



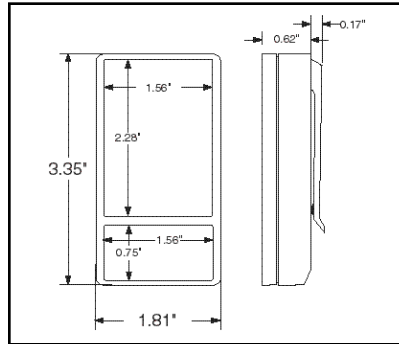
CMD-HHTX-XXX



## OEM HANDHELD TRANSMITTER DATA GUIDE

### DESCRIPTION

The Linx CMD-HHTX-XXX Remote Command Unit is ideal for general-purpose remote control and command applications. The unit has been pre-certified for FCC Part 15 compliance which reduces costs and time to product introduction. Available in 315, 418 or 433.92 MHz (418MHz standard), this compact handheld remote is capable of 100+ ft. transmission ranges. The transmitter unit can be configured with 1-8 buttons and the keypad and labeling can be modified to meet specific customer requirements. Selectable addressing provides security and allows the creation of up to 256 distinct transmitter-receiver relationships. The transmission can be decoded using a matching Linx function module or a Linx LC series receiver paired with a decoder IC or microcontroller. The unit operates from a single 3-volt lithium cell.



Physical Dimensions



### OEM CONFIGURATIONS

With a one-time NRE and minimum order, Linx can configure the keypad and label areas to meet your specific requirements. Contact Linx for details.

### APPLICATIONS INCLUDE:

- General Remote Control
- Keyless Entry
- Garage / Gate Openers
- Lighting Control
- Call Systems
- Home / Industrial Automation
- Wire Elimination

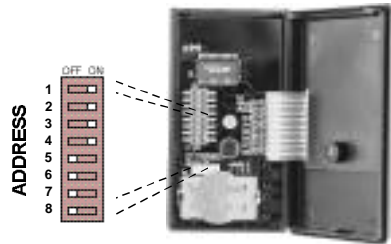
ORDERING INFORMATION	
PART #	DESCRIPTION
CMD-HHTX-315	8-Button Handheld Transmitter
CMD-HHTX-418*	8-Button Handheld Transmitter
CMD-HHTX-433	8-Button Handheld Transmitter
* = Standard Frequency	

## THEORY OF OPERATION

The CMD-HHTX-XXX Remote Command Unit combines the popular Linx LC series transmitter and "Splatch" planar antenna with a commonly available encoder IC to form a simple yet effective RF remote control transmitter. The product's operation is straightforward. When a button is activated on the remote unit, power is applied to the internal circuitry and the encoder IC is enabled. The encoder then detects the logic states of the DIP switch address and button data lines. These states are then formatted into a 3-word transmission cycle which continues until the button is released. The encoder data is used to modulate the LC transmitter which through the antenna conveys the data into free space. The transmitted signal may be received by any Linx LC receiver or pre-made function module. Once data is received it is decoded using a decoder IC or custom microcontroller. The transmitted address bits are checked against the address settings of the receiving device. If a match is confirmed, the decoder's output(s) are set to replicate the transmitter's button status.

## SETTING THE TRANSMITTER ADDRESS

In order to allow the formation of up to 256 unique Transmitter-Receiver relationships, the transmitter's address may be selected using internal DIP switches as shown. The switches are accessed by removing the rear cover as for battery replacement.

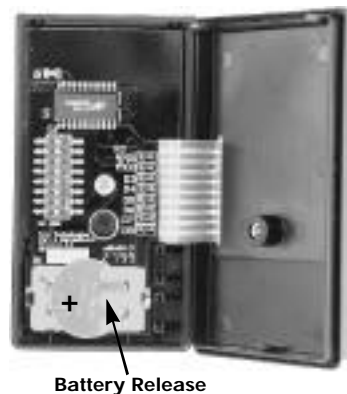


## CONTENTION CONSIDERATIONS

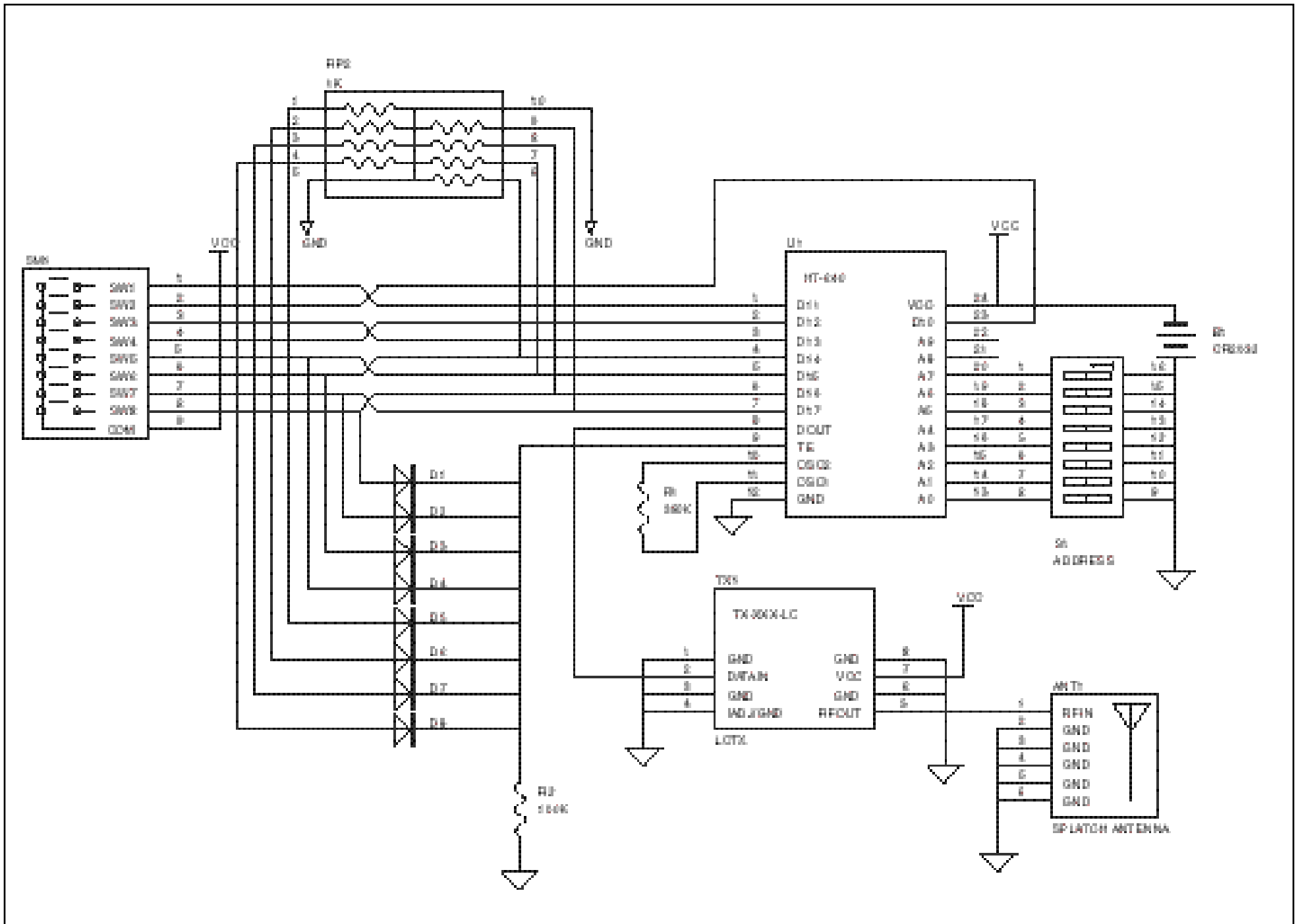
It is important to understand that only one transmitter at a time can be activated within a reception area. While the transmitted signal consists of encoded digital data, only one carrier of any frequency can occupy airspace without contention at any given time.

## BATTERY REPLACEMENT

The remote unit utilizes a CR-2032 Button Lithium Cell. In normal use it will provide 1-2 years of operation. Access for replacement is accomplished by removing the screw in the middle of the back cover. Once the unit is open, remove the battery by depressing the release finger on the battery holder as shown. Replace the cell with the same type while observing the polarity shown.



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## **COMPLIANCE REQUIREMENTS**

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The CMD-HHTX-XXX has been pre-certified by Linx for FCC Part 15 compliance when used with an appropriate function module in keeping with the applications allowed under section 15.231.

## **LABELING/INSTRUCTION REQUIREMENTS**

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The CMD-HHTX-XXX Remote Command Unit has already been labeled in accordance with FCC regulations in effect as of the date of this document. No further labeling of the unit is needed; however, it is necessary to include the following statement in the end product's instruction manual or insert card.

### **INSTRUCTION TO THE USER**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

This equipment has been certified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

*Place the above statement in the instruction manual or insert card.*



## U.S. CORPORATE HEADQUARTERS:

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## Disclaimer

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