

# Operational Principle

The Dongle use SE69D chip, 16MHz Crystal.

- 1.The SE69D is a member of the low-cost, high-performance family of intelligent 2.4 GHz RF transceivers with embedded microcontrollers.
2. The SE69D is optimized to provide a single chip solution for Ultra Low Power (ULP) wireless applications. The combination of processing power, memory, low power oscillators, real-time counter and a range of power saving modes provides an ideal platform for implementation of RF protocols.
3. Benefits of using SE69D include tighter protocol timing, security, lower power consumption and improved co-existence performance. For the application layer the SE69D offers a rich set of peripherals including: USB, and so on. The antenna is typically fed from the end of the monopole section by a plated through-hole via which is in turn connected to the RF output on the 2.4GHz band
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## Channel list

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	2402	11	2422	21	2442	31	2462
2	2404	12	2424	22	2444	32	2464
3	2406	13	2426	23	2446	33	2466
4	2408	14	2428	24	2448	34	2468
5	2410	15	2430	25	2450	35	2470
6	2412	16	2432	26	2452	36	2472
7	2414	17	2434	27	2454	37	2474
8	2416	18	2436	28	2456	38	2476
9	2418	19	2438	29	2458	39	2478
10	2420	20	2440	30	2460	40	2480

Note: the device has totally 40 channels, only 16 channels selected randomly from the channel list were active to transmit at same time.