

Cross View Mirror Systems

Eye - Max[®] LP, Hawk - Eye[®], Mini Hawk-Eye[®], High Definition[®], Safety Cross



A CENTURY OF AUTOMOTIVE VISION SAFETY

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 asymmetric 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 FMVSS111.

Advanced Computer Aided Testing Confirms Eye-Max® LP Performance

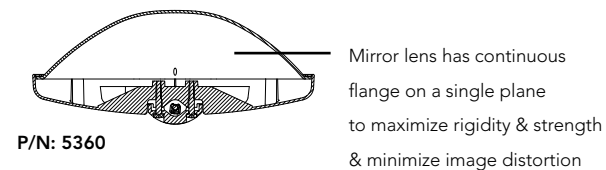
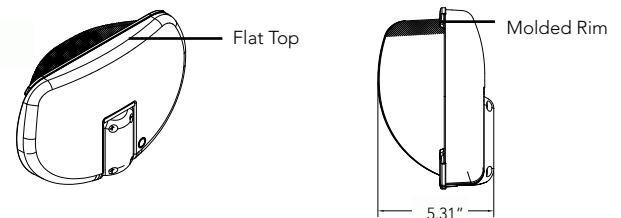
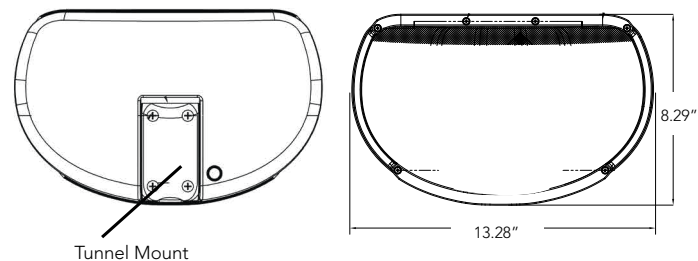
Rosco is a leader in the field of Computer-Aided Testing for confirming vision solutions around the vehicle. These tests utilize accurate mirror and bus geometrics to verify that the reflected images in the mirrors achieve what is mandated by FMVSS 111 or CMVSS 111 with the proper image size. Engineers 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 near a conventional school bus. Several cylinders are by the rear wheels on the door side of the bus and several cylinders are in front of the bus. The reflected images in the mirror provide up to a 33% increase in image size over our own Mini Hawk-Eye® mirrors alongside the bus and a 24% increase in image size in front.

Tunnel/Tube Mount



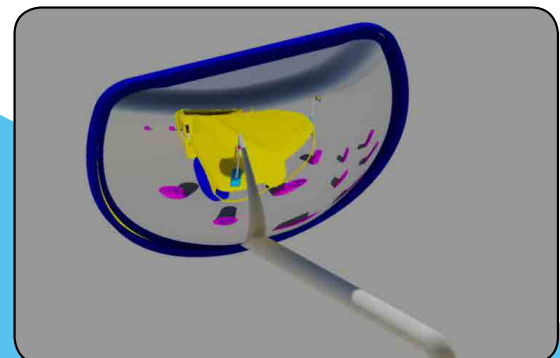
**TUNNEL MOUNT ALLOWS
SIDE TO SIDE ADJUSTMENT**



P/N: 5360

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



Driver side mirror as seen from driver's eye point. Objects and pedestrians in front of the bus are 24% larger than in conventional cross view mirrors.

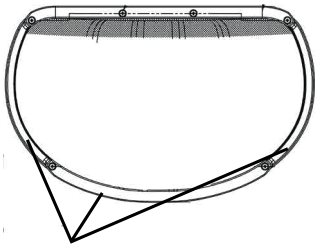
Eye-Max® LP

The Eye-Max® LP Asymmetric Mirror

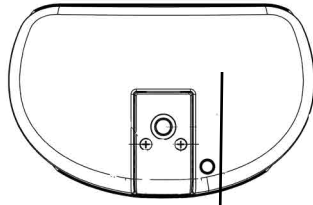
Ball Stud Mount



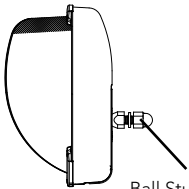
BALL STUD MOUNT ALLOWS OMNI DIRECTIONAL ADJUSTMENT



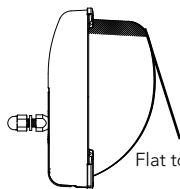
Removeable molded rim allows simple lens replacement



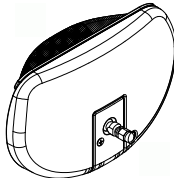
Injection molded housing eliminates corrosion while strengthening mirror structure



Ball Stud Mount



Flat top mirror is textured and darkened to eliminate glare



P/N:5365

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. 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.



Passenger side mirror as seen from driver's eye point. Objects and pedestrians at the rear axle area are 33% larger than in conventional cross view mirrors.

Passenger Side Eye-Max® LP Cross View Mirror

On the passenger 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.

Driver Side Eye-Max® LP Cross View Mirror

On the driver side, the Eye-Max® LP mirror's asymmetry 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.

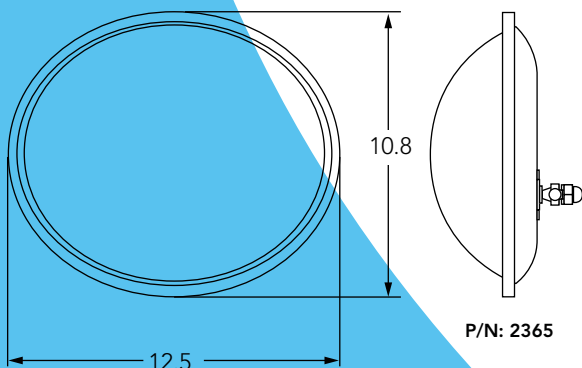
Hawk-Eye®



Rosco Hawk-Eye® cross view mirror without partial tint



Rosco Hawk-Eye® cross view mirror with partial tint



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® cross view mirror series has 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

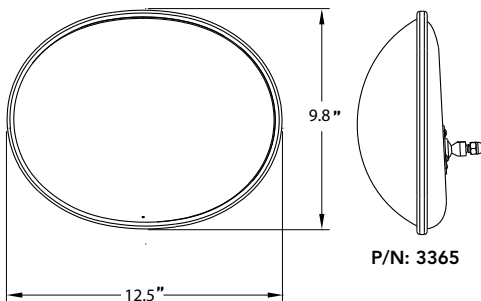
2360	Hawk-Eye® mirror head, with tunnel mount
2360T	Hawk-Eye® mirror head, with tunnel mount, Partial Tint
2360H	Hawk-Eye® mirror head, with tunnel mount, Heated
2360TH	Hawk-Eye® mirror head, with tunnel mount, Heated, Partial Tint
2360FT	Hawk-Eye® mirror head, with tunnel mount, Full Tint
2360FTH	Hawk-Eye® mirror head, with tunnel mount, Heated, Full Tint
2365	Hawk-Eye® mirror head, with ball stud mount
2365H	Hawk-Eye® mirror head, with ball stud mount, Heated
2365T	Hawk-Eye® mirror head, with ball stud mount, Partial Tint
2365TH	Hawk-Eye® mirror head, with ball stud mount, Heated, Partial Tint
2365FT	Hawk-Eye® mirror head, with ball stud mount, Full Tint
2365FTH	Hawk-Eye® mirror head, with ball stud mount, Heated, Full Tint
2365IH	Hawk-Eye® mirror head, with ball stud mount, Heated, with internal connector
2365ITH	Hawk-Eye® mirror head, with ball stud mount, Heated, with internal connector, Partial Tint
2365IFTH	Hawk-Eye® mirror head, with ball stud mount, Heated, with internal connector, Full Tint
2368VDTIH	Hawk-Eye® with tunnel mount dark tint, with internal harness

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

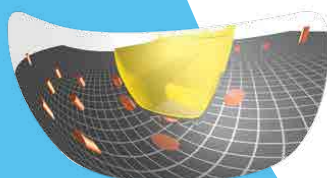
3360	Mini Hawk-Eye® mirror head, with tunnel mount
3360T	Mini Hawk-Eye® mirror head, with tunnel mount, Partial Tint
3360H	Mini Hawk-Eye® mirror head, with tunnel mount, Heated
3360TH	Mini Hawk-Eye® mirror head, with tunnel mount, Heated, Partial Tint
3360FT	Mini Hawk-Eye® mirror head, with tunnel mount, 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
3365T	Mini Hawk-Eye® mirror head, with ball stud mount, Partial Tint
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
3365IH	Mini Hawk-Eye® mirror head, with ball stud mount, Heated, with internal connector
3365ITH	Mini Hawk-Eye® mirror head, with ball stud mount, Heated, with internal connector, Partial Tint
3365IFTH	Mini Hawk-Eye® mirror head, with ball stud mount, Heated, with internal connector, Full Tint

High Definition®

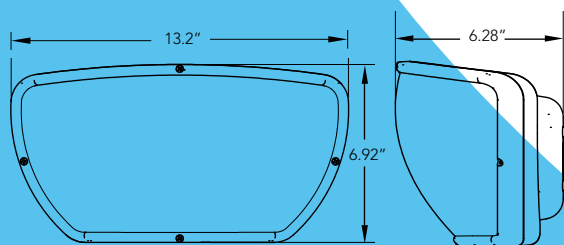
The Industry's only Bi Cross View Mirror System

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.



Dual Convex Focal Points



BUS BOY MOUNT

P/N: 52-370 Non-Heated

P/N: 52-380 Heated

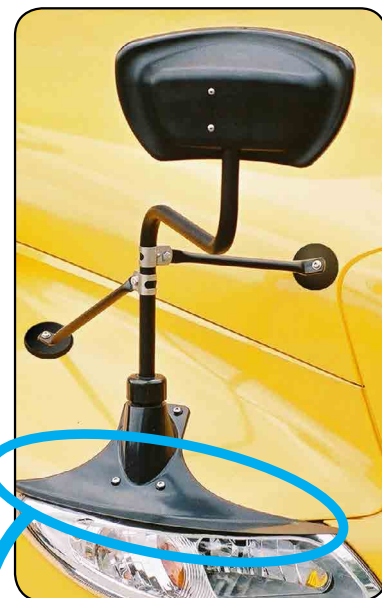
Features and Benefits

- Enhanced danger zone imaging
- Rugged new construction
- Attractive styling
- Fast and easy servicing
- Simple upgrade

BALL STUD MIRROR HEAD

P/N: SC370 Non-Heated

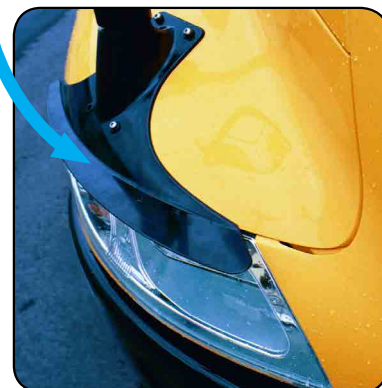
P/N: SC380 Heated



TUNNEL MOUNT MIRROR HEAD

P/N: BBHD-370 Non-Heated

P/N: BBHD-380 Heated



OPTIONAL MOUNT: GLARE REDUCING HEADLIGHT VISOR

PART NO.

DESCRIPTION

BBHD-370	High Definition® Mirror Head Tunnel Mount
BBHD-370L	Replacement Lens - Replaces All Unheated High Definition Lenses
BBHD-380	High Definition® Mirror Head Tunnel Mount Heated
BBHD-380I	High Definition® Mirror Head Tunnel Mount Heated, IC Wiring
BBHD-380L	Heated Replacement Len - Replaces all Heated High Definition Lenses
52-370	High Definition® Non-Heated 3/4" black Bus Boy® Mount
52-380	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.



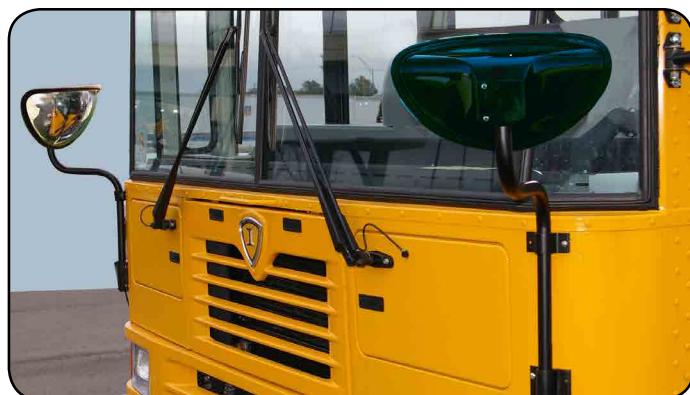
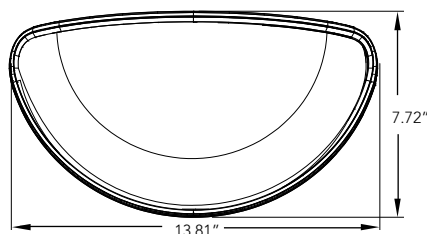
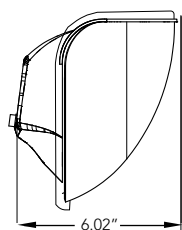
SAFETY CROSS MIRROR HEAD

P/N: SC070A Non-Heated

P/N: SC080A Heated

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.

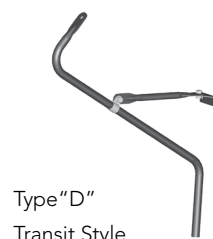
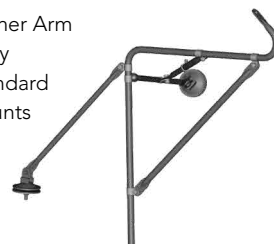


Cross View Arms



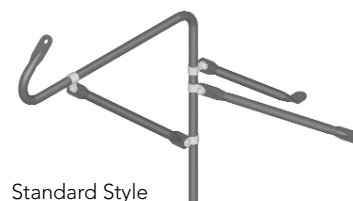
Standard Style
Driver Side

Freightliner Arm
Assembly
with Standard
Bell Mounts



Type "D"
Transit Style

Thomas/Freightliner
C2 Arm Assembly
with Bell Snap®
Breakaway
Mounting Bases



Standard Style



Tunnel Style

PART NO.

DESCRIPTION

SC070A	Safety Cross Mirror Head
SC010A	Safety Cross Mirror Head w/3/8" Ball Stud
SC080A	Safety Cross Heated Mirror Head
SC080A-I	Safety Cross Mirror Head Heated, IC Quick Connect
SC015A	Safety Cross Heated Mirror Head, Ball Stud
SC250A	SC070A Mirror w/73-130 Insert For 1" Tube
SC255A	SC080A Head w/74-130 Rubber For 1" Tube

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.



19U



19G



19A



19NAV



ASY4503



ASY4504



ASY3083



ASY3084



19INT



19FL



19FL95



19ICL



2000 BBL



ASY3117



BAS4505



BAS4506

PART NO.

DESCRIPTION

19A	Type "D", aluminum base with 7" radius for curved surfaces
19FR	Freightliner driver side base also used on pre 1995 Ford Type "C"
19FL	Freightliner passenger side base also used on pre 1995 Ford Type "C"
19FL95	Ford, Type "C" driver side base, 1996 and newer
19FR95	Ford, Type "C" passenger side base, 1996 and newer
19G	Universal aluminum base, for flat surfaces, GM Type "A"
19ICL	IC Corp. CE Type "C", 2004 & newer driver side base
19ICR	IC Corp. CE Type "C", 2004 & newer passenger side base
19INT	International base, used on pre-1990 International Type "C"
19NAV	Navistar base, used on 1991 and newer International Type "C"
19U	Universal base for flat surfaces.
19U/KIT	Well Nut kit, 6 each well nuts and screws
2000BBL	Blue Bird Type "C", Vision, driver side base
2000BBR	Blue Bird Type "C", Vision, passenger side base
ASY4503	Mounting Base Blue Bird Type C Drive Side Cross View Arm Assembly
ASY4504	Mounting Base Blue Bird Type C Curb Side Cross View Arm Assembly
ASY3083	Mounting Base Blue Bird "D3/T3" Drive Side Cross View Arm Assembly
ASY3084	Mounting Base Blue Bird "D3/T3" Curb Side Cross View Arm Assembly
BAS4505	Thomas, C2, Driver Side Center Base Mount
BAS4506	Thomas, C2, Passenger Side Center Base Mount

Testing For FMVSS 111 Compliance



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 Field of Vision DVD.

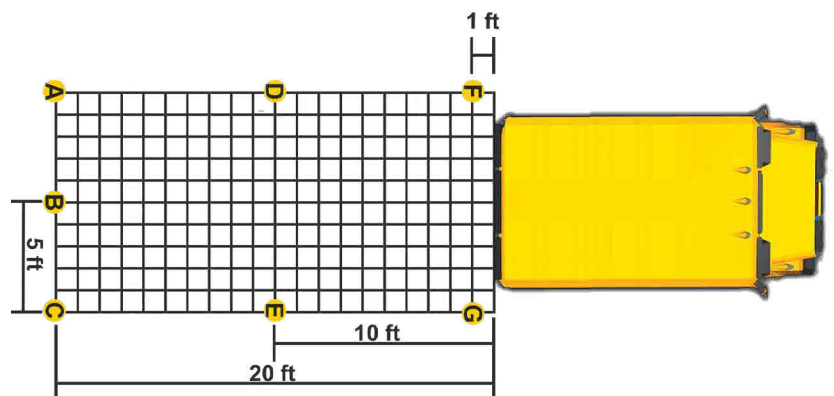
info@roscomirrors.com



FMVSS 111 - Rear Visibility Cameras

On April 7, 2014 NHTSA issued a final rule to "expand the required field of view for all passenger cars, trucks, multipurpose passenger vehicles, buses, and low-speed vehicles with gross vehicle weight of less than 10,000 pounds." This rule includes some Type A school buses that fall within the weight specifications.

FMVSS 111 has been amended in accordance with the Cameron Gulbransen Kids Transportation Safety Act of 2007 to reduce injuries and deaths while a vehicle is reversing. The final rule requires vehicle manufacturers to install backup camera systems on vehicles according to the Phase-In schedule presented in the final rule.



Note: The final specifications of FMVSS 111 require the rear visibility system to enable the driver to view the cylinders in the test grid shown encompassing 5 feet laterally (to each side) from the center of the vehicle and extending 20 feet rearward of the vehicle's rear bumper.

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.



P/N: STSK7965
COMPLETE CAMERA KIT

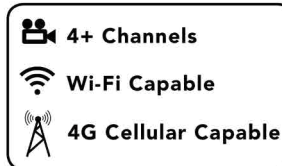
Fleet Safety Management

Dual-Vision™ XC4 Recording

Rosco's Dual-Vision™ XC4 has the capacity to identify unsafe driving behavior through its ability to continuously record video and provide instant driver feedback when an event occurs.

Key Features

- HD Quality Video Recording
- 720p Forward View Camera, 960H Interior Camera
- Optional 960H Auxiliary Cameras For a Total of Four Views
- One-Piece Locking Mounting Bracket Protects SD Card
- Compatible with Current and Future High-Capacity SD Memory Cards
- 3,000+ hours of Recording Time per High-Capacity SD Card
- Built-in Infrared LEDs for Excellent Night Interior View
- Includes DV-Pro® 5 Software
- Includes Database Management and Alert Notification
- Optional Auto Download System – Highest Wi-Fi Speeds
- Optional 4G Cellular Compatibility For Live Tracking and Video Streaming



DV-Pro® 5 Advanced Data Management Software



Maximize your data's potential with the DV-Pro® 5 fleet database management system. This software was developed specifically for organizing information captured by Dual-Vision XC4 recording device. DV-Pro® 5 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. DV-Pro® 5 driver tools give greater control of information generated by high capacity Dual-Vision XC4 recorders. You can conduct searches based on detailed criteria and quickly make note of key events such as speed overages.



Four Camera
Quad Screen
View

Backup Safety Products

Backup Cameras & Backup Sensors

MOR-Vision® Mirror/Monitor Backup Camera Kits



P/N: STSK1030 - Mirror/Monitor 10" x 30" Backup Camera Kit
STSM1030 Mirror/Monitor, STSC109B Camera and STSH341 Harness



P/N: STSK6630 - Mirror/Monitor 6" x 30" Backup Camera Kit
STSM630 Mirror/Monitor, STSC109B Camera and STSH341 Harness



P/N: STSK5530 - Mirror/Monitor 6" x 16" Backup Camera Kit
STSM530 Mirror/Monitor, STSC109B Camera and STSH341 Harness



P/N: STSK4530 - Mirror/Monitor Backup Camera Kit
STSM230 Mirror/Monitor, STSC130 Camera and STSH330 Harness



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 STSK1030 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 Sensors

The BSSK4000 Backup Sensor System is a new 6 sensor kit for buses, trucks and large vehicles. This heavy duty system consists of 4 bumper sensors, 2 roof sensors, a driver display, and an electronic control unit (ECU). The backup sensors are strategically placed on the vehicle's rear bumper and roof for optimal coverage. The roof sensors are ideal for backing into loading docks and other areas with low hanging entrances. The BSSK4000 system is hard wired for immediate real time performance with no latency. The sensors and control unit are fully sealed and weather resistant.



P/N: BSSK4000

NEW YORK SINCE 1907



Rosco was established in 1907. For over a century, our goals have remained the same: We are committed to producing the highest quality automotive vision safety products and providing the level of service our customers deserve.

Today, we supply our products to every truck and bus manufacturer in North America. Our products are designed and largely built in the USA. Our staff has grown to over 250 people in facilities totaling over 150,000 sq ft.

Rosco is at the cutting edge of the automotive transformation from traditional vision products to advanced digital products such as cameras and sensors, and continues to drive automotive vision safety.

As we move forward we have set our goals even higher. We are now certified to ISO-9001:2015. 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.



A CENTURY OF AUTOMOTIVE VISION SAFETY

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