



# APPLICATION NOTE

## LZR-H100: SHADOW LOOP SOLUTION

The purpose of this document is to define the procedure for using an LZR-H100 as a shadow loop. The scope of this document is limited to use of the LZR-H100 in swing gate applications.

### *What is a shadow loop?*

*A shadow loop prevents gate movement when a stopped car has been detected within the path of the swing gate.*

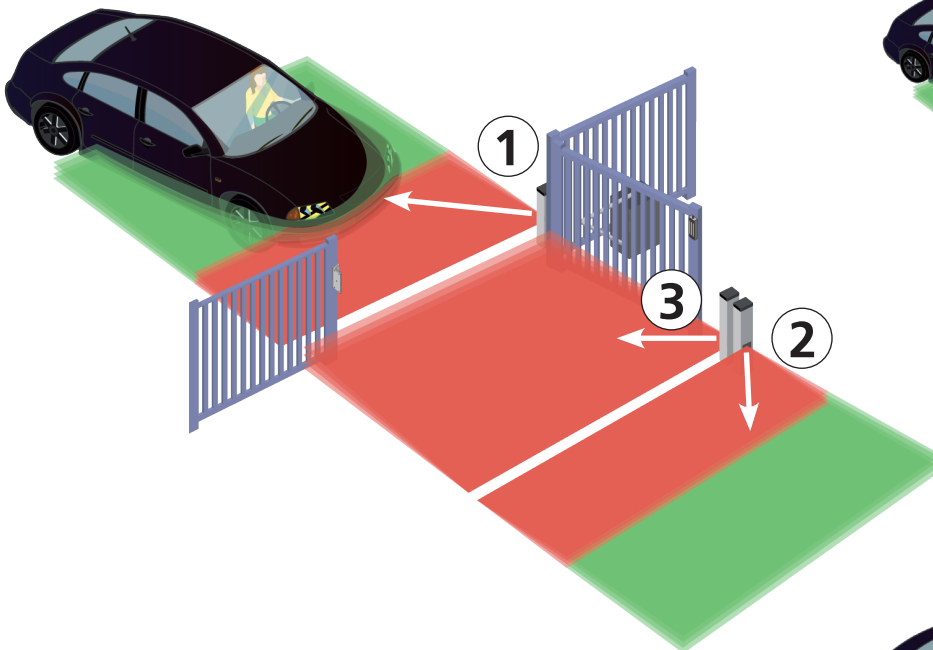
### MOUNTING INFORMATION

In a shadow loop application, an additional LZR-H100 sensor is required.

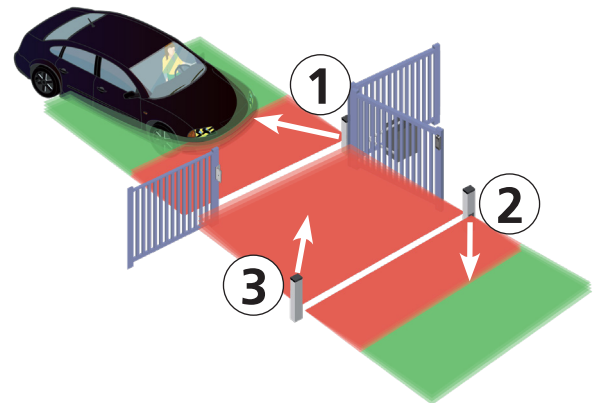
The most important aspect of the designated “shadow loop” sensor is the positioning and direction of the detection field.

See the three images below for the “shadow loop” sensor positioning (refer to sensor #3).

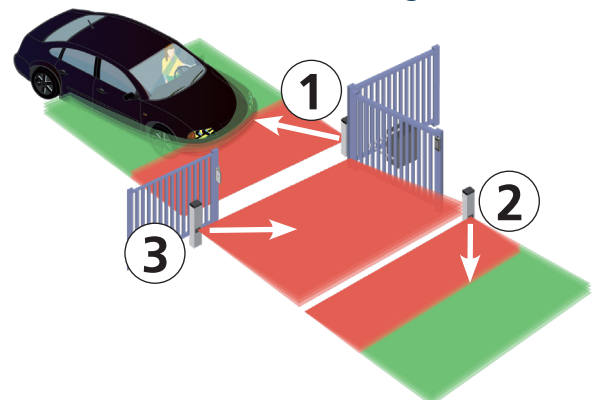
#### RECOMMENDED SENSOR CONFIGURATION



#### Alternative Sensor Configuration



#### Alternative Sensor Configuration



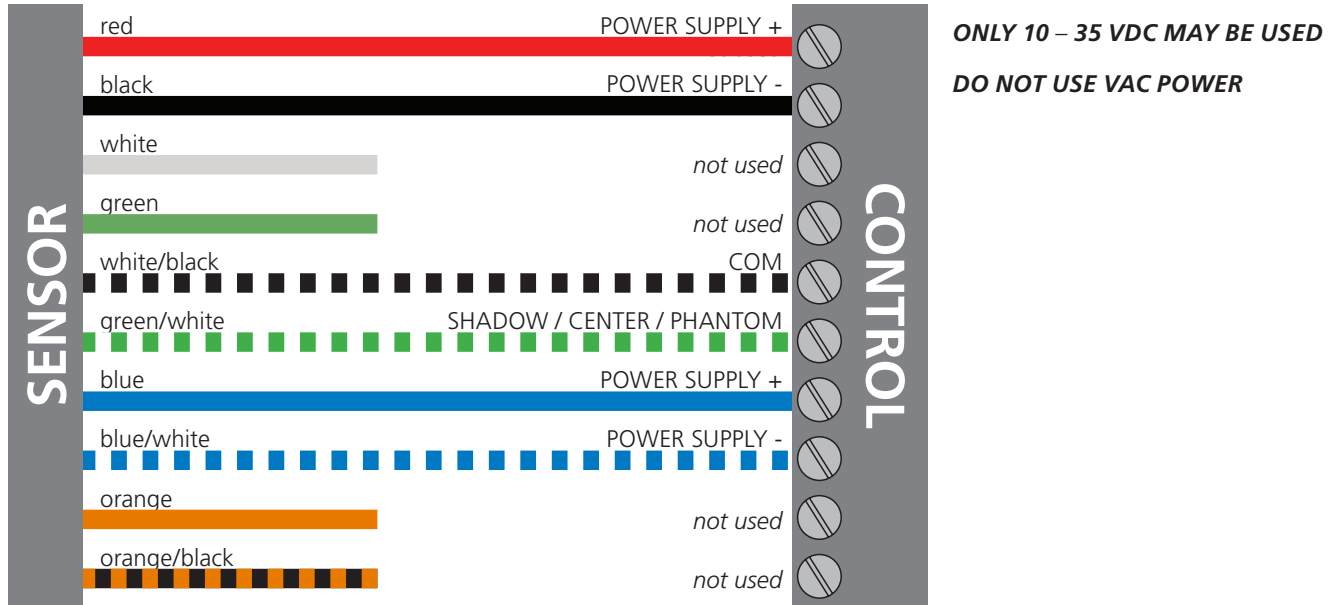
**BEA, Inc. recommends installing all LZR-H100 sensors on the same side of the driveway as the gate operator.**

See “Recommended Sensor Configuration” above.

## WIRING INSTRUCTIONS

The following wiring diagram is only for the “shadow loop” sensor.

The other sensors may be wired as directed in the LZR-H100 User’s Guide (75.5984).



### BEA, INC. INSTALLATION/SERVICE COMPLIANCE EXPECTATIONS

BEA, Inc., the sensor manufacturer, cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor/device; therefore, BEA, Inc. does not guarantee any use of the sensor outside of its intended purpose.

BEA, Inc. strongly recommends that installation and service technicians be AAADM-certified for pedestrian doors, IDA-certified for doors/gates, and factory-trained for the type of door/gate system.

Installers and service personnel are responsible for executing a risk assessment following each installation/service performed, ensuring that the sensor system installation is compliant with local, national, and international regulations, codes, and standards.

Once installation or service work is complete, a safety inspection of the door/gate shall be performed per the door/gate manufacturer recommendations and/or per AAADM/ANSI/DASMA guidelines (where applicable) for best industry practices. Safety inspections must be performed during each service call – examples of these safety inspections can be found on an AAADM safety information label (e.g. ANSI/DASMA 102, ANSI/DASMA 107).

Verify that all appropriate industry signage and warning labels are in place.

