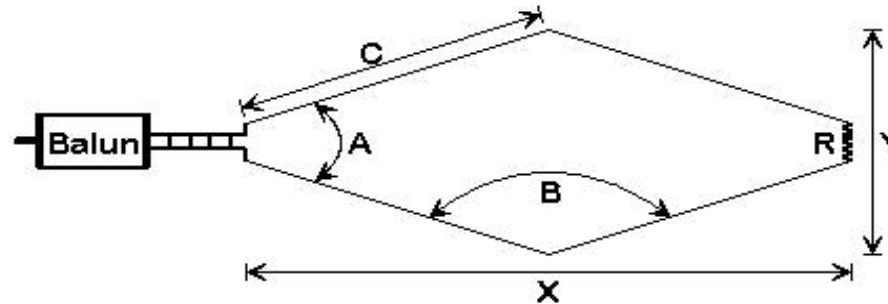


Rhombic Antenna

Rhombic gain 8-10dBd

Un-Terminated Rhombic
 <<<----->> directions
 Bidirectional



Terminated Rhombic
 ----->> direction
 Unidirectional

2 λ	"A" 70°	"B" 110°
3 λ	"A" 57°	"B" 123°
4 λ	"A" 47°	"B" 133°
"R" = 800Ω		

Electrical	1 λ	2 λ	2 λ	2 λ	3 λ	3 λ	3 λ	4 λ	4 λ	4 λ	
Freq. MHz.		"C"	"Y"	"X"	"C"	"Y"	"X"	"C"	"Y"	"X"	
1.900	477.9	955.7	1096.2	1565.8	1433.6	1367.9	2519.8	1911.4	2606.8	2796.2	feet & 10ths
3.800	238.9	477.9	548.1	782.9	716.8	684.0	1259.9	955.7	1303.4	1398.1	feet & 10ths
7.200	126.1	252.2	289.3	413.2	378.3	361.0	664.9	504.4	687.9	737.9	feet & 10ths
10.100	89.9	179.8	206.2	294.6	269.7	257.3	474.0	359.6	490.4	526.0	feet & 10ths
14.250	63.7	127.4	146.2	208.8	191.1	182.4	336.0	254.9	347.6	372.8	feet & 10ths
18.135	50.1	100.1	114.8	164.1	150.2	143.3	264.0	200.3	273.1	293.0	feet & 10ths
21.300	42.6	85.3	97.8	139.7	127.9	122.0	224.8	170.5	232.5	249.4	feet & 10ths
24.910	36.4	72.9	83.6	119.4	109.3	104.3	192.2	145.8	198.8	213.3	feet & 10ths
28.500	31.9	63.7	73.1	104.4	95.6	91.2	168.0	127.4	173.8	186.4	feet & 10ths
29.600	30.7	61.3	70.4	100.5	92.0	87.8	161.7	122.7	167.3	179.5	feet & 10ths
52.100	209.1	418.2	479.7	685.2	627.4	598.6	1102.7	836.5	1140.8	1223.7	inches & 10ths
52.100	17.4	34.9	40.0	57.1	52.3	49.9	91.9	69.7	95.1	102.0	feet & 10ths
146.500	74.4	148.7	170.6	243.7	223.1	212.9	392.2	297.5	405.7	435.2	inches & 10ths
146.500	6.2	12.4	14.2	20.3	18.6	17.7	32.7	24.8	33.8	36.3	feet & 10ths
223.000	48.9	97.7	112.1	160.1	146.6	139.9	257.6	195.4	266.5	285.9	inches & 10ths
223.000	4.1	8.1	9.3	13.3	12.2	11.7	21.5	16.3	22.2	23.8	feet & 10ths
435.000	25.0	50.1	57.5	82.1	75.1	71.7	132.1	100.2	136.6	146.6	inches & 10ths
435.000	2.1	4.2	4.8	6.8	6.3	6.0	11.0	8.3	11.4	12.2	feet & 10ths
445.000	24.5	49.0	56.2	80.2	73.4	70.1	129.1	97.9	133.6	143.3	inches & 10ths
906.000	12.0	24.1	27.6	39.4	36.1	34.4	63.4	48.1	65.6	70.4	inches & 10ths
1268.000	8.6	17.2	19.7	28.2	25.8	24.6	45.3	34.4	46.9	50.3	inches & 10ths
2401.000	4.5	9.1	10.4	14.9	13.6	13.0	23.9	18.2	24.8	26.6	inches & 10ths
5668.000	1.9	3.8	4.4	6.3	5.8	5.5	10.1	7.7	10.5	11.2	inches & 10ths

NOTE: The gray shaded box can be changed by the user to any frequency with no impact to the data algorithm.

Rhombic termination resistor

Termination resistor needs to be near **800Ω**
 Resistors **must** be carbon resistance - not inductive.
 Increased parallel resistor stages will increase overall input Wattage.
All resistors are carbon 5W, creating 10W max dissipation per leg.

Input W	R1a/b Ω	R2a/b Ω	R3a/b Ω	R#a/b Ω		9dB ERP
10W	400	none	none	none		80W
30W	1200	1200	1200	none		240W
50W	2000	2000	2000	2000	R# = 5	400W
100W	4000	4000	4000	4000	R# = 10	800W
300W	12000	12000	12000	12000	R# = 30	2400W

