

The image features a large, abstract graphic composed of overlapping teal and light blue shapes, including a large teal arrow pointing right and several overlapping circles and arcs. The text is positioned in the upper right and lower right areas.

Brigade

1976 - 2026

Vehicle
Safety
Systems

**Product
Catalogue
2026**

English

50 years of Brigade

Brigade Electronics was founded in 1976 by Chris Hanson-Abbott, with the introduction of Europe's first reversing alarm. At the time vehicle safety had not yet been addressed, and it took a further two years of tireless lobbying to change mindsets and secure the first sale.

For the past 50 years, Brigade has remained at the forefront of vehicle and plant safety, pioneering innovative products and developing advanced technologies that have helped shape industry standards. Our extensive knowledge has earned us a reputation for expertise and leadership. We serve as an authoritative voice within the sector and are regularly invited to advise on legislative and international committees.

Today, vehicle safety systems are universally recognised as essential for plant and commercial vehicles. Brigade's longstanding commitment and contribution to this progress has undoubtedly played a significant role in improving safety standards and helping to save countless lives.

Going forward, we will continue to inform and work with policymakers and industry. We will recruit the highest-calibre people who are passionate about what we do. We will deliver expert knowledge and advice to help customers address their challenges. We will continue to innovate and bring new products to market that help prevent collisions and save lives.

Through continuous improvement in the safe operation of commercial vehicles, passenger-carrying vehicles, and mobile plant, we remain committed to achieving our vision of zero lives lost.

- **Chris Hanson-Abbott was recognised in the 2014 Queen's Birthday Honours list and awarded an OBE for services to Vehicle Road Safety.**
- **In 2024, Brigade Electronics Plc received the Queen's Award for Enterprise in recognition for its excellence in International Trade and outstanding growth in overseas sales.**



Brigade

Contents

Camera Monitor Systems	4
Backeye®360	6
Human Form Recognition cameras	6/10
Elite range cameras	11
Select range cameras	13
IP cameras	16/43
Elite range monitors	18
Select range monitors	20
Essential range monitors	20
Camera monitor kits	22
Cables & adapters	24
Tuck/trailer kits	28
Ancillaries	32
Recording systems	34
Recorders	36
Dashcams	40
IP Expansion modules	16/43
Driver-safety systems	44
AI IP Driver Safety Systems for MDR	46
Driver Safety cameras including DDAW & ADDW	48
Detection Systems	50
Ultrasonic detection systems	52
Backsense® Radar detection systems	58
Zonesafe® RFID detection systems	62
Warning Alarms	66
bbs-tek® alarms	68
Speaking alarms	70
Tonal alarms	72
Ancillaries	74
Index by Part number	74
Index by Model number	76
Warranties	78

Camera Monitor Systems

Camera Monitor Systems

Vehicle mounted cameras can help the driver to see blind spots. By delivering a live feed on the monitor of everything in the camera view, they enable drivers and operators to manoeuvre and drive safely. Camera monitor systems are used in a wide range of on and off road applications and meet a host of health and safety and legislative requirements

360° Camera System

Backeye@360 and Backeye@360 AI are intelligent, four-camera systems designed to eliminate vehicle blind spots and assist low-speed manoeuvring. 360 technology provides the driver with a complete 360° top-down view of their vehicle or machine in a single image. In addition, Backeye@360 AI audibly and visually alerts the driver when a person is detected.

Digital IP cameras for MDR

High-definition digital cameras with their own IP address. Directly connected to an MDR, the IP camera transmits digital video via Ethernet cable which provides enhanced image quality and detailed configuration. Expansion modules allow further IP cameras to connect to the MDR.

Human Form Recognition (HFR) Cameras

Using Artificial Intelligence, HFR cameras detect and recognise the human form within a pre-defined detection zone. Detected people are shown in a box on the monitor and an audible warning is given to the driver before a possible collision occurs. Image processing and detected-person-overlay is built-in to the camera unit. Compatible with MDR recorders.

Digital IP cameras for OEM monitors

Digital Internet Protocol (IP) cameras are purpose-built for integration with OE digital monitors, connecting directly to the driver's monitor via an Ethernet cable. Delivering high-definition images with minimal latency, the digital camera features infrared performance for visibility in total darkness. Switchable mirror, normal, and 180° viewing modes for installation to cover any blind spot.

Model

Part No:

360° Camera Monitor Systems

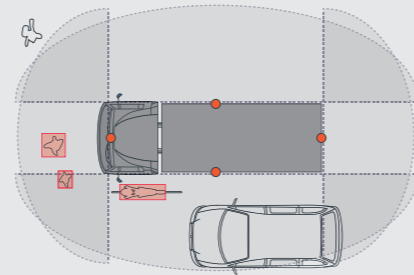
An intelligent camera monitor system designed to assist low-speed manoeuvring by providing the driver with a complete 'bird's-eye' surround view of the vehicle in real time.

360° technology works with four ultra wide-angle cameras, each covering one full side of the vehicle with a viewing angle of over 180°. High-mounted on the front, rear and sides, the calibrated cameras capture all of the surrounding area including the blind spots of the vehicle or machine.

The four live images are simultaneously sent to an electronic control unit (ECU) where they are instantly processed, combined, blended and stitched. A clear, real-time view is provided to the driver in a single image on the monitor.

360° with Artificial Intelligence

- Recognises and alerts the driver to people around the vehicle
- Detected people are shown in a coloured box overlaid on the 360° image on the driver's monitor
- Compatible with all Brigade HD monitors and MDR recorders



Model

Part No:

HUMAN FORM RECOGNITION (HFR) 360° SYSTEM

VBV-360-1000	- HFR HD Backeye®360 system with AI	7524
VBV-360-1000-AI-NC	- HFR HD Backeye®360 system with AI - No cables	8123



- IP69K cameras
- 12-24Vdc
- Size (WxHxD) ECU
140 x 122 x 40mm
- Size (WxHxD) Camera
140 x 63 x 54mm
- 3 year warranty

AHD

Contents

- 1 x ECU
- 4 x VBV-2230-C-AI cameras
- 1 x Interface Harness
- 1 x Power harness
- 1 x Video input harness
- 1 x Video output harness
- 1 x Video output cable
- 1 x Remote control
- Camera cables (7524 only):
1 x 5m extension cable
2 x 10m extension cables
1 x 20m extension cable

Features

- AI technology
- Audible and visual alerts when a pedestrian or cyclist is detected
- Comprehensive view of surrounding area in a single image
- 1080p HD 360° image
- 5 view modes:
- Choice of 2D or 3D
- Landscape & portrait configurations
- Front & rear crossing-traffic
- Customisable vehicle position
- Auto calibration via monitor
- Left, right, reverse & speed signal triggers
- Configurable on-screen parking markers

- Customisable overlay guidelines per camera view
- 2 x video outputs
- Ultra-wide viewing angle cameras (HxV) 190° x 130°
- 1/4" CMOS sensor
- Video output:
AHD 2.0 and CVBS (PAL/NTSC)
- 360 view and individual channels recordable on Brigade MDR recorders

Power

- Power consumption: 15 Watts
- Current: 1.22 Amps

Durability & Standards

- Mechanical vibration: 2.8G
- Operating temperature:
-20 to +75°C
- IP30 ECU
- CE marked
- E-Marked: UNECE R10 compliant
- FCC Approved
- IC Approved
- UNECE R158 compliant

NOTES:

- Calibration mats are required for installation.

Model

Part No:

AHD 360° CAMERA SYSTEM

BN360-300 - High Definition Backeye®360 system

5800



- IP69K cameras
- 12-24Vdc
- Size (WxHxD) ECU
178 x 113 x 26mm
- Size (WxHxD) Camera
61 x 50 x 42mm
- 5 year warranty

AHD

Contents

- 1 x ECU
- 4 x BN360-1000C cameras
- 1 x Video output cable to connect to SELECT range monitor.
- 1 x set-up/view-select button
- 1 x ECU power harness
- 1 x ECU interface/video input harness

Features

- 720p HD 360° image
- 15 different view modes (10 x landscape & 5 x portrait configurations)
- Front & rear crossing-traffic
- Customisable vehicle position
- 2 pre-defined configuration groups
- Configure & customise set up via PC calibration software
- Left, right, reverse & speed signal triggers
- Configurable on-screen parking markers
- Customisable overlay guidelines per camera view
- 2 x video outputs
- Ultra-wide viewing angle cameras (HxV) 182° x 118°
- 1/4" CMOS sensor
- Video output: AHD 1.0 and NTSC
- 360 view and individual channels recordable on Brigade MDR recorders

Power

- Power consumption: 15 Watts
- Current: 1.22 Amps

Durability & Standards

- Mechanical vibration: 8.5G
- Mechanical shock: 51G
- Operating temperature:
-30 to +75°C
- IP30 ECU
- CE marked
- E-Marked: UNECE R10 compliant
- FCC Approved
- IC Approved
- UNECE R158 compliant
- ISO 13766-1:2018

NOTES:

- Calibration kit is required for installation.
- Monitor and camera extension cables not included

BN360-300 360° CAMERA MONITOR SYSTEMS

Complete 360 AHD camera monitor system for large rigid vehicles

SE-770HR-300	- 360 AHD camera system with VBV-770HM - 7" AHD monitor	7296
SE-7014HRF-300	- 360 AHD camera system with VBV-7104HFM - 10.4" AHD monitor	7297



- 1 x Monitor
- 1 x BN360-300 AHD 360 system
- 1 x BN360-H310 - 10m camera cable
- 2 x BN360-H315 - 15m camera cables
- 1 x BN360-H320 - 20m camera cable

See individual products for detailed specifications and warranties

Model

Part No:

HUMAN FORM RECOGNITION (HFR) CABLES

VBV-AI801	- 1 metre AI Camera Extension Cable	7489
VBV-AI805	- 5 metre AI Camera Extension Cable	7490
VBV-AI810	- 10 metre AI Camera Extension Cable	7508
VBV-AI815	- 15 metre AI Camera Extension Cable	7509
VBV-AI820	- 20 metre AI Camera Extension Cable	7491
AC-24-12(011)	- Power adapter for AI camera	5760



BN360-300 CABLES

BN360-H320	HD 20m camera cable	5809
BN360-H315	HD 15m camera cable	5810
BN360-H310	HD 10m camera cable	5811
BN360-H305	HD 5m camera cable	5812
BN360-H3025	HD 2.5m camera cable	5813
AC-H305	HD Splitter cable for MDR (1 required per camera)	6648



BN360-300 MOUNTING BRACKETS

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



Camera Monitor System Ranges

HFR

Human Form Recognition (HFR) cameras are a new generation of active blind-spot detection. Using Artificial Intelligence, the cameras detect and recognise the human form within the pre-defined detection zone and reliably warn the driver visually and/ or audibly before a possible collision occurs.

ELITE

Top of the range systems that are the first choice for Original Equipment Manufacturers (OEMs) and bodybuilders. Exceptional quality and consistent performance in the harshest conditions. Rigorously tested to higher standards, the superior components and build quality are reflected in the Elite series' 5 year warranty. Ideal for heavy duty applications including N2 and N3 Heavy Goods Vehicles (HGVs), on/off-highway vehicles, agricultural machinery and mobile plant used on Construction, Civil Engineering, Quarry and Mine sites.

SELECT

High quality, reliable, best-selling mid-range systems. First choice in the aftermarket and popular also with OEMs and bodybuilders. 3 year warranty. Ideal for medium to large on-highway vehicles and smaller off-highway mobile plant.

ESSENTIAL

Entry level reversing solution for cost-conscious Aftermarket customers. Ideally suited for on-highway applications.

Camera icons

- Infrared LEDs for ultra-low-light performance
- Day/night sensor
- Audio
- Heater
- Normal/mirror view
- WDR** Wide Dynamic Range

Monitor icons

- Number of camera inputs
- Number of auto-triggers
- Audio
- 'Button-lock' anti-tamper feature
- On-screen distance and vertical line markers
- Normal/mirror view - switching from menu

Cable icons

(Black = solid/pins)

- Male connector Select
- Female connector Select
- Male screw fit connector Elite
- Female screw fit connector Elite
- Male push fit connector Elite
- Female push fit connector Elite
- Male IP connector
- Female IP connector
- Male HFR connector
- Female HFR connector

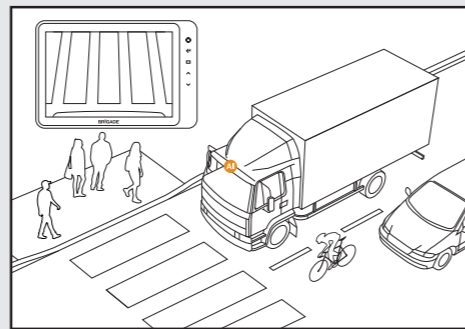
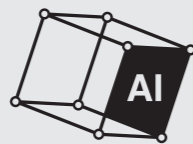
Model

Part No:

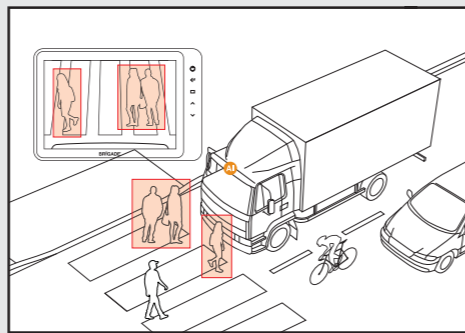
Human Form Recognition Cameras (HFR)

A new generation of active blind-spot detection. Using Artificial Intelligence, the cameras detect and recognise the human form within the pre-defined detection zone and reliably warn the driver visually and/or audibly before a possible collision occurs.

- Recognises and alerts the driver to people in the front and rear blind-spot
- Detected people are shown in a coloured box overlaid on the HD camera image on the driver's monitor
- Image processing and detected-person-overlay directly from the camera unit
- Plug and play:
- AI camera connects directly to the Brigade monitor and/or optional buzzer
- Compatible with all Brigade HD monitors and MDR recorders



No pedestrians in the detection zone



Detected pedestrians

Model

Part No:

HFR

HUMAN FORM RECOGNITION (HFR) CAMERA



VBV AI connector



VBV-2220C AI-D04	Front-facing HFR camera - normal view	7321
VBV-2230C AI-D04	Rear HFR camera - mirror view	7396

- 12-24Vdc
- Camera Viewing angles:
Front : 52°
Rear: 129°
- AI Detection range:
Front: Covers Class 6 area
Rear: Up to 11m (dependent on camera mounting height)
- IP69K
- Camera Size (WxHxD)
97.5x75.3x72
- 2 years warranty

AHD

- Features**
- High Definition AHD 1080P
 - Recognises and alerts the driver to people in the front and rear blind-spot
 - Detected people are shown in coloured box overlaid onto the camera image
 - Image processing and detected-person-overlay directly from the camera unit
 - Plug and play:
AI camera connects directly to the Brigade monitor and/or optional internal buzzer or external alarm
 - Brigade Select range connectors
 - Compatible with all Brigade HD monitors and MDR recorders
 - Alarm trigger output: 12V
- Specifications**
- 260mA @12V, 140mA @24V Imaging
- Operating Voltage:** 12-24V
TV system: 25fps/30fps
CMOS 1/2.9" 2M Pixel sensor
- Durability & Standards**
- Mechanical vibration: 5.9G
 - Operating temperature: -20 to +70°C
 - E-marked: UNECE R10 compliant
 - CE marked
 - FCC Approved
 - UKCA Approved
 - IC Approved
 - VBV-2230C AI-D04 complies with UNECE reg158 requirements

NOTE:
• VBV HFR Camera extension cables only to be used

HFR

HUMAN FORM RECOGNITION (HFR) CABLES

VBV-AI801	- 1 metre AI Camera Extension Cable	7489
VBV-AI805	- 5 metre AI Camera Extension Cable	7490
VBV-AI810	- 10 metre AI Camera Extension Cable	7508
VBV-AI815	- 15 metre AI Camera Extension Cable	7509
VBV-AI820	- 20 metre AI Camera Extension Cable	7491
AC-24-12(011)	- Power adapter for AI camera	5760



Elite Range Camera/monitor compatibility

KEY	ELITE MONITORS	SELECT MONITORS	
	☒ = Compatible ☒AC-007 = Compatible with adapter(s) shown	BE-970WFM BE-970WM BE-870LM BE-870FM	VBV-770HFM VBV-770HM VBV-7104HFM VBV-7104HM
ELITE BE-810C Shutter camera	☒	☒AC-007 & SC-1000-ECU	
All other ELITE cameras	☒	☒AC-007	

Model

Part No:

ELITE

AHD CAMERA 1080p



BE-8100C - PAL	6408
BE-8101C - NTSC	6410

- Viewing angle (HxVxD)
126 x 69 x 144°
- IP69K
- Size (WxHxD)
86 x 72 x 78mm
- 5 year warranty



- Features**
- High definition picture quality with 1080p AHD 2.0 video signal output
 - 4 Infrared LEDs for ultra-low light performance
 - Day / Night sensor
 - Microphone
 - Heater
 - Mirror / Normal view
 - Back Light Compensation
 - Automatic white balance
 - CMOS sensor
 - TV lines: 800

- Power**
- Power consumption: 4.2 Watts
 - Current: 0.35 Amps
- Durability & Standards**
- Mechanical vibration: 8.5G
 - Mechanical shock: 51G
 - Operating temperature: -40 to +85°C
 - CE marked
 - E-Marked: UNECE R10 compliant
 - FCC Approved
 - IC Approved
 - ISO 13766:2018
 - ISO 20653:2013
 - EN61000-6-3:2021
 - Camera monitor system R46 approved

ELITE

CAMERA WITH WDR



BE-800C	- PAL	1623
BE-801C	- NTSC	1905
BE-800C(40)	- Narrow viewing angle: 32 x 24 x 41° PAL	1559
BE-801C(40)	- Narrow viewing angle: 33 x 25 x 42° NTSC	2085
BE-800C(78)	- Narrow viewing angle: 69 x 51 x 92° PAL	1426
BE-801C(78)	- Narrow viewing angle: 71 x 52 x 94° NTSC	2084
BE-890C	- Waterproof to IP69K, No microphone, PAL	2871
BE-891C	- Waterproof to IP69K, No microphone, NTSC	5426
BE-850C	- 12/24Vdc, waterproof to IP69K, PAL	4924
BE-800C-NIR	- No Infrared LEDs, PAL	4247

- Viewing angle (HxVxD)
102 x 76 x 132° PAL
108 x 80 x 136° NTSC
- IP68
- Size (WxHxD)
86 x 72 x 80mm
- 5 year warranty



- Features**
- Wide Dynamic Range for improved detail in shadows and highlights
 - 5 Infrared LEDs for ultra-low light performance (except BE-800C-NIR)
 - Day / Night sensor
 - Heater
 - Microphone
 - Mirror / Normal view
 - Automatic white balance
 - Sony CMOS sensor
 - TV lines: 600

- Durability & Standards**
- Mechanical vibration: 8.5G
 - Mechanical shock: 51G
 - Operating temperature: -40 to +85°C
 - CE marked
 - E-Marked: UNECE R10 compliant
 - FCC Approved
 - IC Approved
 - ISO 13766:2006
 - ISO 20653:2006
 - EN13309:2010
 - Camera monitor system R46 approved
BE-800C, BE-890C & BE-850C only

- Power**
- Power consumption: 4.5 Watts
 - Current: 0.33 Amps
(0.37 - 2.63 Amps BE-850C)

Model

Part No:

ELITE

SHUTTER CAMERA WITH WDR

BE-810C - Shutter camera

1242



- Viewing angle (HxVxD) 103 x 71 x 134°
- IP69K
- Size (WxHxD) 123 x 86 x 80mm
- 5 year warranty



WDR

Features

- Wide Dynamic Range for improved detail in shadows and highlights
- 5 Infrared LEDs for ultra-low light performance
- Day / Night sensor
- Automatic shutter
- Heater
- Microphone
- Mirror / Normal view
- Backlight compensation
- Automatic white balance
- Sony CMOS sensor
- TV System: PAL
- TV Lines: 450

Power

- Power consumption: 5.4 Watts
- Current: 0.45 Amps

Durability & Standards

- Mechanical vibration: 8.5G
- Mechanical shock: 51G
- Operating temperature: -40 to +70°C
- CE Marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved
- ISO 13766-1:2018

Select Range Camera/monitor compatibility

KEY	ELITE MONITORS	SELECT MONITORS	
	☒ = Compatible	BE-970WFM BE-970WM BE-870LM BE-870FM	VBV-770HFM VBV-770HM VBV-7104HFM VBV-7104HM
☒AC-006 = Compatible with adapter(s) shown			
SELECT VBV-710C Shutter	☒AC-006		☒
All other SELECT cameras	☒AC-006		☒

Model

Part No:

SELECT

AHD CAMERA 1080p



- VBV-7100C - High definition (1080p-PAL) 5466
- VBV-7101C - High definition (1080p-NTSC) 5467
- VBV-7190C - No audio. High definition (1080p-PAL) 5470
- VBV-7191C - No audio. High definition (1080p-NTSC) 5471

- Viewing angle (HxVxD) 110° x 60° x 127°
- IP69K
- Size (WxHxD) 81 x 77 x 70mm
- 3 year warranty



Features

- 4 high-power Infrared LEDs for ultra-low light performance
- Day / Night sensor
- Microphone
- Mirror view
- * Backlight compensation
- Automatic white balance
- Sony CMOS 1/3" & Nextchip ISP
- TV System: AHD 1.0 (1080p)
- TV Lines: 800

Power

- Power consumption: 3 Watts
- Current: 0.2 Amps

Durability & Standards

- Mechanical vibration: 8.5G
- Mechanical shock: 51G
- Operating temperature: -30 to +80°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved
- UNECE R158 compliant

SELECT

SHUTTER CAMERA



VBV-710C - Shutter camera

2808

- Viewing angle (HxVxD) 98 x 73 x 108°
- IP68 / IP69K
- Size (WxHxD) 122 x 85 x 82mm
- 3 year warranty



Features

- 4 high power infrared LEDs for ultra-low light performance
- Day / Night sensor
- Automatic Shutter
- Heater
- Microphone
- Mirror / Normal view
- Backlight compensation
- Automatic white balance
- 1/3" Sharp CCD
- TV System: PAL
- TV Lines: 580

Power

- Max Power consumption: 6 Watts
- Max Current: 0.5 Amps

Durability & Standards

- Mechanical vibration: 10G
- Mechanical shock: 50G
- Operating temperature: -30 to +70°C
- CE Marked
- FCC approved
- E-Marked: UNECE R10 compliant
- UNECE R158 compliant

Model **Part No:**

SELECT

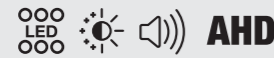
AHD EYEBALL CAMERA



VBV-3100C - High Definition flush-mount eyeball camera Mirror view - (1080p-PAL)	7143
VBV-3101C - High Definition Flush-mount eyeball camera Mirror view - (1080p-NTSC)	7144
VBV-3120C - High Definition Flush-mount eyeball camera Normal view - (1080p-PAL)	7145
VBV-3121C - High Definition Flush-mount eyeball camera Normal view - (1080p-NTSC)	7146



- **Viewing angle (HxVxD)**
130 x 70 x 151°
- **IP69K**
- **Size (WxHxD)**
57 x 42 x 70mm
- **3 year warranty**



Features

- 5 high power infrared LEDs for ultra-low light performance
- Day / Night sensor
- Lens swivel adjustment: 26° (Top) x 4° (Bottom) x 4° (Left) x 4° (Right)
- Lens rotation adjustment: ±180°
- Microphone
- Backlight compensation
- Automatic white balance
- 1/3" CMOS
- TV System: AHD 2.0 (1080p)
- TV lines: 900

Power

- Power consumption: 1.6 Watts
- Current consumption: 0.112 Amps

Durability & Standards

- Mechanical vibration: 8.5G
- Mechanical shock: 51G
- Operating temperature: -30 to +70°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

SELECT

AHD DOME CAMERA



MD-60 - High definition dome camera (720p-PAL)	5737
MD-61 - High definition dome camera (720p-NTSC)	5738
MD-60(SW) - High definition dome camera - Superwide view angle (720p-PAL)	5688
MD-61(SW) - High definition dome camera - Superwide view angle (720p-NTSC)	5690
MD-60(W) - High definition dome camera - Wide view angle (720p-PAL)	5696
MD-61(W) - High definition dome camera - Wide view angle (720p-NTSC)	5698



- **Viewing angle (HxVxD)**
68° x 38° x 80°
(SW) 150° x 85° x 180°
(W) 93° x 51° x 110°
- **IP68**
- **Size (Diameter x H)**
76 x 59.5mm
- **3 year warranty**



Features

- Dome camera with 150° movement range in all directions
- Can be used internally or externally
- Mirror / Normal view
- Backlight compensation
- Automatic white balance
- CMOS - 1/3" ON-Semi ISP - Nextchip
- TV System: AHD 1.0 (720p)
- TV Lines: 900
- TV Lines: 600 (SW & W)

Power

- Power consumption: 1 Watt
- Current: 0.57 Amps

Durability & Standards

- Mechanical vibration: 10G
- Mechanical shock 51G
- Operating temperature: -30 to +85°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC Approved
- IC Approved

OPTIONAL EXTRAS

MD-50SM-30 - Surface mounting adapter (30mm deep)	5003
MD-50AM-15 - Angled surface mounting adapter (adds 15°)	5004
MD-50AM-25 - Angled surface mounting adapter (adds 25°)	5005



Model **Part No:**

SELECT

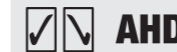
AHD MINI CAMERA



DMC-1035 - High definition mini camera (internal use) (720p-PAL)	5721
DMC-1031 - High definition mini camera (internal use) (720p-NTSC)	5719



- **Viewing angle (HxVxD)**
68 x 38 x 80°
- **IP30**
- **Size (WxHxD)**
43 x 45 x 37.5mm
- **3 year warranty**



Features

- Mirror / Normal view
- Backlight compensation
- Automatic white balance
- CMOS - 1/3" ON-Semi ISP - Nextchip
- TV System: AHD 1.0 (720p)
- TV Lines: 900

Power

- Power consumption: 1.0 Watt
- Current: 0.55 Amps

Durability & Standards

- Mechanical vibration: 10G
- Mechanical shock: 51G
- Operating temperature: -30 to +85°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

SELECT

CYLINDER CAMERA



VBV-485C - Cylinder camera PAL	2199
VBV-481C - Cylinder camera NTSC	2843



- **Viewing angle (HxVxD)**
91 x 77 x 123° PAL
96 x 71 x 126° NTSC
- **IP69K/IP68**
- **Size (Diameter x Length)**
35 x 50mm
- **3 year warranty**



Features

- 9 LEDs for ultra-low light performance
- Day/night sensor
- Mirror view
- Backlight compensation
- Auto white balance
- 1/3" Sharp CCD
- TV Lines: 680 PAL
800 NTSC

Power

- Power consumption: 1.9 Watts
- Current: 0.2 Amps

Durability & Standards

- Mechanical vibration: 10G
- Mechanical shock: 50G
- Operating Temperature: -30 to +70°C
- E-Marked: UNECE R10 compliant
- CE marked
- FCC approved VBV-481C only
- IC approved VBV-481C only

SELECT

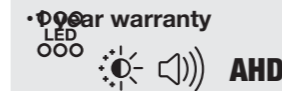
AHD NUMBER PLATE CAMERA



BL-2130C - High Definition Rear-view number plate camera 25fps (PAL)	7152
BL-2131C - High Definition Rear-view number plate camera 30fps (NTSC)	7353



- **12Vdc**
- **Viewing angle (HxVxD)**
145 x 80 x 165.6°
- **IP69K**
- **Size (WxHxD)**
215 x 68 x 42mm
- **3 year warranty**



Features

- Installs above rear registration plate
- Mirror view
- CMOS 1/2.9" 1.3M Pixel
- Resolution: AHD 720p 1080Hx720V
- Auto exposure and auto white balance
- Horizontal Angle adjustment
- Night Vision via 4 high Power Infrared LEDs
- Integrated Day/Night sensor
- Microphone
- TV System: PAL or NTSC

Power

- Current consumption: 65±10mA
94±10mA with IR - 130mA Max

Durability & Standards

- Operating temperature: -20 to +70°C
- E-marked: UNECE R10 compliant
- CE marked
- FCC approved
- IC approved

Model

Part No:

SELECT



AHD FRONT CAMERA

- BL-2120C - High Definition Front view Windscreen-mount camera 25fps (PAL) 7151
- BL-2120C - High Definition Front view Windscreen-mount camera 30fps (NTSC) 7309

- 12Vdc
- Viewing angle (HxVxD) 92 x 51 x 102.9°
- IP55 (internal use)
- Size (WxHxD) 55 x 85 x 40mm
- 1 year warranty

AHD

Features

- Internal windscreen mount using 3M adhesive ensuring no reflection or ghost image
- CMOS 1/3" 1.3M Pixel
- Resolution: AHD 720p 1080Hx720V
- Auto electronic shutter, auto exposure and auto white balance
- Horizontal Angle adjustment
- TV System: PAL or NTSC

Power

- Power consumption: 90mA

Durability & Standards

- Operating temperature: -40 to +70°C
- E-marked: UNECE R10 compliant
- CE marked
- FCC approved
- IC approved

AHD SHUTTER CAMERA 1080p



- VBV-7110C - High definition Shutter Camera (1080p-PAL) 8034
- VBV-7111C - High definition Shutter Camera (1080p-NTSC) 8039
- VBV-7110C(W) - Wide Angle High definition Shutter Camera (1080p-PAL) 8109
- VBV-7111C(W) - Wide Angle High definition Shutter Camera (1080p-NTSC) 8110

- Viewing angle (HxVxD) 108 x 58 x 123° 168 x 93 x 192° (W)
- IP69K
- Size (WxHxD) 122 x 85 x 82mm
- 3 year warranty



AHD

Features

- 4 high power infrared LEDs for ultra-low light performance
- Day / Night sensor
- Automatic Shutter
- Heater
- Microphone
- Mirror / Normal view
- Backlight compensation
- Automatic white balance
- High Quality CMOS
- TV System: AHD 2.0 (1080p)
- TV Lines: 900
- Picture Elements 1920 x 1080

Power

- Max Power consumption: 4.6 Watts
- Max Current: 0.4 Amps

Durability & Standards

- Mechanical vibration: 8.5G
- Mechanical shock: 51G
- Operating temperature: -30 to +80°C
- CE Marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

Model

Part No:

Digital IP cameras

A Digital Internet Protocol (IP) camera is a high-definition digital camera. Unlike MDR IP cameras, which connect via an MDR, a Digital IP camera connects directly to a vehicle's digital interface.

Specifically designed to meet the demands of specialist vehicle builders in industries such as agriculture, construction and mining, Digital IP Cameras support the shift toward fully digital systems and offer full compatibility with digital display systems.

Featuring advanced IR and ICR technology, the Digital IP camera ensures exceptional visibility and performance even in complete darkness, delivering crystal-clear, high-resolution video with ultra-low latency for real-time monitoring.

Model

Part No:

DIGITAL IP CAMERA



- IP-7101C - Digital IP Camera 8309
- IP-7101C(W) - Digital IP Camera (Wide angle view) 8314
- IP-7101C(N) - Digital IP Camera (Narrow angle view) 8313

- Viewing angle (HxVxD) 8309: 90 x 48 x 103° 8314: 105 x 56 x 120° 8313: 55 x 30 x 63°
- IP69K
- Size (WxHxD) 98 x 75 x 72mm
- 3 year warranty



Features

- High-definition picture quality
- <100ms low latency
- Ethernet interface (100BASE-TX)
- True day/night vision
- 10m IR range
- Day/Night sensor
- Microphone
- Automatic white balance
- Integrates with digital HMI via ONVIF, RTSP, RTP
- Compatible with digital monitors
- Normal/Mirror/Flip view
- Imaging device: 1/2.9" CMOS
- Frame rate: 2-30fps
- Picture elements: 1920 x 1080

Power

- Operating Voltage: 10-32 VDC

Durability & Standards

- Mechanical vibration: 5.9G
- Operating temperature: -20 to + 70°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

DIGITAL IP CAMERA ACCESSORIES



- IP-L601 - IP Camera extension cable 1 metre 5867
- IP-L603 - IP Camera extension cable 3 metre 5902
- IP-L605 - IP Camera extension cable 5 metre 5903
- IP-L610 - IP Camera extension cable 10 metre 5982
- IP-L615 - IP Camera extension cable 15 metre 5904
- IP-L620 - IP Camera extension cable 20 metre 5983
- IP-L630 - IP Camera extension cable 30 metre 5984



- IP-1XXX-PC - RJ45 Ethernet and Power adapter 5985
- IP-C-CA-M12D - M12 4-pin D Coded and Power adapter 8421

What are IP cameras & Expansion Modules?

An Internet Protocol (IP) camera is a high-definition digital camera with its own IP address. Instead of transmitting video over a video cable to a monitor or Mobile Digital Recorder (MDR), the IP camera transmits digital video to an MDR over a data connection (Ethernet cable) where the images are saved to the onboard storage.

IP cameras offer enhanced video quality and detailed camera configuration.

Brigade Expansion Modules use Power Over Network (PON) Switch technology to expand the channel capability of the MDR by transmitting digital video images from up to 8 IP cameras over a single Ethernet connection to the MDR. The MDR on-screen display allows easy camera set up without need for specific IP camera knowledge

Benefit: Connecting IP cameras increases the number of channels available on the MDR:

MDR-641	- 4 x Analogue channels plus 1 x IP channel	= 5 channels
MDR-508	- 8 x Analogue channels plus 1 x IP channel	= 9 channels
MDR-644	- 4 x Analogue channels plus 4 x IP channels	= 8 channels
MDR-644 and 4 x PON switch	- 4 x Analogue channels plus 8 x IP channels	= 12 channels
MDR-508 and 4 x PON switch	- 8 x Analogue channels plus 4 x IP channels	= 12 channels
MDR-508 and 8 x PON switch	- 8 x Analogue channels plus 8 x IP channels	= 16 channels

Model

Part No:

IP CAMERA



IP-1000C - Internal forward-facing camera

5935

- Viewing angle (HxVxD) 87 x 51 x 98°
- IP20
- Size (WxHxD) 75 x 122 x 42mm
- 3 year warranty



Features

- High-definition picture quality
- Windscreen flush-mounted to avoid reflections
- Microphone
- Normal view - mirror view via OSD settings or IP web interface
- Backlight compensation
- Automatic white balance
- Supports web browser access
- Fast setup feature in MDR 500 series to auto-assign camera IP address
- Picture Elements: 1920(H) x 1080(V)
- Imaging device: CMOS
- TV Lines: 1050
- Latency: 250ms

Power

- Power consumption: 2.7 Watts
- Current: 0.23 Amps @ 12V

Durability & Standards

- Mechanical vibration: 6G
- Mechanical shock: 51G
- Operating temperature: -40 to +70°C
- Video output signal: H264 or H.265
- Network protocol: MDR5, ONVIF, TCP/IP, HTTP, DHCP, NTP, FTP
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

IP CAMERA



IP-1200C - Surface-mount dome camera

5937

- Viewing angle (HxVxD) 110 x 60 x 136°
- IP65
- Size (WxHxD) 101.5 x 57.4 x 96 mm
- 3 year warranty



Features

- High-definition picture quality
- Surface mount
- Heater
- Microphone
- Normal view
- Backlight compensation
- Automatic white balance
- Supports web browser access
- Fast setup feature in MDR 500 series to auto-assign camera IP address
- Picture Elements: 1920(H) x 1080(V)
- Imaging device: CMOS
- TV Lines: 900
- Latency: 250ms

Power

- Power consumption: 3.5 Watts
- 0.26 A @ 12V (IR off)
- 0.31 A @ 12V (IR on)

Durability & Standards

- Mechanical vibration: 6G
- Mechanical shock: 51G
- Operating temperature: -40 to +70°C
- Video output signal: H264 or H.265
- Network protocol: MDR5, ONVIF, TCP/IP, HTTP, DHCP, NTP, FTP
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

Model

Part No:

IP CAMERA

IP-1100C - Surface-mount camera

5936



- Viewing angle (HxVxD) 84 x 46 x 103°
- IP67
- Size (WxHxD) 96 x 52 x 58mm
- 3 year warranty



Features

- High-definition picture quality
- Surface mount
- Built-in G-sensor for automatic image orientation
- High power infrared LED for low-light performance
- Day/night sensor
- Normal view
- Backlight compensation
- Automatic white balance
- Supports web browser access
- Fast setup feature in MDR 500 series to auto-assign camera IP address
- Imaging device: CMOS
- Picture elements: 1920 x 1080
- TV Lines: 800
- Latency: 800ms

Power

- Power consumption: 5 Watts
- Current: 0.2 Amps

Durability & Standards

- Mechanical vibration: 8.5G
- Mechanical shock: 51G
- Operating temperature: -40 to +70°C
- Video output signal: H264 or H.265
- Network protocol: MDR5, ONVIF, TCP/IP, HTTP, DHCP, NTP, FTP
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

IP EXPANSION MODULES

IP-EM4 - PON 4-channel switch
IP-EM8 - PON 8-channel switch

5860
5861



- 12-24Vdc
- 4 or 8 IP camera inputs
- Size (WxHxD) IP-EM4: 149 x 44 x 127mm IP-EM8: 174 x 54 x 129.5mm
- 3 year warranty

Features

- Expands the channel capability of the MDR by enabling the addition of IP cameras: IP-EM4 - adds 4 channels to MDR-508 IP-EM8 - adds 8 channels to MDR-508 IP-EM4 - adds 4 channels to MDR-644

Power

- Power consumption: 3 Watts

Durability & Standards

- Mechanical vibration: 2.3G
- Mechanical shock: 150G
- Operating temperature: -40 to +70°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

IP CAMERA ACCESSORIES



IP-EC-1 - CAT5E Ethernet cable 1 metre
IP-EC-5 - CAT5E Ethernet cable 5 metre

5865
5866

IP-EM-PC - MDR-PON Power cable
Included with IP-EM4 and IP-EM8

5864

IP-L601 - IP Camera extension cable 1 metre
IP-L603 - IP Camera extension cable 3 metre
IP-L605 - IP Camera extension cable 5 metre
IP-L610 - IP Camera extension cable 10 metre
IP-L615 - IP Camera extension cable 15 metre
IP-L620 - IP Camera extension cable 20 metre
IP-L630 - IP Camera extension cable 30 metre

5867
5902
5903
5982
5904
5983
5984

IP-1XXX-PC - IP Power and Ethernet cable

5985

To connect a single camera to MDR 500 without a PON switch. Not required for 644 and 641 series MDR.

WARNING: There is a latency (time lag) in all digital video transmission, including IP Cameras. Although this time lag is small (~800ms IP1100C ~250ms IP1000C & IP1200C), it is unacceptable for a camera that a driver is using as a safety and manoeuvring aid. Brigade IP cameras are an excellent choice for general monitoring (e.g. bus interior, doors, luggage compartment) and recording purposes, but should not be used as a driver aid for manoeuvring or blind-spot monitoring. Analogue cameras are still the best choice for safety critical manoeuvring and blind spot monitoring applications.

Elite Range Camera/monitor compatibility

KEY	ELITE MONITORS		SELECT MONITORS	
	☑ = Compatible	BE-970WFM	VBV-770HFM	VBV-770M
☑AC-007 = Compatible with adapter(s) shown	BE-970WM	VBV-770HM	VBV-750M	
	BE-870LM	VBV-7104HFM		
	BE-870FM	VBV-7104HM		
ELITE BE-810C Shutter camera	☑	☑AC-007 & SC-1000-ECU		
All other ELITE cameras	☑	☑AC-007		

Model Part No:

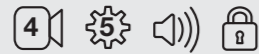
ELITE

7" IP69K QUAD MONITOR

BE-970WFM - Waterproof 7" Quad digital LCD monitor 3560



- 12-24Vdc
- IP69K
- Size (WxHxD)
194 x 124 x 48mm
- 5 year warranty



Plus additional in-built image options

Features

- 4 camera inputs
- Shutter camera compatible (inputs 1&2)
- Backlit touch screen button panel
- 'Button-lock' anti-tamper feature
- 5 Auto-triggers
- Mirror / Normal switching from menu
- On screen distance and vertical line markers
- Audio
- Speed switch trigger to turn monitor on/off or trigger a split screen
- Sun shield
- Multi-lingual menus
- Auto-switching PAL / NTSC

Picture Quality

- LED backlighting (gives 20,000 hours life)
- Anti-glare screen
- Resolution: 800 x 480
- Contrast ratio: 500:1
- Brightness: 500cd/m²
- Viewing angles: Side 65° x Top 50° x Bottom 60°

Power

- Power consumption: min 28 Watts
- Current: max 2.15 Amps

Durability & Standards

- Aluminium die-cast casing
- Mechanical vibration: 10G
- Mechanical shock: 100G
- Operating temperature: -40 to +75°C
- CE marked
- FCC approved
- E-Marked: UNECE R10 compliant
- ISO 16750
- ISO 20653: 2006
- HALT tested

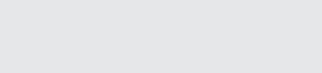
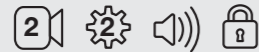
ELITE

7" IP69K MONITOR

BE-970WM - Waterproof 7" Digital LCD monitor 3351



- 12-24Vdc
- IP69K
- Size (WxHxD)
194 x 124 x 48mm
- 5 year warranty



Plus additional in-built image options

Features

- 2 Camera inputs
- Shutter camera compatible - both inputs
- Backlit touch screen button panel
- 'Button-lock' anti-tamper feature
- 2 Auto-triggers
- Mirror / Normal switching from menu
- On screen distance and vertical line markers
- Audio
- Sun shield
- Multi-lingual menus
- Auto-switching PAL / NTSC

Picture Quality

- LED backlighting (gives 20,000 hours life)
- Anti-glare screen
- Resolution: 800 x 480
- Contrast ratio: 500:1
- Brightness: 500cd/m²
- Viewing angles: Side 65° x Top 50° x Bottom 60°

Power

- Power consumption: 11 Watts
- Current: 0.9 Amps

Durability & Standards

- Aluminium die-cast casing
- Mechanical vibration: 20G
- Mechanical shock: 100G
- Operating temperature: -40 to +70°C
- CE marked
- FCC approved
- E-Marked: UNECE R10 compliant
- ISO 16750
- ISO 13766: 2006
- HALT tested

ELITE

7" MONITOR

BE-870HM - 7" High Definition LCD monitor 6380



- 12-24Vdc
- Size (WxHxD)
194 x 124 x 33mm
- 5 year warranty



Plus additional in-built image options

Features

- 2 Camera inputs
- Shutter camera compatible
- 'Button-lock' anti tamper feature
- 2 Auto-triggers with configurable trigger-off delays
- Mirror / Normal switching from menu
- On-screen distance and vertical line markers
- Audio
- Sun shield
- Auto-dimmer and keypad illumination
- Multi-lingual menus
- Auto-switching PAL / NTSC

Picture Quality

- LED backlighting (gives 20,000 hours life)
- Anti-glare screen

- Resolution: 1024 x 600
- Contrast ratio: 800:1
- Brightness: 500cd/m²
- Viewing angles: Side 80° x Top 60° x Bottom 70°

Power

- Power consumption: 11.7 Watts
- Current: 0.975 Amp

Durability & Standards

- Mechanical vibration: 3G
- Mechanical shock: 51G
- Operating temperature: -40 to +70°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

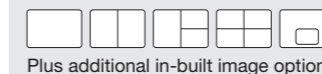
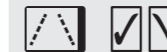
ELITE

7" QUAD MONITOR

BE-870FM - 7" Digital LCD monitor 2146



- 12-24Vdc
- Size (WxHxD)
197 x 135 x 30mm
- 5 year warranty



Plus additional in-built image options

Features

- 4 camera inputs
- 5 Auto-triggers
- Shutter camera compatible
- 'Button-lock' anti-tamper feature
- Mirror / Normal switching from menu
- On-screen distance & vertical line markers
- Audio
- Sun shield
- Auto-dimmer
- Multi-lingual menus
- Auto-switching PAL / NTSC

Picture Quality

- LED backlighting (gives 20,000 hours life)
- Anti-glare screen
- Resolution: 800 x 480
- Contrast ratio: 500:1
- Brightness: 400cd/m²
- Viewing angles: Side 70° x Top 50° x Bottom 70°

Power

- Power consumption: 21 Watts
- Current: 1.9 Amps

Durability & Standards

- Mechanical vibration: 6G
- Mechanical shock: 100G
- Operating temperature: -40 to +70°C
- CE marked
- FCC approved
- E-Marked: UNECE R10 compliant
- HALT tested

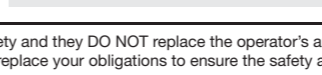
ELITE

7" MONITOR

BE-870LM - 7" Digital LCD monitor 2705



- 12-24Vdc
- Size (WxHxD)
197 x 128 x 34mm
- 5 year warranty



Plus additional in-built image options

Features

- 2 Camera inputs
- Shutter camera compatible - both inputs
- 'Button-lock' anti tamper feature
- 2 Auto-triggers with configurable trigger-off delays
- Mirror / Normal switching from menu
- On-screen distance and vertical line markers
- Audio
- Sun shield
- Auto-dimmer and keypad illumination
- Multi-lingual menus
- Auto-switching PAL / NTSC

Picture Quality

- LED backlighting (gives 20,000 hours life)
- Anti-glare screen
- Resolution: 800 x 480

- Contrast ratio: 500:1
- Brightness: 400cd/m²
- Viewing angles: Side 70° x Top 50° x Bottom 70°

Power

- Power consumption: 12 Watts
- Current: 1 Amp

Durability & Standards

- Mechanical vibration: 2.5G
- Mechanical shock: 51G
- Operating temperature: -30 to +70°C
- CE marked
- FCC approved
- IC approved
- E-Marked: UNECE R10 compliant
- Camera monitor system R46 approved

Select Range Camera/monitor compatibility

KEY	ELITE MONITORS	SELECT MONITORS	
	<ul style="list-style-type: none"> ☒ = Compatible ☒AC-006 = Compatible with adapter(s) shown 	BE-970WFM BE-970WM BE-870LM BE-870FM	VBV-770HFM VBV-770HM VBV-7104HFM VBV-7104HM
SELECT VBV-710C Shutter	☒AC-006		☒
All other SELECT cameras	☒AC-006		☒

SELECT



AHD 10.4" QUAD MONITOR

VBV-7104HFM - 10.4" High Definition LCD monitor

6057

- 12-24Vdc
- **Size (WxHxD)**
267 x 193 x 30mm
- 3 year warranty

10.4"



Plus additional in-built image options

Features

- AHD and CVBS compatible
- High-definition, high contrast, wide view angle
- Configurable view options
- 4 camera inputs
- 'Button-lock' anti-tamper feature
- 5 Auto-triggers
- Configurable trigger delay
- Mirror / Normal switching from menu
- On-screen distance markers
- Built-in speaker
- Sun shield
- Multi-lingual menus
- Auto-switching AHD 1.0 / AHD 2.0 / PAL / NTSC

- Resolution: 1024 x 768
- Contrast ratio: 900:1
- Brightness: 500cd/m²
- Viewing angles:
Side 85° x Top 85° x Bottom 85°

Power

- Power consumption: 31.2 Watts
- Current: 2.6 Amps

Durability & Standards

- Mechanical vibration: 4G
- Mechanical shock: 51G
- Operating temperature: -20 to +70°C
- CE marked
- E-Marked: UNECE R10 compliant
- HALT tested
- FCC approved
- IC approved

Picture Quality

- LED backlighting (gives 30,000 hours life)
- Anti-glare screen

SELECT



AHD 7" MONITOR

VBV-770HFM - 7" High Definition LCD monitor

7204

- 12-24Vdc
- **Size (WxHxD)**
196 x 118 x 28mm
- 3 year warranty

7.0"



Plus additional in-built image options

Features

- AHD and CVBS compatible
- High-definition, high contrast, wide view angle
- Configurable views
- 4 camera inputs
- 5 Auto-triggers
- Mirror / Normal switching from menu
- 'Button lock' anti-tamper feature
- On-screen distance markers
- Audio
- Sun shield
- Auto-dimmer
- Multi-lingual menus
- Auto-switching AHD 1.0 / AHD 2.0 / PAL / NTSC

- Resolution: 1024 x 600
- Contrast ratio: 700:1
- Brightness: 650cd/m²
- Viewing angles:
Side 85° x Top 85° x Bottom 85°

Power

- Power consumption: 27.6 Watts
- Current: 2.3 Amps

Durability & Standards

- Mechanical vibration: 3G
- Mechanical shock: 51G
- Operating temperature: -20 to +70°C
- CE marked
- E-Marked: UNECE R10 compliant
- UKCA marked
- HALT tested
- FCC approved
- IC approved

Picture Quality

- LED backlighting (gives 20,000 hours life)
- Anti-glare screen

Model

Part No:

SELECT

AHD 7" MONITOR

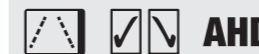
VBV-770HM - 7" High Definition LCD monitor

5611



- 12-24Vdc
- **Size (WxHxD)**
196 x 118 x 26mm
- 3 year warranty

7.0"



Features

- AHD and CVBS compatible
- High-definition, high contrast, wide view angle
- 3 camera inputs
- 3 Auto-triggers
- Mirror / Normal switching from menu
- 'Button lock' anti-tamper feature
- On-screen distance markers
- Audio
- Sun shield
- Auto-dimmer
- Multi-lingual menus
- Auto-switching AHD 1.0 / AHD 2.0 / PAL / NTSC

- Anti-glare screen
- Resolution: 1024 x 600
- Contrast ratio: 700:1
- Brightness: 500cd/m²
- Viewing angles:
Side 85° x Top 85° x Bottom 85°

Power

- Power consumption: 10 Watts
- Current: 0.8 Amps

Durability & Standards

- Mechanical vibration: 4G
- Mechanical shock: 51G
- Operating temperature: -30 to +70°C
- CE marked
- E-Marked: UNECE R10 compliant
- HALT tested
- FCC approved
- IC approved

Picture Quality

- LED backlighting (gives 20,000 hours life)

SELECT

CAMERA MONITOR SYSTEM ANCILLARIES

BMM-019-ARM - 68mm replacement arm (Select range)

3348



- 68mm mounting bracket arm
- Allows monitor to be dash-mounted in portrait position

A further range of camera/monitor brackets and mounting adapters is available. Please contact us for details

ESSENTIAL

4.3" MIRROR MONITOR

VBV-243M - 4.3" Digital Mirror monitor

5323



- 12-24Vdc
- **Size (WxDxH)**
280 x 92 x 30.5mm
- 1 year warranty

4.3"



Features

- On screen multi-lingual display menu
- Digital LCD panel
- 2 Auto-trigger
- Auto dimmer
- Illuminated keypad
- On-screen distance markers
- TV system: PAL / NTSC

- Viewing angles:
Side 65° x Top 60° x Bottom 50°

Power

- Power consumption: 6.6 Watts
- Current: 0.53 Amps

Durability & Standards

- Vibration rating: 6G
- Operating temperature: -20 to +70°C
- CE marked
- FCC approved

Picture Quality

- Resolution: 480 x 272
- Contrast ratio: 600:1
- Brightness: 1000cd/m²

Model

Part No:

ELITE

CAMERA MONITOR SYSTEMS

BE-870L-000 - Single camera monitor system for rigid vehicles **3231**



- BE-870LM - 7" monitor **2705**
- BE-800C Camera **1623**
- BE-L120 - 20m cable **0801**

See individual products for detailed specifications and warranties

BE-870L-100 - Single shutter camera monitor system for rigid vehicles **4032**



- BE-870LM - 7" monitor **2705**
- BE-810C Shutter camera **1242**
- BE-L120 - 20m cable **0801**

See individual products for detailed specifications and warranties

SELECT

AHD CAMERA MONITOR SYSTEMS

VBV-770H-7100 - Single AHD camera monitor system for rigid vehicles **7670**



- VBV-770HM - 7" AHD monitor **5611**
- VBV-7100C - Camera **5464**
- VBV-H420 - AHD 20m cable **5513**

See individual products for detailed specifications and warranties

VBV-770H-3100 - Single AHD camera monitor system for small rigid vehicles **7680**



- VBV-770HM - 7" AHD monitor **5611**
- VBV-3100C - AHD Camera **5454**
- VBV-H410 - AHD 10m cable **5516**

See individual products for detailed specifications and warranties

VBV-770H-3200 - Single AHD camera monitor system for rigid vehicles **7681**



- VBV-770HM - 7" AHD monitor **5611**
- VBV-3100C - AHD Camera **5454**
- VBV-H420 - AHD 20m cable **5513**

See individual products for detailed specifications and warranties

Model

Part No:

ESSENTIAL

AHD CAMERA MONITOR SYSTEM

VBV-6172-000 - High Definition Camera monitor system **7595**



- Camera Viewing angle (HxVxD) **106 x 56 x 120°**
- IP69K camera
- Camera Size (WxHxD) **76 x 59 x 55mm**
- Monitor Size (WxHxD) **194 x 118 x 25mm**
- 1 year warranty

Contents

- 1 x VBV-6170M monitor
- 1 x monitor sunshield
- 1 x monitor bracket
- 1 x VBV-6132C camera
- 1 x 20m VBV-L4120 extension cable
- Fitting kit

Features

- AHD 1080P/720P/CVBS
- 2 camera inputs
- 1 auto trigger
- Multi-lingual menus
- PAL & NTSC (Switching cable)

Picture Quality

- Monitor resolution: 1024x600
- Camera resolution: 1920x1080 AHD

- Contrast ratio: 500:1
- Brightness: 400 cd/m²
- Monitor viewing angles: Side 70° x Top 45° Bottom 65°

Power

- Power consumption: 4.2 Watts
- Current: 0.4 Amps

Durability & Standards

- Mechanical vibration: 5.9G
- Operating temperature: -20 to +70°C
- CE marked
- FCC approved
- IC approved



ESSENTIAL

CAMERA MONITOR SYSTEM

VBV-650-000 - PAL Camera monitor system **4765**
 VBV-650-000N - NTSC Camera monitor system **4766**



- Camera Viewing angle (HxVxD) **81 x 59 x 106° PAL**
81 x 59 x 108° NTSC
- Camera IP67
- Camera Size (WxHxD) **65 x 59 x 55mm**
- Monitor Size (WxHxD) **150 x 99 x 31mm**
- 1 year warranty

Contents

- 1 x VBV-650M monitor
- 1 x monitor bracket
- 1 x VBV-620C camera PAL or VBV-621C camera NTSC
- 1 x 20m VBV-L4020 extension cable
- Fitting kit

Camera Features

- Mirror view
- CMOS
- TV Lines: 420

Monitor Features

- 1 camera input

- ### Picture Quality
- Monitor resolution: 640x480
 - Monitor viewing angles: Side 70° x Top 50° Bottom 70°

Power

- Power consumption: 2 Watts































Durability & Standards

- Operating temperature: -10 to +70°C

























Model Part No:

BRIGADE CAMERA MONITOR ADAPTERS





	 	AC-006 - Connects Select camera (not shutter) to Elite cable	1983
	 	AC-007 - Connects Select monitor to Elite cable	1984
	 	AC-014 - Connects Elite camera to Select cable	2094
	 	AC-014(5M) - Connects Elite camera to Select cable, 5m long	5049
	 	AC-020 - Connects Elite monitor to Select cable	2590
	 	AC-055(5M) - 5-pin to 4-pin Select cable, 5m long	4267
	  	AC-306 - Splitter cable connects 1 x (Non HD) Select camera to MDR & monitor	4904
	  	AC-307 - Splitter cable connects 1 x Elite camera to MDR & Monitor	4905
	  	AC-H305 - Splitter cable connects 1 x BN360-300 camera to MDR & ECU	6648

MISCELLANEOUS CAMERA MONITOR ADAPTERS
























	 	AC-056 - Connects Select camera to Orlaco monitor	4401
	 	AC-062 - Connects Elite camera to Orlaco monitor	4691
	 	AC-063 - Connects Elite camera to Orlaco monitor, screw fit	4925
	 	AC-066 - Connects Orlaco camera to Elite monitor	5027
	 	AC-067 - Connects Orlaco camera to Select monitor	5028
	 	AC-24-12(009) - In-line 24/12Vdc converter - Select camera to Mekra 507405 monitor	4926
	  	AC-308 - Splitter cable to connect MDR to Mekra 507405 CMS	4949

Model Part No:

AI CAMERA MONITOR ADAPTERS

	AC-AI305 - 8-pin to 8-pin/4-pin Splitter Adaptor Cable for Backeye@360	8060
	VBV-360-1000 ECU-VI (4 pin) - 8-pin to 4-pin ECU Adaptor Cable for Backeye@360	8036
	VBV-22X0C-CA-ZONES - 12v Zone-Trigger Adaptor Cable for Backeye@360 and AI cameras	7646
	VBV-22X0C-CA (No alarm) - Camera Adaptor Cable for Backeye@360 and AI cameras	8037
	VBV-22X0C-CA-USB - Camera Adaptor Cable for Backeye@360 and AI cameras	7505
	AC575 - WiFi Dongle for Backeye@360, AI cameras and AI Box	8443
	VBV-22X0C-CA-M12+CAN- M12 & CAN Integration Adaptor Cable for AI cameras	8260
See separate AI cable brochure for detailed specifications		

GENERAL CAMERA MONITOR ADAPTERS

	  	AC-016 - Connects AV to Camera input of Elite monitor	2150
	  	AC-019 - Connects Elite camera to male phono (video only)	2589
	 	AC-021 - Connects BNC/FLIR PathFindIR camera to Elite cable	2704
	   	AC-024 - Connects AV to Select monitor (video & audio input, 12Vdc output)	3183
	  	AC-028 - Connects AV to Select cable	3335
	 	AC-064 - Connects Elite camera to BNC adapter cable	4948

Model Part No:








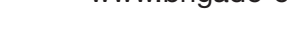
OEM CAMERA MONITOR ADAPTERS

		AC-041 - Connects Elite camera to John Deere 7-pin amp output	4245
		AC-042 - Connects Select camera to John Deere 7-pin amp output	4246
		AC-044 - Connects Select camera to Molex M12 (Fendt)	4279
		AC-045 - Connects Elite camera to Molex M12 (Fendt)	4280
		AC-068 - Connects Select camera to MAN Harman unit with camera prep	5234
		AC-069 - Connects Select camera to MAN/Scania Harman unit without camera prep	5318
		AC-24-12(002) - In-line 24/12Vdc converter - Elite camera to Mercedes monitor	4266
		AC-24-12(006) - In-line 24/12Vdc converter - Select camera to Volvo FH(4) & FM(4)	4719
		AC-24-12(007) - In-line 24/12Vdc converter - Select camera to Iveco connect system	4762
		AC-24-12(008) - In-line 24/12Vdc converter - Select camera to Mercedes Sprinter	4763
		AC-24-12(010) - In-line 24/12Vdc converter - Select camera to Mercedes Actros/Arocs 2019> with J9P prep'	5907

A further range of OEM-specific adapters to connect Brigade cameras to factory-fit monitors is available

ELITE







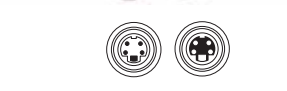


ELITE HD CAMERA CABLES

	BE-H030 - 30 metre extension cable	7376
	BE-H025 - 25 metre extension cable	7375
	BE-H020 - 20 metre extension cable	7374
	BE-H015 - 15 metre extension cable	7373
	BE-H012 - 12 metre extension cable	7372
	BE-H010 - 10 metre extension cable	7371
	BE-H008 - 8 metre extension cable	7370
	BE-H005 - 5 metre extension cable	7369
	BE-H003 - 3 metre extension cable	7368
	BE-H001 - 1 metre extension cable	7367
	BE-H0003 - 0.5 metre extension cable	7366

Model Part No:







ELITE

CAMERA TO MONITOR CABLES

	BE-L130 - 30 metre cable	0800
	BE-L120 - 20 metre cable	0801
	BE-L115 - 15 metre cable	0802
	BE-L112 - 12 metre cable	3008
	BE-L110 - 10 metre cable	0803
	BE-L108 - 8 metre cable	3007
	BE-L105 - 5 metre cable	0804
	BE-L101 - 1 metre cable	5042
	BE-L1003 - 0.3 metre cable	2797

ELITE

ELITE CAMERA EXTENSION CABLES

	BE-X025 - 25 metre extension cable	1907
	BE-X020 - 20 metre extension cable	1143
	BE-X015 - 15 metre extension cable	2101
	BE-X010 - 10 metre extension cable	2100
	BE-X005 - 5 metre extension cable	2099
	BE-X003 - 3 metre extension cable	0805

AI









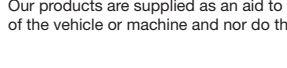
HUMAN FORM RECOGNITION (HFR) CABLES



VBV-AI801 - 1 metre AI Camera Extension Cable	7489
VBV-AI805 - 5 metre AI Camera Extension Cable	7490
VBV-AI810 - 10 metre AI Camera Extension Cable	7508
VBV-AI815 - 15 metre AI Camera Extension Cable	7509
VBV-AI820 - 20 metre AI Camera Extension Cable	7491
AC-24-12(011) - Power adapter for AI camera	5760

SELECT

SELECT AHD CAMERA CABLES

	VBV-H430 - 30 metre cable	5511
	VBV-H425 - 25 metre cable	5512
	VBV-H420 - 20 metre cable	5513
	VBV-H415 - 15 metre cable	5514
	VBV-H412 - 12 metre cable	5515
	VBV-H410 - 10 metre cable	5516
	VBV-H407 - 7 metre cable	5517
	VBV-H406 - 6 metre cable	5518
	VBV-H405 - 5 metre cable	5519
	VBV-H404 - 4 metre cable	5520
	VBV-H403 - 3 metre cable	5521
	VBV-H4025 - 2.5 metre cable	5522
	VBV-H4005 - 0.5 metre cable	5523

Model

Part No:

ELITE

TRUCK/TRAILER CABLE KIT



SK-31E - Truck and trailer cable kit - unique pin layout
Inclusive of SK-31E-T - Trailer kit

1830

- BE-L110 - 10m cable for cab 0803
- SP-7A - 7-pin bulkhead socket for cab & cab-end camera connector (unique pin layout) 7566
- SC-7 - Coiled cable with 7-pin plugs 1829

SK-31E-T - Trailer only kit 1886

- BE-X020 - 20m extension cable for trailer 1143
- SP-7B - 7-pin bulkhead socket for trailer & trailer-end camera connector (unique pin layout) 7567



ELITE

TRUCK/TRAILER CABLE KIT



SK-30E - Truck and trailer cable kit
Inclusive of SK-30E-T - Trailer kit

1144

- BE-L110 - 10m cable for cab 0803
- SP-07C - 7-pin bulkhead socket for cab & cab-end camera connector 7564
- SC-07 - Coiled cable with 7-pin plugs 1046

SK-30E-T - Trailer only kit 1885

- BE-X020 - 20m extension cable for trailer 1143
- SP-07T - 7-pin bulkhead socket for trailer & trailer-end camera connector 7565



ELITE

TRUCK/TRAILER CABLE KIT



SK-15-01 - Truck and trailer cable kit for three cameras 3427

- SP-15A-01 - 15-pin bulkhead socket for cab & 3 cab-end camera connectors 3423

- SP-15B-01 - 15-pin bulkhead socket for trailer & 3 trailer-end camera connectors 3422
- SC-15-01 - Coiled shielded cable with 15-pin plugs 3268



ELITE

TRUCK/TRAILER CABLE KIT



SK-15-04 - Truck and trailer cable kit for single camera & single buzzer ultrasonic detection system 3997

- SP-15A-04 - 15-pin bulkhead socket for cab & cab-end camera connector plus stripped wires and display/buzzer connection for Ultrasonics 3955

- SP-15B-04 - 15-pin bulkhead socket for trailer & trailer-end camera connector plus stripped wires and display/buzzer connection for Ultrasonics 3956

- SC-15-01 - Coiled shielded cable with 15-pin plugs 3268



Model

Part No:

ELITE

TRUCK/DRAWBAR TRAILER CABLE KIT



SK-50E - Truck and drawbar trailer cable kit for two cameras - unique pin layout
Inclusive of SK-50E-A Truck kit and SK-31E-T trailer kit

1570

SK-50E-A - Truck only kit 1879

- BE-L115 - 15m cable for truck 0802
- BE-X005 - 5m extension cable for truck camera 2099
- CS-020 - Two way camera selector 1571
- SP-7A - 7-pin bulkhead socket for trailer & trailer-end camera connector (unique pin layout) 7566
- SC-7 - Coiled cable with 7-pin plugs (unique pin layout) 1829

SK-31E-T - Trailer only kit 1886

- BE-X020 - 20m extension cable for trailer camera 1143
- SP-7B - 7-pin bulkhead socket for cab & cab-end camera connector (unique pin layout) 7567



SELECT

TRUCK/TRAILER CABLE KIT



SK-15-05 - Truck and trailer cable kit for 3-camera Backeye@360 5066

5066

- SP-15A-05 - 15-pin bulkhead socket for cab & cab-end connector plus 3x connections for Backeye@360 Select 5064
- SP-15B-05 15-pin bulkhead socket for trailer & trailer-end connector plus 3x connections for Backeye@360 Select 5065

- SC-15-01 Coiled shielded cable with 15-pin plugs 3268



SELECT

TRUCK/ DRAWBAR TRAILER CABLE KIT



VSK-50E - Truck and drawbar trailer cable kit for two cameras 2540
Inclusive of VSK-50E-A Truck kit and VSK-30E-T Trailer kit

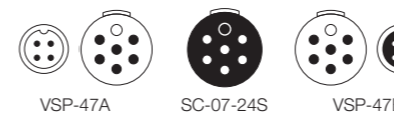
2540

VSK-50E-A - Truck only kit 2541

- VBV-H420 - 20m cable for truck 5513
- VBV-H405 - 5m camera cable for truck camera 5519
- VCS-020 - Two-way camera selector 1844
- 1 x VSP-47A - 7-pin camera bulkhead socket for truck rear 1847
- SC-07-24S - Coiled cable with 7-pin sockets 1227

VSK-30E-T - Trailer only kit 2542

- VBV-H420 - 20m cable for trailer 5513
- VSP-47B - 7-pin camera bulkhead socket for trailer 1846



Model

Part No:

SELECT

TRUCK/TRAILER CABLE KIT

VSK-31E - Truck and trailer cable kit - unique pin layout

2539

Inclusive of VSK-31E-T - Trailer kit



SP-7A SC-7 SP-7B
(Select connector via supplied adapter cables)

- VBV-H410 - 10m cable for cab 5516
- SP-7A - 7-pin bulkhead socket for cab & cab-end camera connector (unique pin layout) 7566
- AC-014 - Adapter cable 2094
- SC-7 - Coiled cable with 7-pin plugs (unique pin layout) 1829

VSK-31E-T - Trailer only kit 2543

- VBV-H420 - 20m cable for trailer 5513
- AC-006 - Adapter cable 1983
- SP-7B - 7-pin bulkhead socket for trailer & trailer-end camera connector (unique pin layout) 7567

SELECT

TRUCK/TRAILER CABLE KIT

VSK-30E - Truck and trailer cable kit

2538

Inclusive of SK-30E-T - Trailer only kit



VSP-47A SC-07-24S VSP-47B

- VBV-H410 - 10m cable for cab 5516
- VSP-47A - 7-pin bulkhead socket for cab & cab-end camera connector 1847
- SC-07-24S - Coiled cable with type 24S 7-pin plugs 1227

VSK-30E-T - Trailer only kit 2542

- VBV-H420 - 20m extension cable for trailer 5513
- VSP-47B - 7-pin bulkhead socket for trailer & trailer-end camera connector 1846

AI Box

The AI Box gives a non-AI camera monitor system Human Form Recognition (HFR) functionality without the need to replace any existing analogue cameras or monitor. Connected in-line with the existing cabling, the AI Box enables the analogue cameras to detect and recognise the human form within a pre-defined detection zone and reliably alert the driver visually and audibly via the monitor, before a potential collision occurs. Compatible with up to two analogue cameras (AHD, CVBS, NTSC, PAL), Backeye@360 and MDR recorders.

- Recognises and alerts the driver to people in the detection zone
- Compatible with up to two cameras
- Highlights detected people on the monitor
- Works with existing cameras, monitor and cabling

Model

Part No:

CAMERA MONITOR SYSTEM ANCILLARIES

VBV-1230-AI -AI Box

8385



- 12-24Vdc
- 2 camera inputs
- Size (WxHxD)
104 x 154 x 28mm
- 3 year warranty

Features

- AI Detection with Human Form Recognition (HFR)
- Alerts the driver to people in the detection zone
- Compatible with up to two analogue cameras (AHD, CVBS, NTSC, PAL)
- Highlights detected people on the driver's monitor
- Works with existing cameras, monitor and cabling
- Compatible with MDR Recorders
- Configurable detection zones
- Uses camera infrared technology for low light conditions

Power

- Current: 18 Watts

Durability & Standards

- Mechanical vibration: 5.9G
- Operating temperature: -20 to +70°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

Model

Part No:

SELECT

DIGITAL WIRELESS CONNECTION SYSTEM



DW-2000-TX - Digital Wireless Transmitter
DW-2000-RX - Digital Wireless Receiver

7088
7089

- 12-24Vdc
- 1 camera input
- IP69K
- Size (WxHxD)
105 x 106 x 25.2mm
- 3 year warranty

Features

- CVBS, AHD 720P and 1080P compatible
- Image Latency: 200 milliseconds
- No need for retractable coiled cables
- Reduces installation time
- Re-pair facility allows for interchangeable trailers
- Triggered by reverse gear
- Up to two transmitters can be paired to one receiver
- TV System AUTO
- Secure connection
- Easy 1-button pairing
- VBV Select range connectors

Power

- Power consumption:
TX: 1.04 Watts RX: 0.12 Watts

Durability & Standards

- Operating temperature:
-20 to +70°C
- CE marked
- FCC approved
- IC approved

Adapter required to connect Elite range camera and monitor.



SELECT

CAMERA MONITOR SYSTEM ANCILLARIES



SS-H002 -High Definition Twin camera screen splitter (Select range connectors) 7178

- 12-24Vdc
- 2 camera inputs
- Size (WxHxD)
147 x 37 x 78mm
- 2 year warranty

Features

- AHD and CVBS compatible
- Offers split-screen option for monitors without in-built functionality
- 3 trigger inputs per camera
- Shutter camera compatible with adapters (Elite - TS-1000-ECU) (Select - AC-035)
- TV System: PAL / NTSC/AHD1/AHD2
- Manual Mirror/Normal switching - choose from horizontal normal/mirror or vertical normal/flip
- Short circuit protection on camera inputs
- Reverse polarity protected

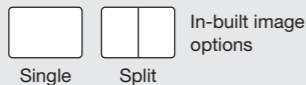
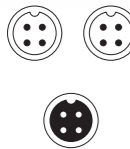
Power

- Current: 0.8 Amps

Durability & Standards

- Mechanical vibration: 3G
- Mechanical shock: 51G
- Operating temperature: -30 to +80°C
- CE marked
- E-Marked: UNECE R10 compliant
- UKCA marked
- FCC approved
- IC approved

Adapter required for Elite range monitors



ELITE

CAMERA MONITOR SYSTEM ANCILLARIES



EDM-50 - Multi-camera module and screen splitter (Elite range connectors) 2152

- 12-24Vdc
- 4 camera inputs
- Size (WxHxD)
154 x 28 x 105mm
- 2 year warranty

Features

- Shutter camera compatible (inputs 1,2&3)
- AV input to accept DVD, sat nav or other add-ons
- 5 manual or auto-triggers for each camera
- On screen distance markers
- Mirror / Normal image switch for each camera
- Selectable camera audio
- Auto-scanning function
- Adapter required for Select range monitors

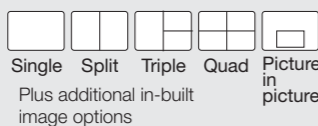
Power

- Power consumption: 20 Watts
- Current: 2A

Durability & Standards

- Mechanical vibration: 5G
- Operating temperature: -25 to +70°C
- CE marked

Not AHD compatible



Model

Part No:

ELITE

CAMERA MONITOR SYSTEM ANCILLARIES



SC-1000-ECU - Shutter camera module

3666

- Allows BE-810C shutter camera to function on non-shutter enabled inputs on Elite range monitors (using Elite range cables)

- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved

- Adapter required for Select range monitors

- 2 year warranty

- Current: 2A



CAMERA MONITOR SYSTEM ANCILLARIES

LS-60-A - Speed switch

4851



- 12-24Vdc
- Auto-triggers safety equipment at the designated speed
- Size (WxHxD)
44 x 16 x 64mm
- 2 year warranty

Features

- Normally closed - safety device on by default, turning off at designated speed
- 10 speed threshold settings
- Compact size
- Easy to install and set up
- Short circuit protection on camera inputs
- Reverse polarity protected

Durability & Standards

- Mechanical vibration: 10G
- Mechanical shock: 50G
- Operating temperature: -40 to +85°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved

Power

- Power consumption: 21.6 Watts
- Max current: 1.8 Amps
- Switch Output max. current: 1.2 Amps

Notes:

A relay is required if connected to a device that is higher than 1.2 Amps

CAMERA MONITOR SYSTEM ANCILLARIES



Elite



CS-020 - Two-way camera selector (Elite range connectors) 1571
VCS-020 - Two-way camera selector (Select range connectors) 1844



Select



- Allows a 2nd camera to be connected to a monitor
- 2nd camera view selected by trigger wire
- Full screen view only
- 2 year warranty

Recording Systems

MDR Mobile Digital Recording systems that are capable of capturing vehicle data and watermarked footage from up to 16 vehicle-mounted cameras. The range includes models with 4G capabilities, allowing data to be accessed from the recorder without having to physically go to the vehicle. Compatible with all Brigade cameras, Digital IP cameras for MDR and Backeye@360

Dashcams







Combined HD camera and recording systems. The palm-sized devices are easily attached to the windscreen, enabling recording of the road ahead and in-cab, plus data capture such as harsh braking. The single and dual lens connected dashcams offer remote access via 4G as well as AI-driven alerts to warn the driver about imminent hazardous situations and high risk behaviours.

Digital IP cameras for MDR

High-definition digital cameras with their own IP address. Directly connected to an MDR, the IP camera transmits digital video via Ethernet cable which provides enhanced image quality and detailed configuration. Expansion modules allow further IP cameras to connect to the MDR

Model **Part No:**

MOBILE DIGITAL RECORDER 600 SERIES

MDR-644-1-SSD	- 8 channel 1TB solid-state drive recorder	6580
MDR-644-2-SSD	- 8 channel 2TB solid-state drive recorder	6585
 MDR-644G-1-SSD	- 8 channel 1TB solid-state drive recorder with 4G	6581
 MDR-644G-2-SSD	- 8 channel 2TB solid-state drive recorder with 4G	6586
  MDR-644GW-1-SSD	- 8 channel 1TB solid-state drive recorder with WiFi & 4G	6582
  MDR-644GW-2-SSD	- 8 channel 2TB solid-state drive recorder with WiFi & 4G	6587



- 9-32Vdc
- 4 x Analogue & 4 x IP camera inputs
- Supports up to 12 cameras using external PON Switch
- Size 190 x 82 x 222mm (WxHxD)
- 8 trigger/alarm inputs
- Lockable and interchangeable storage unit
- Fast, easily downloadable recordings and data
- 3 year warranty

Contents

- 1 x MDR-644 Mobile Digital Recorder
- Wired Mouse
- Input / Output Cable
- Power Cable
- GPS Antenna
- 4G Network Antenna (G & GW models)
- Wi-Fi Antenna (GW models)
- USB A to B Cable
- Security Key
- Bracket & Fixings

Features

- Remotely access MDR units using wireless (WiFi models only) and/or Mobile network (4G models only)
- Mobile apps for remote view (WiFi/4G models only)
- Geo-fencing (4G models only)
- Mobile Standards: 3G/4G
- Audio (cameras must have microphones)
- Robust aluminum housing
- Anti-vibration mounting for reliable recording
- Built-in GPS
- Internal G-sensor and built-in buzzer
- Recordings saved to hard disk (protected by non-visible digital watermark) and in-built Mirror recording onto 64Gb SD card
- Recording modes: normal, alarm and timer (all watermarked)
- Configurable alarm trigger settings (speed, G-force, motion detection, video loss, voltage)
- Record images prior to alarm activation and after vehicle switched off
- MDR-Dashboard (full player) and MDR-Player (portable) with Google (English only)

- Search by date, time or triggered events
- Multi-level password protected access
- Hard drive unit directly pluggable to PC via USB port
- 8 x trigger Inputs, 2x trigger outputs and 1x12V power output
- Built-in HDD heater
- MDR Control using USB Mouse or optional IR remote control
- USB 3.0 connection
- TV System: PAL/NTSC/AHD
- Compatible with Brigade's vehicle CCTV camera monitor systems, IP cameras and Backeye@360 systems

Image and Audio Quality

- High quality H.265 image compression
- ADPCM - audio compression
- Choice of 8 low to high resolution settings
- Record at between 1 and 25 frames per second, per channel

Power

- Max power consumption: 80 Watts
- Current: 6.6 Amps

Durability & Standards

- Mechanical vibration: 3.1G
- Mechanical shock: 51G
- Operating temperature: -40 to +70°C
- CE marked
- FCC approved
- E Mark
- IC approved

OPTIONAL EXTRA







Expand the channel capability of the MDR with the addition of an Expansion Module and IP cameras:



IP-EM4 - PON Expansion Module adds 4 channels to MDR-644 = 12 channels 5860

Model **Part No:**

MOBILE DIGITAL RECORDER 600 SERIES

MDR-641-1-SSD	- 5 channel 1TB solid-state drive recorder	7073
MDR-641-2-SSD	- 5 channel 2TB solid-state drive recorder	7078
 MDR-641G-1-SSD	- 5 channel 1TB solid-state drive recorder with 4G	7074
 MDR-641G-2-SSD	- 5 channel 2TB solid-state drive recorder with 4G	7079
  MDR-641GW-1-SSD	- 5 channel 1TB solid-state drive recorder with WiFi & 4G	7075
  MDR-641GW-2-SSD	- 5 channel 2TB solid-state drive recorder with WiFi & 4G	7080



- 9-32Vdc
- 4 x Analogue & 1 x IP camera inputs
- 8 trigger/alarm inputs
- Lockable and interchangeable storage unit
- Fast, easily downloadable recordings and data
- Size (WxHxD) 190 x 70 x 206mm
- 3 year warranty

Main Contents

- 1 x MDR-641 Mobile Digital Recorder
- Wired Mouse
- Input / Output Cable
- Power Cable
- GPS Antenna
- 4G Antenna (G and GW models)
- Wi-Fi Antenna (GW models)
- CMS adapter cable
- Security Key
- Bracket and Fixings

Features

- Remotely access MDR units using wireless (WiFi models only) and/or Mobile network (4G models only)
- Mobile apps for remote view (WiFi/4G models only)
- Geo-fencing (WiFi/4G models only)
- Mobile Standards: 3G/4G
- Audio (cameras must have microphones)
- Robust housing
- GPS
- Internal G-sensor
- Recordings saved to hard disk or SSD (watermark protected)
- Recording modes: normal, alarm and timer (all watermarked)
- Configurable alarm trigger settings (speed, G-force, motion detection, video loss, voltage)
- Record images prior to alarm activation and after vehicle switched off
- MDR-Dashboard (full player) and MDR-Player (portable) with Google (English only)
- Search by date, time or triggered events

- Multi-level password protected access
- 8 x trigger Inputs, 2x trigger outputs and 1x power output
- Built-in HDD heater
- MDR Control using USB Mouse
- USB 3.0 connection
- TV System: PAL/NTSC/AHD
- Compatible with Brigade's vehicle CCTV camera monitor systems, IP cameras and Backeye@360 systems

Image and Audio Quality

- High quality H.265 image compression
- ADPCM - audio compression
- Choice of 8 low to high resolution settings
- Record at between 1 and 25 frames per second, per channel

Power

- Max power consumption: 22 Watts
- Current: 3.9 Amps

Durability & Standards







- Mechanical vibration: SSD 3.1G
- Mechanical shock: 51G
- Operating temperature: -40 to +70°C
- CE marked
- FCC approved
- E Mark
- IC approved

RECOMMENDED EXTRA

MDR-MCU-R-01	MDR Reader and cable for PC	7053
	Required to download data from storage	

Model **Part No:**

MOBILE DIGITAL RECORDER 500 SERIES

MDR-508-1-G2-SSD	- 8 channel 1TB solid-state drive recorder	6427
MDR-508-2-G2-SSD	- 8 channel 2TB solid-state drive recorder	6437
 MDR-508GW-1-G2-SSD	- 8 channel 1TB solid-state drive recorder with 4G	6428
 MDR-508GW-2-G2-SSD	- 8 channel 2TB solid-state drive recorder with 4G	6438
  MDR-508G-1-G2-SSD	- 8 channel 1TB solid-state drive recorder with WiFi & 4G	6429
  MDR-508G-2-G2-SSD	- 8 channel 2TB solid-state drive recorder with WiFi & 4G	6439

- 9-32Vdc
- 8 camera inputs - Supports AHD High definition cameras
- 8 trigger/alarm inputs
- Lockable and interchangeable storage unit
- Fast, easily downloadable recordings and data
- Size (WxHxD) 224 x 85 x 221mm
- 3 year warranty

Note:
G2 MDR-500 Series hard drives SSD and SD cards are NOT interchangeable with previous MDR-500 Series models unless a firmware and software update has been carried out. HDD SSD & SD cards also need formatting. See website for further details

Main Contents

- Mobile Digital Recorder with storage caddy unit
- Wired Mouse
- 64Gb industrial grade Class 10 SD card
- Input / Output Cable
- Power Cable
- GPS Antenna
- 4G Antenna (G and GW models)
- Wi-Fi Antenna (W and GW models)
- USB A to B Cable (3.0)
- Security Key
- Bracket and Fixings

Features

- Remotely access MDR units using wireless (WiFi models only) and/or Mobile network (4G models only)
- Mobile apps for remote view (WiFi/4G models only)
- Geo-fencing (WiFi/4G models only)
- Mobile Standards: 2G/3G/4G
- Audio (cameras must have microphones)
- Robust aluminum housing
- Anti-vibration mounting for reliable recording
- Built-in GPS
- Internal G-sensor and built-in buzzer
- Recordings saved to hard disk or SSD (protected by non-visible digital watermark) and in-built Mirror recording onto 64Gb SD card
- Recording modes: normal, alarm and timer (all watermarked)
- Configurable alarm trigger settings (speed, G-force, motion detection, video loss, voltage)
- Record images prior to alarm activation and after vehicle switched off
- MDR-Dashboard (full player) and

- MDR-Player (portable) with Google and MS Bing maps (English only)
- Search by date, time or triggered events
- Multi-level GDPR compliant password protected access
- Storage unit directly pluggable to PC via USB port
- 8 x trigger Inputs, 2x trigger outputs and 1x12V power output
- Built-in HDD heater
- MDR Control using USB Mouse
- USB 3.0 connection
- TV System: PAL/NTSC/AHD
- Compatible with Brigade's vehicle CCTV camera monitor systems, IP cameras and Backeye@360 systems

Image and Audio Quality

- High quality H.264 image compression
- ADPCM - audio compression
- Choice of 8 low to high resolution settings
- Record at between 1 and 25 frames per second, per channel

Power

- Max power consumption: 80 Watts
- Current: 6.6 Amps



Durability & Standards

- Mechanical vibration: 1G
- Mechanical shock: 51G
- Vibration: 2.2G
- Operating temperature: -40 to +70°C
- E-Marked: UNECE R10 compliant
- CE marked
- FCC approved
- IC approved
- RoHS2 Compliant



OPTIONAL EXTRA

Expand the channel capability of the MDR with the addition of an Expansion Module and IP cameras:

	IP-EM4 - Expansion Module adds 4 channels to MDR-508 = 12 channels	5860
	IP-EM8 - Expansion Module adds 8 channels to MDR-508 = 16 channels	5861
	IP-1XXX-PC - IP Camera - Power & Ethernet Cable	5985

Model **Part No:**

MOBILE DIGITAL RECORDER ACCESSORIES

AC-305	- Splitter cable connects 1 x Backeye@360 BN360-200 camera to MDR & ECU	4903
AC-H305	- AHD splitter cable connects 1 x Backeye@360 BN360-1000C camera to MDR & ECU	6648
AC-306	- Connects 1 x Select camera to MDR and monitor	4904
AC-307	- Connects 1 x Elite camera to MDR and monitor	4905
AC-075	- Select Range Adapter cable female to female	7020
MDR-USB-A-01	- USB 3.0 cable Type A to Type A connectors <small>For MDR-641 models only</small>	7056
MDR-RP-02	- Remote status & interface panel with panic button	6016
MDR-04RPC	- 6m cable for Remote status & interface panel	6018
MDR-AC-ACC-01	- Adapter cable for remote panel <small>For MDR-641 models only</small>	7051
MDR-MCU-R-01	- MCU reader for PC <small>For MDR-641 models only</small>	7053
MDR-508GW-EXP-0	- Wi-Fi & 4G upgrade Expansion Module <small>For MDR-508 models only. SD card not included</small>	5309
MDR-508G-EXP-0	- 4G upgrade Expansion Module <small>For MDR-508 models only. SD card not included</small>	5310
MDR-508W-EXP-0	- Wi-Fi upgrade Expansion Module <small>For MDR-508 models only. SD card not included</small>	5311
MDR-500-0.5-MCU-G2-SSD	- Caddy unit with 500GB SSD <small>For MDR-504 & MDR-508 models only</small>	6201
MDR-500-1-MCU-G2-SSD	- Caddy unit with 1TB SSD <small>For MDR-504 & MDR-508 models only</small>	6202
MDR-500-2-MCU-G2-SSD	- Caddy unit with 2TB SSD <small>For MDR-504 & MDR-508 models only</small>	6203
MDR-644-1-MCU-SSD	- Caddy unit with 1TB SSD <small>For MDR-644 models only</small>	6617
MDR-644-2-MCU-SSD	- Caddy unit with 2TB SSD <small>For MDR-644 models only</small>	6618
MDR-641-1-MCU-SSD	- Caddy unit with 1TB SSD <small>For MDR-641 models only</small>	7061
MDR-641-2-MCU-SSD	- Caddy unit with 2TB SSD <small>For MDR-641 models only</small>	7062
SD-32GB-IND	- 32GB industrial grade Class 10 SD card	4875
SD-64GB-IND	- 64GB industrial grade Class 10 SD card	4876



LCV Connected Dashcams

LCV Dashcams are cost-effective, combined HD camera and recording systems. Available as a single, forward-facing camera or dual (forward and driver-facing) camera versions. Both models include ADAS features such as lane departure, headway monitoring and forward collision alerts, and the dual lens version adds AI driver monitoring for fatigue, distraction and mobile use. The dashcams use AI technology to warn the driver in real-time about imminent hazardous situations and high-risk behaviours.

The dashcams have 4G/WiFi connectivity capabilities and integrate exclusively with Geotab and Brigade Video Telematics (monthly subscription required)..

- **Single platform access to both Geotab Telematics and Brigade video fleet data**
- **View video and alert data in the same platform as the AI Connected Dashcam and Brigade's Mobile Digital Recording products**
- **In-cab driver alerts**
- **HD video evidence in case of an incident to protect from false or exaggerated claims**

Model

Part No:

DASHCAM

C6-LITE 2.0 - LCV Dual lens dashcam

8209



- **12-24Vdc**
- **Built-in dual cameras: forward and driver facing**
- **Built-in ADAS and driver safety alerts**
- **4G Connection via Brigade's Telematics services**
- **Fast, easily downloadable recordings and data**
- **Size (WxHxD) 117 x 68 x 110mm**
- **1 year warranty**

Contents:

- 1x Dashcam Recorder
- 1x 64Gb Micro SD card
- 1x Power lead
- 1x Mounting Bracket
- 1x Extension cable

Features

- 170° camera lens
- Built-in WiFi and 4G communication module
- Built in ADAS function:
 - Lane Departure Warning (LDW)
 - Forward Collision Warning (FCW)
 - Headway Monitoring Warning (HMW)
- Built in DSC function:
 - Detects poor driving behaviours
- 2 channel recording
- Built in 6-axis G-Sensor for harsh acceleration, deceleration, cornering and incident detection
- Supports up to 2 x 512GB storage capacity
- Sleep mode and remote wake up
- Audio
- Built-in GPS receiver
- 3 recording modes:
 - Continuous: Records in 1min segments
 - Timer: Records to schedule accurate to the second
 - Alarm:
 - Pre-alarm from 1-to 60 minutes
 - Post-alarm from 1-30 minutes

- Individual channel configurations for recording resolution, frame rate and quality
- Continuous recording with automatic overwriting of oldest data

Picture Quality

- 2 M Pixel 1/2.9" CMOS camera sensors
- 1920 x 1080p HD video capture
- 25 frames per second

Power

- Power consumption: 11 Watts

Durability & Standards

- Operating temperature: -40 to +70°C
- CE marked
- FCC approved
- E-marked: UNECE R10 compliant

NOTES:

In order to provide full functionality, a telematics monthly subscription is required. Not available in all regions. Contact us for details.

Model

Part No:

DASHCAM

C6-LITE 2.0-S - LCV Single lens dashcam

8207



- **12-24Vdc**
- **Forward facing camera**
- **Built-in ADAS alerts**
- **4G Connection via Brigade's Telematics services**
- **Fast, easily downloadable recordings and data**
- **Size (WxHxD) 117 x 67 x 79mm**
- **1 year warranty**

Contents:

- 1x Dashcam Recorder
- 1x 64Gb Micro SD card
- 1x Power lead
- 1x Mounting Bracket
- 1x Extension cable

Features

- 106° camera lens
- Built-in WiFi and 4G communication module
- Built in ADAS function:
 - Lane Departure Warning (LDW)
 - Forward Collision Warning (FCW)
 - Headway Monitoring Warning (HMW)
- Supports 2 channel recording (additional camera and cable required)
- Built in 6-axis G-Sensor for harsh acceleration, deceleration, cornering and incident detection
- Supports up to 2 x 512GB storage capacity
- Sleep mode and remote wake up
- Audio
- Built-in GPS receiver
- 3 recording modes:
 - Continuous: Records in 1min segments
 - Timer: Records to schedule accurate to the second
 - Alarm:
 - Pre-alarm from 1-to 60 minutes

- Post-alarm from 1-30 minutes
- Individual channel configurations for recording resolution, frame rate and quality
- Continuous recording with automatic overwriting of oldest data

Picture Quality

- 2 M Pixel 1/2.9" CMOS camera sensor
- 1920 x 1080p HD video capture
- 25 frames per second

Power

- Power consumption: 7 Watts

Durability & Standards

- Operating temperature: -40 to +70°C
- CE marked
- FCC approved
- E-marked: UNECE R10 compliant

NOTES:

In order to provide full functionality, a telematics monthly subscription is required. Not available in all regions. Contact us for details.

AI Connected dashcam

The AI Connected Dashcam is a compact, windscreen-mounted dual camera system that uses AI technology to provide event warnings, high-definition incident recording and monitor driver behaviour.

The forward-facing camera will identify and audibly alert a driver to a hazardous situation, such as a risk of colliding with the vehicle ahead or an unsignalled lane departure.

The driver-facing camera will identify issues such as mobile use, smoking and inattention.

- **1920P forward facing and 1080P driver facing cameras for clearer identification of registrations, faces and incident detail**
- **Supports up to 1TB storage capacity (256GB supplied)**
- **Built-in 4G allows operators to monitor fleets on the move (Subscription required) via a Dashboard or mobile app, and to remotely live stream or download recorded footage**
- **Simple installation and calibration**
- **Enhanced G sensor detects harsh braking, cornering and acceleration events**
- **Event notifications sent to the dashboard or app to alert fleet managers to high risk incidents**

Model

Part No:

AI CONNECTED DASHCAM

DC-204-AI(UK/EU) - Connected Dashcam with AI

7477



• 12-24Vdc

• **In-built dual cameras: front and driver facing**

• **Built-in ADAS and driver safety alerts**

• **4G Connection via Brigade's Telematics services**

• **Fast, easily downloadable recordings and data**

• **Supports 2 additional cameras - additional cable required**

• **Size (WxHxD) 113 x 88 x 68mm**

• **1 year warranty**

Contents:

- 1x Dash Cam Recorder
- 2x 128Gb Micro SD card
- 1x Power lead
- 1x Mounting Bracket
- 1x Power box with cable
- 1 x Torx driver

Features

- 170° driver facing camera lens
- 140° forward facing camera lens
- Wide dynamic range for improved detail in shadow and highlights
- Built-in WiFi and 4G communication module
- Built in ADAS function:
 - Lane Departure Warning (LDW)
 - Forward Collision Warning (FCW)
 - Headway Monitoring Warning (HMW)
 - Digital Cockpit Safety (DCS) to detect unsafe driving behaviour
- Built in 6-axis G-Sensor for harsh acceleration, deceleration, cornering and incident detection
- Built-in GPS receiver
- 3 recording modes:
 - Continuous: Records in 1min segments
 - Timer: Records to schedule accurate to the second
 - Alarm:
 - Pre-alarm from 1-to 60 minutes
 - Post-alarm from 1-30 minutes
- Individual channel configurations for recording resolution, frame rate and quality
- Supports up to 1TB storage capacity

- Audio
- Continuous recording with automatic overwriting of oldest data
- Supports CBVS monitors (additional cable required)

Picture Quality

- 5 M Pixel 1/2.7" CMOS sensor forward facing camera
- 2 M pixel 12.9 CMOS sensor Driver facing camera
- 1080p driver facing HD video capture
- 1920p forward facing HD video capture
- Fast frame rate, 30 frames per second

Power

- Power consumption: 12.66 Watts

Durability & Standards

- Operating temperature: -40 to +70°C
- CE marked
- FCC approved
- IC approved
- E-marked: UNECE R10 compliant

NOTES:

In order to provide full functionality, a telematics monthly subscription is required. Available in the UK and selected other regions only. Contact us for further details.

What are IP cameras & Expansion Modules?

An Internet Protocol (IP) camera is a high-definition digital camera with its own IP address. Instead of transmitting video over a video cable to a monitor or MDR, the IP camera transmits digital video to the MDR over a data connection (Ethernet cable) where the images are saved to the onboard storage.

IP cameras offer enhanced video quality and detailed camera configuration.

See pages 16-17 for the range of IP cameras

Brigade Expansion Modules use Power Over Network (PON) Switch technology to expand the channel capability of the MDR by transmitting digital video images from up to 8 IP cameras over a single Ethernet cable to the MDR. The MDR on-screen display allows easy camera set up without need for specific IP camera knowledge

Benefit: Connecting IP cameras increases the number of channels available on the MDR:

MDR-641	- 4 x Analogue channels plus 1 x IP channel	= 5 channels
MDR-508	- 8 x Analogue channels plus 1 x IP channel	= 9 channels
MDR-644	- 4 x Analogue channels plus 4 x IP channels	= 8 channels
MDR-644 and 4 x PON switch	- 4 x Analogue channels plus 8 x IP channels	= 12 channels
MDR-508 and 4 x PON switch	- 8 x Analogue channels plus 4 x IP channels	= 12 channels
MDR-508 and 8 x PON switch	- 8 x Analogue channels plus 8 x IP channels	= 16 channels

Model

Part No:

IP EXPANSION MODULES

IP-EM4 - PON 4-channel switch
IP-EM8 - PON 8-channel switch

5860
5861



• 12-24Vdc

• **4 or 8 IP camera inputs**

• **Size (WxHxD)**
IP-EM4: 149 x 44 x 127mm
IP-EM8: 174 x 54 x 129.5mm

• **3 year warranty**

Features

- Expands the channel capability of the MDR by enabling the addition of IP cameras:
 - IP-EM4 - adds 4 channels to MDR-508
 - IP-EM8 - adds 8 channels to MDR-508
 - IP-EM4 - adds 4 channels to MDR-644

Power

- Power consumption: 3 Watts

Durability & Standards

- Mechanical vibration: 2.3G
- Mechanical shock: 150G
- Operating temperature: -40 to +70°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- IC approved

IP EXPANSION MODULE ACCESSORIES

IP-EC-1 - CAT5E Ethernet cable 1 metre
IP-EC-5 - CAT5E Ethernet cable 5 metre

5865
5866



IP-EM-PC - MDR-PON Power cable

5864

Connected Services

Brigade's advanced, cloud-based Telematics platforms provide total fleet visibility with intelligent, user-friendly tools designed for today's fast-paced operations.

Combining AI-powered technology with seamless integration into an MDR or dashcam, helps you monitor, protect, and improve fleet performance in real time - without the need for complicated software or manual intervention.

- Driver Coaching
- Reduced Investigation Time
- Evidence Sharing
- Simple, User-Friendly Interface



Software Integrations

GEOTAB®

Brigade and Geotab have teamed up to offer a powerful all-in-one fleet safety and telematics solution. The integration combines Brigade's AI cameras, obstacle detection, and driver alerts with Geotab's advanced data platform.

Fleet managers get full visibility in one place, helping improve safety, reduce collisions, boost driver accountability, and cut costs. It's smart, connected fleet management from two industry leaders.



Brigade Video Telematics

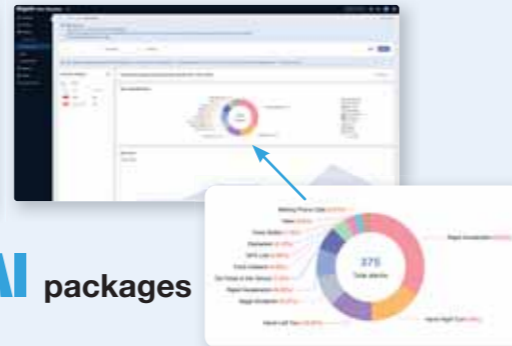
Video Playback



Live View



Safety Analysis



Video Telematics available in **View** & **View AI** packages

- Live Vehicle Tracking
- Live Streaming Video
- Evidence Sharing (FNOL)
- Remote Playback
- Download Stored For 365 Days
- AI ADAS & DMS to Auto Downloads



Where is this available?

Key Features & Benefits



Driver Analysis:

Monitors distracted driving behaviours like phone use, fatigue and smoking.



Road Events:

Identifies critical journey events and provides real-time alerts.



Automated Video Download:

Integrates with Geotab to auto-download video clips based on specific driving and driver events like harsh braking and rapid acceleration.



User-Friendly Interface:

Intuitive dashboard with event list, video player, and filters for easy access and analysis.



Comprehensive Event Logging:

Logs detailed driving events with corresponding video footage for thorough review.



Integration with Existing Systems:

Seamlessly integrates with Geotab telematics and Brigade Electronics equipment.

Brigade Telematics

Dashboard



Vehicle Tracking

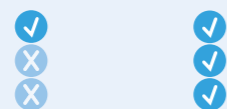


Geofences

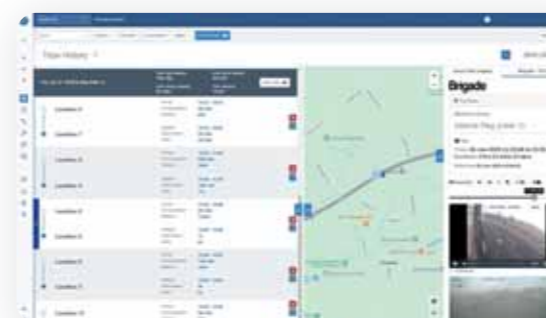


Telematics available in **Track Lite** & **Track** packages

- Live Vehicle Tracking
- Notifications, Reports, Geofencing
- Automated Reports and Vehicle Data



Where is this available?



Where is this available?

Please ask us about availability in other regions

Driver Safety Systems

AI Digital IP cameras for MDR

Connected to an MDR, the cameras scan the road ahead or monitor the driver for drowsiness or fatigue and sends an audible and visual alert in real time to the in-cab monitor or buzzer

Driver Safety cameras, including DDAW and ADDW

Driver Safety Cameras are compact in-cab driver assistance systems that use AI technology to provide driver warnings against the risks associated with inattention, distraction and fatigue.

AI Digital IP cameras for MDR

MDR AI Digital IP cameras are compact, in-cab cameras which use AI technology to provide driver warnings against risks caused by inattention, distraction or fatigue..

The cameras directly connect to the IP channel/s on an MDR-644, MDR-641* or an AI Connected Dashcam** which will generate an alert and send this to an in-cab monitor via the A/V connector. Alternatively, the Hazard Warning Unit will alert the driver with audible and visual warnings.

Driver-facing camera alerts

- Driver fatigue
- Yawning
- Driver distraction
- Using a handheld device
- Smoking

*The MDR-641 has one IP channel so only one IP camera can be connected
** Driver Facing Camera only

Forward-facing camera alerts

- Lane departure (LDW)
- Headway monitoring warning (HMW)
- Forward collision warning (FCW)

Model

Part No:

MDR AI CAMERA

IP-DFC-AI-AP-01 - Driver-facing camera with A-pillar mount	8089
IP-DFC-AI-DB-01 - Driver-facing camera with dashboard mount	8088
IP-DFC-AI-WS-01 - Driver-facing camera with windscreen mount	8029

- Viewing angle (HxVxD) 71 x 42 x 82°
- IP50
- Size (WxHxD) with bracket:
 - IP-DFC-AI-AP-01 - 98 x 53 x 83mm
 - IP-DFC-AI-DB-01 - 98 x 88 x 95mm
 - IP-DFC-AI-WS-01 - 98 x 129 x 39mm
- 3 year warranty

Features

- Full HD driver facing camera
- AI continuously monitors the driver's movements
- 2-stage customisable audible alerts: Real-speech (in English) or high-pitched beep
- Driver alerts include:
 - Driver fatigue
 - Yawning
 - Driver distraction
 - Using a handheld device
 - Smoking
- Built-in infrared (IR) technology for low light conditions
- Effective through glasses/sunglasses
- Focal length calibrated to capture the driver only
- Microphone
- Auto-calibration
- Auto image orientation
- Smartcontroller App
- Built-in G-sensor
- Ethernet connection
- Connects directly to MDR: Compatible with MDR-644, MDR-641* and AI Connected Dashcam

- Picture Elements: 1280(H) x 800(V)
- Imaging device: CMOS

Power

- Current: 0.18 Amps @ 12V

Durability & Standards

- Mechanical vibration: 3.1G
- Mechanical shock: 51G
- Operating temperature: -40 to +70°C
- Video output signal: H.264 or H.265
- Network protocol: TCP/IP, HTTP, DHCP, RTSP, NTP, FTP
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved

NOTES:

Audible alerts via in-cab monitor or Hazard Warning Unit only. (sold separately)

*The MDR-641 has only one IP channel, so camera can not be connected alongside further IP AI/IP Cameras



IP-DFC-AI-DB-01



A-pillar mount



Dashboard mount



Windscreen mount



Model

Part No:

MDR AI CAMERA

IP-FFC-AI-01 - Forward Facing Internal Camera

8027



- Viewing angle (HxVxD) 53 x 3 x 61°
- IP30
- Size (WxHxD): 78 x 126 x 49mm
- 3 year warranty

Features

- Full HD forward facing camera
- Audible driver alerts
- Driver alerts include:
 - Forward Collision Warning (FCW)
 - Headway Monitoring Warning (HMW)
 - Lane Departure Warning (LDW)
- Adjustable lens angle
- Microphone
- Speaker
- Auto-calibration
- Ethernet connection
- Connects directly to MDR: Compatible with MDR-644 and MDR-641*
- Picture Elements: 2688(H) x 1520(V)
- Imaging device: CMOS

Power

- Current: 0.28 Amps @ 12V

Durability & Standards

- Mechanical vibration: 6G
- Mechanical shock: 51G
- Operating temperature: -40 to +70°C
- Video output signal: H.264 or H.265
- Network protocol: TCP/IP, HTTP, DHCP, NTP, FTP, UDP, DNS, IPv4
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved

NOTES:

Audible alerts via in-cab monitor or Hazard Warning Unit only. (sold separately)

*The MDR-641 has only one IP channel, so camera can not be connected alongside further IP AI/IP Cameras

HAZARD WARNING UNIT

MDR-HWU-01 - Hazard Warning Unit

7417



- Display size 36mm
- IP30
- Size (WxHxD): 42 x 45x 16mm
- 3 year warranty

Features

- For use with IP AI Cameras
- 2-stage visual and audible driver alerts
- 2 stage + continuous beeping for forward collision warning and driver fatigue alerts (dependant on camera connected)
- TFT-LCD gloss display
- Resolution 128x128 pixel
- Brightness 400cd/m2
- Connects directly to MDR-644

Durability & Standards

- Mechanical vibration: 8.5G
- Mechanical shock: 51G
- Operating temperature: -30 to +70°C
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved
- ICC approved

Driver Safety Cameras including DDAW

Driver-safety cameras are compact, in-cab driver assistance systems that use AI technology to provide driver warnings against potential issues caused by inattention, distraction and fatigue.

Positioned in-cab, the camera continuously monitors the driver's face, eyes and head movements. AI detects signs of distraction, drowsiness or inattention and will alert the driver via voice alert (English) or audible beep.

The MDSM-22 camera records triggered events to an SD card and connects to a smartphone app via built-in WiFi, which enables video playback.

MDSM-22 alerts

- Drowsiness
- Distraction
- Yawning
- Mobile phone use
- Not wearing seatbelt
- Smoking

MDSM-22S alerts

- Drowsiness, complying with the requirements of EU 2019/2144 GSR regulation
- Yawning

Model

Part No:

DRIVER SAFETY CAMERA

MDSM-22 - AI Driver Safety Camera

8170



- 12-32Vdc
- In-built camera
- Recordings and data accessed via mobile app
- Size (WxHxD) excluding bracket 49 x 41 x 56 mm
- 3 year warranty

Contents:

- 1x Driver Safety camera
- 1x ECU
- 1x ECU/camera cable
- 1x Mounting Bracket
- 1x Power cable

Features

- Full HD, 88° field of view driver facing camera
- AI continuously monitors the driver's face, eyes and head movement
- Driver alerts include:
 - Drowsiness
 - Distraction
 - Yawning
 - Mobile phone use
 - Not wearing seatbelt
 - Smoking
- 3 stage alert based on severity of driver distraction or fatigue
- Built-in GPS and Speaker
- Beep or Voice audible warnings
- Video recording capability to SD card

Recording Modes:

- Normal
- G-sensor
- Driver Status Monitoring Alert
- SD Card Storage (not supplied):
 - 32GB (Approx. 12 hours of recording time)
 - 64GB (Approx. 24 hours of recording time)
- Built-in WiFi for simple configuration with Mobile app
- Video clips can be accessed via app (Telematics subscription required - not available in all regions. Speak to us for details)

Durability and Standards

- Operating temperature: -20°C to +70°C
- CE Marked
- FCC approved
- IC approved

Model

Part No:

DRIVER DROWSINESS & ALERTNESS WARNING SYSTEM

MDSM-22S - Driver Safety Camera with DDAW

8171

MDSM-22A - Driver Safety Camera with ADDW

8290

MDSM-22SA - Driver Safety Camera with DDAW and ADDW

8291



- 12-32Vdc
- In-built camera
- Recordings and data accessed via mobile app
- Size (WxHxD) excluding bracket 49 x 41 x 56 mm
- 3 year warranty

Contents:

- 1x Driver Distraction camera
- 1x ECU
- 1x ECU/camera cable
- 1x Mounting Bracket
- 1x Power cable
- 1 x CAN cable

Features

- CAN Connectivity
- Full HD, 88° field of view driver facing camera
- AI continuously monitors the driver's face, eyes and head movement
- DDAW Driver alerts include:
 - Driver drowsiness
- ADDW Driver alerts include:
 - Driver distraction
- Built-in speaker
- Beep or Voice audible warnings

Durability and Standards

- Operating temperature: -20°C to +70°C
- GSR compliant Driver Drowsiness and Attention Warning - 2019/2133 DDAW
- Independently tested to meet the requirements of GSR standard EU 2019/2144 DDAW
- Certified to meet R118 and R10
- CE Marked
- FCC approved
- IC approved

Detection Systems

Radar Obstacle Detection

Backsense® Radar sensors are designed for heavy-duty machines to detect objects in blind-spots. The driver is informed of distance between the vehicle and objects in the detection range, whether moving or stationary, by a graduated in-cab audible and visual warning. Backsense® radar works effectively in harsh conditions and poor visibility.

Radar Predict side detection with AI

180° side detection radar designed to protect cyclists from collisions with HGVs. AI technology detects a potential collision by analysing data such as speed and direction from both vehicle and cyclist and will alert the driver only when an impact is likely. Suitable for rigid and articulated vehicles.

Ultrasonic Detection Systems

Front, rear, side and corner ultrasonic sensor systems to detect stationary and moving objects. Suitable for road-going commercial vehicles operating in confined spaces or manoeuvring at low speed. Provides in-cab visual and audible warnings to the driver. An external speaking alarm can be added to warn cyclists that the vehicle is turning.

Zonesafe® Detection systems

Zonesafe® detection uses Radio Frequency Identification (RFID) technology to create detection zones around vehicles and mobile plant. Vehicle-mounted antennas detect RFID tags which can be worn by workers, placed on objects or property, or set up around restricted areas. The driver receives audible and visual warnings when a tag is detected.

Ultrasonic Detection On-Screen Display Module

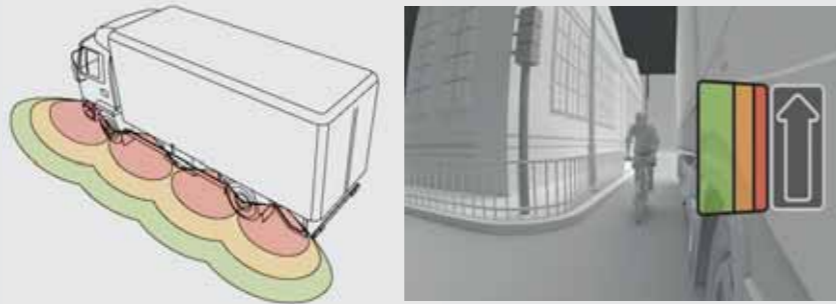


- Integration of Brigade's ultrasonic obstacle detection systems and Backeye® camera monitor systems
- Ultrasonic detection warnings overlaid onto camera image on in-cab monitor
- Reduced driver stress and distractions as all information is in one view

Sensor data and camera image combined

Brigade's ultrasonic proximity sensors minimise both vehicle damage and collisions with pedestrians, cyclists or objects. Perfect for road-going commercial vehicles operating in confined spaces or manoeuvring at low speed.

Working in conjunction with a Backeye® camera monitor system and up to two ultrasonic detection systems, the on-screen display module warns the driver of obstacles close to the vehicle by overlaying 3-stage audible and visual ultrasonic data onto the camera image on the monitor.



Model

Part No:

ULTRASONIC ON-SCREEN DISPLAY MODULE

- UDS-OSD20-ECU - On-screen display module PAL
- UDS-OSD21-ECU - On-screen display module NTSC

5099
5347



- Allows 3-stage audible and visual Ultrasonic data to be overlaid onto camera image on vehicle monitor
- 12-24Vdc
- 2 camera inputs
- 2 trigger inputs
- 2 UDS inputs
- 2 UDS outputs
- 2 year warranty

Contents

- OSD ECU
- Power cable
- Splitter cable
- Trigger cable

Features

- Overlay on monitor of vehicle icon and detection data from up to 2 x ultrasonic detection systems
- Compatible with 1x Sidescan® Frontscan® and Backscan®
- UDS overlay will appear on a black background if no cameras installed
- Graphics can be overlaid left or right on the monitor
- Audible warning via monitor
- Ultrasonic system fault displayed on monitor
- Compatible with MDR

Durability & Standards

- Mechanical vibration: 5G
- Mechanical shock: 10G
- Operating temperature: -30 to +70°C
- IP30
- Dimensions: 74 x 118 x 28mm (WxDxH)
- CE marked
- E-Marked: UNECE R10 compliant
- FCC Approved
- IC Approved

Power

- Power consumption: 1.7 Watts
- Current: 140mA

Note: Not compatible with HD camera monitor systems

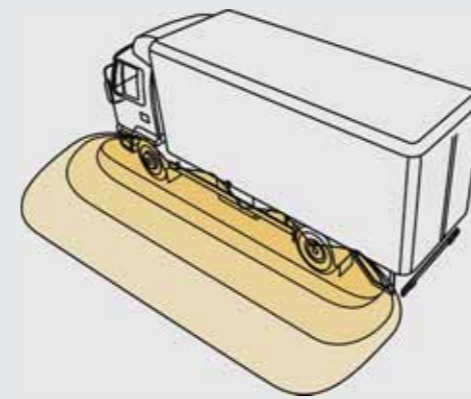
Sidescan®Flex

Flexible side detection

Sidescan®Flex is a four-sensor system fitted to the side of a vehicle to detect objects in the nearside blind spot, where cyclists or pedestrians can otherwise go undetected.

An advancement to the standard Sidescan® system, Sidescan®Flex allows the operator to choose from four detection configurations, each with different detection distances and audible and visual alerts (see table).

Sidescan® Flex has an increased maximum detection range of 2.5 metres.



Detection distance		Config 1	Config 2	Config 3	Config 4
0 - 0.6m	Beeps per second	Constant	Constant	Constant	Constant
	Flashes per second	8	8	8	8
0.6 - 0.9m	Beeps per second	Constant	4	4	4
	Flashes per second	8	8	8	8
0.9 - 1.5m	Beeps per second	4	-	-	1
	Flashes per second	4	4	4	4
1.5 - 2.5m	Beeps per second	1	-	-	-
	Flashes per second	1	1	-	-

Model

Part No:

SIDESCAN®FLEX ULTRASONIC DETECTION SYSTEM

- SS-4200W - Sidescan®Flex sensor system with mute function **5916**
- SS-4200W-000 - Sidescan®Flex sensor system with mute function, low speed trigger module and turn indicator sensor kit **6075**
Includes LS-60-A low speed trigger module and TS-001ECU turn indicator sensor



• 4 sensor system

• 12-24Vdc

• Detection zones - 0 - 2.5m (4 audible/visual configurations, selectable via dip switches)

• Underslung and flush-mount fixings included

- 1 Output trigger
- 3 year warranty

Contents

- 4 x sensors
- Buzzer
- 4 x 0° flush mount fixings
- 4 x 11° flush mount fixings
- 4 x underslung fixings
- Waterproof control box
- 10m buzzer cable
- 4 x 4.5m sensor cables
- 2 x 2.5m extension cables

Features

- Obstacles detected in under 200 milliseconds
- Buzzer with audible distance warning, LED & adjustable volume control
- Buzzer will silence after 4 seconds if there is no movement from detected object or vehicle
- Self-diagnostic function

- Environment Learning Mode prevents false alarms from ancillary equipment that intrudes in the first 100cm of the detection zone

Durability & Standards

- Mechanical vibration: 5G
- Mechanical shock: 10G
- Operating temperature: -30 to +80°C
- Waterproof sensors to IP68
- Waterproof control box to IP69K
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved

Power

- Power consumption: 2.4 Watts
- Current: 200mA

OPTIONAL EXTRA

- UDS-RELAY-24 Trigger-out diode protected relay 24Vdc **4215**
- UDS-RELAY-12 Trigger-out diode protected relay 12Vdc **4216**
To power a device switched by the output trigger



Model

Part No:

SIDESCAN® ULTRASONIC DETECTION SYSTEM

SS-4100W -	Sidescan® Side sensor system with mute function	5257
SS-4100W-000 -	Sidescan® Side sensor system with mute function, low speed trigger module and turn indicator sensor kit <small>Includes LS-60-A low speed trigger module and TS-001ECU turn indicator sensor</small>	5344



- 4 sensor system
- 12-24Vdc
- 1.0/1.5m detection range - (selectable via dip switch)
- Audible distance warning
- Underslung and flush-mount fixings included
- 2 levels of sensitivity - (selectable via dip switch)
- 3 year warranty

Contents

- 4 x sensors
- Buzzer
- 4 x 0° flush mount fixings
- 4 x 11° flush mount fixings
- 4 x underslung fixings
- Waterproof control box
- 10m buzzer cable
- 4 x 4.5m sensor cables
- 2 x 2.5m extension cables

Features

- Obstacles detected in under 200 milliseconds
- Buzzer with audible distance warning, LED & adjustable volume control
- Buzzer will silence after 4 seconds if there is no movement from detected object or vehicle
- Environment Learning Mode prevents false alarms from ancillary equipment that intrudes in the first 100cm of the detection zone
- Self-diagnostic function

Durability & Standards

- Mechanical vibration: 5G
- Mechanical shock: 10G
- Operating temperature: -30 to +80°C
- Waterproof sensors to IP68
- Waterproof control box to IP69K
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved

Power

- Power consumption: 2.4 Watts
- Current: 200mA



SIDESCAN®/SIDESCAN®FLEX ADDITIONS FOR ARTICULATED VEHICLES

SK-15-04	Truck/trailer camera/sensor cable kit	3997
SK-UDS-05	Truck/trailer sensor only cable kit (required)	4219
UDS-10BC	10m display cable (required)	3716
SS-4100W	Additional Sidescan sensor system for cab (optional)	5257

SIDESCAN®/SIDESCAN®FLEX RECOMMENDED EXTRAS

LS-60-A	Low speed trigger module <small>Enables sensors below designated speed</small>	4851
TS-001ECU	Turn indicator trigger for system activation	1362

SIDESCAN®/SIDESCAN®FLEX OPTIONAL EXTRA

SS-BC-08	Backchat speaking alarm with side turn warning for cyclists/pedestrians <small>Note: TS-001ECU Turn indicator trigger is required</small>	1334
TCO-47-01	Latched auto-reset Backalarm cut-out (dash mount)	4752



Model

Part No:

BACKSCAN® ULTRASONIC DETECTION SYSTEM

BS-4000W - Backscan® Rear reversing sensor system	3744
---	------



- 4 sensor system
- 12-24Vdc
- 2.5m detection range - outer sensors 2.5m/0.6m (selectable via dip switch)
- Graduated visual and audible distance warning display
- Underslung and flush-mount fixings included
- 50cm compensation range for sensors fitted inboard of vehicle rear (selectable via dip switch)
- 3 year warranty

Contents

- 4 x sensors
- Visual and audible display
- 4 x 0° flush mount fixings
- 4 x 11° flush mount fixings
- 4 x underslung fixings
- Waterproof control box
- 15m display cable
- 4 x 2.5m sensor cables

Features

- Obstacles detected in under 200 milliseconds
- Environment Learning Mode prevents false alarms from tow-hooks and other ancillary equipment that intrudes in the first 100cm of the detection zone
- Self-diagnostic function
- 1 x Trigger output

Durability & Standards

- Mechanical vibration: 5G
- Mechanical shock: 10G
- Operating temperature: -30 to +80°C
- Waterproof sensors to IP68
- Waterproof control box to IP69K
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved

Power

- Power consumption: 2.4 Watts
- Current: 200mA



ADDITIONS FOR ARTICULATED VEHICLES

SK-15-04	Truck/trailer camera/sensor cable kit	3997
SK-UDS-05	Truck/trailer sensor only cable kit	4219
UDS-10BC	10m Buzzer/display cable	3716

OPTIONAL EXTRA

UDS-RELAY-24	Trigger-out diode protected relay 24Vdc	4215
UDS-RELAY-12	Trigger-out diode protected relay 12Vdc <small>To power a device switched by the output trigger</small>	4216

Model

Part No:

FRONTSCAN® ULTRASONIC DETECTION SYSTEM

FS-4000W - Frontscan® Front sensor system

3747



- 4 sensor system
- 12-24Vdc
- 2.0m/1.0m detection range - outer sensors can be reduced to 0.6m (selectable via dip switches)
- Audible distance warning
- Flush-mount
- 3 year warranty

Contents

- 4 x sensors
- Buzzer
- 4 x 11° flush mount fixings
- 4 x 18° flush mount fixings
- 4 x 26° flush mount fixings
- Waterproof control box
- 2.5m buzzer cable
- 4 x 2.5m sensor cables

Features

- Obstacles detected in under 200 milliseconds
- Environment Learning Mode prevents false alarms from tow-hooks and other ancillary equipment that intrudes in the first 100cm of the detection zone

- Self-diagnostic function
- 1 x Trigger output

Durability & Standards

- Operating temperature: -30 to +80°C
- Waterproof sensors to IP68
- Waterproof control box to IP69K
- CE marked
- FCC approved
- E-Marked: UNECE R10 compliant

Power

- Power consumption: 2.4 Watts
- Current: 200mA

RECOMMENDED EXTRA



LS-60-A

Low speed trigger module

Enables sensors below designated speed

4851

OPTIONAL EXTRA



UDS-RELAY-24

Trigger-out diode protected relay 24Vdc

4215

UDS-RELAY-12

Trigger-out diode protected relay 12Vdc

4216

To power a device switched by the output trigger

CORNERSCAN® ULTRASONIC DETECTION SYSTEM

CS-3100 - Cornerscan® Corner sensor system with mute function

5261



- 3 sensor system
- 12-24Vdc
- 0.6/1.0m detection range - (selectable via dip switch)
- Audible distance warning
- Flush-mount
- 2 levels of sensitivity - (selectable via dip switch)
- 3 year warranty

Contents

- 3 x sensors
- Buzzer
- 3 x 11° flush mount fixings
- 3 x 18° flush mount fixings
- 3 x 26° flush mount fixings
- Waterproof control box
- 2.5m buzzer cable
- 3 x 2.5m sensor cables

Features

- Obstacles detected in under 200 milliseconds
- Buzzer with audible distance warning, LED & adjustable volume control
- Buzzer will silence after 4 seconds if there is no movement from detected object or vehicle
- Environment Learning Mode prevents false alarms

from ancillary equipment within the first 100cm of the detection zone

- Self-diagnostic function

Durability & Standards

- Mechanical vibration: 5G
- Mechanical shock: 10G
- Operating temperature: -30 to +80°C
- Waterproof sensors to IP68
- Waterproof control box to IP69K
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved

Power

- Power consumption: 2.4 Watts
- Current: 2 Amps

RECOMMENDED EXTRA



LS-60-A

Low speed trigger module

Enables sensors below designated speed

4851

Model

Part No:

STEPSCAN™ ULTRASONIC DETECTION SYSTEM

ST-2100 -

Stepscan™ Step sensor system with mute function

5262

ST-2100-60-A - Stepscan™ Step sensor system with mute function and

5345

low speed trigger module

Includes UDS-4.5SC 4.5m extension cable



- 2 sensor system
- 12-24Vdc
- 0.6/1.0m detection range - (selectable via dip switch)
- Audible distance warning
- Flush-mount
- 2 levels of sensitivity - (selectable via dip switch)
- 3 year warranty

Contents

- 2 x sensors
- Buzzer
- 2 x 11° flush mount fixings
- 2 x 18° flush mount fixings
- 2 x 26° flush mount fixings
- Waterproof control box
- 2.5m buzzer cable
- 2 x 2.5m sensor cables

Features

- Obstacles detected in under 200 milliseconds
- Buzzer with audible distance warning, LED & adjustable volume control
- Buzzer will silence after 4 seconds if there is no movement from detected object or vehicle
- Environment Learning Mode prevents false alarms from

ancillary equipment that intrudes in the first 100cm of the detection zone

- Self-diagnostic function

Durability & Standards

- Mechanical vibration: 5G
- Mechanical shock: 10G
- Operating temperature: -30 to +80°C
- Waterproof sensors to IP68
- Waterproof control box to IP69K
- CE marked
- E-Marked: UNECE R10 compliant
- FCC approved

Power

- Power consumption: 2.4 Watts
- Current: 200mA

RECOMMENDED EXTRA



LS-60-A

Low speed trigger module

Enables sensors below designated speed

4851

EXTENSION CABLES



UDS-2.5BC - Buzzer/display extension cable 2.5m

3717

UDS-10BC - Buzzer/display extension cable 10m

3716

UDS-15BC - Buzzer/display extension cable 15m

3746

UDS-2.5SC - Sensor extension cable 2.5m

3719

UDS-4.5SC - Sensor extension cable 4.5m

3720

UDS-7.0SC - Sensor extension cable 7.0m

5623

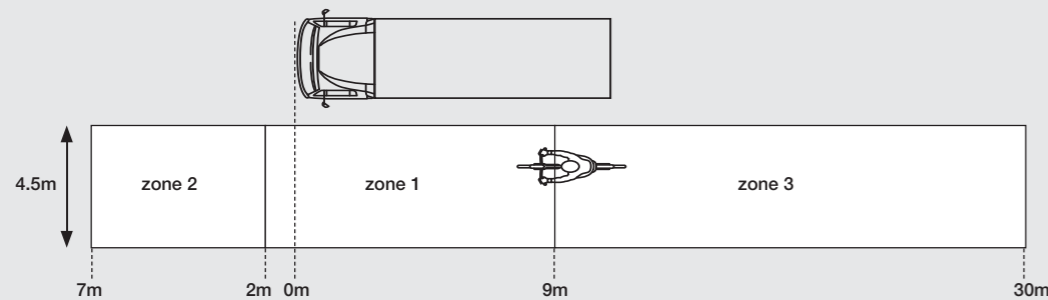
Radar Predict

Artificial Intelligence blind spot detection

Brigade's Radar Predict is the latest innovation in side-detection safety, specifically designed to protect cyclists from collisions with HGVs. The advanced radar system uses AI technology to detect a potential collision by analysing data such as speed and direction of both the vehicle and cyclist. By differentiating between static and moving objects, the Radar Predict algorithm alerts the driver only when an impact with a cyclist is likely.

The single dual-radar unit is fitted to the nearside of the truck and gives complete coverage to the side of the vehicle, including the trailer unit. The driver is alerted if a cyclist enters a detection zone and receives a second warning if a collision is predicted.

- 180° Cyclist side detection
- Detection area of 4.5m x up to 37m
- Calculates if a collision is likely in the nearside blind spot
- Suitable for Rigid AND articulated vehicles
- Quick and easy installation
- Available for left and right side applications
- Meets Reg151 requirements
- Complies with PSS DVS – Independently tested



Model

Part No:

RADAR PREDICT AI SENSOR SYSTEM

RP-001 - 77GHz Radar Predict sensor system with AI - Left side <small>(for right-hand drive vehicles)</small>	7500
RP-010 - 77GHz Radar Predict sensor system with AI - Right side <small>(for left-hand drive vehicles)</small>	7625



- 9-32Vdc
- Detection length: 46m
- Detection width: 4.5m
- Sensor size (WxHxD) 115 x 95 x 41mm
- Sensor size with bracket (WxHxD) 200 x 110 x 43.5mm
- Display size with bracket (WxHxD) 131 x 63 x 42mm
- IP69K sensor
- 3 year warranty

Contents

- 1x dual radar sensor unit
- 1 x Inertial measurement unit module
- 1 x display
- 1 x radar cover
- 1 x 8m Radar cable

Features

- 180° cyclist side detection
- Calculates if a collision is likely in the nearside blindspot
- Covers nearside of a vehicle
- 3 stage Visual alert when a cyclist is detected
- Audible and visual alert when collision is predicted
- Differentiates between cyclists and vehicles/other road users
- Designed for rigid and articulated vehicles
- System active under 30Km/h

Quick and easy installation

- Compact and rugged design for harsh environments
- Automatic trailer recognition
- Operating frequency: 76-77GHz
- Adjustable display volume

Power

- Power consumption: 6.5 Watts

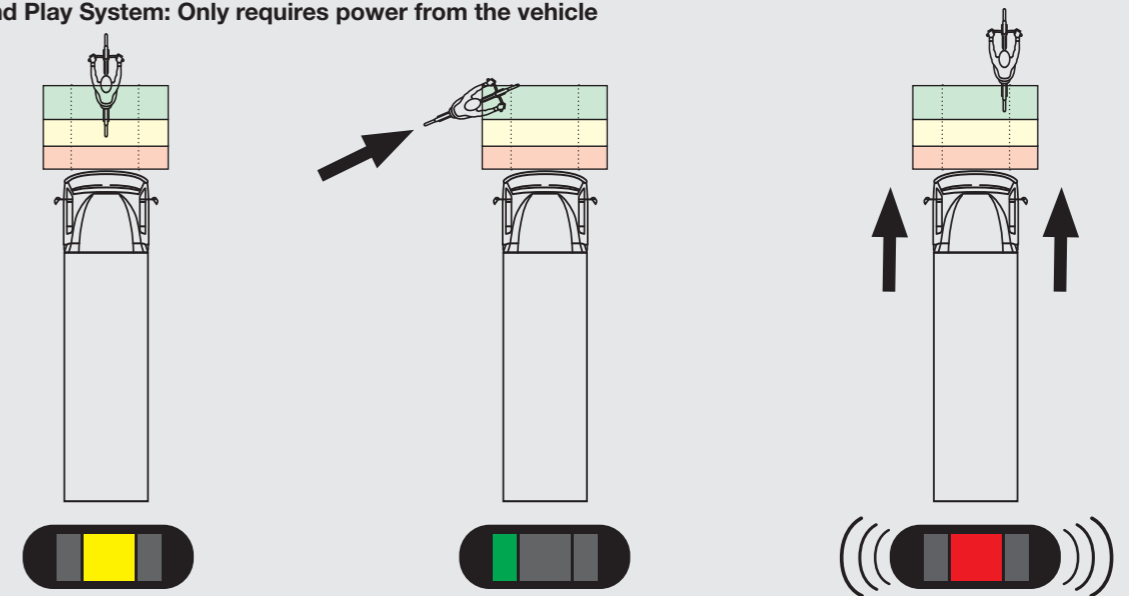
Durability & Standards

- Operating temperature: -40 to +85°C
- CE marked
- FCC approved
- IC approved
- E-Marked: UNECE R10 compliant
- Complies with UNECE reg151 requirements
- Meets 2024 Direct Vision Standard BSIS requirements

Front Radar

Specifically designed to meet 2024 DVS/GSR R159 requirements, the Front Radar is an advanced dual-radar collision prediction system with a 180° detection angle to the front of the vehicle. The driver is alerted through visual and audible signals if a vulnerable road user is detected in close proximity.

- Meets GSR R159 and 2024 PSS Direct Vision Standard MOIS requirements
- Enhanced dual radar technology to detect pedestrians and cyclists in the front blind spot
- 3-stage system to alert drivers through visual and audible signals if a vulnerable road user is detected in close proximity to the front of the vehicle when stationary as well as moving off
- Real-time Feedback: Providing real-time warnings to the drivers for immediate reaction to prevent collisions
- Plug and Play System: Only requires power from the vehicle



Model

Part No:

FRONT RADAR SENSOR SYSTEM

FR-001DVS - DVS Front Radar sensor system <small>For front centre installation</small>	7673
FR-30LDVS - DVS Offset Front Radar sensor system <small>For front 30cm-offset left-of-centre installation</small>	8000
FR-001R159 -R159 Front Radar Sensor System <small>For front centre installation</small>	8064



- 9-32Vdc
- Detection length: DVS Front Radar: 2.5m R159 Front Radar: 4.2m
- Detection width: 3.6m
- Sensor size (WxHxD) 115 x 95 x 41mm
- Sensor size with bracket (WxHxD) 200 x 110 x 43.5mm
- Display size (WxHxD) 80 x 40 x 20mm
- IP69K sensor
- 3 year warranty

Contents

- 1x dual radar sensor unit
- 1 x display & bracket
- 1 x radar cover
- 1 x radar cable 5m
- 1 x IMU module & bracket

Features

- 180° detection angle
- Detects VRUs in the front blind spot when vehicle is stationary or moving off
- Detects static and moving objects
- 3-stage visual driver alert dependent on detection distance from vehicle
- Audible and visual driver alert when object is detected and vehicle is moving forward
- Designed for rigid and articulated vehicles
- System active under 5Km/h
- Quick and easy installation

- Compact and rugged design for harsh environments
- Operating frequency: 76-77GHz
- Adjustable display volume
- Self-adjusting brightness display

Power

- Power consumption: 6.5 Watts

Durability & Standards

- Operating temperature: -40 to +85°C
- CE marked
- E-Marked: UNECE R10 compliant
- DVS Front Radar Meets 2024 PSS Direct Vision Standard MOIS requirements
- R159 Front Radar conforms to GSR R159 requirements

Model

Part No:

PROGRAMMABLE BACKSENSE® OBJECT DETECTION SYSTEM

BS-8100 - 77GHz Programmable detection range

7135



- 10.5-32Vdc
- **Detection length: up to 60m (minimum programmable distance 0-3m)**
- **Detection width: 2 to 16m**
- **Rugged design for harsh environmental conditions**
- **Sensor size (WxHxD) 160 x 100 x 40mm**
- **Display size with bracket 101 x 71 x 70mm (WxHxD)**
- IP69K sensor
- 3 year warranty

Contents

- 1 x Configurable radar sensor
- 1 x Audible and visual display with USB socket and mounting bracket
- 1 x 9m extension cable
- 1 x Mini USB cable

Features

- Frequency modulated continuous wave (FMCW) radar technology
- Quick reaction time
- Effectively detects stationary, moving and multiple objects
- 1 activation input
- 1 trigger output
- Programmable:
 - Detection area
 - Blind zones - system ignores fixed objects
 - Buzzer (70 to 90 dB(A) at 1m)
- Horizontal detection angle: 140°

- 5 stage adjustable audible and visual distance warning display
- Sensor resistant to water, moisture, dust, vibration, heat, cold, mud and glare

Power

- Current: 0.8 Amps
- Power consumption: 8 Watts

Durability & Standards

- Operating temperature: -40 to +85°C
- CE marked
- UKCA marked
- FCC approved
- IC approved
- E-Marked: UNECE R10 compliant

Note: Configuration software available at brigade-electronics.com

SELECTABLE BACKSENSE® OBJECT DETECTION SYSTEMS

BS-7100 - 77GHz Selectable detection range

7248



- 9-32Vdc
- **3 x selectable preset detection ranges: (LxW) 3m x 2.5m, 4.5m x 3.5m, 6m x 4.5m**
- **Rugged design for harsh environmental conditions**
- **Sensor size (WxHxD) 160 x 100 x 40mm**
- **Display size with bracket 101 x 71 x 70mm (WxHxD)**
- IP69K sensor
- 3 year warranty

Contents

- 1 x Non-configurable radar sensor
- 1 x Audible and visual display with mounting bracket
- 1 x 9m extension cable

Features

- Frequency modulated continuous wave (FMCW) radar technology
- Quick reaction time
- Effectively detects stationary, moving and multiple objects
- 1 activation input
- 1 trigger output
- 5 stage adjustable audible and visual distance warning display
- Adjustable buzzer volume: (70-90dBA)
- Sensor resistant to water, moisture, dust, vibration, heat, cold, mud and glare

Power

- Current: 0.8 Amps
- Power consumption: 8 Watts

Durability & Standards

- Mechanical shock: 100G
- Mechanical vibration: 8.3G
- Operating temperature: -40 to +85°C
- CE marked
- UKCA marked
- FCC approved
- IC approved
- E-Marked: UNECE R10 compliant

WARNING:

BS-8100, BS-7100 AND BS-9100 - should not be used or relied upon to detect humans or other living objects.

If this function is required, please see our Human Form Recognition (HFR) camera range on page 10. Our HFR cameras can be used in conjunction with these radar detection systems.

Backsense® CAN Radar

For OEM and specialist application markets, Brigade's Network Radar allows you to connect and link up to 8 sensors to cover large, sometimes complex blind spot zones around a vehicle or machine.

The system provides object detection in CAN (Controller Area Network) message format which may be processed to display data on control panels/displays on the vehicle or used to interact with aspects of the machine.

Each connected radar sensor is allocated a unique ID and will transmit data for up to 8 objects. With a detection range of up to 60m length and 16m width, it provides a flexible system to meet customer specific requirements.

- Provides object detection in CAN message format
- Independent CAN Bus may communicate with existing CAN network via CAN Gateway
- Separate CAN message & ID for each object detected (up to 8 per sensor)

Model

Part No:

NETWORK BACKSENSE® OBJECT DETECTION

BS-9100 - Backsense® 77GHz CAN object detection radar

6351



- 12-24 Vdc
- **Detection length: up to 60m**
- **Detection width: 2m to 16m**
- **Sensor size (WxHxD) 160 x 100 x 40mm**
- IP69K sensor
- 3 year warranty

Contents

- 1 x BS-9100 Radar sensor

Features

- Frequency modulated continuous wave (FMCW) radar technology
- Quick reaction time
- Network up to 8 sensors
- Extremely rugged design for severe weather conditions and all terrains
- Communication via CAN Gateway
- Configurable CAN ID
- Complies with CAN2.0A Base Frame Format
- Separate CAN message & ID for each object detected (up to 8 objects per sensor)

Power

- Current: 0.8 Amps
- Power consumption: 8 Watts

Durability & Standards

- Mechanical shock: 100G
- Operating temperature: -40 to +85°C
- CE marked
- FCC approved
- E-Marked: UNECE R10 compliant

Note: For CAN message format, refer to user manual at brigade-electronics.com

BACKSENSE® RADAR OBJECT DETECTION ACCESSORIES



- | | | |
|-----------|--|------|
| BS-02DCX | - 2m extension cable | 5272 |
| BS-05DCX | - 5m extension cable | 4550 |
| BS-09DCX | - 9m extension cable | 4551 |
| BS-25DCSX | - 25m extension cable (Female end connector supplied loose) | 4975 |
| BS-00NYC | - Network Y Cable for 9000 series radar | 5270 |
| BS-00NT | - 120 Ohms Network Terminator for 9000 series radar | 5291 |
| CT-470 | - Constant tone external alarm - 102dB | 1346 |
| BS-WD-USB | - USB -programming software, port driver and operating guide | 5637 |
| BKT-023 | - Adjustable Bracket for BS-9100, BS-8100 & BS-7100 | 7190 |

Backsense® Radar On-Screen Display

- Integration of Brigade's Backsense® radar detection and Backeye® camera monitor systems
- Up to 4 Radar detection warnings overlaid onto camera image on in-cab monitor

Radar sensor data and camera image combined

Working in conjunction with a Backeye® camera monitor system and up to four Backsense® Network radar sensors, the on-screen display module warns the driver of obstacles in the danger zone by overlaying 5-stage audible and visual radar data onto the camera image on the monitor.



Model

Part No:

BACKSENSE® ON SCREEN DISPLAY

BS-9101-OSD - Radar sensor & On-screen display module

8554



- Allows 5-stage audible and visual radar data to be overlaid onto camera images on in-cab monitor
- 12-24Vdc
- Detection length: up to 60m (minimum programmable distance 3m)
- Detection width: 2 to 18m
- Sensor size (WxHxD) 160 x 100 x 40mm
- OSD ECU size (WxHxD) 195 x 120 x 35mm
- 3 AHD/CVBS camera inputs
- 4 BS-9100 Backsense® inputs
- 6 trigger inputs
- 5 trigger outputs
- 3 year warranty

Contents

- 1 x OSD Radar ECU
- 1 x BS-9100 Radar sensor
- 1 x Extension cable 9m
- 3 x Network Y-cable
- 2 x Network terminator

Features

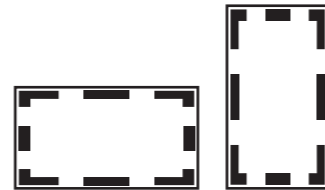
- Frequency modulated continuous wave (FMCW) radar technology
- Overlay on monitor of detection data from up to 4 BS-9100 radar sensors
- Each radar can be shown in one of 8 positions around the monitor/vehicle
- Compatible with Backsense® BS-9100 Network radar sensors only
- Programmable:
 - Detection area
 - Blind zones - system ignores fixed objects
 - Overlay transparency level
- Radar system fault displayed on monitor
- USB connection for configuration via PC
- Compatible with MDR, Backeye®360 & Elite range camera monitor systems (Select range via adapters)
- Audible warning via monitor or optional internal buzzer
- Supports external warning alarm
- Detection area can be configured to change with vehicle speed using GPS module (sold separately)

Durability & Standards

- Operating temperature: -40 to +85°C
- IP rating:
 - OSD: IP30 Radar sensor: IP69K
- CE marked
- E-Marked: UNECE R10 compliant
- FCC Approved
- IC Approved
- ISO-16001 compliant

Configuration Software

- Available via Brigade website



To not obstruct camera views, each radar can be shown in one of eight positions around the edge of the monitor

Camera monitor system not included

TO ADD AN ADDITIONAL RADAR SENSOR:

1 x BS-9100 - Radar sensor	6351
1 x BS-00NYC - Network Y Cable	5270
1 x Extension cable	

OPTIONAL EXTRAS

AC-006	Connects Select camera to OSD ECU	1983
AC-014	Connect OSD ECU to Select Monitor	2094
MDR-ANT-GPS-03	GPS module	6624
BKT-023:	Adjustable bracket	7190
BS-25DCSX:	25m extension cable	5985
BS-00NYC:	Network Y cable for 9100 series radar	5270
BS-00NT:	120 Ohms Network Terminator for 9100 series radar	5291

Zonesafe RFID detection

ZoneSafe Control Unit

The ZoneSafe Control Unit is installed in the cab so it is clearly visible to the driver. ZoneSafe is activated when a VibraTag Driver Tag is inserted into the Control Unit prior to operating the vehicle. Audible and visual alerts indicate various alarm states including a two-stage alert for the detection of one or more tags, system errors and the non-insertion of a driver tag. A mute button can override a detection alert once a tag has been acknowledged.

ZoneSafe Antenna

A ZoneSafe Antenna creates a detection zone around a vehicle. Up to six antennas can be installed and linked in sequence to a control unit. The detection zone for each antenna can be programmed from smallest 3m up to largest 10m.

Zonesafe® RFID Tags

ZoneSafe RFID tags can be used to detect people, protect assets and to create exclusion zones. Each tag can be uniquely identified and linked to individual people. Driver tags have the same functionality as pedestrian tags and are also compatible with the control unit.

Model

Part No:

ZONESAFE® RFID TAG DETECTION SYSTEM

ZS-1000-ECU - ZoneSafe® Control Unit

5881

- 12-24Vdc
- Size (WxHxD) 102 x 180 x 58mm
- IP65
- WIFI configuration interface for remote monitoring and downloads
- 2 Year Warranty

Features

- Installed in the cab of vehicle
- Two stage audible and visual warnings to the machine operator when a tag or tags are detected by connected antennas (available separately)
- Connect up to 6 antennas
- Internal memory to store up to 4,000 events
- System activation by inserting driver tag
- Alarm if driver tag is left in vehicle
- Central mute button to acknowledge the detection of one or more tags (configurable)

- Multi-colour status panel
- 3 selectable detection levels
- AMPS hole pattern mounting
- 1 x Trigger input
- 1 x Trigger output
- TX Frequency: 125kHz
- RX Frequency: 868.3MHz

Power

- Current: 0.5 Amps

Durability & Standards

- Operating temperature: -40 to +85C
- CE marked



OPTIONAL EXTRA

ZS-ECU-MP

Mounting Plate for Control Unit

5900

Model Part No:

ZONESAFE® RFID TAG DETECTION SYSTEM

ZS-1000-AP - ZoneSafe Vehicle-to-Pedestrian Antenna 5882



- 12-24Vdc
- Detection radius range: 0 - 10m (Configurable between 3 & 10m)
- Size (WxHxD) 122 x 250 x 90mm
- IP67
- 2 Year Warranty

Features

- Creates a detection zone around a vehicle
- Detects tags through walls and obstructions and around blind corners
- Detection zone radius programmable manually or via WIFI
- Connects to Control Unit on vehicle (antenna cable available separately)
- Daisy-chain wiring to connect multiple antennas to the same vehicle
- TX Frequency: 125kHz
- RX Frequency: 868.3MHz

Power

- Current: 1 Amp

Durability & Standards

- Operating temperature: -40 to +85C
- CE marked

Note: Antenna cable required for installation

OPTIONAL EXTRA



ZS-C130	Antenna Cable, 30m	5899
ZS-AP-MP	Mounting Plate for Pedestrian Antenna	5898
ZS-1000-BKT	Adjustable-Angle Mounting Bracket	6079

ZONESAFE® RFID TAG DETECTION SYSTEM

ZS-1000-PVT - ZoneSafe® Pedestrian VibraTag, rechargeable 5889
ZS-1000-DVT - ZoneSafe® Driver VibraTag, rechargeable 5888
ZS-1000-TC - ZoneSafe® Pedestrian VibraTag, rechargeable, with clip 5892



Pedestrian VibraTag



Driver VibraTag



Pedestrian VibraTag with clip

- Size (WxHxD) 84 x 53 x 12mm
- IP67
- 1 Year Warranty

Features

- Carried by workers and machine operators
- Each tag can be uniquely identified and linked to individual people
- Driver tags have the same detection functionality as pedestrian tags and are also compatible with the control unit
- Driver tag is masked from detection when inserted into the control unit
- Tag Immediately vibrates upon entering a vehicle detection perimeter
- High-capacity rechargeable battery

- 2 hour inductive charging time using wireless charger (available separately)
- Hermetically sealed to provide best long term protection
- Can be worn on a lanyard, into pockets or armbands
- RX Frequency: 125kHz
- TX Frequency: 868.3MHz

Durability & Standards

- Operating temperature: -10 to +55C
- CE marked

OPTIONAL EXTRA



ZS-1000-TWC	ZoneSafe® Wireless VibraTag charger	5893
-------------	-------------------------------------	------

ZONESAFE® RFID TAG DETECTION SYSTEM

ZS-1000-AT - ZoneSafe® AssetTag 5894



- Size (HxDia) 63 x 48mm
- IP67
- 1 Year Warranty

Features

- High-capacity (non-rechargeable) replaceable power cell providing long operational life (included)
- Protects vehicle from collisions with property or hazards
- Immediately warns the driver when tag is detected within the vehicle's detection zone
- Robust and waterproof enclosure

- Can be attached onto assets or mounted on top of a safety cone with neck opening diameter of 39-44mm
- RX Frequency: 125kHz
- TX Frequency: 868.3MHz

Durability & Standards

- Operating temperature: -10 to +55C
- CE marked

Model Part No:

ZONESAFE® RFID TAG DETECTION SYSTEM

ZS-1000-TT - ZoneSafe® Tag Tester 5883



- 24 Vdc (external 24V DC supplied)
- Size (WxHxD) 110 x 90 x 55mm
- IP67
- 1 Year Warranty

Features

- Checks pedestrian and driver tag battery status (green for good and red for low)
- Includes 2 relays which can be used to trigger alarms, locks or shutters
- Adjustable Tag detection range from 0.1 to 4m
- TX Frequency: 125kHz
- RX Frequency: 868.3MHz

Power

- Current: 0.5 Amp

Durability & Standards

- Operating temperature: -10 to +55C
- CE marked

ZONESAFE® RFID TAG DETECTION SYSTEM

ZS-1000-MZ - ZoneSafe® Masking Zone Antenna 5885



- 24 Vdc (external 24V DC supplied)
- Size (WxHxD) 250 x 122 x 90mm
- IP67
- 1 Year Warranty

Features

- Fitted to walls or other permanent structures
- Makes all tags within the masked area undetectable
- Adjustable masking zone from 3 to 10m
- Tags will be detected as normal once outside the masked area
- TX Frequency: 125kHz

Power

- Current: 1 Amp

Durability & Standards

- Operating temperature: -40 to +85C
- CE marked

OPTIONAL EXTRA



ZS-AP-MP	Mounting Plate for Pedestrian Antenna	5898
ZS-1000-BKT	Adjustable-Angle Mounting Bracket	6079

ZONESAFE® RFID TAG DETECTION SYSTEM

ZS-1000-SG - ZoneSafe® Smart Gateway 5886



- 24 Vdc (external 24V DC supplied)
- Size (WxHxD) 110 x 90x 55mm
- IP67
- 1 Year Warranty

Features

- Fitted to walls or other permanent structures
- 2 x relays which can be used to trigger alarms or open shutters, barriers etc
- Detects approaching vehicles equipped with ZoneSafe systems
- Adjustable detection range from 3 to 9m
- RX Frequency: 125kHz
- TX Frequency: 868.3MHz

Power

- Current: 0.5 Amp

Durability & Standards

- Operating temperature: -10 to +55C
- CE marked

ZONESAFE® RFID TAG DETECTION SYSTEM

ZS-1000-DR - ZoneSafe® Desktop Reader 5887



- Size (HxDia) 160 x80 x 45mm
- 5V USB connection
- 1 Year Warranty

Features

- Checks VibraTag battery status (green for good and red for low)
- Can be powered from any computer via USB
- TX Frequency: 125kHz
- RX Frequency: 868.3MHz

Durability & Standards

- Operating temperature: -10 to +55C

Warning Alarms

bbs-tek® white sound® are the safest alarms in the world due to their instant locatability and directional sound. The multi-frequency alarms are only heard in the danger zone, thus eliminating noise nuisance for local residents.

bbs-tek® white sound® Smart alarms auto-adjust to 5dB above ambient.

Quiet Vehicle Sounder Designed for electric and hybrid-electric vehicles of all types. The front speaker warns pedestrians and other vulnerable road users that a quiet vehicle is approaching. Operational at low speeds, the pitch and volume increase with vehicle speed in a similar way to an internal combustion engine.

Single Tone Alarms meet the basic needs of reversing safety by warning pedestrians and workers that a vehicle is reversing.

Model

Part No:

WHITE SOUND® SMART REVERSING ALARM



SA-BBS-107 - Self-adjusting heavy-duty - 87-107 Decibels

1400

- 12-24Vdc
- IP68
- Size (WxHxD)
172 x 79 x 95mm
- Lifetime warranty



Features

- Alarm continually adjusts to 5-10dB above ambient
- Multi-frequency broadband sound
- Instantly locatable
- Sound confined to danger area
- Eliminates noise nuisance
- Sounder unit: Driver
- Hole centres (mm): 153

Power

- Current: Max 1 Amp

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- SAE J994

WHITE SOUND® SMART REVERSING ALARM



SA-BBS-97 - Self adjusting - medium duty - 77-97 Decibels

1399

SA-BBS-97HV - Self adjusting - electric forklift - 77-97 Decibels

1398

- 12-24Vdc
- 36-80Vdc (HV)
- IP68
- Size (WxHxD)
127 x 76 x 65mm
- Lifetime warranty



Features

- Alarm continually adjusts to 5-10dB above ambient
- Multi-frequency white sound alarm
- Instantly locatable
- Sound confined to danger area
- Eliminates noise nuisance
- Sounder unit: Driver
- Hole centres (mm): 98-108

Power

- Current: Max 1 Amp

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- SAE J994

WHITE SOUND® REVERSING ALARM



BBS-107 - Heavy duty - 107 Decibels

0899

BBS-102 - Heavy duty - 102 Decibels

0898

- 12-24Vdc
- IP68
- Size (WxHxD)
172 x 79 x 95mm
- Lifetime warranty



Features

- Multi-frequency broadband sound
- Instantly locatable
- Sound confined to danger area
- Eliminates noise nuisance
- Sounder unit: Driver
- Hole centres (mm): 153

Power

- Current: Max 1 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- SAE J994

WHITE SOUND® REVERSING ALARM



BBS-82HV - Electric forklift - 82 Decibels

1322

- 36-80Vdc
- IP68
- Size (WxHxD)
127 x 76 x 65mm
- Lifetime warranty



Features

- Multi-frequency broadband sound
- Instantly locatable
- Sound confined to danger area
- Eliminates noise nuisance
- Sounder unit: Speaker
- Hole centres (mm): 98-108

Power

- Current: Max 0.3 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- FCC approved
- IC Marked
- SAE J994

Model

Part No:

WHITE SOUND® REVERSING ALARM



BBS-97 - Medium duty - 97 Decibels

0935

BBS-92 - Medium duty - 92 Decibels

0934

BBS-87 - Medium duty - 87 Decibels

0897

BBS-82 - Medium duty - 82 Decibels

0896

- 12-24Vdc
- IP68

- Size (WxHxD)
105x65x37mm (BBS-97/92)
105x65x32mm (BBS-87/82/77)

- Lifetime warranty



Features

- Multi-frequency broadband sound
- Instantly locatable
- Sound confined to danger area
- Eliminates noise nuisance
- Sounder unit: Speaker
- Hole centres (mm): 76

Power

- Current: Max 0.5 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- SAE J994
- NAS/PIEK approved for night-time delivery (BBS-82 only)

SIDE TURN WARNING ALARM



BBS-TI - Turn Indicator Warning Alarm - 90 Decibels

6317

- 12-24Vdc
- IP68

- Size (WxHxD)
122 x 84 x 50mm

- 2 year warranty



Features

- Multi-frequency broadband sound
- Activates on side turn indication
- Sound synchronises with vehicle indicator flash
- Built-in turn indicator trigger
- Built-in timed and latched alarm cut out functions
- Sounder unit: Speaker
- Hole centres (mm): 102

Power

- Current: 0.5 Amps

Durability & standards

- CE marked

QVS QUIET VEHICLE SOUNDER (AVAS)



QVS-001-75 - Quiet Vehicle Sounder

5385

- 12-24Vdc
- IP68 Speaker
- IP30 ECU

- Size Speaker (WxHxD)
120 x 135 x 120mm

- Size ECU (WxHxD)
93 x 26 x 185mm

- 2 year warranty



Contents

- 1 x Speaker
- 1 x ECU

Features

- Warns pedestrians and other VRU's that a quiet vehicle is approaching
- Combined multi-frequency bbs-tek® technology and tonal sounds
- Multi-frequency sound
- Directional and locatable - The sound is only heard in the hazard zone.
- Front speaker system
- Pitch and volume increase with vehicle speed to mimic an internal combustion engine
- Operational below speeds of 20MPH
- Front sounder operational when ignition activated (silenced when parking brake applied)
- Uses Tachograph speed signal**
- Sounder unit: Speaker

Power

- Current: Max 0.1 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -30 to +70°C
- CE marked
- E-Marked: UNECE R10 compliant
- UKCA marked
- FCC approved
- IC Marked
- UNECE R138 compliant*
- 49 CFR Part 571 and 585 Federal Motor Vehicle Safety Standards compliant*

* QVS helps achieve compliance for the vehicle.

** If your vehicle is not equipped with a Tachograph, please contact us for alternative installation methods

Model

Part No:

NIGHTSHIFT® SPEAKING ALARM



BC-01(NS) - Single reversing message - Nightshift - 90 or 0 Decibels **0378**
 BC-01(NS-B) - Bespoke single message - Nightshift - 90 or 0 Decibels **1198**

- 12-24Vdc
- IP68
- Size (WxHxD)
122 x 84 x 50mm
- 2 year warranty

Features

- Real speech alarm
- * BC-01(NS) message "Ssh! Stand well clear, vehicle reversing..."
- Bespoke message up to 8 seconds, under 4 seconds for best speech quality
- Double engage reverse to cut-out or reduce sound
- Sounder unit: Speaker
- Hole centres (mm): 102

Power

- Current: 0.5 Amps

Durability & standards

- CE marked
- E-Marked: UNECE R10 compliant

SPEAKING ALARM



BC-01 - Single reversing message - 90 Decibels **0077**
 BC-01(B) - Bespoke single message - 90 Decibels **0079**
 BC-02(B) - Bespoke dual message - 90 Decibels **0083**

- 12-24Vdc
- IP68
- Size (WxHxD)
122 x 84 x 50mm
- 2 year warranty

Features

- Real speech alarm
- * BC-01 message "Ssh! Stand well clear, vehicle reversing..."
- Bespoke message up to 8 seconds, under 4 seconds for best speech quality
- Sounder unit: Speaker
- Hole centres (mm): 102

Power

- Current: 0.5 Amps

Durability & standards

- CE marked
- E-Marked: UNECE R10 compliant
- UKCA marked

SPEAKING HANDBRAKE WARNING ALARM



2 wire version

BC-01(H/Brake) - Single message - 2 wire - 90 Decibels **0849**
 BC-01(4W)(H/Brake) - Single message 4 wire - 90 Decibels **1715**

- 12-24Vdc
- IP68
- Size (WxHxD)
122 x 84 x 50mm
- 2 year warranty

Features

- Real speech alarm
- * Message "Bleep! Handbrake not applied..."
- Sounder unit: Speaker
- Hole centres (mm): 102

Power

- Current: 0.5 Amps

Durability & standards

- CE marked
- E-Marked: UNECE R10 compliant
- UKCA marked

SPEAKING LEFT SIDE TURN WARNING ALARM



SS-BC-08 - Single left-side-turn message - 90 Decibels **1334**

- 12-24Vdc
- IP68
- Size (WxHxD)
122 x 84 x 50mm
- 2 year warranty

Features

- Real speech alarm
- * Message "Ssh! Caution. Truck turning left..."
- Sounder unit: Speaker
- Hole centres (mm): 102

Power

- Current: 0.5 Amps

Durability & standards

- CE marked
- E-Marked: UNECE R10 compliant

Note: TS-001ECU Turn indicator trigger is required **1362**

Model

Part No:

SMART TONAL REVERSING ALARM



SA-800 - Self adjusting heavy duty - 87-112 Decibels **1315**

- 12-24 Volts
- IP68
- Size (WxHxD)
156 x 85 x 108mm
- 2 year warranty

Features

- Alarm continually adjusts to 5-10dB above ambient
- Frequency (KHz): 1.9
- Sounder unit: Dome speaker
- Hole centres (mm): 111-114

Power

- Current: Max 0.3 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- SAE J994

SMART TONAL REVERSING ALARM



SA-400 - Self adjusting medium duty - 82-102 Decibels **1310**

- 12-24 Volts
- IP68
- Size (WxHxD)
100 x 72 x 32mm
- 2 year warranty

Features

- Alarm continually adjusts to 5-10dB above ambient
- Frequency (KHz): 1.4
- Sounder unit: Speaker
- Hole centres (mm): 76-82

Power

- Current: Max 0.2 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- SAE J994

TONAL REVERSING ALARM



BA-890 - Heavy duty - 112 Decibels **1246**

- 12-24 Volts
- IP68
- Size (WxHxD)
156 x 85 x 108mm
- 2 year warranty

Features

- Frequency (KHz): 1.9
- Sounder unit: Dome speaker
- Hole centres (mm): 111-114

Power

- Current: Max 0.5 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- SAE J994

Model

Part No:

TONAL REVERSING ALARM



BA-570 - Medium duty - 102 Decibels
BA-560 - Medium duty - 97 Decibels

2885
2742

- 12-24Vdc
- IP68
- Size (WxHxD)
105 x 62 x 32mm
- 2 year warranty

Features

- 2 metre cable (BA-530TCA-2)
- Frequency (KHz): 1.6
- Sounder unit: Speaker
- Hole centres (mm): 75-85

Power

- Current: Max 0.3 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- SAE J994

NIGHT SILENT TONAL REVERSING ALARM



BA-57 - Light duty - 90 Decibels

0027

- 12-24Vdc
- IP66
- Size (WxHxD)
48 x 60 x 48mm
- 2 year warranty

Features

- Blue wire connection mutes alarm when vehicle lights are on
 - Frequency (KHz): 2.4
- Sounder unit: Piezo
- Single bolt fitting

Power

- Current: Max 0.03 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -20 to +60°C

Model

Part No:

VEHICLE INTERCOM



BC-VI - Normally open channel rear to cab; button press cab to rear
BC-VI-2 - Normally closed channel; button press communication

0815
0875

- 12-24Vdc
- IP68
- Size (WxHxD)
122 x 84 x 50mm
- 2 year warranty

Features

- Two-way communication system
- Master unit volume control: 80-95dB
- Includes master unit, slave unit and 25m cable
- Sounder unit: Speaker
- Hole centres (mm): 102

Power

- Current: 0.5 Amps

Durability & standards

- CE marked
- E-Marked: UNECE R10 compliant
- FCC Approved
- IC Approved

ALARM ANCILLARIES



TCO-47 - Timed auto-reset reversing alarm cut-out (dash mount)

0663

- 12-24Vdc
- 2 year warranty

Features

- Single touch timed relay
- Allows driver to cut-out alarm if reversing between the hours of 11.30pm-7.00am
- Auto-resets after 3-4 mins delay

Durability and Standards

- CE marked
- EMC approved

ALARM ANCILLARIES



TCO-47-01 - Latched side-turn alarm cut-out (dash mount)

4752

- 12-24Vdc
- 2 year warranty

Features

- Single touch timed relay
- Allows driver to cut-out alarm between the hours of 11.30pm-7.00am
- Resets by switch or ignition

Durability and Standards

- CE marked
- EMC approved

ALARM ANCILLARIES



NS-2 - Nightshift reversing alarm cut-out switch
NS-3 - Nightshift reversing alarm cut-out switch (auto gearbox)

0334
0974

- 12-24Vdc
- IP68
- 2 year warranty

Features

- Double engage reverse to cut-out alarm
- Resets when reverse gear disengaged
- No wiring necessary to cab

Durability and Standards

- CE marked
- EMC approved

Part	Model	Page	Part	Model	Page	Part	Model	Page	Part	Model	Page	Part	Model	Page			
0027	BA-57	76	2199	VBV-485C	15	4851	LS-60-A	35	5696	MD-60(W)	14	6429	MDR-508G-1-G2-SSD	40	7490	VBV-AI805	8
0077	BC-01	74	2538	VSK-30E	32	4875	SD-32GB-IND	41	5698	MD-61(W)	14	6437	MDR-508-2-G2-SSD	40	7491	VBV-AI820	8
0079	BC-01(B)	74	2539	VSK-31E	32	4876	SD-64GB-IND	41	5719	DMC-1031	15	6438	MDR-508GW-2-G2-SSD	40	7500	RP-001	62
0083	BC-02(B)	74	2540	VSK-50E	31	4903	AC-305	41	5721	DMC-1035	15	6439	MDR-508G-2-G2-SSD	40	7505	VBV-22X0C-CA-USB	27
0334	NS-2	77	2541	VSK-50E-A	31	4904	AC-306	26	5737	MD-60	14	6580	MDR-644-1-SSD	38	7508	VBV-AI810	8
0378	BC-01(NS)	74	2542	VSK-30E-T	31	4904	AC-306	41	5738	MD-61	14	6581	MDR-644G-1-SSD	38	7509	VBV-AI815	8
0663	TCO-47	77	2543	VSK-31E-T	32	4905	AC-307	26	5760	AC-24-12(011)	8	6582	MDR-644GW-1-SSD	38	7524	VBV-360-1000	6
0800	BE-L130	29	2589	AC-019	27	4905	AC-307	41	5809	BN360-H320	8	6585	MDR-644-2-SSD	38	7595	VBV-6172-000	25
0801	BE-L120	29	2590	AC-020	26	4924	BE-850C	11	5810	BN360-H315	8	6586	MDR-644G-2-SSD	38	7625	RP-010	62
0802	BE-L115	29	2704	AC-021	27	4925	AC-063	26	5811	BN360-H310	8	6587	MDR-644GW-2-SSD	38	7646	VBV-22X0C-CA-ZONES	27
0803	BE-L110	29	2705	BE-870LM	21	4926	AC-24-12(009)	26	5812	BN360-H305	8	6617	MDR-644-1-MCU-SSD	41	7670	VBV-770H-7100	24
0804	BE-L105	29	2742	BA-560	76	4948	AC-064	27	5813	BN360-H3025	8	6618	MDR-644-2-MCU-SSD	41	7673	FR-001DVS	63
0805	BE-X003	29	2797	BE-L1003	29	4949	AC-308	26	5860	IP-EM4	19	6624	MDR-ANT-GPS-03	66	7680	VBV-770H-3100	24
0815	BC-VI	77	2808	VBV-710C	13	4975	BS-25DCSX	65	5861	IP-EM8	19	6648	AC-H305	8	7681	VBV-770H-3200	24
0849	BC-01(H/Brake)	74	2843	VBV-481C	15	5003	MD-50SM-30	14	5864	IP-EM-PC	19	6648	AC-H305	26	8000	FR-30LDVS	63
0875	BC-VI-2	77	2871	BE-890C	11	5004	MD-50AM-15	14	5865	IP-EC-1	19	6648	AC-H305	41	8027	IP-FFC-AI-01	51
0896	BBS-82	73	2885	BA-570	76	5005	MD-50AM-25	14	5866	IP-EC-5	19	7020	AC-075	41	8029	IP-DFC-AI-WS-01	50
0897	BBS-87	73	3007	BE-L108	29	5027	AC-066	26	5867	IP-L601	17	7051	MDR-AC-ACC-01	41	8034	VBV-7110C	16
0898	BBS-102	72	3008	BE-L112	29	5028	AC-067	26	5881	ZS-1000-ECU	67	7053	MDR-MCU-R-01	39	8036	VBV-360-1000 ECU-VI	27
0899	BBS-107	72	3183	AC-024	27	5042	BE-L101	29	5882	ZS-1000-AP	68	7053	MDR-MCU-R-01	41	8037	VBV-22X0C-CA	27
0934	BBS-92	73	3231	BE-870L-000	24	5049	AC-014(5M)	26	5883	ZS-1000-TT	69	7056	MDR-USB-A-01	41	8039	VBV-7111C	16
0935	BBS-97	73	3335	AC-028	27	5066	SK-15-05	31	5885	ZS-1000-MZ	69	7061	MDR-641-1-MCU-SSD	41	8060	AC-AI305	27
0974	NS-3	77	3348	BMM-019-ARM	23	5099	UDS-OSD20-ECU	56	5886	ZS-1000-SG	69	7062	MDR-641-2-MCU-SSD	41	8064	FR-001R159	63
1143	BE-X020	29	3351	BE-970WM	20	5234	AC-068	28	5887	ZS-1000-DR	69	7073	MDR-641-1-SSD	39	8088	IP-DFC-AI-DB-01	50
1144	SK-30E	30	3427	SK-15-01	30	5257	SS-4100W	58	5888	ZS-1000-DVT	68	7074	MDR-641G-1-SSD	39	8089	IP-DFC-AI-AP-01	50
1198	BC-01(NS-B)	74	3560	BE-970WFM	20	5261	CS-3100	60	5889	ZS-1000-PVT	68	7075	MDR-641GW-1-SSD	39	8109	VBV-7110C(W)	16
1242	BE-810C	12	3666	SC-1000-ECU	35	5262	ST-2100	61	5892	ZS-1000-TC	68	7078	MDR-641-2-SSD	39	8110	VBV-7111C(W)	16
1246	BA-890	75	3716	UDS-10BC	58	5270	BS-00NYC	65	5893	ZS-1000-TWC	68	7079	MDR-641G-2-SSD	39	8123	VBV-360-1000-AI-NC	6
1310	SA-400	75	3716	UDS-10BC	61	5272	BS-02DCX	65	5894	ZS-1000-AT	68	7080	MDR-641GW-2-SSD	39	8170	MDSM-22	52
1315	SA-800	75	3717	UDS-2.5BC	61	5291	BS-00NT	65	5898	ZS-AP-MP	68	7088	DW-2000-TX	34	8171	MDSM-22S	53
1322	BBS-82HV	72	3719	UDS-2.5SC	61	5309	MDR-508GW-EXP-0	41	5899	ZS-C130	68	7089	DW-2000-RX	34	8207	C6-LITE 2.0 - S	43
1334	SS-BC-08	58	3720	UDS-4.5SC	61	5310	MDR-508G-EXP-0	41	5900	ZS-ECU-MP	67	7135	BS-8100	64	8209	C6-LITE 2.0	42
1334	SS-BC-08	74	3744	BS-4000W	59	5311	MDR-508W-EXP-0	41	5902	IP-L603	17	7143	VBV-3100C	14	8260	VBV-22X0C-CA-M12+CAN	27
1346	CT-470	65	3746	UDS-15BC	61	5318	AC-069	28	5903	IP-L605	17	7144	VBV-3101C	14			
1362	TS-001ECU	58	3747	FS-4000W	60	5323	VBV-243M	23	5904	IP-L615	17	7145	VBV-3120C	14			
1398	SA-BBS-97HV	72	3997	SK-15-04	30	5344	SS-4100W-000	58	5907	AC-24-12(010)	28	7146	VBV-3121C	14	8290	MDSM-22A	53
1399	SA-BBS-97	72	4032	BE-870L-100	24	5345	ST-2100-60-A	61	5916	SS-4200W	57	7151	BL-2120C	16	8291	MDSM-22SA	53
1400	SA-BBS-107	72	4215	UDS-RELAY-24	57	5347	UDS-OSD21-ECU	56	5935	IP-1000C	18	7152	BL-2130C	15	8309	IP-7101C	17
1426	BE-800C(78)	11	4216	UDS-RELAY-12	57	5385	QVS-001-75	73	5936	IP-1100C	19	7178	SS-H002	34	8313	IP-7101C(N)	17
1559	BE-800C(40)	11	4219	SK-UDS-05	58	5426	BE-891C	11	5937	IP-1200C	18	7190	BKT-023	65	8314	IP-7101C(W)	17
1570	SK-50E	31	4245	AC-041	28	5466	VBV-7100C	13	5982	IP-L610	17	7190	BKT-023	65	8385	VBV-1230-AI	33
1571	CS-020	35	4246	AC-042	28	5467	VBV-7101C	13	5983	IP-L620	17	7204	VBV-770HFM	22	8421	IP-C-CA-M12D	17
1623	BE-800C	11	4247	BE-800C-NIR	11	5470	VBV-7190C	13	5984	IP-L630	17	7248	BS-7100	64	8443	AC575	27
1715	BC-01(4W)(H/Brake)	74	4266	AC-24-12(002)	28	5471	VBV-7191C	13	5985	IP-1XXX-PC	17	7296	SE-770HR-300	7	8554	BS-9101-OSD	66
1830	SK-31E	30	4267	AC-055(5M)	26	5511	VBV-H430	29	6016	MDR-RP02	41	7297	SE-7014HRF-300	7	8588	BN360-300	7
1844	VCS-020	35	4279	AC-044	28	5512	VBV-H425	29	6018	MDR-04RPC	41	7309	BL-2120C	16			
1879	SK-50E-A	31	4280	AC-045	28	5513	VBV-H420	29	6057	VBV-7104HFM	22	7321	VBV-2220C AI-D04	10			
1885	SK-30E-T	30	4401	AC-056	26	5514	VBV-H415	29	6075	SS-4200W-000	57	7353	BL-2131C	15			
1886	SK-31E-T	30	4550	BS-05DCX	65	5515	VBV-H412	29	6079	ZS-1000-BKT	68	7366	BE-H0003	28			
1905	BE-801C	11	4551	BS-09DCX	65	5516	VBV-H410	29	6201	MDR-500-0.5-MCU-G2-SSD	41	7367	BE-H001	28			
1907	BE-X025	29	4649	BN360-100C-BKT01	8	5517	VBV-H407	29				7368	BE-H003	28			
1983	AC-006	26	4691	AC-062	26	5517	VBV-H406	29	6202	MDR-500-1-MCU-G2-SSD	41	7369	BE-H005	28			
1984	AC-007	26	4701	BE360-CD	8	5519	VBV-H405	29				7370	BE-H008	28			
2084	BE-801C(78)	11	4714	BN360-100C-BKT02	8	5520	VBV-H404	29	6203	MDR-500-2-MCU-G2-SSD	41	7371	BE-H010	28			
2085	BE-801C(40)	11	4719	AC-24-12(006)	28	5521	VBV-H403	29				7372	BE-H012	28			
2094	AC-014	26	4743	BN360-100C-BKT03	8	5522	VBV-H4025	29	6317	BBS-TI	73	7373	BE-H015	28			
2099	BE-X005	29	4752	TCO-47-01	58	5523	VBV-H4005	29	6351	BS-9100	65	7374	BE-H020	28			
2100	BE-X010	29	4752	TCO-47-01	77	5611	VBV-770HM	23	6380	BE-870HM	21	7375	BE-H025	28			
2101	BE-X015	29	4762	AC-24-12(007)	28	5623	UDS-7.0SC	61	6408	BE-8100C	11	7376	BE-H030	28			
2146	BE-870FM	21	4763	AC-24-12(008)	28	5637	BS-WD-USB	65	6410	BE-8101C	11	7396	VBV-2230C AI-D04	10			
2150	AC-016	27	4765	VBV-650-000	25	5688	MD-60(SW)	14	6427	MDR-508-1-G2-SSD	40	7417	MDR-HWU-01	51			
2152	EDM-50	34	4766	VBV-650-000N	25	5690	MD-61(SW)	14	6428	MDR-508GW-1-G2-SSD	40	7477	DC-204-AI(UK/EU)	44			

Model	Part	Page	Model	Part	Page	Model	Part	Page	Model	Part	Page	Model	Part	Page	Model	Part	Page
AC-006	1983	26	BC-VI-2	0875	77	BN360-H320	5809	8	MDR-04RPC	6018	41	SK-15-05	5066	31	VBV-7191C	5471	13
AC-007	1984	26	BE-800C	1623	11	BS-00NT	5291	65	MDR-500-0.5-MCU-G2-SSD	6201	41	SK-30E	1144	30	VBV-770H-3100	7680	24
AC-014	2094	26	BE-800C-NIR	4247	11	BS-00NYC	5270	65		6202	41	SK-30E-T	1885	30	VBV-770H-3200	7681	24
AC-014(5M)	5049	26	BE-800C(40)	1559	11	BS-02DCX	5272	65	MDR-500-1-MCU-G2-SSD			SK-31E	1830	30	VBV-770H-7100	7670	24
AC-016	2150	27	BE-800C(78)	1426	11	BS-05DCX	4550	65		6202	41	SK-31E-T	1886	30	VBV-770HFM	7204	22
AC-019	2589	27	BE-801C	1905	11	BS-09DCX	4551	65	MDR-500-2-MCU-G2-SSD			SK-50E	1570	31	VBV-770HM	5611	23
AC-020	2590	26	BE-801C(40)	2085	11	BS-25DCSX	4975	65		6203	41	SK-50E-A	1879	31	VBV-AI801	7489	8
AC-021	2704	27	BE-801C(78)	2084	11	BS-4000W	3744	59	MDR-508-1-G2-SSD	6427	40	SK-UDS-05	4219	58	VBV-AI805	7490	8
AC-024	3183	27	BE-8100C	6408	11	BS-7100	7248	64	MDR-508-2-G2-SSD	6437	40	SS-4100W	5257	58	VBV-AI810	7508	8
AC-028	3335	27	BE-8101C	6410	11	BS-8100	7135	64	MDR-508G-1-G2-SSD	6429	40	SS-4100W-000	5344	58	VBV-AI815	7509	8
AC-041	4245	28	BE-810C	1242	12	BS-9100	6351	65	MDR-508G-2-G2-SSD	6439	40	SS-4200W	5916	57	VBV-AI820	7491	8
AC-042	4246	28	BE-850C	4924	11	BS-9101-OSD	8554	66	MDR-508G-EXP-0	5310	41	SS-4200W-000	6075	57	VBV-H4005	5523	29
AC-044	4279	28	BE-870FM	2146	21	BS-WD-USB	5637	65	MDR-508GW-1-G2-SSD			SS-BC-08	1334	58	VBV-H4025	5522	29
AC-045	4280	28	BE-870HM	6380	21	C6-LITE 2.0	8209	42		6428	40	SS-BC-08	1334	74	VBV-H403	5521	29
AC-055(5M)	4267	26	BE-870L-000	3231	24	C6-LITE 2.0-S	8207	43	MDR-508GW-2-G2-SSD			SS-H002	7178	34	VBV-H404	5520	29
AC-056	4401	26	BE-870L-100	4032	24	CS-020	1571	35		6438	40	ST-2100	5262	61	VBV-H405	5519	29
AC-062	4691	26	BE-870LM	2705	21	CS-3100	5261	60	MDR-508GW-EXP-0	5309	41	ST-2100-60-A	5345	61	VBV-H406	5517	29
AC-063	4925	26	BE-890C	2871	11	CT-470	1346	65	MDR-508W-EXP-0	5311	41	TCO-47	0663	77	VBV-H407	5517	29
AC-064	4948	27	BE-891C	5426	11	DC-204-AI(UK/EU)	7477	44	MDR-641-1-MCU-SSD	7061	41	TCO-47-01	4752	58	VBV-H410	5516	29
AC-066	5027	26	BE-970WFM	3560	20	DMC-1031	5719	15	MDR-641-1-SSD	7073	39	TCO-47-01	4752	77	VBV-H412	5515	29
AC-067	5028	26	BE-970WM	3351	20	DMC-1035	5721	15	MDR-641-2-MCU-SSD	7062	41	TS-001ECU	1362	58	VBV-H415	5514	29
AC-068	5234	28	BE-H0003	7366	28	DW-2000-RX	7089	34	MDR-641-2-SSD	7078	39	UDS-10BC	3716	58	VBV-H420	5513	29
AC-069	5318	28	BE-H001	7367	28	DW-2000-TX	7088	34	MDR-641G-1-SSD	7074	39	UDS-10BC	3716	61	VBV-H425	5512	29
AC-075	7020	41	BE-H003	7368	28	EDM-50	2152	34	MDR-641G-2-SSD	7079	39	UDS-15BC	3746	61	VBV-H430	5511	29
AC-24-12(002)	4266	28	BE-H005	7369	28	FR-001DVS	7673	63	MDR-641GW-1-SSD	7075	39	UDS-2.5BC	3717	61	VCS-020	1844	35
AC-24-12(006)	4719	28	BE-H008	7370	28	FR-001R159	8064	63	MDR-641GW-2-SSD	7080	39	UDS-2.5SC	3719	61	VSK-30E	2538	32
AC-24-12(007)	4762	28	BE-H010	7371	28	FR-30LDVS	8000	63	MDR-644-1-MCU-SSD	6617	41	UDS-4.5SC	3720	61	VSK-30E-T	2542	31
AC-24-12(008)	4763	28	BE-H012	7372	28	FS-4000W	3747	60	MDR-644-1-SSD	6580	38	UDS-7.0SC	5623	61	VSK-31E	2539	32
AC-24-12(009)	4926	26	BE-H015	7373	28	IP-1000C	5935	18	MDR-644-2-MCU-SSD	6618	41	UDS-OSD20-ECU	5099	56	VSK-31E-T	2543	32
AC-24-12(010)	5907	28	BE-H020	7374	28	IP-1100C	5936	19	MDR-644-2-SSD	6585	38	UDS-OSD21-ECU	5347	56	VSK-50E	2540	31
AC-24-12(011)	5760	8	BE-H025	7375	28	IP-1200C	5937	18	MDR-644G-1-SSD	6581	38	UDS-RELAY-12	4216	57	VSK-50E-A	2541	31
AC-305	4903	41	BE-H030	7376	28	IP-1XXX-PC	5985	17	MDR-644G-2-SSD	6586	38	UDS-RELAY-24	4215	57	ZS-1000-AP	5882	68
AC-306	4904	26	BE-L1003	2797	29	IP-7101C	8309	17	MDR-644GW-1-SSD	6582	38	VBV-1230-AI	8385	33	ZS-1000-AT	5894	68
AC-306	4904	41	BE-L101	5042	29	IP-7101C(N)	8313	17	MDR-644GW-2-SSD	6587	38	VBV-2220C AI-D04	7321	10	ZS-1000-BKT	6079	68
AC-307	4905	26	BE-L105	0804	29	IP-7101C(W)	8314	17	MDR-AC-ACC-01	7051	41	VBV-2230C AI-D04	7396	10	ZS-1000-DR	5887	69
AC-307	4905	41	BE-L108	3007	29	IP-C-CA-M12D	8421	17	MDR-ANT-GPS-03	6624	66	VBV-22X0C-CA	8037	27	ZS-1000-DVT	5888	68
AC-308	4949	26	BE-L110	0803	29	IP-DFC-AI-AP-01	8089	50	MDR-HWU-01	7417	51	VBV-22X0C-CA-M12+CAN			ZS-1000-ECU	5881	67
AC-AI305	8060	27	BE-L112	3008	29	IP-DFC-AI-DB-01	8088	50	MDR-MCU-R-01	7053	39		8260	27	ZS-1000-MZ	5885	69
AC-H305	6648	8	BE-L115	0802	29	IP-DFC-AI-WS-01	8029	50	MDR-MCU-R-01	7053	41	VBV-22X0C-CA-USB	7505	27	ZS-1000-PVT	5889	68
AC-H305	6648	26	BE-L120	0801	29	IP-EC-1	5865	19	MDR-RP02	6016	41	VBV-22X0C-CA-ZONES	7646	27	ZS-1000-SG	5886	69
AC-H305	6648	41	BE-L130	0800	29	IP-EC-5	5866	19	MDR-USB-A-01	7056	41	VBV-243M	5323	23	ZS-1000-TC	5892	68
AC575	8443	27	BE-X003	0805	29	IP-EM-PC	5864	19	MDSM-22	8170	52	VBV-3100C	7143	14	ZS-1000-TT	5883	69
BA-560	2742	76	BE-X005	2099	29	IP-EM4	5860	19	MDSM-22A	8290	53	VBV-3101C	7144	14	ZS-1000-TWC	5893	68
BA-57	0027	76	BE-X010	2100	29	IP-EM8	5861	19	MDSM-22S	8171	53	VBV-3120C	7145	14	ZS-AP-MP	5898	68
BA-570	2885	76	BE-X015	2101	29	IP-FFC-AI-01	8027	51	MDSM-22SA	8291	53	VBV-3121C	7146	14	ZS-C130	5899	68
BA-890	1246	75	BE-X020	1143	29	IP-L601	5867	17	NS-2	0334	77	VBV-360-1000	7524	6	ZS-ECU-MP	5900	67
BBS-102	0898	72	BE-X025	1907	29	IP-L603	5902	17	NS-3	0974	77	VBV-360-1000 ECU-VI	8036	27			
BBS-107	0899	72	BE360-CD	4701	8	IP-L605	5903	17	QVS-001-75	5385	73	VBV-360-1000-AI-NC	8123	6			
BBS-82	0896	73	BKT-023	7190	65	IP-L610	5982	17	RP-001	7500	62	VBV-481C	2843	15			
BBS-82HV	1322	72	BL-2120C	7151	16	IP-L615	5904	17	RP-010	7625	62	VBV-485C	2199	15			
BBS-87	0897	73	BL-2120C	7309	16	IP-L620	5983	17	SA-400	1310	75	VBV-6172-000	7595	25			
BBS-92	0934	73	BL-2130C	7152	15	IP-L630	5984	17	SA-800	1315	75	VBV-650-000	4765	25			
BBS-97	0935	73	BL-2131C	7353	15	LS-60-A	4851	35	SA-BBS-107	1400	72	VBV-650-000N	4766	25			
BBS-TI	6317	73	BMM-019-ARM	3348	23	MD-50AM-15	5004	14	SA-BBS-97	1399	72	VBV-7100C	5466	13			
BC-01	0077	74	BN360-100C-BKT01	4649	8	MD-50AM-25	5005	14	SA-BBS-97HV	1398	72	VBV-7101C	5467	13			
BC-01(4W)(H/Brake)	1715	74	BN360-100C-BKT02	4714	8	MD-50SM-30	5003	14	SC-1000-ECU	3666	35	VBV-7104HFM	6057	22			
BC-01(B)	0079	74	BN360-100C-BKT03	4743	8	MD-60	5737	14	SD-32GB-IND	4875	41	VBV-710C	2808	13			
BC-01(H/Brake)	0849	74	BN360-300	8588	7	MD-60(SW)	5688	14	SD-64GB-IND	4876	41	VBV-7110C	8034	16			
BC-01(NS-B)	1198	74	BN360-H3025	5813	8	MD-60(W)	5696	14	SE-7014HRF-300	7297	7	VBV-7110C(W)	8109	16			
BC-01(NS)	0378	74	BN360-H305	5812	8	MD-61	5738	14	SE-770HR-300	7296	7	VBV-7111C	8039	16			
BC-02(B)	0083	74	BN360-H310	5811	8	MD-61(SW)	5690	14	SK-15-01	3427	30	VBV-7111C(W)	8110	16			
BC-VI	0815	77	BN360-H315	5810	8	MD-61(W)	5698	14	SK-15-04	3997	30	VBV-7190C	5470	13			

Warranties

Life Lifetime New-For-Old Warranty (covers product for the life of vehicle)

bbs-tek® White sound® reversing alarms
bbs-tek® Self-adjusting reversing alarms

5 5 Year New-For-Old Warranty

Backeye®360 HD camera system
ELITE range camera monitor systems

3 3 Year New-For-Old Warranty

Backeye®360 AI camera system
SELECT range camera monitor systems
MDR mobile digital recorders
IP cameras and accessories
Driver Safety systems
Ultrasonic object detection systems
Backsense® radar object detection systems
Wireless connection system

2 2 Year New-For-Old Warranty

AI Cameras
Camera monitor system ancillaries
Ultrasonic object detection on-screen display
Ultrasonic object detection ancillaries
Backchat® Speaking alarms
Single tone alarms
Vehicle intercom
QVS Quiet vehicle sounder
Side turn warning alarm
Alarm ancillaries
Zonesafe® Antenna & Control unit

1 1 Year New-For-Old Warranty*

ESSENTIAL range camera monitor systems
AI Connected dashcams
ZoneSafe® RFID Tags and ancillaries
Dashcams
All products aside those specifically listed

Warranty Conditions:

Brigade's liability in respect of the sale and supply of products and/or services, and under any warranties as per our Standard Terms and Conditions of Sale and/or official warranty documentation, are strictly subject to the following conditions.

For the purposes of these warranty conditions, any reference to "you" shall include a customer, purchaser, reseller, installer, end-users or anyone else, who buys, handles, uses or installs our products and/or services.

PLEASE ENSURE THAT YOU READ AND UNDERSTAND THE FOLLOWING:

1. Our products are supplied as an aid to safety and they DO NOT replace the operator's and/or driver's obligation to ensure the safety of the vehicle or machine, the proper and safe operation of the vehicle or machine and nor do they replace your obligations to ensure the safety and suitability of the vehicle or machine.
2. You are responsible for ensuring that our products are suitable and appropriate for your or any third party's specific needs and/or that they are compatible with all other systems and components that make up a relevant vehicle or machine.
3. You are responsible for ensuring that system configurations (reaction times, detection areas etc.) meet with your operational and safety requirements.
4. You are responsible for ensuring that the vehicles or machines into which our products are incorporated are safe, suitable for the purpose and driven or operated responsibly and safely.
5. All of our products must be fitted by a suitably qualified person.
6. All of our products must be fitted, maintained, stored, tested and otherwise cared for in accordance with our written instructions.
7. Our products must only be used for their intended purpose and not for any other purpose.
8. You must not adapt, modify or disassemble our products without our prior written consent.
9. You must ensure that the serial numbers, product numbers and any warnings that are attached to the products remain fixed to the relevant product at all times.
10. You must ensure that all user manuals and other instructions for the safe and proper use of our products are provided to the driver and/or operators of the vehicle or machine.
11. You are responsible for checking and ensuring that all relevant software updates are downloaded to the products promptly if we make these available to you.
12. If any of our products become damaged for any reason whatsoever, it must immediately stop being used and/or relied upon. We cannot accept liability for any claims relating to the use of a damaged product.
13. We use reasonable endeavours to ensure that the products comply with the applicable laws in the countries where we directly distribute the products and the relevant compliance declarations will be displayed on the product packaging and/or included in our product catalogue. It remains your responsibility to ensure that products and services supplied to you comply with all applicable laws and regulations of the countries in which it is to be used and/or installed and/or resold.
14. Brigade does not have any control over and cannot be responsible for the quality and specifications of third-party products and how or whether they work with or adversely affect our products. As such, we will have no liability for any claim of any kind to the extent that it results from the combination, operation or use of our products with equipment, devices or products not supplied by us, if a claim would not have occurred but for such combination, operation or use.
15. To the extent that our products are reliant upon third party software, software interfaces, satellite and mobile network coverage, we cannot accept liability for any failures caused by such third-party software or software interfaces or lack of internet, satellite or mobile network coverage.



Scan for full Terms and Conditions

Brigade Group

Brigade Electronics Group Plc

Brigade House, The Mills
Station Road, South Darenth
DA4 9BD. United Kingdom
Tel: +44 (0)1322 420300

Email: international.sales@brigade-electronics.com
www.brigade-electronics.com

Brigade Electronics (UK) Ltd

Brigade House, The Mills
Station Road, South Darenth
DA4 9BD. United Kingdom
Tel: +44 (0)1322 420300

Email: sales@brigade-electronics.com
www.brigade-electronics.com

Brigade Electronics (EU) B.V. Germany

Havelstraße 21

24539 Neumünster. Germany
Tel: +49 (0) 4321 9655610

Email: orders.germany@brigade-electronics.com
www.brigade-elektronik.de

Brigade Elettronica srl

Corso Trapani, 16
10139 Torino. Italy
Tel: +39 011-0142105

Email: info-italia@brigade-electronics.com
www.brigade-elettronica.it

Brigade Electronics (EU) B.V.

Ambachtstraat 8
7587 BW de Lutte
The Netherlands
Tel: +31 541 53 18 01

Email: info@brigade-electronics.nl
www.brigade-electronics.nl

Brigade Electronics (EU) B.V. France

Siège social: 5 rue Lucien Chaserant
72650 Saint Saturnin France
Tel : 02 99 03 60 34

Email: info@brigade-electronics.fr
www.brigade-electronics.fr

Brigade Electronics Inc

1976 West Tyson Road
Portland, IN 47371. USA
Tel: +1 (260) 766-4343

Email: sales@brigade-inc.com
www.brigade-inc.com

Brigade Electronics (Canada) Limited

2390 Industrial St,
Burlington, ON, L7P 1A5 Canada
Tel: +1 (905) 319-9993

Email: contact@brigade-electronics.ca
www.brigade-electronics.ca

Brigade Electronics (EU) B.V. Poland

ul. Olszewskiego 6,
25-663 Kielce. Poland
Tel: +48 41 250 70 81

Email: info@brigade.com.pl
www.brigade.com.pl

