

## THEORY OF OPERATION

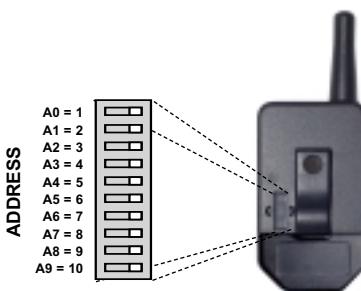
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The CMD-HHLR-xxx Remote Command Unit combines the popular Linx LC-Series transmitter and an antenna, with a commonly available encoder IC to form a simple yet effective RF remote-control transmitter. When a button is activated on the remote unit, power 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 transmitter which through the antenna conveys the data into free space. The transmitted signal may be received by any Linx LC- or KH-Series receiver or pre-made function module. Once data is received, a decoder IC or custom microcontroller is used to check the transmitter's address bits 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

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In order to allow the formation of up to 1024 unique Transmitter-Receiver relationships, the transmitter's address may be selected using internal DIP switches as shown. The switches are accessed by removing the DIP-switch access cover.



## CONTENTION CONSIDERATIONS

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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

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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 battery access cover by pressing down firmly on the label area and sliding it off. Once the unit is open, remove the battery by sliding it from beneath the holder. Replace the cell with the same type while observing the polarity shown.

