

KX-TG9541 Radio part description (1.9GHz part)

Category : Intentional Radiator

Model name: KX-TG9541 (Baset)

Frequency band : 1920 to 1930 MHz

Emission Designations : : F1E

Frequency Shift Keying deviation : +/- 400kHz

Bit Rate : 1.152 MBit/sec

Power Rating

Baset : AC 120V 60Hz (AC adaptor output DC 5.5V)

Frequency table for KX-TG9541 (Baset) :

Carrier N	CenterFrequency on TX/RX (MHz)	Local on TX (MHz)	Local on RX (MHz)
0	1928.448	3856.896	3858.624
1	1926.720	3853.440	3855.168
2	1924.992	3849.984	3851.712
3	1923.264	3846.528	3848.256
4	1921.536	3843.072	3844.800

Transmitting Frequency : 1921.536 - 1928.448MHz

Receive Frequency : 1921.536 - 1928.448MHz

Channel Space : 1.728 MHz

IF Frequency : 864kHz

Other Clock Frequency : 10.368MHz (Reference clk for PLL)

Frequency stability

+/- 10ppm

Multiplex mode : Time Division Duplex

The basic, repeating, frame structure is 10msec long. It is sub-divided into 24 slots. Baset transmits the traffic bearer on air link to the handset. The first 12 slots form the "down-link", when the Baset transmits to the Handsets. The last 12 slots from the "up-link", when the Handsets transmit to the Baset. This system uses TDD (Time Division Duplex) to carry a two-way voice communication.

Wide band mode via only Bluetooth

The basic, repeating, frame structure is 10msec long. It is sub-divided into 12 slots. Baset transmits the traffic bearer on air link to the handset. The first 6 slots form the "down-link", when the Baset transmits to the Handsets. The last 6 slots from the "up-link", when the Handsets transmit to the Baset. This system uses TDD (Time Division Duplex) to carry a two-way voice communication.

KX-TG9541 use one slot for the dummy bearer, and 10 slots (maximum) are used for traffic bearer.

CH Number : 60 (12 slots X 5 carrier)
30 (6 slots X 5 carrier) (For Wide band mode)

TX power tolerance

KX-TG9541 (baset) : +18.5dBm +/- 1.5dB (at conductive point)

Type of Antenna

KX-TG9541 (Baset) :Antenna diversity
ANT1 Wired Antennna (Gain 0dBi)
ANT2 Pattern Antennna (Gain 0dBi)

Transmitter Output Power limit

KX-TG9541 (Baset) : 100mW (+20.0dBm) max

KX-TG9541 Radio part description (2.4GHz part)

Category : Intentional Radiator

Model name: KX-TG9541 (Base unit)

Frequency band : 2400 to 2483.5 MHz

Operation mode : Bluetooth2.1 compatible Mode

AFH (Adaptive Frequency Hopping):

Removing the "bad channel" from the hopping table in order to avoid the interference.

Default: 79-channels hopping

Minimum: 20-channels hopping

FSK deviation 160kHz.typ
 20dB BW 0.9MHz.typ
 Channel space 1MHz

Type of Antenna

Pattern Antenna (Gain 0dBi)

Transmitter Output Power (Not tune up) 10mW.(+10dBm)max (Bluetooth Class1)

Reference CLK 26.00 MHz

Hopping Frequency Table (Decimal)

ch	MHz	ch	MHz	ch	MHz	ch	MHz	ch	MHz	ch	MHz	ch	MHz	ch	MHz
0	2402	10	2412	20	2422	30	2432	40	2442	50	2452	60	2462	70	2472
1	2403	11	2413	21	2423	31	2433	41	2443	51	2453	61	2463	71	2473
2	2404	12	2414	22	2424	32	2434	42	2444	52	2454	62	2464	72	2474
3	2405	13	2415	23	2425	33	2435	43	2445	53	2455	63	2465	73	2475
4	2406	14	2416	24	2426	34	2436	44	2446	54	2456	64	2466	74	2476
5	2407	15	2417	25	2427	35	2437	45	2447	55	2457	65	2467	75	2477
6	2408	16	2418	26	2428	36	2438	46	2448	56	2458	66	2468	76	2478
7	2409	17	2419	27	2429	37	2439	47	2449	57	2459	67	2469	77	2479
8	2410	18	2420	28	2430	38	2440	48	2450	58	2460	68	2470	78	2480
9	2411	19	2421	29	2431	39	2441	49	2451	59	2461	69	2471		

