

DESCRIPTION

The Models D-8C and D-8CW are eight-channel, 12 Volt digital UHF receivers useful in wireless security systems and remote control applications. Typically, the receiver is connected to the inputs of a hardwire alarm control panel, giving the control panel wireless capability.

Each of the receiver's eight channels controls a solid state output. The circuits associated with these outputs are normally open until activated. When activated, the outputs switch to ground and trigger the control panel zone (see Figure 1).

A 15-inch ribbon cable exits the receiver for power and output connections. The D-8CW has a 10-position connector on the cable for easy installation to compatible control panels. See Figure 2 for D-8C connections and Figure 3 for D-8CW connections.

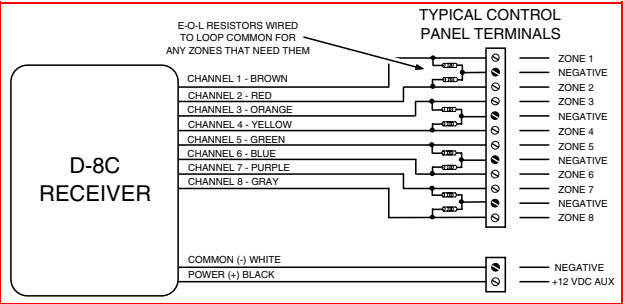


Figure 1. Normally Open Outputs Connected to Control Panel

Figure 2. Rear View of D-8C Receiver

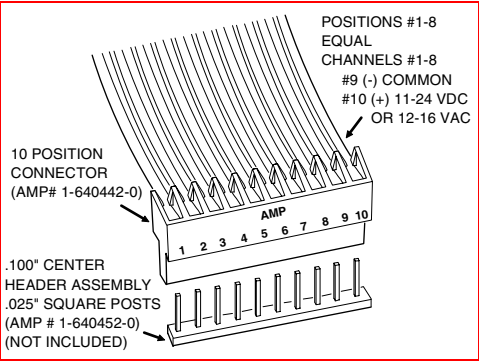
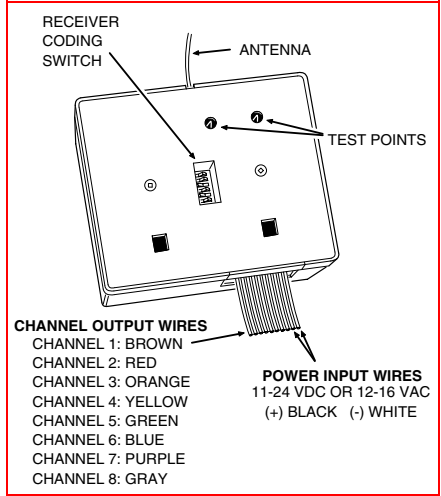


Figure 3. D-8CW Connector Details

EIGHT CHANNEL RECEIVER CODE SETTING

Locate the digital coding switch which is recessed in the center of the back of the receiver case (see Figure 2). Note that the coding switch has eight keys numbered 1 through 8 (see Figure 4).

CAUTION! Transmitters and receivers should be re-coded by the installer prior to operation. DO NOT USE THE FACTORY SET CODE!

Among the 32 possible digital codes, four codes are considered invalid, and should not be used. They are: all switch keys set to ON; all switch keys set to OFF; switch key set alternating ON/OFF or OFF/OFF combinations.

To set a code, select any valid combination of ON and OFF positions for the switch keys numbered 4, 5, 6, 7, and 8. **Ignore keys 1, 2, and 3 in the receiver, they are disconnected and not used for coding; they may be set in any position.**

Use a pointed object (other than a pencil or pen) to set the keys. The ON position is when the top of the switch is down. The OFF position is when the top of the switch is up and the bottom is down.

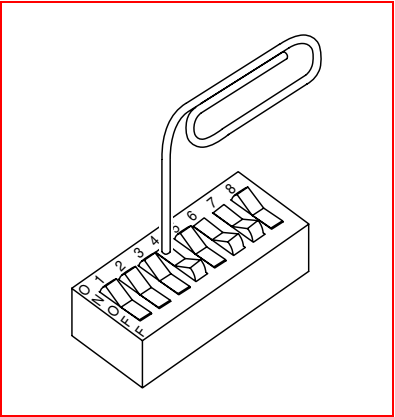
For example the switch shown in Figure 4 is set with the 4, 6, and 7 keys ON, and keys 1, 2, 3, 5 and 8 OFF.

The code set on keys 4, 5, 6, 7, and 8 on the receiver must now be matched in all transmitters used with the system.

TRANSMITTER CODE SETTING

Following is the procedure for coding a Linear single-channel transmitter to an eight-channel receiver.

Figure 4. Receiver Code Switch Example



NOTE: For coding a multi-channel transmitter to this receiver, consult the transmitter's Code Setting Instructions or call Linear's Technical Services Department for assistance.

Depending upon the transmitter model, the coding switch may be accessed by removing the battery cover plate, or it may be necessary to disassemble the transmitter case.

On the coding switch of each single-channel transmitter used with this receiver, **the keys numbered 4 through 8 in the transmitter must be set to the exact same code as keys 4 through 8 in the receiver.**

To complete the transmitter coding, decide which receiver channel the transmitter should activate. Then set the transmitter keys numbered 1, 2, and 3 to the desired channel as shown in Table 1.

RECEIVER INSTALLATION

The D-8C receiver should be mounted on the wall above or next to the control panel. Use the mounting bracket supplied and stretch the white wire antenna out straight. Generally, the higher the receiver is mounted above ground level the better the radio range will be. Follow these steps to install the receiver:

CAUTION: DO NOT MOUNT THE D-8C RECEIVER ON OR IN A METAL CONTROL PANEL! SHORT RANGE AND/OR ERRATIC OPERATION WILL OCCUR!

STEP 1 Connect GROUND (WHITE) to the negative terminal on the 12-volt 24-hour output from the control panel.

STEP 2 Connect +12-VOLT (BLACK) to the positive terminal on the 12-volt 24-hour output from the control panel.

STEP 3 Connect the CHANNEL outputs 1-8 (See Figure 2 for colors) to the zone input terminals on the control panel.

CHANNEL #	TRANSMITTER SWITCH #		
	1	2	3
1	OFF	OFF	OFF
2	ON	OFF	OFF
3	OFF	ON	OFF
4	ON	ON	OFF
5	OFF	OFF	ON
6	ON	OFF	ON
7	OFF	ON	ON
8	ON	ON	ON

Table 1. Channel Coding Matrix

NOTE: To operate correctly with this receiver, the control panel must be able to trigger from a short-to-common input. Program the panel for normally open loop trigger. Check that the loop returns are the same as the control panel common ground.

STEP 4 If the control panel uses end-of-line resistors, connect each resistor across the zone input terminals and the loop return of the control panel.

CHECKOUT AND TEST

After coding the D-8C receiver, the system should be tested. To test the receiver, perform the following steps:

STEP 1 Apply power to the control panel. Be sure the control panel is disarmed or in a "test" mode.

STEP 2 Trigger each of the system's transmitters, one at a time. Receiver activation indicates that the transmitters are operating properly and that the digital codes are correctly matched. Verify that the correct control panel loop is violated for each transmitter triggered.

STEP 3 With portable transmitters, operate them from various locations. This will help to locate possible null areas where structural steel, and/or certain obstacles may interfere with transmission.

If the transmitter fails to activate the receiver, first check the coding switches to see that the switch keys in the transmitter and receiver are properly matched. Next, check the battery and replace it if it is weak. Although transmitter batteries should last for a year with normal use, it is good practice to install new transmitter batteries every six months.

LINEAR LIMITED WARRANTY

This Linear product is warranted against defects in material and workmanship for twelve (12) months. The Warranty Expiration Date is labeled on the product. **This warranty extends only to wholesale customers** who buy direct from Linear or through Linear's normal distribution channels. **Linear does not warrant this product to consumers.** Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any. **There are no obligations or liabilities on the part of Linear corporation for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstatement.** All implied warranties, including implied warranties for merchantability and implied warranties for fitness, are valid only until Warranty Expiration Date as labeled on the product. **This Linear Corporation Warranty is in lieu of all other warranties express or implied.**

For warranty service on Linear equipment return product, at sender's expense to:

U.S.A.

Linear Corporation
2350 Camino Vida Roble
Carlsbad, CA 92009
Attention: Repairs Department
Ph# (800) 392-0123

Canada

Linear Canada Inc.
673 Consortium Court
London, Ontario, Canada N6E 2S8
Attention: Repairs Department
Ph# (519) 685-3020

IMPORTANT !!!

Linear radio controls provide a reliable communications link and fill an important need in portable wireless signalling. However, there are some limitations which must be observed.

For U.S. installations only: The radios are required to comply with FCC Rules and Regulations as Part 15 devices. As such, they have limited transmitter power and therefore limited range.

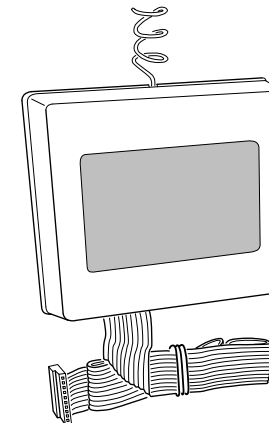
Receivers may be blocked by radio signals that occur on or near their operating frequencies, regardless of code settings.

A receiver cannot respond to more than one transmitted signal at a time. Infrequently used radio links should be tested regularly to protect against undetected interference or fault.

A general knowledge of radio and its vagaries should be gained prior to acting as a wholesale distributor or dealer, and these facts should be communicated to the ultimate users.

D-8C & D-8CW

Eight Channel Digital Security Receiver



Code Setting Instructions

D-8CW SHOWN

Linear

A NORTEK COMPANY

2055 Corte Del Nogal
Carlsbad, CA 92009

(619) 438-7000 • (800) 421-1587
CA (800) 321-1845 • FAX (619) 438-7043
Customer/Technical Service: (800) 392-0123