeCanX controller with the functionality of a control head in one compact package.

- Powered by WeCanX
- Seamlessly integrates with Whelen Command software
- Remote firmware updates through USB-C with Whelen Command
- Vehicle-to-Vehicle Sync
- 1 input, 1 output
- Supports a primary WeCanX warning device
- Supports one Remote Expansion Module to bring DVI™ and intelligent lighting control to a vehicle's peripheral lighting like Vertex™, ION™, or Micron™ lightheads



## CORE-R™ DOT

- All the benefits and features of Core-R are housed in a durable junction box to protect control system components and wiring from harsh environments and weather typically experienced by DOT vehicles
- Its modular design makes installation on a municipal vehicle quick and easy with parts designed to be installed in various locations throughout a vehicle
- Optional modules are available to further enhance flexibility and safety like DVI and V2V Sync



# MUNICIPAL OPTIONS

## L31 BRANCH GUARD

Cast aluminum brush guard for one beacon.

<b>L360BGB</b>	Branch Guard Kit for L31H Series, 6.55" (167mm) H x 9.35" (238mm) Dia.
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## CABLE LENGTHS

Substitute 45' or 30' cables for standard 60' cables. Offered in single or pairs.

<b>SUBF4C45</b>	Pair, 45'
<b>SUBF4C30</b>	Pair, 30'
<b>SUBF2C45</b>	Single, 45'
<b>SUBF2C30</b>	Single, 30'
<b>SUBR2C45</b>	Substitute 45' 2/C Rear Cable



## TIR3™ SUPER-LED® LIGHTHEAD

Add visibility with a TIR3 lighthouse mounted to the side of a 400 or 700 Series housing, providing 90° of warning light coverage. Offered in pairs.

<b>ADD4TIR3</b>	400 Series
<b>ADD7TIR3</b>	700 Series



## SNOWAWAY™ HEATED LENS SYSTEM

Introducing industry-first technology for preventing snow build-up on rear corner post lights in most conditions.

### FEATURES

- Tempered glass heats uniformly and keeps lenses at 45° F in most conditions
- Automatically switches on when the temperature drops below 40° F
- LED indicator light in the cab notifies operator of system status
- On/Off switch located in the cab allows operator to manually control the system if needed
- Tempered glass uses between 1-4 Amps (colder temperature increases Amp draw)
- Housing and lens design accommodates three lighthoods
- 14-gauge wire included

<b>H400SD</b>	400 Series Heated Lens System
<b>H400VD</b>	400 V-Series™ Heated Lens System

NOTE: Municipal lighting system sold separately. Option includes heated lens system only. Works with following system models: SYS401D, SYS402D, SYS404D, SYS405D, SYS406D and SYS410D



## PIONEER MICRO™

### FEATURES

- Die-cast aluminum Black powder-coated housing
- Powder-coated stainless steel bail bracket with 3/8" stud carriage bolt mount
- Optic lens changes easily via four screws in picture frame fixture
- Includes three additional lenses:
  - Flood lens with 90° x 20° wide optics
  - Flood lens with 40° x 20° optics
  - Flood lens with 40° x 8° narrow flood
- 12 VDC

<b>MPBB</b>	Pioneer Micro
<b>MPBBA</b>	Pioneer Micro, Amber



## PAR-36 WORK LIGHT

### FEATURES

- Combination spot/floodlight with rubber housing and stainless steel swivel bracket and hardware
- Hard-coated lenses resist environmental damage from sand, sun, salt, and road chemicals
- Reverse polarity protected

<b>P36SLCHG</b>	PAR-36
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## PHOTOCELL

Photocell option for Hi/Low power, includes Black flange

<b>LCPHOTO</b>	Logic Level Photocell for use with SLFLASH, CenCom Core®
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## WING PLOW™ LIGHTING SYSTEMS

### FEATURES

- Two styles of Amber lighthoods provide complete coverage whether snowplow wing is in the operating position or the traveling position
- Pairs can be synchronized for alternating or simultaneous flashing
- Fully encapsulated for vibration, moisture, and corrosion resistance

<b>WPLOW3AA</b>	TIR3™ Light Modules
<b>WPLOW1A</b>	Wing Plow Operating Amber TIR3
<b>WPLOWZ1A</b>	Wing Plow Operating Amber LINZ6™
<b>WPLOW2A</b>	Wing Plow Stowed Amber TIR3
<b>WPLOWZ2A</b>	Wing Plow Stowed Amber LINZ6
<b>WPLOWZ3A</b>	LINZ6 Light Modules



# BEACONS

## R316 & R416 ROTA-BEAM™ SERIES

The R316 and R416 Rota-Beam features solid-state “rotating” technology, simulating the appearance of a rotating beacon without any moving parts or motors for long-life reliability. Models feature a smooth, self-cleaning polycarbonate dome and a powder-coated die-cast aluminum base. Conformal coated electronics provide moisture and vibration resistance, and hard-coated domes resist environmental damages. Models include 32 Scan-Lock™ flash patterns.



## L31 & L32 SERIES

L31 and L32 beacons provide the utmost versatility, featuring a smooth polycarbonate dome and powder-coated die-cast aluminum base. Conformal coated electronics provide moisture and vibration resistance, and hard-coated domes resist environmental damages. Permanent mount models include 69 Scan-Lock flash patterns.



## L41 SERIES

The L41 beacon features a smooth medium-profile polycarbonate dome and powder-coated die-cast aluminum base. Models are fully encapsulated and feature hard-coated domes to resist environmental damages. Models include 25 Scan-Lock flash patterns.



## L10 SERIES

L10 beacons are available with high or low-profile polycarbonate domes and a polycarbonate base. Conformal coated electronics provide moisture and vibration resistance. Permanent mount models include 18 Scan-Lock flash patterns.



## L21 & L22 SERIES

L21 and L22 beacons are available with high or low-profile polycarbonate domes and a polycarbonate base. Models are fully encapsulated. Permanent mount models include 25 Scan-Lock flash patterns.



## L51 SERIES

L51 beacons feature a low-profile, twist-off polycarbonate dome and a polycarbonate base. Conformal coated electronics provide moisture and vibration resistance. Permanent mount models feature 25 Scan-Lock flash patterns.



# MOUNTING OPTION

## QUICKFIT™ SERIES

Designed for fast and effortless installation, QuickFit mounts a variety of emergency lighting without any vehicle damage. The bolt-on system securely mounts QuickFit with no cutting or drilling, for a strong and stable rooftop mount. Vehicle-specific vacuum-formed install kits provide a perfect fit.



# MINI LIGHTBARS

## EDGE® 9X SERIES

Edge 9X mini lightbars feature a retro design with modern technology updates like WeCanX® connectivity and individually controlled lighthoods for endless customization. Designed for durability, competitively priced, and highly configurable the 9X is available in short and tall profiles, providing a perfect fit for any size vehicle.



## RESPONDER® HD SERIES

Responder HD lightbars feature dual-level Super-LED® modules, providing 360° of warning coverage. Models feature a polycarbonate dome and aluminum base. Models are 100% solid-state and feature hard-coated domes to resist environmental damage. Permanent mount models feature 55 Scan-Lock™ flash patterns.



## RESPONDER LP SERIES

Responder LP Series mini lightbars feature single-level conical modules, providing 360° of warning coverage. Models feature a polycarbonate dome and aluminum or polycarbonate base. Models are 100% solid-state and feature hard-coated domes to resist environmental damage. Permanent mount models feature 55 Scan-Lock flash patterns.



## MINI CENTURY™ SERIES

The Mini Century is a reliable, compact version of Whelen's efficient Century lightbar. Available in three lengths, the versatile Mini Century is easy to operate and service. Models are fully populated and pre-configured and feature standard current switching with 17 Scan-Lock flash patterns.



## MINI JUSTICE® SERIES

The Mini Justice is a compact version of the high-performance Justice lightbar designed to fit special applications. Models feature a polycarbonate dome and aluminum base. Models are 100% solid-state and feature hard-coated domes to resist environmental damage. Permanent mount models feature 95 Scan-Lock flash patterns.



## MINI FREEDOM® IV SERIES

A compact version of the high-performance Freedom IV, the Mini Freedom IV features multiple mounting options and a durable extruded aluminum platform. Models include Linear Super-LED® technology and hard-coated lenses. Permanent mount models feature 67 Scan-Lock flash patterns.



## MINI LIBERTY™ II SERIES

A compact version of the low-profile Liberty II, the Mini Liberty II features a polycarbonate dome and a durable extruded aluminum platform. Models are 100% solid-state and feature hard-coated domes to resist environmental damage. Permanent mount models offer 67 Scan-Lock flash patterns.



## MINI LEGACY® SERIES

Whelen's Mini Legacy is a compact version of the high-performance Legacy lightbar designed to fit special applications. With multiple mounting options and an extruded aluminum platform, the Mini Legacy is built for versatility and long-life reliability. Models include hard-coated lenses. Permanent mount models feature 67 Scan-Lock flash patterns.







# LIGHTHEADS

## 400 SERIES SUPER-LED® BACK-UP LIGHT

The 400 Series Super-LED Back-Up Light provides high-intensity work zone illumination to increase operator and workforce safety.

### FEATURES

- Downward ground illumination optics
- Available in horizontal or vertical mount
- Mounts into 400 Series housings
- Hard-coated lenses resist environmental damage from sand, sun, salt, and road chemicals

SUB44BUH	Substitute (2) 400 Horizontal Back-ups for Vertical
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## 400 V-SERIES™

Dual purpose optics provide maximum rear corner post warning for all dump body positions.

### FEATURES

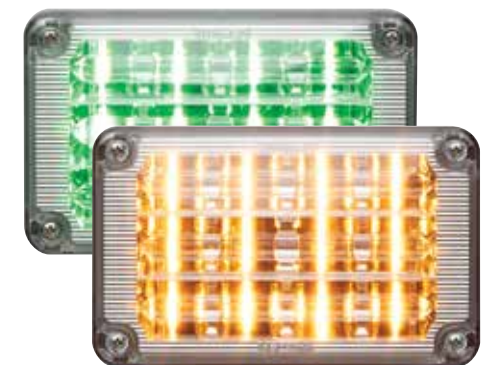
- SAE Class 1 Certified
- Single-color warning utilizing linear technology placed in both directions
- Hard-coated lenses resist environmental damage from sand, sun, salt, and road chemicals
- Vibration, moisture, and corrosion resistant
- Mounts vertically into stainless steel housing
- Works in conjunction with current flasher models
- Conformal coated PC boards
- 12" pigtail with Deutsch® waterproof connector and strain relief

SUB4V400	Substitute (2) Amber 400VV for 400 Linear Warning
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## 400 SERIES PLUS LIGHT

Coming Soon! Get more features including DUO™ capabilities and improved performance with our upgraded 400 Series Plus warning lightheads.



## ION™ SERIES

Engineered for optimal versatility, ION Series lighthead provide high-intensity warning or illumination. Designed to mount in many applications, ION lighthead are available in directional, wide-angle, DUO™ (two-color interleaved), or TRIO™ (three-color interleaved) models. Models are available in surface or universal mount.



## ION V-SERIES™

Utilizing multiple planes of light in one lighthead, ION V-Series lighthead are available in three-in-one combination or single-color warning models. Models are available in surface or universal mount.



## ION T-SERIES™ & MINI T-SERIES

The ION T-Series and Mini T-Series feature Linear Super-LED® technology and a sleek and low-profile design. The T-Series measures a depth of 1.50"; while the Mini T-Series measures a depth of only .50" and a length of only 3.34", making it the smallest ION yet. ION T-Series lighthead are available in SOLO™, split, DUO or TRIO models. ION Mini T-Series lighthead are available in SOLO or DUO models.



## AVENGER® II SERIES

The Avenger II Series features combination Linear/TIR™ optics for high-intensity warning and illumination and a smaller profile to maximize space for optimal versatility. The Avenger II is available in SOLO, DUO, or TRIO models.



## VERTEX™ SERIES

Whelen's Vertex Series offers three different optical light output models to direct light anywhere it's needed. These small Super-LED lighthead install easily with a 1" hole and utilize an in-line lamp driver. Available in SOLO and DUO models.



# MUNICIPAL SYSTEMS

PROFESSIONAL WARNING AND LIGHTING

A comprehensive guide to Whelen's lighting and warning products

Distributed by:

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OFFICIAL WARNING LIGHTS

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