

ICS / VCS

Intersection Cross-traffic System /
Vehicular Cross-traffic System



COMBAT Forklift caused injuries and deaths and their expensive side effects

ALERT Pedestrians to vehicular traffic with auditory and visual alarms

ARM Drivers with tools to increase pedestrian visibility

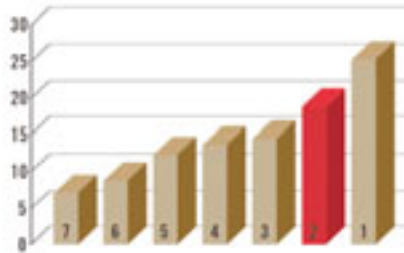
Facts

Approximately every 3 days, someone in the US is killed in a forklift related accident (BLS).

OSHA recognizes hazards with powered industrial forklifts. One of the most useful pieces of equipment in today's plant environment can be one of the most dangerous. Every day workers are injured when forklifts overturn, lose materials and strike pedestrians. Although OSHA's powered industrial forklift training has helped to reduce accidents, it does not guarantee pedestrian awareness in intersections.

Forklift Accidents Result in Injuries and Death

1. Forklift Tipping Over
2. Pedestrians Struck
3. Falling Load
4. Mechanical & Maintenance Issues
5. Personnel Riding Lifts
6. Operators Lose Control
7. Loading Dock Mishaps



NIOSH recommends Evaluating intersections and other blind corners to determine whether **overhead dome mirrors** could improve the visibility of forklift operators or workers on foot.

Make every effort to alert workers when a forklift is nearby. **Use horns, audible backup alarms, and flashing lights to warn workers and other forklift operators** in the area. Flashing lights are especially important in areas where the ambient noise level is high.

Description

The **ICS** and **VCS** from Bircher America Inc. increase plant safety by alerting pedestrians when forklift traffic is approaching, creating safer walkways and positive work environments.

The **ICS/VCS** also assists forklift drivers to locate intersections, allowing them to reduce speed and take precautions when entering the safety zone. The system can sense vehicles separately from pedestrians in busy aisle ways, between narrow rack aisles and can be customized to address specific areas of concern.

Multiple Alarms	Versatility	Minimal Installation
Strobe lighted signs	Senses vehicles up to 80'	Self contained system
26" mirrored dome	Protects 1 to 4 aisles per system	Operates on 120V/15 amp
Adjustable audible alarm	Senses vehicles separately from pedestrians	Sensors can be adjusted with a remote control

- Alert
- 8.7 millions candlepower strobe
 - Audible alarm (28 different tones, from 93 db up to 111 db)

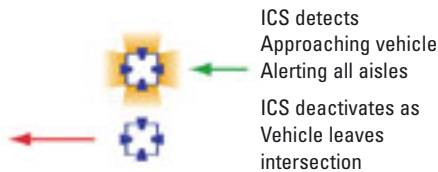
- Arm
- 360° mirrored dome
 - State of the art Microwave motion sensors only detect vehicles moving towards the intersection



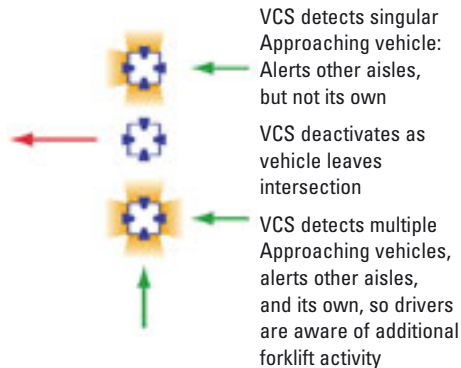
Functionality

The **ICS** and **VCS** from Bircher America Inc. was developed to address the daily hazards of people working with and around powered industrial forklifts. The **ICS** and **VCS** is typically installed over busy facility forklift intersections that also include pedestrian crossings.

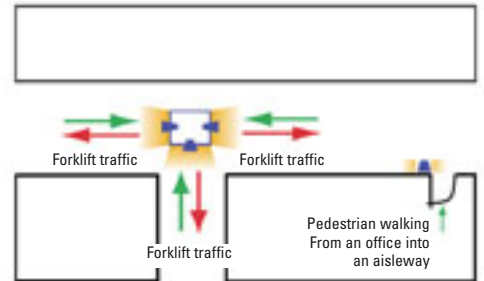
ICS "Intersection Cross-traffic System"



VCS "Vehicular Cross-traffic System"



Application



Material needed for this application:

1 pce	ICS-3 or VCS-3
1 pce	small wall mounted sign
1 pce	people detector inside the office
1 pce	remote

Accessories

- The RC Duo remote control unit allows you to program the Hercules easily and conveniently from floor level. Data transfer between the RC Duo and the Hercules takes place in both directions and are displayed so that they can be checked.
- Additional alerts can be interconnected to the main system, expanding the safety zone. At this time we offer a smaller illuminated sign with a forklift or a pedestrian.
- The Reflex microwave sensor unit allows detecting pedestrians and warning i.e. forklift drivers of people coming out of a door into an aisle where forklifts are working.



small sign forklift



small sign pedestrian



small sign wall mounted



vehicle sensor
Hercules



pedestrian sensor
Reflex



remote control
RC Duo

Special versions are available upon request (i.e. full NEMA 4 Units)

Ordering Information

P/N	Description	Name	P/N	Description
BIAM.ICS-1	Intersection Cross-traffic System (one sensor/aisle)	ICS-1	BIAM.ICS-5	small sign forklift NEMA 12/13 (triangle)
BIAM.ICS-2	Intersection Cross-traffic System (two sensors/aisles)	ICS-2	BIAM.ICS-6	small sign pedestrian NEMA 12/13 (triangle)
BIAM.ICS-3	Intersection Cross-traffic System (three sensors/aisles)	ICS-3	BIAM.ICS-7	additional Horn (28tones, 93–111db)
BIAM.ICS-4	Intersection Cross-traffic System (four sensors/aisles)	ICS-4	BIAM.ICS-8	upgrade NEMA 12/13 for ICS and VCS
BIAM.VCS-1	Vehicular Cross-traffic System (one sensor/aisle)	VCS-1	BIAM.ICS-9	spare/replacement strobe
BIAM.VCS-2	Vehicular Cross-traffic System (two sensors/aisles)	VCS-2	BIAM.ICS-10	small sign forklift flat wall mounted NEMA 12/13
BIAM.VCS-3	Vehicular Cross-traffic System (three sensors/aisles)	VCS-3	BIAM.ICS-11	small sign pedestrian flat wall mounted NEMA 12/13
BIAM.VCS-4	Vehicular Cross-traffic System (four sensors/aisles)	VCS-4	BIAM.ICS-12	spare/replacement mirror 26"
			BIAM.ICS-13	spare/replacement strobe for small signs
			BIAM.ICS-14	spare/replacement signage
			F539.90000	remote for sensors (RC Duo)
			F531.32100	vehicle sensor (Hercules)
			F531.115000	pedestrian sensor (Reflex)

Technical data

Intersection Cross-traffic System		
Alert	<ul style="list-style-type: none"> • 8.7 millions candlepower strobe • 26", 360° mirrored dome • audible self adjusting horn 	
Weight	ICS/VCS: Approximately 50–65 lbs (25–30 kg) Sensor: 1.587 lb (720 g) incl. cable	Final weight depends on the configuration
Material	ICS/VCS: Metal/PVC Sensor: Aluminum housing	Color white Color black
Dimensions	ICS/VCS: 30" x 30" x 32" (762 x 762 x 813 mm) Sensor: 5.28" x 3.23" x 2.95" (134 x 82 x 75 mm)	W x H x D
Max. Range	80 ft (25 m)	At 14.75 ft (4.5 m) height and max. field dimension
Mounting Height	8.2' to 23.0' (2.5 m to 7 m)	
Operating Voltage	ICS/VCS: 120 V/3 A Sensor: 12–28 VAC, 12–36 VDC / 110 mA	At 24 V AC and 20°C (68°F)
Protection Class	ICS/VCS: NEMA 12/13 Sensor: suitable for use in acc. with IP 65	NEMA 4 available
Operating Temperature	ICS/VCS: –4 °F to 120 °F (–20°C to +49°C) Sensor: –4 °F to 140 °F (–20°C to +60°C)	
Humidity	ICS/VCS: NEMA 12/13 Sensor: 0% to 95% relative humidity, without condensation	
Outputs	2 potential-free changeover contacts for separation of: <ul style="list-style-type: none"> • People/vehicles • Direction recognition 	Max. switching voltage 48 V AC/DC Max. switching current 0.5 A AC / 1.0 A DC Max. switching capacity 55 VA / 24 W ohmic load
Detection Speeds	Max. 25 km/h (15 mph) for vehicles	
Response Time	< 100 ms	
Approvals	ICS/VCS: Sensor: CE 0682/FCC	Patent pending
Mounting	The ICS is suspended from chains or appropriate bracketing capable of supporting a minimum of 100 lbs (not included)	

Your contact

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