

## Product Description

### Safety 1<sup>st</sup> Model 49236 Circuit Description:

The Safety 1<sup>st</sup> Model 49236 is Nursery Monitor operating in the 49.82 to 49.90 MHz per FCC section 15.235. It consists of a Child unit and a Parent unit. Each is powered by an external AC/DC power adapter or by an internal alkaline battery. This Nursery monitor operation is similar to most monitors sold in the market today. The Child unit will pick up the audio within a room and transmit the signal via FM modulation on a radio carrier. The Parent unit will receive and demodulated FM signal and amplify the audio through an internal speaker. The two devices will be sold as a pair.

There is a special two-way mode of operation. When the Parent unit's Push-to-Talk button is depressed, the Parent unit goes from receive mode to transmit mode. The Child unit checks if the Parent unit is in transmit mode by polling its receiver every two seconds. If there is a signal present from the Parent Unit, the Child unit goes from transmit to receive mode. When the Push-to-Talk button is depressed on the Parent unit, system operation reverts back to normal operation.

The Child unit transmits on one of two frequencies, 49.830 and 49.845 respectively. The Parent Unit is usually in receive mode unless the Push-to-Talk button is depressed and then only transmits on one of two frequencies, 49.875 and 49.890 respectively. The receivers in both Parent and Child units are FM super-heterodyne dual conversion. The transmitters are crystal controlled direct FM oscillators.

A five kilohertz super-audible tone is generated and detected on both units and modulated on the FM carrier as a means of signal coding to ensure proper signal connection.

The case is non-conductive plastic.