# Inquiry

## Inquiry scan (slave)

An unconnected Bluetooth device that wants to be "discovered" by a master device will periodically enter the **inquiry scan** state; in this state, the device activates its receiver and listens for inquiries. It must enter this state at least every 2.56 seconds (4096 slots).

During the inquiry scan state, the unconnected device listens on one of 32 channels, for at least 10ms (16 slots). A different channel is selected every 1.28 seconds (2048 slots). The channels and the hopping sequence are calculated from the general inquiry address.

## Inquiry (master)

When commanded to enter the **inquiry** state, the master device starts to transmit, using 16 of the 32 channels used for inquiries. During every even numbered slot it transmits two [ID](#) packets on two different channels, and during the following slot it listens on those two channels for a slave's response (an [FHS](#) packet). In the next two slots it uses the next two channels, so the hopping sequence (of 16 channels) repeats every 10ms (16 slots). The 16 slot sequence must be repeated at least 256 times (i.e. for at least 2.56 seconds) before switching to the other set of 16 channels.

*Last updated 18th April 2002, Peter Dziwior.*