# Before you install this loop, check to see if it is the correct size for the project.\*



See Chart below for recommend larger loop sizes.

Driveway width		Recommended loop size		BD Loops Direct Burial part #			BD Loops Saw-Cut part #		
Residential	Commercial	Residential	Commercial	40ft lead-in	60ft lead-in	100ft lead-in	20ft lead-in	50ft lead-in	100ft lead-in
Drive Thru Lane		2.5x3.5 or 3x3	-	RL12-40	EL12-60	-	SC12-20	SC12-50	-
Drive Thru Lane/ Parking		2.5x4.5 or 3x4	-	RL14-40	EL14-60	-	SC14-20	SC14-50	-
8ft-10ft	-	4x4 or 3x5	-	RL16-40	EL16-60	-	SC16-20	SC16-50	-
9ft-10ft	-	4x5 or 3x6	-	RL18-40	EL18-60	-	SC18-20	SC18-50	-
10ft-11ft	-	4x6 or 3x7	-	RL20-40	EL20-60	-	SC20-20	SC20-50	-
12ft	10ft	4x8	6x6	RL24-40	EL24-60	EL24-100	SC24-20	SC24-50	SC24-100
14ft	12ft	4x10	6x8	-	EL28-60	EL28-100	-	SC28-50	SC28-100
16ft	14ft	4x12	6x10	RL32-40	EL32-60	EL32-100	SC32-20	SC32-50	SC32-100
18ft	16ft	4x14	6x12	RL36-40	EL36-60	EL36-100	SC36-20	SC36-50	SC36-100
20ft	18ft	4x16	6x14	-	EL40-60	EL40-100	-	SC40-50	SC40-100
-	20ft	-	6x16	RL44-40	EL44-60	EL44-100	SC44-20	SC44-50	SC44-100
-	24ft	-	6x20	RL52-40	EL52-60	EL52-100	SC52-20	SC52-50	SC52-100

## The proper loop size will limit your liability, best protect the gate path, and greatly reduce the chances of a vehicle being struck by the gate.

### Try the **FREE BD Loops** Loopalator

### The Loop Layout calculator!

Just by knowing the driveway width and type of gate system you can calculate where the loops should be placed and a recommended size.

Visit <a href="http://www.bdloops.com">http://www.bdloops.com</a> and download your copy of the Loopalator Today! (Requires Microsoft Excel)

\*Check BDLoops.com for the latest installation instructions & product literature!

## **BD** Loops — NOTICE



We're on the Installer's Side

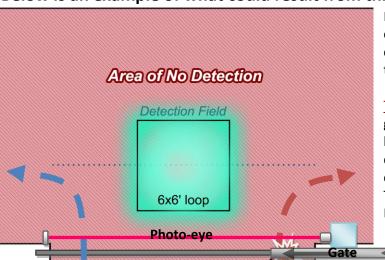
### Limit your liability! Don't let your installer get caught short in their reverse loop design.

BD Loops has larger sizes available, standard sizes up to 52 feet (6'  $\times$  20'). Depending on the application custom loops sizes available up to 132 feet (6'  $\times$  60').

### Why specify a larger loop size?\*

Any loop providing the function of reverse/obstruction/safety or close needs to span the full driveway width coming within 2ft from the curbs on each side. If you leave a gap larger than 2ft on each side of the loop from the curb a small vehicle or motorcyclist will be able to pass by without being detected if they drive near the side. Which is likely to happen, especially if the motorcyclist is driving close to the curb because they are planning on turning left or right after passing through the gate, or if a telephone entry system that is used to open the gate is located on the far left (or right, in some countries) side.

#### Below is an example of what could result from this type of compromise:



Many installers are taught that if a loop's detection height or field will extend around the loop in all directions. This causes installers to install loops up to 4 - 4.5ft away from the curbs or side of the roadway.

This simply isn't true. The detectable field that a loop generates is an electromagnetic field. This field will behave like a magnet. This rough diagram shows the direction that current is flowing in this loop.

The loop legs are labeled: North, South, East, and West.

Area of No Detection

Area of No Detection

Area of No Detection

When you look at the diagram you can see that the current is flowing in opposite directions for the N & S and the E & W legs of the loop. Because the current is flowing in opposite directions, the EMF Fields that are being generated act like magnets and attract (opposites attract) and pull the fields in towards the opposite legs. This is why the usable detection fields that surround outside of the loop only extend for a few inches beyond the outside perimeter of the loop. This attraction effect is also the reason why the detection field height of a loop increases as the short leg of the loop gets longer. For example if you install a loop with a 2ft short leg, the N and S sides of the loop are closer together, which means the magnetic attraction is stronger, which is why the fields stand lower. If a loop has a 6ft short leg the N & S sides are further apart, and the attraction is weaker, which is why the detection fields stand taller.

The detection fields are mostly concentrated above and below the loop because of this magnetic attraction. This is why loops need to span the full driveway width to be within 2ft of the curbs or side of the roadway. Protect the gate path, and limit your liability, do not install a loop that is too small to protect the gate path!

#### See more at www.BDLoops.com

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