DXR-701

DX BY Linear

SINGLE-CHANNEL DIGITAL RECEIVER

Installation Instructions

Linear®

(760) 438-7000 • FAX (760) 438-7043
USA & Canada (800) 421-1587 & (800) 392-0123
Toll Free FAX (800) 468-1340
www.linearcorp.com

PRODUCT DESCRIPTION

The DXR-701 is a digital receiver with an isolated relay output designed for use with Linear's DX Format transmitters. This receiver can be used in a variety of remote control applications. When the receiver detects a signal from a transmitter programmed into its memory, the relay output activates. The relay has four optional output configurations.

In a typical installation, the receiver is connected to an alarm control panel, door strike, camera, high current relay or some other device. A transmitter is used to activate or control the device. The receiver should be mounted with the supplied mounting bracket indoors or inside a weather resistant non-metallic housing.
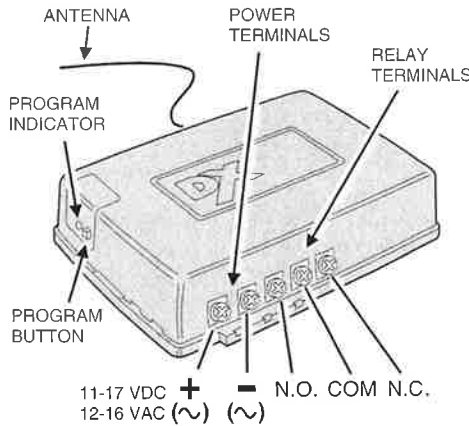
The digital DX code format features over a million possible codes. The DX transmitters are precoded at the factory to unique codes, so no field coding is required. Receivers must be programmed to the transmitter's code before system testing and operation. Up to 32 transmitters can be programmed into the receiver's memory. The memory is retained, even without power. The unit can be powered from a 11-17 VDC or 12-16 VAC power source. The relay's normally open and normally closed contacts can switch up to 1 amp at 24 volts AC/DC.

Cutting jumpers select how the relay activates. The factory setting causes the relay to engage for four seconds each activation. Optionally, the relay can be set to engage for one second, toggle on with one activation then off with the next, or latch engaged until reset by pressing the program button.

A nine-inch wire lead serves as the receiver's antenna. The red program indicator lights during RF reception. The installer can verify that signals are being sent from transmitters and diagnose interference problems by viewing the indicator. The indicator also lights during memory programming/erasing and flashes to count the number of transmitters in memory. The program button and indicator function as follows:
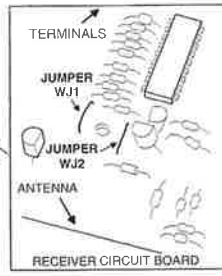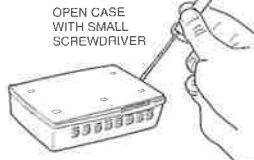
FUNCTION	PROGRAM BUTTON	PROGRAM INDICATOR
NORMAL OPERATION	RELEASES LATCHED RELAY	LIGHTS AS TRANSMITTERS ARE RECEIVED, BLINKS AS INTERFERENCE IS RECEIVED
PROGRAMMING MEMORY	PRESS AND RELEASE	LIGHTS FOR 3 SECONDS FOR PROGRAMMING
CHECKING MEMORY	PRESS UNTIL BLINK AND RELEASE	BLINKS THE NUMBER OF TRANSMITTERS IN MEMORY
ERASING MEMORY	PRESS AND HOLD THROUGH THE COUNT AND HOLD FOR 4 SECONDS MORE	AFTER BLINKING COUNT, A PAUSE THEN A SINGLE BLINK AS MEMORY IS ERASED

DXR-701 FEATURES

ANTENNA
POWER TERMINALS
RELAY TERMINALS
PROGRAM INDICATOR
PROGRAM BUTTON

11-17 VDC ✛ ━ N.O. COM N.C.
12-16 VAC (∼) (∼)

RELAY OPTION JUMPERS

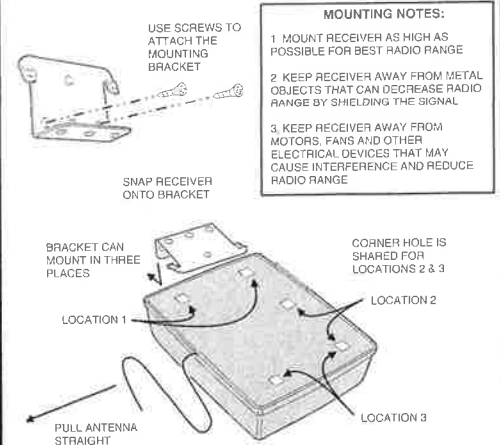**NOTE:** IF RELAY OPTION IS GOING TO BE CHANGED: REMOVE POWER, CUT JUMPERS, APPLY POWER, ERASE MEMORY, THEN RE-PROGRAM ALL TRANSMITTERS
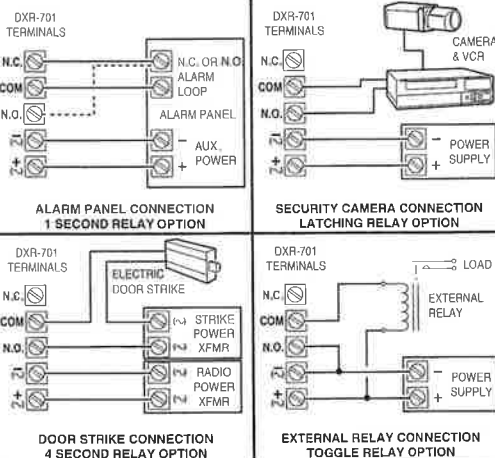
OPEN CASE WITH SMALL SCREWDRIVER

TERMINALS
JUMPER WJ1
JUMPER WJ2
ANTENNA
RECEIVER CIRCUIT BOARD

RELAY OPTION	JUMPER WJ1	JUMPER WJ2
4 SECOND LATCH	SOLID	SOLID
1 SECOND LATCH	CUT	SOLID
LATCH UNTIL RESET ++	SOLID	CUT
TOGGLE ON AND OFF ++	CUT	CUT
BE SURE POWER IS OFF WHEN CUTTING JUMPERS		

++ CAN BE RESET BY PUSHING THE PROGRAM BUTTON ONCE

MOUNTING RECEIVER

USE SCREWS TO ATTACH THE MOUNTING BRACKET

MOUNTING NOTES:

1. MOUNT RECEIVER AS HIGH AS POSSIBLE FOR BEST RADIO RANGE

2. KEEP RECEIVER AWAY FROM METAL OBJECTS THAT CAN DECREASE RADIO RANGE BY SHIELDING THE SIGNAL

3. KEEP RECEIVER AWAY FROM MOTORS, FANS AND OTHER ELECTRICAL DEVICES THAT MAY CAUSE INTERFERENCE AND REDUCE RADIO RANGE

SNAP RECEIVER ONTO BRACKET

BRACKET CAN MOUNT IN THREE PLACES
CORNER HOLE IS SHARED FOR LOCATIONS 2 & 3
LOCATION 1
LOCATION 2
LOCATION 3
PULL ANTENNA STRAIGHT

TERMINAL CONNECTIONS

DXR-701 TERMINALS
N.C. OR N.O. ALARM LOOP
ALARM PANEL
AUX. POWER

ALARM PANEL CONNECTION 1 SECOND RELAY OPTION

DXR-701 TERMINALS
CAMERA & VCR
POWER SUPPLY

SECURITY CAMERA CONNECTION LATCHING RELAY OPTION

DXR-701 TERMINALS
ELECTRIC DOOR STRIKE
STRIKE POWER XFMR
RADIO POWER XFMR

DOOR STRIKE CONNECTION 4 SECOND RELAY OPTION

DXR-701 TERMINALS
LOAD
EXTERNAL RELAY
POWER SUPPLY

EXTERNAL RELAY CONNECTION TOGGLE RELAY OPTION

PROGRAMMING MEMORY

1. PRESS AND RELEASE PROGRAM BUTTON.

2. PROGRAM INDICATOR WILL LIGHT IF THERE IS ROOM IN MEMORY FOR ANOTHER TRANSMITTER. (32 TRANSMITTERS MAX.)

3. SEND SIGNAL FROM TRANSMITTER, INDICATOR WILL FLICKER AS SIGNAL IS RECEIVED.

4. REPEAT THE ABOVE THREE STEPS FOR EACH ADDITIONAL TRANSMITTER.

NOTE: THE RECEIVER CAN MEMORIZE EACH TRANSMITTER MORE THAN ONCE. TO PREVENT DUPLICATE ENTRIES, PROGRAM EACH TRANSMITTER INTO RECEIVER ONLY ONCE.
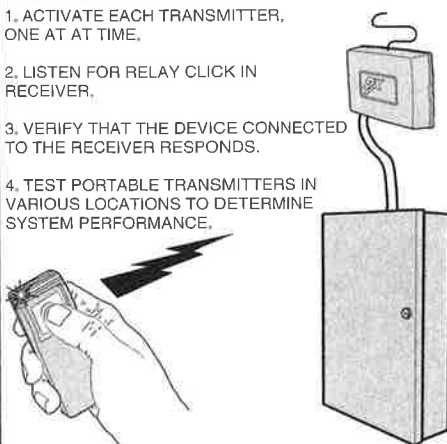
CHECKING MEMORY

1. PRESS PROGRAM BUTTON AND HOLD FOR ABOUT TWO SECONDS UNTIL INDICATOR LIGHTS THEN RELEASE.

2. COUNT THE NUMBER OF INDICATOR BLINKS, THIS IS THE TOTAL NUMBER OF TRANSMITTERS PROGRAMMED.

PUSH UNTIL INDICATOR LIGHTS

NOTE: DO NOT CONTINUE TO PRESS BUTTON OR MEMORY WILL BE ERASED

SYSTEM TESTING

1. ACTIVATE EACH TRANSMITTER, ONE AT AT TIME.

2. LISTEN FOR RELAY CLICK IN RECEIVER.

3. VERIFY THAT THE DEVICE CONNECTED TO THE RECEIVER RESPONDS.

4. TEST PORTABLE TRANSMITTERS IN VARIOUS LOCATIONS TO DETERMINE SYSTEM PERFORMANCE.

ERASING MEMORY

1. PRESS PROGRAM BUTTON AND CONTINUE TO HOLD IT THROUGH THE COUNT OF THE TRANSMITTERS.

2. CONTINUE TO HOLD THE BUTTON AFTER THE COUNT UNTIL THE INDICATOR BLINKS ONE MORE TIME (ABOUT FIVE SECONDS AFTER THE COUNT).

3. ALL TRANSMITTERS PROGRAMMED INTO MEMORY WILL BE ERASED.

PUSH AND HOLD BUTTON FOR FIVE SECONDS AFTER THE TRANSMITTER COUNT

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 reinstallation. 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.

All products returned for warranty service require a Return Product Authorization Number (RPA#). Contact Linear Technical Service at 1-800-421-1587 for an RPA# and other important details.

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.
- A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies, regardless of code settings.
- Changes or modifications to the device may void FCC compliance.
- 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.