



# Mobile Equipment Safety

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**NOTE:** These products are available to customers operating east of the Mississippi River in the United States

# Mobile Equipment Safety

## Audible Warning



### MF Series

### Multi-Frequency Back-up Alarm



EA7070



EA5050



EA6100

The Preco Multi-Frequency back-up alarm provides a safe warning signal for those in the danger zone of backing vehicles while minimizing disturbance to work site neighbors. This alarm operates by emitting sound at multiple frequencies attenuated above 4000Hz so that the sound is perceived to dissipate more quickly than a conventional pure-tone alarm.

#### Features

- Universal mounting bracket
- Shh-shh multi-frequency
- SAE J994 Type F & B, AMECA, CE, R10
- ECCO Life - Vehicle Life Warranty
- Sealed in epoxy for protection against dust, moisture, and vibration
- Dim (DxWxH): 3.2x7.0x4.0" (81x178x102mm)
- Weight: 2.5 lbs (1.13 kg)

**Applications:** for con ned or densely populated work areas where noise pollution needs to be minimized

| Part No. | Type       | Approval            | Warranty     | Loudness (Db) | Voltage | Amps (12V) |
|----------|------------|---------------------|--------------|---------------|---------|------------|
| MF102    | Fixed      | SAE Type F, CE, R10 | Vehicle Life | 102 Db        | 12-24V  | 0.6A       |
| MF107    | Fixed      | SAE Type B, CE, R10 | Vehicle Life | 107 Db        | 12-24V  | 0.8A       |
| EA7070   | Fixed      | SAE Type B, CE, R10 | ECCO Life    | 107 Db        | 12-24V  | 0.8A       |
| EA7020   | Fixed      | SAE Type F, CE, R10 | ECCO Life    | 102 Db        | 12-24V  | 0.6A       |
| EA9070   | Adjustable | SAE Type F, CE, R10 | ECCO Life    | 87-107 Db     | 12-24V  | 0.9A       |
| EA5050   | Fixed      | SAE Type D, CE, R10 | 2 Years      | 87 Db         | 12-24V  | 0.34A      |
| EA5200   | Fixed      | SAE Type C, CE, R10 | 2 Years      | 97 Db         | 12-24V  | 1.0A       |
| EA5920   | Fixed      | SAE Type F, CE, R10 | 2 Years      | 92 Db         | 12-24V  | 0.5A       |
| EA6100   | Fixed      | SAE Type C, CE, R10 | 2 Years      | 97 Db         | 12-24V  | 0.7A       |

### Preco Self-Adjustable Alarms

#### Preco Self-Adjustable Alarms



| Product | Type                           | Loudness (Db) | Voltage   | Amps (12V) | Warranty | Dimensions (LxHxD)          | Approval       |
|---------|--------------------------------|---------------|-----------|------------|----------|-----------------------------|----------------|
| 1020    | Tonal Self-adjustable          | 77-102        | 12-24V DC | 0.2A       | 2 Years  | 7.2x4.0x3.2" (183x102x81mm) | SAE Type F, UL |
| 1028    | Tonal Self-adjustable          | 77-97         | 12-48V DC | 0.2A       | 2 Years  | 7.2x4.0x3.2" (183x102x81mm) | UL             |
| 1040    | Tonal Self-adjustable          | 87-112        | 12-24V DC | 1.3A       | 2 Years  | 5x3.1x3.8" (127x79x97mm)    | CE, R10, IP66  |
| 1045    | Tonal Self-adjustable          | 97-112        | 12-24V DC | 1.3A       | 2 Years  | 5x3.1x3.8" (127x79x97mm)    | CE, R10, IP66  |
| 1059    | Tonal, Worble, Self-adjustable | 87-112        | 12-24V DC | 0.9A       | 2 Years  | 5x3.1x3.8" (127x79x97mm)    | CE, R10, IP66  |

### Fixed Db Alarms

#### Preco Self-Adjustable Alarms



#### Features

- Stud terminal connection
- Encapsulated electronics

| Product | Type                | Loudness (Db) | Voltage   | Amps (12V) | Warranty | Dimensions (LxHxD)          | Approval                 |
|---------|---------------------|---------------|-----------|------------|----------|-----------------------------|--------------------------|
| 110     | Tonal 100 Series    | 112           | 12-24V DC | 1.5A       | 2 Years  | 7.2x4.0x3.2" (183x102x81mm) | CE, R10, Type A          |
| 112     | Tonal 100 Series    | 97/107/112    | 12-36V DC | 1.3A       | 2 Years  | 7.2x4.0x3.2" (183x102x81mm) | SAE Type A, CE, R10      |
| 240     | Tonal 200 Series    | 97            | 12-24V DC | 0.23A      | 2 Years  | 4x2.6x1.6" (102x66x41mm)    | SAE Type A, B & C, CE, e |
| 250     | Tonal 200 Series    | 102           | 12-24V DC | 0.4A       | 2 Years  | 4x2.6x1.6" (102x66x41mm)    | SAE J994 Type C, CE, R10 |
| 270     | Tonal 200 Series    | 107           | 12-24V DC | 1.2A       | 2 Years  | 4x2.6x1.6" (102x66x41mm)    | SAE J994 Type F, CE, R10 |
| FS255   | Fast Sounding Tonal | 102           | 12-24V DC | 0.3A       | 2 Years  | 4x2.6x1.6" (102x66x41mm)    | CE, R10                  |

# Mobile Equipment Lighting

## Audible Warning



### 500 Series

#### Features

- ECCO compact design
- Stud terminal connection

| Product | Type | Voltage   | Loudness (Db) | Amps (12V)    | Bolt   | Warranty | Dimensions (LxHxD)                         | Approval                                |
|---------|------|-----------|---------------|---------------|--------|----------|--|---|
| 520     | SRC  | 12-24V DC | 97 Db         | 0.2A @ 12V DC | 2 Bolt | 2 Years  | 2.8 x 4 x 1.6 inches<br>(71 x 102 x 41 cm) | CE, R10, Type A<br>UL AMECA, IP65       |
| 530     | SRC  | 12-24V DC | 102 Db        | 1.0A @ 12V DC | 2 Bolt | 2 Years  | 2.8 x 4 x 1.6 inches<br>(71 x 102 x 41 cm) | SAE Type A, CE, R10,<br>UL, AMECA, IP65 |



520

530

SCR – monitors the frequency of the alarms sound output on each side and adjusts to the optimum frequency.

### 600 Series



Smart Alarm – listens, adjusts, reacts

#### Features

- ECCO reverse mounted speaker protects against dust, moisture and vibration
- Encapsulated electronics

| Product | Type               | Voltage | Loudness (Db) | Amps (12V) | Bolt   | Warranty  | Dimensions (LxHxD)                           | Approval                               |
|---------|--------------------|---------|---------------|------------|--------|-----------|--|--|
| 630M    | Tonal Smart Series | 12-36V  | 107 Db        | 1.2A       | 2 Bolt | ECCO LIFE | 3.1 x 5.0 x 2.7 inches<br>(78 x 127 x 68 cm) | SAE J994 Type B,<br>CE, R10, UL, AMECA |

### 700 Series



#### Features

- ECCO smart alarm
- OEM popular design
- Encapsulated electronics

| Product | Type               | Voltage | Loudness (Db)            | Amps (12V) | Warranty | Dimensions (LxHxD)                          | Approval                                |
|---------|--------------------|---------|--------------------------|------------|----------|---|---|
| 777     | Tonal Smart Series | 12-24V  | 97/107/112<br>Switchable | 0.8A       | 2 Years  | 3.3 x 7.1 x 4 inches<br>(84 x 181 x 102 cm) | SAE J994 Type A, B, C,<br>CE, R10, IP66 |

# Mobile Equipment Lighting

## Audible Warning



### 700 Series

#### Features

- ECCO reverse mounted speaker protects against dust, moisture and vibration
- Encapsulated electronics
- ECCO-LIFE - Life of Vehicle Warranty

| Product | Type               | Voltage | Loudness (Db) | Amps (12V) | Warranty  | Dimensions (LxHxD)                            | Approval                               |
|---------|--------------------|---------|---------------|------------|-----------|---|--|
| SA914N  | Tonal Smart Series | 12-24V  | 87-112 Db     | 1.5A       | ECCO LIFE | 4.2 x 7.1 x 3.1 inches<br>(105 x 180 x 78 cm) | SAE J994 Type F,<br>CE, R10            |
| SA917N  | Tonal Smart Series | 12-24V  | 87-112 Db     | 1.5A       | ECCO LIFE | 4.2 x 5.7 x 3.1 inches<br>(105 x 146 x 79 cm) | SAE J994 Type F,<br>CE, R10            |
| 850N    | Tonal Fixed        | 12-36V  | 112 Db        | 1.3A       | ECCO LIFE | 4.2 x 5.7 x 3.1 inches<br>(105 x 146 x 79 cm) | SAE J994 Type A, CE,<br>R10, UL, AMECA |
| 876N    | Tonal Fixed        | 12-36V  | 112 Db        | 1.3A       | ECCO LIFE | 4.2 x 5.7 x 3.1 inches<br>(105 x 146 x 79 cm) | SAE J994 Type A, CE,<br>R10, UL, AMECA |



850N



876N



SA914N



SA917N

### Disc Horns

#### Features

- High frequency disc horn
- Heavy-duty copper wire motor
- Universal mounting bracket
- Steel corrosion-resistant finish.
- Dimensions: 2.63" (67mm) High, 3.63" (92mm) Ø diameter.

| Product     | Model | Loudness      | Voltage   | Amps (12V) | Additional Information    |
|-------------|-------|---------------|-----------|------------|---------------------------|
| FIA-52240   | HK9   | 130dB @ 1.2m  | 12V DC    | 5A         | HK9 Disc Horn 12V DC      |
| FIA-7360012 | HK9E  | 130dB @ 1.2m  | 24-48V DC | 5A         | HK9E Disc Horn 24-48V DC  |
| FIA-7364011 | HK/9E | 1130dB @ 1.2m | 12-24V DC | 5A         | HK/9E Disc Horn 12-24V DC |

#### Parts

FIA-2132311

#### Additional Information

Fulltone Repair Kit/Horn Replacement Kit, (2) Membranes, (2) Covers, (2) Gaskets, (6) Screws.  
Dim: (WxHxL) 3x0.5x3" (76.2x12.7x76.2mm). 3" (76.2mm) Ø diameter.



FIA-52240



FIA-7360012



FIA-7364011



# Mobile Equipment Lighting

## Audible Warning



**MATRIX**

### Emergency Vehicle Warning Speakers and Sirens

| Product        | Type                 | Dimensions (DxWxH)                                | Functions                   | Voltage   | Additional Information  |
|----------------|----------------------|---|-----------------------------|-----------|---|
| STA-D-44       | Speaker              | 6.6" x 2.9" x 6.6"<br>(167.64x73.66x 167.64mm)    | N/A                         | 32V DC    | N/A   |
| STA-D-60       | Speaker              | 7 1/4"x8"x 5 1/4"<br>(184.15x203.2x133.35mm)      | N/A                         | 12V DC    | N/A   |
| STA-LCS800-008 | Siren/Amp Controller | 7/8"x7 11/16"x4 11/64"<br>(22.22x195.26x105.96mm) | 8 Light Functions           | 10-16V DC | Exceeds Acoustical and environmental requirements of SAE J1849,* California Title 13, Class A* (* when used with SVP drivers) |
| STA-SS651-013  | Siren                | 4"x6 5/16"x2"<br>(101.6x160.33x50.8mm)            | 20 programmable siren tones | 12V DC    | Exceeds acoustical and environmental, requirements, SAE J1849, California Title 13  |
| STA-SS670      | Siren                | 4 11/16"x6"x2"<br>(119.06x152.4x 50.8mm)          | 26 programmable siren tones | 12V DC    | Exceeds acoustical and environmental requirements, SAE J1849, California Title 13   |
| STA-SS700-013  | Siren                | 5 13/16"x6"x2 3/8"<br>(147.63x152.4x 60.32mm)     | 24 programmable siren tones | 12V DC    | Exceeds acoustical and environmental requirements, SAE J1849, California Title 13   |
| STA-SB4020     | Amp Switch Box       | 4 3/4"x6"x2"<br>(120.65x 152.4x50.8mm)            | 40A and 20A Switches        | 10-16V DC | 2' wire harness, 5lgs (2.26kg)  |

#### Star Warning 1889 Speakers

#### Star Warning 1889 Sirens



STA-D-44



STA-D-60



STA-LCS800-008



STA-SS651-013



STA-SS670



STA-SS700-013



STA-SB4020

### Model 52



#### Resonating Horn

The Federal Signal Model 52 resonating horn produces 114dBa @ 10 feet [124dBa @ 1m] with a 1,000 foot range. It is capable of penetrating high ambient noise levels. Being electrically-activated, the Model 52 does not require an air compressor for operation. The Model 52 is able to withstand the shocks, vibrations, dust and atmospheric conditions encountered in off-road use. The operating temperature range is -40°F to 185°F [-40°C to 85°C].

Rubber gaskets and a power connector make the Model 52 completely watertight. The projector and internal parts are made of zinc-coated steel or stainless steel to resist corrosion; the exterior is sealed with grey enamel paint. The housing is die-cast aluminum. Tied and adhesive-bonded internal wiring helps prevent electrical shorts, wire breakage, and loose connections. The Model 52 is available in 24VDC. It's 18-32V operating range allows for voltage inconsistencies. The Model 52 has a duty cycle of five minutes on and five minutes off.

#### Quick Tech Specs

|                   |                            |
|-------------------|----------------------------|
| Decibel Output    | 114dBa @ 10                |
| Voltage           | 24V DC                     |
| Operating Current | 4.0A @24V DC               |
| Operating Temp    | -40°F to 85°F              |
| Duty Cycle        | 5 min. on, 5 min. off      |
| Enclosure Rating  | Type 4X                    |
| Mount             | Surface mount with flanges |

#### Features

- Available in 24VDC
- Withstands extreme outdoor conditions
- Produces 114dBa @ 10' [124dBa @ 1m]
- Surface mount with flanges
- Dim (HxWxD): 8.5x7.5x21.5" [216x 190.5x546mm]
- Weight: 10 lbs (4.54kg)

#### Application

Heavy/Off-road vehicles, mining and construction etc.

| Product   | Volume (dB)               | Voltage | Amps (12V) |
|-----------|---------------------------|---------|------------|
| NBH52-24V | 114dB @ 10m<br>124dB @ 1m | 12V DC  | 4.0A       |

# Mobile Equipment Lighting

## Audible Warning



### Marinco Electric Horns

| Product     | Volume (dB) | Type                         | Voltage | Amps (24V) | Additional Information  |
|-------------|-------------|------------------------------|---------|------------|---|
| AFI-10017XL | 118dB @ 1m  | Single Trumpet Electric Horn | 24V DC  | 2.5A       | 100% stainless steel for marine applications, frequency: 370 +/- 20Hz, 16.5" L x 4" W x 4.75" H, 5 year warranty            |
| AFI-10018XL | 123dB @ 1m  | Dual Trumpet Electric Horn   | 24V DC  | 5A         | 100% stainless steel for marine applications, frequency: 370 +/- 20Hz ; 310 +/- 20H, 18.5" L x 8" W x 5" H, 5 year warranty |

### Marinco Electric Horns

24V Single Trumpet Electric Horn



AFI-10017XL

24V Dual Trumpet Electric Horn



AFI-10018XL

## Why Update to LED Lighting?

Our goal is to provide your operation with the best lighting solution to support your safety and productivity goals.

More light isn't always the best solution. Selecting the right fixtures, the right setup (orientation/tilt/mounting position) and ensuring these solutions are simple and repeatable is key.

Even a small percentage decrease each day in electrical utility costs can add up to big savings.

**Matrix offers a free LED upgrade ROI analysis to support lighting upgrade decisions.**

# Mobile Equipment Lighting

## Visual Warning - LED Beacons - Class I



### Class I LED Beacons – Rotating

| Product          | Dimensions  | Color | Voltage   | Amps             | Flash   | Warranty | Additional Information   |
|------------------|---|-------|-----------|------------------|---------|----------|--|
| 7660<br>RotoLED™ | 6.2" (156mm) High,<br>6.5" (165mm) Ø                          |       | 12-24V DC | 2.1A @<br>12V DC | 125 FPM | 5 Years  | 3 Bolt or Vacuum-magnet ( <b>VM</b> ) mount, SAE J845 Class I, CE, R10, IP67, Cal. Title 13 ( <b>A &amp; C/A</b> only), RoHS. No gears, brushes, or bulbs to wear out. LED optics and UV hard-coated lens. |
| 5280<br>RotoLED™ | 5.8" (146mm) High<br>13.3" (337mm) Wide,<br>6.3" (160mm) Deep |       | 12-24V DC | 4A @<br>12V DC   | 360 FPM | 5 Years  | Magnet mount versions available. ADD -MG to part number for magnet mount models. SAE J845 Class I, CE, R10, IP67   |

ECCO 7660 RotoLED™



7660A



7660A-VM

ECCO 5280 RotoLED™



5220A

**Abbrev:** **A** = Amber **B** = Blue. **C** = Clear **G** = Green **R** = Red  
**VM** = Vacuum-magnet mount

**Parts Example:** **7660C** = 7660, Clear, 3 Bolt mount  
**7660A-VM** = 7660, Amber, Vacuum-magnet mount

### Class I LED Beacons – Flash

| Product                        | Dimensions   | Color | Voltage   | Amps             | Flash   | Warranty | Additional Information   |
|--------------------------------|--|-------|-----------|------------------|---|----------|--|
| 7960<br>Pulse™                 | 5.6" (142mm) High,<br>6.5" (165mm) Ø   |       | 12-24V DC | 3.7A@<br>12V DC  | 11 patterns   | 5 Years  | 3 Bolt / 1" Pipe or Vacuum-magnet ( <b>VM</b> ) mount, SAE J845 Class I, CE, R10, IP56, RoHS. Hi/Lo intensity. Encapsulated electronics for severe vibration applications. Replacement lenses available.   |
| EB7 180<br>RotoLED™            | 2.3" (58mm) High,<br>6.5" (165mm) Wide<br>6.5" (165mm) Deep  |       | 12-24V DC | 6.2A @<br>12V DC | 8 patterns<br>including<br>simulated<br>rotate mode | 3 Years  | 4 Bolt / 1" Pipe or Vacuum-magnet ( <b>VM</b> ) mount, SAE J845 Class I, Cal. Title 13, R10, IP55, AME- CA. Compact, low-profile beacon. Synchronization capable.  |
| EB7 185<br>(Dual-color<br>LED) | 3.3" (84mm) High,<br>6.5" (165mm) Wide<br>6.5" (165mm) Deep  |       | 12-24V DC | 6.2A @<br>12V DC | 24 patterns<br>including<br>rotate mode             | 3 Years  | 4 Bolt / 1" Pipe or Vacuum-magnet ( <b>VM</b> ) mount, SAE J845 Class I, Cal. Title 13, R10, IP55, AME- CA. Compact, low-profile beacon. Hi/Lo intensity. Synchronization capable.   |
| 7460<br>Profile™               | 3.1" (79mm) High,<br>6.4" (163mm) Ø  |       | 12-24V DC | 3.6A@<br>12V DC  | 180 FPM<br>x 8                                      | 5 Years  | 3 Bolt / 1" Pipe or Vacuum-magnet ( <b>VM</b> ) mount, SAE J845 Class I, CE, IP67. Compact and low-profile. Reflective LED module. Overhead heat-sink design provides aesthetic pipe mounting.   |
| 7160<br>Reflex®                | 3.9" (99mm) High,<br>6.5" (165mm) Ø  |       | 12-24V DC | 2A @<br>12V DC   | 15 patterns   | 5 Years  | 3 Bolt / 1" Pipe or Vacuum-magnet ( <b>VM</b> ) mount, SAE J845 Class I, Cal. Title 13, CE, R10, IP66, RoHS. Synchronization capable. Hi/Lo intensity. Encapsulated electronics. Lenses available.   |
| 7900<br>Series                 | <b>7965/75:</b> 4.9"<br>(124mm) High, 6.5"<br>(165mm) Ø<br><b>7970/80:</b> 6.7"<br>(170mm) High, 6.5", (165mm) Ø |       | 12-24V DC | 36A @<br>12V DC  | 80 FPM<br>x 8                                       | 5 Years  | 3 Bolt / 1" Pipe or Vacuum-magnet ( <b>VM</b> ) mount, SAE J845 Class I, CE, R10, RoHS ( <b>7965A/7970A only</b> ). Encapsulated electronics for severe vibration applications ( <b>7975/7980 only</b> ). Aluminum base. Replacement lenses available. |

ECCO 7960 Pulse™



7960A



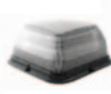
7960A-VM

ECCO EB7180



EB7180A

ECCO EB7185



EB7185AAA

ECCO 7460 Profile™



7460A

ECCO 7160 Reflex™



7160A  
(Simulated  
Rotation)

ECCO 7900 Series



7965A



7965A-VM



7970A



7970A-VM



7980A

# III Mobile Equipment Lighting

## Visual Warning - LED Beacons - Class II/III



### Class II LED Beacons

| Product   | Color | Flash Pattern | Voltage   | Amps          | Flash Rate | Warranty | Additional Information |
|-----------|-------|---------------|-----------|---------------|------------|----------|------------------------|
| PRE-7512A |       | Pulse8        | 12-48V DC | 1.3A @ 12V DC | 70         | 2 Years  | SAE J845 Class II      |
| PRE-7513A |       | Pulse8        | 12-48V DC | 1.3A @ 12V DC | 70         | 2 Years  | SAE J845 Class II      |
| PRE-7960A |       | Double/Quad   | 12-48V DC | 1.3A @ 12V DC | 70         | 2 Years  | IP67                   |

### PRECO Class II LED Beacons



PRE-75 12A



PRE-75 13A



PRE-7960A

**Abbrev:** **A** = Amber **B** = Blue. **C** = Clear **G** = Green **R** = Red  
**VM** = Vacuum-magnet mount

**Parts Example:** **7660C** = 7660, Clear, 3 Bolt mount  
**7660A-VM** = 7660, Amber, Vacuum-magnet mount

### Class II LED Beacons - Flash

| Product | Dimensions   | Color | Voltage   | Amps               | Flash    | Warranty | Additional Information   |
|---------|--|-------|-----------|--------------------|----------|----------|--|
| 7900    | <b>7945:</b> 4.9" (124mm) High,<br><b>7950:</b> 6.7" (170mm) High,<br>6.5" (165mm) Ø |       | 12-24V DC | 1.3A@ 11<br>12V DC | patterns | 2 Years  | 3 Bolt / 1" Pipe or Vacuum-magnet ( <b>VM</b> ) mount, SAE J845 Class II, CE, R10, RoHS ( <b>7945A/7950A only</b> ). Reinforced polypropylene base. Replacement lenses available |

### ECCO 7900 Series



7945A



7945A-VM



7950A



7950A-VM

### Class III LED Beacons

| Product   | Color | Flash Pattern | Voltage   | Amps          | Flash Rate | Warranty | Additional Information                   |
|-----------|-------|---------------|-----------|---------------|------------|----------|--|
| PRE-7314A |       | Pulse8        | 12-80V DC | 0.2A @ 12V DC | 85         | 3 Years  | SAE J845 Class III, CE, R10, UL          |
| PRE-7414A |       | Pulse8        | 12-80V DC | 1.3A @ 12V DC | 70         | 3 Years  | SAE J845 Class III, CE, R10, UL, IP66/67 |

### PRECO Class III LED Beacons



PRE-73 14A



PRE-74 14A



# Mobile Equipment Lighting

## Visual Warning - LED Beacons - Class III



### Class III LED Beacons – Flash

| Product | Dimensions  | Color | Voltage   | Amps             | Flash         | Warranty                         | Additional Information   |
|---------|---|-------|---|------------------|---------------|----------------------------------|--|
| 6465    | 3.9" (99mm) High,<br>5.1" (130mm) Ø   |       | 12-80V DC   | 1.9A@<br>12V DC  | 85 FPM<br>x 8 | 3 Years                          | 3 Bolt or Magnet mount ( <b>MG</b> ), SAE J845 Class III, CE, R10, UL <b>6465A only</b> . RoHS ( <b>6465A only</b> ). Industrial applications. Reinforced nylon base. Ideal for material handling equipment.     |
| 6262    | <b>6262/63</b> : 4.9" (124mm) High, 3.9" (98mm) Wide<br><b>6267</b> : 4.9" (124mm) High 2.8" (71mm) Ø |       | 12-80V DC   | 0.47A@<br>12V DC | 70 FPM<br>x 8 | 3 Years                          | 2 Bolt or 1/2" Pipe mount ( <b>6267A only</b> ), SAE J845 Class III, CE, R10, UL, IP66/67, RoHS. Industrial applications. Encapsulated electronics extended product life. Ideal for material handling equipment. |
| 6410    | 3.9" (99mm) High,<br>5.1" (130mm) Ø   |       | 12-80V DC<br><b>(6410A)</b><br>12-80V DC<br><b>(6410A-MG)</b> | 0.3A@<br>12V DC  | 70 FPM<br>x 1 | 2 Year<br>Strobe 6<br>Month Tube | 3 Bolt or Magnet mount ( <b>MG</b> ), CE, R10, UL ( <b>6410A only</b> ). Industrial applications. Reinforced nylon base. Ideal for material handling equipment. Replacement lenses and flash tubes available     |

#### ECCO 6465



6465A



6465A-MG



64 10A



64 10A-MG

#### ECCO 6262 Series



6262A  
(Wire exit: side)



6263A  
(Wire exit: bottom)



6267A

**Abbrev:** **A** = Amber **B** = Blue. **C** = Clear **G** = Green **R** = Red  
**MG** = Magnet mount


**Parts Example:** **6465C** = 6465, Clear, 3 Bolt mount  
**6465A-MG** = 6465, Amber, Magnet mount

# Mobile Equipment Lighting

## Visual Warning - Low-Intensity Rotators - Class I



### Class I Halogen Rotators

| Product | Dimensions  | Color   | Voltage | Amps            | Flash   | Warranty                                 | Additional Information  |
|---------|---|---|---------|-----------------|---------|--|---|
| 5800    | <b>5810:</b> 8.2" (208mm)<br>High, 5813: 5.7"<br>(146mm) High, 5813:<br>6.0" (153mm) Ø<br><b>5816:</b> 7.3" (185mm)<br>High, 5810/16: 5.3"<br>(134mm) Ø |  | 12V DC  | 4.9A@<br>12V DC | 195 FPM | 1 Year<br>Rotator<br><br>3 Month<br>Bulb | 3 Bolt mount ( <b>5813A</b> ) or Magnet<br>mount ( <b>5813A-MG</b> ), DIN Pole mount<br>( <b>5810A</b> ), 1 Bolt mount ( <b>5816A</b> ), SAE<br>J845 Class I, R10, R65. Belt-drive<br>rotator mechanism, Polycarbonate<br>base. Free-form optical reflector<br>maximizes light output. Replacement<br>lenses and bulbs available. |

### ECCO 5800 Series



6465A



6465A

**Abbrev:** **A** = Amber  
**MG** = Magnet mount

**Parts Example:** **5813A** = 5813, Amber, 3 Bolt mount  
**5813A-MG** = 75813, Amber, Magnet mount

# Mobile Equipment Lighting

## Visual Warning - Strobe - Class I & II



**MATRIX**

### Class I and II Strobes

| Product       | Color | Flash Pattern | Voltage    | Amps           | Flash Rate | Warranty | Additional Information      |
|---------------|-------|---------------|------------|----------------|------------|----------|-----------------------------|
| PRE-3318A     | Amber | Single        | 12-110V DC | 0.25A @ 12V DC | 80         | 2 Years  | CE                          |
| PRE-4243A     | Amber | Double/Quad   | 12-48V DC  | 2.5A@ 12V DC   | 80/65      | 2 Years  | SAE J1318 Class II, CE, R10 |
| PRE-4262A     | Amber | Double/Quad   | 12-48V DC  | 3.7A @ 12V DC  | 65         | 2 Years  | SAE J1318 Class I           |
| PRE-4263A     | Amber | Double/Quad   | 12-48V DC  | 2.5A@ 12V DC   | 80/65      | 2 Years  | SAE J1318 Class II, CE, R10 |
| PRE-FT4203    | Clear | -             | 12-48V DC  | -              | -          | 6 Months | Flashtube                   |
| PRE-MK4200    | N/A   | N/A           | N/A        | N/A            | N/A        | 1 Year   | Magnet Kit                  |
| PRE-MKS4200-6 | N/A   | N/A           | N/A        | N/A            | N/A        | 1 Year   | Magnet Kit with Cord        |
| ECCO-9007C    | N/A   | N/A           | 12V DC     | N/A            | N/A        | 6 Months | N/A                         |

### PRECO Visual LED Strobes

### Parts



PRE-33 18A



PRE-4243A



PRE-4262A



PRE-4263A



PRE-MK4200



ECCO-9007C



PRE-FT4203

**Abbrev:** **A** = Amber **B** = Blue. **C** = Clear **G** = Green **R** = Red  
**VM** = Vacuum-magnet mount

**Parts Example:** **6650C** = 6650, Clear, 3 Bolt mount  
**6650A-VM** = 6650, Amber, Vacuum-magnet mount

### Class II Strobes

| Product     | Dimensions  | Color | Voltage   | Amps         | Flash   | Warranty                       | Additional Information  |
|-------------|---|-------|-----------|--------------|---|--------------------------------|---|
| 6600 Series | 6.7" (170mm) High,<br>6.5" (165mm) Ø  | Amber | 12-24V DC | 2.2A@ 12V DC | 65 FPM  | 2 Years Strobe<br>6 Month Tube | 3 Bolt/1" Pipe or Vacuum-magnet ( <b>VM</b> ) mount, SAE J1318 Class II, CE, R10. Double or quad flash. Hi/Lo intensity. Aluminum base. Replacement lenses and flash tubes available. |
| 6500 Series | <b>6550:</b> 4.8" (121mm), High, 6570: 6.7"<br><b>6550/70:</b> 6.5" (165mm) Ø | Amber | 12-48V    | 2.2A@ 12V DC | <b>6550/70A:</b><br>80 FPM x 2<br>65 FPM x 4<br><b>6550/70-A VM:</b> 80 FPM x 2 | 2 Years Strobe<br>6 Month Tube | 3 Bolt/1" Pipe or Vacuum-magnet ( <b>VM</b> ) mount, SAE J1318 Class II, CE, R10. Aluminum base. Reinforced polypropylene base. Replacement lenses and flash tubes available.         |

### ECCO 6600 Series

### ECCO 6500 Series



6650A



6650A-VM



6550A



6550A-VM



6570A



6570A-VM

# Mobile Equipment Lighting

## Visual Warning - LED Lightbar



**MATRIX**

### Rotation LED Minibars

| Product | Operating Temp. | Color  | Voltage   | Amps          | Type     | Warranty | Additional Information     |
|---------|-----------------|--------|-----------|---------------|----------|----------|----------------------------|
| 5235A   | -22°F to +122°F | Yellow | 12-24V DC | 11.0A@ 12V DC | Rotation | 2 Years  | SAE J845 Class I, CE, IP54 |

### ECCO 5135A Rotate



5135A



5135A-VM

### Class I LED Lightbar

Abbrev: **A** = Amber **B** = Blue. **C** = Clear **G** = Green **R** = Red

| Product            | Dimensions   | Color                   | Voltage   | Amps         | Flash       | Warranty | Additional Information  |
|--------------------|--|-------------------------|-----------|--------------|-------------|----------|---|
| 12 Series Vantage™ | <b>54" (1371.6mm)</b><br>Long 2.5" (64mm)<br>High, 11" (279mm)<br>Wide | Blue, Amber, Clear, Red | 12-24V DC | 6.5A@ 12V DC | 24 Patterns | 3 Years  | 10 x LED warning modules, and 2 x LED worklamp modules, and 2 x LEG stop-tail-turn modules. SAE J845 Class I, Cal. Title 13, CE, R10. Aluminum chassis, polycarbonate base and lens. Each lightbar is shipped with 'controller-ready' wiring for fast, easy installation. Optional 12 Series Lightbar Controller available. |

### ECCO 12 Series Vantage™



54" (12-00007-E)

#### Light Bar Icon Keys:

- LED Warning module
- LED Stop-Tail-Turn module
- LED Work Lamp module
- LED Alley Light module



### 15 Series Lightbars

| Product       | Color  | Length    | Type       | Voltage | Amps          | Flash Pattern | FMP (x4) | Warranty | LEDs |
|---------------|--------|-----------|------------|---------|---------------|---------------|----------|----------|------|
| EC-15-00011-E | Yellow | 23"/0.58m | TIR        | 12V DC  | 0.8A @ 12V DC | Quad          | 80       | 2 Years  | 4    |
| EC-15-00013-E | Yellow | 23"/0.58m | TIR        | 12V DC  | 1.2A @ 12V DC | Quad          | 80       | 2 Years  | 6    |
| EC-15-00015-E | Yellow | 23"/0.58m | TIR        | 12V DC  | 1.6A @ 12V DC | Quad          | 80       | 2 Years  | 8    |
| EC-15-00019-E | Yellow | 23"/0.58m | TIR        | 12V DC  | 2.0A@12VDC    | Quad          | 80       | 2 Years  | 10   |
| EC-15-01423-E | Yellow | 23"/0.58m | Reflective | 12V DC  | 2.8A@12VDC    | Quad          | 80       | 2 Years  | 4    |
| EC-15-01427-E | Yellow | 23"/0.58m | Reflective | 12V DC  | 4.2A@12VDC    | Quad          | 80       | 2 Years  | 6    |
| EC-15-01428-E | Yellow | 23"/0.58m | Reflective | 12V DC  | 5.6A @ 12V DC | Quad          | 80       | 2 Years  | 8    |
| EC-15-01429-E | Yellow | 23"/0.58m | Reflective | 12V DC  | 7.0A @ 12V DC | Quad          | 80       | 2 Years  | 10   |
| EC-15-00035-E | Yellow | 39"/0.98m | TIR        | 12V DC  | 1.6A @ 12V DC | Quad          | 80       | 2 Years  | 8    |
| EC-15-00036-E | Yellow | 49"/1.24m | TIR        | 12V DC  | 1.6A @ 12V DC | Quad          | 80       | 2 Years  | 8    |
| EC-15-00037-E | Yellow | 49"/1.24m | TIR        | 12V DC  | 3.2A @ 12V DC | Quad          | 80       | 2 Years  | 16   |
| EC-15-01424-E | Yellow | 49"/1.24m | Reflective | 12V DC  | 4.9A@12VDC    | Quad          | 80       | 2 Years  | 16   |
| EC-15-00038-E | Yellow | 54"/1.37m | TIR        | 12V DC  | 2.9A@12VDC    | Quad          | 80       | 2 Years  | 14   |
| EC-15-01426-E | Yellow | 54"/1.37m | Reflective | 12V DC  | 4.3A@12VDC    | Quad          | 80       | 2 Years  | 14   |
| EC-15-00039-E | Yellow | 54"/1.37m | TIR        | 12V DC  | 3.0A @ 12V DC | Quad          | 80       | 2 Years  | 15   |
| EC-15-01425-E | Yellow | 54"/1.37m | Reflective | 12V DC  | 4.6A@12VDC    | Quad          | 80       | 2 Years  | 15   |
| EC-15-01255-E | Yellow | 54"/1.37m | TIR        | 12V DC  | 4.0A@12VDC    | Quad          | 80       | 2 Years  | 20   |

### ECCO Streetlazer 15 Series



EC-15-00013-E



EC-15-01255-E

# Mobile Equipment Lighting

## Visual Warning - LED Lightbar



### Lightbar Controller (Optional)

| Product | Dimensions  | Flash       | Description   |
|---------|---|-------------|---|
| EZ0006  | 3.6" (90mm) High,<br>5.9" (149mm) Wide,<br>0.7" (18mm) Deep | 24 Patterns | The optional 12 Series Lightbar Controller provides convenient and easy control of the 24 built-in flash patterns and auxiliary LED modules (where applicable). Simply plug-n-play. |

| No. Pattern               | Description                           | No. Pattern                     | Description   |
|---------------------------|---------------------------------------|---------------------------------|---|
| 1 Steady Burn             | Always On                             | 13 Quint Hold Diagonal          | 1150 Quint FPM Alternating Diagonal                 |
| 2 Quad Flash              | 120 Quad FPM                          | 14 Rotate                       | 120 RPM   |
| 3 Double Flash            | 75 Double FPM                         | 15 Rotate/Quad                  | 120 RPM/75 Quad FPM                                 |
| 4 Slow Quad               | 65 Quad FPM                           | 16 Wave Rotate                  | 70 RPM  |
| 5 Slow Double             | 65 Double FPM                         | 17 Quad Flash Alternate Front   | 150 Quad FPM Alt Side to Side (Front Only) 150      |
| 6 Quint Hold              | 75 Quint FPM                          | 18 Quad Flash Alternate Rear    | Quad FPM Alt Side to Side (Rear Only) 150 Double    |
| 7 Pulse8                  | 75 Oct FPM                            | 19 Double Flash Alternate Front | FPM Alt Side to Side (Front Only) 150 Double FPM    |
| 8 Quad Flash Alternate    | 150 Quad FPM Alternating Side to Side | 20 Double Flash Alternate Rear  | Alt Side to Side (Rear Only) 150 Quint FPM Alt Side |
| 9 Quad Flash Diagonal     | 150 Quad FPM Alternating Diagonal     | 21 Quint Hold Alternate Front   | to Side (Front Only) 150 Quint FPM Alt Side to Side |
| 10 Double Flash Alternate | 150 Quad FPM Alternating Side to Side | 22 Quint Hold Alternate Rear    | (Rear Only) 150 Quad FPM Alt Side to Side (Center   |
| 11 Double Flash Diagonal  | 150 Quad FPM Alternating Diagonal     | 23 Quad Flash Alternate Center  | Only) Cycle through patterns                        |
| 12 Quint Hold Alternative | 150 Quad FPM Alternating Side to Side | 24 Cycle All                    |   |



**ECCO EZ0006**  
In-cab Lightbar Controller  
EZ0006

### Installation

| Product                                       | Description   |
|---|---|
| ER0002<br>(Standard Feet Kit)                 | Standard Feet Kit for 12 Series Vantage Lightbar. Features length-of-the-bar mounting tracks that make installation easy for any roof or flat mounting surface. |
| A1032RMK<br>(Headache Rack Mounting Brackets) | Headache Rack Bracket for 12 Series Vantage Lightbar. Strap mounting kits for the most popular work vehicles as well as headache rack mounting brackets.        |

#### ECCO ER0002

Standard Feet Kit



EC-15-00013-E

#### ECCO A1032RMK

Headache Rack Mounting Brackets



EC-15-00013-E



ECCO Vantage lightbars feature individual power, control and auxiliary STT cables allowing for easy routing to the battery, power distribution module and the cab. The control cable is pre-wired to accept the plug-n-play or can be connected discretely.

### Phazer/Razor Lightbars)

| Product             | Color | Length    | Flash Patterns   | Voltage   | Flashing Functions   |
|---------------------|-------|-----------|--|-----------|--|
| Phazer 1400         |       | 44 inches | 20 different simultaneous patterns<br>39 warning patterns<br>9 Traffic Director patterns | 12V DC    | P1, P2, P3, P4, P5, left traffic, right traffic, ICL, DIM, takedown pursuit, alley, flash, turn left, turn right |
| Phazer 1550-SPECIAL |       | 58 inches | 20 different simultaneous patterns<br>39 warning patterns<br>9 Traffic Director patterns | 12V DC    | P1, P2, P3, P4, P5, left traffic, right traffic, ICL, DIM, takedown pursuit, alley, flash, turn left, turn right |
| Razor 2440          |       | 46 inches | 30 different flash patterns  | 10-16V DC | NA   |
| Razor 2540          |       | 56 inches | 30 different flash patterns  | 10-16V DC | NA   |

#### Star Phazer Lightbars



1400/1550-SPECIAL

#### Star Razor Lightbars



2440/2540



# Mobile Equipment Lighting

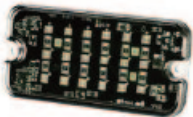
## Visual Warning - LED Directional



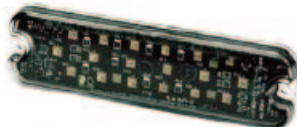
### Compact Directional Warning Lights

| Product | Voltage | Amps | LEDs | Temperature Range | Warranty | Flash Patterns | Approval |
|---------|---------|------|------|-------------------|----------|----------------|----------|
| 3931C   | 12V DC  | 0.5A | N/A  | N/A               | 2 Years  | 16             | IP66     |
| 3931R   | 12V DC  | 0.5A | N/A  | N/A               | 2 Years  | 16             | P66      |
| 3932C   | 12V DC  | 0.5A | N/A  | N/A               | 2 Years  | 16             | P66      |
| 3932R   | 12V DC  | 0.5A | N/A  | N/A               | 2 Years  | 16             | P66      |

### ECCO Compact Warning Lights



3931C/3931R



3932C/3932R

### Visor Light LED

| Product | Color | Dimensions (DxWxH)                 | Flash Patterns               | Voltage   | Amps          | Additional Information                                    |
|---------|-------|------------------------------------|------------------------------|-----------|---------------|---|
| VL22    |       | 8"x11.5"x4" (22.2x 292.1x 101.6mm) | 30 Selectable Flash Patterns | 10-16V DC | 1.5A @ 12V DC | High intensity LED, auto-voltage adjust, visor mount only |

### Starvisor II Visor Light



VL22-RB

### ED001 Series Class I Directional LED

The ECCO ED001 Series high output LED directional light meets SAE Class I requirements for light output and provides the convenience of either single bolt-bracket mount with thru-bolt wiring or conventional surface mount. Featuring a clear polycarbonate lens with four LEDs that illuminate amber, warning capability can be customized by selecting from 24 flash patterns and synchronizing multiple heads simultaneously or alternately.

#### Features

- 24 flash patterns
- Die-cast base and polycarbonate lens
- Weatherproof IP67 Rating
- SAE J595 Class I
- Temperature Range: -22°F to +122°F
- Colors: Clear, Amber, Blue, Green, Red
- Warranty: 1 year



| Product | Color | Voltage | Amps (12V) | Flash Pattern | Watts |
|---------|-------|---------|------------|---------------|-------|
| ED001C  | Clear | 12-24V  | 0.7A       | 24            | 25W   |
| ED001G  | Green | 12-24V  | 0.7A       | 24            | 25W   |
| ED001B  | Blue  | 12-24V  | 0.7A       | 24            | 25W   |
| ED001R  | Red   | 12-24V  | 0.7A       | 24            | 25W   |
| ED001A  | Amber | 12-24V  | 0.7A       | 24            | 25W   |

# Mobile Equipment Lighting

## Visual Warning - LED Directional



### Class I LED Directional Lights

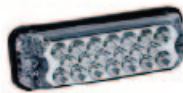
| Product                                    | Dimensions   | Color | Voltage      | Amps              | Flash                             | Warranty | Additional Information   |
|--|--|-------|--------------|-------------------|-----------------------------------|----------|--|
| 3510                                       | 1.5" (37mm) High,<br>3.67" (93mm)<br>Wide, 0.5" (12mm)<br>Deep |       | 12-24V<br>DC | 0.75A @<br>12V DC | 16 patterns<br>(Sync.<br>capable) | 5 Years  | Surface 2 Bolt mount, SAE J595 Class I, California. Title 13, CE, R10. Compact high-intensity LED warning signal. In-line waterproof driver module. Available mounting options: Universal Bracket ( <b>A3510L</b> ), Chrome Bezel ( <b>A3510BZC</b> ), Multi-angle Bracket ( <b>A3510MA</b> ). |
| 3811                                       | 2.1" (53mm) High,<br>5.9" (151mm)<br>Wide, 1.2" (30mm)<br>Deep |       | 12-24V<br>DC | 0.4A @<br>12V DC  | 7 patterns<br>(Sync.<br>capable)  | 3 Years  | Surface 2 Bolt mount, SAE J595 Class I, CE, R10. Encapsulated electronics extend product life.   |
| ED3700 Series<br>(Solid or<br>Split Color) | 1.3" (33mm) High,<br>4.5" (115mm)<br>Wide, 1" (25mm)<br>Deep   |       | 12-24V<br>DC | 1.0A @<br>12V DC  | 21 patterns<br>(Sync.<br>capable) | 3 Years  | Surface 2 Bolt mount, SAE J595 Class I, CE, R10. Four LED model with single or split-color options. Black bezel included.  |
| 3715                                       | 1.5" (38mm) High,<br>5.1" (130mm)<br>Wide, 1.5" (38mm)<br>Deep |       | 12-24V<br>DC | 0.3A @<br>12V DC  | 9 patterns<br>(Sync.<br>capable)  | 5 Years  | Surface 2 Bolt mount, SAE J595 Class I, CE, R10. IP67. Encapsulated electronics extend product life.   |
| 3945<br>(Solid or<br>Split Color)          | 5.2" (132mm) Ø,<br>1.3" (32mm) Deep                            |       | 12-24 DC     | 0.5A @<br>12V DC  | 8 patterns                        | 1 Year   | Round grommet, SAE J595 Class I. Solid or split-color grommet mount. Fits standard rear-lighting grommet.  |
| 3965<br>(Solid or<br>Split Color)          | 2.2" (56mm) High,<br>7.4" (189mm) wide<br>1.5" (38mm) Deep     |       | 12-24 DC     | 0.5A @<br>12V DC  | 8 patterns                        | 1 Year   | Oval grommet, SAE J595 Class I. Solid or split-color grommet mount. Fits standard rear-lighting grommet.   |

ECCO 3510



3510A

ECCO 3811



3811A

ECCO ED3700 Series



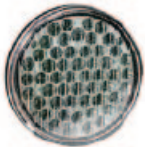
ED3704A

ECCO 3715



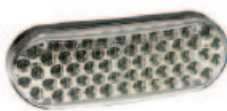
3715A

ECCO 3945



3945A

ECCO 3965



3965A

Abbrev: **A** = Amber **B** = Blue. **C** = Clear **G** = Green **R** = Red  
**VM** = Vacuum-magnet mount

Parts Example: **7660C** = 7660, Clear, 3 Bolt mount  
**7660A-VM** = 7660, Amber, Vacuum-magnet mount

### Class II LED Directional Light

| Product | Dimensions   | Color | Voltage      | Amps             | Flash       | Warranty | Additional Information   |
|---------|--|-------|--------------|------------------|-------------|----------|--|
| 3735    | 1.3" (34mm) High,<br>3.7" (94mm) Wide,<br>1.5" (38mm) Deep |       | 12-24V<br>DC | 0.3A @<br>12V DC | 11 patterns | 1 Year   | Surface 2 Bolt mount, SAE J595 Class II, CE, R10, IP67. ABS Plastic. Encapsulated electronics extend product life. |

ECCO 3735



Abbrev: **A** = Amber  
**VM** = Vacuum-magnet mount **MG** = Magnet mount

Parts Example: **6650A** = 6650, Amber, 3 Bolt mount  
**6650A-MG** = 6650, Amber, Magnet mount

# Mobile Equipment Lighting

## Visual Warning - LED Arrowbar



### Class I LED Directional Arrowbar

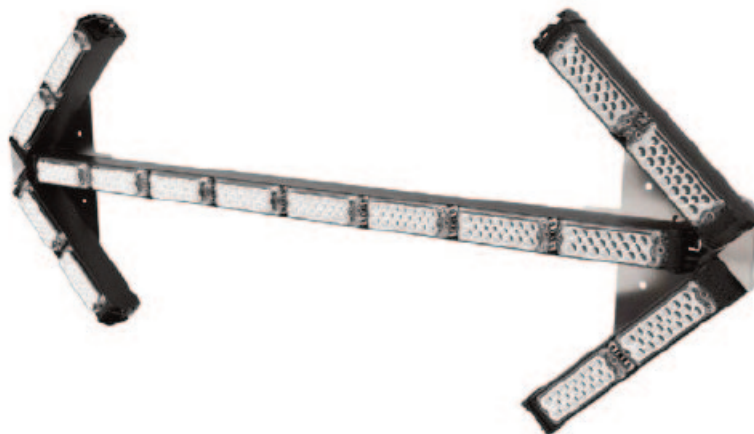
| Product                        | Dimensions  | Color  | Voltage   | Amps          | Flash       | Warranty | Additional Information  |
|--------------------------------|---|--------|-----------|---------------|-------------|----------|---|
| Safety Director™ ED3307 Series | 24.4" (620mm) High, 53.8" (1367mm) Wide<br>3.2" (81mm) Deep | Yellow | 12-24V DC | 2.8A @ 12V DC | 35 patterns | 3 Years  | SAE J595 Class I, CE, R10. powered 3811 LED modules. Extruded aluminum housing with polycarbonate lens. Includes Arrow Bar ( <b>ED3307A</b> ), Controller ( <b>ED3307CB</b> ) and 35' (10.7m) Cable ( <b>3410-35</b> ). |

| Product  | Dimensions  | Description                      | Flash Patterns   |
|----------|---|----------------------------------|--|
| ED3307CB | 2.1" (53mm) High, 6.1" (155mm) Wide, 0.7" (18mm) Deep | Safety Director Arrow Controller | One lamp sequence then double flash<br>1 Flash - Wig wag<br>2 Right sweep - Single lamp L-R sequentially/double flash<br>3 Left sweep - Single lamp R-L sequentially/double flash<br>4 Center - Single lamp center out/double flash              |
| 3410- 15 | 15' (4.57m) Long                                      | 15' Cable                        |  |
| 3410- 35 | 35' (10.67) Long                                      | 35' Cable                        |  |
| 3410- 55 | 55' (16.77) Long                                      | 55' Cable                        |  |
| 3811     | 2.1" (53mm) High, 5.9" (151mm) Wide, 1.2" (30mm) Deep | 3811 LED Module                  | Two lamp sequence then double flash<br>5 Flash - Wig wag alternating<br>6 Right sweep - Two lamp L-R sequentially/double flash<br>7 Left sweep - Two lamp R-L sequentially/double flash<br>8 Center - Two lamp center out/double flash           |
|          |   |                                  | Six lamp sequence then double flash<br>9 Flash - Hyper wig wag<br>10 Right sweep - Six lamp L-R sequentially/double flash<br>11 Left sweep - Six lamp R-L sequentially/double flash<br>12 Center - Six lamp center out/double flash              |
|          |   |                                  | Sequence to solid double flash<br>13 Flash - Wig wag<br>14 Right sweep - L-R sequentially/solid double flash<br>15 Left sweep - R-L sequentially/solid double flash<br>16 Center - Center out/solid double flash                                 |
|          |   |                                  | One lamp sequence then triple flash<br>17 Flash - Hyper alternating<br>18 Right sweep -Single lamp L-R sequentially/triple flash<br>19 Left sweep - Single lamp R-L sequentially/triple flash<br>20 Center - Single lamp center out/triple flash |
|          |   |                                  | Three lamp sequence then double flash<br>21 Flash - Alternating solid<br>22 Right sweep - Three lamp L-R sequentially/double flash<br>23 Left sweep - Three lamp R-L sequentially/double flash<br>24 Center - Three lamp center out/double flash |
|          |   |                                  | Sequence on/off<br>25 Flash - Hyper wig wag<br>26 Right sweep - L-R sequentially/off<br>27 Left sweep - R-L sequentially/off<br>28 Center - Center out/solid   |
|          |   |                                  | Solid arrow<br>29 Flash - Wig wag<br>30 Right sweep - Right side on/off<br>31 Left sweep - Left side on/off<br>32 Center - All lamps on/off  |
|          |   |                                  | Flash with no arrows<br>33 Cycle flash - Wig wag<br>34 Solid flash - Wig wag<br>35 Solid flash - Alternating   |

### ECCO Safety Director™ ED3307 Series



ED3307CB



ED3307A

# Mobile Equipment Lighting

Visual Warning - LED Concealed



## Super LED Light

| Product      | Type             | Description                             |
|--------------|------------------|---|
| WH-VTX609*   | Omni-Directional | Single color                            |
| WH-XTX609*   | Omni-Directional | Single color, Smoked lens               |
| WH-VTX609#   | Omni-Directional | Split color, Amber, Blue, Red, or White |
| WH-VTXFB     | Omni-Directional | Black angle kit, surface mount          |
| WH-VTXFC     | Omni-Directional | Chrome angle kit, surface mount         |
| WH-VTX3609*  | Side Emitter     | Single color                            |
| WH-VTX3609#  | Side Emitter     | Split color, Amber, Blue, Red, or White |
| WH-VTXD609*  | Directional      | Single Color                            |
| WH-XTXD609*  | Directional      | Single color, Smoked lens               |
| WH-VTX D609# | Directional      | Split color, Amber, Blue, Red, or White |
| WH-XTX D609# | Directional      | Split color, Smoked lens                |
| WH-VTXFB     | Directional      | Black angle kit, surface mount          |
| WH-VTXFC     | Directional      | Chrome angle kit, surface mount         |

Replace symbol \* in model number with letter indicating desired color:  
A = Amber, B = Blue, R = Red, C = White

Replace symbol # in model number with letter indicating desired split color:  
D = Red/Clear, E = Blue/Clear, F = Amber/Clear, J = Red/Blue, K = Red/Amber, M = Blue/Amber

## Whelen Vertex Super LED Light



WH-VX609F

WH-VTX3609R

WH-VTXD609C  
with side reflector

## LED Concealed Warning Light

| Product     | Dimensions                         | Color | Voltage               | Amps             | Flash                          | Warranty | Additional Information  |
|-------------|------------------------------------|-------|-----------------------|------------------|--------------------------------|----------|---|
| Hide-A-LED™ | 0.9" (22mm) High,<br>1.5" (38mm) Ø |       | 12-24V<br>DC<br>multi | 0.9A @<br>12V DC | 16 patterns<br>(Sync. capable) | 2 Years  | 2 Bolt mount (in-headlight flange 1" hole or surface mount), CE, R10, IP67. Six LED head. In-line waterproof driver module with 9' (2.74m) cable. |



9014A

Abbrev: A = Amber MG = Magnet mount

Parts Example: 6650A = 6650, Amber, 3 Bolt mount  
6650A-MG = 6650, Amber, Magnet mount

## Hideaway Strobe Kit

| Product   | Type                              | Dimensions (DxLxH)                            | Flash Patterns                  | Voltage         | Amps | Watts | Kit Includes   |
|-----------|-----------------------------------|---|---------------------------------|-----------------|------|-------|--|
| RSK996P-4 | Four Head<br>Remote<br>Strobe Kit | 5 1/4"x5 1/2"x2 7/8"<br>(133.35x139.7x 73.02) | 24 Selectable<br>Flash Patterns | 10V - 30V<br>DC | 9.4A | 90W   | 90 Watt remote power supply, clear strobe tube assemblies, 15" and 20" cables with attached ends and lighted toggle switch |

## Star Warning Strobe Kit



STA-RSK996P-4



# Mobile Equipment Lighting

## ID Display Boards



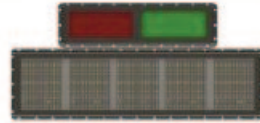
### LED Vehicle Identification Display (VID)



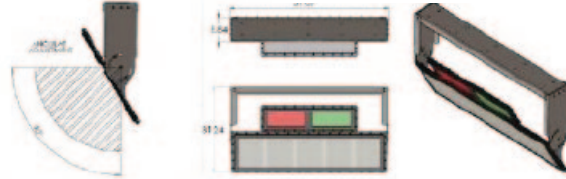
Visibility of Call Sign decals or ID numbers is of key importance at all times to ensure correct identification of heavy vehicles, water carts and other machinery. APS Vehicle Identification Display panels positively identifies vehicles on the job-site. Built tough, durable and rugged for harsh mining and construction environments having been field-tested for over 10 years.



### 5-character LED Vehicle Identification Display (VID) with Traffic Alert



The 5-character LED VID with traffic alert by APS is built on the same durable and robust design as the as the other VID products. This unit includes the additional red and green traffic alert system and 5 character LED display, which is visible for up to 152.4m (500ft).



| Part No.      | Description   |
|---------------|---|
| VID-5C12T-ARG | APS 5-character LED Vehicle Identification Display with Traffic Alert |

| Part No.           | Description   |
|--------------------|---|
| VID-2N12L-24V-A    | 2-digit numeric display, 304mm (12 inch) character height, 24V DC, 8W, Amber                      |
| VID-3N12L-24V-R    | 3-digit numeric display, 304mm (12 inch) character height, 24V DC, 12W, Red                       |
| VID-3N12L-24V-A    | 3-digit numeric display, 304mm (12 inch) character height, 24V DC, 12W, Amber                     |
| VID-3C12L-24V-A    | 3-character alpha-numeric display, 304mm (12 inch) character height, 24V DC, 36W, Amber           |
| VID-S10-2          | Mounting brackets for 2 to 4-digit/alpha-character 304mm (12 inch) displays                       |
| VID-S18-2          | Mounting brackets for 1-character 457.2mm (18 inch) displays                                      |
| VID-S24-2          | Mounting brackets for 1-character 609.6mm (24 inch) displays                                      |
| VID-S36-2          | Mounting brackets for 1-character 914.4mm (36 inch) displays                                      |
| VID-PC-EXT-50-1    | 50 ft (15.24m) power extension chord for LED and Backlit displays, two wire and Deutsch connector |
| VID-PC-EXT-50-2    | 50 ft (15.24m) power extension chord for LED and Backlit displays, Deutsch connector both ends    |
| VID-PC-EXT12-2Y    | Power Chord Splitter 2 VID's for 2 to 4-digit/alpha-character 304mm (12 inch) displays            |
| VID-PC-EXT12-3Y    | Power chord splitter 3 VID's for 2 to 4-digit/alpha-character 304mm (12 inch) displays            |
| VID-PC-EXT18/24-2Y | Power chord splitter 2 VID's for 1-character 457.2mm (18 inch) and 609.6mm (24 inch) displays     |
| VID-PC-EXT18/24-3Y | Power chord splitter 3 VID's for 1-character 457.2mm (18 inch) and 609.6mm (24 inch) displays     |
| VID-PC-EXT36-2Y    | Power chord splitter 2 VID's for 1-character 914.4mm (36 inch) displays                           |
| VID-PC-EXT36-3Y    | Power chord splitter 3 VID's for 1-character 914.4mm (36 inch) displays                           |

### Programmable LED (VID)



Now with In-cab Programming. The APS team in Chile have been working on developing a range of pre-programmed in-cab selectable codes for the Haul Truck number boards. Rather than just being a static ID display the haul truck operator has the capability to select any of the following codes from inside the cab. Up to 25 different codes can be programmed.

| Part No.           | Description  |
|--------------------|--|
| VID-3C12-AMCA-24VA | Programmable 3-character alpha-numeric display with arrows |

### APS Backlit Vehicle Identification Display (VID) Panels



The APS backlit VID panels feature backlit technology, and reflective and translucent bold font for optimum day or night visibility. Available with any number, letter or symbol, these VID panels are visible even when not under power.



| Part No.           | Description  |
|--------------------|--|
| VID-BL1C18-BK-24V  | 1-character display, 457.2mm (18 inch) character height, 24V DC, 50W                             |
| VID-BL1C24-BK-24V  | 1-character display, 609.6mm (24 inch) character height, 24V DC, 80W                             |
| VID-BL1C36-BK-24V  | 1-character display, 914.4mm (36 inch) character height, 24V DC, 100W                            |
| VID-BL2C12-BK-24V  | 2-character display, 304mm (12 inch) character height, 24V DC, 60W                               |
| VID-BL3C12-BK-24V  | 3-character display, 304mm (12 inch) character height, 24V DC, 90W                               |
| VID-BL4C12-BK-24V  | 4-character display, 304mm (12 inch) character height, 24V DC, 120W                              |
| VID-S10-2          | Mounting brackets for 2 to 4-digit/alpha-character 304mm (12 inch) displays                      |
| VID-S18-2          | Mounting brackets for 1-character 457.2mm (18 inch) displays                                     |
| VID-S24-2          | Mounting brackets for 1-character 609.6mm (24 inch) displays                                     |
| VID-S36-2          | Mounting brackets for 1-character 914.4mm (36 inch) displays                                     |
| VID-PC-EXT-50-1    | 50 ft (15.24m) power extension cord for LED and Backlit displays, two wire and Deutsch connector |
| VID-PC-EXT-50-2    | 50 ft (15.24m) power extension cord for LED and Backlit displays, Deutsch connector both ends    |
| VID-PC-EXT12-2Y    | Power cord Splitter 2 VID's for 2 to 4-digit/alpha-character 304mm (12 inch) displays            |
| VID-PC-EXT12-3Y    | Power cord splitter 3 VID's for 1-character 457.2mm (18 inch) and 609.6mm (24 inch) displays     |
| VID-PC-EXT18/24-3Y | Power cord splitter 3 VID's for 2 to 4-digit/alpha-character 304mm (12 inch) displays            |
| VID-PC-EXT36-2Y    | Power cord splitter 2 VID's for 1-character 914.4mm (36 inch) displays                           |
| VID-PC-EXT36-3Y    | Power cord splitter 3 VID's for 1-character 914.4mm (36 inch) displays                           |



# Mobile Equipment Lighting

## Safety Whips & Flags



### Safety Whips and Flags



This unique and innovative product features a 3-sided backlit Vehicle Identification Display (VID) with LEDs, making it suitable for 360 degree visibility on heavy and auxiliary equipment such as dozers and graders.

Customize it the way you want, as there are plenty of options to choose from such as: having an LED beacon or without an LED beacon, having a whip and flag or without a whip and flag, and you can also choose whether to have a powered or unpowered whip and flag.

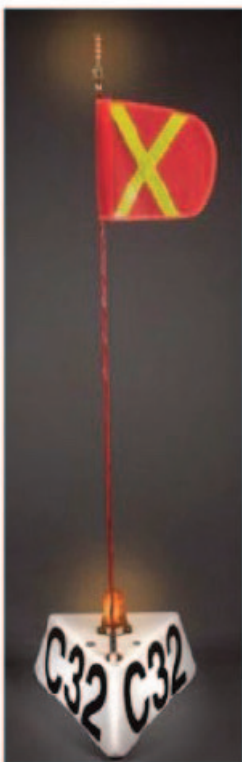
#### Features

- Internal high performance LED illumination for night time visibility
- Manufactured with 3M Diamond Grade Reflective for night visibility
- Heavy duty ultra-high density shell for water and weather resistance
- Constructed with four heavy duty magnets
- Up to 3 characters at 210.82mm (8.3 inch) height



#### Part No. Description

|              |  |
|--------------|--|
| VID-LA4-SX   | APS 3-sided backlit Vehicle Identification Display (VID), beacon, powered whip, LED strobe tube        |
| VID-LA4NP-SX | APS 3-sided backlit Vehicle Identification Display (VID), beacon, non-powered whip                     |
| VID-SA4FA-SX | APS 3-sided backlit Vehicle Identification Display (VID) for lite duty pickups/utes                    |
| UPM5         | Powered Universal Platform Mount with 1.52m (5') pole  |
| UPM5-V       | APS 3-sided display, thread whip mount, powered Universal Platform Mount with 1.52m (5') pole          |
| UPM5-VS      | APS 3-sided display, thread whip mount, strobe, powered Universal Platform Mount with 1.52m (5') pole  |
| UPM3         | Powered Universal Platform Mount with 0.914m (3') pole   |
| UPM3-V       | APS 3-sided display, thread whip mount, powered Universal Platform Mount with 0.914m (3') pole         |
| UPM3-VS      | APS 3-sided display, thread whip mount, strobe, powered Universal Platform Mount with 0.914m (3') pole |
| UPMT         | Toolbox/Side mount for telescoping whips and Universal Platform Mounts                                 |



#### Part No. Description

|               |   |
|---------------|---|
| SIG2FL-G/R-24 | VID Flashing LED Signal Light Display           |
| 519.30B       | Zinc Plated Spring Mount                        |
| 519.343       | Threaded Safety Whip Base                       |
| AW07D-Red     | Alloy Whip with Light Socket                    |
| FLAG-X        | Reflective X Safety Flag                        |
| M-PLA         | High Impact Lens for Miniature Lamps            |
| M-PLR         | High Impact Lens for Miniature Lamps            |
| W08           | Safety Whip without Flag and Plugs              |
| W08-B         | Powered Whip with Buggy Lights                  |
| W08NP-X       | Heavy Duty Whip Non-Powered                     |
| W10           | Safety Whip without Flag                        |
| W10-M         | Heavy Duty Fiberglass Whip with Mesh Flag       |
| W10-X         | Heavy Duty Fiberglass Whip with Reflective Flag |
| W12-M         | Safety Whip and Mesh Flag                       |
| W12NP-X       | Heavy Duty Fiberglass Whip                      |

# Mobile Equipment Lighting

## Safety Whip Lightheads



### Safety Whip Lightheads LED

| Product    | Type                       | Dimensions (H x W x L)   | Color | Voltage |
|------------|----------------------------|--------------------------|-------|---------|
| AL2CA      | Amber Light Head Steady On | –                        | Amber | 9-24V   |
| AL2CW      | White Light Head Steady On | –                        | White | 9-24V   |
| AL8CA      | Amber Light Head Steady On | 104mm (4.1 in) in Length | Amber | 9-12V   |
| AL8FA      | Amber LED Flashing Light   | 104mm (4.1 in) in Length | Amber | 9-12V   |
| AL8FB      | Blue LED Flashing Light    | 104mm (4.1 in) in Length | Blue  | 9-12V   |
| AL8FG      | Green LED Flashing Light   | 104mm (4.1 in) in Length | Green | 9-12V   |
| AL8FR      | Red LED Flashing Light     | 104mm (4.1 in) in Length | Red   | 9-12V   |
| CXA-BA15SR | Red Buggy Whip Light       | –                        | Red   | 9-32V   |

### Safety Whip Lights



AL2CA



AL2CW



AL8CA/  
AL8FA



AL8FB



AL8FG



AL8FR



CXA-BA15SR

### APS Wheelchocks

| Product | Application   | Tire Size | Size (H x W x L)                               | Weight               | Max Tire Radius        | Max Weight                 |
|---------|---|-----------|--|----------------------|------------------------|----------------------------|
| 10840   | Airport small vehicles, carts, small trailers, light duty 4 x 4 | Small     | 6" x 7" x 8"<br>(152 x 178 x 203mm)            | 1.5 lbs<br>12V DC    | 20"/508 mm<br>(0.8 kg) | 30,000 lbs/<br>13,608 kg   |
| 1088    | Airport Service Vehicles, trucks and minesite support vehicles  | Medium    | 7" x 8" x 11.5"<br>(178 x 203 x 292mm)         | 3.5 lbs<br>(1.6 kg)  | 40"/1.016 mm           | 70,000 lbs/<br>31,752 Kg   |
| 1085    | Mining Trucks   | Giant     | 14.5" x 14.75" x 17.25"<br>(368 x 375 x 439mm) | 21.5 lbs<br>(9.8 kg) | 105"/2.667 mm          | 366,000 lbs/<br>166,015 kg |
| 1143    | Mining Trucks   | Mega      | 18" x 18" x 26"<br>(457 x 457 x 660mm)         | 44 lbs<br>(20 kg)    | 140"/3.556 mm          | 240 Ton/<br>217,724 kg     |



10840



1088



1085



1143