

EXHIBIT B

[FCC Ref. 2.1033(b)(4)]

"Description of Circuit Functions"

Exhibit B(1)-1 - Circuit Description



Graco Baby Monitor 1 Way Circuit Description

Baby Unit

RF Transmitter

This circuit modulates the voice or data onto a carrier frequency using FM. The modulated carrier signal is amplified and feeds to the antenna.

Frequency Synthesizer

Both transmit and receiver frequencies are generated based on a reference frequency derived from a quartz crystal. This allows accurate and stable frequency generation. A microcontroller is used to set both transmit and receive frequencies by sending signals to the frequency synthesizer therefore allowing multi-channel operation.

Microphone Amplifier

The audio signal picked up by the microphone is a very low-level signal. A microphone amplifier is used to amplify this signal so that it can be transmitted.

Microcontroller

This is the 'brain' of the system. It determines the receive frequency to use base on the location of the channel switch.

Parent Unit

RF Receiver

Modulated RF signal is received through the antenna. The received signal is downconverted to a lower frequency IF.

Frequency Synthesizer

Both transmit and receiver frequencies are generated based on a reference frequency derived from a quartz crystal. This allows accurate and stable frequency generation. A microcontroller is used to set both transmit and receive frequencies by sending signals to the frequency synthesizer therefore allowing multi-channel operation.

FM Demodulator

The IF from RF receiver is converted into audio signal by this circuitry. The demodulated audio goes into the speaker amplifier while the recovered data signal goes into the microcontroller.

Speaker Amplifier

The amplifier is used to amplify the received signal to sufficiently high levels before feeding into the speaker.

Microcontroller

This is the 'brain' of the system. It determines the receive frequency to use base on the location of the channel switch.