

FCC ID: UXD09002

Operation Description

The 2403.4 - 2479.2MHz IC drives the base of IC the final/buffer amplifier. The modulation provided by IC.

Antenna, Ground and Power Source

There is no external antenna. There is no external ground connection. The ground is only that of the printed circuit board. Electric current is supplied by a A.C. power supply.

Operation Descriptions

The receiver is an audio receiver operating at 2403.4 – 2479.2MHz band. The receiver is powered by A.C. Power supply and the receiving frequency is crystal controlled. The operation is achieved by different combinations of form pulse modulating signal on the 2403.4 – 2479.2MHz carrier frequency.

Remarks:

The receiver will be operated when the Wired/Wireless mode switch is on Wireless.

The EUT will pair up with the dedicated Transmitter and continue to receive signal from it.

It is Pulse receiver, Modulation by IC; and type is Pulse modulation.

A frequency hopping spread spectrum (FHSS) system works by hopping from one frequency channel to another frequency channel in a known sequence out of a select group of channels. The Squeak system frequency hops between 20 channels. The group of 20 channels is selected out of a total of 38 hopping channels in the **ISM band**.

If the Squeak firmware determines that one of the 20 hopping channels is found to be noisy or poor due to other RF interference, then a new channel is selected from the 18 unused channels (i.e. $38 - 20 = 18$) and the one noisy channel is released to the unused group. This repeats whenever a noisy or poor channel is detected.

In the Squeak system, the master TX dwells on a single hopping channel and transmits a data packet to the slave RX. When the slave RX receives a good data packet from a TX, the RX sends an acknowledgment back to the TX.

Once the slave RX has responded to the master TX, then both the TX and RX units each hop to the next frequency channel and the process is repeated.

However, when the RX receives a corrupted data packet from a TX, the RX transmits a resend request back to the TX. The TX responds by re-transmitting the last packet of audio data. In this way the RX can maintain a high quality of service (QoS) by replacing bad audio data with good audio data before the data is decoded and output to the speaker.