

# Hopping Information – Bluetooth

## 1 Hopping Range

Hereby we declare that the maximum range frequency of this device is: 2.400-2.4835GHz.

This is according to the Bluetooth Core Specification BT4.0 for devices which will be operated in the USA.

## 2 Hopping Sequence

Example of a 79 hopping sequence in data mode:

35,14,21,44,23,42,53,46,55,48,40,59,72,29,76,31,08,73,  
07,65,09,45,60,39,58,13,47,11,77,52,35,50,65,54,67,56,  
69,62,71,64, 37,25,27,66,57,70,24,61,78,63,10,41,05,43,  
19,43,64,68,02,71,06,01,51,03,55,05,03,66,53,49,26,46,

## 3 Receiver input bandwidth

The input bandwidth of the receiver is 1MHz. In every connection one Bluetooth device is the master and the other one is the slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master.

Additionally the type of connection is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings. Repeating of a packet has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case. That means a repeated packet will not be sent on the same frequency, it is sent on the next frequency of the hopping sequence.