COMMSCOPE®

Instruction Sheet

095345-000 Revision D, May 2016

DB201 Cutting Chart
Radial and Radiator Lengths For Field Tuning

30-50 MHz, 66-88 MHz, 100-150 MHz, 150-174 MHz,
406-420 MHz, 450-512 MHz.

CUTTING INSTRUCTIONS

The following charts list the lengths to which the radiating element and the ground radials should be cut to obtain a certain desired frequency when field tuning uncut DB201 antennas.

To determine the correct lengths, find the desired frequency in the “Frequency” columns. Then, follow across to the right to the “A” and “B” columns to find the lengths. The length of the radiating element is shown in column “A” (see Figure 1) and the length of the ground radials is shown in column “B” (see Figure 2). All measurements are in inches.

Important: When cutting the ground radials (Figure 2), cut the excess from the end that goes into the base plate. ***Do not cut the excess from the tapered end.***

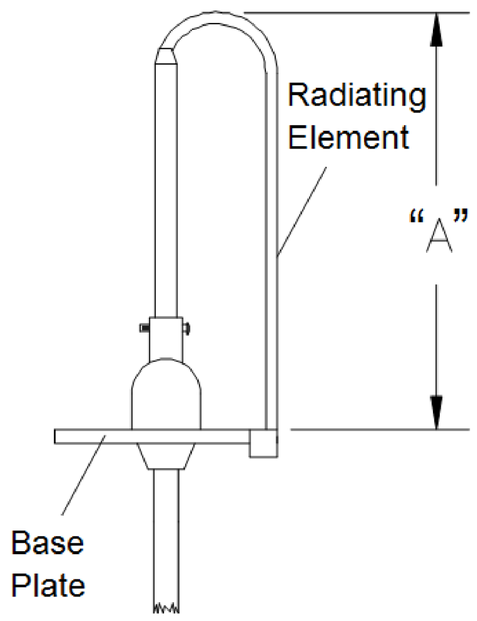

Figure 1 - Radiating Element Length (Shown in Column “A”. All measurements are in inches.)

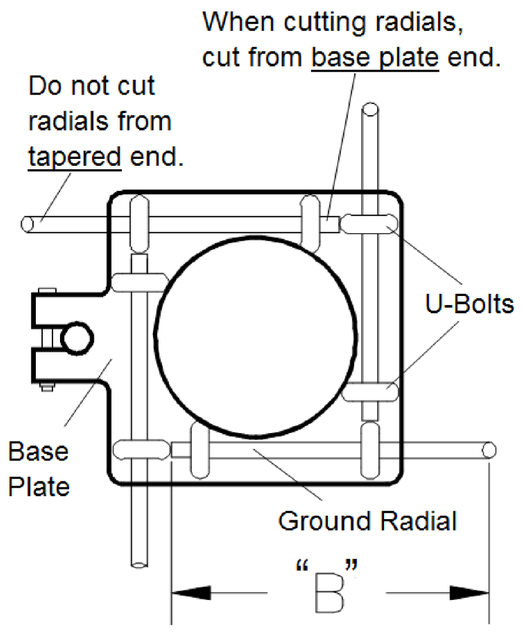

Figure 2 - Ground Element Lengths (Shown in Column “B”. All measurements are in inches.)

Warning!
Installation of this product near power lines is dangerous.
For your safety, follow the installation procedures.

30-50 MHz

(All measurements are in inches.)

Freq.	A	B	Freq.	A	B
30.00	90	127	33.50		
.10			.60	80	113 3/4
.20	89 1/2	126	.70		
.30			.80	79 3/4	113
.40	88 3/4	125 1/2	.90		
.50			34.00	79 1/2	112 1/2
.60	88	124 3/4	.10		
.70			.20	78 3/4	111 3/4
.80	87 1/2	124	.30		
.90			.40	78 1/4	111
31.00	87	123	.50		
.10			.60	78	110 1/2
.20	86 1/4	122 1/4	.70		
.30			.80	77 1/2	110
.40	85 3/4	121 1/2	.90		
.50			35.00	77	109 1/2
.60	85	120 3/4	.10		
.70			.20	76 3/4	109
.80	84 1/2	120	.30		
.90			.40	76 1/4	108 1/2
32.00	84	119 1/4	.50		
.10			.60	75 1/2	107 3/4
.20	83 /1/2	118 1/2	.70		
.30			.80	75	107 1/4
.40	83	118	.90		
.50			36.00	74 3/4	106 1/2
.60	82 1/2	117	.10		
.70			.20	74 1/4	106
.80	82	116 1/2	.30		
.90			.40	74	105 1/2
33.00	81 1/2	115 3/4	.50		
.10			.60	73 1/2	105
.20	81	115	.70		
.30			.80	73 1/4	104 1/2
.40	80 1/2	114 1/2	.90		

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30-50 MHz

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Freq.	A	B	Freq.	A	B
37.00	72 3/4	103 3/4	41.10		
.10			.20	66 3/4	95 1/4
.20	72 1/4	103 1/4	.30		
.30			.40	66 1/2	94 3/4
.40	72	102 3/4	.50		
.50			.60	66 1/4	94 1/2
.60	71 1/2	102	.70		
.70			.80	65 3/4	93 3/4
.80	71	101 1/2	.90		
.90			42.00	65 1/2	93 1/2
38.00	70 3/4	101	.10		
.10			.20	65 1/4	93
.20	70 1/4	100 1/2	.30		
.30			.40	65	92 1/2
.40	70	100	.50		
.50			.60	64 1/2	92
.60	69 1/2	99 1/4	.70		
.70			.80	64 1/4	91 3/4
.80	69	98 3/4	.90		
.90			43.00	64	91 1/4
39.00	69 3/4	98 1/4	.10		
.10			.20	63 3/4	90 7/8
.20	68 1/4	98	.30		
.30			.40	63 1/2	90 1/2
.40	68	97 1/2	.50		
.50			.60	63 1/4	90
.60	67 3/4	97	.70		
.70			.80	63	89 3/4
.80	67 1/2	96 1/2	.90		
.90			44.00	62 1/2	89 1/2
40.00	67 1/4	96 1/2	.10		
.10			.20	62 1/4	89
.20	67 1/4	96 3/8	.30		
.30			.40	62	88 1/2
.40	67 1/8	96 1/4	.50		
.50			.60	61 3/4	88
.60	67 1/8	96	.70		
.70			.80	61 1/2	87 1/2
.80	67	95 3/4	.90		
.90			45.00	61 1/4	87 1/4
41.00	67	95 1/2	.10		

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30-50 MHz

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Freq.	A	B	Freq.	A	B
45.20	60 3/4	87	.70		
.30			.80	58 1/4	82 3/8
.40	60 1/2	86 3/4	.90		
.50			48.00	58	82
.60	60 1/4	86 1/2	.10		
.70			.20	57 7/8	81 3/4
.80	60	86	.30		
.90			.40	57 3/4	81 1/4
46.00	59 3/4	86 1/2	.50		
.10			.60	57 1/2	81
.20	59 5/8	86 1/4	.70		
.30			.80	57 1/8	80 3/4
.40	59 1/2	85 7/8	.90		
.50			49.00	57	80
.60	59 1/2	85 1/2	.10		
.70			.20	56 3/4	79 7/8
.80	58 1/4	85	.30		
.90			.40	56 1/2	79 1/2
47.00	59	83 3/4	.50		
.10			.60	56 1/4	79 1/4
.20	58 7/8	83 1/4	.70		
.30			.80	56	79
.40	58 3/4	83	.90		
.50			50.00	55 7/8	78 1/2
.60	58 1/2	82 3/4			

66-68 MHz

(All measurements are in inches.)

Freq.	A	B	Freq.	A	B
66.00	39 1/2	57 1/2	78.00	34 1/2	47 3/4
67.00	39	56 1/2	79.00	34	47
68.00	38 3/4	55 3/4	80.00	33 1/2	46 1/2
69.00	38 1/4	55	81.00	32 3/4	46
70.00	38	54 1/2	82.00	32 1/2	45 3/4
71.00	37 1/2	53 3/4	83.00	32 1/4	45 1/2
72.00	37 1/4	53	84.00	32	44 1/4
73.00	36 3/4	52 1/2	85.00	31 3/4	44
74.00	36 1/2	52	86.00	31 1/4	43 3/4
75.00	35 1/2	49 1/2	87.00	30 1/2	43 1/4
76.00	35	49	88.00	30 1/4	43
77.00	34 3/4	48 1/2			

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120-150 MHz

(All measurements are in inches.)

Freq.	A	B	Freq.	A	B
100.00	26 7/8	39 9/16	126.00	21 7/16	30 1/4
101.00	26 5/8	39 3/16	127.00	21 1/4	30
102.00	26 5/16	38 13/16	128.00	21 1/16	29 3/4
103.00	26 1/16	38 7/16	129.00	20 15/16	29 1/2
104.00	25 13/16	38	130.00	20 3/4	29 5/16
105.00	25 9/16	37 11/16	131.00	20 5/8	29 1/16
106.00	25 5/16	37 5/16	132.00	20 7/16	28 7/8
107.00	25 1/8	36 15/16	133.00	20 5/16	28 5/8
108.00	24 7/8	36 5/8	134.00	20 1/8	28 7/16
109.00	24 5/8	36 5/16	135.00	20	28 3/16
110.00	24 7/16	35 15/16	136.00	19 7/8	28
111.00	24 3/16	35 5/8	137.00	19 11/16	27 13/16
112.00	24	35 5/16	138.00	19 9/16	27 5/8
113.00	23 3/4	35	139.00	19 7/16	27 7/16
114.00	23 9/16	34 11/16	140.00	19 5/16	27 3/16
115.00	23 3/8	34 3/8	141.00	19 1/8	27
116.00	23 1/8	34 1/8	142.00	19	26 5/8
117.00	22 15/16	33 13/16	143.00	18 7/8	26 13/16
118.00	22 3/4	33 1/2	144.00	18 5/8	27 9/16
119.00	22 5/8	33 1/4	145.00	18 1/2	27 3/8
120.00	22 1/2	31 3/4	146.00	18 3/8	27 1/4
121.00	22 5/16	31 1/2	147.00	18 1/4	27
122.00	22 1/8	31 1/4	148.00	18 1/8	26 7/8
123.00	21 15/16	31	149.00	18	26 5/8
124.00	21 3/4	30 3/4	150.00	17 7/8	26 1/2
125.00	21 9/16	30 1/2			

150-174 MHz

(All measurements are in inches.)

Freq.	A	B	Freq.	A	B
150.00	17 7/8	26 1/2	163.00	16 3/8	24 7/16
151.00	17 3/4	26 5/16	164.00	16 1/4	24 5/16
152.00	17 5/8	26 1/8	165.00	16 3/16	24 1/8
153.00	17 1/2	26	166.00	16 1/16	24
154.00	17 3/8	25 7/8	167.00	16	23 7/8
155.00	17 1/4	25 5/8	168.00	15 7/8	23 3/4
156.00	17 1/8	25 1/2	169.00	15 3/4	23 5/8
157.00	17	25 3/8	170.00	15 5/8	23 1/2
158.00	16 7/8	25 3/16	171.00	15 9/16	23 3/8
159.00	16 3/4	25	172.00	15 1/2	23 1/4
160.00	16 11/16	24 7/8	173.00	15 3/8	23 1/8
161.00	16 5/8	24 3/4	174.00	15 5/16	23
162.00	16 1/2	24 5/8			

406-420 and 450-512 MHz

(All measurements are in inches.)

Freq.	A	B	Freq.	A	B
406 to 420	7 1/4	9 3/8	490.00	5 3/4	8
450.00	6 3/8	8 5/8	500.00	5 5/8	7 7/8
460.00	6 1/8	8 1/2	510.00	5 1/2	7 3/4
470.00	6	8 3/8	512.00	5 1/2	7 5/8
480.00	5 7/8	8 1/4			

Important: When cutting the ground radials (Figure 2), cut the excess from the end that goes into the base plate. ***Do not cut the excess from the tapered end.***

SAFETY NOTICE

The installation, maintenance, or removal of an antenna requires qualified, experienced personnel. CommScope 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.

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

It is recommended that transmit power be turned off when the field installation is performed. Follow all applicable safety precautions as shown on this page.

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.