Monitor 7" RLED

Installation manual
Manual No. IM0973270 A 09

11/2012
English

Art. No.: 0208500
0208520
0208550
0208590
0208603
0208612
0208622
0208632
0208642
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ORLACO

Specialised Camera Solutions

Monitor 7'' RLED

| ⚠️ | **Safety**
In order to guarantee safe operation, these safety instructions must be read before you start using this equipment. |

- Do not open the enclosure. This can cause damage, short-circuiting or electrical shocks.
- Do not expose the equipment to extreme temperatures. This can cause deformation of the enclosure or damage to internal components.
- Repairs may only be made by the manufacturer.
- The equipment must be installed as shown in this manual.

Before you start using this equipment, please read this manual carefully and follow all instructions. This installation manual describes the installation of the equipment, outlines the connection options and explains how to put the equipment into operation. We recommend that you keep this manual in a safe place for reference purposes.

If you have any questions or issues concerning the operation of this equipment, consult the relevant section in the manual or contact the Orlaco Products BV Service department.

All data subject to change without notice. All dimensions are for commercial purpose only. The camera/display systems from Orlaco comply with the latest CE, ADR, EMC and mirror-directive regulations, where applicable. All products are manufactured in accordance with the ISO 9001 quality management system, IATF 16949 quality automotive, ISO 14001 environmental management systems, where applicable.

CERTIFIED IATF 16949   CERTIFIED ISO 9001   C E   E4

Contents

| ⚠️ | **Do not apply voltage to the output power of the monitor!** |

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1. Monitor placement

The correct placement of the monitor depends on the type of the vehicle. Please take note of the following guidelines when installing the monitor.

Obstruction of the field of vision
The monitor must be placed in such a way that the field of vision of surrounding traffic and the work area is obstructed as little as possible.
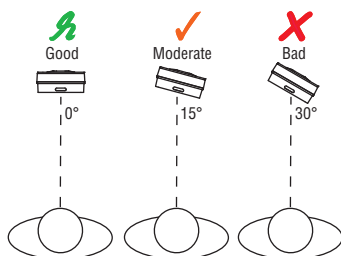
Obstruction of the operation
The monitor may not obstruct the basic operation (the handling of the operation functions and the field of vision on the dashboard) within the vehicle.
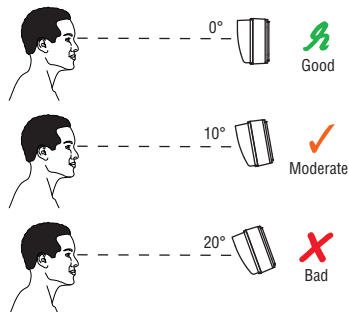The placement of the monitor may not hinder the driver when getting in or out of the vehicle.
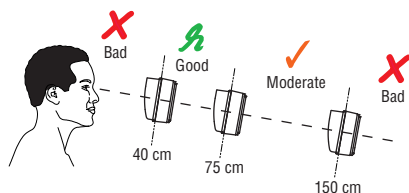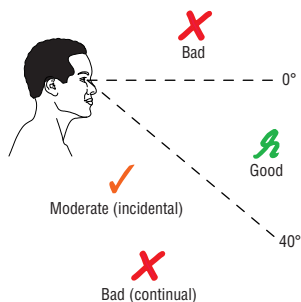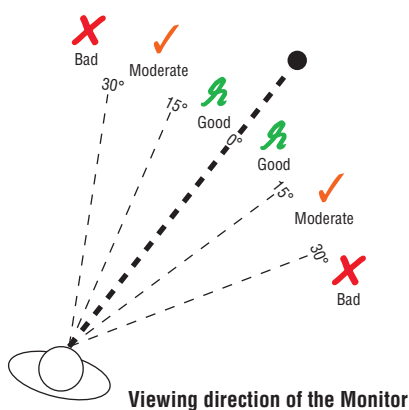
Viewing distance

View point on the Monitor

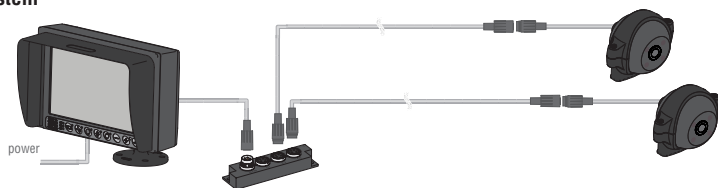**View point on the Monitor**

Posture

Viewing direction of the Monitor
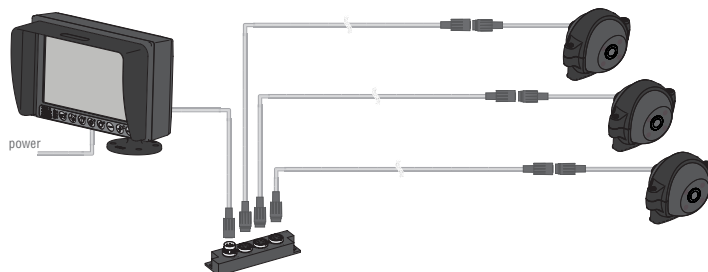
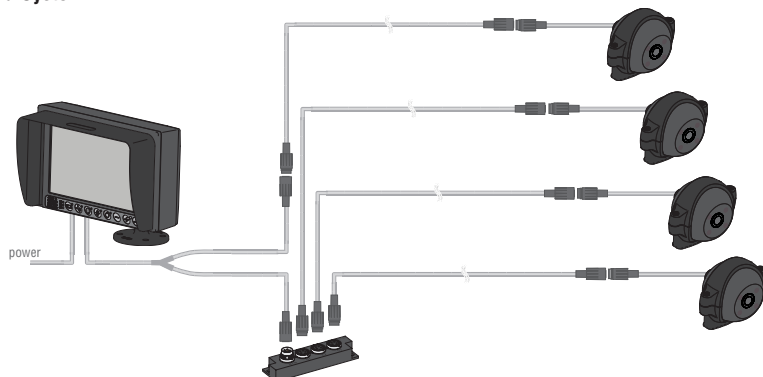## 2. Basic system installations

One Camera System

power

Two Camera System

power

Three Camera System

power

Four Camera System

power

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2.1 Electromagnetic compatibility installation instructions (EMC).

Preferred installation

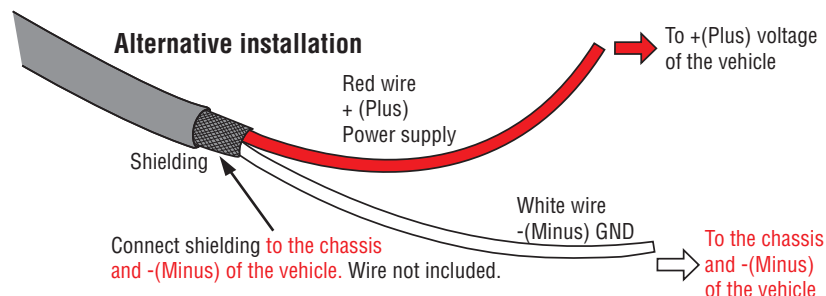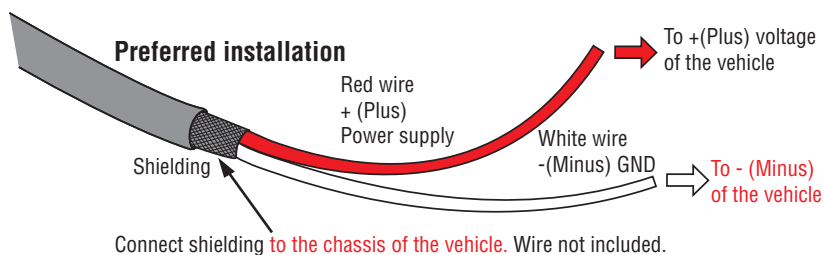Installation especially for forklifttrucks.

Warning! On vehicles with separated powerwiring like electrical forklifttrucks no other installation is allowed, the shielding may **NOT** in any way be connected to the battery:

Color/wire	Function	Vehicle connection:
Red wire	+(plus) power supply	+(plus) voltage of the vehicle (10..60V/Dc, 5A fuse)
White wire	-(minus) GND power supply	-(minus) of the vehicle
Shielding powercable	Eliminates EMC disturbances	Chassis of the vehicle

Alternative installation

If no separate 0V/minus is available on the vehicle and the minus of the battery is connected to the chassis of the vehicle; connection is as follows:

Color/wire	Function	Vehicle connection:
Red wire	+(plus) power supply	+(plus) voltage of the vehicle (10..60V/DC, 5A fuse)
White wire and Schielding powercable	-(minus) GND power supply and EMC	Chassis of the vehicle combined with -(minus) of the vehicle

Preferred installation

To +(Plus) voltage of the vehicle

Red wire + (Plus) Power supply

White wire -(Minus) GND

To - (Minus) of the vehicle

Shielding

Connect shielding to the chassis of the vehicle. Wire not included.

Alternative installation

To +(Plus) voltage of the vehicle

Red wire + (Plus) Power supply

Shielding

White wire -(Minus) GND

To the chassis and -(Minus) of the vehicle

Connect shielding to the chassis and -(Minus) of the vehicle. Wire not included.

3. RLED variants

RLED Art. No.	Special feature	Mask	Video Cable	Bracket	Power Cable	Page
Monitor 7" RLED PL				**Z**	**b4 b5**	
0208500*		Sun mask	0,29 metre 4 pin female	LCD Bracket	0,24 metre 5 pin male	10
Monitor 7" RLED CAN Serial (Cold store)				**R**	**6B CS**	
0208520		Sun mask	6 metre 7 pin female	Adjustable bracket 90mm	6 metre 8 pin male	11
Monitor 7" RLED PL				**R**	**4D**	
0208550*		Monitor mask	4 metre 4 pin female	Adjustable bracket 90mm	4 metre 6 pin male D	12
Monitor 7" RLED PL				**R**	**1D1**	
0208590*		Monitor mask	0,3 metre 4 pin female	Adjustable bracket 90mm	1,1 metre 2 pin D	13
Monitor 7" RLED				**R**	**2**	
0208603		Sun mask	2 metre 4 pin female	Adjustable bracket 90mm	2 metre	14
Monitor 7" RLED 4Cam				**R**	**2**	
0208612		Sun mask	2 metre Y-cable 4 pin female	Adjustable bracket 90mm	2 metre	15
Monitor 7" RLED Serial				**R**	**6B**	
0208622		Sun mask	6 metre 7 pin female	Adjustable bracket 90mm	6 metre 8 pin male	16
Monitor 7" RLED Serial				**R**	**6**	
0208632		Sun mask	6 metre 7 pin female	Adjustable bracket 90mm	6 metre	17
Monitor 7" RLED CAN 4Cam				**Z**	**2**	
0208642		Sun mask	2 metre Y-cable 4 pin female	LCD Bracket	2 metre	18
Monitor 7" RLED (Cold store)				**R**	**4 CS**	
0208672		Sun mask	4 metre 4 pin female	Adjustable bracket 90mm	4 metre	19
Monitor 7" RLED (Cold store)				**Z**	**4 CS**	
0208681		Sun mask	4 metre 4 pin female	LCD Bracket	4 metre	20
Monitor 7" RLED Serial				**Z**	**6**	
0208691		Sun mask	6 metre 7 pin female	LCD Bracket	6 metre	21

*Dedicated OEM product, not for sale!

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RLED Art. No.	Special feature	Mask	Video Cable	Bracket	Power Cable	Page
Monitor 7" RLED PL				**F**	**4**	
0208721*		Sun mask	4 metre 4 pin female	Special bracket	4 metre	22
Monitor 7" RLED Serial				**R**	**11B**	
0208831		Sun mask	11 metre 7 pin female	Adjustable bracket 90mm	11 metre 8 pin male	23
Monitor 7" RLED CAN SRD				**R**	**6**	
0208871		Sun mask	6 metre 7 pin female	Adjustable bracket 90mm	6 metre	24
Monitor 7" RLED (Cold store)				**RC**	**4 CS**	
0208902		Sun mask	4 metre 4 pin female	Adjustable bracket 144mm + Clamp	4 metre	25
Monitor 7" RLED (Cold store) PL				**RC**	**2D65 CS**	
0208922*		Sun mask	2,65 metre 6 pin female	Adjustable bracket 90mm + Clamp	2,65 8 Pin male PL	26
Monitor 7" RLED (Cold store) PL				**RC**	**3.3 CS**	
0208950*		Sun mask	4 metre 4 pin female	Adjustable bracket 144mm + Clamp	4 m 2 pin male PL	27
Monitor 7" RLED (Cold store) PL				**RB**	**4J5 CS**	
0208991*		Monitor mask	4,5 metre 5 pin female PL	Ball joint for bracket	4,5 m 2 pin male PL	28
Monitor 7" RLED CAN SRD 4 Cam				**R**	**7-4**	
0209110		Sun mask	2 metre Y-cable 7 pin female	Adjustable bracket 90mm	2 metre	29
Monitor 7" RLED (Cold store) PL				**R**	**1.2AMP8 CS**	
0209190*		Sun mask	2,6 metre 4 pin female	Adjustable bracket 90mm	1,2 metre 8 pin male E	30
Monitor 7" RLED (Cold store) PL				**R**	**1D2 CS**	
0209300*		Sun mask	1,4 metre 4 pin female	Adjustable bracket 90mm	1,2 metre 3 pin male D	31
Monitor 7" RLED CAN (Cold store) PL					**CS**	
0209310*		Sun mask	0,29 metre 4 pin female	-	0,24 metre 8 pin male	32
Monitor 7" RLED CAN (Cold store) PL				**RB**	**4D CS**	
0209400*		Sun mask	4 metre 4 pin female	-	4 metre 8 pin male	33

*Dedicated OEM product, not for sale!

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4. Technical specifications

Type	Automotive 7inch TFT liquid crystal display module LED backlight.
Resolution	WVGA 800xRGBx480 pixels.
Viewing	70° horizontal and 60° vertical (@ CR≥10).
LED Life Time	30000 Hrs.
Typical performance	Center luminance of white: 600cd/m2, Contrast ratio 650:1, Response time 5 ms (Tr).
**Softwaremenu **	Full On-Screen-Display (OSD) functionality in 15 languages: English, Dutch, German, French, Chech, Hungarian, Italian, Polish, Portuguese, Spanish, Turkish, Swedish, Finnish, Danish, Norwegian.
ABC mode	Improved Auto Brightness Control (ABC) including one-touch day/night setting and adjustable minimum and maximum levels for automatic control.
Operating temperature	-40°C ..+85°C.
Storage temperature	-40°C ..+105°C.

Electrical *

Input voltage range	12...60V +/-10%.
Power consumption	Max 12W (only for the monitor, total power consumption depending on cameras and other peripherals).
Protection	>70V overvoltageprotection, <10V undervoltageprotection, protected against loaddumps, spikes and surges, reverse polarity on all wiring.
Power-output	Nominal 2A +/-10% for powering cameras and other peripherals.
Video input	1Vtt, 75Ω, Pal 50 Hz, 4,43MHz color sub carr. NTSC 60 Hz, 3,58MHz color sub carr.

Mechanical

Surface	Hard coating (3H), with AG LR (Low Reflection) polarizer.
UV Resistance	Exposure to intense direct sunlight (UV radiation) may increase the degradation of the display.
Housing	Color Black, material: aluminium & high impact automotive synthetic thermoplastic polymer.
Shock constancy	Shock and vibration resistant for usage on trucks, cranes, fork-lifts, maritime applications, machinery. Random vibration test 9,73Grms at frequency: 5 to 2000, PSD (g²/Hz) 0,015 to 0,10.
Ingress protection	IP67 according IEC 60529 (dust tight, immersion in water up to 1m for 30 min).
Truck use	Withstand all fluids and materials used in and around trucks like: ammonia solution 5%, ethanol 80-100%, isopropanol 5-10%, soapy water (min. 50% soap per volume), alkaline degreasing compounds(used in high pressure washing equipment).

Certification

Quality & environment	Units are manufactured by Orlaco in the Netherlands; ISO 9001, ISO14001, ISO-TS16949.
Approvals	Approvals in compliance with all relevant EMC- and Automotive directives. Certificates available upon request. This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Green Passport	All materials are compliant to Green Passport requirements according IMO resolution MEPC.197(62) as adopted on 15 July 2011 (Maritime sector: International Maritime Organization concerning the functions of the Marine Environment Protection Committee).

*Different specifications for the Serial Monitors

Electrical

|	
Input voltage range	18...30V +/-10%.
Power consumption	Max 12W (only for the monitor, total power consumption depending on cameras and other peripherals)
Protection	>70V overvoltageprotection, <10V undervoltageprotection, protected against loaddumps, spikes and surges, reverse polarity on all wiring.
Power-output	For powering cameras and other peripherals. Power-output = input voltage. Output current 2A max.
Video input	1Vtt, 75Ω, Pal 50 Hz, 4,43MHz color sub carr. NTSC 60 Hz, 3,58MHz color sub carr.

** Software menu

For the Radar Monitor Art. no. 0208871 and 0209110 applies; Software Menu Full On-Screen Display (OSD) functionality in 8 of languages: English, Dutch, German, French, Italian, Polish, Spanish, Swedish.

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5. Back plate RLED

5.1. Backside Monitor 7" RLED
Back plate with 11 x M5 threaded holes, thread length 8 mm.
Make sure to tighten the screws according torque 2.0 Nm.
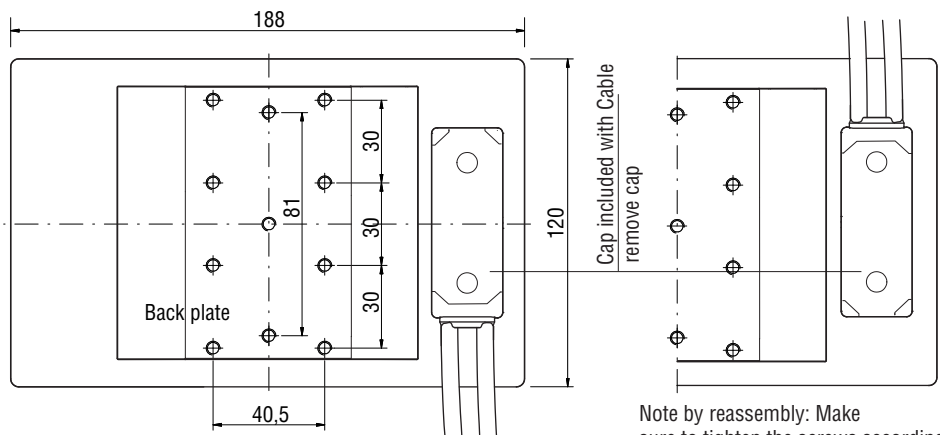
Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 ozf·in.

5.2. Cable connection downwards or upwards and changing cable.
First decide if you want to use a downward or upward connection.
1. Position of the JST connector for a downward connection. Please note that the wires are not twisted.
2. The position of the JST connector for an upwards connection.Turn the JST connector clockwise. Please note that the wires are not twisted.
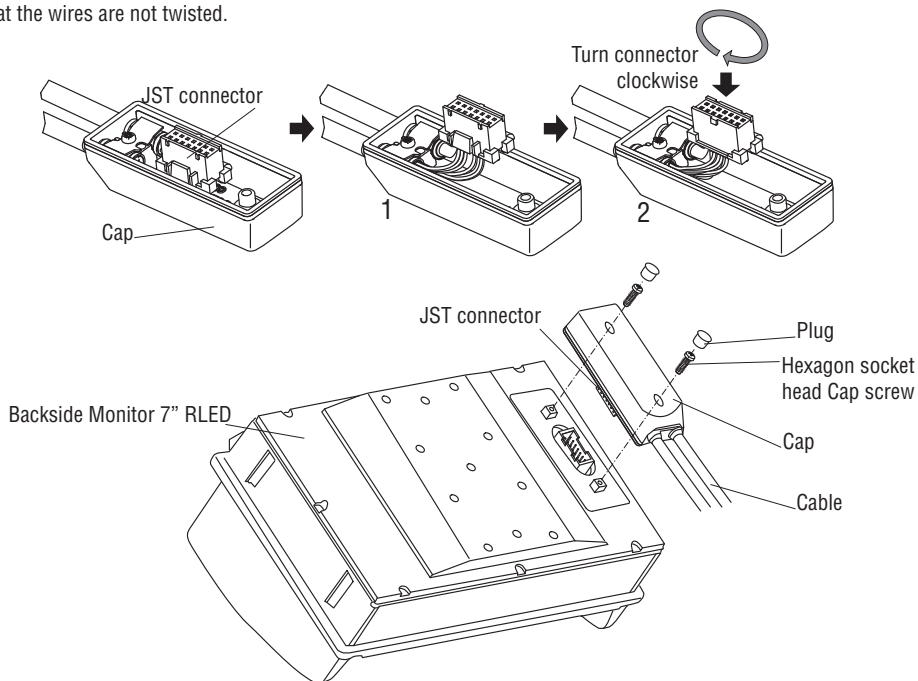
6. Assembly, connections and data RLED

Article number: 0208500

Cables / Connectors	0,24m multicable (power) with 5p male connector, 0,29m multicable (video) with 4p female connector Art. no.: 8976741.
Bracket	Anodized aluminium adjustable mounting bracket is supplied. Art. No. : 8974000.
Weight	1,6kg (Monitor, bracket, cables and connectors).

units in mm

Min. bend radius= 50mm
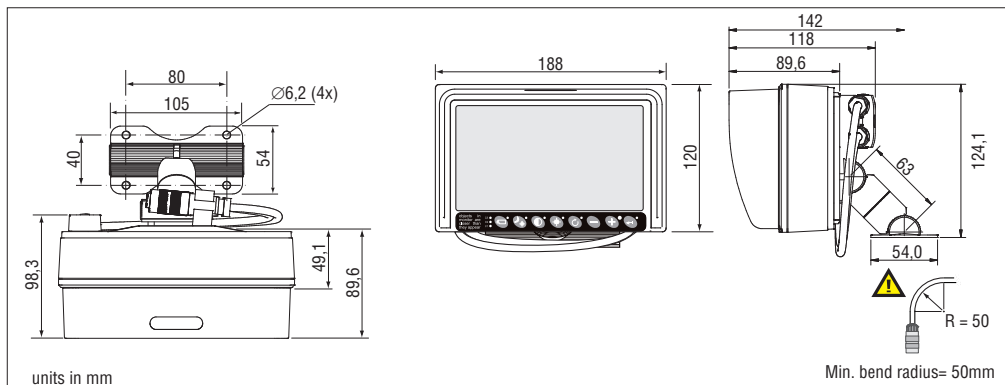
Solder side 5p male connector: (Secure the power input with a 5A fuse)

1 = Red	= Power input: 12...60V/DC
2 = White	= Power input: 0V
3 = Blue	= Cam No. 1 activated at 7...60V/DC*
4 = Brown	= Cam No. 2 activated at 7...60V/DC*
5 = White/Yellow	= Cam No. 3 activated at 7...60V/DC*
6 = Grey	= N.C.
7 = Yellow	= N.C.
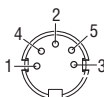
*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest cam. no. has the highest priority.

Solder side 4p female connector:

1 = Coax core	= Video in
2 = Coax shielding	= Video 0V
3 = Red	= Power output: 12V/DC
4 = Black	= Power output: 0V
Shielding	= Ground

Back side

Connectors fixed on the back side of the monitor.

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Installation manual

Article number: 0208520

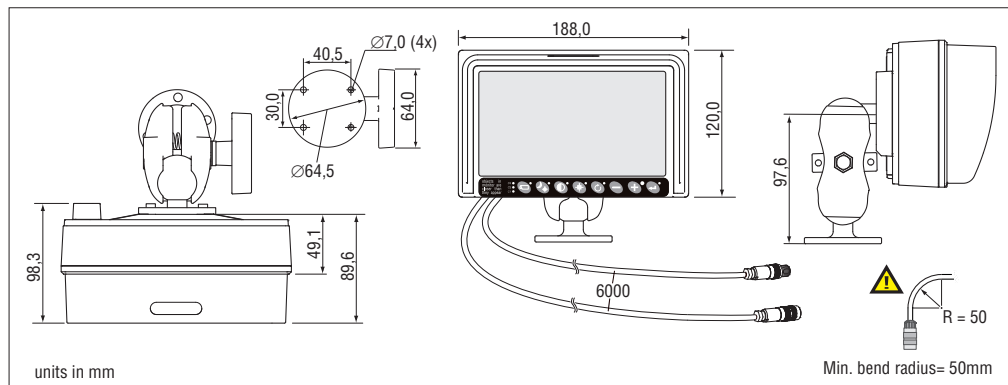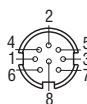|	
Cables / Connectors	6m multicable (power) with 8p male IP67 PG7 AU, 6m cable (video) with 7p female IP67 GOLD 423 connector. Art. No.: 8976251.
Bracket	A clamping user-adjustable mounting bracket is supplied, Art. No. 2015500.
Weight	1,9kg (Monitor, cables and connectors).
Use	Suitable for open-cabin, drive-in/drive-out cold store use.

units in mm

Min. bend radius= 50mm

Solder side 8p male: (Secure the power input with a 5A fuse)
1 = Red   = Power input: 18...30V/DC
2 = White   = Power input: 0V
3 = Blue   = Cam No. 1 activated at 7...30V/DC*
4 = Brown   = Cam No. 2 activated at 7...30V/DC*
5 = White/Yellow = Cam No. 3 activated at 7...30V/DC*
6 = Grey   = Cam No. 4/Speedometer/Tachograph/Zoom in
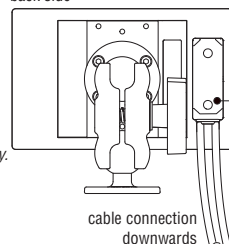7 = Yellow   = Parking Brake (only Front Cam)/Zoom out.
8 = N.C.

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

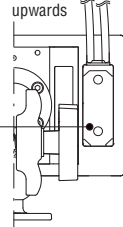Solder side 7p female connector:
1 = Coax core   = Video in
2 = Coax shielding = Video 0V
3 = Red   = Power output: equal to "Power input"
4 = Black   = Power output: 0V
5 = Orange   = RS232 Rx
6 = Yellow   = RS232 Tx
7 = Grey   = RS232 Rx & Tx 0V

back side

cable connection upwards

cable connection downwards

remove cap

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Installation manual

Article number: 0208550
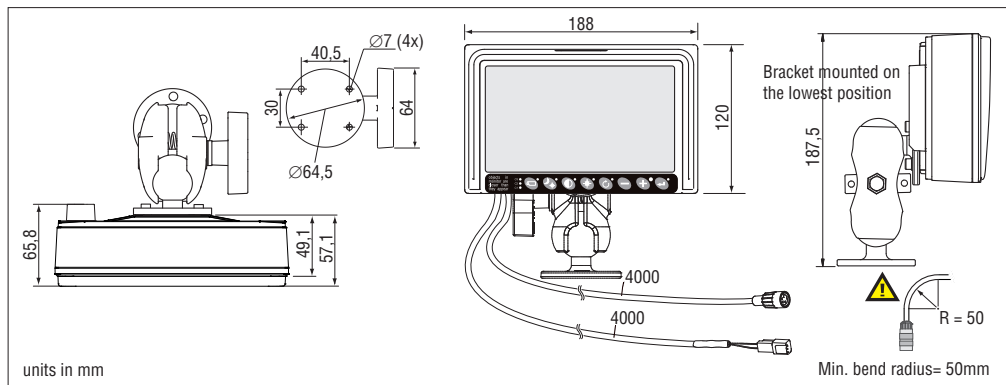
Cables / Connectors	4m multicable (power) with Deutsch DT04-60 6p connector, 4m video cable with 4p molded female connector. Art. No.: 8976283.
Bracket	A clamping user-adjustable mounting bracket is supplied. Art. No.: 2015500
Weight	1,9kg (Monitor, bracket, cables and connectors)

units in mm

Bracket mounted on the lowest position

Min. bend radius= 50mm

R = 50

Deutsch DT04-6p connector: (Secure the power input with a 5A fuse)
1 = Red = Power input: 12...60V/DC
2 = White = Power input: 0V
3 = Blue = Cam No. 1 activated at 7...60V/DC*
4 = Brown = Cam No. 2 activated at 7...60V/DC*
5 = White/Yellow = Cam No. 3 activated at 7...60V/DC*
6 = Grey = Aux 1
7 = Yellow = N.C.

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest cam. no. has the highest priority.

Crimp side
6p male connector

Front side 4p molded female connector:
1 = Coax core = Video in
2 = Coax shielding = Video 0V
3 = Red = Power output: 12V/DC
4 = Black = Power output: 0V
Shielding = Housing
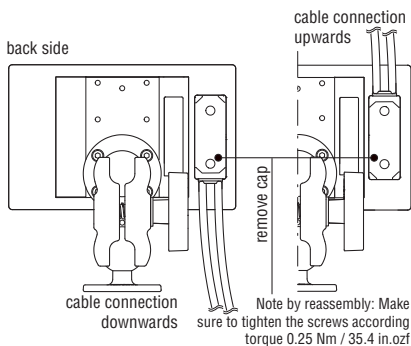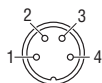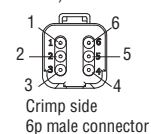
back side

cable connection upwards

remove cap

cable connection downwards

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

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Installation manual

Article number: 0208590
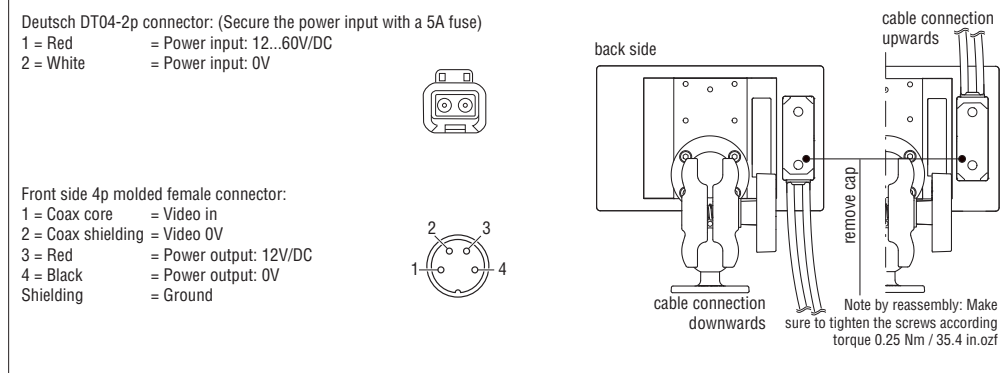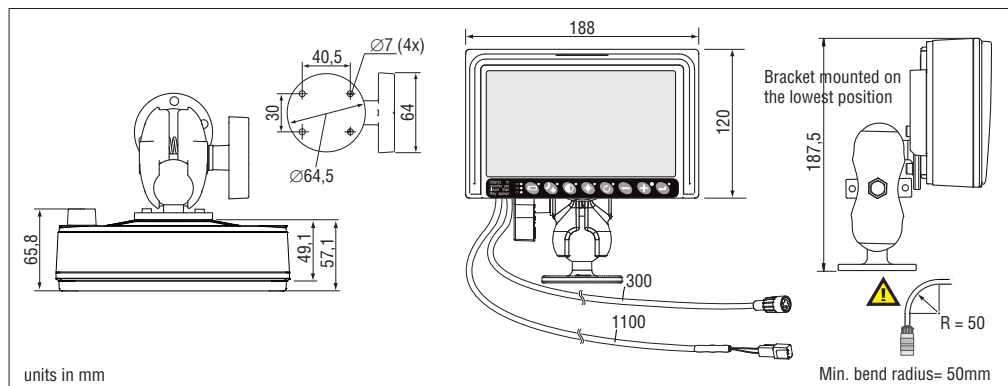
Cables / Connectors 1,1m multicable (power) with Deutsch DT04-2p connector, 0,3m video cable with 4p molded female connector. Art. No.: 8976651
Bracket A clamping user-adjustable mounting bracket is supplied. Art. No.: 2015500
Weight 1,9kg (Monitor, bracket, cables and connectors)

units in mm

Bracket mounted on the lowest position

Min. bend radius= 50mm

R = 50

Deutsch DT04-2p connector: (Secure the power input with a 5A fuse)
1 = Red   = Power input: 12...60V/DC
2 = White   = Power input: 0V

Front side 4p molded female connector:
1 = Coax core   = Video in
2 = Coax shielding = Video 0V
3 = Red   = Power output: 12V/DC
4 = Black   = Power output: 0V
Shielding   = Ground

back side

cable connection upwards

cable connection downwards

remove cap

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions: Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions: Please refer to User manual no: UM0972080 for operation.

Article number: 0208603

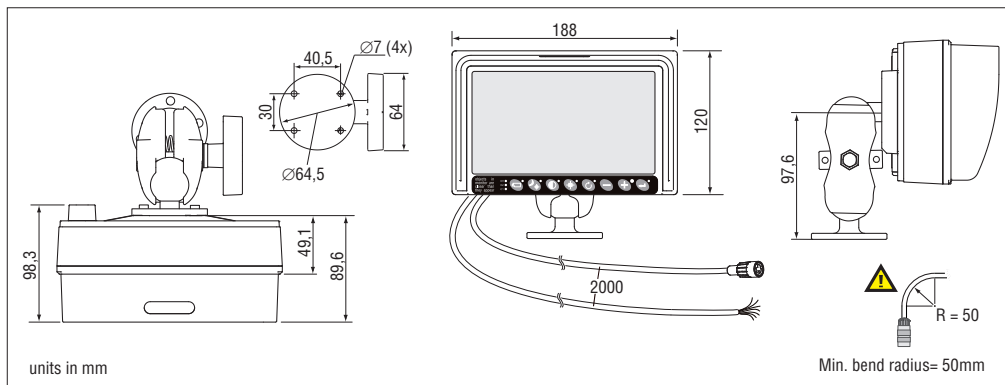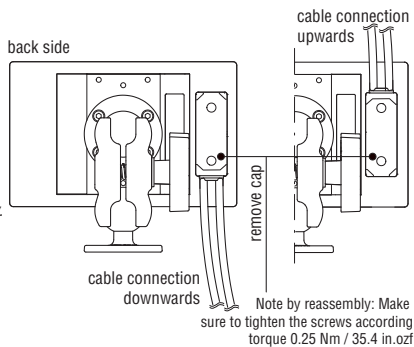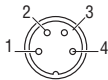|	
Cables / Connectors	2m multicable (power) open wired, 2m video cable with 4p molded female connector. Art. No.: 8976212.
Bracket	A clamping user-adjustable mounting bracket is supplied. Art. No.: 2015500.
Weight	1,9kg (Monitor, bracket, cables and connectors).

units in mm

Min. bend radius= 50mm

Connections to the monitor: (Secure the power input with a 5A fuse)
1 = Red = Power input: 12...60V/DC
2 = White = Power input: 0V
3 = Blue = Cam No. 1 activated at 7...60V/DC*
4 = Brown = Cam No. 2 activated at 7...60V/DC*
5 = White/Yellow = Cam No. 3 activated at 7...60V/DC*
6 = Grey = Cam No. 4/Speedometer/Tachograph/Zoom in
7 = Yellow = Parking Brake (only Front Cam)/Zoom out.

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Front side 4p molded female connector:
1 = Coax core = Video in
2 = Coax shielding = Video 0V
3 = Red = Power output: 12V/DC
4 = Black = Power output: 0V
Shielding = Ground

back side

cable connection upwards

cable connection downwards

remove cap

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0208612

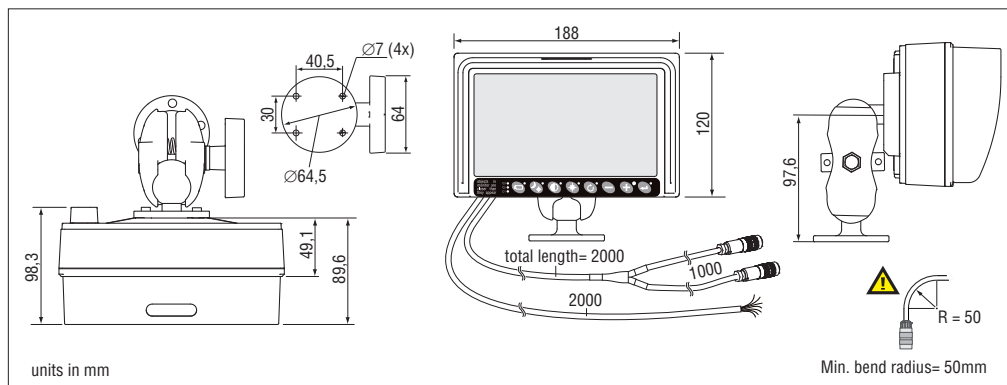|	
Cables / Connectors	2m multicable (power) open wired, 2m Y-cable (video) with two 4p female IP67 PG7 AU connector. Art. No.: 1002089.
Bracket	A clamping user-adjustable mounting bracket is supplied. Art. No.: 2015500.
Weight	1,9kg (Monitor, bracket, cables and connectors).

units in mm

Min. bend radius= 50mm

Connections to the monitor: (Secure the power input with a 5A fuse)
1 = Red = Power input: 12…60 V/DC
2 = White = Power input: 0 V
3 = Blue = Cam No. 1 activated at 7…60 V/DC*
4 = Brown = Cam No. 2 activated at 7…60 V/DC*
5 = White/Yellow = Cam No. 3 activated at 7…60 V/DC*
6 = Grey = Cam No. 4/Speedometer/Tachograph/Zoom in
7 = Yellow = Parking Brake (only Front Cam)/Zoom out

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Solder side 4p female connector:
1 = Coax core = video in
2 = Coax shielding = video 0V
3 = Red = Power output: 12 V/DC
4 = Black = Power output: 0V
Shielding = Ground

back side

cable connection upwards

remove cap

cable connection downwards

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions: Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions: Please refer to User manual no: UM0972080 for operation.

Article number: 0208622
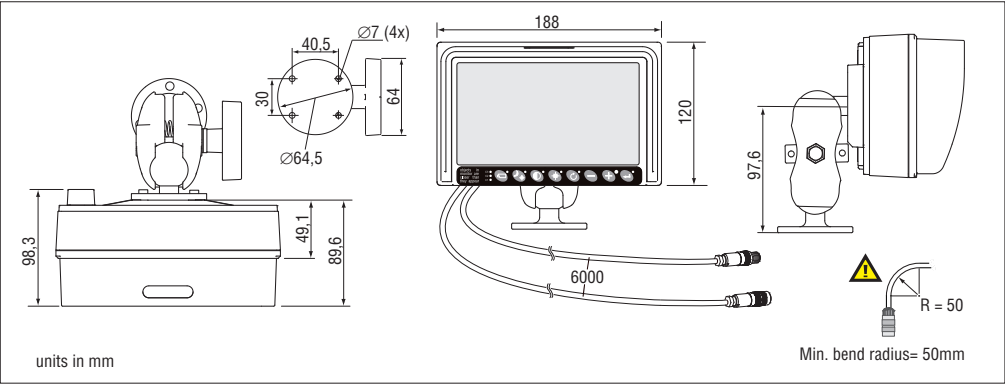
Cables / Connectors	6m multicable (power) with 8p male molded connector, 6m multicable (video) with 7p female molded connector. Art. No. 8976251.
Bracket	A clamping user-adjustable mounting bracket is supplied. Art. No. : 2015500.
Weight	1,9kg (Monitor, bracket, cables and connectors).

units in mm

Min. bend radius= 50mm

Solder side 8p male: (Secure the power input with a 5A fuse)
1 = Red   = Power input: 18...30V/DC
2 = White   = Power input: 0V
3 = Blue   = Cam No. 1 activated at 7...30V/DC*
4 = Brown   = Cam No. 2 activated at 7...30V/DC*
5 = White/Yellow = Cam No. 3 activated at 7...30V/DC*
6 = Grey   = Cam No. 4/Speedometer/Tachograph/Zoom in
7 = Yellow   = Parking brake (only Front Cam)/Zoom out.
8 = N.C.

*Triggers camera >7V/DC and returns to non-triggered <5V/DC.
If multiple cameras are triggered the highest cam. no. has the highest priority.

Solder side 7p female connector:
1 = Coax core   = Video in
2 = Coax shielding = Video 0V
3 = Red   = Power output: equal to "Power input"
4 = Black   = Power output: 0V
5 = Orange   = RS232 Rx
6 = Yellow   = RS232 Tx
7= Grey   = RS232 Rx & Tx 0V

back side

cable connection upwards

remove cap

cable connection downwards

Note by reassemble: make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0208632
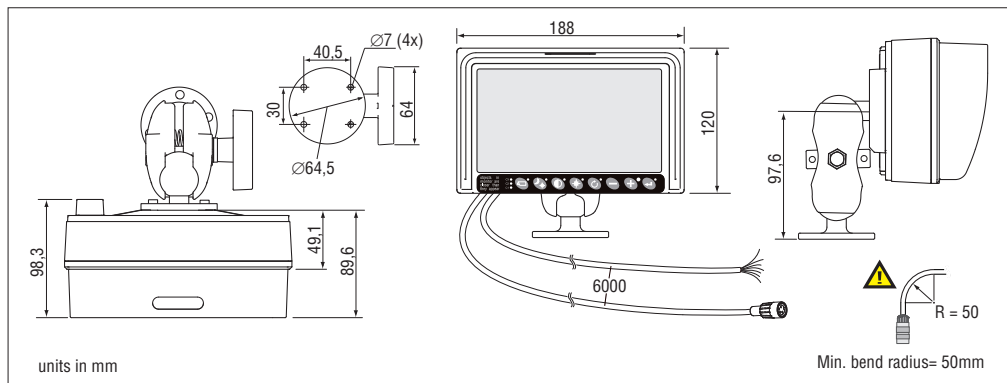
Cables / Connectors	6m power cable open wired, 6m video cable with 7p molded M16 female connector; Art. no. 8976331.
Bracket	A clamping user-adjustable mounting bracket is supplied. Art. No. : 2015500.
Weight	1,9kg (Monitor, bracket, cables and connectors).

units in mm

Min. bend radius= 50mm

Connections to the monitor: (Secure the power input with a 5A fuse)
1 = Red   = Power input: 18...30V/DC
2 = White   = Power input: 0V
3 = Blue   = Cam No. 1 activated at 7...30V/DC*
4 = Brown   = Cam No. 2 activated at 7...30V/DC*
5 = White/Yellow = Cam No. 3 activated at 7...30V/DC*
6 = Grey   = Cam No. 4/Speedometer/Tachograph/Zoom in
7 = Yellow   = Parking Brake (only Front Cam)/Zoom out.

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Front side 7p molded female connector:
1 = Coax core   = Video in
2 = Coax shielding = Video 0V
3 = Red   = Power output: equal to "Power input"
4 = Black   = Power output: 0V
5 = Orange   = RS232 Rx
6 = Yellow   = RS232 Tx
7 = Grey   = RS232 Rx & Tx 0V

back side

cable connection upwards

cable connection downwards

remove cap

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0208642
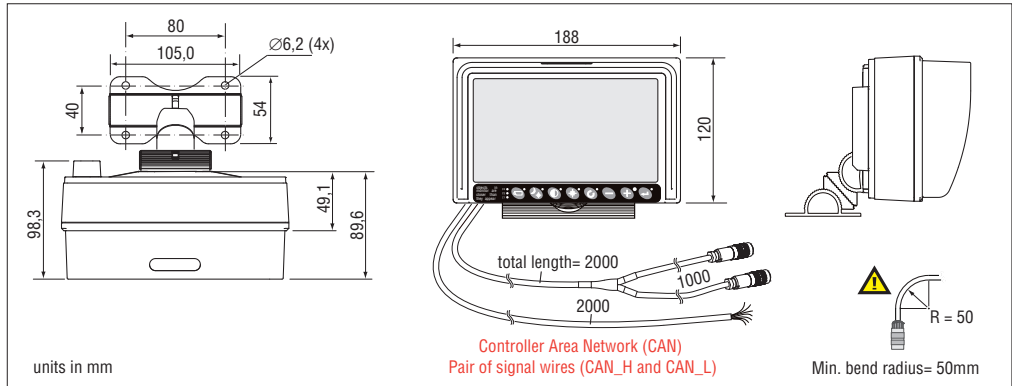
Cables / Connectors	2m multicable (power) open wired, 2m Y-cable (video) with two 4p female IP67 PG7 AU connector. Art. No.: 0303781
Bracket	Anodized aluminium adjustable mounting bracket is supplied. Art. No. : 8974000
Weight	1,7kg (Monitor, bracket, cables and connectors)

units in mm

total length= 2000

Controller Area Network (CAN)
Pair of signal wires (CAN_H and CAN_L)

Min. bend radius= 50mm

R = 50

Aansluiting aan de monitor:(Zeker de voedings ingang met een 5A zekering)
1 = Rood   = Voedings ingang: 12...60V/DC
2 = Wit   = Voedings ingang: 0V
3 = Blauw   = Cam nr. 1 geactiveerd bij 7...60V/DC*
4 = Bruin   = Cam nr. 2 geactiveerd bij 7...60V/DC*
5 = Wit/Geel = Cam nr. 3 geactiveerd bij 7...60V/DC*
6 = Grijs   = CAN H
7 = Geel   = CAN L

*Camera schakelt in >7V/DC en schakelt weer uit <5V/DC.
Als er meerdere camera's worden geactiveerd; het hoogste cameranummer heeft de eerste prioriteit

Soldeerzijde 4p vrouwelijk connector:
1 = Coax kern   = Video in
2 = Coax afscherming = Video 0V
3 = Rood   = Voedings uitgang: 12V/DC
4 = Zwart   = Voedings uitgang: 0V
Afscherming   = Aarde
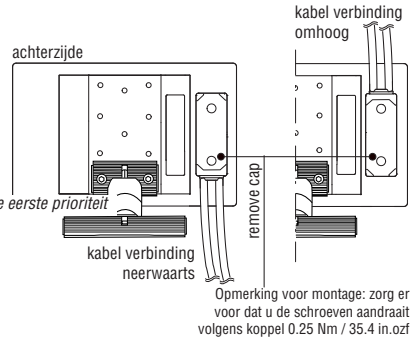
achterzijde

kabel verbinding omhoog

kabel verbinding neerwaarts

remove cap

Opmerking voor montage: zorg er voor dat u de schroeven aandraait volgens koppel 0.25 Nm / 35.4 in.ozf

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0208672

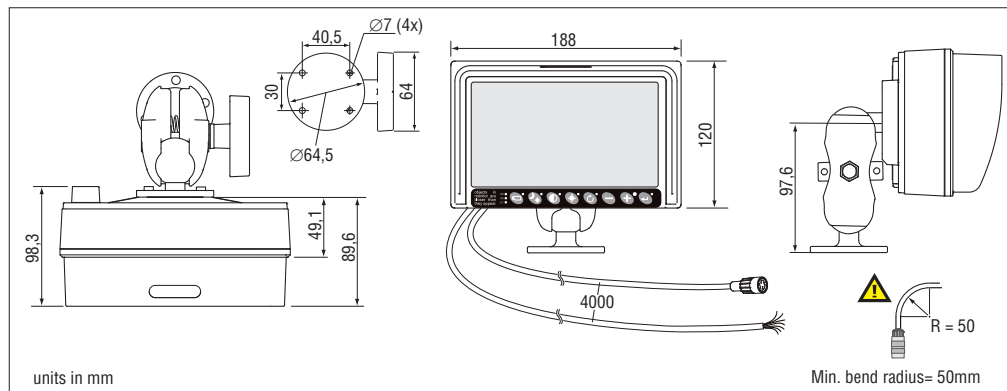|	
Cables / Connectors	4m multicable (power) open wired, 4m multicable (video) with 4p molded female connector. Art. No.: 8976223.
Bracket	A clamping user-adjustable mounting bracket is supplied. Art. No.: 2015500.
Weight	1,8kg (Monitor, bracket, cables and connectors).
Use	Suitable for open-cabin, drive-in/drive-out cold store use.

units in mm

Min. bend radius= 50mm

Connections to the monitor: (Secure the power input with a 5A fuse)
1 = Red   = Power input: 12...60V/DC
2 = White   = Power input: 0V
3 = Blue   = Cam No. 1 activated at 7...60V/DC*
4 = Brown   = Cam No. 2 activated at 7...60V/DC*
5 = White/Yellow = Cam No. 3 activated at 7...60V/DC*
6 = Grey   = Cam No. 4/Speedometer/Tachograph/Zoom in
7 = Yellow   = Parking Brake (only Front Cam)/Zoom out.

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Front side 4p molded female connector:
1 = Coax core   = Video in
2 = Coax shielding = Video 0V
3 = Red   = Power output: 12V/DC
4 = Black   = Power output: 0V
Shielding   = Ground

back side

cable connection upwards

cable connection downwards

remove cap

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0208681

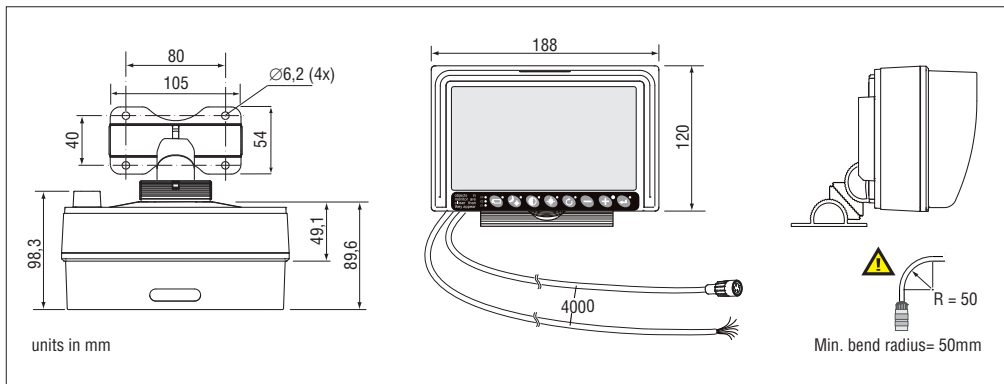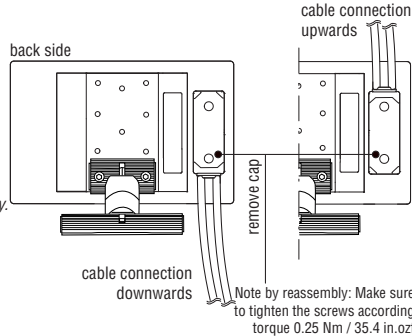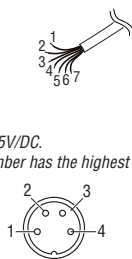|	
Cables / Connectors	4m multicable (power) open wired, 4m multicable (video) with 4p molded female connector. Art. No.: 8976223
Bracket	Anodized aluminium adjustable mounting bracket is supplied. Art. No. : 8974000
Weight	1,6kg (Monitor, bracket, cables and connectors)
Use	Suitable for open-cabin, drive-in/drive-out cold store use.

units in mm

Min. bend radius= 50mm

Connections to the monitor: (Secure the power input with a 5A fuse)
1 = Red = Power input: 12...60V/DC
2 = White = Power input: 0V
3 = Blue = Cam No. 1 activated at 7...60V/DC*
4 = Brown = Cam No. 2 activated at 7...60V/DC*
5 = White/Yellow = Cam No. 3 activated at 7...60V/DC*
6 = Grey = N.C.
7 = Yellow = N.C.

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Front side 4p molded female connector:
1 = Coax core = Video in
2 = Coax shielding = Video 0V
3 = Red = Power output: 12V/DC
4 = Black = Power output: 0V
Shielding = Ground

back side

cable connection upwards

remove cap

cable connection downwards

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

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Article number: 0208691
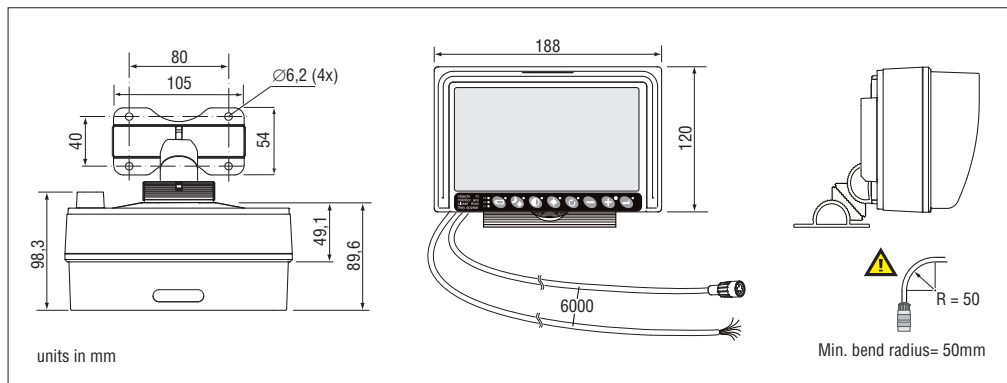
Cables / Connectors	6m power cable open wired, 6m video cable with 7p molded M16 female connector; Art. No.: 8976331
Bracket	Anodized aluminium adjustable mounting bracket is supplied. Art. No. : 8974000
Weight	1,7kg (Monitor, bracket, cables and connectors)

units in mm

Min. bend radius= 50mm

Connections to the monitor: (Secure the power input with a 5A fuse)
1 = Red   = Power input: 18...30V/DC
2 = White   = Power input: 0V
3 = Blue   = Cam No. 1 activated at 7...30V/DC*
4 = Brown   = Cam No. 2 activated at 7...30V/DC*
5 = White/Yellow = Cam No. 3 activated at 7...30V/DC*
6 = Grey   = Cam No. 4/Speedometer/Tachograph/Zoom in
7 = Yellow   = Parking Brake (only Front Cam)/Zoom out.

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Front side 7p molded female connector:
1 = Coax core   = Video in
2 = Coax shielding = Video 0V
3 = Red   = Power output: equal to "Power input"
4 = Black   = Power output: 0V
5 = Orange   = RS232 RX
6 = Yellow   = RS232 TX
7 = Grey   = RS232 Rx & Tx 0V
Shielding   = Ground
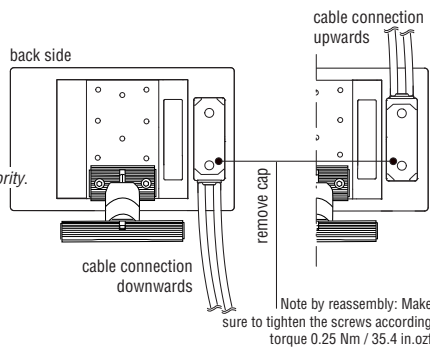
cable connection upwards

back side

cable connection downwards

remove cap

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0208721
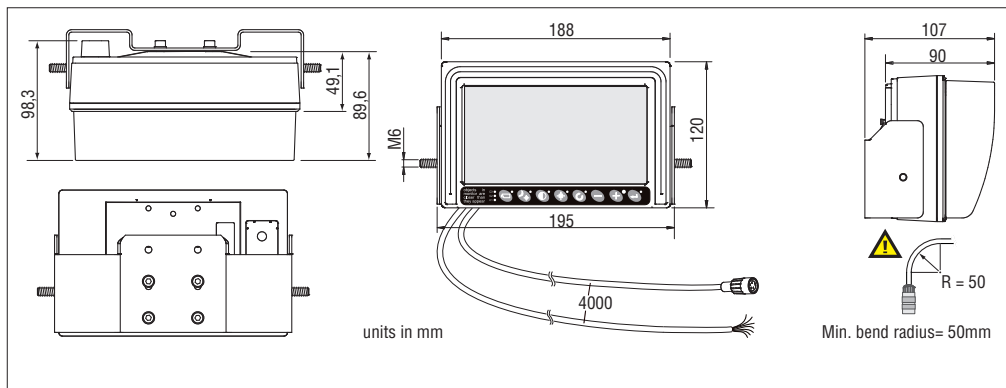
Cables / Connectors	4m multicable (power) open wired, 4m multicable (video) with 4p female molded connector. Art. No.: 8976223.
Bracket	7" Monitor fixation is supplied. Art. No. : 2013250.
Weight	1,6kg (Monitor, bracket, cables and connectors).

188
49.1
98,3
89,6
M6
120
195
107
90
4000
R = 50
units in mm
Min. bend radius= 50mm

Connections to the monitor: (Secure the power input with a 5A fuse)
1 = Red = Power input: 12...60V/DC
2 = White = Power input: 0V
3 = Blue = Cam No. 1 activated at 3...60V/DC*
4 = Brown = Cam No. 2 activated at 3...60V/DC*
5 = White/Yellow = Cam No. 3 activated at 3...60V/DC*
6 = Grey = Cam No. 4/Speedometer/Tachograph/Zoom in
7 = Yellow = Parking Brake (only Front Cam)/Zoom out.

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Front side 4p molded female connectors::
1 = Coax core = Video in
2 = Coax shielding = Video 0V
3 = Red = Power output: 12V/DC
4 = Black = Power output: 0V
Shielding = Ground

back side

cable connection upwards

remove cap

cable connection downwards

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf
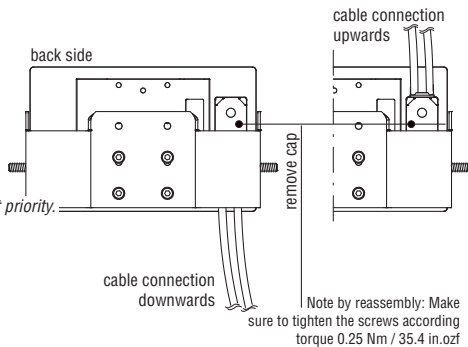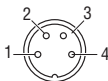
Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0208831

Cables / Connectors	11m multicable (power) with 8p molded male connector, 11m multicable (video) with 7p molded female connector. Art. No.: 8975583.
Bracket	A clamping user-adjustable mounting bracket is supplied. Art. No.: 2015510.
Weight	1,9kg (Monitor, bracket, cables and connectors).

units in mm
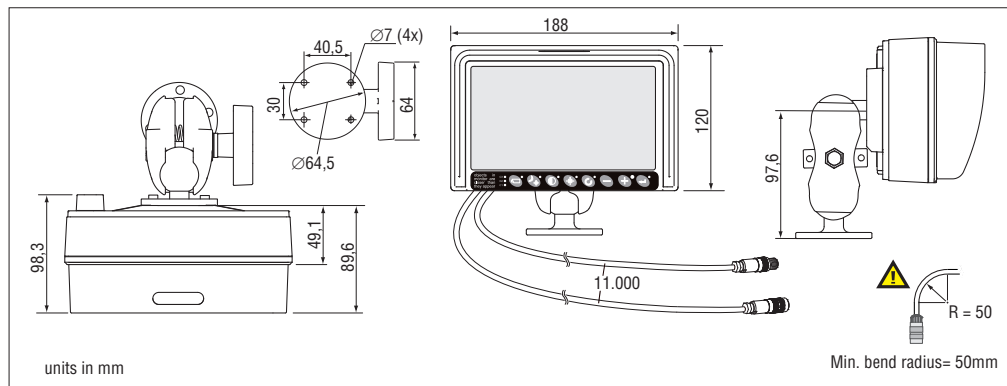
Min. bend radius= 50mm

Solder side 8p male: (Secure the power input with a 5A fuse)
1 = Red   = Power input: 18...30V/DC
2 = White   = Power input: 0V
3 = Blue   = Cam No. 1 activated at 7...30V/DC*
4 = Brown   = Cam No. 2 activated at 7...30V/DC*
5 = White/Yellow = Cam No. 3 activated at 7...30V/DC*
6 = Grey   = Cam No. 4 activated at 7...30V/DC*
7 = Yellow   = Quad view activated at 7...30V/DC*
8 = N.C.

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Solder side 7p female connector:
1 = Coax core   = Video in
2 = Coax shielding = Video 0V
3 = Red   = Power output: equal to "Power input"
4 = Black   = Power output: 0V
5 = Orange   = RS232 Rx
6 = Yellow   = RS232 Tx
7 = Grey   = RS232 Rx & Tx 0V

back side

cable connection upwards

cable connection downwards

remove cap

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

ORLACO

Article number: 0208871

Cables / Connectors	6m power cable open wired, 6m video cable with 7p molded M16 female connector; Art. no.:8976331.
Bracket	A clamping user-adjustable mounting bracket is supplied. Art. No. : 2015500.
Weight	1,9kg (Monitor, bracket, cables and connectors).

units in mm

Controller Area Network (CAN)
Pair of signal wires (CAN_H and CAN_L)

Min. bend radius= 50mm

Connections to the monitor: (Secure the power input with a 5A fuse)
1 = Red = Power input: 12…60V/DC
2 = White = Power input: 0V
3 = Blue = Cam No. 1 activated at 7…60V/DC*
+ Activation Radar on sensor direction 5,6 and 7
4 = Brown = Cam No. 2 activated at 7…60V/DC*
+ Activation Radar on sensor direction 1,11 and 12
5 = White/Yellow = Cam No. 3 activated at 7…60V/DC*
6 = Grey = Cam No. 4 activated at 7…60V/DC*
+ Blocking sensor directions 2,3,4 and 8,9,10
7 = Yellow = Quad view, Parking Brake (only Front Cam)/Zoom out

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.
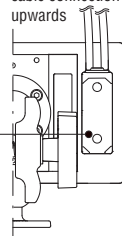
Front side 7p molded female connector:
1 = Coax core = Video in
2 = Coax shielding = Video GND
3 = Red = Power output: equal to "Power input"
4 = Black = Power output: 0V
5 = Orange = CAN-L
6 = Yellow = CAN-H
7= Grey = N.C.

back side

cable connection upwards

cable connection downwards

remove cap

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

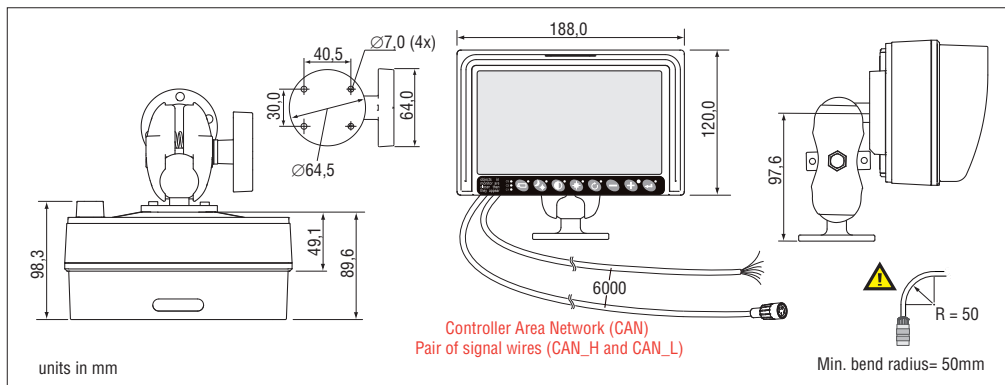|	
Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0208902

Cables / Connectors	4m multicable (power) open wired, 4m multicable (video) with 4p molded female connector. Art. No.: 8976223
Bracket	User-adjustable mounting bracket with clamp; Art. No.: 2015800, 2015750 and 2015950 is supplied.
Weight	2,1kg (Monitor, bracket, cables and connectors)
Use	Suitable for open-cabin, drive-in/drive-out cold store use.

units in mm

Connections to the monitor:
(Secure the power input with a 5A fuse)

1 = Red	= Power input: 12...60V/DC
2 = White	= Power input: 0V
3 = Blue	= Deactivate Standby function + activate Cam No. 1 (7..60V/DC)*
4 = Brown	= Deactivate Standby function + activate Cam No. 2 (7..60V/DC)*
5 = White/Yellow	= Deactivate Standby function + activate Cam No. 3 (7..60V/DC)*
6 = Grey	= Speedometer/Tachograph
7 = Yellow	= N.C.

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Front side 4p molded female connector:

1 = Coax core	= Video in
2 = Coax shielding	= Video 0V
3 = Red	= Power output: 12V/DC
4 = Black	= Power output: 0V
Shielding	= Ground

back side

cable connection upwards

cable connection downwards

remove cap

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Note forklift trucks: Make sure to connect the metal back cover of the RLED to the chassis

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0208922

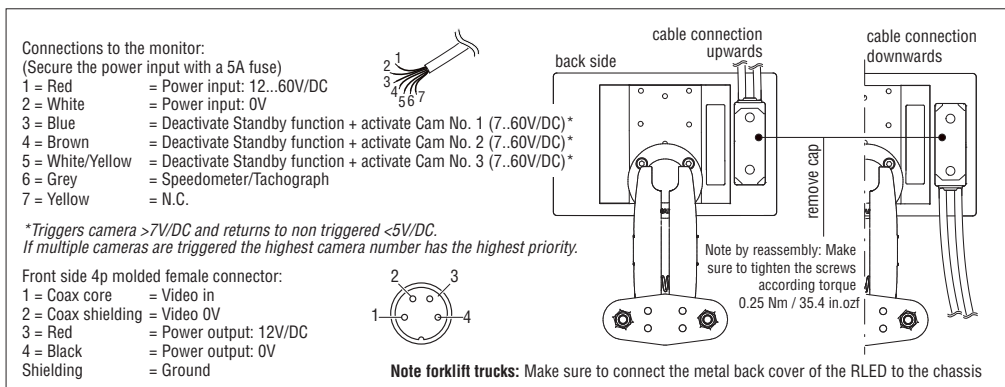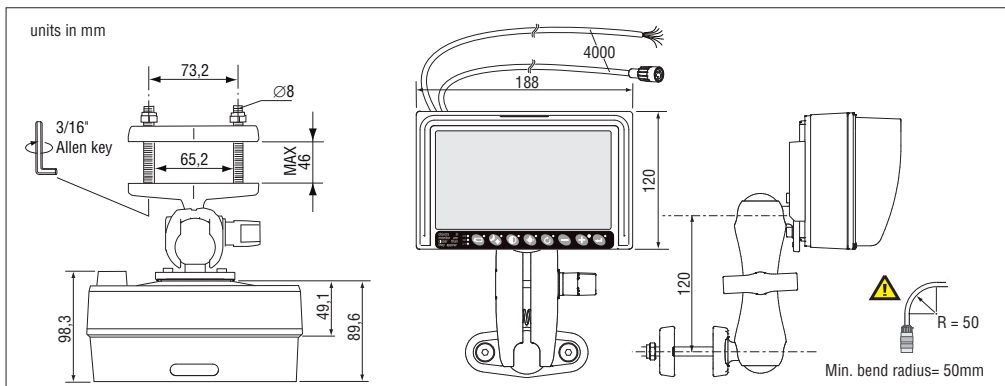|	
Cables / Connectors	2650mm multicable (power) with 8p male Deutsch connector, 2650mm multicable (video) with 6p female Deutsch connector. Art. No.: 8975791
Bracket	User-adjustable mounting bracket with clamp; Art. No.: 2015510 and 2015950 is supplied.
Weight	2,1kg (Monitor, bracket, cables and connectors)
Use	Suitable for open-cabin, drive-in/driveout cold store use.

Units in mm

Min. bend radius= 50mm

R = 50
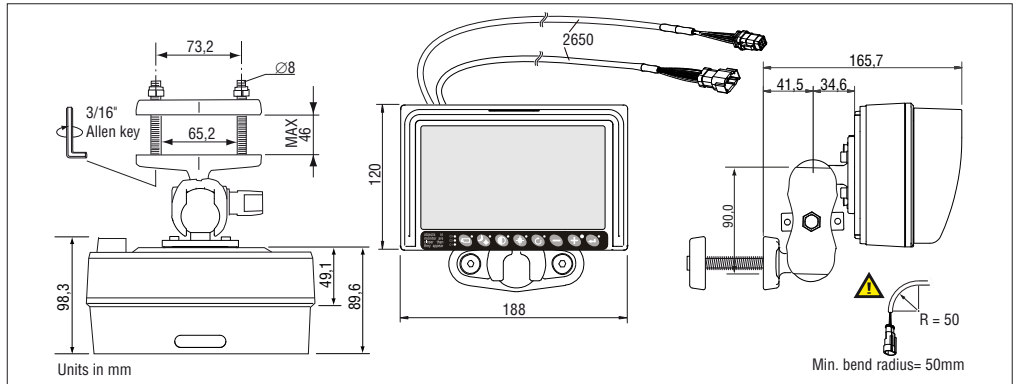
Back side 8p male connector to the monitor: (Secure the power input with a 5A fuse)
1 = Red = Power input: 12...60V/DC
2 = White = Power input: 0V
3 = Blue = Connected to Camera 1
4 = Brown = Connected to Camera 2
5 = White/Yellow = Connected to Camera 3
6 = Grey = Aux 1
7 = Yellow = Aux 2
8 = Overall Shielding

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Back side 6p female connector:
1 = Coax core = Video in
2 = Coax shielding = Video 0V
3 = Red = Power output: 12V/DC
4 = Black = Power output: 0V; connect to Orange
5 = Overall Shielding
6 = Orange = Mirror

Note forklift trucks: Make sure to connect the metal back cover of the RLED to the chassis

cable connection upwards
back side
remove cap
Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf
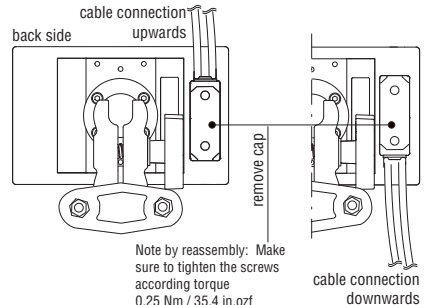cable connection downwards

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

ORLACO

Installation manual

Article number: 0208950

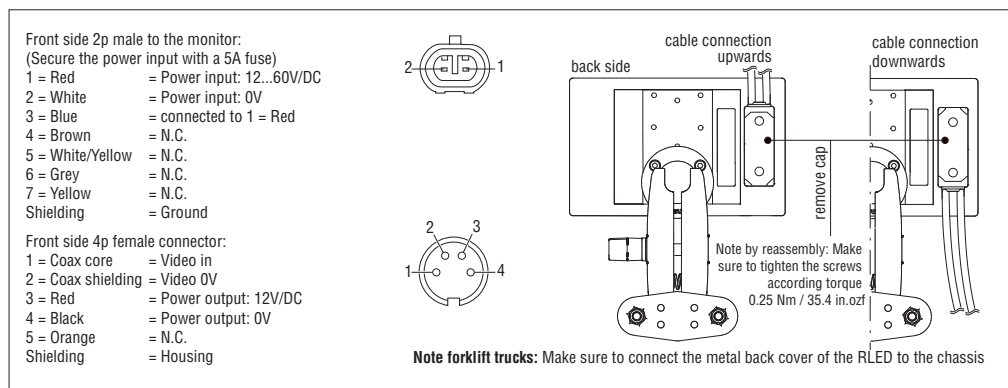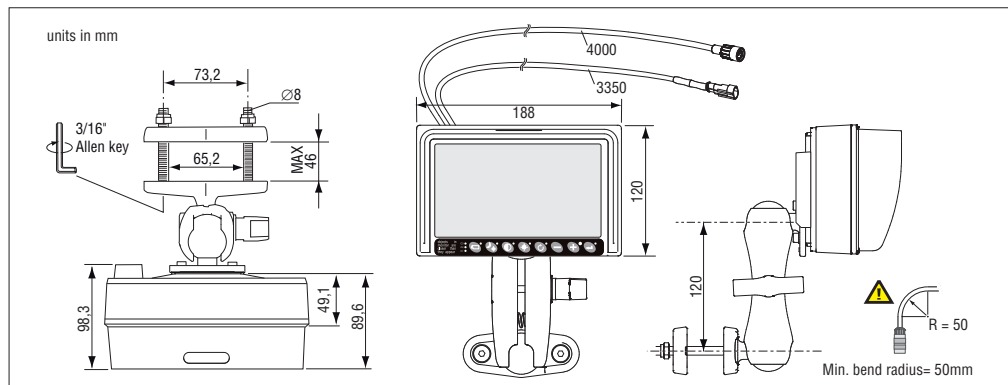|	
Cables / Connectors	3350mm multicable (power) with 2p male Tyco connector, 4000mm multicable (video) with 4p molded female connector. Art. No.: 8976621.
Bracket	User-adjustable mounting bracket with clamp; Art. No.: 2015800, 2015750 and 2015950 is supplied.
Weight	2,1kg (Monitor, bracket, cables and connectors).
Use	Suitable for open-cabin, drive-in/driveout cold store use.

Front side 2p male to the monitor:
(Secure the power input with a 5A fuse)

1 = Red	= Power input: 12...60V/DC
2 = White	= Power input: 0V
3 = Blue	= connected to 1 = Red
4 = Brown	= N.C.
5 = White/Yellow	= N.C.
6 = Grey	= N.C.
7 = Yellow	= N.C.
Shielding	= Ground

Front side 4p female connector:

1 = Coax core	= Video in
2 = Coax shielding	= Video 0V
3 = Red	= Power output: 12V/DC
4 = Black	= Power output: 0V
5 = Orange	= N.C.
Shielding	= Housing

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Note forklift trucks: Make sure to connect the metal back cover of the RLED to the chassis

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0208991

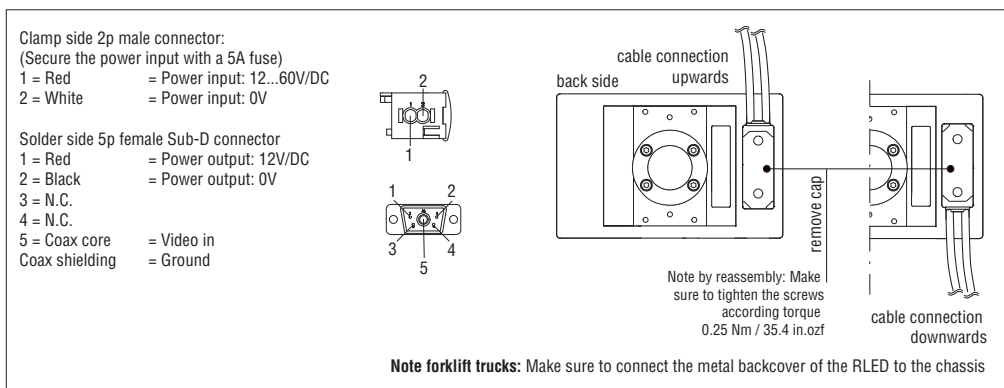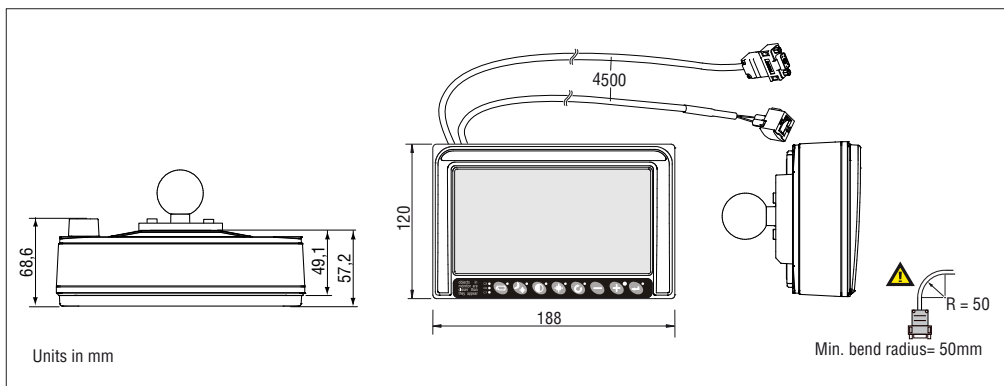|	
Cables / Connectors	4,5m multicable (power) with 2p male JPT connector, 4,5m multicable (video) with 5p female PL Sub-D connector. Art. No.: 8976380.
Bracket	Ball joint with mounting plate Art No. 2015750 is supplied (for adjustable bracket 2015800 or 2015510).
Weight	1,6kg (LCD, bracket, cables and connectors).
Use	Suitable for open-cabin, drive-in/drive-out cold store use.

Units in mm

Min. bend radius= 50mm

Clamp side 2p male connector:
(Secure the power input with a 5A fuse)
1 = Red   = Power input: 12...60V/DC
2 = White   = Power input: 0V

Solder side 5p female Sub-D connector
1 = Red   = Power output: 12V/DC
2 = Black   = Power output: 0V
3 = N.C.
4 = N.C.
5 = Coax core   = Video in
Coax shielding = Ground

cable connection upwards
back side

remove cap

Note by reassembly: Make sure to tighten the screws according torque
0.25 Nm / 35.4 in.ozf

cable connection downwards

Note forklift trucks: Make sure to connect the metal backcover of the RLED to the chassis

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to usermanual no: UM0972080 for operation.

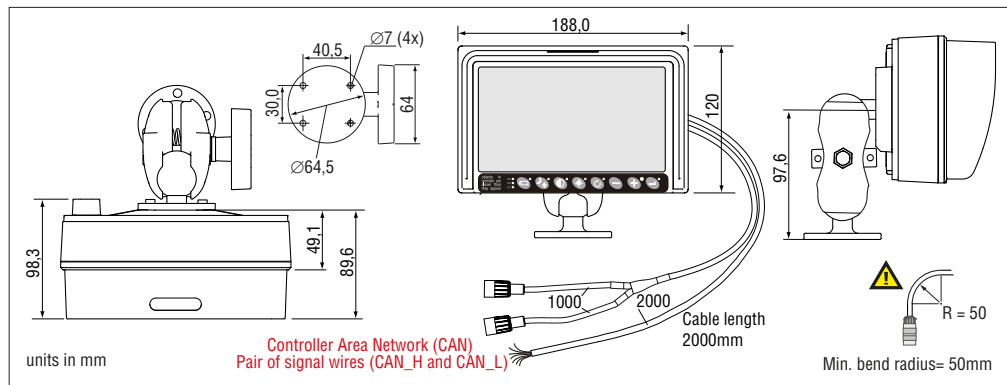**Article number: 0209110**

Cables / Connectors	2m multicable (power) open wired, 2m Y-cable (video) with molded 7p female connector and molded 4p female connector. Art. no.: 8976751.
Bracket	A clamping user-adjustable mounting bracket is supplied. Art. No. : 2015510.
Weight	1,9kg (LCD, bracket, cables and connectors).

units in mm

Controller Area Network (CAN)
Pair of signal wires (CAN_H and CAN_L)

Cable length 2000mm

R = 50

Min. bend radius= 50mm

Connections to the monitor: (Secure the power input with a 5A fuse)
1 = Red = Power input: 12...60V/DC
2 = White = Power input: 0V
3 = Blue = Cam No. 1 activated at 3...60V/DC*
+ Activation Radar on sensor direction 5,6 and 7
4 = Brown = Cam No. 2 activated at 3...60V/DC*
+ Activation Radar on sensor direction 1,11 and 12
5 = White/Yellow = Cam No. 3 activated at 3...60V/DC*
6 = Grey = Cam No. 4 activated at 3...60V/DC*
+ Blocking sensor directions 2,3,4 and 8,9,10
7 = Yellow = Quad view, Parking Brake (only Front Cam)/Zoom out

*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Solder side 7p female connector:
1 = Coax core = Video in
2 = Coax shielding = Video GND
3 = Red = Power output: equal to "Power input"
4 = Black = Power output: 0V
5 = Orange = CAN-L
6 = Yellow = CAN-H
7= Grey = N.C

Front side molded 4p female connector:
1 = Coax core = Video input
2 = Coax shielding = Video 0V
3 = Red = Power output: 12...30V
4 = Black = Power output: 0V
Shielding = To housing

back side

cable connection upwards

cable connection downwards

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

remove cap

Connect instructions: Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions: Please refer to User manual no: UM0972080 for operation.

Article number: 0209190

|	
Cables / Connectors	1,1m multicable (power) 8p male Econoseal connnector, 2,55m multicable (video) with M16 4p molded female connector. Art. No.: 1001204.
Bracket	A clamping user-adjustable mounting bracket is supplied, Art. no. 2015500.
Weight	1,6kg (Monitor, bracket, cables and connectors).
Use	Suitable for open-cabin, drive-in/drive-out cold store use.

units in mm

Min. bend radius= 50mm
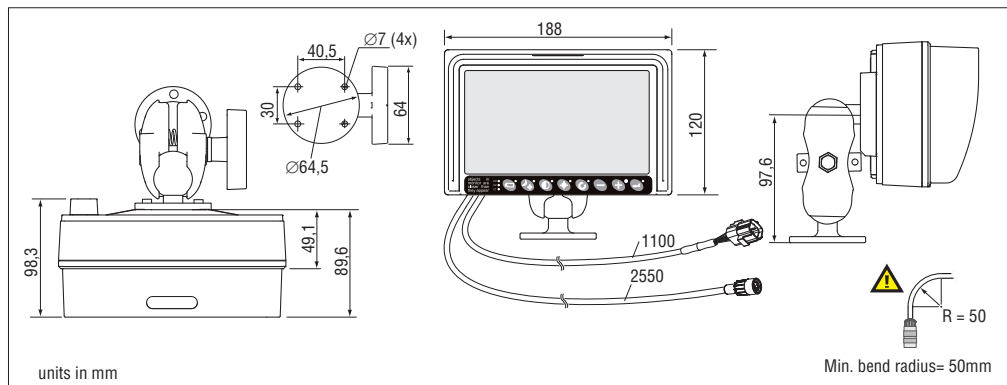
Connections to the monitor:
(Secure the power input with a 5A fuse)
4 = Red = Power input: 12...60V/DC
5 = White = Power input: 0V
1 = Blue = Cam 1 activated at 7...60V/DC*
2 = Brown = Cam 2 activated at 7...60V/DC*
3 = White/Yellow = Cam 3 activated at 7...60V/DC*
6 = Grey = Cam 4 activated at 7...60V/DC*
7 = Yellow = Parking Brake (only Front Cam)/Zoom out

Front side

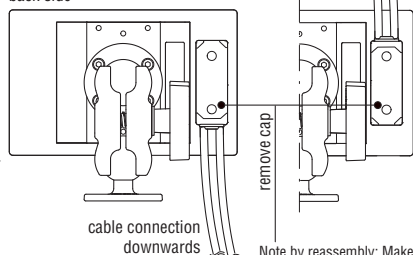*Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest camera number has the highest priority.

Front side 4p molded female connector:
1 = Coax core = Video in
2 = Coax shielding = Video 0V
3 = Red = Power output: 12V/DC
4 = Black = Power output: 0V
5 = Orange = N.C.
Shielding = Housing

back side

cable connection upwards

remove cap

cable connection downwards

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

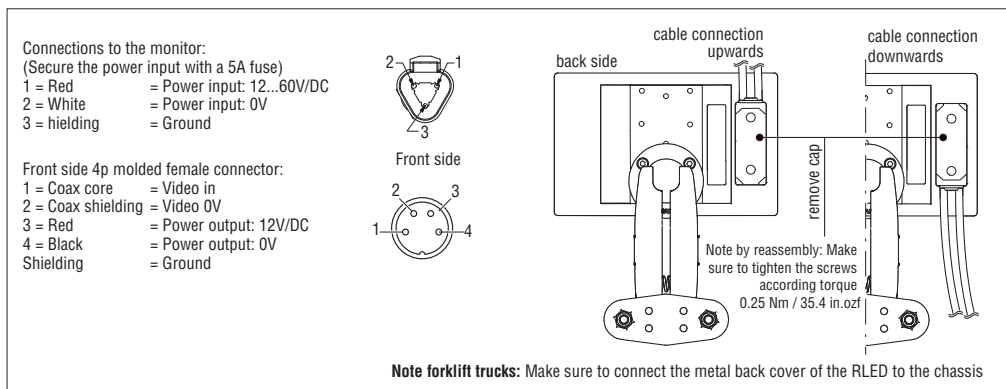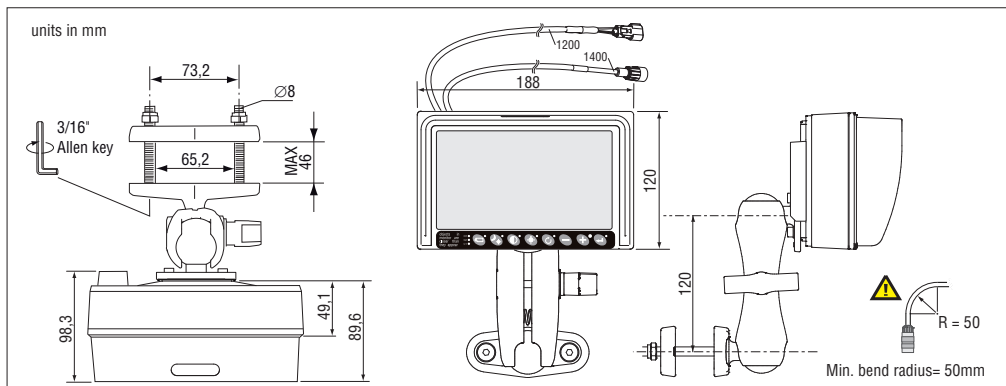|	
Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.
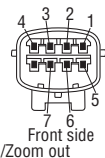
Article number: 0209300

Cables / Connectors	1,2m multicable (power) with Deutsch male connector, 1,4m multicable (video) with 4p molded female connector. Art. No.: 1001391
Bracket	User-adjustable mounting bracket with clamp; Art. No.: 2015800, 2015750 and 2015950 is supplied.
Weight	2,1kg (Monitor, bracket, cables and connectors)
Use	Suitable for open-cabin, drive-in/drive-out cold store use.

Connections to the monitor:
(Secure the power input with a 5A fuse)
1 = Red   = Power input: 12...60V/DC
2 = White   = Power input: 0V
3 = hielding   = Ground

Front side 4p molded female connector:
1 = Coax core   = Video in
2 = Coax shielding = Video 0V
3 = Red   = Power output: 12V/DC
4 = Black   = Power output: 0V
Shielding   = Ground

Front side

cable connection upwards
back side
cable connection downwards

remove cap

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

Note forklift trucks: Make sure to connect the metal back cover of the RLED to the chassis

Connect instructions: Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
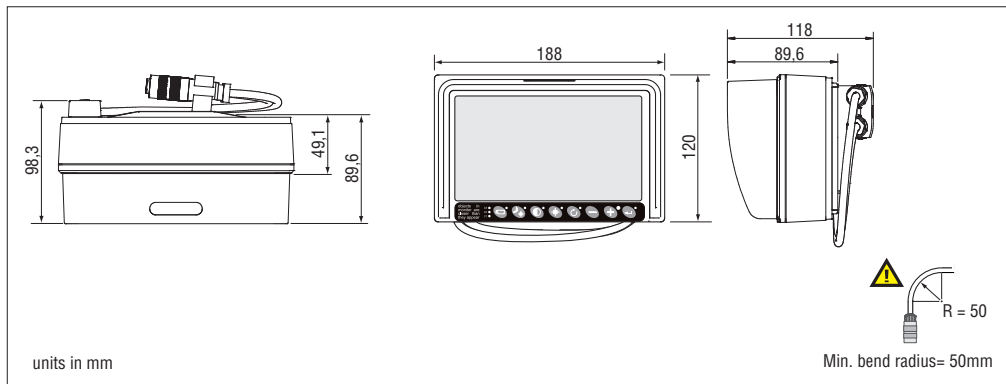**User instructions:** Please refer to User manual no: UM0972080 for operation.

Article number: 0209310

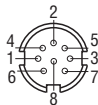|	
Cables / Connectors	0,24m multicable (power) with 8p male connector, 0,29m multicable (video) with 4p female connector Art. no.:1001409
Weight	1,5kg (Monitor, cables and connectors)

units in mm

Min. bend radius= 50mm

R = 50

Solder side 8p male connector: (Secure the power input with a 5A fuse)
1 = Red   = Power input: 12...60V/DC
2 = White   = Power input: 0V
3 = Blue   = Cam No. 1 activated at 7...60V/DC*
4 = Brown   = Cam No. 2 activated at 7...60V/DC*
5 = White/Yellow = Cam No. 3 activated at 7...60V/DC*
6 = Grey   = N.C.
7 = Yellow   = N.C.
8 =   = N.C.
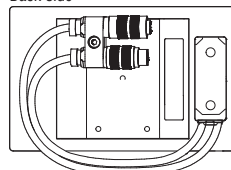 *Triggers camera >7V/DC and returns to non triggered <5V/DC.
If multiple cameras are triggered the highest cam. no. has the highest priority.

Back side

Solder side 4p female connector:
1 = Coax core   = Video in
2 = Coax shielding = Video 0V
3 = Red   = Power output: 12V/DC
4 = Black   = Power output: 0V
Shielding   = Ground

Connectors fixed on the back side of the monitor.

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to User manual no: UM0972080 for operation.

Article number: 0209400

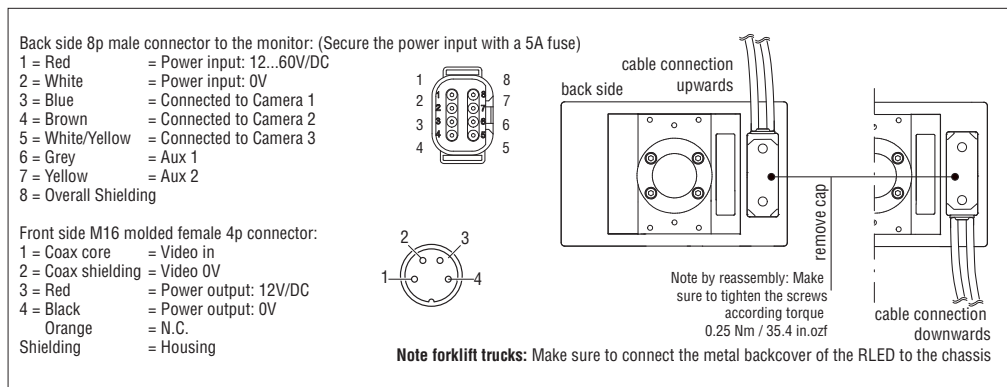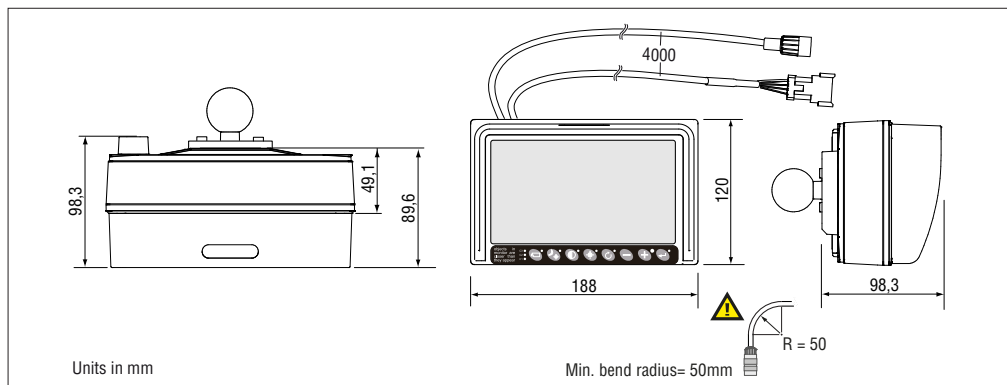|	
Cables / Connectors	4m multicable (power) with 8p male Deutsch connector, 4m multicable (video) with 4p female molded M16 connector. Art. No.: 8976433.
Bracket	Ball joint with mounting plate Art No. 2015750 is supplied (for adjustable bracket 2015800 or 2015510).
Weight	1,6kg (Monitor, cables and connectors).
Use	Suitable for open-cabin, drive-in/drive-out cold store use.

Units in mm

Min. bend radius= 50mm

Back side 8p male connector to the monitor: (Secure the power input with a 5A fuse)
1 = Red = Power input: 12...60V/DC
2 = White = Power input: 0V
3 = Blue = Connected to Camera 1
4 = Brown = Connected to Camera 2
5 = White/Yellow = Connected to Camera 3
6 = Grey = Aux 1
7 = Yellow = Aux 2
8 = Overall Shielding

Front side M16 molded female 4p connector:
1 = Coax core = Video in
2 = Coax shielding = Video 0V
3 = Red = Power output: 12V/DC
4 = Black = Power output: 0V
   Orange = N.C.
Shielding = Housing

cable connection upwards
back side

Note by reassembly: Make sure to tighten the screws according torque 0.25 Nm / 35.4 in.ozf

remove cap

cable connection downwards

Note forklift trucks: Make sure to connect the metal backcover of the RLED to the chassis

Connect instructions:	Please refer to your Orlaco system documentation or chapter 2. "Basic System Installations"
User instructions:	Please refer to usermanual no: UM0972080 for operation.

7. Maintenance and cleaning

First, do not touch the screen with your fingers. The underlying transistors will react to the static electricity in your fingers, or may get damaged by the pressure thus exerted. This will eventually produce dead pixels; tiny, inoperative, or colored dots impairing picture quality.

So take care when cleaning your delicate LCD Screen. Use a high quality and safe foam cleaner and a soft cloth. Do absolutely not use aggressive chemicals or abrasive cleaning agents.

8. Disposal

Disassembly, removal and disposal. Local regulations for dealing with waste must be followed when disposing of disassembled components or entire units.

9. General terms and conditions

Orlaco Products BV is not liable for damage resulting from inadequate servicing, incorrect usage or alterations made to the equipment without informing the manufacturer in writing.

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Orlaco reserves the right to make changes to components at any time without informing customers beforehand or directly. All dimensions given are for commercial purposes.

For information regarding repairs that is not covered in this manual, please contact the Orlaco Products BV service department.

This manual has been prepared with all due care and attention.

However, Orlaco Products BV cannot be held responsible for any errors in this manual or any consequences thereof.

10. Version details

Version R1-0. First issue, November 2012.
Version R1-1. Monitor added page 9, November 2012.
Version R1-2. Monitors added pages 22, 25 December 2012.
Version R1-3. Monitor added page 10. Change electrical connections; Art. No 0208871, page 24, March 2013.
Version R1-4. Cable length changed; Art. No. 0208831, page 23
Version R1-5. Monitor added page 26, September 2013.
Version R1-6. Monitor added page 10, January 2014.
Version R1-7. Monitor added page 30, January 2014.
Version R1-8. Monitor added page 11, February 2014.
Version R1-9. Monitor added page 25, March 2014.
Version R2-0. Monitor added page 11, July 2014.
Version R2-1. Monitor changed page 11, September 2014.
Version R2-2. Barcode added, September 2014.
Version R2-3. Drawing dimensions page 29 changed, December 2014.
Version R2-4. Torque added at text chapter 5, January 2015
Version R2-5. Chapter 4, Specifications adjusted, April 2015.
Version R2-6. Chapter 5, Torque data changed, November 2015.
Version R2-7. Monitor added page 32, January 2016.
**Version R2-8.** Monitor page 32 Bracket changed, July 2016.
Version R2-9. Art. No. 0208632, 0208691 and 0208871; cable changed, August 2016.
Version A 01. Monitors Art. No. 0208702 and 0208712 deleted, December 2016.
Version A 02. Monitor Art. No. 0209190 weight modified + Manual number adjusted, February 2017.
Version A 03. Monitors added page 31,32, March 2017.
Version A 04. Art. No. cables changed page 19, 20, 25, April 2018.
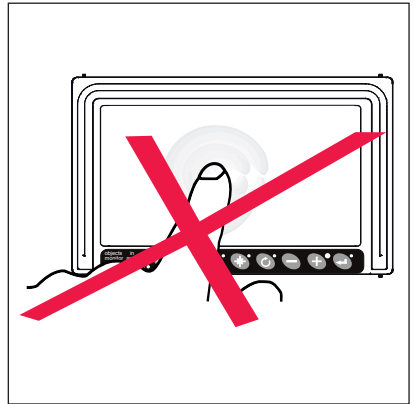
Version A 05. Other Art. no. cables changed, June 2018.
Version A 06. Tightening torque changed, chapter 5, August, 2018.
Version A 07. Monitor added page 33, March 2020.
Version A 08. Copyright text added, March 2021.
Version A 09. Specifications changed, July 2021.

11. Copyright

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ORLACO

Orlaco is a Manufacturing company that specializes in making cameras and monitor systems for commercial vehicles, fork-lift trucks, cranes, off shore and maritime.

Our objective is to design and produce camera systems for the professional market that improve the drivers' view and increase operating efficiency.

At our facility in Barneveld we locate our design, manufacturing, warehousing and service department.

Vision is our mission®. Orlaco therefore deploys the development, manufacture, supply and service of camera and Monitor systems that will improve safety and efficiency of all vehicles, machinery and vessels. Our systems give the end user a view on each blind spot and will create comfort and improved working conditions. Our active approach will support market demands and innovations and will lead to enthusiastic ambassadors in the market; our customers.

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