

Field Tuning Instructions

Cutting Chart DB205 Antennas

Andrew Institute offers installation training.

The DB205 is a heavy-duty, unity gain, omni antenna for 33-174 MHz. When field tuning uncut DB205 antennas, the charts on the following pages list the lengths to which the whip and skirt should be set to obtain a certain desired frequency.

DETERMINING CORRECT LENGTHS

1. Find the desired frequency in the "Frequency" column.
2. Follow across to the columns "A" (length of whip) and "B" (length of skirt) to find the lengths. See Figure 1.

ADJUSTING THE LENGTH OF THE WHIP

1. Loosen the set screws.
2. Remove the whip.
3. Cut the whip to the desired length.
4. Replace the whip and tighten the set screws.

ADJUSTING THE LENGTH OF THE SKIRT

1. Loosen the set ring.
2. Telescope the unit to the desired length.
3. Replace the set ring.

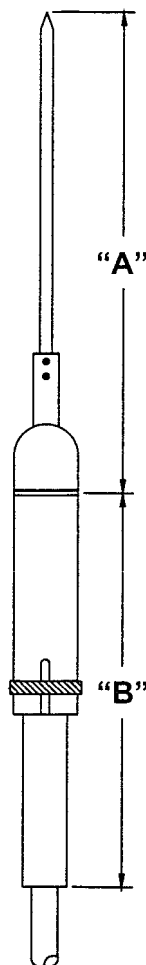


Figure 1. DB205 Antenna
Whip length is "A"; Skirt length is "B". (All measurements are in inches.)

All measurements are in inches.

Freq. (MHz)	A Whip	B Skirt
33.0	92	84
33.2	91 1/2	83 3/4
33.4	91	83
33.6	90 1/2	82 1/2
33.8	90	82 1/8
34.0	89 1/2	81 5/8
34.2	89	81 1/4
34.4	88 1/2	80 7/8
34.6	88	80 1/2
34.8	87 1/2	80
35.0	87	79 5/8
35.2	86 1/2	79 1/4
35.4	86	78 7/8
35.6	85 1/2	78 3/8
35.8	85	78
36.0	84 1/2	77 5/8
36.2	84	77 1/4
36.4	83 5/8	77
36.6	83 1/4	76 5/8
36.8	82 3/4	76 1/8
37.0	82 1/4	75 7/8
37.2	81 7/8	75 3/8
37.4	81 3/8	75
37.6	81	74 5/8
37.8	80 1/2	74 1/4
38.0	80 1/8	74
38.2	79 5/8	73 1/2
38.4	79 1/4	73 1/8
38.6	78 7/8	72 7/8
38.8	78 1/2	72 1/2
39.0	78	72 1/4
39.2	77 5/8	71 15/16
39.4	77 1/8	71 5/8
39.6	76 7/8	71 1/4
39.8	76 1/2	71
40.0	76	70 3/4
40.2	75 5/8	70 1/2
40.4	75 1/4	70 1/4
40.6	74 3/4	69 15/16

NOTICE

The installation, maintenance, or removal of an antenna requires qualified, experienced personnel. Andrew installation instructions are written for such installation personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

Andrew disclaims any liability or responsibility for the results of improper or unsafe installation practices.



Do not install near power lines. Power lines, telephone lines, and guy wires look the same. Assume any wire or line can electrocute you.



Do not install on a wet or windy day or when lightning or thunder is in the area. Do not use metal ladder.



Wear shoes with rubber soles and heels. Wear protective clothing including a long-sleeved shirt and rubber gloves.

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Freq. (MHz)	A Whip	B Skirt
40.8	74 3/8	69 5/8
41.0	74 1/4	69 1/2
41.2	74	69 3/8
41.4	73 1/2	69 1/8
41.6	73 1/4	68 3/4
41.8	72 7/8	68 1/2
42.0	72 1/2	68 1/4
42.2	72	68
42.4	71 3/4	67 3/4
42.6	71 3/8	67 1/2
42.8	71	67 1/8
43.0	70 5/8	66 7/8
43.2	70	66 3/8
43.4	69 5/8	66 1/8
43.6	69 1/4	65 3/4
43.8	68 7/8	65 5/8
44.0	68 5/8	65 3/8
44.2	68 1/4	65 1/8
44.4	68	64 7/8
44.6	67 5/8	64 3/4
44.8	67 1/4	64 1/2
45.0	66 7/8	64 3/16
45.2	66 3/4	64
45.4	66 3/8	63 3/4
45.6	66	63 1/2
45.8	65 3/4	63 1/4
46.0	65 3/8	62 15/16
46.2	65	62 3/4
46.4	64 3/4	62 1/2
46.6	64 1/2	62 1/4
46.8	64 1/8	62
47.0	63 7/8	61 3/4
47.2	63 5/8	61 1/2
47.4	63 1/4	61 1/4
47.6	63	61 1/8
47.8	62 3/4	60 7/8
48.0	62 1/2	60 3/4
48.2	62 1/8	60 1/2
48.4	61 7/8	60 1/4

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Freq. (MHz)	A Whip	B Skirt
48.6	61 5/8	60
48.8	61 3/8	59 3/4
49.0	61 1/8	59 5/8
49.2	60 7/8	59 3/8
49.4	60 5/8	59 1/4
49.6	60 3/8	59
49.8	60 1/8	58 3/4
50.0	60	58 5/8
50.5	58 1/2	55 3/8
51.0	57 7/8	54 7/8
51.5	57 5/16	54 3/8
52.0	56 3/4	53 7/8
52.5	56 1/4	53 1/2
53.0	55 11/16	53 1/8
53.5	55 3/16	52 5/8
54.0	54 11/16	52 1/8
54.5	54 3/16	51 5/8
55.0	53 11/16	51 1/4
55.5	53 3/16	50 7/8
56.0	52 3/4	50 7/16
56.5	52 1/4	50
57.0	51 13/16	49 5/8
57.5	51 5/16	49 1/8
58.0	50 7/8	48 3/4
58.5	50 7/16	48 3/8
59.0	50	48
59.5	49 5/8	47 5/8
60.0	49 3/16	47 1/4
60.5	48 13/16	46 3/4
61.0	48 3/16	46 5/16
61.5	48	46
62.0	47 5/8	45 5/8
62.5	47 1/4	45 1/4
63.0	46 7/8	45
63.5	46 1/2	44 5/8
64.0	46 1/8	44 3/8
64.5	45 3/4	44
65.0	45 7/16	43 3/4
65.5	45 1/16	43 3/8

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All measurements are in inches.

Freq. (MHz)	A Whip	B Skirt
66.0	44 3/4	43 1/8
66.5	44 3/8	42 3/4
67.0	44 1/16	42 1/2
67.5	43 3/4	42 1/4
68.0	43 7/16	42
68.5	43 1/16	41 3/4
69.0	42 3/4	41 1/2
69.5	42 1/2	41 1/4
70.0	42 3/16	41
70.5	41 7/8	40 1/8
71.0	41 9/16	39 1/2
71.5	41 5/16	39 1/4
72.0	41	39
72.5	40 3/4	38 3/4
73.0	40 7/16	38 1/2
73.5	40 3/16	38 1/4
74.0	39 7/8	38
74.5	39 5/8	37 3/4
75.0	39 3/8	37 5/8
75.5	39 1/8	37 3/8
76.0	38 13/16	37 1/8
76.5	38 9/16	36 7/8
77.0	38 5/16	36 5/8
77.5	38 1/16	36 3/8
78.0	37 7/8	36 1/8
78.5	37 5/8	35 7/8
79.0	37 3/8	35 3/4
79.5	37 1/8	35 1/2
80.0	36 7/8	35 1/4
80.5	36 11/16	35
81.0	36 7/16	34 7/8
81.5	36 1/4	34 5/8
82.0	36	34 3/8
82.5	35 3/4	34 1/4
83.0	35 9/16	34
83.5	35 3/8	33 7/8
84.0	35 1/8	33 5/8
84.5	34 15/16	33 1/2
85.0	34 3/4	33 1/4

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Freq. (MHz)	A Whip	B Skirt
85.5	34 1/2	33 1/16
86.0	34 5/16	32 7/8
86.5	34 1/8	32 3/4
87.0	33 15/16	32 5/8
87.5	33 3/4	32 3/8
88.0	33 9/16	32 1/8
88.5	33 3/8	31 1/4
89.0	33 3/16	31 1/16
89.5	33	30 7/8
90.0	32 13/16	30 11/16
90.5	32 5/8	30 5/8
91.0	32 7/8	30 3/8
91.5	32 1/4	30 5/16
92.0	32 1/8	30 1/4
92.5	31 15/16	30
93.0	31 3/4	29 7/8
93.5	31 9/16	29 3/4
94.0	31 3/8	29 5/8
94.5	31 1/4	29 7/16
95.0	31 1/16	29 1/4
95.5	30 15/16	29 1/8
96.0	30 3/4	29
96.5	30 9/16	28 7/8
97.0	30 7/16	28 3/4
97.5	30 1/4	28 5/8
98.0	30 1/8	28 1/2
98.5	30	28 3/8
99.0	29 13/16	28 1/4
99.5	29 11/16	28 1/8
100	29 1/2	28
101	29 1/4	27 3/4
102	28 15/16	27 1/2
103	28 11/16	27 1/4
104	28 3/8	27
105	28 1/8	26 3/4
106	27 7/8	26 1/2
107	27 9/16	26 3/8
108	27 5/16	26 1/8
109	27 1/16	26

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Freq. (MHz)	A Whip	B Skirt
110	26 7/8	25 3/4
111	26 9/16	25 5/8
112	26 3/8	25 3/8
113	26 1/8	25 1/4
114	25 7/8	25
115	25 11/16	24 3/4
116	25 7/16	24 1/2
117	25 1/4	24 3/8
118	25	24 1/4
119	24 13/16	24
120	24 5/8	23 7/8
121	24 3/8	23 3/4
122	24 3/16	23 1/2
123	24	23 3/8
124	23 13/16	23 1/4
125	23 5/8	23
126	23 7/16	22 7/8
127	23 1/4	22 3/4
128	23 1/16	22 9/16
129	22 7/8	22 3/8
130	22 11/16	22 1/4
131	22 1/2	22 1/8
132	22 3/8	22
133	22 3/16	21 7/8
134	22	21 3/4
135	21 7/8	21 5/8
136	21 3/4	21 1/2
137	21 9/16	21 3/8
138	21 3/8	21 1/4
139	21 1/4	21 1/8
140	20 1/16	21
141	20 15/16	20 7/8
142	20 13/16	20 3/4
143	20 5/8	20 5/8
144	20 1/2	20 1/2
145	20 3/8	20 3/8
146	20 1/4	20 1/4
147	20 1/16	20 3/16
148	19 15/16	20 1/8

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All measurements are in inches.

Freq. (MHz)	A Whip	B Skirt
149	19 13/16	20
150	19 11/16	19 7/8
151	19 9/16	19 13/16
152	19 7/16	19 3/4
153	19 5/16	19 5/8
154	19 3/16	19 1/8
155	19 1/16	19
156	18 15/16	18 7/8
157	18 13/16	18 11/16
158	18 11/16	18 9/16
159	18 9/16	18 3/8
160	18 7/16	18 1/4
161	18 5/16	18 1/8
162	18 1/4	18 1/16
163	18 1/8	17 15/16
164	18	17 7/8
165	17 7/8	17 3/4
166	17 3/4	17 5/8
167	17 11/16	17 1/2
168	17 9/16	17 3/8
169	17 1/2	17 5/16
170	17 3/8	17 3/16
171	17 1/4	17 1/8
172	17 3/16	17
173	17	16 7/8
174	16 7/8	16 13/16
175	16 3/4	16 1/2

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