

Improving Safety With Technology

Dock ***ALERT***

User's Manual

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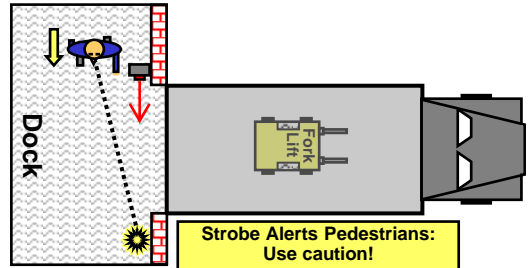
Dock ALERT

ALERT Safety Products 1-800-783-4290

Introduction

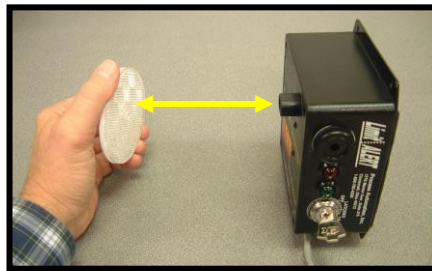
Dock ALERT turns on when a reflector passes the sensor and turns off the second time a reflector passes the sensor.

Dock ALERT warns workers that a forklift is inside a trailer, railroad car, etc.



How It Works

Wherever a hazardous dock exists, you simply mount the Dock ALERT base unit on a wall nearby. The *base unit* contains a photo-detector that sends out a red light beam. When it detects its own reflection from a special (corner) *reflector*, it triggers the alert. This reflective tape is easy to mount on any vehicle.



Dock ALERT Components



AC Power
Adapter

Base
Unit

Audible
Alarm

Strobe

Dock ALERT consists of a Base Unit (with AC Adapter) and an alarm device(s) that you choose (our A97 Audible Alarm and S470Y Strobe are pictured here).

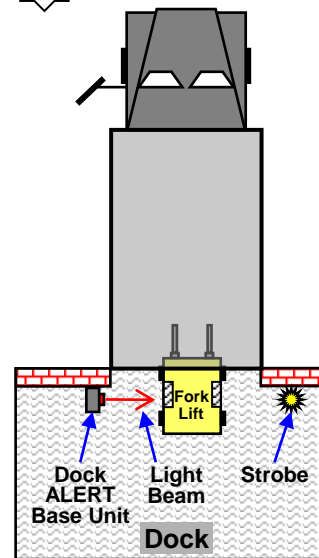
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Installation & Operation

Dock ALERT has been carefully designed so that the user can install it with common tools. Just follow these easy 1-2-3-4 steps.

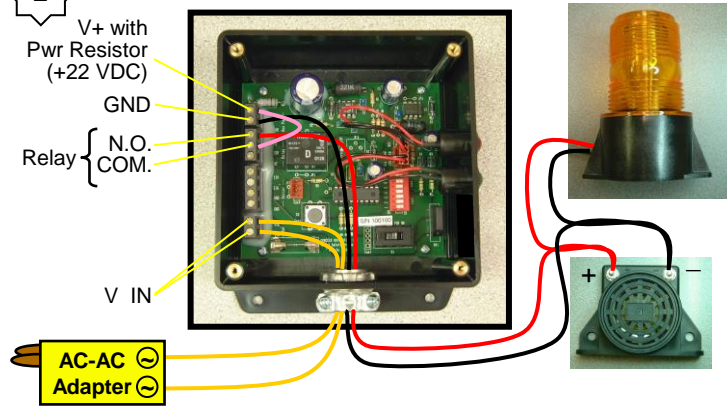
1 Mount the DA Components



Mount the **Base Unit** at the dock door, with the light beam pointing toward the forklift.

Mount the **Strobe** or other warning device at the place where workers need to be alerted of the vehicle's presence.

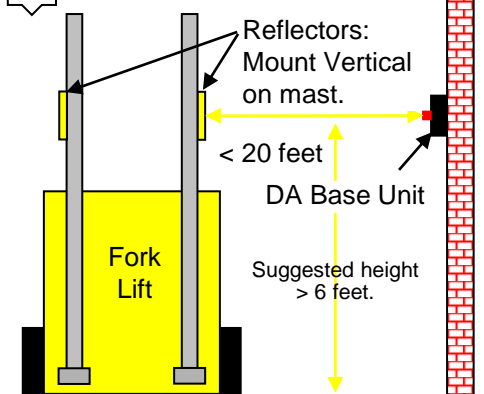
2 Connect the Dock ALERT Components



- Connect the power terminals (~ and ~) on the AC adapter to the AC IN power terminals in the base unit.
- Connect the Strobe (black) and Horn (-) to the auxiliary sensor GND.
- Connect the Strobe (red) and Horn (+) to the relay N.O.

Note: The Power Resistor may be connected to power only our approved accessories. Do not power user-supplied devices using this resistor. (See page 4, Externally Powered Alarms)

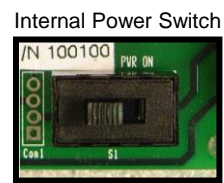
3 Mount Reflectors



Mount the **entire** 3" x 9" reflective tape **vertical** on the mast, centered at the same height as the DA sensors. Clean the mast surface before applying the adhesive-backed reflectors.

4 Turn "Dock ALERT" On

Plug the AC adapter into a 120VAC wall outlet and turn the power switch to the ON position.



Installation of the DA is complete.

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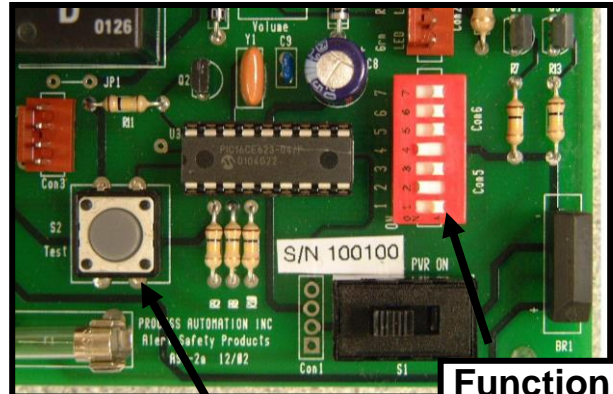
Tips & Techniques

Warning Duration

The alert warning turns ON when a forklift enters the trailer and turns OFF when the forklift exits. However, the warning duration can also be set to turn OFF at the end of the selected timeout period.

The timeout period can be adjusted from approximately 16 seconds to 256 seconds. Use a small screwdriver to flip the switches. With switch 7 ON the warning turns off with a second trigger or after the selected timeout period has occurred. With switch 7 OFF the warning turns off only when a second trigger occurs.

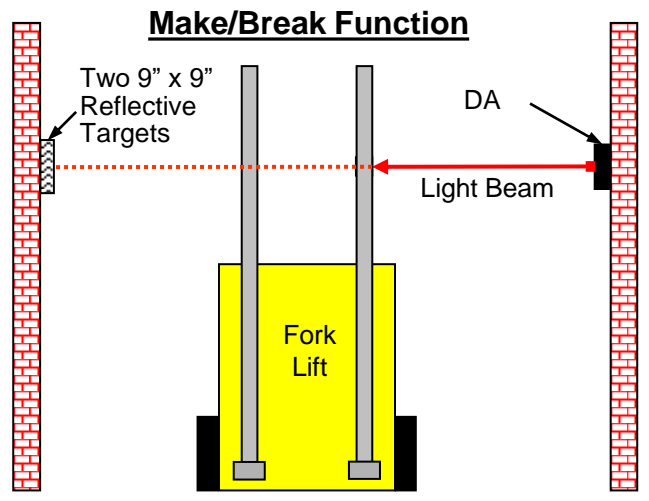
The detect delay will prevent any additional detects from occurring until the selected delay has timed out. We recommend setting this to 1S in the make mode and 2S in the break mode.



Test

Function Switches

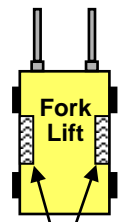
Test Switch: Pressing the test switch will activate the red LED and relay for 4 seconds.



Dock ALERT can be programmed by the user to trigger when the reflected light beam is "broken" instead of when it is "made". By placing the reflective targets on an opposite wall or column and setting Function Switch 6 to OFF, Dock ALERT will trigger when anything interrupts the light beam. TIP: Align Dock ALERT like a gun, eye near sensor looking at target reflector. Bright red light will appear when light beam is on target. The photo sensor should be centered on the 9" x 9" reflective target. We recommend setting the Alert delay at 2S when using the Break mode to prevent false triggering on high loads.

Reflector Mounting

By mounting reflectors on both sides of your vehicles, Dock ALERT will detect the vehicles traveling forwards and backwards.



Reflectors

Reflectors may be mounted anywhere on the vehicle. We recommend they be mounted on the mast above head height when possible. Mount them vertically and centered at the same height as the DA sensor. Use the entire 3" x 9" adhesive backed reflective strip that is supplied.

Function Switches							Duration
1	2	3	4	5	6	7	Seconds
				*	**	***	16
On				*	**	***	32
	On			*	**	***	48
On	On			*	**	***	64
		On		*	**	***	80
On	On	On		*	**	***	96
	On	On		*	**	***	112
On	On	On		*	**	***	128
			On	*	**	***	144
On			On	*	**	***	160
	On		On	*	**	***	176
On	On		On	*	**	***	192
		On	On	*	**	***	208
On	On	On	On	*	**	***	224
	On	On	On	*	**	***	240
On	On	On	On	*	**	***	256

Legend:
 Blank = Off
 SW 5(*):
 ON = 2S Detect Delay
 OFF = 1S Detect Delay
 SW 6(**)
 ON = Make
 OFF = Break
 SW 7 (***)
 ON = Timeout enabled
 OFF = No Timeout

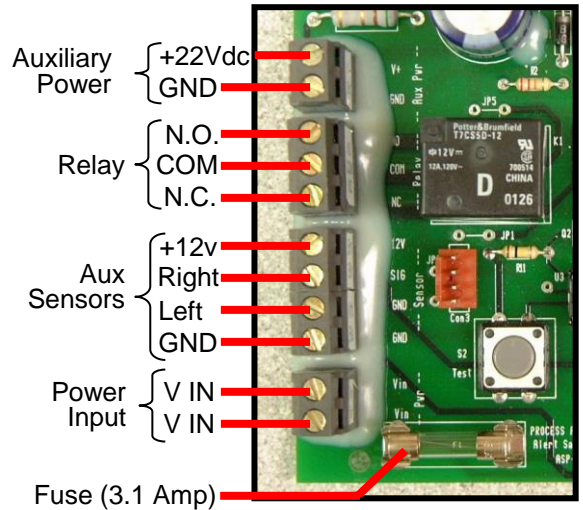
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External Devices

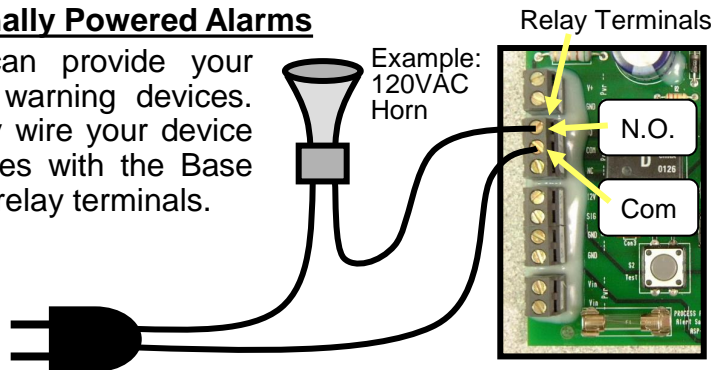
Note: The relay is rated for:
12 Amps at 125 VAC or
10 Amps at 28 VDC

Base Unit Terminals



Externally Powered Alarms

You can provide your own warning devices. Simply wire your device in series with the Base Unit's relay terminals.



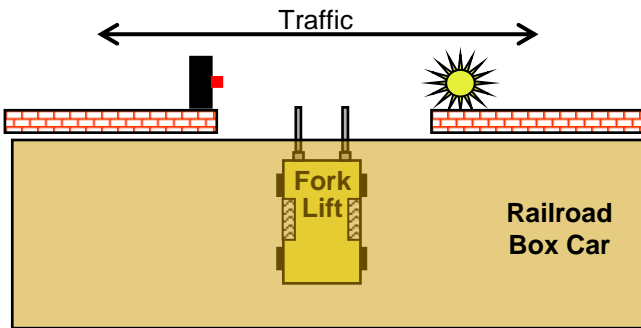
DO NOT USE THE INTERNAL POWER SUPPLY TO POWER USER-SUPPLIED WARNING DEVICES. FIRST REMOVE THE POWER RESISTOR SUPPLIED WITH THE UNIT. (See Page 2.)

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Specifications

Suggested Protection Locations

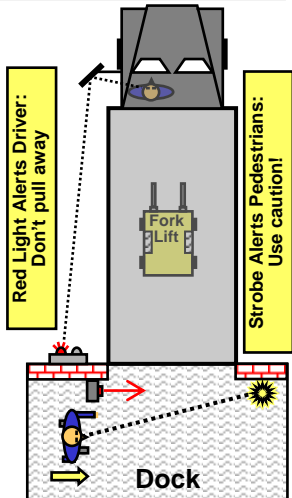


- Tractor-Trailer Docks
- Railroad Car Docks
- Tool Cribs
- Wherever a vehicle may suddenly exit into traffic from a confined area

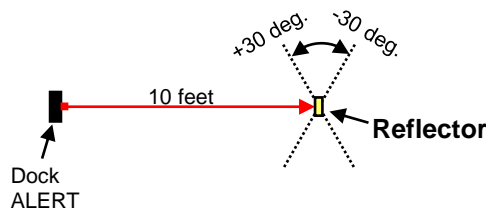
Specifications

- Sensor Range:
 - 20 feet (Non-polarized), 10 feet (Polarized)
 - Angle: 30 degrees, maximum
- Power Requirements
 - 120 VAC Standard Wall Outlet
 - AC Adapter provides 24 VAC
 - Fuse: 3.15 Amp, slow-blow, 5x20 mm
- Weight:
 - 0.9 lbs. (0.4 Kg)
- Size:
 - Box: 4.75"W x 4.75"L x 2.38"H
 - Mounting surface: 4.75"W x 5.75"L
- Mounting:
 - Industrial Double Sided Tape
 - Four screws
- Device Power Requirements (20 Watts Max.)
 - Base Unit (No sensors): 1.0 Watt
 - Sensors: 0.5 Watts each
- User Adjustments:
 - Warning Timeout Duration
 - 16S to 256S. In steps of 16 seconds
 - Timeout Enabled or Disabled
 - Make or Break Mode
 - Detect Delay, 1S or 2S
- Reflector
 - 3"x 9" Reflective Tape

Warn Your Drivers !



Ensuring Success and Safety



Dock ALERT has about a 6" diameter beam at 10 feet. The specified reflector has a +/-30 degree acceptance angle. Dock ALERT will trigger reliably in the examples above.

Special Message

While we cannot anticipate all of the conditions you may encounter, we hope that we have given you enough information that your inventive spirit will take over to solve those really challenging cases. On the other hand, our consulting services are always available to create custom solutions for unique problem areas or for any of your industrial automation needs.

Dock ALERT is intended to enhance safety, not relieve the user's responsibility to comply with OSHA and other requirements. Furthermore, the user is responsible for maintaining, testing, and cleaning all Dock ALERT components including the reflectors. See the "Terms and Conditions of Sale" for specific warranty and other information.

Important Notice!!!

The use of this system or any other warning device does not insure that all drivers and pedestrians can or will observe or react to a warning signal. Never take the right-of-way for granted, it is your responsibility to be sure you can proceed safely. The effectiveness of this warning system is highly dependent upon correct mounting, wiring and installation. Vehicle operators and plant personnel should insure daily that all features of the system are operating correctly.

Alert Safety Products are intended to enhance safety, not to relieve the user's responsibility to comply with OSHA or other safety requirements. The user is responsible for maintaining, testing and cleaning all Alert Safety components including the reflectors. Alert Safety Products, Inc assumes no liability for any loss resulting from the use of this warning system. See the "Terms and Conditions of Sale" for specific warranty and other information.