



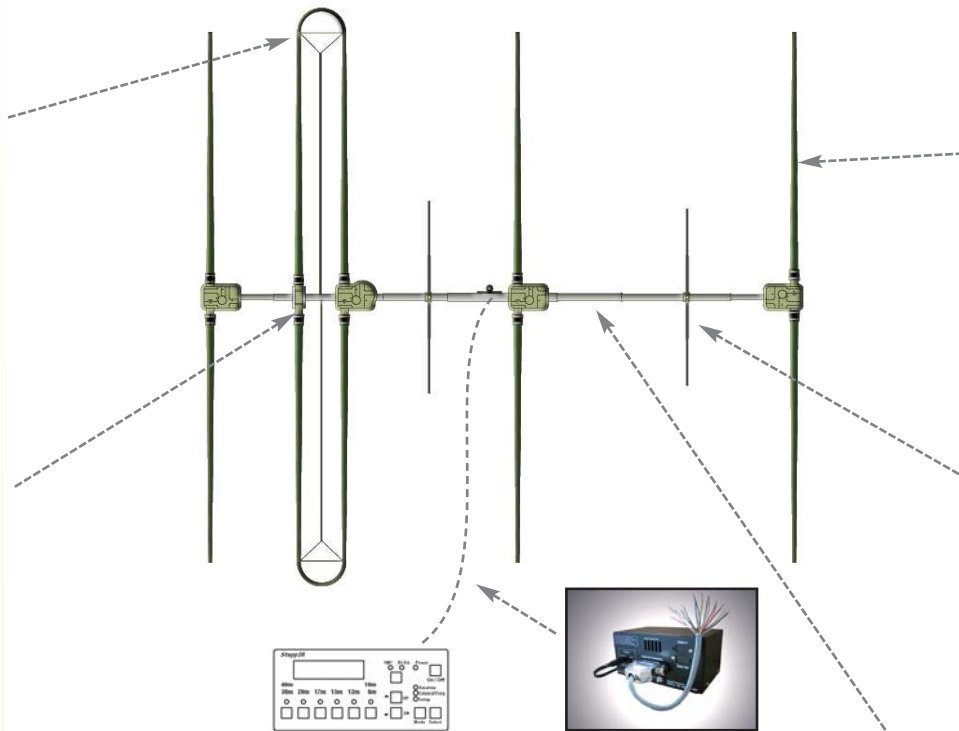
30m/40m sweep design with optional truss system



39 ft driven element, Dipole on 30m/40m. (Functions as a dipole on 30m through 40m with this option)



Microprocessor based antenna controller



4 element Yagi with 40/30 dipole



18ft telescoping Poles



Optional 6m passive elements



6061 T6 extruded aluminum tubing



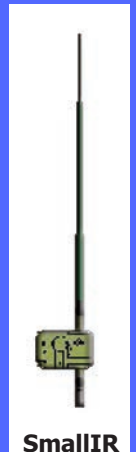
Antenna control cable

SteppIR Antenna Specifications

BigIR Vertical	Antenna Specifications	SmallIR Vertical
15 lb / 6.8 kg	Weight	12 lb / 5.4 kg
1.9 sq ft / 0.17 sq m	Wind load	1.0 sq ft / 0.9 sq m
33 ft / 10.05 m	Longest element	18 ft / 5.49 m
YES (1500w max)	80m Coil available?	YES (500w max)
NA	40m Coil available?	YES (1500w max)
3000 Watts	Power rating	3000 Watts
100 mph w/2 guys	Wind rating	100 MPH
6.8 - 54 MHz	Frequency coverage	13.8 - 54 MHz
4 / 8 wire 22AWG	Cable requirements	4 / 8 wire 22 AWG
1.33 ft sec / 0.4 m sec	Tuning rate	1.33 ft sec / 0.4m sec
50 MPH	Un-guyed wind rating	100 MPH



BigIR

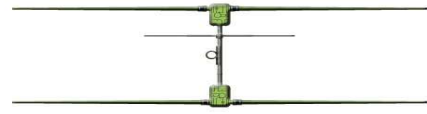


SmallIR

2 Element 40m-6m Yagi with optional 30m/40m



2 Element 20m-6m Yagi

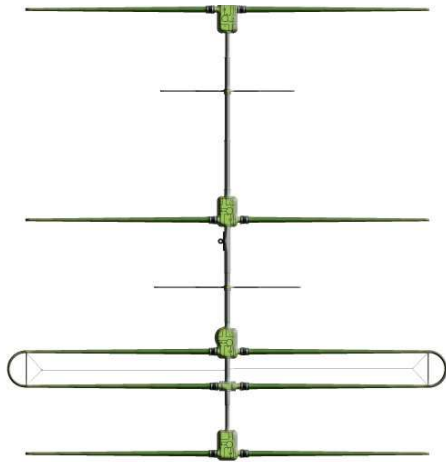


Antenna Specs	2 Element with 30M/40M adder kit	2 Element without 30M/40M adder kit
Weight	37 lb / 16.8 kg	30 lb / 13.6 kg
Wind load	6.0 sq ft / 0.56 sq m	4.0 sq ft / 0.37 sq m
Longest element	39 ft / 11.9 m	36 ft / 10.97 m
Turning radius	20 ft / 6.09 m	18.2 ft / 5.53 m
Boom length	57 in / 1.44 m	57 in / 1.44 m
Mast clamps (incl.)	2.0 in / 5.08 cm	2.0 in / 5.08 cm
Power rating	3 KW	3 KW
Wind rating	100 mph EIA-222-C	100 mph EIA-222-C
Frequency coverage	6.8 MHz – 54 MHz	13.8 MHz – 54 MHz
Cable requirements	12 conductor 22 ga shielded	12 conductor 22 ga shielded
Tuning rate	1.33 ft/sec - .4 m/sec	1.33 ft/sec - .4 m/sec

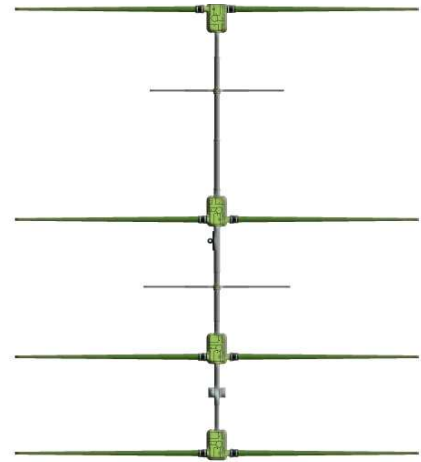
Performance		
Band	dBi Gain	F/R dB
40m	1.8	N/A
30m	2.1	N/A
20m	6.6	21
17m	6.6	16
15m	6.5	13
12m	6.4	11
10m	6.2	9
6m	5.0 (8.3)*	2(20)*

- *With optional passive element kit
- Sketches shown with 6M passives and 30m/40m truss option
- Gain and F/R measured in free space

4 Element 40m-6m Yagi with optional 30m/40m



4 Element 20m-6m Yagi

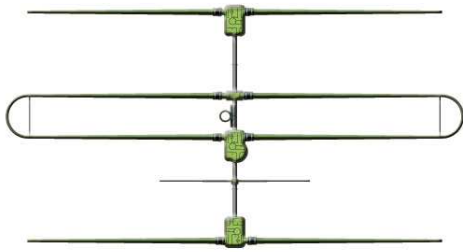


Antenna Specs	4 Element with 30M/40M adder kit	4 Element without 30M/40M adder kit
Weight	106 lb / 48.2 kg	99 lb / 45 kg
Wind load	11.7 sq ft / 1.09sq m	9.7 sq ft / 0.9 sq m
Longest element	39 ft / 11.9 m	36 ft / 10.97 m
Turning radius	24.1 ft / 7.35 m	24.1 ft / 7.35 m
Boom length	32 ft / 9.75 m	32 ft / 9.75 m
Mast clamps (incl.)	2.0 in / 5.08 cm	2.0 in / 5.08 cm
Power rating	3 KW	3 KW
Wind rating	100 mph EIA-222-C	100 mph EIA-222-C
Frequency coverage	6.8 MHz – 54 MHz	13.8 MHz – 54 MHz
Cable requirements	16 conductor 22 ga shielded	16 conductor 22 ga shielded
Tuning rate	1.33 ft/sec - .4 m/sec	1.33 ft/sec - .4 m/sec

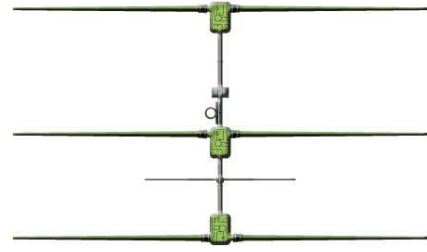
Performance		
Band	dBi Gain	F/R dB
40m	1.8	N/A
30m	2.1	N/A
20m	9.5	21
17m	10.0	20
15m	10.2	27
12m	10.4	21
10m	10.6	11
6m	7.8 (13)*	4(30)*

- *With optional passive element kit
- Sketches shown with 6M passives and 30m/40m truss option
- Gain and F/R measured in free space

3 Element 40m-6m Yagi with optional 30m/40m



3 Element 20m-6m Yagi

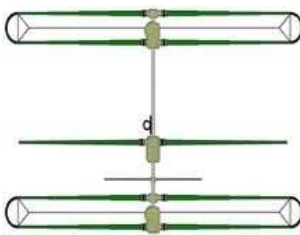


Performance		
Band	dBi Gain	F/R dB
40m	1.8	N/A
30m	2.1	N/A
20m	7.4	25
17m	8.3	25
15m	8.5	20
12m	8.8	15
10m	9.0	11
6m	6.2(10.1)*	4(30)*

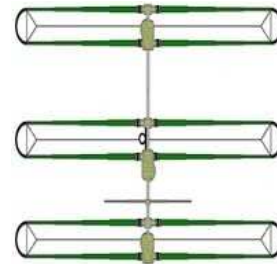
- *With optional passive element kit
- Sketches shown with 6M passives and 30m/40m truss option
- Gain and F/R measured in free space

Antenna Specs	3 Element with 30M/40M adder kit	3 Element without 30M/40M adder kit
Weight	58 lb / 26.3 kg	51 lb / 23.1 kg
Wind load	8.1 sq ft / 0.76 sq m	6.1 sq ft / 0.57 sq m
Longest element	39 ft / 11.9 m	36 ft / 10.97 m
Turning radius	19.7 ft / 6 m	19.7 ft / 6 m
Boom length	16 ft / 4.87 m	16 ft / 4.87 m
Mast clamps (incl.)	2.0 in / 5.08 cm	2.0 in / 5.08 cm
Power rating	3 KW	3 KW
Wind rating	100 mph EIA-222-C	100 mph EIA-222-C
Frequency coverage	6.8 MHz – 54 MHz	13.8 MHz – 54 MHz
Cable requirements	12 conductor 22 ga shielded	12 conductor 22 ga shielded
Tuning rate	1.33 ft/sec - .4 m/sec	1.33 ft/sec - .4 m/sec

DB18 40m-6m 3 Element Yagi



DB18E 40m-6m 3 Element Yagi



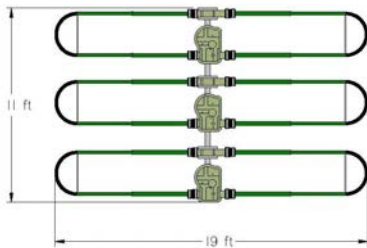
Performance		
Band	dBi Gain	F/R dB
40m	6.2	20
30m	7.0 (5.4)	20 (NA)
20m	7.4	25
17m	8.3	25
15m	8.5	20
12m	8.8	15
10m	9.0	11
6m	6.2(10.1)*	4(30)*

- *With optional passive element kit
- DB18 gain on 30m is shown in parenthesis ()
- Gain and F/R measured in free space

Antenna Specs	DB18 3 Element Yagi	DB18E 3 Element Yagi
Weight	96 lb / 43.5 kg	110 lb / 50 kg
Wind load	10.1 sq ft / 0.93 sq m	12.1 sq ft / 1.12 sq m
Longest element	39 ft / 11.9 m	39 ft / 11.9 m
Turning radius	21.58 ft / 6.57 m	21.58 ft / 6.57 m
Boom length	19 ft / 5.79 m	19 ft / 5.79 m
Mast clamps (incl.)	1.75 - 3 in / 4.4 -7.6 cm	1.75 - 3 in /4.4-7.6 cm
Power rating	3 KW	3 KW
Wind rating	100 mph EIA-222-C	100 mph EIA-222-C
Frequency coverage	6.8 MHz – 54 MHz	6.8 MHz – 54 MHz
Cable requirements	16 conductor 22 ga shielded	16 conductor 22 ga shielded
Tuning rate	1.33 ft/sec - .4 m/sec	1.33 ft/sec - .4 m/sec

DB11 20m-6m 3 Element Yagi

Dipoles: 40m-6m Loop & 20m-6m Straight



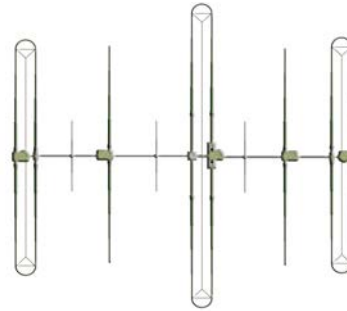
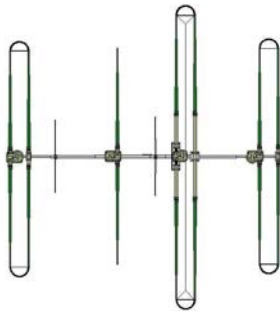
DB11 Performance		
Band	dBi Gain	F/R dB
40m*	*	*
30m*	*	*
20m	6.41	19.53
17m	7.02	16.19
15m	7.08	21.35
12m	7.25	23.17
10m	7.46	24.55
6m	8.76	15.09

- *40/30m will be available as an option (design not finished as of 05/2011)
- Gain and F/R measured in free space
- Great performance in a small package

Antenna Specs	DB11 3 Element Yagi	Dipoles 40m-6m / 20m-6m
Weight	63 lb / 28.57 kg	25 lb / 15 lb
Wind load	5.9 sq ft / 0.54 sq m	3.8 sq ft / 1.9 sq ft
Longest element	19 ft / 5.79 m	39 ft / 36 ft
Turning radius	10.5 ft / 3.2 m	19.5 ft / 18 ft
Boom length	11 ft / 3.35 m	30 in / NA
Mast clamps (incl.)	1.75 in / 4.45 cm	2.0 in / 2.0 in
Power rating	3 KW	3 KW
Wind rating	100 mph EIA-222-C	100 mph EIA-222-C
Frequency coverage	13.8 MHz – 54 MHz	40m-6m / 20m-6m
Cable requirements	16 conductor 22 ga shielded	4 conductor 22 ga shielded
Tuning rate	1.33 ft/sec - .4 m/sec	1.33 ft/sec - .4 m/sec

DB36 40m-6m 4 Element Yagi

DB42 40m-6m 5 Element Yagi



DB36/DB42		
Band	dBi Gain	F/R dB
40m	7.2/8.0	21/25.5
30m	8.2/9.0	18/12.4
20m	9.27/10.12	21.5/22
17m	9.88/10.8	26.5/23.2
15m	10.21/11.0	27.1/25.7
12m	10.43/11.9	21.1/24.1
10m	10.65/12.2	11/20
6m*	12.75/14.0	27.4/25

- *Gain & F/R for 6m is shown with passive elements option. Without option: gain / F/R: DB36 4.0/1.78; DB42 5.0/14
- **Optional 80m dipole available for both DB36 and DB42 Yagi

Antenna Specs	DB36 4 Element Yagi	DB42 5 Element Yagi
Weight	160 lb / 72.8 kg	238 lb / 108 kg
Wind load	17.5 sq ft / 1.63 sq m	19.9 sq ft / 1.85 sq m
Longest element	49 ft / 14.9 m	49 ft / 14.9 m
Turning radius	26 ft / 8.0 m	29 ft / 8.8 m
Boom length	36 ft / 10.97 m	43 ft / 13.0 m
Mast clamps (incl.)	1.75-3.0 in/4.45-7.62 cm	1.75-3.0 in/4.45-7.62 cm
Power rating	3 KW	3 KW
Wind rating	100 mph EIA-222-C	100 mph EIA-222-C
Frequency coverage	**6.8 MHz – 54 MHz	**6.8 MHz – 54 MHz
Cable requirements	16 conductor 22 ga shielded	24 conductor 22 ga shielded
Tuning rate	1.33 ft/sec - .4 m/sec	1.33 ft/sec - .4 m/sec