

Hopping Information

1 Hopping Range

Hereby we declare that the maximum frequency of this device is: 2402-2480MHz.

This is according the Bluetooth Core Specification V1.2 (+ critical errata) for devices which will be operated in the USA.

This was checked during the Bluetooth Qualification tests (Test Case: TRM/CA/04-E).

Other frequency ranges (e.g. for Spain, France, Japan) which are allowed according the Core Specification are not supported by this device.

2 Hopping Sequence

Example of a 79 hopping sequence in data mode:

33,04,21,44,23,42,53,46,55,48,40,59,72,29,76,31,08,73,
07,75,09,45,60,39,58,13,47,11,77,52,35,50,65,54,67,56,
69,62,71,64, 37,25,27,66,57,70,74,61,78,63,10,41,05,43,
15,44,64,68,02,70,06,01,51,03,55,05,03,66,53,49,36,47,

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.