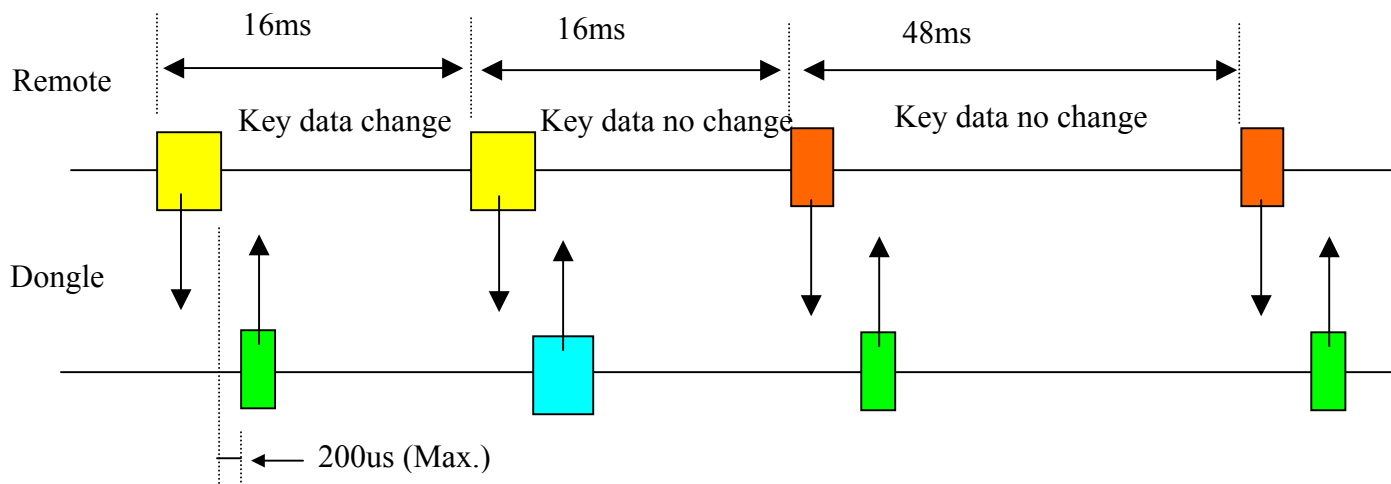


**ET Wireless Xbox Game-Pad Data Transfer Description V1.1:**

2004/09/14

Dirk Leu

**Normal Transfer:****Yellow: Key Data.**

4bit Sink+2 bytes Preamble+7 bytes Header+13 bytes Payload+2 bytes CRC: 196us

**Orange: Connect Data.**

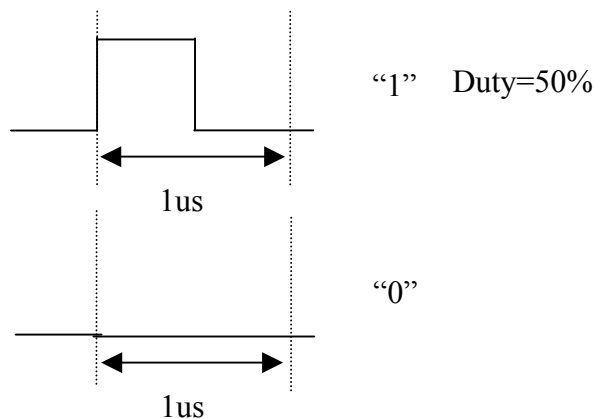
4bit Sink+2 bytes Preamble+7 bytes Header+2 bytes Payload+2 bytes CRC: 108us

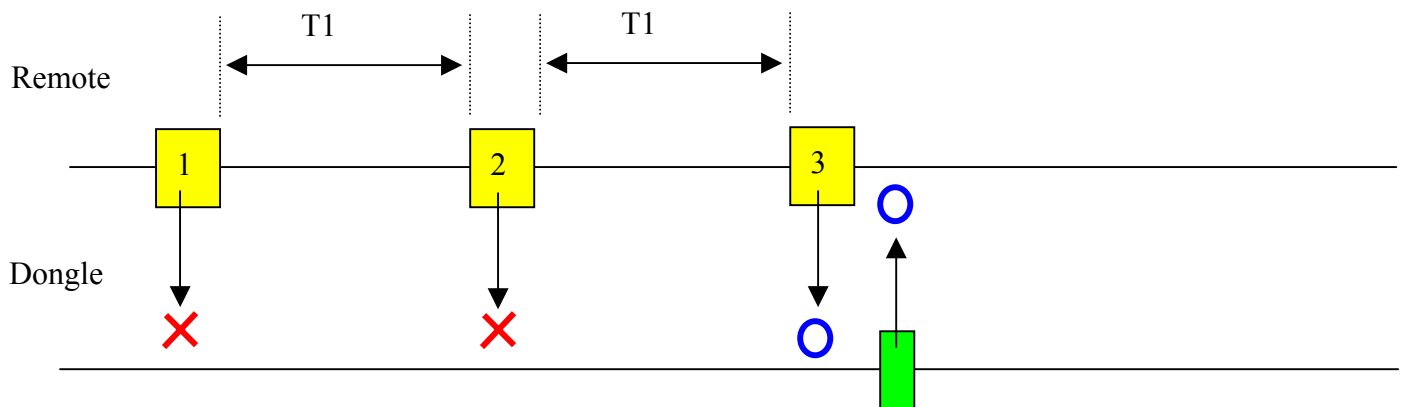
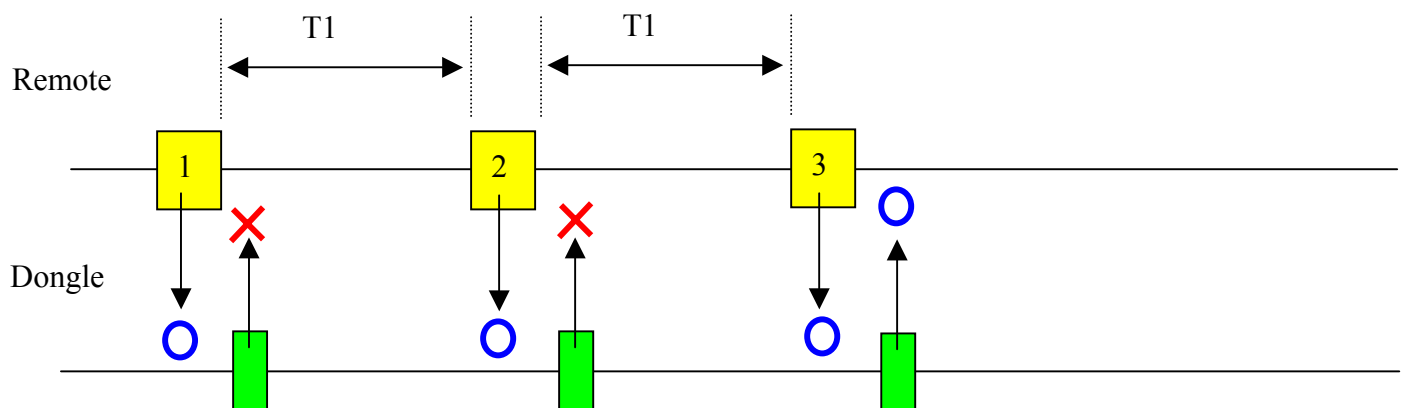
**Green: ACK signal.**

4bit Sink+2 bytes Preamble+7 bytes Header+2 bytes CRC: 92us

**Blue: Motor Data.**

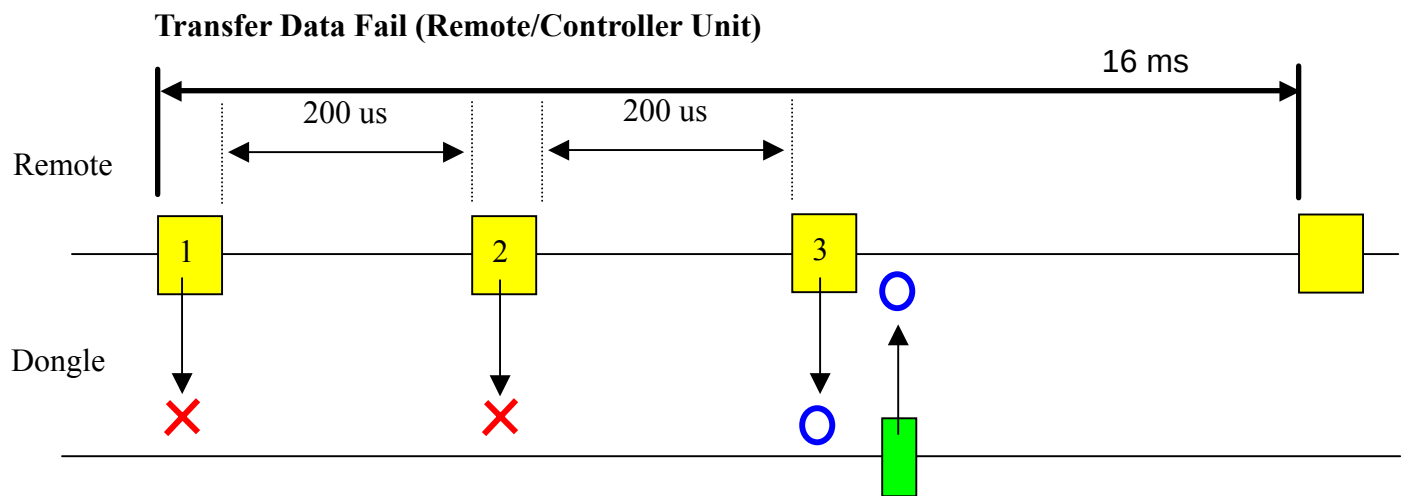
4bit Sink+2 bytes Preamble+7 bytes Header+2 bytes Payload+2 bytes CRC: 108us

**Bit format: RZ code.**

**Transfer Data Fail (Remote)****Transfer Data Fail (Dongle)**

○ Data Transfer OK      ✗ Data Transfer Fail

- There are three times to send data. If 2<sup>nd</sup> remote can receive Dongle side ACK, the transfer will end.
- If data transfer fail in the 3<sup>rd</sup> time, the system will stop to send data in this time block (16ms). Wait next time block coming, the system will check key data values and then send to Dongle side.
- $200\text{ us} < T1(\text{Random}) < 350\text{us}$

**Worst Case:**

Yellow: Key Data.

4bit Sink+2 bytes Preamble+7 bytes Header+13 bytes Payload+2 bytes CRC: 196us

$$\text{Average Factor} = 3 \times 0.196 / 16 = 0.037 \text{ or } -28.6 \text{ dB}$$