



# Installation Instructions AUTOMATIC GATE AND DOOR RADIO CONTROLS 12-24V RECEIVER

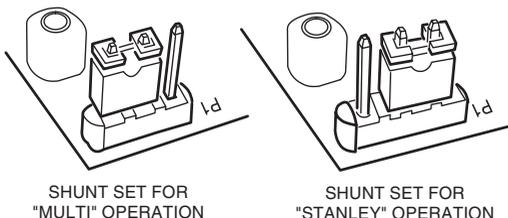
### WARNING:

- Disconnect power before any installation or repair.

Your Multi-Code Radio Controls are designed specifically for the remote control of industrial door or gate openers and to give years of dependable service without adjustment.

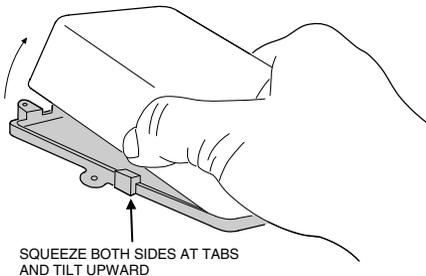
### SELECTING AN OPERATING FREQUENCY

Place the shunt on the 2 pins of P1 that correspond with the desired frequency of operation. P1 is labeled "Multi" for 300 MHz operation and "Stanley" for operation at 310 MHz. NOTE: If the shunt is not used, and the pins of P1 are left open, the default frequency is 310 MHz.



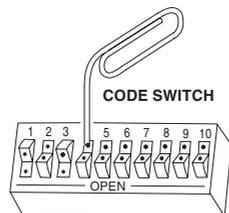
### SELECTING A CODE

The code is determined by the positions of the 10 small switches numbered 1 through 10 located on the receiver board. Set these code switches to match the transmitter's code switches. To gain access to the switches, remove the rear section of the case by squeezing the side.



Any combination of ON (CLOSED) or OFF (OPEN) positions can be selected by using a pointed object such as a small screwdriver or paper clip. We strongly urge that you avoid the following code schemes: ALL ON, ALL OFF, 2, 4, 6, 8, 10, ON or 1, 3, 5, 7, 9, ON. These codes are frequently used by other manufacturers, and create the possibility of false operation, and may be less secure than other code schemes.

The MC302850, two-channel receiver has only 9 code switches. Set them to match switches 1-9 on the transmitter. The channel of operation is determined by the position of switch 10 on the transmitter (OFF- CH1, ON-CH2).



Be certain to check that the code is functional before completing the installation.

### INSTALLATION

The receiver comes equipped with an F-connector receptacle and an antenna with an F-connector plug. The antenna can be plugged directly into the receptacle, or it can be moved away from a metal structure, or to an outside location for better receiver performance by using the coaxial cable which is included.

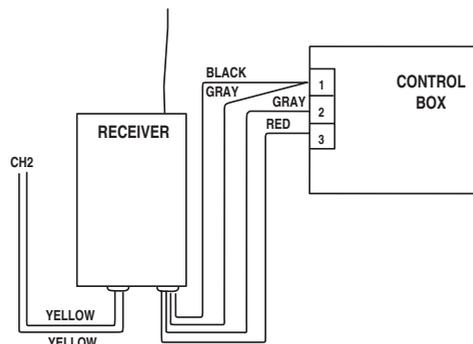
Begin your installation of the receiver by correctly wiring the receiver to the devices you will be using. WE URGE YOU TO BECOME FAMILIAR WITH THE INSTRUCTIONS THAT THE MANUFACTURER OF YOUR EQUIPMENT HAS PROVIDED. SINCE, IN MANY CASES, THESE INSTRUCTIONS DETERMINE THE WAY IN WHICH THE RECEIVER SHOULD BE INSTALLED.

The receiver should be mounted near the opener power head and can be installed in any position by using screws and the two slots in the cover flanges. Select a location and position that permits access to the terminals and space for the antenna as clear of metal structures as possible and preferably in a vertical position.

Wire the red and black wires to the power source.

The input voltage is: 12.0 - 30 AC  
10.6 - 30 VDC (Red + Black -)

Connect the remaining gray wires as specified by the manufacturer of your operator. If such instructions do not exist, wire the two gray wires in parallel with the pushbutton terminals. If the operator has a three wire terminal, the proper terminals will usually be marked "1" and "2" or "24V" and "RELAY".



At this point you should mount your receiver to its permanent location, if you have not already done so.

The receivers come with the output wires connected between the relay common and normally open contacts. Normally closed contacts can be selected by moving the channel's output wire from the N.O. to the N.C. post on the circuit board.

The output wires are:

- Gray: Channel one
- Yellow: Channel two

### ANTENNA INSTALLATION

After you have mounted your receiver, test it with the enclosed antenna for range, noting the coverage that you get from all desired operating locations. If greater range or coverage pattern is necessary, you may need the 1066 Coaxial Wiring Kit, which is available from your dealer. It is not advisable to add lengths of coaxial cable greater than 20 feet, as this may affect range or tuning.

### ADDITIONAL INSTALLATION INFORMATION

Linear Corporation has taken every possible precaution to make the receiver as reliable as possible. We think the following notes should be observed:

1. Be sure the unit is sealed from moisture, and, if at all possible, keep it away from direct moisture.
2. In those installations where vibration may be a factor, be sure to use a fastening compound, such as LOCTITE (TM) on the mounting screws to insure reliable mounting.

### OPERATIONAL CHECK

To check operation, move back a reasonable distance (about 50 feet) and press the transmitter button. Operation should be reliable at this distance but environment and location of both the transmitter and receiver will affect the range. If the transmitter is stowed well out of sight, it may be necessary to remove it from its mounting and hold near the windshield. Try different locations and positions. If operation is still unsatisfactory, check the following:

1. The antenna must be connected to the receiver for normal use.
2. If the opener fails to operate, check to see that 115 VAC power is present. Check circuit breaker. Check for a system power failure.
3. If the opener operates by pressing the wall button, but not when the transmitter button is pressed, the radio controls are probably at fault. Check to make sure both transmitter and receiver code switches are set to the exact same code since a difference of just one switch will prevent operation. Check transmitter battery, location of the transmitter and receiver installation.
4. Try mounting the antenna in a more favorable remote location by utilizing the coaxial kit.

If, after performing the above operational check, it is necessary to return the radio controls, return both the transmitter and receiver to your dealer for repair or replacement or they may be returned, postage prepaid, directly to Linear Corporation.

### WARRANTY

All MULTI-CODE garage door related products carry an eighteen (18) month warranty against defects in workmanship or material. This warranty begins at the date of manufacture, for eighteen months. Linear Corporation warrants our product only to our authorized dealers and distributors, and not to the end customer. If you have any questions about our warranty, please ask your dealer to determine the nature and scope of his warranty. Linear Corporation does not assume, and is not responsible for, any real or consequential damages from claims against the performance of our product, nor is it liable for any costs related to loss of life, property, or revenue. Further, Linear Corporation is in no way responsible for installation of our product, and will assume no costs to re-installation or removal. Linear Corporation's Warranty is in lieu of all other warranties, expressed, or implied.

**CAUTION:** Any changes or modification in intentional or unintentional radiators which are not expressly approved by LINEAR CORPORATION could void the user's authority to operate this equipment.

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