

CM9-603

Wiring Diagram



Add the Loop Detector to the Harness



The harness contains a reverse loop, phantom loop, and exit loop. You will need a separate loop detector for each loop.

Loop wires go into the left side of the block terminal. The terminal accepts loop wires for Exit Loops, Phantom Loops, and Reverse Loops.

Adjust the sensitivity from 0-7. The sensitivity is the blue potentiometer on the side of the loop detector. We generally recommend setting the sensitivity to 5 or 6.



When finished, use screws to mount the harness underneath the gate operator chassis, on the back of the power compartment. You will see 4 transparent holes that you can use to drill in 4 screws (not included).



Move the cable from the loop detector harness up into the circuit board compartment, there will be a small circular hole large enough for the cable to go through. Connect the wires based on the wiring diagram in the previous page.

Note: If using the Safety and/or Phantom loops, remove the black jumper guard in Figure A, page 1. On the gate operator circuit board on the bottom right side, remove the wire that joins 24V-COM and SAFETY together. If using the exit loop only, disregard this step.

Exit Loops

An exit loop opens the gate automatically when a car approaches the gate.

A reverse loop is a loop that reverses the direction of a closing gate if a car drives over it. It will also hold a gate open if a vehicle stops over the loop. If the gate is fully closed and a vehicle drives over it, the gate will not open.

A phantom loop is a reverse loop located inside the property that covers the path of an opening swing gate. The phantom loop prevents the opening swing gate from hitting a car in its path.



Exit Loops

Loop wires are installed 1.5" underground by cutting the concrete with a circular saw. The typical size loop is 8x4'. Common loop wires are size 16 or 18 AWG stranded copper XLPE (cross-linked polyethylene) electrical wire. 3 layers of turns are required for a typical 4x8' loop. For different size loops, use 4 turns for 10-20ft in perimeter, 3 turns for 20-32ft in perimeter, and 2 turns for 32-98ft in perimeter. The wire ends must be twisted back into the gate operator with a minimum of 6 twists per foot. The twisted ends must be placed inside a PVC conduit. Use caulk or sealant to seal the ground once finished.



Exit Loops



Loop Size (Sq ft)	Number of Turns
6' to 12'	6
13' to 20'	5
21' to 60'	4
61' to 240'	3
241'+	2