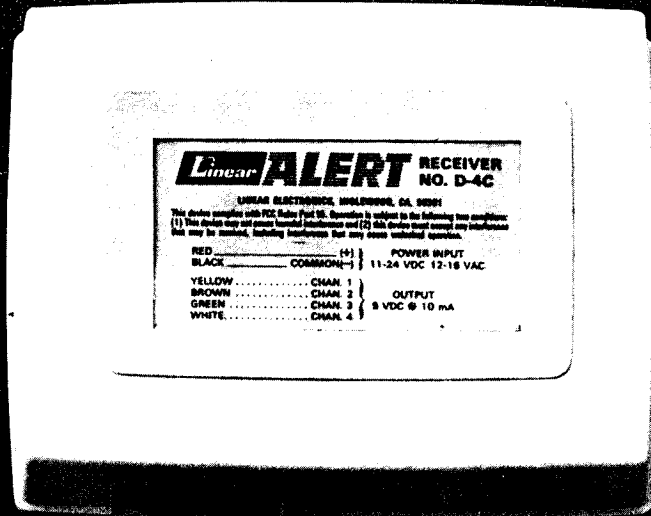


# Linear ALERT

**Wireless Radio Control  
From Linear Electronics**

## D-4C Four Channel Digital Receiver

9-Volt output on activation



**Linear ALERT RECEIVER NO. D-4C**  
LINEAR ELECTRONICS, WILMINGTON, CA 90701  
This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference and (2) this device must accept any interference that may be received, including interference that may cause undesired operation.

RED ..... (+) ..... POWER INPUT  
BLACK ..... COMMON ..... 11-24 VDC 12-16 VAC

YELLOW ..... CHAN. 1 ..... OUTPUT  
BROWN ..... CHAN. 2 ..... 9 VDC @ 10 mA  
GREEN ..... CHAN. 3  
WHITE ..... CHAN. 4

POWER INPUT  
Four channels available for applications

### FEATURES

### BENEFITS

<b>Radio Operation (RF)</b>	With no wires to run, installations are faster and structural modifications (drilling holes, fishing wires) are minimal. Access to crawl spaces and attics is not required. This means an 80% labor savings. In addition, most estimates can be prepared more quickly and accurately.
<b>Advanced Digital Coding</b>	Reliable, accurate and high level of security - virtually false alarm free.
<b>Large Number of Discrete Codes Provided</b>	Keeps your system private for multiple installations simultaneously.
<b>Minimum Power Consumption</b>	Excess energy is instantly returned, systems can be powered by most common household power supplies.
<b>Small Compact Case Ideal for use in areas where high density installations are required.</b>	Provides multi-channel capabilities in one system, ability to integrate (Reliable cost per channel).
<b>9-Volt Output on Activation</b>	Compatible with most standard installations.

### GENERAL DESCRIPTION

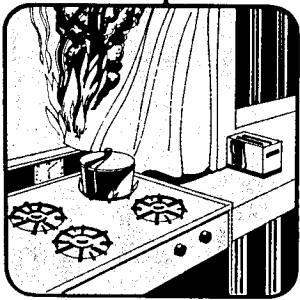
The Model D-4C receiver is a small economical package, designed for use in wireless security systems. It makes available four separate control channels in one receiver. All Linear Alert digital radio transmitters may be coded to activate this receiver, and any number of transmitters may be used to operate each channel. Up to 64 independent four channel security systems may be operated in adjacent areas.

### 4 SOLID STATE OUTPUTS

Each of the four channels controls a solid state output. The circuits associated with each of the outputs are floating until activated. When activated, the outputs switch to plus 9-Volts.

### APPLICATIONS

The Linear Alert Model D-4C is a versatile digital receiver. It is useful in 12-Volt wireless security systems that have central control panels. Each channel can perform a variety of functions. Applications include fire warning, motion/intrusion detection, panic alarm response, and medical reporting. Alternatively, this receiver can provide local annunciation, or control alarms associated with up to four fire or intrusion zones.

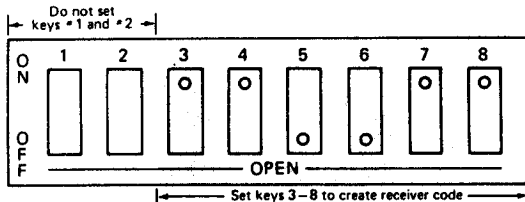


# CODING INSTRUCTIONS

## RECEIVER CODING

The digital coding switch on Linear's 4-channel receiver is recessed in the back of the receiver case. Use a pen, pencil or other pointed object to set the eight keys on the digital switch to the code you select. Note that keys 1 and 2 are not operational. Their functions are hard-wired on the circuit board.

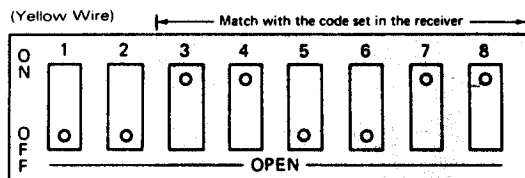
Set keys to ON or OFF positions from left to right (from numbers 3 through 8). In the example shown below, keys numbered 3, 4, 7, and 8 are set to ON, the keys numbered 5 and 6 are OFF.



## CODING TRANSMITTERS

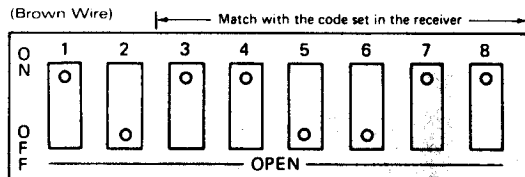
Inside each of Linear's digital transmitters is an 8-key switch which is identical to the switch in the 4-channel receiver. The keys numbered 3 through 8 must be set to the same code as the corresponding keys in the receiver. Set Key No. 1 and Key No. 2 on the transmitter coding switch as follows to establish which of the four receiver channels the transmitter will access.

### Transmitter code to access Channel #1



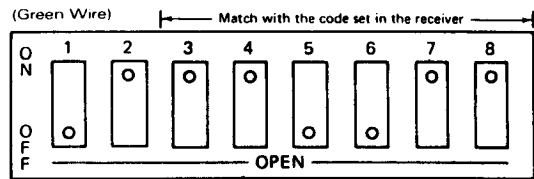
Channel No. 1 of the receiver is accessed by setting transmitter Key No. 1 to OFF and transmitter Key No. 2 to OFF.

### Transmitter code to access Channel #2



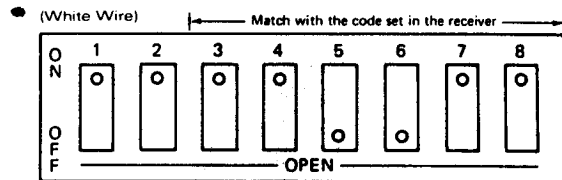
Channel No. 2 of the receiver is accessed by setting transmitter Key No. 1 to ON and transmitter Key No. 2 to OFF.

### Transmitter code to access Channel #3



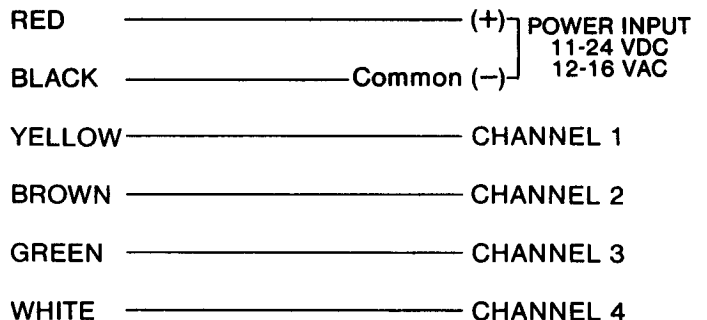
Channel No. 3 of the receiver is accessed by setting transmitter Key No. 1 to OFF and transmitter Key No. 2 to ON.

### Transmitter code to access Channel #4



Channel No. 4 of the receiver is accessed by setting transmitter Key No. 1 to ON and transmitter Key No. 2 to ON.

## HOOK-UP DIAGRAM



## SPECIFICATIONS

CODING TECHNIQUE..... Pulse width A-1 modulation at 250 bits per second. Four 8-bit words are required for output.

NUMBER OF CODES  
4-Channel Receiver..... 64 System codes.  
4-Channels per system.

R-F CARRIER..... Range 290-320 MHz.

RADIATED OUTPUT..... Complies with FCC Rules, Part 15.

SELECTIVITY..... 5 MHz at 5µV input.

POWER REQUIREMENTS..... 11 to 24 VDC  
12 to 16 VAC  
Standby 15 mA  
Operating typical 15 mA

OUTPUT CAPABILITY:  
9-Volts..... Open circuit  
40 mA..... Short circuit current

OPERATING TEMPERATURE RANGE ... -40 to +140° F  
(-40 to +60° C)

SIZE..... Approximately 4.9 x 3.8 x 1.3 inches  
(125 x 97 x 33 mm)

**Linear**  
**Security Products Group**

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