Cross View Mirror Systems
Eye-Max® LP, Hawk-Eye®, Mini Hawk-Eye®, High Definition®, Safety Cross
Eye-Max® LP

Asymmetric Cross View Mirror System

The Eye-Max® LP represents the next step in the evolution of cross view mirrors. It improves on the performance of the already successful Hawk-Eye® and Mini Hawk-Eye® mirrors. The novelty of the Eye-Max® LP is the revolutionary asymmetrical shape of its mirror lens. This offers some significant advantages:

- Enhanced definition of passengers passing through the danger zones around a school bus
- Lower profile reduces forward blind spots
- Enhanced coverage of dangerous passing traffic on driver side
during loading and unloading at stops
- Surpasses System “B” mirror requirements per FMVSS-111

Advanced Computer Aided Testing

Confirms Eye-Max® LP Performance

Rosco is a leader in the field of Computer-Aided Testing for confirming vision solutions around the vehicle. These tests utilize accurate mirror and bus geometries to verify that the reflected images in the mirrors achieve what is mandated by FMVSS-111 or CMVSS-111 with the proper image size. Engineers from all the major bus body builders and from Transport Canada have reviewed these types of images both at Rosco and at their own facilities for accuracy.

The computer simulation seen near and far lower right illustrates the advantages of the Eye-Max® LP asymmetric mirror system on a conventional school bus. These images show FMVSS-111 test cylinders which approximate children riding a conventional school bus. Several cylinders are by the rear wheels on the door side of a conventional school bus. These images show FMVSS-111 test cylinders along the door (curb) side, images must be large enough to detect a child running to catch the bus. The Eye-Max® LP asymmetric cross view mirror enlarges those images by as much as 33% over our own Mini Hawk-Eye® mirror. In front of the bus, increased coverage over a closer but wider area necessitates a different curvature to provide sufficient coverage without sacrificing image size.

The Eye-Max® LP Asymmetric Mirror

Different sections throughout the mirror yield optimum viewing parameters for specific danger zones around the bus. These asymmetric mirror divisions are designed to increase image-size and coverage in all areas around the bus.

Asymmetry makes better use of the mirror surface by tailoring specific areas of the mirror to the needs of specific danger zones around the bus. By the rear wheels of a bus along the door (curb) side, images must be large enough to detect a child running to catch the bus. The Eye-Max® LP asymmetric cross view mirror enlarges those images by as much as 33% over our own Mini Hawk-Eye® mirror.

PART NO. DESCRIPTION

5360 Eye-Max® LP Mirror Head Only, w/ Tunnel Mount System
5360H Eye-Max® LP Mirror Head Only Heated, w/ Tunnel Mount System
5365H Eye-Max® LP Mirror Head Only Heated For Internal Harness, w/ Tunnel Mount System
5365 Eye-Max® LP Mirror Head Only, w/ Tunnel Mount System
5360H Eye-Max® LP Mirror Head Only Heated, w/ Ball Stud Mount System
5365H Eye-Max® LP Mirror Head Only Heated For Internal Harness, w/ Ball Stud Mount System

Driver Side Eye-Max® LP Cross View Mirror

On the driver side, the Eye-Max® LP mirror’s unique shape provides superior coverage and image size in all danger zones. As seen at left, the Eye-Max® LP enhances the image size of the FMVSS-111 test cylinders around the bus.

Passenger Side Eye-Max® LP Cross View Mirror

On the passenger side, the Eye-Max® LP mirror’s unique shape provides larger images in the front danger zone. Along the left (road) side of the bus, the increased coverage helps the driver see motorists who may be attempting to drive by the bus during a stop.
Hawk-Eye®

Better Shape Delivers Better Perspective

The oval shape of Rosco’s Hawk-Eye® series cross view mirrors provides drivers with a complete picture of the bus and the areas around it. Unlike other cross view mirrors, Rosco’s Hawk-Eye® mirrors reflect the full front of the bus to provide a better frame of reference in assessing distance and clearance. Without seeing the complete front of the bus, drivers only receive a “piece” of a bigger picture, which can be similar to seeing an object out of context.

Since 2000, Rosco’s oval Hawk-Eye® series cross view mirrors have provided unparalleled image consistency and clarity. Regardless of where along the major and minor axes an image is viewed, the image size remains constant. This is because the curvature along those axes is constant. From the center of the mirror to the perimeter, top to bottom or left to right, the Hawk-Eye® series sets the standard for safe, clear viewing in the critical areas around the bus.

The right mirror system should assist drivers in their job to get children to and from school safely. At Rosco, we’re dedicated to making mirror systems that are innovative and offer the latest in safety technology. That’s why Rosco Hawk-Eye® and Mini Hawk-Eye® cross view mirrors are offered on nearly every school bus manufactured in North America. Now available with full or partial tints, Rosco continues to offer school bus drivers the best mirrors on the market today.

PART NO. | DESCRIPTION
--- | ---
2360 | Hawk-Eye® mirror head, with tunnel mount
2360T | Hawk-Eye® mirror head, with tunnel mount, Partial Tint
2360H | Hawk-Eye® mirror head, with tunnel mount, Heated
2360TH | Hawk-Eye® mirror head, with tunnel mount, Heated, Partial Tint
2360FT | Hawk-Eye® mirror head, with tunnel mount, Full Tint
2360FTH | Hawk-Eye® mirror head, with tunnel mount, Heated, Full Tint
2360T | Hawk-Eye® mirror head, with ball stud mount
2360H | Hawk-Eye® mirror head, with ball stud mount, Heated
2360TH | Hawk-Eye® mirror head, with ball stud mount, Heated, Partial Tint
2360FT | Hawk-Eye® mirror head, with ball stud mount, Full Tint
2360FTH | Hawk-Eye® mirror head, with ball stud mount, Heated, Full Tint
3365 | Hawk-Eye® mirror head, with ball stud mount
3365H | Hawk-Eye® mirror head, with ball stud mount, Heated
3365TH | Hawk-Eye® mirror head, with ball stud mount, Heated, Partial Tint
3365FT | Hawk-Eye® mirror head, with ball stud mount, Full Tint
3365FTH | Hawk-Eye® mirror head, with ball stud mount, Heated, Full Tint

Mini Hawk-Eye®

Features and Advantages of Hawk-Eye® Series

- Complete field of vision coverage for FMVSS-111 compliance.
- Full oval shape provides larger viewing area for driver.
- Universally adjustable ball swivel allows for easy adjustment.
- Aerodynamic profile provides smoother airflow, which reduces vibration.
- Contoured housing provides stability.
- Full oval gives driver perspective of vehicle within viewing area.
- Constant mirror curvature provides uniform images along the major and minor axes.
- Available in tunnel mount, for interchangeability with pre-existing arms.
- Economical pricing.

Additional Features of the Mini Hawk-Eye®

In addition, the Mini Hawk-Eye® also features:

- Lower overall height to minimize obstruction.
- Smaller profile for reduced blind spots in small bus applications.

PART NO. | DESCRIPTION
--- | ---
3360 | Mini Hawk-Eye® mirror head, with tunnel mount
3360T | Mini Hawk-Eye® mirror head, with tunnel mount, Partial Tint
3360H | Mini Hawk-Eye® mirror head, with tunnel mount, Heated
3360TH | Mini Hawk-Eye® mirror head, with tunnel mount, Heated, Partial Tint
3360FT | Mini Hawk-Eye® mirror head, with tunnel mount, Full Tint
3360FTH | Mini Hawk-Eye® mirror head, with tunnel mount, Heated, Full Tint
3365 | Mini Hawk-Eye® mirror head, with ball stud mount
3365H | Mini Hawk-Eye® mirror head, with ball stud mount, Heated
3365TH | Mini Hawk-Eye® mirror head, with ball stud mount, Heated, Partial Tint
3365FT | Mini Hawk-Eye® mirror head, with ball stud mount, Full Tint
3365FTH | Mini Hawk-Eye® mirror head, with ball stud mount, Heated, Full Tint

Hawk-Eye® cross view mirror without partial tint

Hawk-Eye® cross view mirror with partial tint
**High Definition®**

*The industry’s only Bi Cross View Mirror System*

The High Definition® features the industry’s first “Bi-optical” mirror lens. Unlike most convex lenses, it combines a pair of focal points to seamlessly concentrate visibility where you need it most.

As a result, the reflected images of objects around the bus are larger while the image of the bus itself is smaller. This improves driver comprehension by enhancing danger zone imaging.

- **Enhanced danger zone imaging**
- **Rugged new construction**
- **Attractive styling**
- **Fast and easy servicing**
- **Simple upgrade**
- **Headlight reducing visor glare**

**BBHD-380**
High Definition® Mirror Head Tunnel Mount

**BBHD-370**
Replacement Lens - Replaces All Unheated High Definition Lenses

**BBHD-380**
High Definition® Mirror Head Tunnel Mount Heated

**BBHD-380L**
High Definition® Mirror Head Tunnel Mount Heated, IC Wiring

**BBHD-380L**
Heated Replacement Lens - Replaces All Heated High Definition Lenses

**S2-370**
High Definition Non-Heated 3/4” black Bus Boy® Mount

**S2-380**
High Definition Heated 3/4” black Bus Boy® Mount

**SC370**
High Definition® Mirror Head 5/16” Ball Stud Mount

**SC380**
High Definition® Mirror Head Heated 5/16” Ball Stud Mount

---

**Safety Cross**

*Lightest Weight Cross View*

Through a revolutionary new lens design, the Safety Cross comfortably exceeds the certification requirements for cross view mirrors. In addition, features have been designed into the Safety Cross mirror that eliminates the glare of the headlight for the driver.

- **Reduced glare**
- **Optimum visibility**
- **Durable construction**
- **Easy servicing**
- **Attractive styling**

**SC070A**
Safety Cross Mirror Head

**SC080A**
Safety Cross Mirror Head w/3/8” Ball Stud

**SC080A**
Safety Cross Heated Mirror Head

**SC080A**
Safety Cross Heated Mirror Head, IC Wiring

**SC010A**
Safety Cross Mirror Head w/3/8” Ball Stud

**SC010A**
Safety Cross Mirror Head Heated, IC Wiring

**SC070A**
Safety Cross Mirror Head Heated, Ball Stud Mount

**SC070A**
Safety Cross Heated Mirror Head Heated, Ball Stud Mount

**SC070A**
Safety Cross Heated Mirror Head Heated, Ball Stud Mount

---

**Cross View Arms**

- **Standard Style**
- **Driver Side**
- **Type "D"**
- **Transit Style**
- **Freightliner Arm Assembly with Standard Ball Mounts**
- **Thomas/Freightliner C2 Arm Assembly with Bell Snap® Breakaway Mounting Bases**

**Features and Benefits**

- Manufactured from heavy gauge galvanized tubing.
- Powder coated for corrosion-resistance, appearance and durability.
- High brace points for maximum stability and vibration resistance.
- Available in ball swivel and tunnel mount configurations.
- All arms available in stainless steel.
- Stainless fasteners and clamps.
- “Beneath the hood” fender-mounting “Z” brackets provide strength and stability.
Tiger Grip® Mounting Bases

Features and Benefits

- Patented internal aluminum clamping system for increased stability.
- Housing is molded from Space Age engineering-grade resins for superior performance and durability.
- Bases available for every type of mounting surface.
- Aluminum/resin clamping combination allows breakaway swiveling without typical metal to metal seizing.
- Aluminum/resin combination maintains optimum clamping friction.

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>19A</td>
<td>Type “D”, aluminum base with 7” radius for curved surfaces</td>
</tr>
<tr>
<td>19FR</td>
<td>Freightliner driver side base also used on pre 1995 Ford Type “C”</td>
</tr>
<tr>
<td>19FL</td>
<td>Freightliner passenger side base also used on pre 1995 Ford Type “C”</td>
</tr>
<tr>
<td>19FL95</td>
<td>Ford, Type “C” driver side base, 1996 and newer</td>
</tr>
<tr>
<td>19FR95</td>
<td>Ford, Type “C” passenger side base, 1996 and newer</td>
</tr>
<tr>
<td>19G</td>
<td>Universal aluminum base, for flat surfaces, GM Type “A”</td>
</tr>
<tr>
<td>19CL</td>
<td>IC Corp. CE Type “C”, 2004 &amp; newer driver side base</td>
</tr>
<tr>
<td>19CR</td>
<td>IC Corp. CE Type “C”, 2004 &amp; newer passenger side base</td>
</tr>
<tr>
<td>19INT</td>
<td>International base, used on pre-1990 International Type “C”</td>
</tr>
<tr>
<td>19NAV</td>
<td>Navistar base, used on 1991 and newer International Type “C”</td>
</tr>
<tr>
<td>19U</td>
<td>Universal base for flat surfaces</td>
</tr>
<tr>
<td>19U/KIT</td>
<td>Well Nut kit, 6 each well nuts and screws</td>
</tr>
<tr>
<td>2000BBL</td>
<td>Blue Bird Type “C”, Vision, driver side base</td>
</tr>
<tr>
<td>2000BBR</td>
<td>Blue Bird Type “C”, Vision, passenger side base</td>
</tr>
<tr>
<td>ASY4503</td>
<td>Mounting Base Blue Bird Type C Drive Side Cross View Arm Assembly</td>
</tr>
<tr>
<td>ASY4504</td>
<td>Mounting Base Blue Bird Type C Curb Side Cross View Arm Assembly</td>
</tr>
<tr>
<td>ASY3083</td>
<td>Mounting Base Blue Bird “D3/73” Drive Side Cross View Arm Assembly</td>
</tr>
<tr>
<td>ASY3084</td>
<td>Mounting Base Blue Bird “D3/73” Curb Side Cross View Arm Assembly</td>
</tr>
<tr>
<td>BAS4505</td>
<td>Thomas, C2, Driver Side Center Base Mount</td>
</tr>
<tr>
<td>BAS4506</td>
<td>Thomas, C2, Passenger Side Center Base Mount</td>
</tr>
</tbody>
</table>

Mirror System Testing For Compliance to FMVSS-111

Rosco’s Eye-Max® LP cross view mirror systems have been certified for compliance to FMVSS-111 by most major school bus body builders. These OEMs have shown time and again that Rosco mirrors not only meet, but exceed the requirements of FMVSS-111. Rosco has taken this one step further. We continue to test and improve our mirrors to make sure that they cover areas around the bus beyond the requirements of FMVSS-111. Rosco will never rest in this regard, because we know that the safety of our children depends on it.

You know your buses are being manufactured with FMVSS-111 compliant mirrors, but how do you know that your mirrors are being properly adjusted? Can you be sure that your drivers are seeing the blind areas around the bus? Are there blind areas around the bus beyond the FMVSS-111 mandated coverage?

Unsure about these questions? Then you need to see “Field of Vision”, the first video which teaches your team how to keep your mirrors properly adjusted at all times. This FREE guideline is a perfect addition to your driver training program. It not only shows how to keep your mirrors adjusted in compliance with FMVSS-111, but also how to see blind areas beyond FMVSS-111 regulations.

Email us for your FREE DVD copy.

info@roscomirrors.com
Backup Safety Products

Backup Cameras & Monitors

Safety Starts with a Rearview Camera

We cover all the safety angles so your vehicle can backup safely. Replace a standard rearview mirror with one that displays an LCD image as soon as the vehicle is shifted into reverse. Or install a rearview mirror backup camera that delivers an unobstructed view of what’s behind the vehicle even when it’s dark outside. Reduce the risks of moving in reverse. Drivers will be able to maneuver easily in reverse with one of our backup camera kits.

Fleet Safety Management

Dual-Vision XC Recording

Rosco’s Dual-Vision XC is the most cost effective windshield based camera that offers all the benefits of event based recording with the added benefit of continuous recording. With Dual-Vision XC fleets have the ability to reduce distracted driving, improve driver performance, and reduce liability and insurance premiums. Some Dual-Vision XC features include:

- No monthly fees
- Up to 160 hours of continuous video on a 32GB SD card
- Tamper proof SD card lock
- G-Force recognition
- Vehicle speed
- Integrated GPS tracking
- Driver panic button
- 24 hour surveillance timer audio, night vision
- Up to 6 camera views
- Wi-Fi download capability and much more.

DV-Pro® Advanced Data Management Software

Maximize your data’s potential with the DV-Pro® fleet database management system. This software was developed specifically for organizing information captured by Dual-Vision XC recording devices. DV-Pro® makes it fast and easy to view or transfer recorded data, locate specific events on footage, archive or discard content, and compile reports or email files.

Backup Safety Sensors

A wireless backup sensor kit alerts drivers to unsafe situations behind a vehicle. Rosco designs flush mount and under-the-bumper backup sensors for a range of applications. Commercial vehicle backup sensors give drivers the information they need for safe reversing to vehicles, objects, and other targets. Look to Rosco backup sensors for trucks and other hardworking vehicles. With sensor kits and backup cameras, we deliver rugged tools for smooth driving.

Backup Safety Products

Backup Cameras & Backup Sensors

MOR-Vision™ Mirror/Monitor Backup Camera Kits

Rosco Vision Systems introduces a revolutionary new backup camera system (STSK6630) for large school buses and vehicles. This new system utilizes an interior 6” x 30” rearview mirror (STSM630) to display a 7” LCD monitor when the vehicle is in reverse operation. This monitor allows the driver to see behind the vehicle, and once the vehicle is shifted to all other modes of operation a normal full mirror view reappears.

The MOR-Vision™ series also includes our STSK5530 kit and STK1030 kit for small and large buses. Buses equipped with MOR-Vision™ have options for multiple cameras and automatic monitor view changes based on operational conditions of the school bus.

With two camera inputs, the MOR-Vision™ systems allow for a second camera to be installed for increased visibility and security. Upgrade the MOR-Vision™ Mirror/Monitor Backup Camera System with a second interior or exterior camera for maximized safety.

Backup Safety Products

Backup Cameras & Monitors

Safety Starts with a Rearview Camera

We cover all the safety angles so your vehicle can backup safely. Replace a standard rearview mirror with one that displays an LCD image as soon as the vehicle is shifted into reverse. Or install a rearview mirror backup camera that delivers an unobstructed view of what’s behind the vehicle even when it’s dark outside. Reduce the risks of moving in reverse. Drivers will be able to maneuver easily in reverse with one of our backup camera kits.

Fleet Safety Management

Dual-Vision XC Recording

Rosco’s Dual-Vision XC is the most cost effective windshield based camera that offers all the benefits of event based recording with the added benefit of continuous recording. With Dual-Vision XC fleets have the ability to reduce distracted driving, improve driver performance, and reduce liability and insurance premiums. Some Dual-Vision XC features include:

- No monthly fees
- Up to 160 hours of continuous video on a 32GB SD card
- Tamper proof SD card lock
- G-Force recognition
- Vehicle speed
- Integrated GPS tracking
- Driver panic button
- 24 hour surveillance timer audio, night vision
- Up to 6 camera views
- Wi-Fi download capability and much more.

DV-Pro® Advanced Data Management Software

Maximize your data’s potential with the DV-Pro® fleet database management system. This software was developed specifically for organizing information captured by Dual-Vision XC recording devices. DV-Pro® makes it fast and easy to view or transfer recorded data, locate specific events on footage, archive or discard content, and compile reports or email files.

Backup Safety Sensors

A wireless backup sensor kit alerts drivers to unsafe situations behind a vehicle. Rosco designs flush mount and under-the-bumper backup sensors for a range of applications. Commercial vehicle backup sensors give drivers the information they need for safe reversing to vehicles, objects, and other targets. Look to Rosco backup sensors for trucks and other hardworking vehicles. With sensor kits and backup cameras, we deliver rugged tools for smooth driving.

Backup Safety Products

Backup Cameras & Backup Sensors

MOR-Vision™ Mirror/Monitor Backup Camera Kits

Rosco Vision Systems introduces a revolutionary new backup camera system (STSK6630) for large school buses and vehicles. This new system utilizes an interior 6” x 30” rearview mirror (STSM630) to display a 7” LCD monitor when the vehicle is in reverse operation. This monitor allows the driver to see behind the vehicle, and once the vehicle is shifted to all other modes of operation a normal full mirror view reappears.

The MOR-Vision™ series also includes our STSK5530 kit and STK1030 kit for small and large buses. Buses equipped with MOR-Vision™ have options for multiple cameras and automatic monitor view changes based on operational conditions of the school bus.

With two camera inputs, the MOR-Vision™ systems allow for a second camera to be installed for increased visibility and security. Upgrade the MOR-Vision™ Mirror/Monitor Backup Camera System with a second interior or exterior camera for maximized safety.
Rosco was established in 1907. For over a century, our goals have remained the same: We are committed to producing the highest quality automotive products and providing the superior service our customers have grown to expect.

Today, we supply our products to every school bus manufacturer in North America. Our products are designed and built in the USA. Our staff has grown to over two hundred people in facilities totaling over one hundred thousand square feet.

As we move forward we have set our goals even higher. We are now certified to ISO-9001:2008. Our focus on Total Quality Management and continuous improvement will keep our product quality at levels our customers demand.

We will strive to improve our customer service through online and other electronic resources. We will continue to develop newer and better products to serve the ever-changing needs of the marketplace of tomorrow.