

# Backeye®360° Camera Systems

**4 cameras**  
**1 image**  
**0 blind spots**



Actual Backeye®360 images



This exciting new development provides drivers with a single clear view image of all near-field blind spots around the vehicle – which is a massive leap forward in vehicle safety!

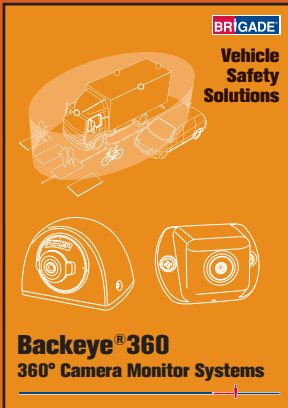
Ultrawide-angle cameras mounted on the front, sides and rear of the vehicle capture the surrounding areas of the vehicle, including blind spots. The digital images from these cameras are processed and 'video stitched' together to produce a top-down 360° 'birds eye view' of the vehicle and surrounding areas in a single image.

The software also removes the fisheye camera effect, so that the driver is presented with a clear and undistorted image.

Backeye®360 Systems are compatible with Brigade MDR digital recorders, providing you with footage that can help make major cost savings by refuting bogus claims, and providing evidence in the event of any accident or incident.

- **Eliminates blind spots, improves safety**
- **Comprehensive view of the surrounding area in a single image**
- **Reduces collisions with people and objects**

Features	Benefits	Backeye®360 ASL360	Backeye®360 BN360
Customisable triggers	Best view of each manoeuvre	Bespoke views 8 triggers	Fixed views 3 triggers
Dual views on monitor	View the most critical areas	Bespoke image views	Fixed dual views
Customised joins between camera images	Seamless surround image optimised for your vehicle	✓	✓
Flexible camera positioning	Backeye®360 System will still be accurate if cameras installed off-centre	✓	✓
Full-screen 360° view	Entire screen can be devoted to the 360° view	✓	✓
Automatic light balancing between camera images	Easy to view, balanced image	✓	✗
'Pie dish' effect	Reduced image stretch, so that distant people and objects appear recognisable	✓	✗
R46 Approved	Suitable to replace Class V and Class VI mirrors	✗	✓



Available Brochure

**Which system is for you?**

**Backeye®360 BN360**  
 Regulation 46 approved.  
 Full screen 360 or a twin image split screen view.  
 In split screen mode, the 360 'birds eye view' is permanently displayed together with the blind spot to the front, rear, left or right of the vehicle – auto-switching between these according to vehicle manoeuvre.  
 This means that the driver always has both the 360 'birds eye view' plus a conventional view of the area into which the vehicle is moving..

**Backeye®360 ASL360**  
 Suitable for most vehicle and mobile plant machines.  
 Full screen 360 plus a flexible and wide range of bespoke split screen viewing options. 'Pie Dish' image correction feature allows a wider area around the machine to be displayed to the driver, and provides a more natural view of objects that are at some distance from the vehicle.  
 Automatic light balancing between camera images makes for easier viewing on days when one side of the vehicle is bathed in bright sunlight and the other is in shadow.



**Model**

**Part No:**

## 360° CAMERA SYSTEM

**BN360-000 - Backeye®360 system**

**4483**



- IP69K cameras
- 12-24Vdc
- Size (WxHxD) ECU  
170 x 126.4 x 36mm
- Size (WxHxD) Camera  
35.4 x 60.7 x 45.8mm
- 2 year warranty

**Contents**

- 1 x BN360-ECU-10
- 4 x BN360-100C cameras
- 1 x BN360-VBV-L4015 video-out cable to connect to SELECT range monitor.

**Note: Monitor and camera extension cables not included**

**Features**

- 360° full screen image or split screen option
- Triggered views (rear, left and right)
- 4 x ultra-wide viewing angle cameras (HxV) 185° x142°
- 1/3" CMOS sensor
- TV system: NTSC

**Power**

- Power consumption: 15 Watts
- Current: 1.23 Amps

**Durability & Standards**

- Mechanical vibration: 1G
- Mechanical shock: 50G
- Operating temperature: -30 to +75°C
- CE marked
- EMC approved: E
- HALT tested

**Note: A calibration kit is required for installation.**

## BN360 CABLES AND ADAPTERS

<b>BN360-L120</b>	<b>20m camera cable</b>	<b>4493</b>
<b>BN360-L115</b>	<b>15m camera cable</b>	<b>4495</b>
<b>BN360-L110</b>	<b>10m camera cable</b>	<b>4496</b>
<b>BN360-L105</b>	<b>5m camera cable</b>	<b>4498</b>
<b>BN360-L1025</b>	<b>2.5m camera cable</b>	<b>4499</b>
<b>AC-305</b>	<b>Splitter cable for MDR (1 required per camera)</b>	<b>4903</b>

## MOUNTING BRACKETS



<b>BN360-100C-BKT01</b>	<b>Adaptable mounting bracket</b> <small>Can be shaped to allow installation on non-vertical surfaces</small>	<b>4649</b>
<b>BN360-100C-BKT02</b>	<b>Mounting bracket to adjust camera angle</b>	<b>4714</b>
<b>BE360-CD</b>	<b>Deflector to shield camera from knocks</b> <small>(To be used with BN360-100C-BKT02 Mounting bracket)</small>	<b>4701</b>
<b>BN360-100C-BKT03</b>	<b>Deflector to shield camera from knocks</b>	<b>4743</b>

## REQUIRED FOR ARTICULATED VEHICLES

<b>BN360-Enclosure</b>	<b>IP66 Enclosure kit to enable ECU to be installed on outside of vehicle</b> <small>Note: Coiled cable kit or wireless connector also required</small>	<b>4723</b>
<b>SK-15-05</b>	<b>3-camera Backeye®360 cable kit for articulated vehicles</b>	<b>5066</b>

**Model**

**Part No:**

**360° CAMERA SYSTEM**

**ASL360-SV - Backeye®360**

**4328**



- IP68 cameras
- 12-24Vdc
- Size (WxHxD) ECU  
225 x 35 x 120mm
- Size (WxHxD) Camera  
70 x 50 x 62mm
- 2 year warranty

**Contents**

- 1 x ASL360-ECU
- 4 x ASL360-CM2 cameras

**Note: Monitor, camera cables and adapters NOT included**

**Features**

- 360° full screen or split screen options
- Flexible blend widths and positioning
- Up to 30 frames per second
- Self-monitoring to eliminate frozen images
- Triggered views
- 4 x ultra-wide viewing angle cameras (HxV) 185 x 180°
- 1/4" CMOS sensor
- TV system: PAL

**Power**

- Power consumption:  
Camera: 0.5 Watts  
ECU: 5.0 Watts
- Current:  
Camera: 0.04 Amps  
ECU: 0.4 Amps

**Durability & Standards**

- Operating temperature:  
-40 to +85°C
- CE marked
- EMC approved: E

**Note: A calibration kit is required for installation. Available to Brigade trained fitters only**

**ASL360 CABLES AND ADAPTERS**

ASL360-L120	20m camera cable	4333
ASL360-L115	15m camera cable	4334
ASL360-L110	10m camera cable	4335
ASL360-L1025	2.5m camera cable	4336
AC-054	2.5m adapter cable to connect ECU to monitor via AC-016 / AC-024 (BNC B to Phono A)	4340
AC-016	Adapter cable to connect AV/Phono to Elite monitor	2150
AC-024	Adapter cable to connect AV/Phono to Select monitor	3183

**MOUNTING BRACKET**

BE360-CD	Deflector to shield camera from knocks	4701
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**REQUIRED FOR ARTICULATED VEHICLES**

BN360-Enclosure	IP66 Enclosure kit to enable ECU to be installed on outside of vehicle	4723
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Note: Coiled cable kit or wireless connector also required



**Model**

**Part No:**

## BN360 360° CAMERA MONITOR SYSTEMS

Complete kits including monitor, Backeye®360 camera system, cables and adapters



**SE-7104F-100 - 360 camera monitor system for large rigid vehicles**

**4618**



- 1 x VBV-7104FM - 10.4" monitor
- 1 x BN360-000 360 system
- 1 x BN360-L110 - 10m camera cable
- 2 x BN360-L115 - 15m camera cables
- 1 x BN360-L120 - 20m camera cable

See individual products for detailed specifications

- 2 year system warranty



**SE-770-100 - 360 camera monitor system for large rigid vehicles**

**4804**



- 1 x VBV-770M 7" monitor
- 1 x BN360-000 360 system
- 1 x BN360-L110 - 10m camera cable
- 2 x BN360-L115 - 15m camera cables
- 1 x BN360-L120 - 20m camera cable

See individual products for detailed specifications

- 2 year system warranty
- R46 Approved

**R46**

## ASL360 360° CAMERA MONITOR SYSTEMS

Complete kits including monitor, Backeye®360 camera system, cables and adapters



**SE-770-000 - 360 camera monitor system for large rigid vehicles**

**4803**



- 1 x VBV-770M - 7" monitor
- 1 x ASL-360SV 360 system
- 1 x ASL-L110 - 10m camera cable
- 2 x ASL-L115 - 15m camera cables
- 1 x ASL-L120 - 20m camera cable
- 1 x AC-024 - phono adapter cable
- 1 x AC-054 - adapter cable

See individual products for detailed specifications

- 2 year system warranty