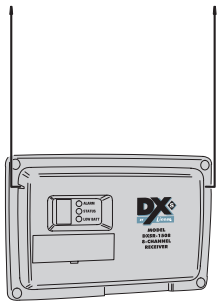
DXSR-1504
DXSR-1508

SUPERVISED DIGITAL RECEIVERS

Installation Instructions



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PRODUCT DESCRIPTION

The DXSR-1504 and DXSR-1508 are four and eight channel supervised digital receivers with solid state outputs designed for use with Linear's DX and DXS Format transmitters. These receivers can be used in a variety of security and remote control applications. When the receiver detects a signal from a transmitter programmed into its memory, the appropriate channel output activates. The channel outputs have three optional configurations; momentary, toggle on/off, and latch until restored. Status and low battery outputs are for supervisory indications. Cutting jumpers select which channels require supervisory status reports from transmitters.

Each unit incorporates a dual high-sensitivity superheterodyne diversity receiver with two whip antennas. This type of receiver provides superior performance by preventing loss of signal due to multi-path interference.

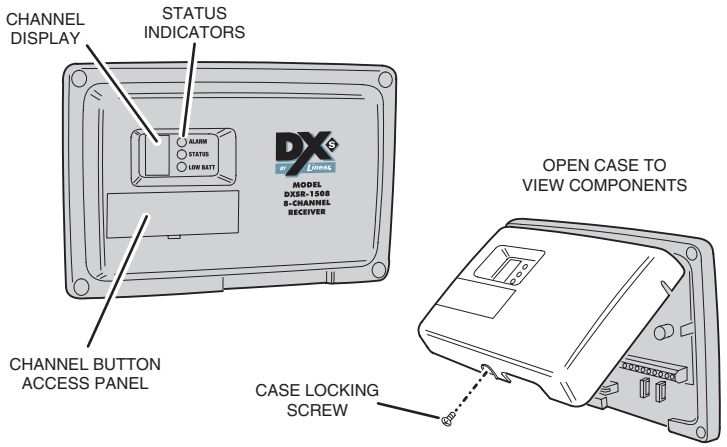
In a typical installation, the receiver is connected to an alarm control panel, door strike, camera, high current relay or some other devices. Transmitters are used to activate or control the devices. The receiver should be mounted indoors or inside a weather resistant *non-metallic* housing for outdoor use.

The digital DX/DXS code format features over a million possible codes. The transmitters are precoded at the factory to unique codes, so no field coding is required. For versatility, *any transmitter can be programmed into any receiver channel.* Receivers must be programmed to recognize the transmitter's code before system testing and operation. Up to 32 transmitters can be programmed into the receiver. Each button on multi-button portable transmitters send a unique code, and are programmed as separate transmitters.

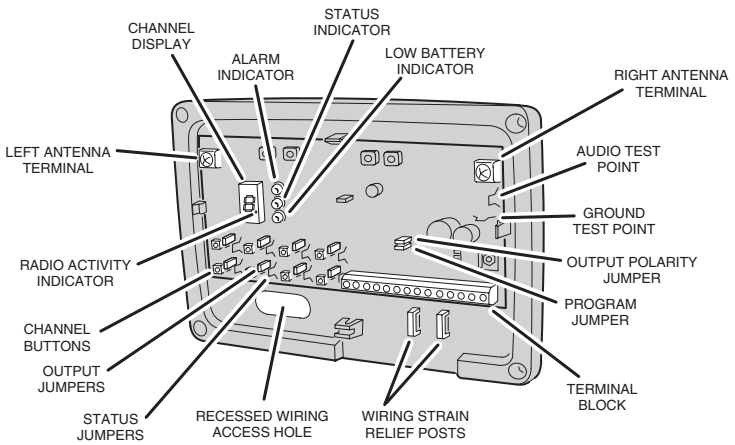
The CHANNEL display shows the channels activated and the presence of radio activity. Individual indicators for ALARM, STATUS, and LOW BATT show the supervisory status of each receiver channel. All outputs can be configured for normally open or normally closed.

The units can be powered from a 10.2-14.4 VDC or 12-16 VAC power source. The units will draw about 35 mA standby and up to 120 mA in alarm.

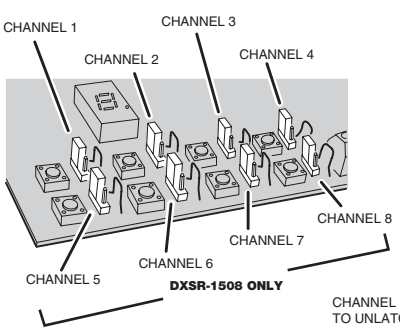
FEATURES

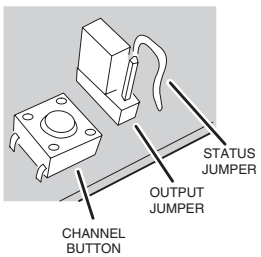


COMPONENT LOCATIONS



OPTION JUMPERS AND CHANNEL BUTTONS DETAIL



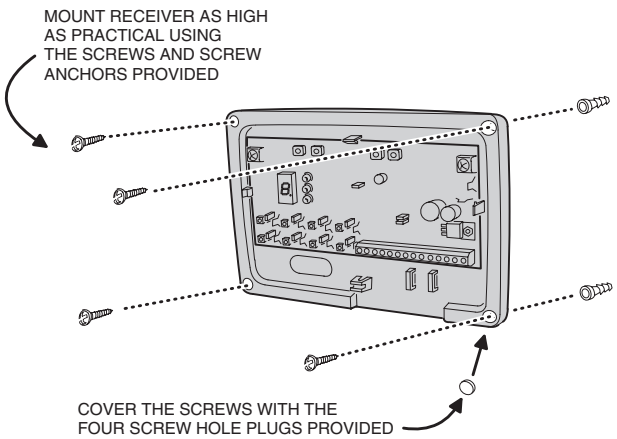


CHANNEL BUTTONS ARE USED DURING PROGRAMMING AND TO UNLATCH THE CHANNEL'S OUTPUT IN LATCHED MODE

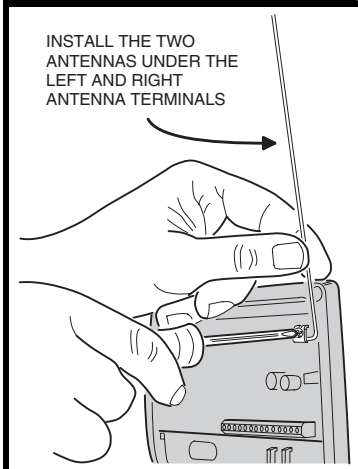
OUTPUT JUMPERS SELECT MOMENTARY, TOGGLE, OR LATCHED OUTPUT FOR EACH CHANNEL

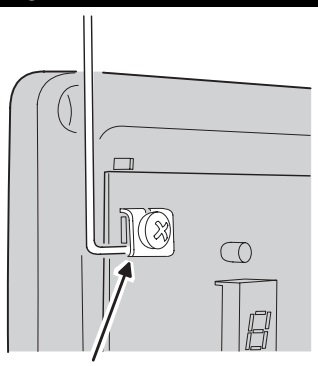
WHEN A CHANNEL'S STATUS JUMPER IS CUT, THE CHANNEL WILL REQUIRE STATUS TRANSMISSIONS FROM A SUPERVISED TRANSMITTER PROGRAMMED INTO THAT CHANNEL

MOUNT RECEIVER



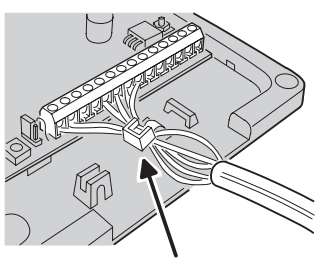
ATTACH ANTENNAS

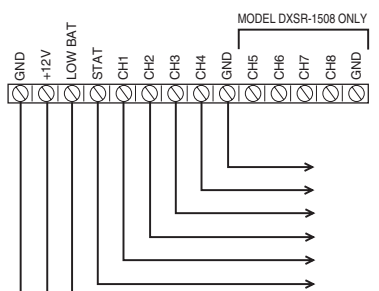




TIGHTEN ANTENNA TERMINALS WITH ANTENNA WHIPS BELOW THE SCREW AND UNDER THE TERMINAL PLATE AS SHOWN (BE SURE TOP COVER SLOTS ALIGN WITH ANTENNAS)

CONNECT TERMINALS





FROM POWER SOURCE
10.2-14.4 VDC OR 12-16 VAC
120 mA MINIMUM

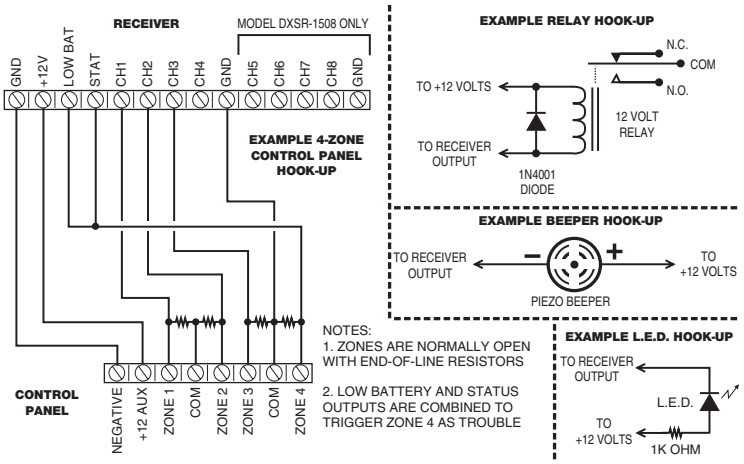
OUTPUTS TO DEVICE TO BE TRIGGERED

100 mA MAXIMUM PER OUTPUT

WITH OUTPUT POLARITY JUMPER IN PLACE, ALL OUTPUTS WILL SWITCH TO GROUND WHEN ACTIVE

NOTE: SEE WIRING EXAMPLES ON REVERSE SIDE OF THESE INSTRUCTIONS

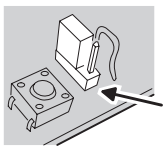
WIRING EXAMPLES



NOTES:
1. ZONES ARE NORMALLY OPEN WITH END-OF-LINE RESISTORS

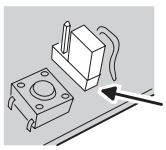
2. LOW BATTERY AND STATUS OUTPUTS ARE COMBINED TO TRIGGER ZONE 4 AS TROUBLE

SELECT OPTIONS

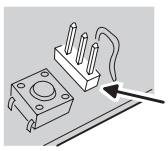


SET OUTPUT JUMPERS FOR EACH CHANNEL USED

MOMENTARY OUTPUT
JUMPER IN THIS POSITION (FACTORY SETTING) CAUSES A MOMENTARY 1 SECOND MINIMUM OUTPUT WITH EACH ACTIVATION



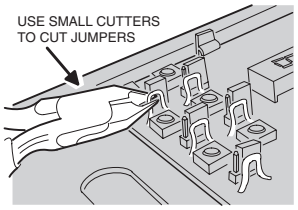
TOGGLE OUTPUT
JUMPER IN THIS POSITION CAUSES A TOGGLE OUTPUT, EACH ACTIVATION WILL CAUSE THE OUTPUT TO SWITCH FROM OFF TO ON, OR, ON TO OFF



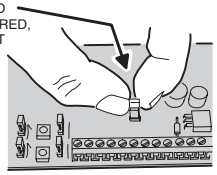
LATCHING OUTPUT
JUMPER REMOVED CAUSES OUTPUT TO LATCH UNTIL RESET BY A RESTORE TRANSMISSION (DXS-31 DOOR CLOSED) OR RESET BY PRESSING THE CHANNEL BUTTON (JUMPER CAN BE STORED ON SINGLE PIN)

CUT STATUS JUMPERS FOR ANY CHANNELS THAT REQUIRE STATUS TRANSMISSION MONITORING

USE SMALL CUTTERS TO CUT JUMPERS

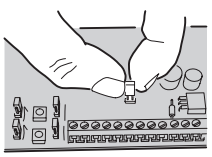


IF NORMALLY CLOSED OUTPUTS ARE REQUIRED, REMOVE THE OUTPUT POLARITY JUMPER



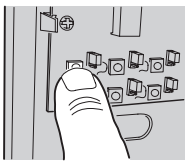
ADDING TRANSMITTERS

1



REMOVE THE PROGRAM JUMPER, THE CHANNEL DISPLAY SHOWS "P"

2



BRIEFLY PRESS THE BUTTON FOR THE CHANNEL THAT THE TRANSMITTER IS GOING TO BE ADDED INTO, THE CHANNEL NUMBER SHOWS ON THE DISPLAY

3

YOU HAVE 5 SECONDS TO ACTIVATE THE TRANSMITTER, THE ALARM LED WILL BLINK

4

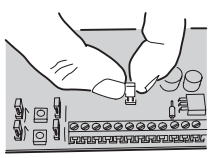
AFTER THE TRANSMITTER IS ENTERED, OR AFTER 5 SECONDS, THE CHANNEL DISPLAY WILL RETURN TO "P"

REPEAT STEPS 2 & 3 FOR ADDITIONAL TRANSMITTERS (UP TO 32 TOTAL, WITH ANY MIX OF CHANNELS) THEN REPLACE PROGRAM JUMPER WHEN FINISHED

NOTE: ON MULTI-BUTTON TRANSMITTERS, EACH BUTTON HAS A UNIQUE CODE, AND IS ADDED TO THE RECEIVER SEPARATELY, INTO ANY CHANNEL

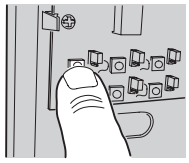
REVIEWING MEMORY

1



REMOVE THE PROGRAM JUMPER, THE CHANNEL DISPLAY SHOWS "P"

2



PRESS AND HOLD THE BUTTON FOR THE CHANNEL TO REVIEW UNTIL THE ALARM LED STARTS TO BLINK, THEN RELEASE THE CHANNEL BUTTON

3

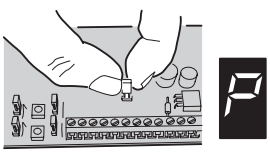
COUNT THE NUMBER OF TIMES THE ALARM LED BLINKS, THIS IS THE NUMBER OF TRANSMITTERS PROGRAMMED INTO THE CHANNEL

REPEAT STEPS 2 & 3 TO REVIEW OTHER CHANNELS

REPLACE THE PROGRAM JUMPER WHEN FINISHED

REMOVING TRANSMITTERS

1



REMOVE THE PROGRAM JUMPER, THE CHANNEL DISPLAY SHOWS "P"

2

PRESS AND HOLD THE CHANNEL BUTTON FOR THE CHANNEL TO ERASE, CONTINUE HOLDING DOWN THE BUTTON WHILE THE ALARM LED COUNTS THE NUMBER OF TRANSMITTERS

KEEP HOLDING THE BUTTON DOWN

3

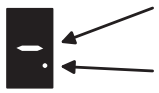
THE DISPLAY WILL CONTINUE TO SHOW THE CHANNEL NUMBER

KEEP HOLDING DOWN THE CHANNEL BUTTON UNTIL THE ALARM LED FLASHES TWICE, SIGNALING THE CHANNEL HAS BEEN ERASED

REPEAT STEPS 2 & 3 TO ERASE OTHER CHANNELS

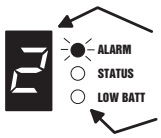
REPLACE THE PROGRAM JUMPER WHEN FINISHED

SYSTEM OPERATION



THE CENTER BAR OF THE CHANNEL DISPLAY WILL BLINK WHILE THE RECEIVER IS IDLE

THE DECIMAL POINT WILL LIGHT WHEN ANY INCOMING RADIO SIGNALS ARE PRESENT



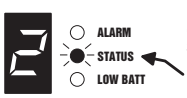
WHEN ANY CHANNELS ARE IN ALARM, OR HAVE ANY SUPERVISORY CONDITIONS, THE CHANNEL NUMBER(S) WILL SHOW ON THE CHANNEL DISPLAY, ADVANCING IN ASCENDING ORDER

AS EACH CHANNEL NUMBER IS DISPLAYED, ITS CONDITION IS SHOWN ON THE THREE INDICATORS (ALARM, STATUS, OR LOW BATTERY)

WHEN ALL OUTPUTS ARE RESTORED (NON-ALARM CONDITION), EITHER BY RESTORE TRANSMISSIONS OR BY MANUALLY RESETING LATCHED CHANNELS WITH THE CHANNEL BUTTONS, THE CHANNEL DISPLAY WILL RETURN TO THE BLINKING BAR

SUPERVISORY CONDITIONS

STATUS MONITORING

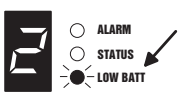


IF STATUS MONITORING IS ENABLED FOR A RECEIVER CHANNEL (BY CUTTING ITS STATUS JUMPER), A TRANSMITTER SENDING STATUS REPORTS MUST BE PROGRAMMED INTO THAT CHANNEL

IF STATUS REPORTS ARE NOT RECEIVED FOR EIGHT HOURS, THE CHANNEL NUMBER WILL BE DISPLAYED, THE STATUS INDICATOR WILL LIGHT, AND THE STATUS OUTPUT WILL ACTIVATE

NOTE: IF STATUS MONITORING IS ENABLED FOR A CHANNEL, ONLY PROGRAM ONE STATUS REPORTING TRANSMITTER INTO THAT CHANNEL

TRANSMITTER LOW BATTERY



IF A LOW BATTERY REPORT IS RECEIVED FROM A TRANSMITTER, ITS CHANNEL NUMBER WILL BE DISPLAYED, THE LOW BATT INDICATOR WILL LIGHT, AND THE LOW BATTERY OUTPUT WILL ACTIVATE

THE INDICATION WILL CONTINUE AND THE OUTPUT WILL STAY ACTIVATED UNTIL THE TRANSMITTER'S BATTERY IS REPLACED

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 Services 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 signaling. 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.

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