



APPLICATION NOTE

LZR-WIDESCAN IN COLD ROOMS

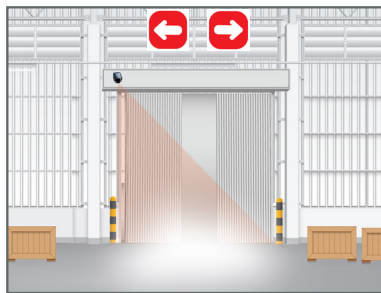
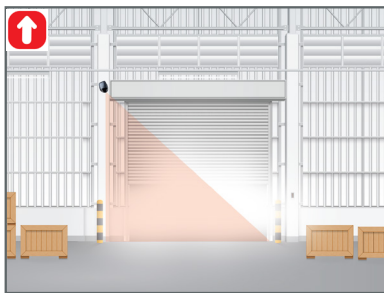
Cold rooms can be challenging environments for LZR-WIDESCAN installation, but appropriate mounting and awareness of fog will ensure success!

When a cold room door opens, warm and cold air mix together which creates a freezing fog around the door. Due to this, there are two critical elements to sensor installation in this application: mounting position and mounting height.

1. *Mounting position: This will change depending on the type of opening (bi-part or vertical) and the environment (cold side or warm side).*
2. *Mounting height: Low, yet appropriate mounting height is recommended to minimize contact with the fog.*

WARM SIDE

Fog tends to cover the whole surface in front of the door, starting from the floor to a specific height.

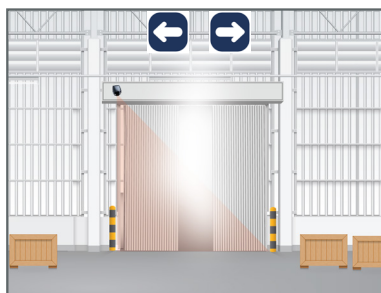
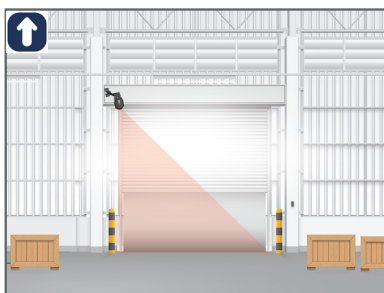


Vertical doors: The best mounting position is left-mount (center-mount is an alternative).

Bi-part doors: Fog takes form on the opening side of the door. Mount the Widescan on the opposite side to minimize the contact between the detection field and the fog.

COLD SIDE

The fog tends to raise to the top, close to and parallel to the door.



Vertical doors: It is recommended to place the Widescan on the left, away from the door.

Bi-part doors: Same as for the warm side (opposite side of the opening).

An appropriate mounting bracket is highly recommended to tilt the Widescan with a negative angle. Contact with fog is significantly minimized when using this configuration.

See the LZR-WIDESCAN MENU TREE (75.5982) for more information about the LCD menus.

Heating: ON

It will keep the front face free from ice and snow. Note that the power consumption will increase to a maximum of 15W.

Minimum Object Height and Uncovered Zone: 19.7" (accordingly)

Set *MinObjHeight* and *Uncovered Zone* to filter the fog's height.

NOTE: The *MinObjHeight* setting only affects the Presence, Pull-cord, and Motion fields; *Uncovered Zone* must also be set to affect the Safety field.

Immunity: 5 (maximum)

Direction filter: UNI CTR (motion)




Helps to avoid unwanted detections during the opening.

EXAMPLE:

	WIDTH	DEPTH	IMMUNITY	FILTER	Remark
SAFETY	Entire width	15.7"	5	-	-
PRESENCE	< Safety	Field start: 15.7" Depth: 78.7"	5	vehicle	Real need for presence field?
MOTION	< Safety	Field start: 78.7" Depth Max	4	vehicle	Alternative: pull cord
Note for warm side: MINOBJHEIGHT: 19.7" / UNCOVERED ZONE: 19.7"					

*can be adapted accordingly.

TIPS

-  Do not oversize the fields.
-  Pull-cord is a good alternative to Motion field in order to increase the Motion immunity by allocating the opening command to a specific place only.
-  Extending the Safety field is a good alternative to replace the Presence field. Safety field is preferred to the Presence field since the immunity is stronger. If Presence field is needed, try to avoid overlapping the Safety and Presence fields. Use the Door Zone OFF (B) setting to shift the Presence field in depth.

Door type	Lateral opening			Vertical opening
	To the left ←	To the right →	In the middle ↔	Vertical ↑
WARM SIDE	Left	Right	Left	Left or middle
COLD SIDE	Left + extended arm	Right + extended arm	Left + extended arm	Left + extended arm