

PARENT UNIT OPERATIONAL DESCRIPTION with 2.0" and 2.8" LCD

1. Supply voltage: 4.5Vdc from batteries or 6v from DC adapter
2. Frequency of operation: 2410.875~2468.25 MHz
3. Number of channels: 18
4. Antenna type: Wire soldered on PCB
5. Antenna gain: 0dBi
6. Antenna connector: Soldered
7. Introduction of the device: The device is part of a 2.4G digital baby monitoring using FHSS with GFSK modulation.
8. Related antenna connector photo:

2.0" LCD



Antenna

2.8" LCD



Antenna

FREQUENCY HOPPING DESCRIPTION

Device has 18 channels

CH	FREQUENCY	CH	FREQUENCY
0	2410.875	9	2441.25
1	2414.25	10	2444.625
2	2417.625	11	2448
3	2421	12	2451.375
4	2424.375	13	2454.75
5	2427.75	14	2458.125
6	2431.125	15	2461.5
7	2434.5	16	2464.875
8	2437.875	17	2468.25

Out of the 18 channels above, 15 of them are used in a hop sequence.

An example hop sequence is given below.

CH17,CH1,CH2,CH6,CH4,CH8,CH3,CH5,CH7,CH9,CH15,CH16,CH11,CH13,CH10

Device always uses 15 channels. When there is interference on one of the 15 channels, device replaces that channel with 1 of the 3 unused channels ($18-15=3$) and it continues to hop on 15 channels. If another channel needs to be replaced, it is replaced again with 1 of the 3 unused channels. This way device always uses 15 channels. All the hop sequences continue to be pseudorandom.

All the channels in the hop sequence is used once before the sequence is repeated again. This ensures equal use of each channel.

System receivers have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and they shift frequencies in synchronization with the transmitted signals.

There are no irregularities in hopping behavior during continuous data stream or short transmission bursts. Device continues to follow the hop procedure explained above.