



# Multi-Code Gate Receivers Models 109950, 302850

- Dual frequency — Multi-Code or Stanley compatible; jumper selectable.
- 12–24 Volts AC or DC.
- Auto voltage sensing — no jumpers to set.
- Single relay and two relay models.
- Supplied with whip antenna, three feet of coaxial cable and bulkhead connector.

The MCS109950 and the MCS302850 are two auto sensing Multi-Code or Stanley compatible format gate receivers from Linear. They eliminate any chance of damage to either the gate operator or themselves from running off the wrong voltage. Nearly all gate operators offer either 24 or 12 volts AC or DC as accessory power. Because these two receivers are auto sensing, each recognizes the gate operator's correct voltage. As a result, installers can be assured of always having the correct model gate receiver on the truck.

The two receivers can operate from 12-30 volts AC or 10.5-30 volts DC and are normally powered from the gate operator. Their relay contact(s) are rated at 30 VAC/DC up to 5 Amps.

The two receivers both support transmitters that use the Multi-Code format (300 MHz), as well as the Stanley compatible (310 MHz) format. Both formats support 1,024 system codes for the MCS109950 and 512 system codes for the MC302850 (system codes are easy to set via dip switches).

The MCS109950 has a single relay and replaces three different Multi-Code gate receivers, the MCS109930, the MCS109940, and the MCS109931. It is designed for use with automatic gate operators or systems where a remote antenna is needed. The MCS302850 comes with two relays and replaces Linear models MCS302801 and MCS203102, both of which were housed in metal enclosures. The MCS302850 comes in a plastic housing that is easy to

work with. It will operate two gates, one gate and an obstacle sensor, or channel one can open the gate and channel two can close the gate. Both models come with a 9-inch local antenna, three feet of 75 ohm coaxial cable, and a bulkhead connector for locating the antenna outside the gate operator enclosure. These receivers also include audio test points for connecting audio listening equipment for troubleshooting.



# General Specifications

## RF

300 (Multi-Code) and 310 (Stanley compatible)  
MHz +/- 250 KHz; both formats support 1,024 system codes  
(MCS109950) or 512 system codes (MCS302850)

## OUTPUTS

**Relay(s):** MCS109950 = 1CH and MCS302850 =2CH; each relay is a Form C relay (NC connection available on PCB) rated at 30V AC/DC up to 5 Amps

**RF Test Points:** two test points for connecting of an audio listening device to hear what the receiver is hearing

## INPUTS

**Antenna:** 75 Ohm F connector

**Dip Switch:** used to set the system code; on the MCS109950, all 10 switches can be used for the system code; the MCS302850 uses switch # 10 from the transmitter to determine which channel it should activate; thus only 9 switches can be used to create the system code

## POWER

12 - 30 VAC or 10.5 - 30 VDC; 16 mA nominal, 50 mA maximum while relay is triggered

## OPERATING TEMPERATURE

-4°F to +140°F (-20°C to +60°C)

## DIMENSIONS

3.625 in W x 5.25 in H x 1.5 in D (92 x 133 x 38 mm)

## Electrical Connections

36" 22AWG wires on removable connectors:

**Power:** red and black wires

**CH1 Relay:** 2 gray wires

**CH2 Relay:** 2 yellow wires

## STANDARD EQUIPMENT

MCS109950 and MCS302850; 9.5" whip antenna, 3 ft coaxial cable, bulkhead connector, mounting hardware

## REGULATORY

FCC Part 15

The logo for Linear Corporation, featuring the word "Linear" in a bold, blue, sans-serif font with a registered trademark symbol (®) to the upper right of the letter 'r'.

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