RioV360

Heavy-Duty Forklift and Reach Stacker Fitment Guide

Find your big truck, match the class, and order the right RioV360 kit.

UNIVERSAL FIT

One RioV360 Kit for Big Trucks and Container Handlers

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 high-capacity forklifts, heavy forklifts, container handlers and reach stackers in ports, steel, lumber and intermodal yards. It runs on 8 to 32 V DC, so it connects directly to the 24 V system on most big trucks. Cameras mount on the frame and counterweight, clear of the mast and boom. 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 long cable runs.

How to Use This Guide

1. Find your brand and model in the table below.
2. Match the class to its power connection and accessories. Most big trucks run 24 V, and RioV360 connects directly.
3. Confirm the model and voltage on the data plate. Model ranges change by year and region.
4. Plan long cable runs before drilling. Elevated and offset cabs need RV360-CBX extension cables.
5. Order the complete kit plus any accessories listed for your class.

Power: 12 V, 24 V and Electric Big Trucks

- **Diesel big trucks and reach stackers:** most run 24 V. Connect to a fused, key-switched 24 V circuit and the constant 24 V line, as the user manual shows.
- **High-capacity forklifts:** some run 12 V. RioV360 runs on 8 to 32 V DC and connects directly to either. Check the data plate.
- **Battery-electric big trucks:** connect to the key-switched low-voltage accessory circuit. If there is none, add the RV360-DCC isolated DC-DC converter. Never connect to the traction battery.

RioV360 User Manual

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

Fitment by Class

Class	Capacity	Power	Power / RioV360 connection	RioV360 Accessories	Notes
High-Capacity Forklift	About 15,000 to 36,000 lb	12 V or 24 V	Direct: 12 V or 24 V key-switched circuit	EXT, CBX, 512	Steel, lumber, concrete and ports. Load and mast block the forward view.
Heavy Forklift	Over 36,000 lb	24 V	Direct: 24 V key-switched circuit	EXT, CBX, 512	Long wheelbase and wide counterweight. Mount cameras high enough to see 0 to 5 m.
Container Handler	Empty and laden, masted	24 V	Direct: 24 V key-switched circuit	EXT, CBX, 512	Spreader and container block the view ahead. Front camera low on the frame.
Reach Stacker	About 10 to 130 t	24 V	Direct: 24 V key-switched circuit	EXT, CBX, 512	Boom over the cab. Cameras on the chassis, never on the boom.
Battery Electric	All classes	High-voltage battery	Key-switched 24 V accessory circuit, or RV360-DCC	EXT, CBX, 512, DCC if needed	Taylor ZH and ZLC, Kalmar electric and Hyster J-XD. Never connect to the traction battery.

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

Models by Brand and Class

Brand	High-Capacity Forklift	Heavy Forklift	Container Handler	Reach Stacker
Hyster	H190-280XD, H300-360XD	H400-450XD, H550-700XD, H800-1050XD	H1050-1150XD-CH and empty handlers	RS45, RS46
Kalmar	DCG160 and DCE160 range	Heavy forklift range	Empty container handlers	Gloria DRG420-450, DRG100, Super Gloria DRG450-1300, ERG450 electric
Taylor	X-160, XH-180, X-360M, X-360L, ZH-360L electric	XH-300L, X-620RR, X-1250	XEC-155/6, XLC-975, XLC-976, ZLC electric	XRS-1180, ZRS-1272 electric
Konecranes	SMV forklifts	SMV heavy forklifts	SMV empty container handlers	SMV 4531 and 4538 series
Toyota	THD3000 to THD3600	THD4000 to THD12500	Not listed	Not listed
Cat Lift Trucks	DP60HP-DP100CP	Not listed	Not listed	Not listed
Yale	GP190VX, GP230SDF	GP330EF and larger	Not listed	Not listed
Bobcat / Doosan	D100S-9, D120S-9, D140S-9	D160S-9, DV160S-9	Not listed	Not listed

Older Big Trucks

Brand	Older series	How to match
Hyster	H190-360HD, HD2, older RS reach stackers	Fits like the current XD or RS of the same class
Kalmar	DCE and DRF series, earlier DRG	A DRF450 fits like the DRG450
Taylor	Earlier X and XH series	Same 24 V connection as the current model
Konecranes / SMV	Earlier SMV forklifts and reach stackers	Match by class and voltage

Older big trucks fit by class and voltage. Most run 24 V and connect directly. Not listed? Send the make and model and we will confirm the kit within one business day.

Camera / Beacon Layout

- **Rear:** high on the counterweight, aimed down at the reverse path.
- **Sides:** on the frame corners or fenders, aimed along the turning arc and the wheels.
- **Front:** low on the front frame, looking under the load, mast, spreader or boom at the travel path.
- **Monitor:** inside the cab with the RV360-EXT kit, clear of the forward view.
- **Beacon:** high on the counterweight or cab roof rear, where ground crews can see and hear it.

Mount on the chassis and counterweight, never on the mast, boom or spreader, so the view stays steady. On reach stackers with sliding or elevating cabs, leave a service loop in the monitor cable for full cab travel. 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 long machines.
- **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-MAG:** Magnetic Camera Mounts: no-drill mounting on steel surfaces, ideal for trial positions (US shipments).
- **RV360-DCC:** Isolated DC-DC Converter: for electric machines with no low-voltage circuit. Priced on quote.

Common Questions

Does RioV360 fit Kalmar and Hyster reach stackers? Yes. Reach stackers run 24 V, which RioV360 uses directly. Cameras mount on the chassis and counterweight, not the boom.

Does RioV360 work on electric container handlers? Yes. Connect to the key-switched low-voltage accessory circuit. If there is none, add the RV360-DCC isolated converter.

Where does the front camera go on a container handler? Low on the front frame, looking under the spreader and container at the travel path, where the operator's view is blocked.

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 Big Truck Before You Commit

$500 off

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

Put RioV360 on the big truck with the most people around it 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 machine**
   Choose the machine with the most people working around it.
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 layout in this guide.
5. **Roll out**
   Use the same kit and layout across the rest of the fleet.

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 long frames and elevated cabs.

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

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

RV360-MAG
Magnetic Camera Mounting Kit
No-drill camera mounts to trial positions on steel surfaces.

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

Classes, capacities and model lists are approximate and vary by year, region and configuration. 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.