

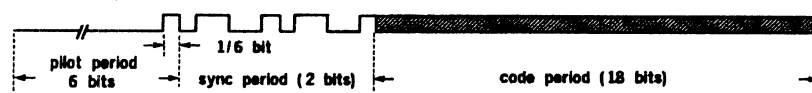
The Linx Remote Command Unit uses a Holtek encoder IC model HT-640. This device generates an 18 bit word based on the state of the data on the address pins. The worst case duty cycle for high bits is 48% as illustrated below.



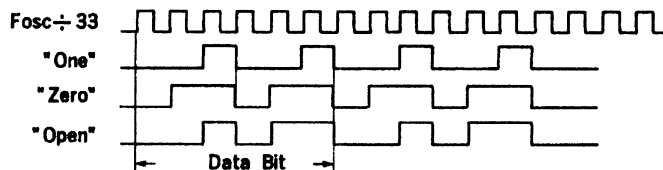
## I. Functional Description —

### 1. Encoder Operation

Upon receipt of a TE signal (active high), the HT-640 begins a 3 word transmission cycle and repeats this transmission cycle until the TE signal has been removed. One transmission cycle is composed of 3 data words each contains 3 periods as shown below:

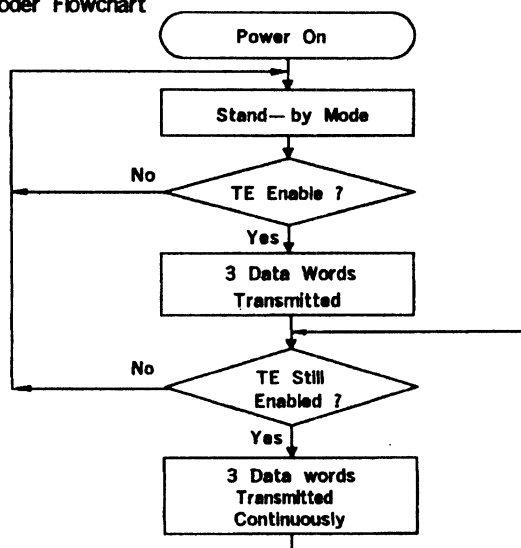


The HT-640 detects the logic state of address and data pins (A0~A13, D0~D3) and transmits this information during code period, it is capable of transmitting 4 different data with  $3^{14}$  address. Each address/data pin can be set as one of three following logic states:



The 'OPEN' state data input will be interpreted as logic low by decoder since the decoder output has only two states.

HT-640 Encoder Flowchart



hp  
TIME OF 1 PULSE TRAIN  
REF 100.0 dBμV ATTEN 10 dB

MKR Δ 48.00 msec  
-0.30 dB

10 dB/

DL  
60.0  
dBμV

MARKER Δ  
48.00 msec  
-0.30 dB

CORR'D

CENTER 418.036 030 MHz  
RES BW 30 kHz

VBW 30 kHz

SPAN 0 Hz  
SWP 100 msec

