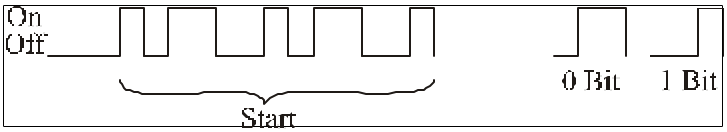
Duty Cycle for T24A-Pdual433 Transmitter

A packet of data consists of the start sequence, 20 address bits, and 16 data bits. The packet is compatible with the Holtek brand of data encoder chips used in Linx brand transmitters and other places.

The packet sequence uses the following definitions:



The Start sequence consists of:
471µs on, 471µs off, 973µs on, 973µs off, 471µs on, 471µs off, 973µs on, 973µs off, 471µs on (3 1's and 2 0's)
Address & data bits consist of: a "0 bit" being defined as 471µs off, 973µs on,
a "1 bit" being defined as 973µs off, 471µs on.

The start sequence consists of 2 0's + 3 1's.

The address consists of 20 bits and the worst case on time is 16 0's + 4 1's.

The data consists of 16 bits and the worst case on time is 7 0's + 9 1's.

There is a pause of at least 21.3 msec before the packet is transmitted again.

The packet period is 78.33 msec.
Over a 100 ms interval, the worst case starts the interval at the beginning of the start sequence and ends 21.67 msec into the next packet (10 bits into the address) =

{[(2+16+7)*973 + (3+4+9)*471] + [3*471 + 12*973]} / 100,000 = 44.95%

Electronic Solutions, Inc.
11811 Upham St. Unit #2, Broomfield, CO 80020-2710
voice: 303-469-9322 fax: 303-469-5129 www.elec-solutions.com