

# XT-1H XT-2H XT-4H

## XTENDED RANGE PORTABLE TRANSMITTERS

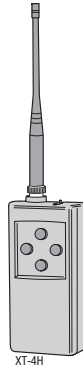
For Use With Linear's  
XR Series Xtended  
Range Receivers

### Operation Instructions

# Linear®

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

**WARNING: THIS PRODUCT SHOULD NOT BE USED IN LIFE SAFETY APPLICATIONS.**  
FCC Rules allow unlicensed high-power transmissions at or near the operating frequency of this product which may interfere with, or even disable, normal operation of this radio device.



## 1. PRODUCT DESCRIPTION

Linear's Xtended Range FM transmitters and receivers are designed for use in various wireless remote control applications. When activated, the XT-H portable transmitters will send a 2 watt, 27.255 MHz, digital encoded, FSK modulated, signal to their companion receiver. The receiver will verify the digital code, activate its output, and trigger the remote device.

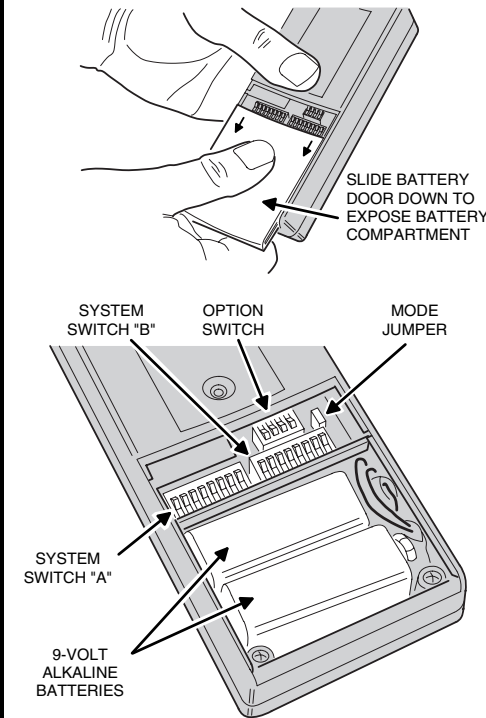
These transmitters are available in three models. The Model XT-1H is a one-button, single channel transmitter. The Model XT-4H is a four-button, four channel transmitter. The Model XT-2H is a two-button transmitter with two operating modes. In standard mode, the XT-2H is a three channel device, pressing the left button sends channel one; the right button sends channel two; both buttons send channel three. In lockout mode, the XT-2H will only send a signal (on the channel selected) when both buttons are pressed. Each transmission is limited to a maximum of 30 seconds duration.

The XT-H portable transmitters are powered by two 9-volt alkaline batteries in series, supplying 18 volts. During transmissions, the red operation indicator will light (visible through a window next to the antenna). If the transmitter's battery voltage is low, the indicator will blink during transmissions. The XT-H transmitters have battery supervision capabilities. If the combined battery voltage drops below 12 volts, a low battery message will be included with any signal transmitted, causing the receiver's low battery output to activate. The test button next to the indicator sends a test transmission when pressed.

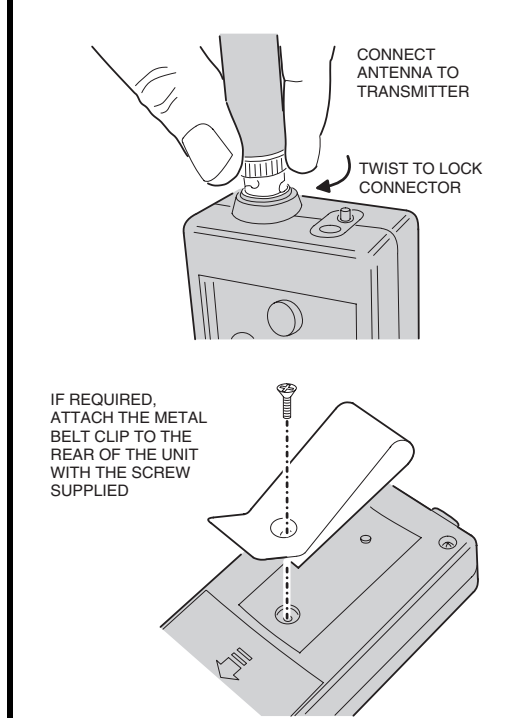
Two 8-position switches set the unit's system code. This code must be matched in the transmitter's companion receiver. There are 65,536 different system codes possible. The 4-position option switch selects the transmitter's channel (XT-1H & XT-2H in lockout mode only) and the receiver's bank (for the XR-16 receiver only).

Each model transmitter is provided with a 6-inch "rubber duck" antenna and a removable belt clip.

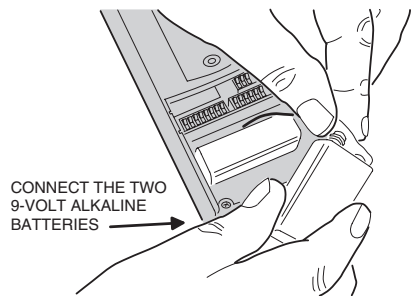
## 2. COMPONENT LOCATIONS



## 3. INSTALL ANTENNA & BELT CLIP

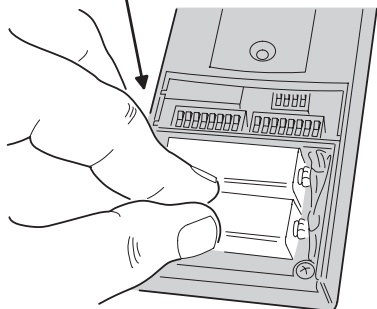


## 4. CONNECT BATTERIES

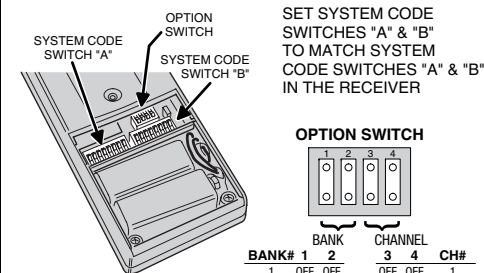


CONNECT THE TWO 9-VOLT ALKALINE BATTERIES

TUCK BATTERIES INTO BATTERY COMPARTMENT



## 5. SET SWITCHES



SET SYSTEM CODE SWITCHES "A" & "B" TO MATCH SYSTEM CODE SWITCHES "A" & "B" IN THE RECEIVER

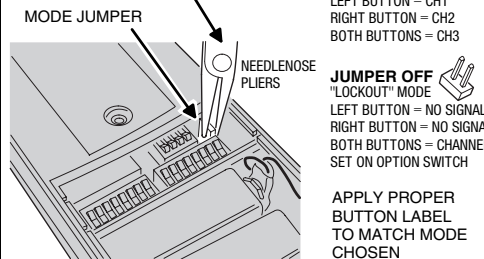
### OPTION SWITCH

BANK#	BANK		CHANNEL		CH#
	1	2	3	4	
1	OFF	OFF	OFF	OFF	1
2	ON	OFF	ON	OFF	2
3	OFF	ON	OFF	ON	3
4	ON	ON	ON	ON	4

SET OPTION SWITCH TO SELECT RECEIVER'S BANK AND CHANNEL (DON'T SET CHANNEL ON XT-4H OR XT-2H IN STANDARD MODE, THE FRONT BUTTONS CONTROL THE TRANSMITTER'S CHANNEL)

**MODEL XT-2H ONLY**  
MODE JUMPER CAN BE REMOVED TO SELECT TWO-BUTTON LOCKOUT MODE

**JUMPER ON "STANDARD" MODE**  
LEFT BUTTON = CH1  
RIGHT BUTTON = CH2  
BOTH BUTTONS = CH3



**JUMPER OFF "LOCKOUT" MODE**  
LEFT BUTTON = NO SIGNAL  
RIGHT BUTTON = NO SIGNAL  
BOTH BUTTONS = CHANNEL SET ON OPTION SWITCH

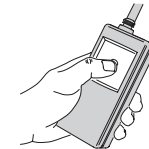
APPLY PROPER BUTTON LABEL TO MATCH MODE CHOSEN

## 6. TEST SYSTEM

BEFORE TESTING, REPLACE BATTERY DOOR

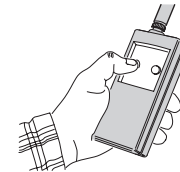
### MODEL XT-1H

PRESS BUTTON, VERIFY THAT THE PROGRAMMED CHANNEL IN THE RECEIVER ACTIVATES.



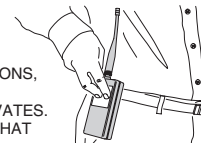
### MODEL XT-2H (IN STANDARD MODE)

PRESS LEFT BUTTON, RIGHT BUTTON, THEN BOTH BUTTONS. VERIFY THAT RECEIVER CHANNELS 1, 2 AND 3 ACTIVATE.



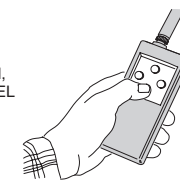
### MODEL XT-2H (IN LOCKOUT MODE)

PRESS BOTH TRANSMITTER BUTTONS, VERIFY THAT THE PROGRAMMED CHANNEL IN THE RECEIVER ACTIVATES. PRESS EITHER BUTTON, VERIFY THAT NO SIGNAL IS SENT.



### MODEL XT-4H

PRESS EACH TRANSMITTER BUTTON, VERIFY THAT THE CORRECT CHANNEL IN THE RECEIVER ACTIVATES FOR EACH BUTTON.



## 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.

**WARNING: THIS PRODUCT IS NOT TO BE USED IN LIFE SAFETY APPLICATIONS.** FCC Rules allow unlicensed high-power transmissions at or near the operating frequency of this product which may interfere with, or even disable, normal operation of this radio device. For U.S. installations only: The radios are required to comply with FCC Rules and Regulations as Part 95 Radio Control 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.