

15-1892 Remote Control RF Encoding Method

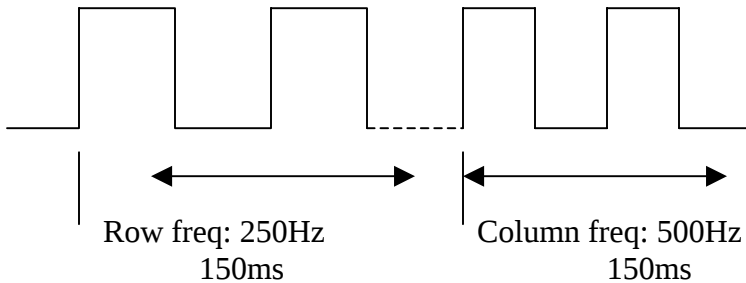
A dual frequency encoding method is used to encode each of the keys on the remote control. Each key on the remote is represented by a row frequency and a column frequency as show in figure 1. When a key is pressed, the row frequency is transmitted for 150ms then the column frequency is sent for another 150ms.

Freq(Hz) row \ Freq(Hz) col	500	625	800
200	<	STORE	>
250	1	2	3
300	4	5	6
357	7	8	9
437	MINUS	0	PLUS

Figure 1

When the receiver detects five cycles of row frequency follow by five cycles of column frequency within a 280ms period, it will assume a correct key is received.

For example, code '1' has the waveform illustrated as bellow:



Both waveforms have 50% duty cycle.