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Why Orlaco?

Welcome to the Orlaco product catalogue. We are personally committed to bringing you the best camera and monitor solutions possible. To help create safer and more secure workplaces around the world. Our professional team has spent over twenty five years designing and manufacturing a variety of certified, reliable and complete camera display solutions that effectively eliminate the blind spots around vehicles, machinery and vessels. We are confident that the options offered in this catalogue will not only help you to improve the safety, security and efficiency of your fleet, but also to enhance the ergonomics and comfort for your operators. That is what Orlaco stands for. We invite you to share your ideas and experiences with us.

On behalf of the entire team, Henrie van Beusekom Executive Director Orlaco



That's why!





Traffic is becoming increasingly busier. Not only are you expected to have a good view of the situation, but you are also expected to arrive at your destination safely, on time, and without damage. Good visibility around your truck is not possible without help. Orlaco's vision solutions improve the efficiency of your actions. No longer will you have to get out of your vehicle to determine the distance each time you load and unload. This could result in immediate economic benefits. An Orlaco camera system enables you to do your job more efficiently while reducing your risk of overlooking someone or something. Less risk and improved safety and efficiency.

Good posture is just as important as good visibility. Orlaco asked TNO to produce a report on the optimum position for a cab monitor. This report takes into consideration details like the diagonal size of the image on the monitor, the position of the mirrors, the windscreen and the driver. These test results have been included in the installation manual for each system. They ensure that operators can carry out their work ergonomically, without the need for additional stretching or straining.

At Orlaco, quality is never taken lightly. We keep a clear and persistent focus on customer satisfaction. A focus that is maintained throughout the manufacturing process of our quality products, which are custom designed in various formats. We are able to uphold our level of quality by providing detailed servicing. To top it all off, we have secured the highest achievable automotive certification: TS16949. At Orlaco, we invest in continuous improvement in order to secure a long term, satisfied customer base. We believe that compatibility in products, systems, and operations is the key element to creating reliable partnerships. All our products are controlled and clearly documented to give our customers a zero-defect product with operation that works right, every time.

Why Orlaco

Frontview



0400511 - PAGE 18 0400270 - PAGE 31

The Frontview camera provides the required visibility at the front of the truck. A quick look at the monitor and you will know whether you can drive off safely without overlooking a cyclist, pedestrian or object.

The monitor can be integrated or surface-mounted, depending on the vehicle. It is also equipped with handy options, such as automatic brightness adjustment. No matter how brightly the sun is shining or how dark it is, you always have good visibility.







For fitting the monitor to the dashboard or on the roof of the cab.



Class VI camera support 0401270 - PAGE 38

The class VI camera support has been specifically designed for the Frontview camera. It enlarges the field of vision. Cables are well protected and tucked away neatly.

INFORMATION

The new EU mirror directive came into force in 2006 and was extended in January 2007. It includes front view mirrors for all new trucks in Europe. Only an approved camera system may replace the front view mirror. The front camera provides a perfect view of the blind spot in front of the cab. This makes it possible to notice cyclists and pedestrians in time.



The front view mirror may be replaced by a front camera provided it meets, among others, the following requirements:

- Mandatory front vision at forward speeds of between 0 and 10km per hour.
- It must be possible to see the class VI field of vision. (2m in front of and 2m across the entire width of the cab)
- The monitor and camera must meet all technical requirements.

The EG*2003/97*2005/27 directive describes the specifications that a truck's mirrors must comply with. Orlaco's front view system meets all these requirements. (See page 47)

Surround view



PAGE 30

Blind spots are a thing of the past thanks to surround view. Surround view offers 360 degrees visibility surrounding a vehicle. When manoeuvring through narrow streets or busy areas, surround view gives the driver maximum visibility on all sides of the truck via one central monitor. This is due to the camera images overlapping. Therefore the driver is able to see every person and object around his vehicle.

Contact Orlaco for more information regarding surround view and the EU standards.





Frontview



0400511 - PAGE 18 0400270 - PAGE 31

The Frontview camera provides the required visibility at the front of the truck. A quick look at the monitor and you will know whether you can drive off safely without overlooking a cyclist, pedestrian or object.

The monitor can be integrated or surface-mounted, depending on the vehicle. It is also equipped with handy options, such as automatic brightness adjustment. No matter how brightly the sun is shining or how dark it is, you always have good







Camera setting: Horizontal and vertical line marks. With this option the camera on the back of the rigid is also an affetive aid when connecting the trailer.



The Rearview camera lets you see the area immediately behind the truck. The monitor in the cab automatically switches over to this camera if you select reverse gear, allowing you to reverse safely. The rear view camera on the rigid provides visibility when the drawbar-trailer or center axle-trailer is not connected. Orlaco has special cable sets (with or without spiral interconnection) for Rearview cameras on your rigid and drawbar- / center axle-trailer.

Recommendation: Add RadarEye to increase safety & efficiency. (see page 42-43)





Trailer switcher

0405600 - PAGE 40

The switcher is included in the special cable set. This trailer switcher ensures that the monitor automatically displays the rearmost camera. This is one less thing for the driver to think about and he can reverse the entire combination safely.



Rearview



The Rearview camera lets you see the area immediately behind the truck. The monitor in the cab automatically switches over to this camera if you select reverse gear, allowing you to reverse safely.

A longer and heavier truck combination (LHV), is a truck that can and may transport more freight than an ordinary truck combination. Various LHV models are available, which is why the cables are always customised to order.









0400511 - PAGE 18 0400270 - PAGE 31





0400511 - PAGE 18 0400270 - PAGE 31

The Frontview camera provides the required visibility at the front of the truck. A quick look at the monitor and you will know whether you can drive off safely without overlooking a cyclist, pedestrian or object.

The monitor can be integrated or surface-mounted, depending on the vehicle. It is also equipped with handy options, such as automatic brightness adjustment. No matter how brightly the sun is shining or how dark it is, you always have good visibility.









View of the axles. These truck combinations must comply with very specific safety requirements. Although a camera system is not mandatory, it certainly adds significant value. Please contact Orlaco for a system tailored to your requirements.



INFORMATION

The transportation of hazardous materials by road is regulated in Europe in the ADR. The vehicle must comply with a significant number of safety requirements, just like the camera system. Safety is of paramount importance for these companies, and cameras provide a significant amount of support in this regard. The ADR regulations contain stringent requirements for cabling. All of Orlaco's cameras and cables meet these stringent requirements, and have been marked "ADR approved" by the TÜV.



Rearview



0401861 - PAGE 18

The Rearview camera lets you see the area immediately behind the truck. The monitor in the cab automatically switches over to this camera if you select reverse gear, allowing you to reverse safely.

Recommendation: Add RadarEye to increase safety & efficiency. (see page 42-43)





12 Bulk truck Container- / hooklift truck 13

Sideview



PAGE 25-26

Extra visibility when manoeuvring and swinging out. As these trucks enter farmyards, they have to be able to manoeuvre accurately between the farmhouse and the sheds which often have low roofs. The outer mirrors do not provide a direct view of the side of the-trailer in bends. It is important for the driver to be able to see whether he can swing the rear of the vehicle out safely. Orlaco's Sideview camera provides a clear image of this.



Rearview



0401861 - PAGE 25-26

The Rearview camera lets you see the area immediately behind the truck. The monitor in the cab automatically switches over to this camera if you select reverse gear, allowing you to reverse safely.

Recommendation: Add RadarEye to increase safety & efficiency. (see page 42-43)





Camera setting: Horizontal line mark.
This option shows a reference line on the monitor

Hookliftview - Rearview



Hooking up a container requires several critical actions to be carried out in a short space of time. As the driver, it is important for you to check that the container is hooked up properly, positioned onto the rollers correctly and locked securely. The Orlaco camera brings it all into view. A camera with a small angle (69°) on the rear of the cab. How well you see is especially important. A camera with a wide angle (102°) on the rear bumper. What you see is especially important. The horizontal and vertical line marks shown on the monitor will enable you to position your vehicle correctly.



Frontview



0400511 - PAGE 18 0400270 - PAGE 31

The Frontview camera provides the required visibility at the front of the truck. A quick look at the monitor and you will know whether you can drive off safely without overlooking a cyclist, pedestrian or object.

The monitor can be integrated or surface-mounted, depending on the vehicle. It is also equipped with handy options, such as automatic brightness adjustment. No matter how brightly the sun is shining or how dark it is, you always have good visibility.



Combined set

Front-Rearview

0401971 - PAGE 18 - 20

The Frontview system can be expanded with a Rearview camera. This makes optimum use of your monitor.

14 Tipper truck

Municipal vehicles 15

Frontview



0400511 - PAGE 18 0400270 - PAGE 31

The Frontview camera provides the required visibility at the front of the truck. A quick look at the monitor and you will know whether you can drive off safely without overlooking a cyclist, pedestrian or object.





Dumperview - Rearview



If you want to keep an eye on the load, then the solution is to install a camera in the dumper. The camera also provides an accurate indication of whether your vehicle is positioned correctly and whether the container is sufficiently filled. Put simply, it eliminates the need for extra staff and the driver no longer has to keep climbing in and out. The cameras are heated and waterproof (IP69K). The cameras can be cleaned with a high pressure cleaner, for example, when the vehicle is being washed.



Combined set

Front-Rearview

0401971 - PAGE 19 - 20

The Frontview system can be expanded with a Rearview camera. This makes optimum use of your monitor.



Rearview



0401861 - PAGE 18

The Rearview camera lets you see the area immediately behind the truck. The monitor in the cab automatically switches over to this camera if you select reverse gear, allowing you to reverse safely.

In accordance with NEN 1501, rear vision is always mandatory for refuse collection trucks, even when driving forwards.





Vehicles used in the environmental sector often operate in busy residential areas. Within this sector, the problem of blind spots is a crucial issue. It is therefore logical that cameras are mandatory on the back of refuse collection vehicles. They enable the driver to not only keep sight of the situation behind the truck, but also to maintain contact with the loaders. Orlaco cameras also provide visibility around side loaders, street sweepers, drain cleaning vehicles and container trucks. Orlaco cameras comply with **NEN-EN 1501**, the European safety standard for refuse vehicles.

16 Fire truck **Bus** 17

Rearview



0401861 - PAGE 18

The Rearview camera increases the safety of professional response personnel and bystanders. You can manoeuvre more easily because you can see the area behind the vehicle. The monitor in the cab automatically switches over to the rear view camera if you select reverse gear.

Recommendation: Add RadarEye to increase safety & efficiency. (see page 42-43)





Frontview



0400511 - PAGE 18 0400270 - PAGE 31

The Frontview camera provides the required visibility at the front of the truck. A quick look at the monitor and you will know whether you can drive off safely without overlooking a cyclist, pedestrian or object.



Frontview



0400511 - PAGE 18 0400270 - PAGE 31

Buses may not be covered by the mirror directive, but this does not mean front view cameras are an unnecessary luxury. When approaching a bus stop along the street or at the station, the front view camera will ensure no passengers are overlooked.





Rearview



0401861 - PAGE 18

The rear view camera lets you see the area immediately behind the bus. The monitor in the cab automatically switches over to this camera if you select reverse gear, allowing you to reverse safely.



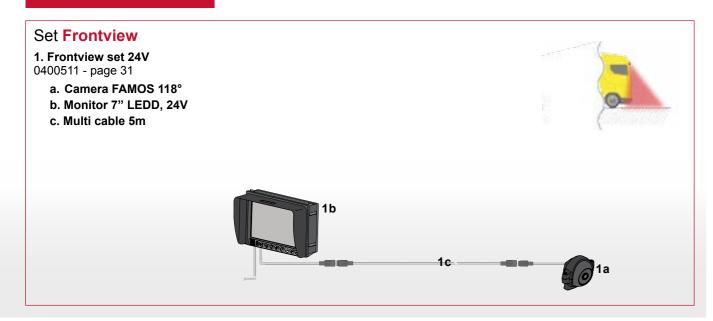


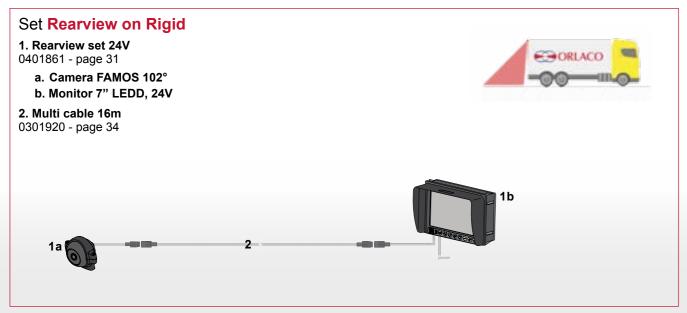
Combined set

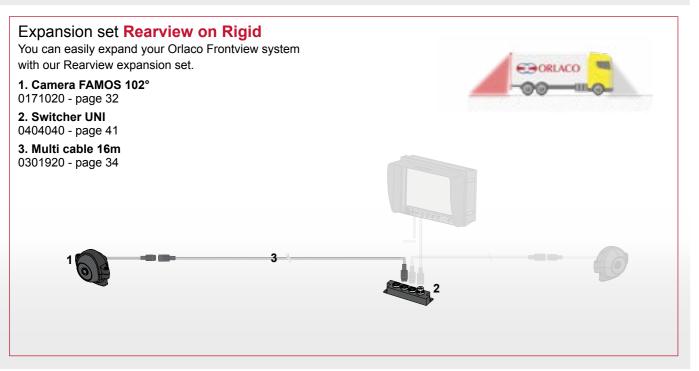
Front-Rearview

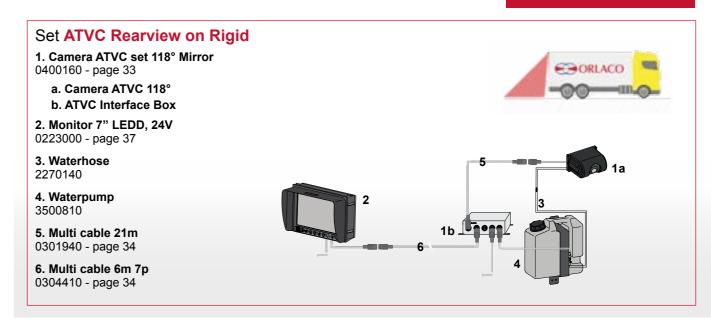
0401971 - PAGE 19 - 20

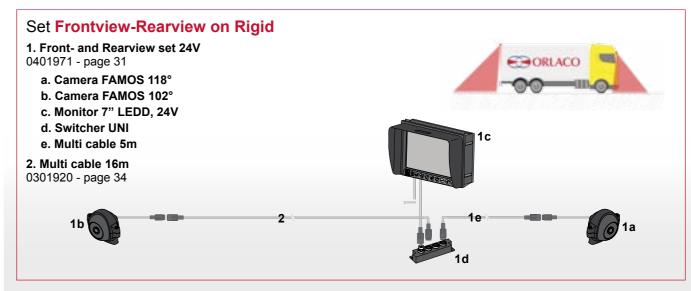
The Frontview system can be expanded with a Rearview camera. This makes optimum use of your monitor.

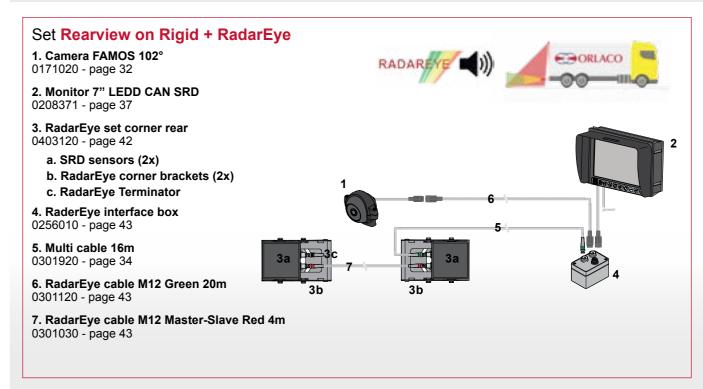


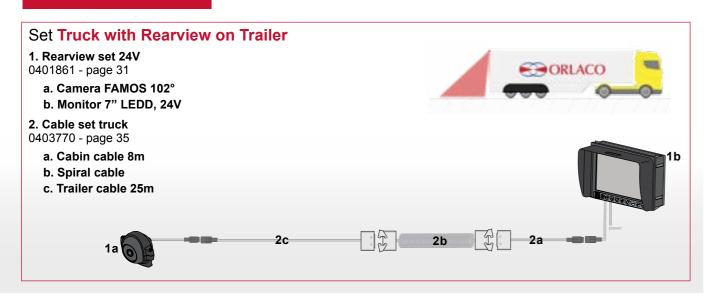


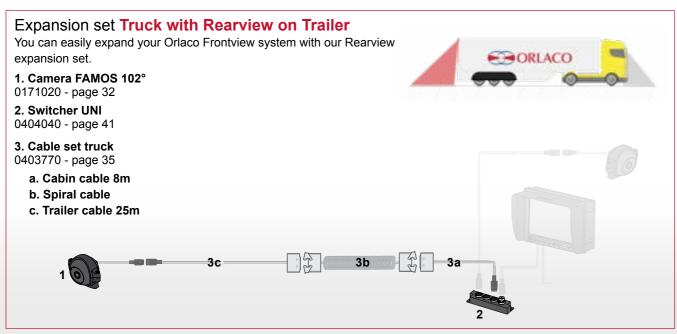


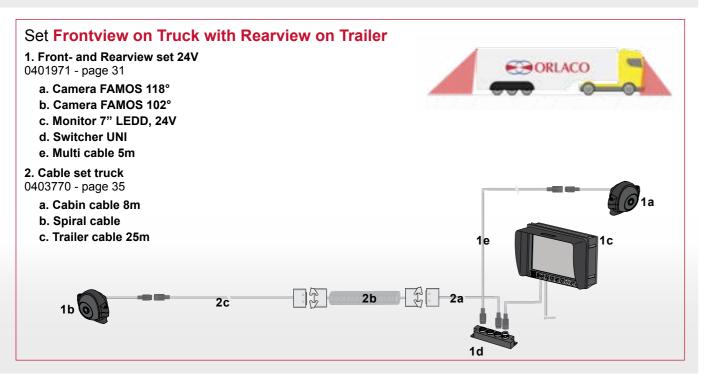


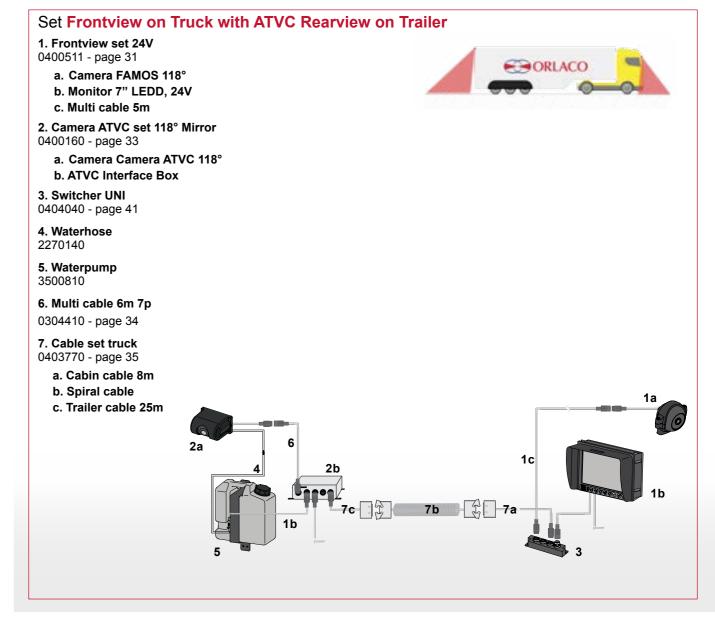


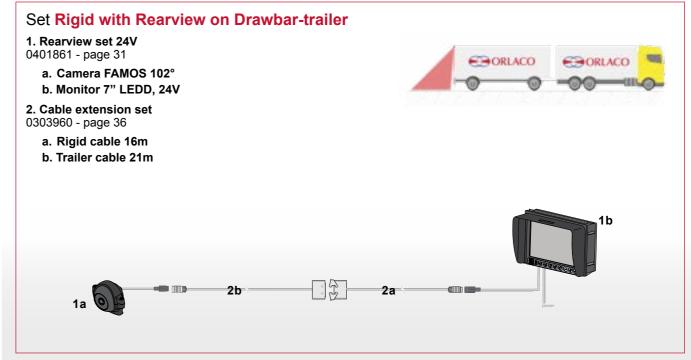


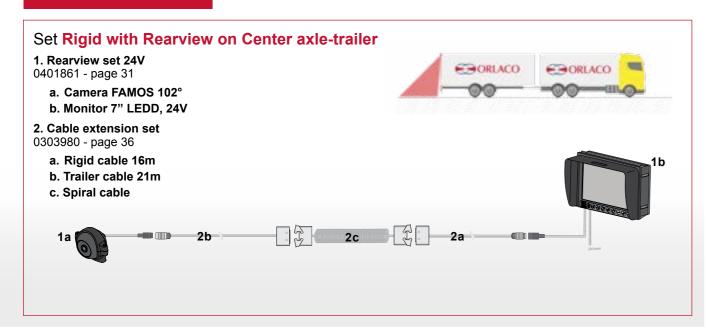


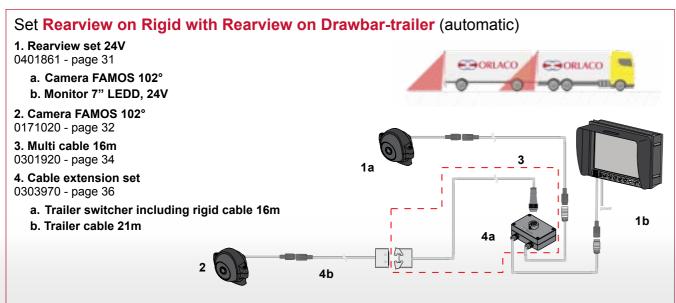


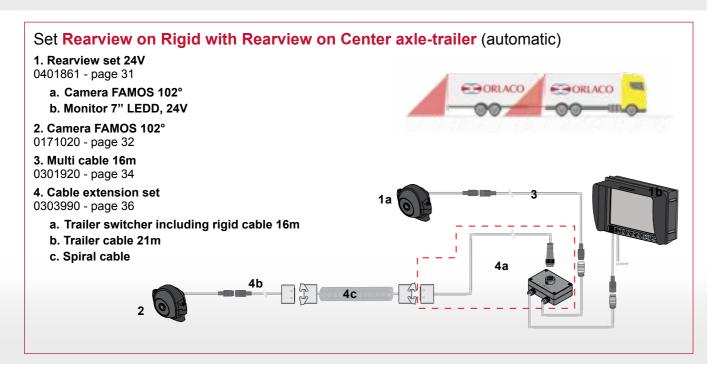


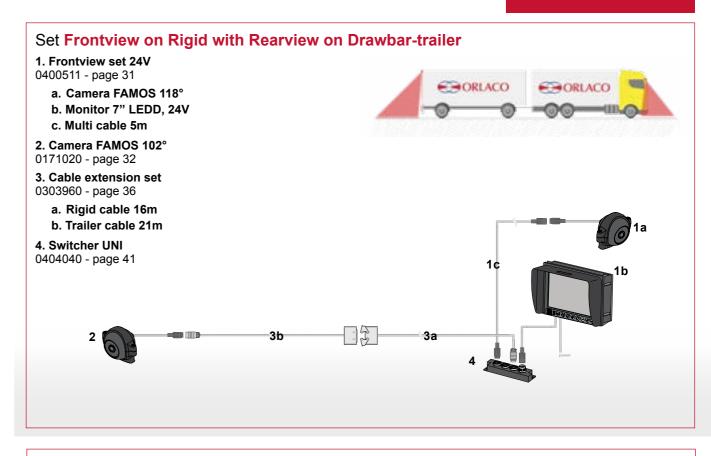


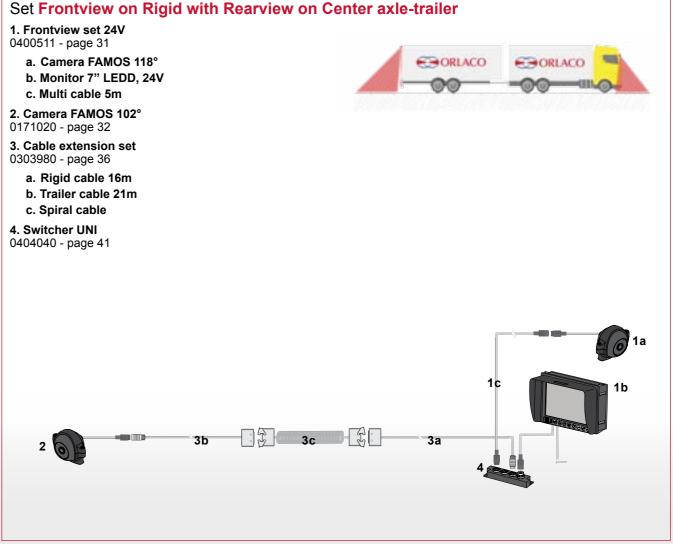


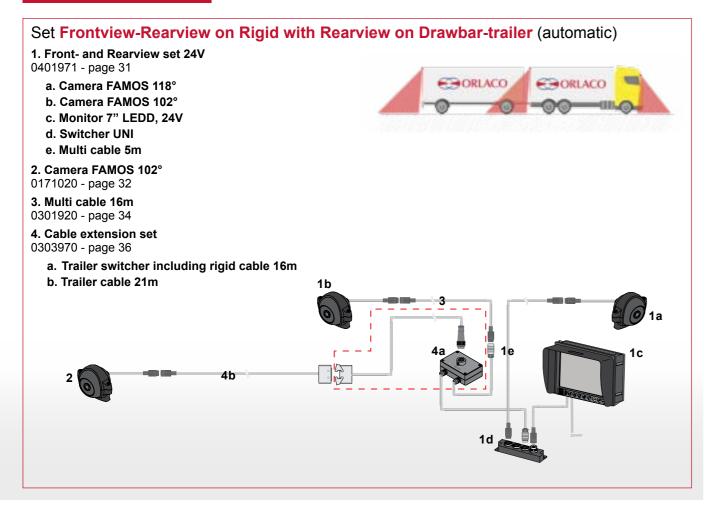


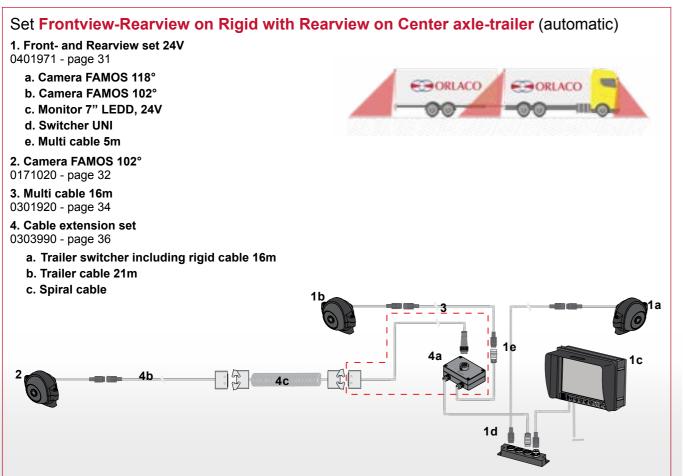


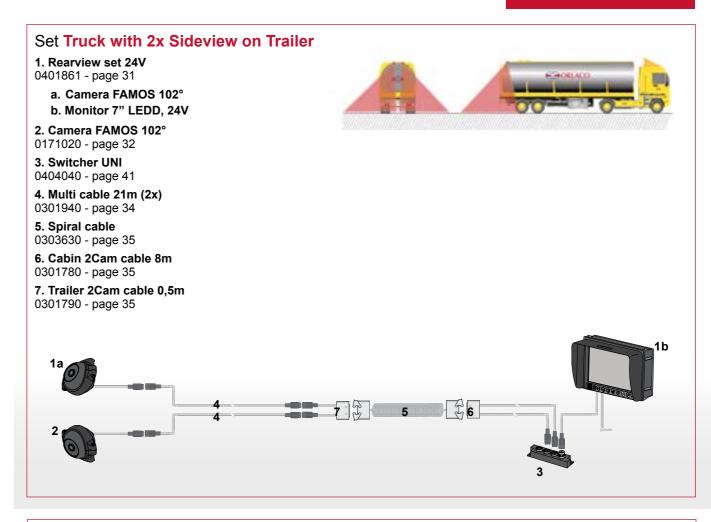


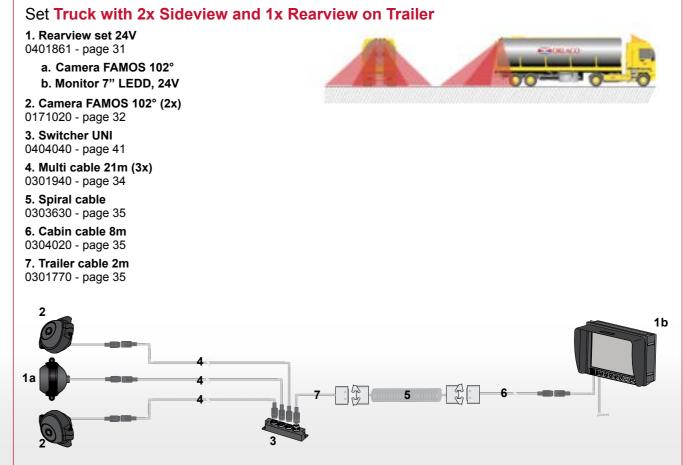


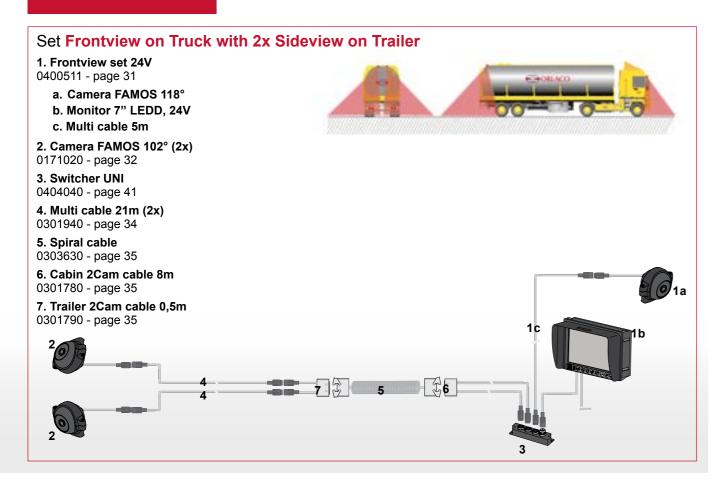


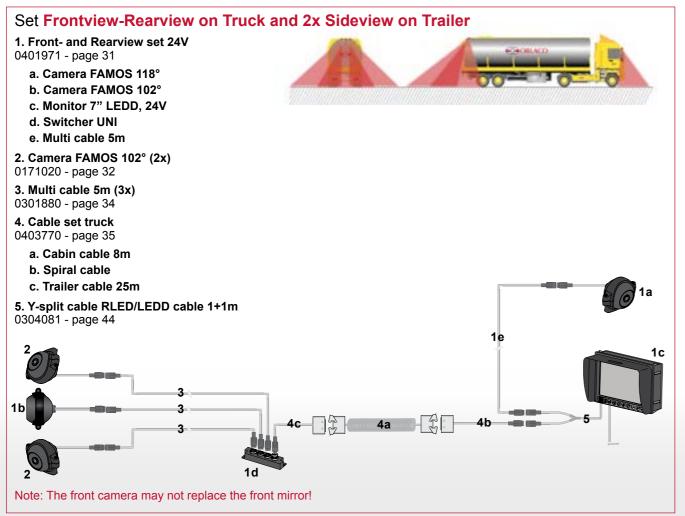


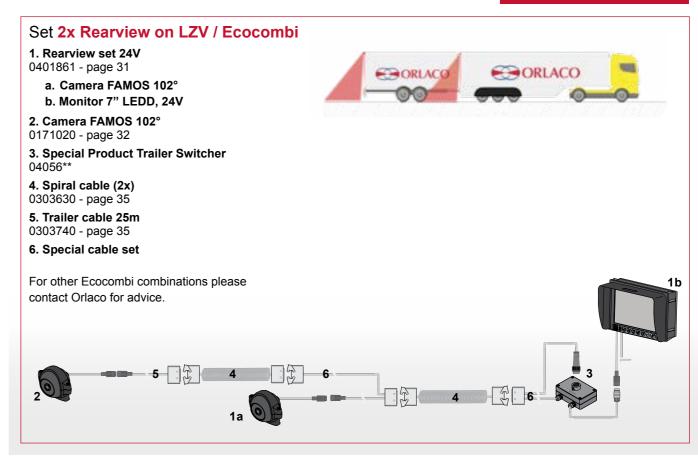


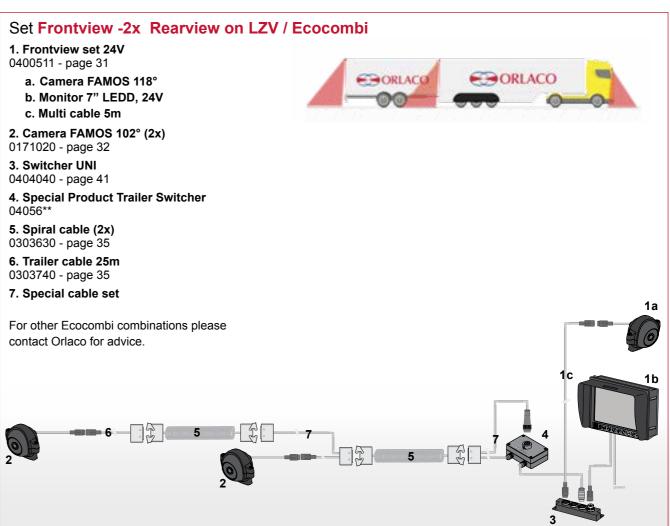


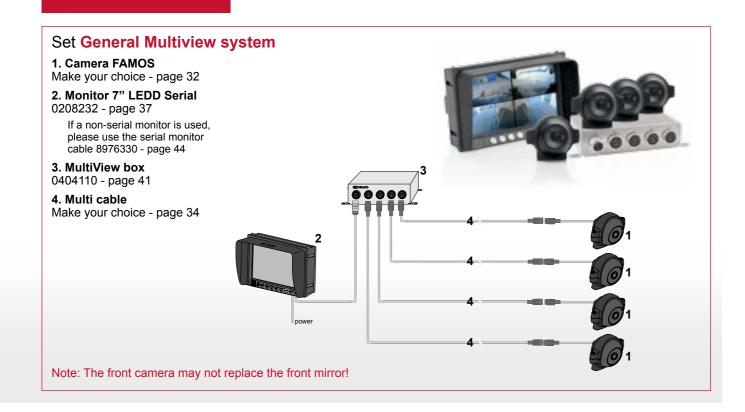












Set ATVC Rearview on Rigid connected to a third party monitor

1. Camera ATVC set 118° Mirror 0400160 - page 33

a. Camera Camera ATVC 118°

b. ATVC Interface Box

2. Waterhose 2270140

3. Waterpump

3500810

Mercedes-Benz

4. Multi cable 6m 7p 0304410 - page 34

5. Adapter cable 4pF

page 45: Make your choice:

Iveco Connect 0303770 Mercedes-Benz Radio/Nav 0304660 Camera MIRROR Pal is required

Sprinter FR7 0306660 NTSC Mirror camera is required Mercedes-Benz 0306680

J9J camera preparation Mercedes Telematic -

0304060

Fleet board dispo pilot II

Bosch Radio/Nav (MAN/SCANIA/DAF) 0303090 Snooper S7000 / S8000 Snooper S6400 / S9000 Volkswagen Crafter

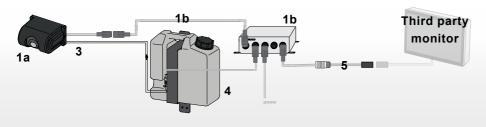
0303770 0306660 NTSC Mirror camera is required TomTom Bridge Pro 827x 0304060 Garmin Fleet 640V 0303770

Alpine 0303770 0304060 Kenwood 0303770 Pioneer 0303770 Trimble 0303770 Volvo Euro 6 0304990 Renault T 0304990

MAN

ORLACO

0304870



For more advice about extensions of these systems with a second and third camera, please contact Orlaco.

Set Rearview on Rigid connected to a third party monitor

1. Camera FAMOS 102º MIRROR SW

0171250 - page 33

2. Multi cable 16m 0301920 - page 34

3. Adapter cable 4pF page 45: Make your choice:

Iveco Connect 0303770 Mercedes-Benz Radio/Nav 0304660 Camera MIRROR Pal is required

Mercedes-Benz

Sprinter FR7 0306660 NTSC Mirror camera is required Mercedes-Benz 0306680

J9J camera preparation Mercedes Telematic -

Fleet board dispo pilot II 0304060 Bosch Radio/Nav MAN (MAN/SCANIA/DAF) 0303090

0304060

Snooper S6400 / S9000 0303770 Volkswagen Crafter NTSC Mirror camera is required

Snooper S7000 / S8000

TomTom Bridge Pro 827x Garmin Fleet 640V

0304870 Alpine 0303770 0303770 Kenwood Pioneer 0303770

ORLACO

0306660 Trimble 0303770 0304990 Volvo Euro 6 0304060 0304990 Renault T 0303770

Third party monitor 3 =

For more advice about extensions of these systems with a second and third camera, please contact Orlaco.

Set Truck with Rearview on Trailer connected to a third party monitor

1. Camera FAMOS 102º MIRROR SW

0171250 - page 33 2. Cable set truck

0403770 - page 35

- a. Cabin cable 8m
- b. Spiral cable
- c. Trailer cable 25m

3. Adapter cable 4pF

Page 45: Make your choice:

Iveco Connect 0303770 Mercedes-Benz Radio/Nav 0304660 Camera MIRROR Pal is required

0306660

Mercedes-Benz Sprinter FR7 NTSC Mirror camera is required

Mercedes-Benz 0306680 J9J camera preparation

Mercedes Telematic -

Fleet board dispo pilot II 0304060

Bosch Radio/Nav MAN 0304870 (MAN/SCANIA/DAF) 0303090 Alpine 0303770 Snooper S7000 / S8000 0304060 Kenwood 0303770 Snooper S6400 / S9000 0303770 Pioneer 0303770 Volkswagen Crafter 0306660 Trimble 0303770 Volvo Euro 6 0304990 TomTom Bridge Pro 827x 0304060 0304990 Renault T Garmin Fleet 640V 0303770



For more advice about extensions of these systems with a second and third camera, please contact Orlaco.

Surround view



Three hundred and sixty degrees of visibility around a vehicle increases safety. The dimensions of a truck make it hard for a driver to get a complete overview of what is happening around his vehicle. Surround view gives him that overview. While manoeuvring and at loading and unloading docks, the system gives the driver maximum visibility on all sides of the truck via a single central monitor. The camera images overlap, allowing the driver to see every person and all objects around his vehicle. This greatly increases safety and efficiency. At street level, the surrounding area of the vehicle is clearly visible, even the corners. People and objects captured on the camera are shown in real size. This gives the driver an immediate, clear overview of the situation.

- · Surround view can be applied on any type of vehicle.
- Increased visibility when manoeuvring in narrow streets and busy areas.
- Images available: 180° , 270° or 360° .
- Surround view offers an overview of objects and people around a vehicle. They are always visible, thanks to overlapping camera images.
- Suitable for both 7" and 12" Orlaco monitors.
- Operating temperature between -40° and +85°C.
- · A maximum of four different overviews can be programmed.
- · No time-consuming calibration of cameras.
- Surround view can be designed and programmed in accordance with the customer's wishes.
- · Contact Orlaco for more information and advice.



Forward manoeuvring



Standard sets

0400511 / 0400270 Frontview set 24V / 12V

The Orlaco Frontview set provides the required visibility at the front of the truck.

- Camera FAMOS PAL 118° (0171010 page 32)
- Monitor 7" LEDD, 24V (0221000) page 37) /
- Monitor 7" LEDD, 12V (0208203) page 37) /
- Multi cable 5m (0301880 page 34)

0400521 Cabin sideview set 24V

The Orlaco cabin sideview set provides the required visibility at the front of the truck. Not approved for mirror replacement.

- Camera FAMOS PAL 129° (0171000 page 32)
- Monitor 7" LEDD, 24V (0221000) page 37)
- Multi cable 5m (0301880 page 34)

0401971 Front- and Rearview set 24V

The Orlaco Front- and Rearview set provides the visibility at the front and the back side of the truck.

- Camera FAMOS PAL 118° (0171010 page 32)
- Camera FAMOS PAL 102° (0171020 page 32)
- Monitor 7" LEDD , 24V (0221000 page 37)
- Multi cable 5m (0301880 page 34)
- Switcher UNI (0404040 page 41)

Any required cables for the Rearview camera can be ordered separately. (see page 34)

0401981 Cabine side- and Rearview set 24V

The Orlaco Cabine side-and Rearview set provides the visibility at the front and the back side of the truck. Not approved for mirror replacement.

- Camera FAMOS PAL 129° (0171000 page 32)
- Camera FAMOS PAL 102° (0171020 page 32)
- Monitor 7" LEDD, 24V (0221000 page 37)
- Multi cable 5m (0301880 page 34)
- Switcher UNI (0404040 page 41)

Any required cables for the Rearview camera can be ordered separately. (see page 34)

0401861 Rearview set 24V

The Orlaco Rearview camera lets you see the area immediately behind the truck. The monitor in the cab automatically switches over to this camera if you select the reverse gear.

- Camera FAMOS PAL 102° (0171020 page 32)
- Monitor 7" LEDD, 24V (0221000 page 37)

Any required cables for the Rearview camera can be ordered separately. (see page 34)

0400910 / 0400920 Set RLED 102° / 118° 24V

- Camera FAMOS PAL 102° (0171020 page 32) /
- Camera FAMOS PAL 118° (0171010 page 32)
- Monitor 7" RLED , 24V(0223000 page 37)

Any required cables can be ordered separately. (see page 34)







Or design your system yourself

Step 1: Select your camera

Step 2: Select your desired cable

Step 3: Select your monitor

Step 4: Select the required options

It is also possible to configure your system online on our website: www.orlaco.com

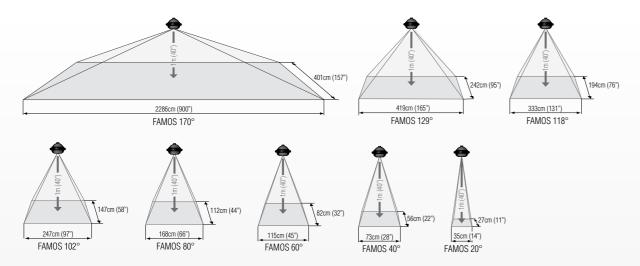
Whatever you select, the system can be easily installed and is plug-and-play.

Note: For two or more cameras a Switcher, Y-split cable or MultiView Box and additional cables are required. Contact us for support.

The qualifications of our AMOS and FAMOS Compact Cameras

- · Next generation CMOS sensor
- Light sensitivity 0.05 lux
- Integrated Safety ticker to show that Heated lens glass, therefore no camera is running and active
- · Impact and vibration proof
- · Operating temperature between -40°C to +85°C
- problems with condensation or frost
- · Fixed lens

- · IP68 dust- and waterproof according to IEC 60529
- The camera has a 0.5m cable including a waterproof molded 4p connector male



Cameras FAMOS

Туре	Art. no. PAL	Art. no. NTSC
20°	0171060	0171160
40°	0171050	0171150
60°	0171040	0171140
80°	0171030	0171130
102°	0171020	0171120
102° MIRROR	0171220	0171240
118°	0171010	0171110
118° MIRROR	0171210	0171230
129°	0171000	0171100
170°	0171070	0171170

- · Chemically hardened lens
- · Automotive molding-filled housing, watertight IP69K according to DIN 40050-9
- · Improved EMC-standards
- · Optimized impact- and vibration-resistance

Cameras FAMOS MIRROR SW

Camera with mirrored image and guiding lines.

Art. no. NTSC Type Art. no. PAL 102° MIRROR 0171250 0171260



Cameras AMOS IR LED

Day/Night camera including 15 High Power Infrared LEDs 850nm.

Туре	Art. no. PAL	Art. no. NTSC
69°	0146200	0146220
118°	0146210	0146230
118° MIRROR	0146240	0146250

- · Chemically hardened glass
- Nitrogen-filled housing, watertight IP69K according to DIN 40050-9



Cameras AMOS ATVC Set (All Time Vision Camera)

Self cleaning camera system by a rotating glass tube and fluid.

Туре	Art. no. PAL	Art. no. NTSC
118° MIRROR	0400160	0400260

- Including control unit for Input/Output ATVC
- Excluding water pump with 6 liter reservoir (3500810)
- Excluding water hose (2270140)

installing the Compact Camera.

• Excluding extension cable camera to Input/Output ATVC



0403310 Shock-absorbers for Compact Camera In situations where shock absorption plays a major role, we recommend that the specially developed shock absorbers are used when



The advantages of Orlaco cables

- All cables are specially developed by Special cables are available for Orlaco
- · ADR approved

- various circumstances
- · Resistant to oil and petrol
- · Watertight cable connectors
 - Operating temperature -40°C to +85°C





This standard cable can be used if no special requirements like mechanical protection or dynamic movement of the cable

Including 4p molded connectors:

0301960	1m	0301870	2m
0301890	3m	0301880	5m
0301910	7,5m	0301930	8m
0301950	9m	0301900	11m
0301920	16m	0301940	21m
0301990	40m		

Including 7p molded connectors:

0304420	0,5m	0304260	2m
0304410	6m	0304610	11m
0304620	16m	0305030	21m



0304580

Designed for dynamic use.

· Soft cover with small bend radius

Including 4p molded connectors:

11m

0304371	0,5m	0304281	1m	
0305341	3,5m	0304341	5m	
0304381	6m	0304391	8m	
0304431	9m	0304441	10m	
0301811	11m	0304451	12m	
0301731	15m	0301831	20m	
Including 7	p connectors:			
0304460	3m	0304470	4m	
0304480	5m	0304490	8m	
0304560	9m	0304570	10m	



1220110	Multi cable 1x coax, 2x power, 1x data
1220170	Multi cable 1x coax, 5x wires
1220250	Multi cable 1x coax, 12x wires PUR
1220350	Multi cable 2x coax, 5x wire PUR
1220600	Dynamic cable 1x coax, 5x wire PUR
1220900	Power cable 7x wire AWG20
1222000	Coax cable 75 OHM RG59

0304590 17m

Any required connectors can be ordered separately. (see page 46)

Truck- and Trailer cables

- · Oil and petrol resistant
- IP67 Watertight

0304020 Cabin cable 8m

Cable suitable for lead through on truck.

- Fitted with 4p molded male and 10p Harting female connectors
- · Including extra mounting housing

0301780 Cabin 2Cam cable 8m

Two camera cable suitable for lead through on truck.

- Fitted with two 4p molded male and 10p Harting female connectors
- · Including extra mounting housing



0303630 Spiral cable 3,5m

3,5m spiral cable between truck and trailer.

- Fitted with 10p Harting connectors
- Double coax



0301770 Trailer cable 2m 0303740 Trailer cable 25m

Cable suitable for lead through on trailer.

• Fitted with 4p molded female and 10p Harting male connectors

0301790 Trailer 2Cam cable 0.5m

Two camera cable suitable for lead through on trailer.

• Fitted with two 4p molded female and 10p Harting male connectors



0303870 Swivelling arm cable 11m

Cable suitable for lead through on truck/cabin.

- Fitted with 4p male connector and 10p Harting female connector
- Multi cable fitted with 10m protection hose



0403770 Cable set for truck - trailer

Cable set for connecting the camera on the trailer.

This set contains:

- 0304020 Cabin cable 8m
- 0303630 Spiral cable 3,5m
- 0303740 Trailer cable 25m







Cable extension sets

0303960 Cable extension rigid - drawbar trailer

Two cables suitable for lead through on rigid and drawbar trailer.

This set contains:

- 16m multi cable 4p male 10p female Harting
- 21m multi cable 4p female 10p male Harting
- · Including push button (for manually switching between cameras)



0303970 Cable extension rigid - drawbar trailer (automatic)

Two cables suitable for lead through on rigid and drawbar trailer.

This set contains:

- 16m multi cable 7p male 10p female Harting
- 21m multi cable 4p female 10p male Harting
- · Including Trailer switcher (Switches automatically on



0303980 Cable extension rigid - center axle trailer (manual)

Two cables suitable for lead through on rigid and center axle trailer.

- 16m multi cable 4p male 10p female Harting
- 21m multi cable 4p female 10p male Harting
- Spiral cable 3,5m, 10p Harting connectors
- · Including push button (for manually switching between cameras)



0303990 Cable extension rigid - center axle trailer (automatic)

Two cables suitable for lead through on rigid and center axle trailer.

- 16m multi cable 7p male 10p female Harting
- 21m multi cable 4p female 10p male Harting
- Spiral cable 3,5m, 10p Harting connectors
- · Including Trailer switcher (Switches automatically on connection)

The possibilities offered by Orlaco LED monitors

- · Automotive 7inch TFT liquid crystal display module, LED backlight
- · Operating temperature between -40°C to +85°C
- · Impact and vibration resistance meet the stringent requirements
- · Power protected against:
- Induction voltages

- Load dumps
- Over- and undervoltage
- Mirror image setting
- · High resolution pixel WVGA 800xRGBx480
- · Brightness automatically adjusts to the ambient light
- · Option of a marker line per camera

on the screen for the optimum determination of distance

- · Integrated sun visor
- IP67 according to IEC 60529
- Full On-Screen-Display (OSD) in 12 languages
- · Watertight molded connectors



Monitors LEDD

For double DIN slide opening in the dashboard

0221000 Monitor 7" LEDD, 24V

- 2m multi cable (power) open wired, 2m multi cable (video) including 4p molded female connector
- Input Voltage 18...30V/DC +/-10%

0208203 Monitor 7" LEDD, 12V

- 2m multi cable (power) open wired, 2m multi cable (video) including 4p molded female connector
- Input Voltage 12...60V/DC +/-10%

0208232 Monitor 7" LEDD Serial

- 6m multi cable (power) open wired, 6m multi cable (video) with 7p female connector
- For serial connection (MultiView box)
- Input Voltage 12...60V/DC +/-10%

0208371 Monitor 7" LEDD CAN SRD 6

- 6m multi cable (power) open wired, 6m multi cable (video) with 7p female connector
- Specially designed for RadarEye systems (see page 42-43)
- Input Voltage 12...60V/DC +/-10%

Monitors RLED 7"

User-adjustable 132mm mounting bracket

0223000 Monitor 7" RLED R 2, 24V

- 2m multi cable (power) open wired, 2m multi cable (video) including 4p molded female connector
- Input Voltage 18...30V/DC +/-10%
- · For 12V applications, please contact Orlaco

0208632 Monitor 7" RLED Serial R 6

- 6m multi cable (power) open wired, 6m multi cable (video) with 7p female connector
- For serial connection (MultiView box)
- Input Voltage 12...60V/DC +/-10%

Monitors RLED 12"

0411130 Monitor 12" RLED Serial R 6

- 6m multi cable (power) open wired, 6m multi cable (video) with 7p female connector
- · User-adjustable 190mm mounting bracket
- For serial connection (MultiView box)
- Input Voltage 12...60V/DC +/-10%





OPTIONS

Mounting means - LEDD monitor

Brand	Model	DDIN slot	Necessary mounting brackets
DAF	Euro 5 CF/XF	Yes	None
DAF	Euro 6 CF/XF/LF	Yes	None
Iveco	All models	No	0400610 or 0400600
MAN	All models	No	0400610 or 0400600
Mercedes-Benz	Actros Euro 5	Yes	0400610 or 0400600
Mercedes-Benz	Actros Euro 6	No	0400610 or 0400600
Mercedes-Benz	Other models	No	0400610 or 0400600
Renault	Euro 5 Premium / Euro 6 Renault T	Yes	0400610 or 0400600
Renault	Magnum	Yes	0400630
Renault	Other models	No	0400610 or 0400600
Scania	Long dashboard: Euro 5 / Euro 6	Yes	None
Volvo	Euro 5 FM / FE	Yes	None
Volvo	Euro 5 FH	No	0400680
Volvo	Euro 6 FM	Yes	None
Volvo	FL	No	0400610 or 0400600





0400610 Monitor mounting bracket For assembly of the Monitor 7" LEDD.

• ABS + aluminium

0400600 Monitor mounting bracket flexible For flexible assembly of the Monitor 7" LEDD.

• ABS + aluminium



Mounting means - Compact Cameras

0401270 Camera bracket

Compact bracket specially designed for the Compact Camera.

- Cap can be resprayed in the color of the vehicle
- Including mounting kit
- · Compact Camera is not included

0401210 Camera bracket with extension

Extended bracket specially designed for Volvo FM / FH Frontview and Mercedes-Benz.

- · Including mounting kit
- · Rubber extension part
- · Compact Camera is not included



0402280 Camera Extension 155 Stainless steel

Extended heavy duty bracket specially designed for Rearview.

- 155mm extension
- Including camera bracket (0401270)
- · Stainless steel housing
- Including mounting kit
- · Compact Camera is not included



Camera extension brackets

Specially designed for the Compact Camera. Matches the hole pattern of the Compact Camera bracket.

Stainless steel

0402250 Camera extension 155mm

0402270 Camera extension 250mm



0403400 Compact Camera magnet bracket For quick mounting of Compact Camera on steel profiles.

8400610 Compact Camera bracket Assembly set for Compact Camera.





0402450 Camera Housing Dome

Ceiling mount for Compact Camera.

- Aluminum housing
- · Including mounting hardware
- · Compact Camera is not included



0401260 Quick coupling Compact Camera

For moving the Compact Camera between various objects.

- · Including two attachment plates
- · Stainless steel
- · Compact Camera is not included



Covers

Cover specially designed for the Compact Camera.

· Stainless steel

0402320 Protective cover



0402360 Aerodynamic cover

0402310 Aerodynamic cover + nozzle

The nozzle allows high pressure cleaning of the camera lens.

· Hose and water tank are not included



Switchers

0405600 Trailer switcher

For connecting the Rearview cameras to the rigid and trailer

- · Switches automatically on connection
- · Including 16m multi cable 7p 10p Harting

Input and power supply for three cameras and in combination with a Y-split cable: four cameras.

• Cameras can be switched over automatically or manually

0404040 Switcher UNI

- Waterproof IP54 according to IEC 60529
- 4p output for monitor



- Waterproof IP67 according to IEC 60529
- 7p output for monitor
- · Only in combination with a Serial monitor



- Waterproof IP67 according to IEC 60529
- 4p output for monitor





0404070 Switcher 4Cam

This video switcher for third party monitors has 4 video inputs and 1 video output

- · Connect up to 4 cameras (PAL or NTSC) to a third party monitor (only applicable for third party monitors)
- Including 3,85m power cable



The MultiView box is an advanced video imaging system for up to 4 cameras. There are many possibilities of different split views in 5 selectable video channels.

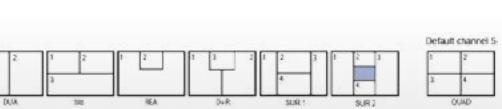
- · Stainless steel housing
- A MultiView box can only be connected to an Orlaco Serial Monitor or via the Serial Cable 6m (8976330) when a non-serial monitor is used

0404110 MultiView box

• 4 camera inputs (4x Compact Camera)

0404150 Multiview box dual mode

• pre-progammed splitsscreen



Preset view options for channel 1-4.

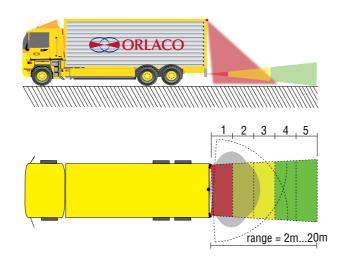
RadarEye unites visibility and active detection



Orlaco has developed this radar unit in addition to the camera-monitor systems. By combining the vision solution with an active signaling system, RadarEye offers additional safety and efficiency.

RadarEye is an integrated active view system designed to detect and see objects in zones obscured from the driver's view. The radar system detects stationary as well as moving objects in a designated coverage area. With this view system the driver is actively warned with audible tones that increase in rate as objects come closer. When an object is detected it can be seen on the monitor and the driver can respond immediately. This prevents damage to the drivers truck and any other equipment he may reverse into. The radar units have a rugged design, are shockproof, waterproof and is not influenced by the environment, such as snow, rain, mud and or temperature changes.

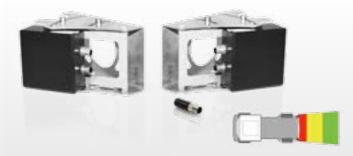
- RadarEye can be used on various machines
- RadarEye is capable of visualizing the radar-zones on the display. As soon as an object enters the zone it will activate colored dots (default setting) or a transparent visualization (standard/custom preset settings) to make the driver aware of the potential danger
- · 2...20m detection area, divided in 5 equally sized segments
- Separation distance: 1-4m (configurable)
- Antenna beam horizontal: 70°(typ.), vertical: 11°(typ.)
- Operating temperature between -40°C to +85°C
- Obstacle reaction delay 50ms
- Orlaco Monitor CAN SRD is required (see page 37)
- RadarEye can be extended with multiple sensor and camera units for all around detection and visibility
- · Please contact Orlaco for advice and installation





You Tube

Check our demo RadarEye videos on the Orlaco YouTube channel.



RadarEye Sets

0403120 Set SRD Corner Rear

Active Rearview system for corner mounting.

- · Including SRD sensors, brackets and terminator
- Interface Box CAN/SRD/camera is required (0256010 or 0504820)
- · Cables, camera and monitor CAN SRD are not included



0403100 Set SRD Center Rear

Active Rearview system for center mounting.

- Including SRD sensors, bracket, cable master-slave (0301080) and terminator
- Interface Box CAN/SRD/camera is required (0256010 or 0504820)
- · Cables, camera and monitor CAN SRD are not included

RadarEye Interface boxes

0256010 Interface Box CAN/SRD/camera

The Interface Box is designed to connect SRD sensors to camera and CAN SRD monitor.

0504820 Interface Box with Ext. speaker CAN/SRD/camera

The Interface Box is designed to connect SRD sensors to a camera, CAN SRD monitor and external speaker.

- Set consists of: External speaker and Interface Box
- Sound pressure speaker: 85dB (+/-3dB) distance 1m





RadarEye Cables

Cable M12 Green

Connection cable between Interface box and master SRD sensor or connection cable between slave SRD sensor and next SRD sensor.

0301050	5m	0301060	10m
0301070	15m	0301120	20m
0301130	25m	0301140	30m



Connection cable between master SRD sensor and slave SRD sensor.

0301080	0,25m	0301020	1m
0301030	4m	0301040	8m
0301090	16m		



RadarEye Brackets

0401330 Bracket SRD Sensor Corner Rear

Mounting bracket for SRD Sensor for corner mounting

- · Stainless steel
- · SRD sensor not included

0401320 Bracket SRD Sensor Center Rear

Mounting bracket for SRD Sensor for center mounting

- · Stainless steel
- · SRD sensors not included

RadarEye Parts

Please contact Orlaco for advice

0004310 SRD sensor CAN Horizontal

Short Range Detection (SRD) sensor for integration in active view system (RadarEye).

• Connectors position: Side

0004320 SRD sensor CAN Vertical

Short Range Detection (SRD) sensor for integration in active view system (RadarEye).

Connectors position: Top / Bottom

0350110 M12 Terminator 120 Ohm

120 Ohm resistor for terminating CAN bus.













Video distributor

0407000 Orlaco video distributor

For connecting a second and third Orlaco monitor.

- 12V/DC
- · Cables and connectors are not included



Interface / Power supply

0004600 Power supply 9-36V

- · Maximum cable length 200m
- Power input 9-36V/DC
- Power output 12V/DC



0256270 Monitor activator

This activator can be adjusted for automatic activation of the front camera at speeds between 0 and 30 km per hour.

· Including connector for tachometer/speed meter output







Digital MPEG2 video recorder

0000200 Easysolid Recorder

- CompactFlash storage
- · Compact stainless steel housing
- Video loop function
- 10-36V/DC
- · Automatic timestamp
- Including 32GB CF-card for max 72 hours of storage and CF-card reader





Y-split and power cables

0304081 Y-Split cable LEDD

- With two 4p molded female connectors (video) and open wire cable (power)
- For connections 2 to 4 cameras (with Switcher)

8975171 Cable LEDD 2m

 2m multi cable (power) open wired, 2m multi cable (video) including 4p molded female connector

8976330 Cable Serial 6m

A non-serial LEDD monitor can be connected to the MultiView Box (0404110) via this cable.

• 6m multi cable (power) open wired, 6m multi cable (video) including 7p female connector

Adapter cables

0304000 Adapter cable 4pF - 4pF

0304050 Adapter cable 4pM - 4pM

Interface cables

To connect an Orlaco MIRROR Compact Camera to a third party monitor. Note: with sideview camera always use adapter cable in combination with 0404070 Switcher 4Cam.

0303770	Adapter cable 4pF - Cinch / power wires
	(horse Comment Alaine Diament Komment IVO Trimble

(Iveco Connect, Alpine, Pioneer, Kenwood, JVC, Trimble, TomTom, Garmin Fleet 670V)

0304670 Adapter cable Truckmate

0303860 Adapter cable 4pF - BNC

0304060 Adapter cable 4pF - 3,5mm Jack plug

(Snooper, Mercedes Telematics-Fleetboard dispo pilot II, TomTom Bridge pro 827x)

0304990 Adapter cable m4F

(Volvo FH 4 / FM 4 SID High, Renault T 6YR02)

0303090 Adapter cable 4pF - Bosch (MAN/DAF/SCANIA) radio

0304870 Adapter cable m4F - r4M MAN MMT Monitor

(For vehicles with camera preparation)

0308400 Adapter cable MAN MMT.2 / 2016 - r4M m4

(For vehicles with camera preparation)

0308410 Adapter cable MAN MMT.2 / 2016 - r4M RA m4F

(For vehicles without camera preparation)

0304660 Adapter cable 4pF - Mercedes-Benz radio/navigation*

(For 7" multimedia system without camera preparation)

0306660 Adapter cable - HMI Fakra Female b4F MB Sprinter*

(For MB Sprinter with FR7 camera preparation and VW Crafter,

only in combination with a NTSC camera)

0306680 Adapter cable b4F - HMI Fakra Male b4F*

(For vehicles with camera preparation J9J in combination with an instrument-

display or multimedia system)











*Note: The monitor automatically switches to rearview when reversing. Additional cameras require manual switching (on steering wheel or radio) from navigation to camera view.

Products





Push button

8975760 Push button yellow For manually switching between cameras.



Connectors

1310841 Connector 4p female Gold
This connector is recommended for the multi cable 6mm.

1312001 Connector 4p male Gold
This connector is recommended for the multi cable 6mm.

1310850 Connector 4p female PG9 Gold This connector is recommended for the dynamic cable 9mm.

1312050 Connector 4p male PG9 Gold This connector is recommended for the dynamic cable 9mm.

1311201 Connector 7p female Gold This connector is recommended for the multi cable 6mm.

1322401 Connector 7p male Gold
This connector is recommended for the multi cable 6mm.



Cable disconnection sets

- Watertight
- · With caps

0351070 7p

0351100 10p harting



Connector kit

0351120 Connector kit Connectors to cable 0303630



Spare parts 10p Harting

1399510 Mounting housing

1399610 Female insert

1399500 Housing

1399600 Male insert

2200250 Reducer

2205200 Cable gland

ISO Certifications

All Orlaco products are manufactured according to the latest *Quality Management System Standards*:

ISO/TS 16949 : 2009 ISO 9001 : 2008

Additionally, all Orlaco products are manufactured according to the latest *Environmental Management System Standard*:

ISO 14001: 2004







Type-Approval Certifications

Regulations 10 and 46 are used to determine the Type-Approval for EMC and Indirect Vision (Mirror Directive). R46 describes mirror specifications for truck compliancy. Orlaco Frontview systems meet all these requirements. R10 describes the EMC behavior of the Orlaco Camera and Monitor systems.

TÜV Automotive Certifications

The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) demands additional equipment. Orlaco Camera and Monitor systems and connection cables comply with these regulations.

Compliance

Our Camera and Monitor systems are produced entirely in line with the **CE-marking** and the most recent applicable directives and product standards (e.g. **EMC**, **FCC**, **Machinery**, **R&TTE**). Orlaco products are compliant with **RoHS** and **REACH**.







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dealer

It is Orlaco's viewpoint that optimal vision around every vehicle and vessel should be the norm. It provides safety, less damage, comfort and efficiency. *Vision is our mission*®. A revealing mission. We develop professional vision solutions for every situation:

















Check our website for all our brochures (pdf).



