



Be Heard, Be Seen, Be Woodway



# ECE-R65 Catalogue

7th Edition

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**NEW!** Each page is colour coded, simply flick to the colour of the product you require.



New in this edition: Liberty II **Page 8**



New in this edition: Legacy **Page 9**



New in this edition: ION V-Series **Page 19**



5 year Heavy-Duty Professional Warranty



Available in 12V for light commercial vehicle, van, 4X4 and car applications



Available in 24V for commercial vehicle applications such as Fire Appliances and Incident Command Vehicles



SYNC capable devices are able to synchronise their output



Approved to ECE-REG 10



Look for the SmartLED® logo for lighthead that do not need an external flasher.



Available with dual voltage so can run on both 12V and 24V vehicles



CenCom Sapphire UK designed for use with this product



Class 1 products have a single setting intensity



Class 2 products have a dual settings, both high intensity and low intensity.

## How to use this catalogue

### Product Category

### High Resolution Pictures

Each product in the catalogue is accompanied with the highest resolution pictures available of products relevant to the UK market.

### Icons

For quick reference each product has set icons determining the key features. See below for an outline of each of these features.



### Product Type

### LED Colour Options

### Colour Coding

Each product category is colour coded, simply select the category of your choice from the contents list (above) and flick to the page you wish to view.

Woodway Engineering Ltd is a successful family-run business that employs 50 people and has over 40 distributors spread across the globe. As the recognised UK leading supplier of emergency equipment, we are known internationally for providing superior products that last the lifetime of the vehicle and beyond. As the longest running British company in the industry, our name is connected with some of the major milestones that characterised the history of emergency services, such as the introduction in 1981 of the first strobe lights in the UK.

Emergency Services play a vital role in ensuring public safety, and having a fleet equipped with high quality equipment enables them to address emergencies as quickly and efficiently as possible. This is why at Woodway Engineering our mission is to help protect people by providing innovative audible and visual solutions, facilitating the job of those who work hard to protect the community

**We share the Whelen® mission statement “to make life safer for those who save lives”**



**R. J. Skelhon**  
**CHAIRMAN**  
**Woodway Engineering Ltd**



## About Whelen

Whelen Engineering designs and manufactures high quality audio and visual warning equipment for Police, Fire, Emergency Services, and Public Works markets worldwide. Founded in 1952, Whelen produces a wide range of European certified products that conform to the European EMC Directive, R65, R10, and AES Specification 5.

With over 60 years of experience, Whelen is a leading provider of innovative sirens, lightheads, lightbars, white illumination lighting, beacons, and controllers.

- Two manufacturing facilities totaling over 800,000 square feet.
- Largest staff of Design Engineers in the industry.
- Research and development.
- Plastics injection moulding machines from 30 to 2000 tons capacity.
- In-house plastics, hard coating, metallising and sheet metal fabrication.
- On-site test lab for environmental dust, moisture, vibration, etc
- Acoustic anechoic sound chamber
- Worldwide network of Sales, Service and Training






**Woodway and Whelen maintain a close working relationship that has lasted for over 35 years. Woodway cater products for the European market, ensuring all products meet any specific accreditations (E-marking, ECE-R65, R10) for use in the local market. Woodway the sole licensed manufacturer for European certified Whelen emergency lightbars and warning systems.**

# ECE-R65 COMPLIANCE



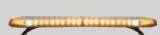



## Compliance status of our R65 products



### ECE-R65 LED Beacons

	R65 BLUE Class 1	R65 BLUE Class 2	R65 BLUE Class 1	R65 AMBER Class 2	R65 RED Class 1	R65 RED Class 2	Approved to ECE REG 10
<b>L31™ Series</b> 	12V Blue Lens Clear Lens	12V Blue Lens					Yes
<b>L32™ Series</b> 	12V Blue Lens Clear Lens		12V Clear Lens				Yes
<b>L40™ Series</b> 			12V and 24V Amber Lens				Yes

### ECE- R65 LED Lightbars






	R65 BLUE Class 1	R65 BLUE Class 2	R65 AMBER Class 1	R65 AMBER Class 2	R65 RED Class 1	R65 RED Class 2	Approved to ECE REG 10
<b>Legacy™ Series</b> 		12V Clear Lens	12V Clear Lens				Yes
<b>Liberty™ II Series</b> 		12V Clear Lens	12V Only Clear Lens				Yes
<b>Justice™ Series</b> 		12V and 24V Blue Lens Clear Lens (12V Only)	12V and 24V Amber Lens Clear Lens				Yes
<b>Century™ Series</b> 	12V Clear Lens		12V Clear Lens				Yes
<b>Freedom™ Series</b> 		12V Clear Lens	12V Clear Lens	12V Amber Lens Clear Lens			Yes
<b>4500 Series</b> 		12V Clear Lens  A pair is required to meet approval					Yes

### More R65 products coming very soon!

We are always adding new and exciting products to our range. Check out page 32 to see products due for release shortly. Additionally, if you would like to keep up to date with the latest new releases please visit our website:

[www.woodwayengineering.com](http://www.woodwayengineering.com)

### ECE-R65 LED Lightheads

	R65 BLUE Class 1	R65 BLUE Class 2	R65 AMBER Class 1	R65 AMBER Class 2	R65 RED Class 1	R65 RED Class 2	Approved to ECE REG 10
<b>LINZ6™</b> 		12V and 24V Clear Lens 2 lightheads required to meet approval		12V and 24V Clear Lens 2 lightheads required to meet approval			Yes
<b>ION™</b> 		12V and 24V Clear Lens	12V and 24V Clear Lens				Yes
<b>ION™ V-Series</b> 	12V Clear Lens		12V Clear Lens				Yes
<b>M2</b> 		12V and 24V Blue Lens A pair is required to meet approval					Yes
<b>M4</b> 		12V and 24V Blue Lens		12V and 24V Amber Lens		24V Only Red Lens	Yes
<b>M6</b> 		12V and 24V Blue Lens		12V and 24V Amber Lens			Yes
<b>M7</b> 		12V and 24V Blue Lens		12V and 24V Amber Lens			Yes



# ECE-R65 BEACONS

## L31™ Series



The brightest 360° LED beacon in the industry! Super-LED™ optical design packs all the punch of strobe while retaining the superior performance characteristics of LED. Rugged and low profile, the L360 Series features a built-in flasher.



- R65 approved Class 1 and Class 2 blue.
- Blue Class 1 approval with clear and blue domes.
- Blue Class 2 approval with blue dome permanent mount only.
- Double flash pattern.
- Heavy-duty powder coated die-cast base.
- Choose permanent, single magnet, single magnetic/suction or Heavy-Duty triple magnet/vacuum mounting.
- Detachable beacons are supplied with 3m cord and cigar plug with built-in switch.

### Model Numbers:

#### Blue, High profile, ECE-R65 Class 1 Beacons:

- L31HBF-R65B:** Blue dome, die cast base, permanent mounting.
- L31HBF-R65C:** Clear dome, die cast base, permanent mounting.
- L31HBM-R65B:** Blue dome, magnetic mounting.
- L31HBM-R65C:** Clear dome, magnetic mounting.
- L31HBV-R65B:** Blue dome, single suction/magnetic mounting.
- L31HBV-R65C:** Clear dome, single suction/magnetic mounting.

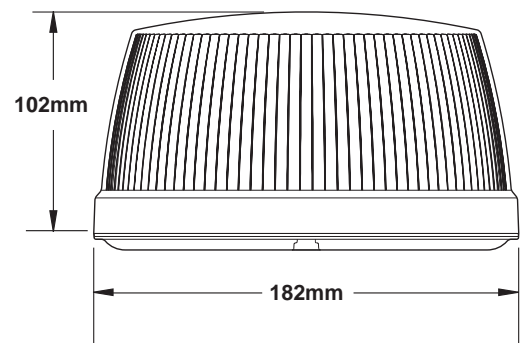
#### Blue, High profile, ECE-R65 Class 2 Beacons:

- L31HBF-R65B2:** Blue dome, die cast base, permanent mounting.



**L31HBF-R65B**

### Dimensions:



## L32™ Series

The brightest 360° LED Beacon in the industry! Super-LED™ optical design packs all the punch of strobe while retaining the superior performance characteristics of LED. Rugged and low profile, the L360 Series features a built-in flasher.



- R65 Approved Class 1 in amber and blue.
- Blue approval with clear and blue domes.
- Amber approval with clear dome only.
- Double flash pattern.
- Heavy-duty powder coated die-cast base.
- Choose permanent, single magnet, single magnetic/suction or heavy-duty triple magnet.
- Detachable beacons are supplied with 3m cord and cigar plug with built-in switch.

### Model Numbers:

#### Amber, Low Profile, ECE-R65 Class 1 Beacons:

- L32LAF-R65C:** Clear dome, die cast base, permanent mounting
- L32LAM-R65C:** Clear dome, magnetic (single magnet with neoprene cover)
- L32LAV-R65C:** Clear dome, single suction/magnetic mounting
- L32LAM-UK-R65B:** Clear dome, magnetic (3 magnets with neoprene covers)

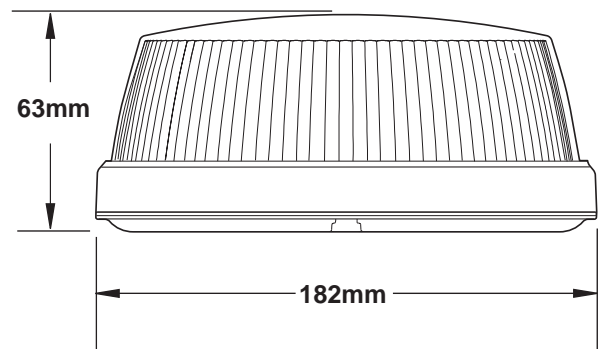
#### Blue, Low Profile, ECE-R65 Class 1 Beacons:

- L32LBF-R65B:** Blue dome, die cast base, permanent mounting
- L32LBF-R65C:** Clear dome, die cast base, permanent mounting
- L32LBM-R65B:** Blue dome, magnetic (single magnet with neoprene cover)
- L32LBM-R65C:** Clear dome, magnetic (single magnet with neoprene cover)
- L32LBV-R65B:** Blue dome, single suction/magnetic mounting
- L32LBV-R65C:** Clear dome, single suction/magnetic mounting
- L32LBM-UK-R65B:** Blue dome, magnetic (3 magnets with neoprene covers)
- L32LBM-UK-R65C:** Clear dome, magnetic (3 magnets with neoprene covers)



**L32LAF-R65C**

### Dimensions:



**NOTE:** Use of temporary mounted (magnetic, suction/magnetic etc) beacons on the roof of a vehicle in motion is not recommended and is at the sole discretion and risk of the user.

Ultra high intensity LED technology rivals strobe in intensity and draws far less power. LED light source has a rated life that exceeds that of strobe flash tubes by more than 50:1.



- Medium profile, smooth outer dome, universal application.
- Polycarbonate base.
- 50,000 hour rated life.
- 12/24V operation
- Low current draw.

### Model Numbers:

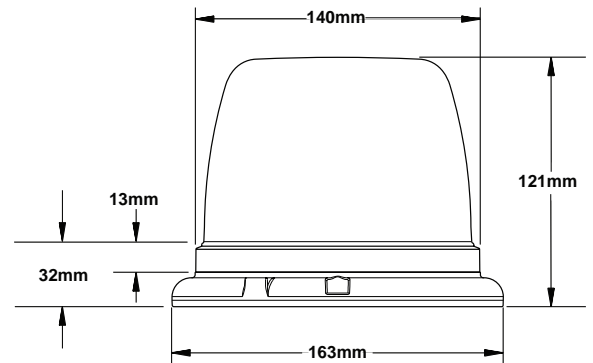
#### Amber, ECE-R65 Class 1 Beacon:

**L40MV-R65A1:** Amber, polycarbonate base, permanent mounting.

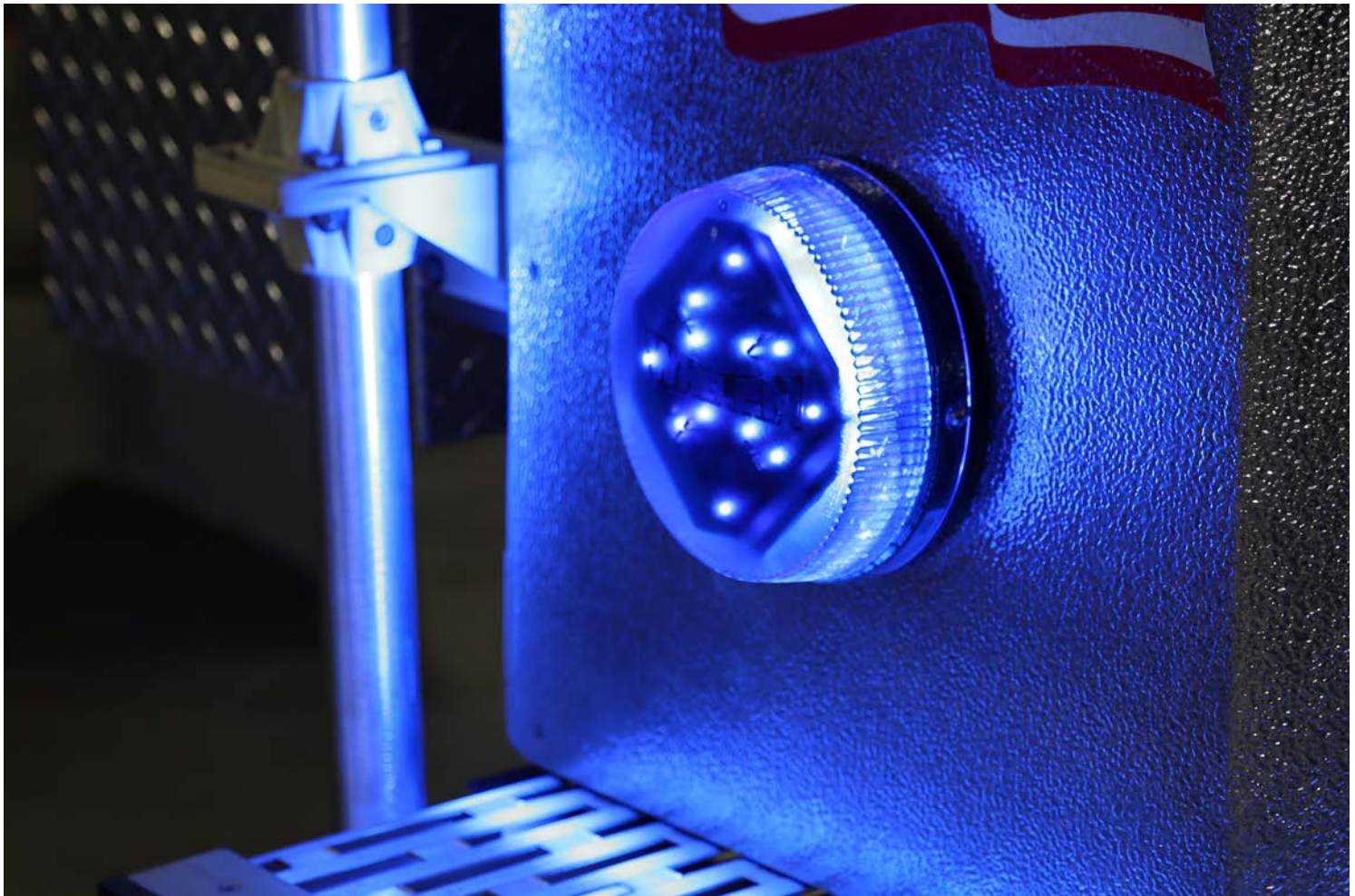


**L40MV-R65A1**

### Dimensions:



**NOTE:** The use of magnetic mounted beacons on the roof of a vehicle in motion is not recommended and is at the sole discretion and risk of the user.



# ECE-R65 LIGHTBARS



## Century™ Mini

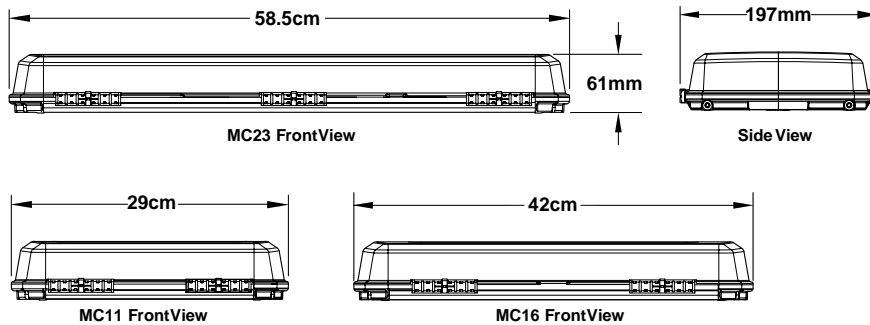
Premium lighting at an off-the-shelf price! Designed for long-life, reliable performance, ease of operation and serviceability.



- Low profile design with compression fit gasket for superior moisture resistance.
- Available in both Amber and Blue, 12V only.
- Extruded aluminium platform for rugged, long life dependability.
- Clip-Lock™ system allows easy removal of lightbar domes for service without compromising the weather resistant seal.
- Five year HDP® Heavy-Duty Professional warranty.



### Dimensions:



### Model Numbers:

#### Amber, ECE-R65 Class 1 Mini Lightbar:

- CE11AAAAAM-R65C1: 29cm, Magnetic Mounting
- CE11AAAAAP-R65C1: 29cm, Permanent Mounting
- CE16AAAAAM-R65C1: 42cm, Magnetic Mounting
- CE16AAAAAP-R65C1: 42cm, Permanent Mounting
- CE23AAAAAM-R65C1: 58.5cm, Magnetic Mounting
- CE23AAAAAP-R65C1: 58.5cm, Permanent Mounting

#### Blue, ECE-R65 Class 1 Mini Lightbar:

- CE16BBBBBM-R65C1: 42cm, Magnetic Mounting
- CE16BBBBBP-R65C1: 42cm, Permanent Mounting

#### Blue, ECE-R65 Class 2 Mini Lightbar:

- MCB-R65C2: 29cm, Magnetic Mounting

## Century™ Series

Premium lighting at an off-the-shelf price! Designed for long-life, reliable performance, ease of operation and serviceability.



- Lengths from 292mm up to 2032mm.
- Available in Amber and Blue with clear or coloured lens, 12V.
- Optional R65 Approved Amber or Blue Class 1 with Clear lens, 12V.
- Optional Super-LED™ front and/or rear facing directional flashing lights.
- Optional LED alley lights.
- Optional LED spotlights.
- Supplied with MKEZ7 Permanent Mounting Feet as standard.
- For 24V versions contact factory.



### Model Numbers:

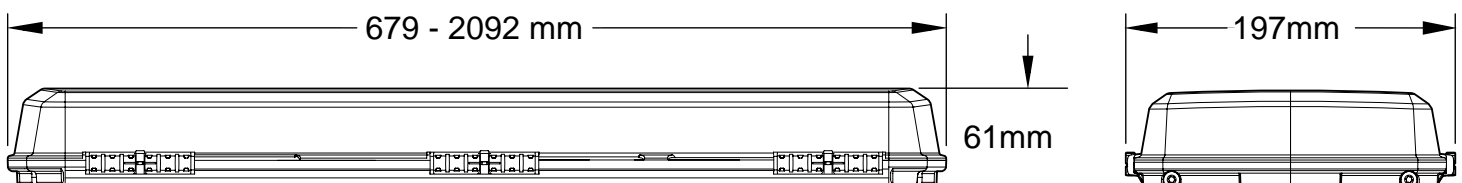
#### Amber, ECE-R65 Class 1 Lightbar:

- CE27AAAA-R65C1: 68cm, Permanent Mounting R65 Version
- CE40AAAA-R65C1: 100cm, Permanent Mounting R65 Version
- CE4AAAA-R65C1: 111.5cm, Permanent Mounting R65 Version
- CE8AAAA-R65C1: 128cm, Permanent Mounting R65 Version
- CE2AAAA-R65C1: 144cm, Permanent Mounting R65 Version
- CE60AAAA-R65C1: 152cm, Permanent Mounting R65 Version
- CE72AAAA-R65C1: 185cm, Permanent Mounting R65 Version

#### Blue, ECE-R65 Class 1 Lightbar:

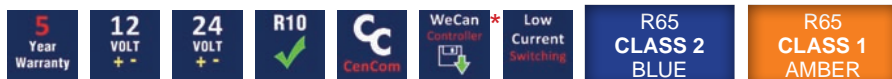
- CE4BBBB-R65C1: 115.5cm, Permanent Mounting R65 Version
- CE2BBBB-R65C1: 144cm, Permanent Mounting R65 Version
- CE80BBBB-R65C1: 209cm, Permanent Mounting R65 Version

### Dimensions:



**NOTE:** Use of temporary mounted (magnetic, suction/magnetic etc) lightbars on the roof of a vehicle in motion is not recommended and is at the sole discretion and risk of the user.

High performance, cost competitive Super-LED® lightbar with a wide range of options, designed for ease of operation, upgrade and serviceability. Woodway manufacture the Justice™ lightbar in both blue and amber to comply with European ECE-R65 regulations and specific options required by the European market. This includes bespoke lengths, lighting configurations and r10 compliance. Using the latest Whelen® LED technology, the Justice™ provides an economical low profile warning package.



- ECE-R65 compliant blue lightbar contains four corner Linear6 Super-LED™ modules.
- ECE-R65 compliant amber lightbar contains four corner Linear6 Super-LED™ modules.
- Cruise Light function
- Black polycarbonate base on an extruded aluminium platform for added strength and MKEZ7 permanent mount feet.
- Wide mounting footprint provides greater stability and weight distribution.
- Service orientated - easy to change colours, upgrade or service in the field. Simply remove four screws to access any section of the lightbar.
- Replace any lighthouse by removing one screw and single connector.
- Low current draw.
- **\*Note:** WeCan only available on long dome ends.

- 12V Blue or Clear Lens.
- 24V Blue Lens only.

### ECE-R65 Amber Class 1

- 4 Super-LED™ Corner Modules
- Steady burn 'Cruise Light' Facility.
- MKEZ7 Permanent Mounting Feet.
- 12V/24V with Amber or Clear Lens.

### Factory Installed Options:

- Additional Red, Amber, Blue or White CON3 LED modules.\*
- Alley and spotlights with optional 15-degree horizontal adjustment.
- Various gutter/gutter-less mounting straps to suit most vehicle types.
- Bespoke lengths from 585mm up to 1806mm (See below).

### ECE-R65 Blue Class 2

- 4 Super-LED™ Corner Modules.
- Steady burn 'Cruise Light' Facility.
- MKEZ7 Permanent Mounting Feet.



LR11 LED Alley Lights

High Intensity LED Spotlights



Red, Amber Blue and White CON3™ Super-LED™ Directional Lights #



R65 Amber Class 1 Mini Lightbar



r10 Approved Brake/Tail/Turn Lights

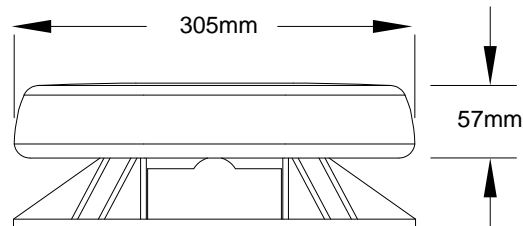
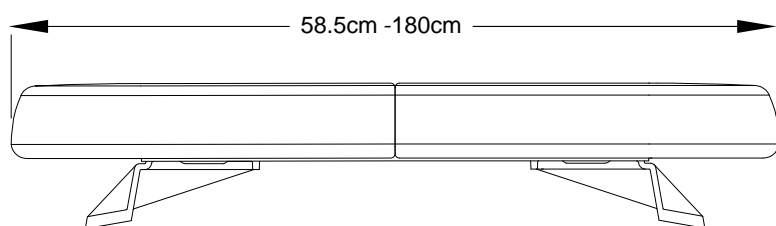


Various Mounting Straps

### 5-8 Lamp Traffic Advisor (5 lamp amber shown)

#Additional blue and amber directional CON3 LED lights are independently switched and do not form part of the ECE-R65 Approval.

### Dimensions:



**NOTE:** Use of temporary mounted (magnetic, suction/magnetic etc) lightbars on the roof of a vehicle in motion is not recommended and is at the sole discretion and risk of the user.

# ECE-R65 LIGHTBARS

## Justice™ Series



### Model Numbers:

#### R65 Blue Class 2 Mini Lightbar:

**MJYBBBBB#-R65C2:** 58.5cm, Blue LEDs with Clear Lens, 12V  
**MJYBBBBB#-R65B2:** 58.5cm, Blue LEDs with Blue Lens, 12V  
**MJYBBBBB#-24-R65B2:** 58.5cm, Blue LEDs with Blue Lens, 24V

#### R65 Amber Class 1 Mini Lightbar:

**MJYAAAA#R65C1:** 58.5cm, Amber LEDs with Clear Lens, 12V  
**MJYAAAA#-24-R65C1:** 58.5cm, Amber LEDs with Clear Lens, 24V  
**MJYAAAA#R65A1:** 58.5cm, Amber LEDs with Amber Lens, 12V  
**MJYAAAA#-24-R65A1:** 58.5cm, Amber LEDs with Amber Lens, 24V

#### R65 Blue Class 2 Lightbar:

**JE\*BBBB-R65C2:** Various Sizes with Clear Lens, 12V  
**JE\*BBBB-R65B2:** Various Sizes with Blue Lens, 12V  
**JE\*BBBB-24-R65B2:** Various Sizes with Blue Lens, 24V

#### R65 Amber Class 1 Lightbar:

**JE\*AAAA-R65C1:** Various Sizes with Clear Lens, 12V  
**JE\*AAAA-24-R65C1:** Various Sizes with Clear Lens, 24V  
**JE\*AAAA-R65A2:** Various Sizes with Amber Lens, 12V  
**JE\*AAAA-24-R65A2:** Various Sizes with Amber Lens, 24V

All full-sized lightbar specifications are also available as a WeCan equivalent.

Replace “ \* ” symbol in model number with letter indicating size of lightbar desired; Sizes from 584mm – 2027mm (23” - 80”)

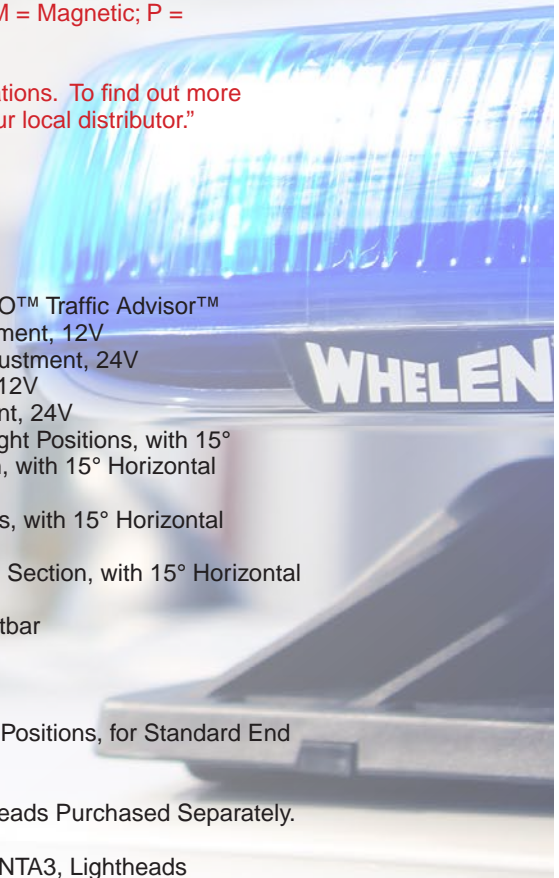
Replace “ # ” symbol in model number with letter indicating mounting option desired; M = Magnetic; P = Permanent; V = Vacuum Magnetic Mounting

The Justice series is available in a wide range of configurations to suit different applications. To find out more information on what specification may be best suited for your needs please contact your local distributor.”

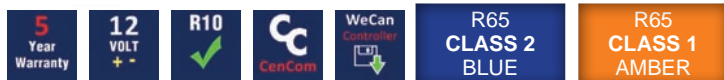
### Super-LED® Options:

**JDC\*:** One CON3™, Amber, Blue, Red or White  
**JDH\*:** One LTR3™, for use in Centre Section Only, Amber, Blue, Red or White  
**JDL\*:** One LIN6™, Amber, Amber, Blue, Red or White, 12V  
**JDL\*-24:** One LIN6™, Amber, Amber, Blue, Red or White, 24V  
**JDL#:** One DUO™ LIN6™, Red/Amber or Blue/Amber, for use in Rear of Bar as a DUO™ Traffic Advisor™  
**JTLS1:** Two LR11 Super-LED® Flashing Take-Down Lights with 15° Horizontal Adjustment, 12V  
**JTLS6-24:** Two LR11 Super-LED® Flashing Take-Down Lights with 15° Horizontal Adjustment, 24V  
**JALF1:** Two LR11 Super-LED® Flashing Alley Lights with 15° Horizontal Adjustment, 12V  
**JALF6-24:** Two LR11 Super-LED® Flashing Alley Lights with 15° Horizontal Adjustment, 24V  
**JDLF\*\*:** Two Red, Blue and/or Amber Flashing LR11 Super-LED® Modules in Alley Light Positions, with 15°  
**JCTLS1:** One LR11 Super-LED® Flashing Take-Down Light, for Single Centre Section, with 15° Horizontal Adjustment  
**JCTLS12:** Two LR11 Super-LED® Flashing Take-Down Lights, for Two Centre Sections, with 15° Horizontal Adjustment  
**JCTLS1D:** One Dual LR11 Super-LED® Flashing Take-Down Lights, for Single Centre Section, with 15° Horizontal Adjustment  
**JTDLED1:** One Super High Intensity LED Take-Down, for Centre Section of a 50” Lightbar  
**JTDLED2:** Two Super High Intensity LED Take-Down Lights  
**JWLLED2:** Two Super High Intensity LED Work Lights  
**JXALF1L:** Two Super-LED® External Alley Lights, for Standard End Section  
**JXALF\*L:** Two Red, Blue and/or Amber Super-LED® Modules in External Alley Light Positions, for Standard End Section  
**JGPBTT:** Two LED Brake/Turn/Tail Lights  
**JTACNTL:** Traffic Advisor™ Includes Internal, External Harness and TACTLD1, Lightheads Purchased Separately. When Purchased with Lightbar Only. For Use with CON3™ Centre Module Only  
**JTACBL:** Traffic Advisor™ Includes Internal and External Harness, for use with CCSRNTA3, Lightheads Purchased Separately. When Purchased with Lightbar Only. For Use with CON3™ Centre Module Only

**Please Note:** Some of the additional options shown may not meet ECE-R65 compliance. These can be fitted on a separate switch that maintains R65 compliance when additional lights are switched off. Check with your agent beforehand.



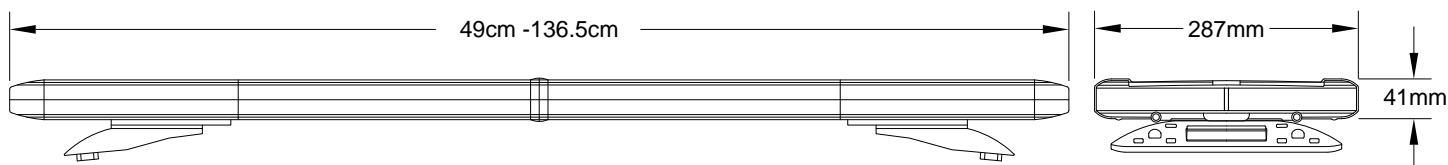
Reminiscent of the original Freedom™ Series, the Legacy™ Series features LEDs of outstanding quality with new additional functionality to maximise performance and reliability. A Legacy™ lightbar provides that boost of confidence and peace of mind that only equipment of the highest standard can offer.



- R65 approved models feature four corner modules, with the option of adding one pair of forward and/or rear facing half directional modules without exceeding R65 maximum levels.
- New Diamond Optix™ linear reflector optic design.
- Newly designed, high-output linear combo “Multi-Angled” corner modules produce light straight out and to the side. These modules cover the critical 45° angles. The four combo modules produce a 360° warning signal.
- Whelen’s exclusive Collimator™ patented design captures, collects and focuses light for unbeaten light output.
- Increased lifetime for LEDs.
- One piece Uni-Dome construction with a single sealing point. Each dome slides onto the aluminium extrusion and wraps around all internal components while the wiper seal protects your lightbar from the worst elements.
- Metal top shield stays cool to the touch, protects the lightbar from nature’s elements such as hail and provides passive solar radiation to direct heat away from internal components to ensure long life and reliability.
- Centre divider(s) with LIM (Liquid Injection Moulded) wiper seals ensure lightbar integrity in all conditions.
- Legacy “plug and play” into the CenCom Sapphire™ UK controller. A WeCan® controller module is supplied for use with other switch centres.
- Hard-coated lenses shrug off environmental damage from the sun, salt and road chemicals.
- The I/O board snaps into brackets, and point to point wiring between each lighthouse. The I/O board creates a clean look and allows for easy serviceability.
- Five year HDP® Heavy-Duty Professional warranty.



### Dimensions:



**NOTE:** Use of temporary mounted (magnetic, suction/magnetic etc) lightbars on the roof of a vehicle in motion is not recommended and is at the sole discretion and risk of the user.

# ECE-R65 LIGHTBARS

## Legacy™ Series



### Additional Options:



TIR3 alley module with 15° adjustment



Multi-angled combo corner modules produce light straight out and to critical 45° angles.



Complete light coverage with no dead spots between modules.



3 LED Take-Down lights with 15° adjustment



6 LED Take-Down lights

### Model Numbers:

#### R65 Amber Class 1 Lightbar:

**GS4AAAA-R65C1:** 110cm, Amber LEDs with Clear Lens, 12V

**GS8AAAA-R65C1:** 122cm, Amber LEDs with Clear Lens, 12V

**GS2AAAA-R65C1:** 136.5cm, Amber LEDs with Clear Lens, 12V

#### R65 Blue Class 2 Lightbar:

**GS4BBBB-R65C2:** 110cm, Blue LEDs with Clear Lens, 12V

**GS8BBBB-R65C2:** 122cm, Blue LEDs with Clear Lens, 12V

**GS2BBBB-R65C2:** 136.5cm, Blue LEDs with Clear Lens, 12V

Replace “\*” symbol in model number with letter indicating mounting option desired: P = Permanent Mount, M = Magnetic Mount, V = Vacuum Mount

### Super-LED® Options:

Lightheads available in Amber, Blue, Red or White. Options not available on all models, refer to WeCad™ Build-A-Bar program for lighthead placement.

**GSDL\*:** One single colour, long lighthead

**GSDS\*:** One single colour, short lighthead

**GBTL:** Two TIR6™ take-down lights

**GBTS:** Two TIR3™ take-down lights with 15° adjustment

**GBA:** Two TIR3™ alley lights with 15° adjustment

**GSTL\*:** DUO™ colour long lighthead, specify warning colour, Red, Blue or White, second colour is Amber for rear Traffic Advisor™

**GSTS\*:** DUO™ colour short lighthead, specify warning colour, Red, Blue or White, second colour is Amber for

rear Traffic Advisor™

**GSPHOTO:** Photo cell option for Hi/Low

**GBCF\*:** Red, Blue or Amber, colour filter, corner module

**GBLF\*:** Red, Blue or Amber, colour filter, long module

**GBSF\*:** Red, Blue or Amber, colour filter, short module

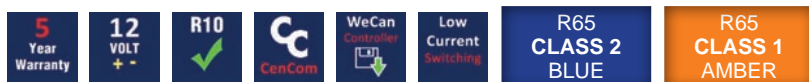
Replace “\*” symbol in model number with letter indicating lens colour or LED colour desired: A = Amber; B = Blue; C = Clear/White; R = Red, G = Green

Replace “#” symbol in model number with letter indicating Split lens or LED colour desired: D = Red/Clear; E = Blue/Clear; F = Amber/Clear; H = Green/Clear; J = Red/Blue; K = Red/Amber; L = Red/Green; M = Blue/Amber

**Please Note:** Some of the additional options shown may not meet ECE-R65 compliance. These can be fitted on a separate switch that maintains R65 compliance when additional lights are switched off. Check with your agent beforehand.

With improved optic technology and exterior design, the next generation Liberty™ lightbar from Whelen®, a favourite of emergency services worldwide, is tougher than ever.

Building on the reputation of the Liberty™ Series for excellent reliability and superior quality of the product, the new Liberty™ II has been redesigned to meet the needs of your fleet and last the lifetime of the vehicle. The new Liberty™ II provides an enhanced performance, with 30% more illuminated surface area on all warning modules.



- R65 compliant blue lightbar contains four corner and four short directional modules
- R65 compliant amber lightbar contains four corner and four short directional modules
- Class 1 options available in Amber only. Class 2 options available in Blue only
- 12V only
- Clear lens
- Aluminium top directs the heat away from internal components and maximises protection
- Centre dividers with LIM (Liquid Injection Molded) seal protect the internal components from water infiltration
- Hard-coated lenses resist environmental damage for longevity
- Whelen's patented Collimator™ optic design provides unbeaten light output
- Advanced Thermal Design reduces the stress on LEDs during extended dwell time
- Five-year HDP® Heavy-Duty Professional warranty



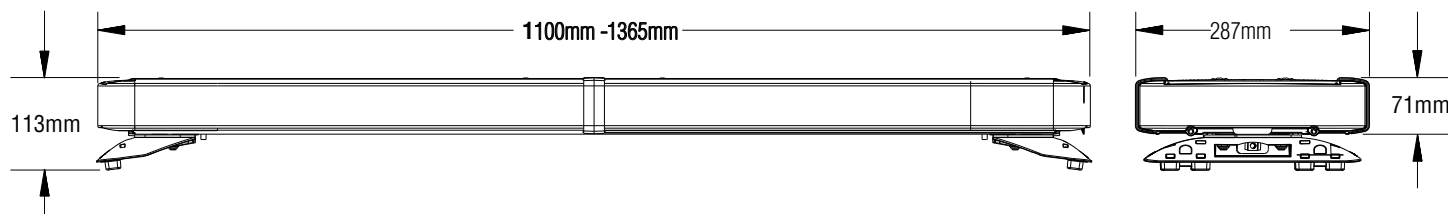
### Comparison between the Liberty™ and Liberty™ II:

- 30% more illuminated surface area on all warning modules, including corner and inboard modules
- Efficiently designed heat sink gives all inboard modules longer life and higher performance
- Lower profile feet are quieter, reducing wind noise and giving the bar a stealthy look
- Newly designed alley light module allowing for contiguous light



### Dimensions:

### R65 Amber Class 1 Mini Lightbar



**NOTE:** Use of temporary mounted (magnetic, suction/magnetic) lightbars on the roof of a vehicle in motion is not recommended and is at the sole discretion and risk of the user.

# ECE-R65 LIGHTBARS

## Liberty™ II Series



### Model Numbers:

#### R65 Amber Class 1 Lightbar:

**IX4AAAA-R65C1:** 110cm, Double Flash, Single Intensity, 12V  
**IX8AAAA-R65C1:** 122cm, Double Flash, Single Intensity, 12V  
**IX2AAAA-R65C1:** 136.5cm, Double Flash, Single Intensity, 12V

#### R65 Blue Class 2 Lightbar:

**IX4BBBB-R65C2:** 110cm, Double Flash, Dual Intensity, 12V  
**IX8BBBB-R65C2:** 122cm, Double Flash, Dual Intensity, 12V  
**IX2BBBB-R65C2:** 136.5cm, Double Flash, Dual Intensity, 12V

### Super-LED® Options:

Lighthouse available in Amber, Blue, Red or White. Options not available on all models, refer to WeCad™ Build-A-Bar program for lighthouse placement.

**IBDL\*:** One Single Colour Long 12 Super-LED® Lighthouse, Amber, Blue, Red or White

**IBDS\*:** One Single Colour Short 6 Super-LED® Lighthouse, Amber, Blue, Red or White

**ITL12:** Two Long 12 Super-LED® Take Down Lights

**IJDC\*:** One Single Colour Double Reflector Lighthouse, Amber, Blue,

White or Red, for IJ Series Lightbar Only. Rear Centre Mount Option Only

**IJDC#:** One DUO+™ Color Interleaved 12-LED Double Reflector Lighthouse, Amber, Blue, White and/or Red, for IJ Series Lightbar Only. Rear Centre Mount Option Only

**ITL6:** Two Long 6 Super-LED® Take Down Lights

**ITS6:** Two Short 6 Super-LED® Take Down Lights

**ITL3:** Two Long 3 Super-LED® Take Down Lights

**ITS3:** Two Short 3 Super-LED® Take Down Lights

**IA3:** Two 3 Super-LED® Alley Lights with 15° Horizontal Adjustment

Replace " \* " symbol in model number with letter indicating lens colour or LED colour desired: A = Amber; B = Blue; C = Clear/White; R = Red, G = Green

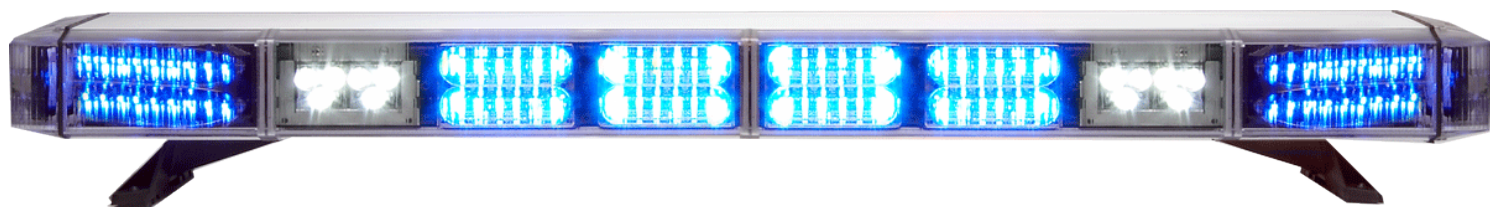
Replace " # " symbol in model number with letter indicating Split lens or LED colour desired:

D = Red/Clear; E = Blue/Clear; F = Amber/Clear; H = Green/Clear J = Red/Blue; K = Red/Amber; L = Red/Green; M = Blue/Amber

**Please Note:** Some of the additional options shown may not meet ECE-R65 compliance. These can be fitted on a separate switch that maintains R65 compliance when additional lights are switched off. Check with your agent beforehand.



The Freedom™ features all Linear-LED® technology in a warning package that rivals strobe in impact but provides heavy-duty, long life operation with low current draw. Woodway manufacture the Freedom™ lightbar in blue and amber to comply with European ECE-R65 Class 2 regulations and provide specific options required by the European market. This includes bespoke lengths, lighting configurations and R10 compliance. Freedom™ R65 lightbars are available for 12V operation only. Used extensively by the professional service such as Fire Authorities and the Highways Agency, all Freedom™ lightbars have Edge® performance and reliability and are made for the rough treatment and long hours that these services demand. The Freedom™ lightbar is available in two variants: Freedom™ three split colour and Freedom™ FE Economy.



### Standard Features:

- State-of-the-art optics and the latest generation Super-LED™ technology with clear outer lenses.
- Built on an extruded aluminium chassis that provides optimum shock protection, superb strength and stability. The modular construction allows for ease of maintenance and customer upgrading. A wide mounting footprint provides greater stability and weight distribution on the thinner roof construction common on today's vehicles.
- Four standard lengths: 100cm, 113.5cm, 127cm and 140cm. Custom lengths available on request
- Each Super-LED™ lighthouse is driven by an all-electronic flasher that provides proper input power and choice of flash patterns. You are assured of equal light intensity from each lighthouse through the voltage range of 10-16 VDC.
- Pre-wired with 4.5m cable.
- Supplied as standard with polycarbonate permanent mounting feet. Various stainless steel straps to suit European cars available. High rise mounting feet and bespoke mountings available.

### Freedom™ 3 Series Blue, ECE-R65 Class 2 and Amber ECE-R65 Class 1, 12V:

- Corner modules with split blue and amber upper and lower levels. The amber level is approved to R65 Class 1, the blue level to R65 Class 2. The amber and blue lightbar levels have independent control allowing split colour lightbar configurations. This makes the lightbar ideal for dual purpose vehicles required to show either blue or amber R65 compliant lighting.

### FE 'Economy' Series Amber, ECE-R65 Class 1 and Class 2, 12V:

- Economy Series lightbars feature 4 standard Super-LED™ corner modules (Class 1) or 8 standard Super-LED™ corner modules (Class 2). Simple all bar operation control. Optional spot and 'E' approved brake/tail/turn lights. Ideal for customers who require minimal lighthouse selection optional.

### FE 'Economy' Series Blue, ECE-R65 Class 2, 12V:

- Economy Series lightbars feature 4 standard Super-LED™ corner Linear 12 modules. Simple all-bar operation control. Optional spot and 'E' approved brake/tail/turn lights. Ideal for customers who require minimal lighthouse selection options. This series of Freedom™ lightbars is used extensively on Fire Appliances and fitted with the optional 100W Lo-Pro speaker.

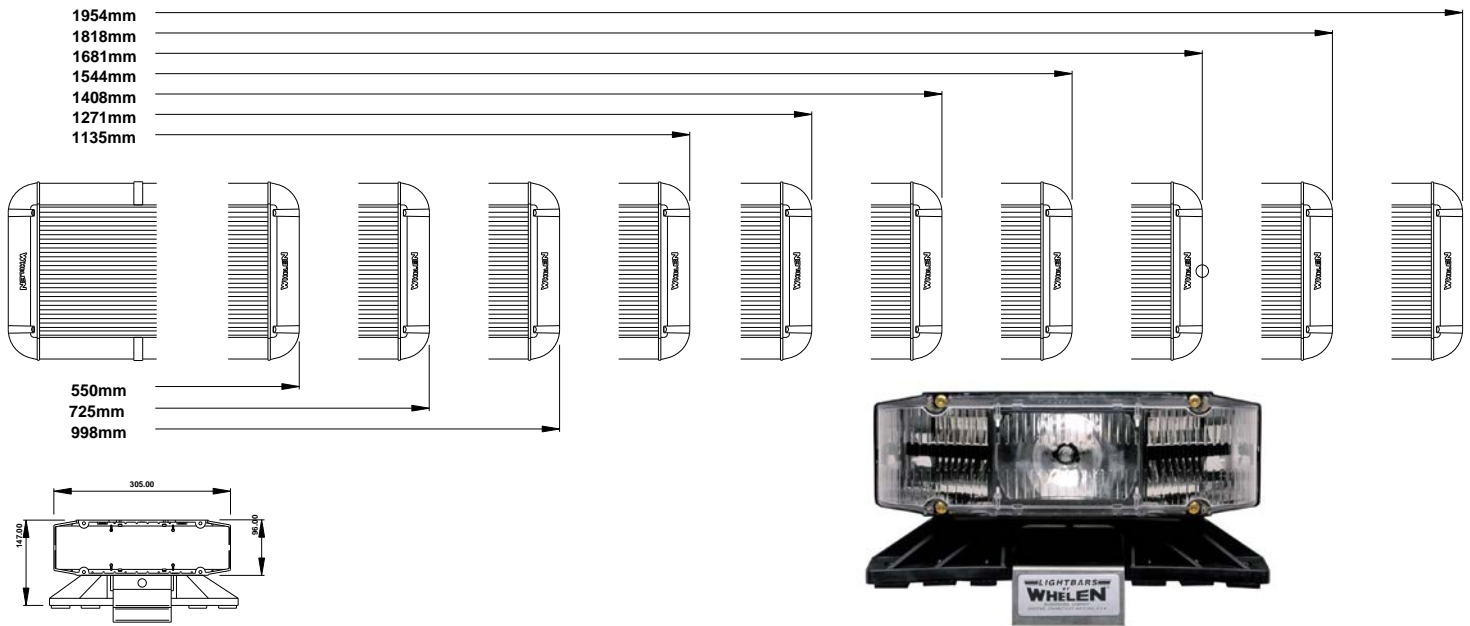


# ECE-R65 LIGHTBARS

## Freedom™ Series



### Dimensions:



### Additional Options:

KEY FEATURES and OPTIONS		FE	F3
	FXALF1D Super-LED™ Alley light.	Optional	No
	FXTLS1D Dual Super-LED™ LR11 Spotlight.	Optional	Optional
	Duplex 6/6 Super-LED™ Linear12 light modules. 12 LEDs per module.	Optional	Optional
	Split colour 6/6 Super-LED™ Linear12 light modules. 6 LEDs per colour.	Optional	Optional
	ZB6200 LED Brake, Tail and Turn lights. 'r' Approved.	Optional	Optional
	SA40 Lo-Pro Speaker 100W.	Optional	Optional
	Illuminated and non-illuminated signs.	Optional	Optional
	5 and 6 Lamp LED Traffic Advisor	No	Optional
	'GATSO' steady burn camera Super-LED™ lamp.	Optional	Optional
	Various mounting feet and straps.	Optional	Optional
	OPTI-LINK receiver pre-installed into the lightbar.	No	Optional

Edge® 4500 Plus lightbar is 12cm high and just 13cm deep but it's packed with Whelen's new LED technology. New snap-in/lock-in lighthouse brackets (no screws, nuts or washers) and individual front-mounted lenses for each module make service a breeze. Woodway manufacture the 4500™ lightbar in blue to comply with European ECE-R65 Class 2 regulations and provide specific options required by the European market. This includes bespoke lengths, lighting configurations and r10 compliance. ECE-R65 approved 4500™ lightbars uses a special 'European' corner module to achieve ECE-R65 Class 2 compliance.



### Standard Features:

- State-of-the-art optics and the latest generation Super-LED™ technology, Double Flash Pattern with clear outer lenses.
- Proven heavy-duty extruded aluminium housing.
- Front mounted lenses and modular construction allows for ease of maintenance and upgrading.
- 360° expanded closed cell silicone sponge cord style gasket seals the lenses to the extrusion.
- Lengths from 560mm to 2083mm.
- Lightbar mounts easily to chassis via four adjustable slide bolts.
- Various options including 'E' approved brake, tail and indicator lights, halogen and Super-LED™ scene and work lights, illuminated and non illuminated signs and side marker lights.
- R65 approval requires two half lightbars, one facing to the front of the vehicle and one facing to the rear of the vehicle.
- 4500 R65 lightbars are available for 12V operation only.



2 European blue corner Super-LED™ modules. Clear lens. Double Flash Pattern.

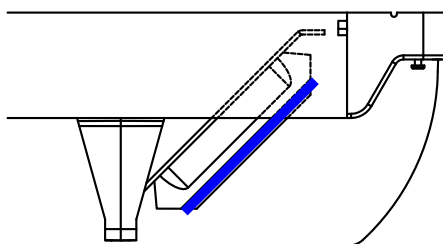
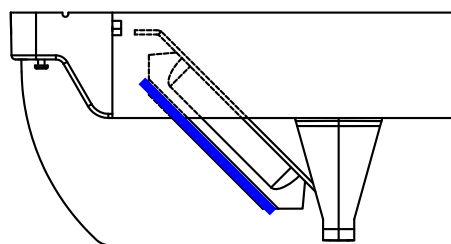


Solid State Flasher to operate corner Super-LED™ modules. R65 Double Flash Pattern with Hi/Lo Intensity setting.

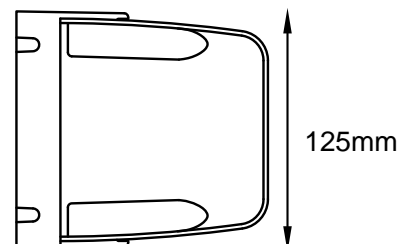


Proven Heavy-Duty Extruded Aluminium Housing.

### Dimensions:



560mm - 2083mm

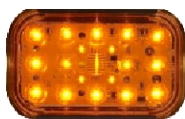


135mm

### Optional Features:



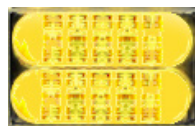
Duplex 6/6 Super-LED™ white Linear 12 flashing modules.



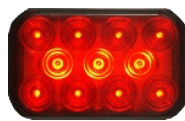
LED Indicator Light. 'E' Approved.



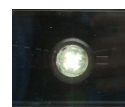
Solid State Flasher to operate auxiliary Super-LED™ directional modules.



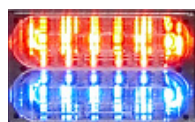
Duplex 6/6 Super-LED™ Linear 12 light modules. 12 LEDs per module.



LED Brake and Tail Light. 'E' Approved.



Marker lights. 'E' Approved.



Split colour 6/6 Super-LED™ Linear 12 light modules. 6 LEDs per colour.



LED Brake, Tail and Turn lights. 'E' Approved.



Illuminated and non illuminated signs.

# ECE-R65 LIGHTHEADS



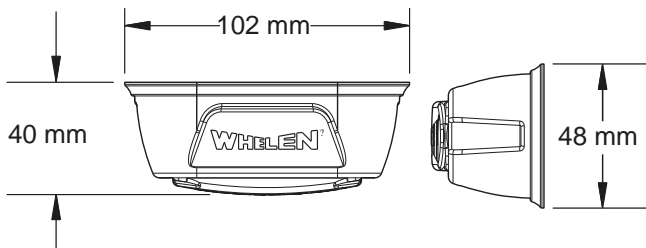
## LINZ6™ Series

A compact rugged little powerhouse that shrugs off moisture and road shock while giving you maximum performance... anywhere on your vehicle.



- R65 Class 2 approved in blue and amber with clear lens
- Two individual lighthoods are required to meet the approval.
- A sub-compact, full-featured LED lighthood with wide-angle light spread, which can be mounted virtually anywhere
- Clear non-fluted lens and black ABS flange standard, optional chrome flange available.
- Minimal current draw.
- SmartLED® design requires no external flasher.
- Surface mounted with no external flasher, easy to install.
- The "SYNC" interconnect wire allows up to eight lighthoods to be synchronised together.
- Fully encapsulated electronics provide full moisture and vibration protection.

### Dimensions:



See page 30 for a full list of mounting options.



LINZ6 fitted with LINZ6FB black flange (available separately)

### Model Numbers:

#### LINZ6™ Series:

LINZ6B-R65C2-S2: 12V - Blue  
 LINZ6B24-R65C2-S2: 24V - Blue  
 LINZ6A-R65C2-S2: 12V - Amber  
 LINZ6A24-R65C2-S2: 24V - Amber

Set includes 2 lighthoods to meet R65 approval. Lighthoods are available individually on request (see diagram below).

## Vertex™ Series

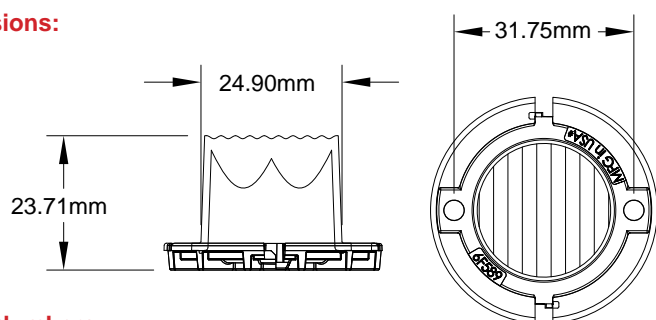
Only 7/8" (22mm) in height, this small LED lighthood is perfect for applications where size and intensity are critically important. Self-contained unit using an in-line combination lamp driver/flasher. Due to its small size it can also be surface mounted to anywhere outside of the vehicle.



- 25 Scan-Lock™ flash patterns, including synchronise feature for alternating and synchronous flashing of multiple lamps
- Mounts vertically or horizontally via two screws
- Optional surface mount flanges available in Black or Chrome for models VTX609 and VTXD609 allow for mounting virtually anywhere
- Simple installation with no separate lamp drivers, flashers, ballast or power supplies
- 1" 25.4mm hole makes this LED module backwards compatible to HA238 and standard 25.4mm Hideaway™ style lamps
- Virtually no RFI/EMI noise emitted
- Includes a 9" (228.6mm) pre-wired and sealed 4-C/22 gauge cable with power, pattern and synchronise wires
- Five-year HDP® Heavy-Duty Professional warranty



### Dimensions:



### Model Numbers:

#### Vertex Series

VTX609A-R65C1: Amber, Class 1, black housing, 12V.  
 VTX609B-R65C1: Blue, Class 1, black housing, 12V.

ION™ V Series single colour warning light with combination 180 degree warning and TIR warning lights.



- ECE-R65 Class 2 approved in blue and R65 Class 1 approved in amber with clear lens.
- ION V-Series lighting is the smallest most effective, Super-LED light in the industry today.
- Surface mount model includes flange and a black housing.
- Hard coated lenses with HDO™ technology (High Definition Optics).
- Twenty-five Scan-Lock™ flash patterns including fourteen synchronizable patterns.
- Available Amber and Blue.
- Supplied with 10" 6-wire pigtail.
- Five year HDP® Heavy-Duty Professional warranty.

### Model Numbers:

#### ION V-Series - Surface Mount

**IONSV1A-R65C1:** Amber, Class 1, black housing. Surface mounting, 12V.

**IONSV1B-R65C1:** Blue, Class 1, black housing. Surface mounting, 12V.

#### ION V-Series - Universal Mount

**IONV1A-R65C1:** Amber, Class 1, black housing, 12V.

**IONV1B-R65C1:** Blue, Class 1, black housing, 12V.

(Above lights are supplied with Gripper Bracket).

### Mounting Options for ION and ION V-Series (Universal Mount Only)

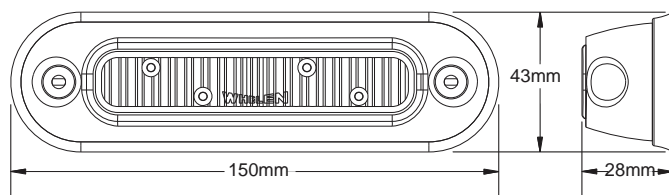
**IONK1B:** Black bail bracket mount

**IONGROM:** Grommet Mount Kit

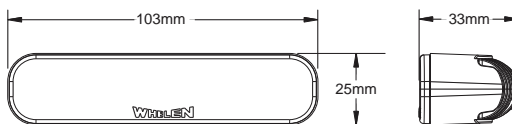


### Dimensions:

#### Surface Mount



#### Universal Mount



## ION™ Series

ION™ is a super-tough, ultra compact LED light that is perfect for mounting anywhere on your vehicle, inside or out.



- ECE-R65 Class 2 approved in blue and R65 Class 1 approved in amber with clear lens.
- One lighthead is required to meet both approvals.
- Double Flash Pattern.
- Standard models have TIR directional warning
- Synchronisable to other Whelen® SYNC products.
- Surface mounted with no external flasher, easy to install.
- Includes universal mount: combination permanent/pedestal, clip, edge mount.
- 0.40 Amps average at 12V.
- Fully encapsulated electronics provide full moisture and vibration protection.
- SmartLED® design requires no external flasher.
- Five year HDP® Heavy-Duty Professional warranty.

### Model Numbers:

#### ION Series - Universal Mount

**IONA-R65C1:** Amber, Class 1, black housing, 12V.

**IONA24-R65C1:** Amber, Class 1, black housing, 24V.

**IONB-R65C2:** Blue, Class 2, black housing, 12V.

**IONB24-R65C2:** Blue, Class 2, black housing, 24V.

(Above lights are supplied with Gripper Bracket).

### Mounting Options for ION and ION V-Series

**IONK1B:** Black bail bracket mount

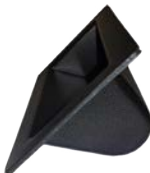
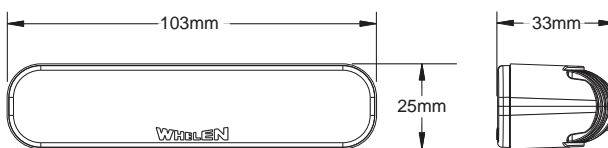
**IONGROM:** Grommet Mount Kit



Gripper Bracket supplied as standard (not surface mount).

### Dimensions:

#### Universal Mount



Compatible with the Woodway Adjustable Screen Pod. Enables adjustment, which ensures the lighthead is always facing in the direction required. Compatible with ION™ Universal Mount.

See **Page 30** for more details.

# ECE-R65 LIGHTHEADS

## M Series



The only patented Linear-LED® lightheads designed to stand up to the harsh environments and standards of the industry while providing top of the line performance.

5  
Year  
Warranty

12  
VOLT  
+ -

24  
VOLT  
+ -

R10  
✓

SYNC  
→

R65  
CLASS 2  
AMBER

R65  
CLASS 2  
BLUE

R65  
CLASS 2  
RED

- Easy to install, surface mounted via two screws.
- Updated design allows for faster and easier installation.
- Super-LEDs provide unmatched high intensity warning, low current consumption.
- Unique lens shape is completely illuminated with patented Linear-LED designed reflector assembly.
- Lens and reflector are a sealed assembly. Lighthead is designed with mounting screws located outside of the sealed lens/reflector assembly eliminating water infiltration.
- M Series blue and red lightheads are Class 2 approved, Double Flash with SYNC.
- M Series have hard coated lenses that resists scratches, chemical and UV damage.

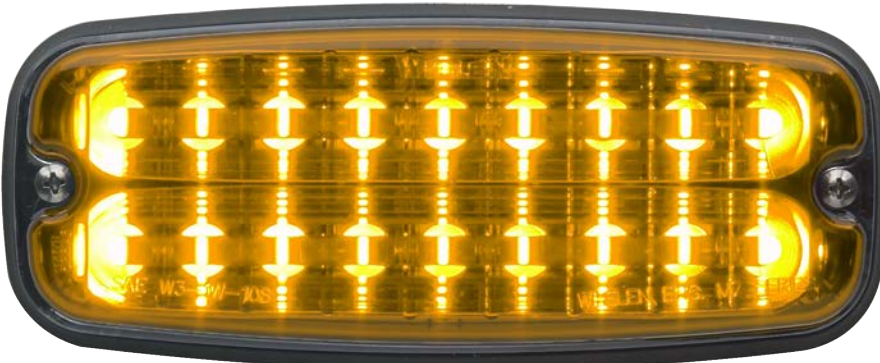
SmartLED



M6B-R65B2: M6 Series, Blue



M4R24-R65R2: M4 Series, Red



M7A-R65A2: 12V - M7 Series



M2B-R65B2: 12V - M2 Series



### Model Numbers:

#### Amber with Amber Lens

**M4A-R65A2:** 12V - M4 Series  
**M4A24-R65A2:** 24V - M4 Series  
**M6A-R65A2:** 12V - M6 Series  
**M6A24-R65A2:** 24V - M6 Series  
**M7A-R65A2:** 12V - M7 Series  
**M7A24-R65A2:** 24V - M7 Series

#### Blue with Blue Lens

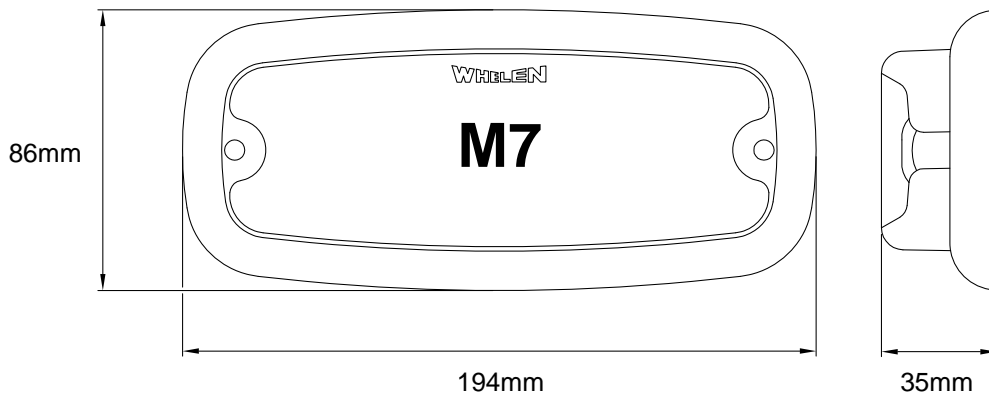
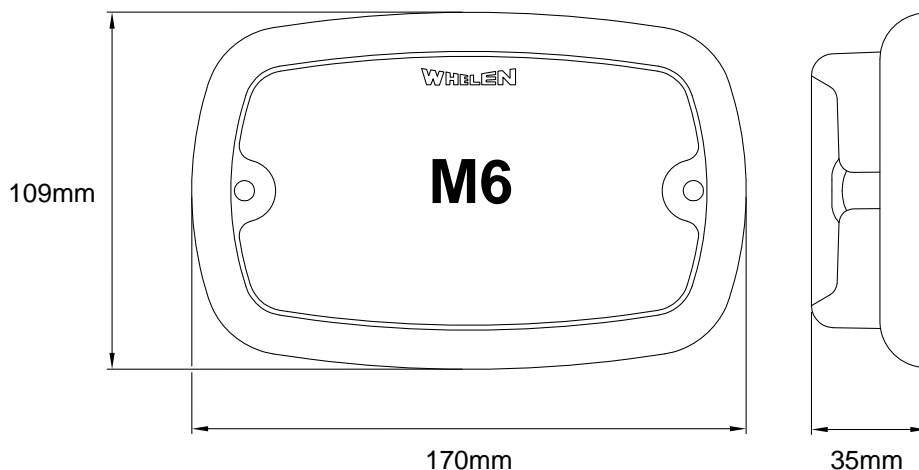
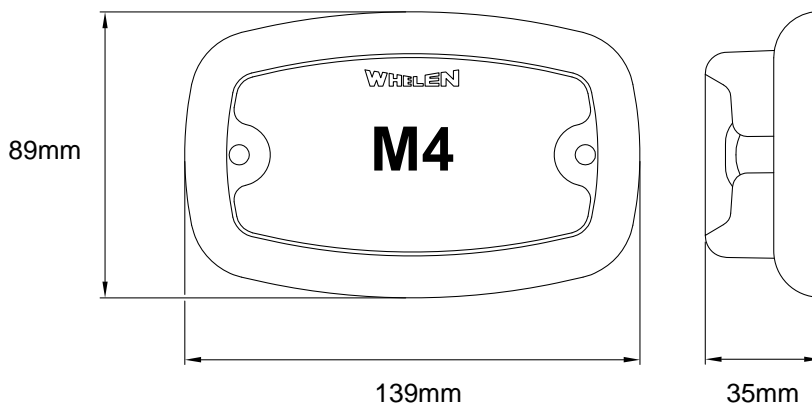
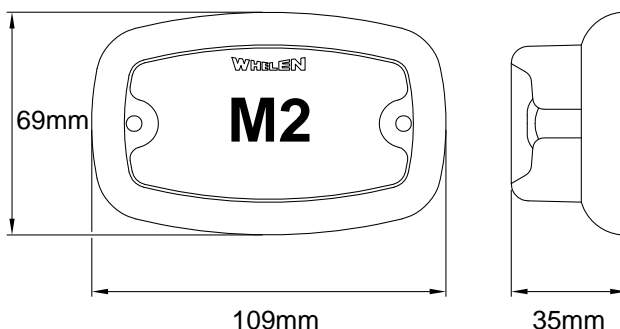
**M2B-R65B2:** 12V - M2 Series\*  
**M2B24-R65B2:** 24V - M2 Series\*  
**M4B-R65B2:** 12V - M4 Series  
**M4B24-R65B2:** 24V - M4 Series  
**M6B-R65B2:** 12V - M6 Series  
**M6B24-R65B2:** 24V - M6 Series  
**M7B-R65B2:** 12V - M7 Series  
**M7B24-R65B2:** 24V - M7 Series

#### Red with Red Lens

**M4R24-R65R2:** 24V - M4 Series

\* Set includes two lighthead to meet R65 approval. Lighthead are available individually on request (see diagram below).

### Dimensions:



M Series side profile



Compatible with a variety of different mounting options.

See **Page 30** for more details.

# SIREN SYSTEMS/SPEAKERS

## CenCom Sapphire™ UK



Manufactured by Whelen® exclusively for Woodway Engineering, the brand new CenCom Sapphire™ UK is the all-in-one solution you have been waiting for. Catered specifically to the needs of our European customers, the CenCom Sapphire™ is the ultimate siren and light control unit, offering an abundance of features alongside the reliability you have come to expect from Woodway.

No more secondary boxes and mountains of wire to contend with, saving on both time and installation costs. Just plug and go!



### Fully Programmable:

Configuration programming is easier than ever with newly redesigned CenCom Sapphire software. CenCom Sapphire™ UK retains the highly regarded simplicity of previous Whelen® CenCom software, with new features and added flexibility; including the ability to configure your Whelen® WeCan® lightbar!

### Siren Testing Volume Reduction Unit:

The CenCom Sapphire™ UK comes with an STVRU offering enhanced convenience during installation.

### Integrated WeCan® serial port:

CenCom Sapphire UK adds an integrated WeCan® serial port for connecting your Whelen® WeCan® series lightbar directly to the unit.

### Built-in Siren - 200w Speaker Compatibility:

The CenCom Sapphire™ UK can control either a single 100 watt or 2 x 100 watt siren speaker drivers.

### Run Lock:

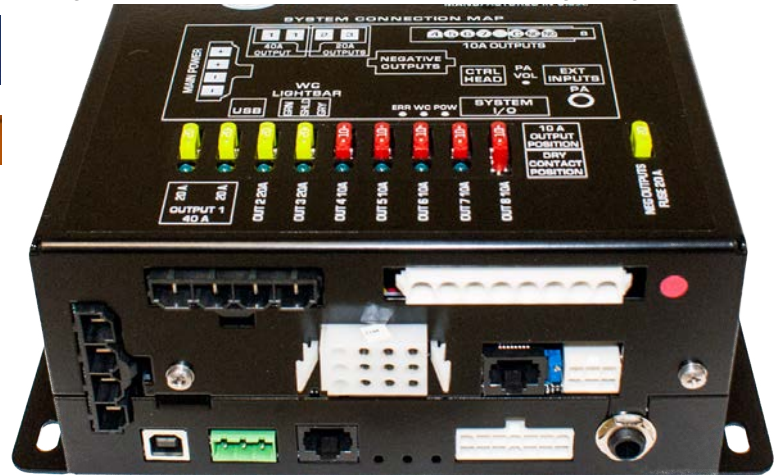
There is a built-in traditional Run Lock, which can be set to run unlimitedly or up to 4 hours and has conditions linked with the handbrake and footbrake.

### Woodway Switch Panel Connectivity:

The CenCom Sapphire™ UK connects directly with the OPTI-LINK, OPTI-DIN and MICRO-LINK switch panels without needing to use any interface or receiver modules. All switch panels retain existing functionality including external 999 activation, PA and Keypad illumination. New Feature: when paired with the OPTI-LINK switch panel, the 999 button can now control its own outlets.

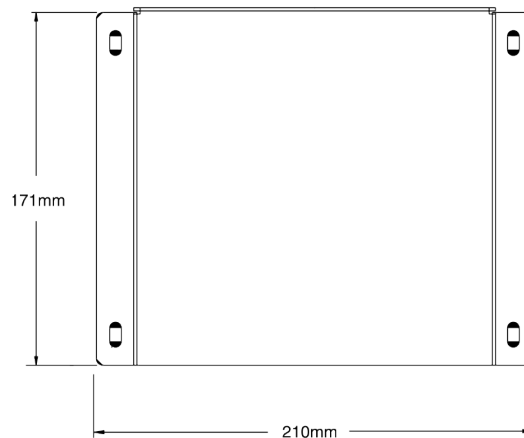


100% Compatible with Woodway Switch Panels

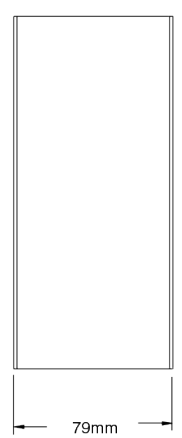


### Dimensions:

#### Front

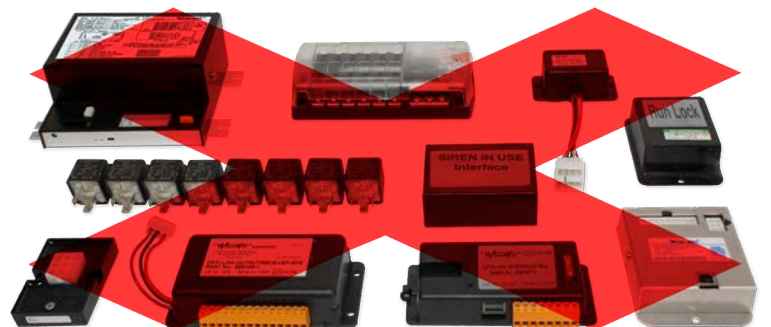


#### Side



The CenCom is an all-in-one unit that significantly reduces the amount of parts needed for installation.

Time to say goodbye to the Keypad Interface Module, Output/Receiver Module, Lightbar Interface Box, Siren Amplifier, Rear Fog Flasher, Siren-In-Use Interface, STVRU, Grille Blues LED Relay, Tailgate Switch Relay, Delay Timer, Microphone Extension Cable and Run Lock.



### Additional Features:

- Indicator LEDs have been added to each output creating a simple way to troubleshoot shorted or broken connections in your vehicle's wiring.
- Fuses and connections are easily accessible without having to use any tools or remove any covers. All high-current outputs are fused for your convenience.
- New, heavy-duty power and output connectors can handle rough treatment without damage or accidental disengagement and are easily accessible on the front of the unit.
- Solid-state outputs: one 40-Amp, two 20-Amp, four 10-Amp, and four 250 milliAmp.
- + 8 x 2 Amp Negative Outputs.
- Relay output: one 10-Amp Dry Contact Relay.
- Lightbar: 1 Phoenix style connector for a WeCan® series lightbar.
- Inputs: 3 negative, 3 positive and 4 that are selectable (either negative or positive).
- Easy to configure using the included CenCom Sapphire™ UK Windows application.
- Configured programs may be extracted, modified and stored for ease of service.
- A USB port on the unit provides easy access for programming. The control head does not need to be connected for programming.
- The rugged, aluminium-housed unit is field-serviceable with easy access to fuses and connections.
- Variable delay shutdown timer up to 4 hours after the ignition has been turned off, this can be used to keep sockets or radios alive for this period.
- Load Management feature where you can select a voltage between 10V and 12V (in increments of 0.25V) to load shed circuits.
- Includes all connectors.
- Rugged CAT-5 cable connects the control head to the unit.
- Five-year Heavy-Duty Professional warranty.

### In the box:



1. 1 x CenCom Sapphire UK (not pictured)
2. 1 x RJ45 blanking plug/dust Cap
3. 1 x Software CD
4. 1 x CAT5e extension cable
5. 1 x 3 way WeCan® screw terminal plug
6. 2 x 4 way Molex Mini-Fit Senior black female plug (Main Power)
7. 1 x 14 way Tyco Mini Universal Mate N Lok Female Plug
8. 1 x 12 way Tyco Commercial Mate N Lok Male Plug
9. 1 x 8 way Tyco Universal Mate N Lok Female plug
10. 1 x 6 way Tyco Mini Universal Mate N Lok female plug
11. Male and female connectors

### Technical Specifications

#### Electrical and physical data:

**Output Voltage:** @15V @11 Ω, 24V Maximum

**Speaker Impedance:** 5.5 Ω Minimum

**Input Voltage:** 12.5V +/- 20% (negative ground only)

**Main Input Current:** 80 Amps Max.

**Standby Current:** 100mA

**Operating Temp:** -30C to +60C

**Storage Temp:** -40C to +70C

**Humidity:** 99% (non condensing)

#### Siren/Amp module:

**Wail:** 725 to 1600 Hz 12 cycles/min.

**Yelp:** 725 to 1600 Hz 180 cycles/min.

**Piercer:** 725 to 1600 Hz 800 cycles/min.

**Hi/Low:** 550 to 650 Hz 60 cycles/min.

**Airhorn:** Composite Constant

**Audio Bandwidth:** @25 Watts, 300 to 10000 Hz +/- 3db

**Distortion:** @25 Watts @1KHz, 1% Maximum

#### Outputs (main outlets are protected by mini blade fuses):

- 1 x 40 Amp split circuit (Positive switching)
- 2 x 20 Amp circuits (Positive switching)
- 4 x 10 Amp circuits (Positive switching)
- 1 x 10 Amp dry contact circuit
- 4 x 250 milliAmp circuits (Positive switching)
- 8 x 2 Amp circuits (Negative switching)

#### 10 Inputs:

- 4 x Positive or Negative inputs (selectable)
- 3 x Positive inputs
- 3 x Negative inputs

Inputs can be Latching, Momentary, Security timed (\*see below) or a Variable timer 100ms to 10 minutes.

\* There is an 8 second security timer, activated with a double pulse for access to gun boxes or a safe box for documents, etc.

### Model Numbers:

#### CenCom Unit:

**CENCOM-UK:** CenCom Sapphire UK - Siren-I/O Unit UK Spec

**CENCOM-UKH:** CenCom Sapphire UK - Siren-I/O Unit UK Spec with Headlamp Flasher

#### Switch Panels (connecting cable included):

**ADDMLINKCC:** MICRO-LINK, 12V

**ADDODINCC:** OPTI-DIN, 12V

**ADDOLINKCC:** OPTI-LINK, 12V

**CEN<sup>TM</sup>**  
**COM**  
**SAPPHIRE UK**

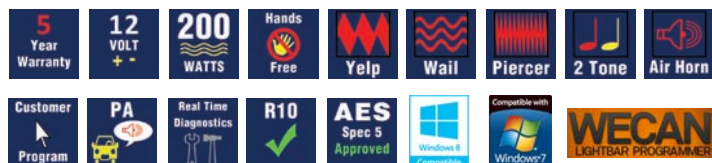


# SIREN SYSTEMS/SPEAKERS

## CenCom Sapphire™



CenCom Sapphire delivers what you've been asking for in a sleek, new, tougher, more advanced design.



### CenCom Sapphire adds an integrated WeCan® serial port:

For connecting your Whelen WeCan series lightbar directly to the Amplifier Control Module. No more bulky wires and secondary boxes to contend with. Just plug in and go!

### Indicator LEDs have been added to each output:

Creating a simple way to troubleshoot shorted or broken connections in your vehicle's wiring.

### Fuses and connections are easily accessible without having to use any tools or remove any covers:

All high current outputs are fused for your convenience.

### New, heavy-duty power and output connectors:

Can handle rough treatment without damage or accidental disengagement and are easily accessible on the front face of the Amplifier Control Module.

### Configuration programming is easier than ever with newly redesigned CenCom Sapphire software:

CenCom Sapphire retains the highly regarded simplicity of our previous CenCom software, with new features and added flexibility; including the ability to configure your Whelen WeCan® lightbar!



# CEN<sup>TM</sup>COM SAPHIRE

### Models Available (see next page for full description):



**CCSRN3  
CCSRNTA3  
CCSRN3A  
CCSRNT3A**



**CCSRN36  
CCSRNT36  
CCSRN3F  
CCSRNT3F**



**CCSRN35  
CCSRNT35**



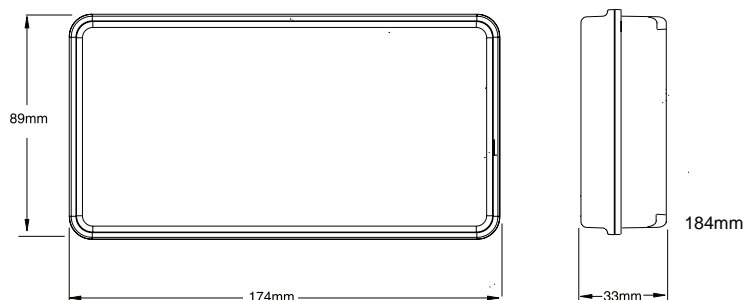
**Microphone**

### Additional Features:

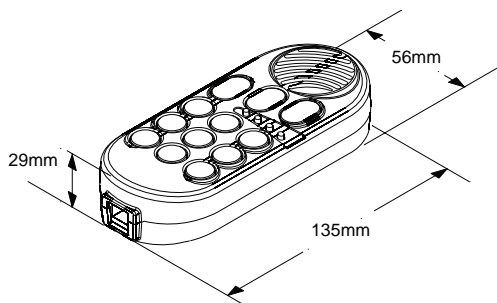
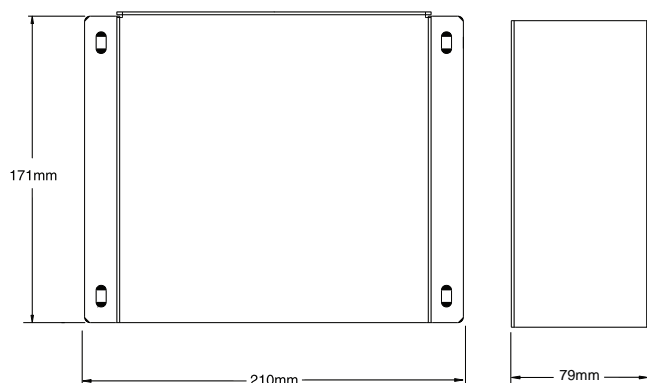
- Control your warning lights, siren and Traffic Advisor™ functions from a single keypad.
- Many models to choose from for compatibility with Traffic Advisors **CCSRN**: operates Whelen 2-wire Traffic Advisors that do not require external controls. **CCSRNT**: operates Traffic Advisors that do require external controls.
- Solid-state outputs: one 40-Amp, two 20-Amp, four 10-Amp, and four 250-milliAmp.
- Relay output: one 10-Amp Dry Contact Relay.
- Lightbar: 1 Phoenix style connector for a WeCan Series lightbar.
- Integrated Traffic Advisor connection on CCSRNT Series.
- 4 positive or ground-activated inputs, including a horn ring input.
- NEW models include input expansion module for additional 8 positive or negative inputs (12 total).
- Easy to configure using the included CenCom Sapphire Windows application.
- Configured programs may be extracted, modified and stored for ease of service and reuse.
- A USB port on the Amplifier Control Module provides easy access for programming. The control head need not be connected for programming.
- Each button is individually customisable for numerous button types (press on/press off, momentary, etc).
- Control head backlighting can be easily turned on or off for high visibility on patrol or blacked out for discrete night operations.
- Brightly backlit push-buttons include standard function labels to choose from.
- Rugged, aluminum-housed Amplifier Control Module is field-serviceable with easy access to fuses and connections.
- Operates one or two 100-Watt siren speakers.
- PA microphone with plug-in connector and 20' microphone cable are included (except with hand held models).
- Includes all pigtails and connectors.
- Rugged CAT-5 cable connects the control head to the Amplifier Control Module.

### Dimensions:

#### Control Head Dimensions



#### Siren Amplifier Dimensions



### Model Numbers:

**CCSRN3:** 3-Position slide switch and 18 push-button control head with Amplifier Control Module with pigtails, microphone and CCMICX20 extension cable.

**CCSRN3A:** Same as CCSRN3, except with 8 (positive or negative) input expansion module, 12 total inputs.

**CCSRN35:** 3-Position progressive push-button switches and 9 push-button hand held control head with amplifier module with pigtails.

**CCSRN36:** 3 section control head and 8 push-button, 4-position slide switch and a 7-position rotary knob. Manual, airhorn plus 3 Traffic Advisor™ switches.

**CCSRN3F:** Same as CCSRN36, except with 8 (positive or negative) input expansion module, 12 total inputs.

**CCSRNTA3:** Same as CCSRN3, with Traffic Advisor module.

**CCSRNT3A:** Same as CCSRNTA3, except with 8 (positive or negative) input expansion module, 12 total inputs.

**CCSRNT35:** Same as CCSRN35, with Traffic Advisor module.

**CCSRNT36:** Same as CCSRN36, with Traffic Advisor module.

**CCSRNT3F:** Same as CCSRNT36, except with 8 (positive or negative) input expansion module, 12 total inputs.

### Additional Options

**CCTRIM:** Trim ring for semi-flush mounting of control head.

### Technical Specifications

#### Electrical and physical data:

**Input Voltage:** 12.5VDC +/- 20% (negative ground only)

**Main Input Current:** 80 Amps Max.

**Standby Current:** 100NA

**Operating Temp:** -30C to +60C

**Storage Temp:** -40C to +70C

**Humidity:** 99% (Noncondensing)

#### Siren/Amp module:

**Wail:** 725 to 1600 Hz 12 cycles/min.

**Yelp:** 725 to 1600 Hz 180 cycles/min.

**Piercer:** 725 to 1600 Hz 800 cycles/min.

**Hi/Low:** 550 to 650 Hz 60 cycles/min.

**Airhorn:** Composite Constant

**Audio Bandwidth:** @25 Watts, 300 to 10000 Hz +/- 3db

**Distortion:** @25 Watts @1KHz, 1% Maximum

#### Outlet Current

**Outlet #1:** 40 Amps Max. (fused)

**Outlet #2:** 20 Amps Max. (fused)

**Outlet #3:** 20 Amps Max. (fused)

Note: Total of Outlets 1, 2, 3 not to exceed 50 A.

**Outlet #4:** 10 Amps Max. (fused)

**Outlet #5:** 10 Amps Max. (fused)

**Outlet #6:** 10 Amps Max. (fused)

**Outlet #7:** 10 Amps Max. (fused)

**Outlet #8:** 10 Amps Max. (fused)

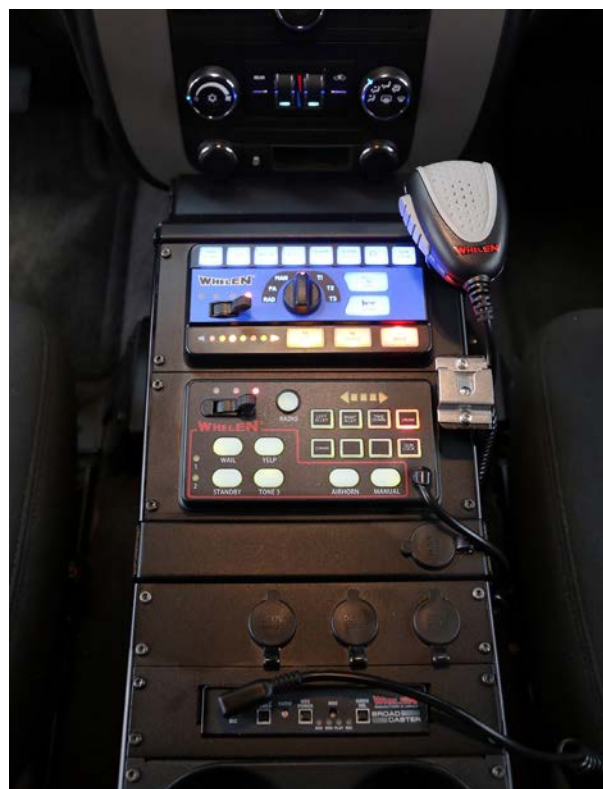
Note: Total of Outlets 4 – 8 not to exceed 50 A

**Outlet #9:** 0.25 Amps Max. (fused)

**Outlet #10:** 0.25 Amps Max. (fused)

**Outlet #11:** 0.25 Amps Max. (fused)

**Outlet #12 (horn relay):** 0.25 Amps Max. (fused)



# SIREN SYSTEMS/SPEAKERS



## Euro 1

Ultra compact remote mounted amplifier with 16 warning tones, Hands Free, and horn ring override capability. Scan-Lock™ tone selection and 4 modes of operation. One of the most advanced remote mounted Whelen® amplifiers to date.



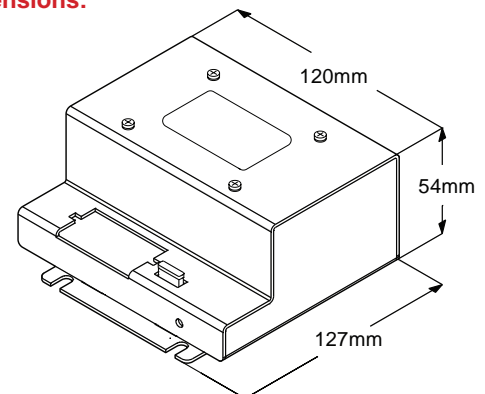
- Ultra compact design makes the Euro-UK ideal for both overt and covert applications.
- Power to drive up to two x 100 Watt, 11Ω speakers.
- 16 primary siren tones available WAIL, YELP, HI/LO, PIERCER, MECHANICAL, TRI-TONE, AIR HORN-HI/LO, ALT. WAIL, ALT. YELP, H-WAIL, WAIL-378, YELP-225, MARTIN TONE, H-HI/LO, COMPOSITE TRI-TONE, PULSE YELP/AIR HORN. See page 33 for a full list of siren tones.
- Hands Free operation allows the driver to turn the siren ON, activate the YELP, WAIL or TWO TONE/PIERCER tones and turn the siren OFF from the vehicle's road horn button. Hands Free control allows the driver to control the siren system without taking their eyes off the road and hands off the steering wheel.
- Conveniently accessible Scan-Lock™ button allows customer tone programming.
- 5 modes of operation. LED lights indicate the mode of operation that the siren has been set to.
- Output open/short circuit protection.
- Harmonically rich composite AIR HORN tones.

### Technical Specifications:

- **Input Voltage:** 12V
- **Polarity:** Negative ground
- **Polarity Protection:** Diode/Fuse
- **Output Load:** Two 11Ω speakers
- **Input Current (off):** 0 mA
- **Input Current (siren on):** 15 Amps (max)
- **Standby Current:** 10 mA (max)
- **Fuse:** 20 Amp
- **Fuse Mounting:** Spade type, PC board
- **Output Short Protection:** Fuse
- **Horn/Ring Control:** +12V or ground
- **Weight:** 2.4 lbs/1.2 kg
- **Operating Temperature:** -30°C to +60°C
- **Operating Humidity:** 0-99% Non-condensing
- **Connector:** One 16 position input connect



### Dimensions:



**Model Number:**  
**EURO-UK: 12V Remote Siren Amplifier**

## Beta™

Remote mounted amplifier with Public Address and Hands Free operation, multiple warning tones and horn ring override capability. BETA Sirens allow easy set-up and configuration to meet local requirement.



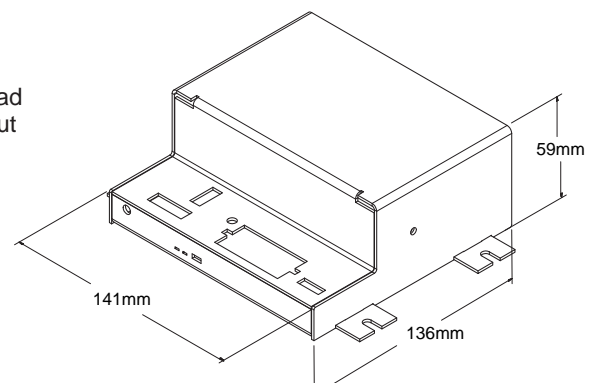
- Lower profile design which exhibits a smaller footprint in comparison to 2013 model
- 200W (2 x 100W) speaker compatibility.
- Multiple tone selection via Scan-Lock™.
- Siren in use feature.
- Backwards compatibility with old BETA as comes with an interconnecting cable
- Public Address and five siren tones available. Use up to four tones: WAIL, YELP, PIERCER or HI/LO and AIR HORN.
- Hands Free operation allows the driver to turn the siren ON, activate the YELP, WAIL or TWO TONE/PIERCER tones and turn the siren OFF from the vehicle's road horn button. Hands Free control allows the driver to control the siren system without taking his eyes off the road and hands off the steering wheel.
- Conveniently accessible dip switches on remote amplifier allows instant configuration of popular operating features.
- See page 33 for a full list of siren tones.

### Model Numbers:

**BETA112E:** 200W European Model Update 2014 - 12V  
**BETA112R:** 200W Standard Model Update 2014 - 12V  
**BETA1124R:** 200W Standard Model Update 2014 - 24V



### Dimensions:



An economical combination 30W amplifier and speaker. The new heavy-duty WSSC30 siren features Hands Free operation, Scan-Lock™ multiple warning tones and AIR HORN override capability. Designed for ease of installation into Emergency Service Vehicles that have limited space or which do not require a 100W siren system such as motorcycles or occasionally used lease vehicles. Where a higher power output is desirable, two WSSC30 sirens may be synchronised together using an optional WSSC30HK harness kit.



- Heavy-duty, compact rugged housing with water resistant connectors.
- Hands Free operation allows the driver to turn the siren ON, activate various siren tones and turn the siren OFF from the vehicles road horn button. Hands Free control allows the driver to control the siren system without taking their eyes off the road and hands off the steering wheel.
- Scan-Lock™ siren tones available: WAIL, YELP, PIERCER, HI/LOW, Y249, WARBLE, WOOP, TRI-TONE, ALT. WAIL and MARTIN TONE. See page 33 for a full list of siren tones.
- Two sirens can be synchronised together using an optional WSSC30HK harness.
- Supplied with 2 way "L" mounting bracket.
- Requires 2 customer supplied switches.
- Maximum current draw 2 Amps@15VDC.

4 modes of operation selected by DIP switches at the rear of the unit:

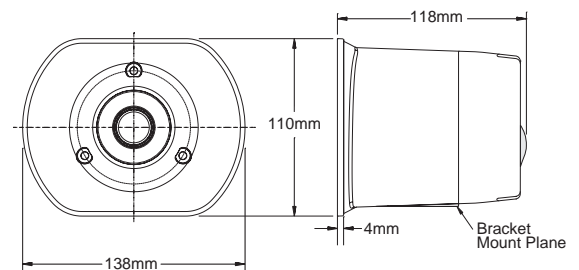
- Instant HF 2 cycle with AIR HORN override. Default cycle tones WAIL and YELP.
- Instant HF 3 cycle with AIR HORN override. Default cycle tones WAIL, YELP and PIERCER.
- Tone 1 and tone 2 selected by individual latching switches. Tone 1 has priority over tone 2 if both switches are activated. Default tones WAIL and YELP.
- Tone 1 with AIR HORN override. Default tone 1 WAIL.

### Model Number:

**WSSC30-Euro:** 30 Watt Siren and Speaker Combination

**WSSPA30-Euro:** Same as WSSC30, Includes Public Address

### Dimensions:



## HHS2200

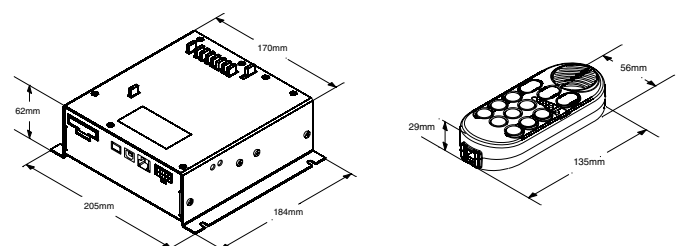
Windows® based program allows full custom setup configuration of each of the 12 buttons to control desired light and siren functions from this compact hand held controller with built-in microphone. The moisture-resistant controller features twelve rubberised, backlit push buttons including progressive three position push button lighting control that mimics typical slide-switch operations. The unit is microprocessor controlled and rated for one or two 100-watt speakers. Compact control is ideal for multiple applications including undercover vehicles and vehicles with limited interior space



- All switch functions are programmed via simple "pick and click, or drag" screens. Windows® based, XP or later operating system required. USB input from PC or laptop makes programming easy.
- Compact hand held Siren/Light control with built-in microphone. Controller is ideal for multiple applications including covert vehicles and vehicles with limited interior space.
- Hands Free operation allows the driver to turn the siren ON, activate the YELP, WAIL or TWO TONE/PIERCER tones and turn the siren OFF from the vehicles road horn button. Hands Free control allows the driver to control the siren system without taking their eyes off the road and hands off the steering wheel.
- WAIL, YELP, PIERCER, AIR HORN and Manual Siren tones preset standard with 37 tones to choose from including mechanical siren tones.
- Twelve illuminated push buttons, programmable to selected outputs.
- Adjustable (preset) microphone and radio repeat volume.
- Nine 10 Amp outputs.
- 1.8m handset cable.
- 6m Interconnect cable.
- See page 33 for a full list of siren tones.



### Dimensions:



### Model Number:

**HHS2200:** Siren Amplifier with Hand-Held Controller, Includes Programming Software

# SIREN SYSTEMS/SPEAKERS



## Unique Siren Tube

With the continued development of new cars and compact engine size, available space under the bonnet is more limited than ever before. The UST has been specifically designed with this in mind utilising minimal space availability.



### Full Unique Siren Tube Kits:

**UST:** Full UST Kit

**UST-ECON:** Full UST Kit (Economy Version)

**UST-MINI:** Full MINI UST Kit

**UST-MINIEC:** Full MINI UST Kit (Economy)

Full UST kits come with the Whelen® SD210 speaker driver, Whelen® rubber tubing and Woodway aluminium flare tube. Economy kits come with both the same driver and the speaker flare, however the tubing is not reinforced or manufactured directly by Whelen®.



Standard UST



MINI UST

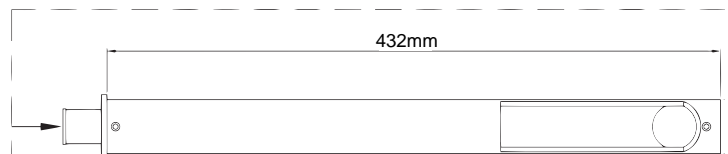
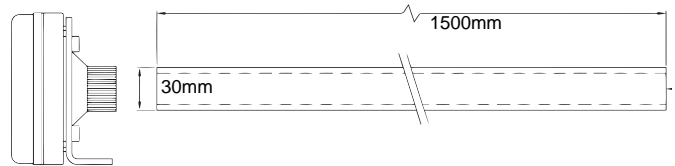
### Partial Unique Siren Tube Kits:

**UST-KIT:** Partial Kit (no speaker driver)

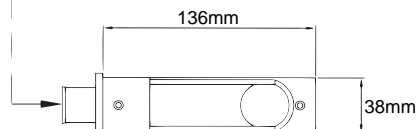
**UST-KIT2:** Partial Kit (no rubber tubing)



### Dimensions



STANDARD UST



MINI UST

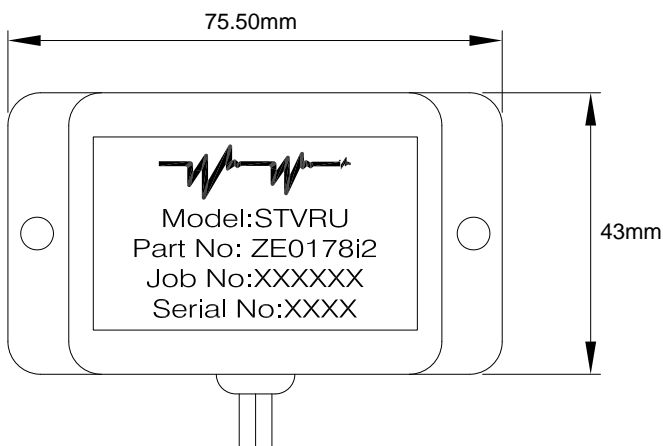
## STVRU

Designed for use in confined situations e.g. workshops when testing sirens. When fitted to a Woodway siren system, the unit reduces the volume of the siren.

### Model Number:

**STVRUI2:** Siren Testing Volume Reduction Unit (12V/24V)

### Dimensions:



The Perimeter Enhancement Light can be used in a wide range of applications such as locker space illumination, walkways, pick-up vehicle beds and where white illumination is needed. Super-LED® lighthead provides reliable, bright light which will stand up to harsh environments and vibration.



- Downward projected, reliable, ground lighting for the perimeter of vehicles.
- Six diode Super-LED® module in a rugged polycarbonate housing; available in chrome or black.
- Steady-burn, white light is projected downward at a 40° angle to illuminate a large area.
- Mounts to vertical surfaces and may be mounted inverted.
- Supplied with 150mm pigtail connector, customer supplied switching required.
- Moulded rubber gasket protects body panels.
- Five-year HDP® Heavy-Duty Professional warranty.

### Model Numbers:

#### 12V:

**PELCC:** Chrome Flange  
**PELCB:** Black Flange  
**PELCW:** White Flange  
**PELCY:** Ambulance Yellow Flange

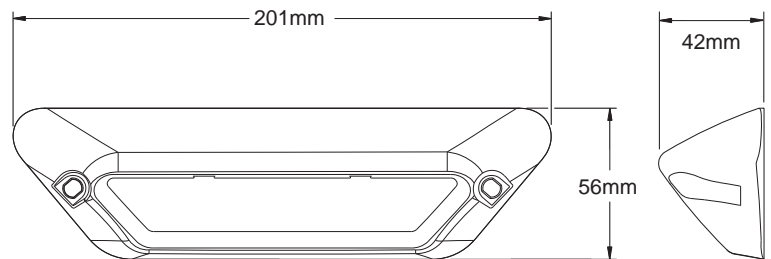
#### 24V:

**PELCC4:** Chrome Flange  
**PELCY4:** Ambulance Yellow Flange  
**PELCB4:** Black Flange  
**PELCW4:** White Flange



### PELCY

#### Dimensions:



### Adjustable Window PODs - ION/Vertex Series

Screen mounted POD. Enables adjustment which ensures the lighthead is always facing in the direction required. Compatible with a variety of different lighthead.

### Adjustable Screen POD

**ASPB26:** Standard Finish - Compatible with ION Series

**VSP360C:** Carbon Finish - Compatible with Vertex 360 lighthead

**VSPD26CL:** Carbon Finish - 26 degree - Left POD - Compatible with Vertex Directional (with shield)

**VSPD26CR:** Carbon Finish - 26 degree - Right POD - Compatible with Vertex Directional (with shield)

**VSPD60CL:** Carbon Finish - 60 degree - Left POD - Compatible with Vertex Directional (with shield)

**VSPD60CR:** Carbon Finish - 60 degree - Right POD - Compatible with Vertex Directional (with shield)

**Please note:** Vertex Series Directional and 360 degree variants are available separately and do not meet ECE-R65 approval.

### High Gradient Window POD


**ASBPC68:** Carbon Finish - Compatible with ION Series

**ASPB68:** Carbon Finish - Compatible with ION Series



### ION™ Spacer - ION Series

Alters the angle of the lighthead by a set amount, enabling the light to focus on a different area. Compatible with ION™ Universal Mount and ION V Series.

**ZM5715:** Spacer 78° 

**ZM5716:** Spacer 71°



### Swivel Mount Bracket - ION Series

Swivel Mount Bracket for ION™ Series. Compatible with ION™ Universal Mount and ION™ V Series.

**IONK1B:** Swivel Mount Bracket



### Pedestal Mount - ION Series

ION™ Pedestal Mount Kit in Black. Compatible with ION™ Universal Mount and ION™ V Series.

**IONPEDB:** ION™ Pedestal Mount



### Flange - M-Series

Flange for use with M Series.

**M4FC:** Chrome Flange - M4

**M6FC:** Chrome Flange - M6

**M7FC:** Chrome Flange - M7

**M4FB:** Black Flange - M4

**M6FB:** Black Flange - M6

**M7FB:** Black Flange - M7



### Flange - M-Series

15° Flange for use with M-Series

**M6P15C:** 15° Angled Flange, Chrome

**M6P15B:** 15° Angled Flange, Black

**Please note:** Lighthead pictured is not an R65 product. Flange is compatible with R65 lighthead



### Swivel Mounting Bracket

Aluminium Swivel Mounting Bracket for LINZ6™ series. Compatible with the LINZ6™ series of lighthead.

**RBKT4:** Swivel Mounting Bracket



### Rubber Grommet

Rubber Grommet Mount Adaptor. Provides flush fitting appearance and simple installation. Compatible with LINZ6™ series of lighthead.

**ZM5544:** Rubber Grommet



### Angle Mounting Bracket

Mounting Bracket for LINZ6™ series. Compatible with the LINZ6™ series of lighthead.

**RBKT1:** Angle Mounting Bracket



### Chrome Flange

Deep, chrome plated mounting flange kit. Compatible with LINZ6™ series of lighthead.

**LINZ6FC:** Chrome Mounting Kit





### MICRO-LINK Switch Panel

The MICRO-LINK is ideal for covert installations where the switch panel needs to be hidden from view. Six individual switches and a triple function '999', 'ARRIVAL' and 'RESET' switch provide an enhanced control interface between the driver and the vehicle's emergency equipment. Easy to program by the customer, switches may be set to either latching or momentary.

**MLK1HCR:** Control System MICRO-LINK (Full Kit)

**ZE0187:** MICRO-LINK Switch Panel

**ADDMLINKCC:** MICRO-LINK with connecting cable for use with CenCom Sapphire™ UK



### OPTI-LINK Switch Panel

Easy to program by the customer, switches may be set to either latching or momentary. The large switches and flexible legend design allows customers to individually configure the control panel to meet their specific needs.

The OPTI-LINK is designed to allow the operator to quickly activate equipment associated with emergency response situations

**CLKSYS5-12:** Control System OPTI-LINK (Full Kit)

**ZE0175:** OPTI-LINK Switch Panel

**ADDOLINKCC:** OPTI-LINK with connecting cable for use with CenCom Sapphire™ UK



### OPTI-DIN Switch Panel

The new slim profile allows the switch panel head to be mounted either in a DIN housing, flat panel or as a conventional dashboard fascia mounted panel. Whichever method is used, the built-in PA microphone may still be accessed.

**OPTIDIN-I2:** Control System OPTI-DIN (Full Kit)

**ZE0224:** OPTI-DIN Switch Panel

**ADDODINCC:** OPTI-DIN with connecting cable for use with CenCom Sapphire™ UK



## LED/Headlight Flashers

### SSFPOS-UK

- 100% Solid-State flasher with encapsulated electronics.
- 2 outlet, 160 Watt per outlet.
- For positive switching headlights.
- 12V, 12.5 Amps output.
- High beam override and nighttime inhibit.
- Scan-Lock provides seven flash patterns which can be accessed by a momentary switch.

**SSFPOS-UK:** Solid State Flasher



### ULF22

- Two outlet, two channel LED flasher.
- 5 Scan-Lock flash patterns with Phase 1 and Phase 2 for alternating or simultaneously flashing LED headlights plus steady-burn
- Hi/Low intensity control.
- Fully encapsulated for vibration and moisture resistance.

**ULF22:** LED Flasher

### ULF28

- Eight outlet, two channel LED flasher.
- 9 Scan-Lock flash patterns. Four patterns have Phase 1 and Phase 2 for alternating or simultaneously flashing LED headlights plus steady-burn.
- Sync facility to synchronise with other flashers.
- Fully encapsulated for vibration and moisture resistance.

**ULF28:** LED Flasher



### HF1000/01

- HF1000/HF1001 provides two alternating or simultaneous positive outputs to flash the vehicle headlights. Nighttime inhibit. 70 flashes per minute per outlet.

**HF1000:** 12V Flasher

**HF1001:** 24V Flasher



# COMING SOON

## Freedom™ IV



Whelen's new Freedom IV Series features advanced Linear Super-LED optics, all new two level technology, and 360° of contiguous light. All Freedom IV Series lightbars are designed to provide heavy-duty, long life operation with low current draw and to stand rough treatment and long hours of use.



- Linear Super-LED technology
- Advanced Thermal Design reduces the stress on LEDs during extended dwell time
- Centre dividers with LIM (Liquid Injection Molded) seals protect internal components from water infiltration
- Each model has one or two sealing points, assuring lightbar integrity in all weather conditions
- Hard-coated lenses minimise environmental damage from the sun, salt, and road chemicals
- 100% solid-state electronics
- Point to point wiring between the I/O board and each lighthouse allows for easy reconfiguration
- Newly designed corner modules blend light together for 360° of contiguous light
- Whelen's Collimator™ patented optic design provides unbeaten light output
- WeCan lightbar models are programmable with unlimited flash patterns
- Add up to 16 optional Linear Super-LED directional modules
- 17 foot passenger side cable
- Five year HDP® Heavy-Duty Professional warranty





1. Wail 750\_1570\_12cm
2. Yelp 750\_1570\_158cm
3. Hilo 550\_650
4. Airhorn-Hi
5. Airhorn-Lo
6. Piercer 750\_1570\_800cm
7. Mechanical simulated
8. Ambulance - Netherlands and Holland
9. Airhorn Hilo 30cm
10. Alt Wail
11. Alt Yelp
12. H-Wail
13. Wail 600\_1200\_16cm
14. Yelp 600\_1200\_267cm
15. Martin tone
16. H\_hilo\_composit\_46cm
17. Composite\_tritone\_\_17cm

18. Pulsed yelp/airhorn
19. Triton 475\_635\_800\_45cm
20. Standard
21. Denmark
22. Sweden
23. Police (Austria)
24. Ambulance (Austria)
25. Canarias
26. Police (Netherlands)
27. Police (Holland)
28. Guardia Urbana
29. Deutschland
30. Alemania
31. Gendarmerie(France)
32. Police (France)
33. Fire (France)
34. UMH (France)

35. DIN 14610
36. Fire/Ambulance (Italy)
37. Police (Italy)
38. Ambulance
39. Ambulance (France)
40. Ambulance (Netherlands)
41. Composite\_hilo\_375\_500\_46cm
42. Composite\_hilo\_375\_500\_92cm
43. Police (Netherlands)
44. Fire (Austria)
45. Rescue (Austria)
46. Police (Austria)
47. Pistensignal
48. Fire-Brigade (GB).
49. Yelp 700\_1200\_162cm

## HS2200



1. Airhorn
2. Mech Man Coast
3. Manual Stop
4. Manual Coast
5. Airhorn Hi/Low
6. Mech Man Stop
7. Hi/Low
8. Yelp
9. Wail
10. Radio
11. Mech Wail
12. Alternate Yelp
13. Yelp 249\*
14. Alternate Wail\*
15. Piercer
16. PA
17. Comp Yelp

18. Woop
19. Comp Wail
20. Alarm
21. Warning
22. Wail/Yelp/Piercer
23. Pulsed Piercer
24. Pulsed Airhorn
25. Comp Piercer
26. Warble
27. 800 HZ
28. Wail/Yelp
29. Wail 850-1700 5.25s
30. Hi/Low SPO
31. Martin Hi/Low
32. Hi/Low GEN
33. Comp Hi/Low 2800/2000 List
34. Tritone

35. DIN Hi/Low
36. 392 AVF
37. Wail 378p3
38. Yelp 225
39. Hi/Low 510-1150
40. Hi/Low 466p
41. FRA AF
42. Hi/Low 500-660
43. Hi/Low 610-760
44. Comp Hi/Low 1800/1400 List
45. Hi/Low POL
46. Composite Tritone
47. Wail 850-1700 4s
48. Hi/Low UMH

## Temporary Mounting Guide

### Magnetic Mounting:

This is the most commonly used temporary attachment method. It relies on the magnetic adhesion between the vehicle roof surface and a magnet (or multiple magnets) fixed to the beacon base. Neoprene covers may be placed over the magnet to prevent direct metal to roof contact which is likely to damage the vehicle paintwork, however, the use of a neoprene magnet cover will reduce the magnetic adhesion force between the magnet and the vehicle roof. Whelen® magnetic beacons are supplied as standard with a single central mounted magnet with no cover. Under normal operating conditions this will be suitable for low speed and static use. Where it is intended to use a beacon with this method of temporary fixing whilst the vehicle is in motion, we recommend the 3 point magnetic fixing detailed below, which is available for the L32™ low profile beacon or the 4 point attachment for the Responder and 6POD mini lightbars. The 6POD also features automatic roof profile adjustment which allows the magnets to adjust to various roof profiles maximising magnetic adhesion.

\* Please refer to the warning notice below for more Information regarding magnetic attachment of beacons.

### Magnetic/Vacuum Mounting:

This is a combination of magnet and rubber suction cup. The magnet pulls the beacon onto the vehicle roof and compresses the rubber suction cup forming a vacuum which provides additional adhesion. This method is less likely to damage the vehicle paintwork. Whelen® magnetic/vacuum beacons\*, are supplied as standard with a single central mounted magnet/vacuum assembly. Under normal operating conditions this will be suitable for low speed and static use. Where it is intended to use a beacon with this method of temporary fixing whilst the vehicle is in motion we recommend the 4 point attachment for the Responder and Justice™ mini lightbars.

\* Please refer to the warning notice below for more Information regarding magnetic attachment of beacons.

### Quick Release:

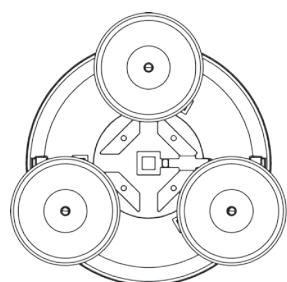
This provides the most secure temporary mounting method that particularly suitable for mini lightbars, and is popular on leased vehicles where good quality lighting is required and damage to the vehicle must be minimised during its use. A vehicle specific 'Thule' roof cross bar must be purchased. This is modified to allow the mini lightbar with the corresponding quick release base to be attached. The method of attachment and removal is simple, in addition a security screw prevents unauthorised removal once fitted. The Thule roof bar may be removed should the vehicle not require temporary lighting at any time or when the vehicle is disposed of.

## \*WARNING\*

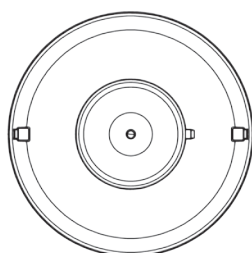
The use of any magnetically or magnetic/vacuum mounted warning device on the outside of a vehicle in motion is not recommended and is at the sole risk and responsibility of the user.

Before using a magnetic or vacuum mount beacon on a moving vehicle the following factors noted below should be considered. Each factor will to varying degrees contribute to the magnetic/vacuum adhesion being lost and the beacon becoming detached from the vehicle posing a risk to other road users.

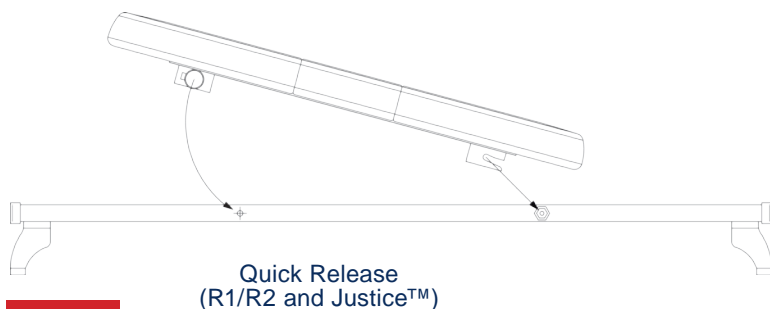
- The higher the speed that the vehicle is travelling, the greater the force that will be exerted on the beacon.
- Headwinds, crosswinds, turbulence from other vehicles and forces exerted when cornering, braking or accelerating may exert sudden unpredictable forces on the beacon.
- The surface condition of the vehicle roof due to the presence of water, ice or road contamination will compromise suction and reduce magnetic adhesion and will act as a lubricant that may cause the beacon to move.
- The use of rubber or neoprene magnet caps to prevent scratching of the vehicle roof will reduce the magnetic adhesion force.
- The thinner the gauge of metal used in the manufacture of the vehicle, the lower the magnetic clamping force available.



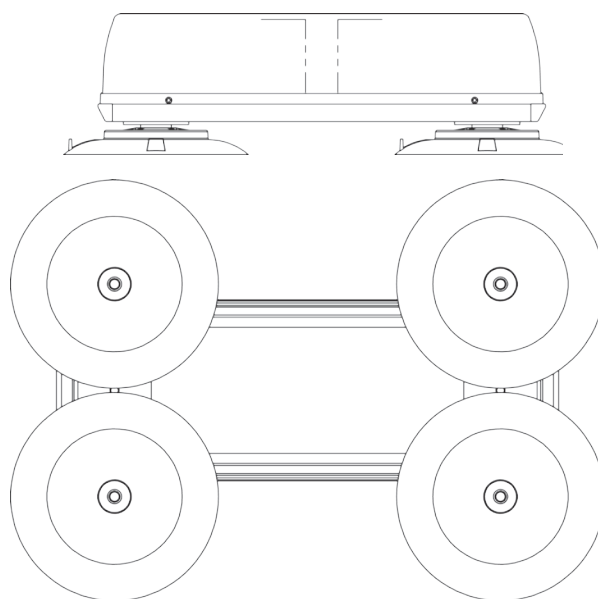
3 Point Magnet Mounting  
(L31/L32 UK Specification)



Single Magnet Mounting  
(Standard Whelen®)



Quick Release  
(R1/R2 and Justice™)



4 Point Magnetic/Vacuum Mounting  
(R1/R2 UK Specification)

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### Contact Details:

**Sales:** [sales@woodwayengineering.com](mailto:sales@woodwayengineering.com)

**Marketing:** [marketingsupport@woodwayengineering.com](mailto:marketingsupport@woodwayengineering.com)

**Accounts Payable:** [payables@woodwayengineering.com](mailto:payables@woodwayengineering.com)

**Accounts Receivable:** [accounts@woodwayengineering.com](mailto:accounts@woodwayengineering.com)

**Business Address:** Woodway Engineering Ltd, Lower Road, Barnacle, Coventry, CV7 9LD

**Telephone:** 02476 841 750

**Fax:** 02476 621 796

### Warranty:

All Woodway/Whelen® products are covered with a comprehensive warranty. For full details on the Warranty, please visit: [www.woodwayengineering.com](http://www.woodwayengineering.com)

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Tel: +44 (0) 2476 841750  
Fax: +44 (0) 2476 621796  
Email: [sales@woodwayengineering.com](mailto:sales@woodwayengineering.com)  
Web: [www.woodwayengineering.com](http://www.woodwayengineering.com)

Woodway Engineering LTD,  
Lower Road, Barnacle, Coventry  
Warwickshire, CV7 9LD  
England

