RioV360

Material Handler Camera Fitment Guide

Find your handler, match the size class, and order the right RioV360 kit.

UNIVERSAL FIT

One RioV360 Kit for Material Handlers of Any Brand

RioV360 is a 4-camera AI pedestrian detection system that alerts the operator and people on foot before a collision. The same complete kit fits material handlers in scrap, timber, pipe and port yards, from compact sorting handlers to 100-ton port machines. It runs on 8 to 32 V DC, mounts on the upper structure so the cameras swing with the operator, and works with elevating cabs. No tags, software or subscription.



4 AI Cameras
1080p, 130° view, infrared night vision, IP69K. Full 360° coverage.

Detects People
Standing, crouching, kneeling or partly hidden, 0 to 5 m, alert in under 400 ms.

7 Inch Monitor
Live view with red, yellow and green zones set per camera.

120 dB Beacon
External voice alert and light so people on foot know to move.

Onboard Recording
Continuous video, 256GB card included, about 30 hours.

Fast Install
Complete kit with harness and hardware. Plan extra time for the elevating cab cable run.

How to Use This Guide

1. Find your brand and model in the table below. The model number usually sets the size class.
2. Match the size class to its power connection and accessories. Material handlers run 24 V, so RioV360 connects directly.
3. Confirm the model and voltage on the machine data plate. Model ranges change by year and region.
4. Plan the elevating cab route. The monitor rides with the cab, so its cable follows the cab lift with a service loop.
5. Order the complete kit with RV360-CBX extension cables, plus any accessories listed for your class.

Power: 24 V, Electric and Hybrid Handlers

- **Diesel handlers:** 24 V system. Connect to a fused, key-switched 24 V circuit and the constant 24 V line on the upper structure, as the user manual shows.
- **Electric drive handlers:** mains-powered machines still run a battery-assisted 24 V control and lighting circuit. Connect there, never to the mains supply.
- **Hybrid handlers:** same 24 V control circuit as diesel models.
- **Elevating cab:** take power from the upper structure fuse panel and run the monitor cable through the cab lift beside the cab's own harness.

RioV360 User Manual

Installation, settings and troubleshooting: **Download the RioV360 User Manual (PDF, v4.4)**.

Fitment by Size Class

Size class	Operating weight	Power	Power / RioV360 connection	RioV360 Accessories	Notes
Compact	Under about 30 t (66,000 lb)	24 V	Direct: 24 V key-switched circuit	EXT, CBX, 512	Waste sorting, recycling and indoor work. Run the monitor cable up the cab lift with a service loop.
Medium	About 30 to 55 t	24 V	Direct: 24 V key-switched circuit	EXT, CBX, 512	Scrap, timber and pipe yards. Rear camera on the counterweight, side cameras on the upper deck rails.
Large	About 55 to 100 t	24 V	Direct: 24 V key-switched circuit	EXT, CBX, 512	Log loaders and pipe handling, Sennebogen 850 class. Plan the cable route up the elevating cab before drilling.
Port / Heavy	Over about 100 t	24 V	Direct: 24 V key-switched circuit	EXT, CBX, 512	Very long cable runs: confirm lengths with us. Detection covers 0 to 5 m, so mount cameras low enough to see the ground.
Electric Drive	Any size	Mains power, 24 V control circuit	24 V key-switched control circuit	EXT, CBX, 512	Electric handlers still run 24 V controls and lights. Never connect to the mains supply.

Codes shortened from RV360-EXT, -CBX and -512. Details on page 3.

Models by Brand and Size Class

Brand	Compact	Medium	Large	Port / Heavy
Sennebogen	817, 818, 821, 822, 825	830, 835, 840	850, 855, 860, 870	875, 885, 895
Liebherr	LH 22, LH 24, LH 26	LH 30, LH 35, LH 40, LH 50	LH 60, LH 80	LH 110, LH 120, LH 150
Fuchs	MHL320, MHL331, MHL335	MHL340, MHL350, MHL360, MHL370	MHL390	Not listed
Cat	MH3022, MH3024, MH3026	MH3040, MH3050, MH3250	MH3260	Not listed
Volvo	EW200E MH, EW240E MH	Not listed	Not listed	Not listed

Older Material Handlers

Brand	Older series	How to match
Sennebogen	C, D and earlier E-Series	An 835 M or 850 R of any series fits like the current model
Liebherr	A 900 and R 900 handler versions, earlier LH generations	A 924 C and A 934 C fit Compact and Medium by weight
Fuchs	D and E series, Terex Fuchs	MHL350 D fits like the MHL350
Cat	M318D MH, M322D MH, M325D L MH	M325D L MH fits like the MH3040
Volvo	EW210D MH	Fits like the EW200E MH

Older handlers fit by operating weight. The model number usually sets the class, so an older generation fits like the current model with the same number. Not listed? Send the make and model and we will confirm the kit within one business day.

Camera / Beacon Layout

- **Rear:** on the counterweight, aimed down at the swing radius and reverse path. The counterweight swing is the biggest danger to people on foot.
- **Sides:** on the upper deck rails or upper corners, aimed down along the tires or tracks and the swing path.
- **Front:** on the upper structure below the boom foot, looking at the travel path. Not on the elevating cab, which moves.
- **Monitor:** inside the elevating cab with the RV360-EXT kit, so it rides with the operator.
- **Beacon:** high on the counterweight, where ground crews can see and hear it.

Mounting on the upper structure means the cameras swing with the operator, so the monitor view always matches where the operator is facing. Check the cable loop at full cab height and full forward travel before tying it down. No tags for workers to wear: the AI cameras detect any person in the zone.

RioV360 Accessories

- **RV360-CBX:** Extension Cables: two 3 m and two 5 m camera cables plus a 5 m monitor cable for the elevating cab and long uppers.
- **RV360-EXT:** Monitor Extension and Mounting Kit: rail clamp, round base, cab-frame bracket or T-attachment.
- **RV360-512:** Upgraded Storage: 512GB card for about 60 hours of continuous video.
- **RV360-PWR:** Bench Test AC Power Adapter: run the system from a wall outlet and learn it on a table before install.

Common Questions

Does RioV360 fit Sennebogen material handlers? Yes. From the 817 to the 895, Sennebogen handlers run a 24 V system, which RioV360 uses directly. RioV360 is running today on a Sennebogen 850 and on elevating-cab log loaders.

How does the monitor cable reach an elevating cab? It follows the cab's own harness through the cab lift, with a service loop sized for full height and full forward travel. RV360-CBX supplies the extra length.

Where do the cameras go on a machine that rotates? On the upper structure: counterweight, deck rails and below the boom foot. They swing with the operator, so the monitor always shows what is around the cab.

Does RioV360 work on electric material handlers? Yes. Electric drive handlers still run a 24 V control and lighting circuit. RioV360 connects there, never to the mains supply.

Do workers need to wear tags? No. RioV360 uses AI cameras to detect any person in the zone, with nothing to wear or charge.

PILOT UNIT PROGRAM

Prove It on Your Handler Before You Commit

$500 off

PILOT discount applies to all RioV360 units through December 31, 2026

Put RioV360 on your busiest material handler and let your operators, supervisors and EHS team see it work in your own yard. No long trial agreements and no software to set up. Install it, run it, and decide.

1. **Pick the handler**
   Choose the machine with the most foot traffic around the swing radius.
2. **Order**
   Send the make, model and serial number. Pay by credit card.
3. **Ships fast**
   In-stock units ship from Arizona in 2 business days.
4. **Install**
   Follow the user manual and the elevating cab notes in this guide.
5. **Roll out**
   Use the same kit and layout across the rest of the yard.

Included with the PILOT unit: 4 AI cameras, 7 inch monitor, 120 dB voice beacon, 256GB card, wiring harness, mounting hardware, user manual and 18-month warranty. Phone, email or Teams support for your installer.

Recommended PILOT Unit Accessories

RV360-CBX
Extension Cables
Camera and monitor extensions for the elevating cab and long upper structure.

RV360-EXT
Monitor Extension and Mounting Kit
Rail clamp, round base, cab-frame bracket or T-attachment.

RV360-512
Upgraded Storage
512GB high endurance card for about 60 hours of continuous video.

RV360-PWR
Bench Test AC Power Adapter
Run the system from a wall outlet and learn it on a table before install.

Order a PILOT unit: **+1 (520) 501-0602** | **info@riodatos.com**

Size classes, weights and model lists are approximate and vary by year, region and undercarriage (wheeled, crawler, pedestal or rail). Brand and model names are trademarks of their owners. RioDatos is not affiliated with or endorsed by any manufacturer listed. Model names are used only to identify compatible machines.