RF EXPOSURE

The following table summarizes the minimum separation distance as calculated following FCC OET Bulletin 65. Because of the large variation in antenna and amplifier configurations, minimum separation distance is calculated over the full range of total EIRP only.

To obtain the minimum separation distance for a particular system, the antenna gain (dBm) listed in Table 1.2 must be added to the amplifier output power (dBm) listed in Table 1.3, resulting in the total EIRP for a given system. If no amplifier is used, the output power of the radio from Table 1.2 is to be used in place of the amplifier output power. Cross referencing this EIRP (dBm) with that listed below will give the corresponding minimum separation distance for the given system.

NOTE: THE ONLY PERMISSIBLE SYSTEM CONFIGURATIONS ARE THOSE LISTED IN THE *SYSTEM CONFIGURATION INFORMATION* EXHIBIT.

Table 1.1 Potential Health Hazard Radiation Level

EIRP(dBm)	R (cm)	EIRP(dBm)	R (cm)	EIRP(dBm)	R (cm)
54	141.4	36	17.8	18	2.2
53	126.0	35	15.9	17	2.0
52	112.3	34	14.1	16	1.8
51	100.1	33	12.6	15	1.6
50	89.2	32	11.2	14	1.4
49	79.5	31	10.0	13	1.3
48	70.9	30	8.9	12	1.1
47	63.2	29	8.0	11	1.0
46	56.3	28	7.1	10	0.9
45	50.2	27	6.3	9	0.8
44	44.7	26	5.6	8	0.7
43	39.8	25	5.0	7	0.6
42	35.5	24	4.5	6	0.6
41	31.7	23	4.0	5	0.5
40	28.2	22	3.6	4	0.4
39	25.1	21	3.2	3	0.4
38	22.4	20	2.8	2	0.4
37	20.0	19	2.5	1	0.3

The following equations were used in calculating the operating distance (R).

$$EIRP(mW) = Po(mW) \cdot 10^{\frac{Gain(dB)}{10}}$$

and

$$R = \sqrt{\frac{EIRP(mW)}{4 \cdot \Pi \cdot S(mW/cm^2)}}, \quad S = 1 mW/cm^2$$

Table 1.2 Amplifier Output Power Ratings

Amplifier Model	Output Power (dBm)
None (Radio only)	11.0
HA2401-AGC10	10.0
HA2401-AGC16	12.0
HA2401-AGC50	17.0
HA2401-AGC100	20.0
HA2401-AGC250	24.0
HA2401-AGC-250	24.0
HA2401-AGC500	27.0
HA2401-AGC1000	30.0

Table 1.3 Antenna Gain

Antenna Model	Construction	Gain (dBi)
HG2401U	whip/monopole	1
HG2405U	whip/monopole	5
HG2406U	whip/monopole	6
HG2407U	whip/monopole	7
HG2408U	whip/monopole	8
HG2409U	whip/monopole	9
HG2410U	whip/monopole	10
HG2412U	whip/monopole	12
HG2415U	whip/monopole	15
HG2403MU	whip/automotive	3
HG2405MU	whip/automotive	5
HG2408P	patch	8
HG2409P	patch	9
HG2413P	patch	13
HG2414P	patch	14
HG2416P	patch	16
HG-UNI-16	patch	16
HG2412P	linear array	12
HG2415P	linear array	15
HG2417P	linear array	17
HG2420P	linear array	20
HG2412Y	Yagi-Uda	12
HG2415Y	Yagi-Uda	15
HG2414D	dish	15
HG2415G	dish	19
HG2419G	dish	21
HG2421G	dish	24