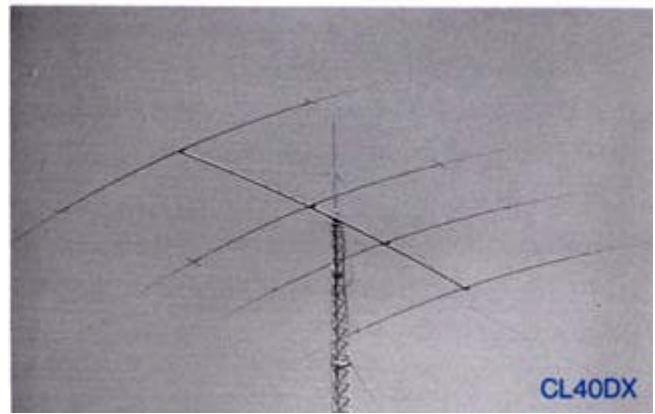
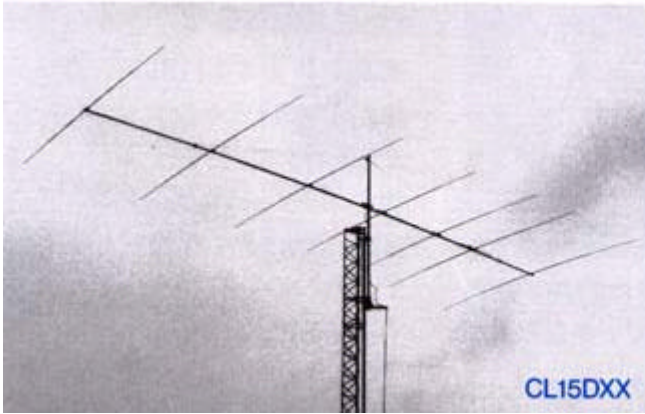


HF Long John Beams

Maximum Gain Theoretically Physically Obtain and Sharp Beam Pattern
Meet For Those Seeking for Maximum Performance, Rugged Structure



These are high gain antennas designed to offer the highest obtainable gain manufactured under high tolerance specifications to meet the customers seeking the best without any sacrifice. All of the models have an optimum length and a spacing of elements so as to derive maximum attainable capabilities theoretically. The CD Yagi beams are designed to simulate those for professional applications and are made of aluminum components with highest quality to strict specifications and clamps made of magnesium alloy through high precision machining. Each of the models is provided with a high-power balun indispensable to a Yagi beam system as well as a unique hairpin stub in order to ensure optimum transmission of high frequency energy at low standing wave ratio (VSWR). Thus, the CD Yagi beams are rugged and exceptional antennas manufactured on the basis of excellent technology in design and fabrication.

Model	CL40B-4	CL40DX	CL40E	CL40C	CL20	CL20DX	CL20DXX
Frequency (MHz)	7	7	7	7	14	14	14
No. of Element	3	4	3	4	4	5	6
Forward Gain (dBi)	9.0	11.0	10.0	11.0	12.0	13.0	14.0
F / B Ratio (dB)	22/18	20	22	20	22	22	20
Power Capability (PEP/kW)	4	4	4	4	3	3	3
Boom Length (m)	10.3	15.0	12.0	15.6	9.3	13.3	16.0
Element Length (m)	16.0	16.0	22.3	22.4	11.1	11.3	11.2
Element Diameter (mm)	40	40	50	50	30	30	30
Rotational Radius (m)	9.6	10.9	12.5	13.3	6.9	8.8	9.6
Mast Diameter (mm)	48 ~ 61	60 ~ 77	60 ~ 77	60 ~ 77	48 ~ 61	48 ~ 61	48 ~ 61
Wind Surface Area (m ²)	1.7	2.0	2.5	2.7	1.0	1.3	1.8
Weight (kg)	49.0	70.0	80.0	120.0	23.0	36.0	50.0
Recommended Rotator	RC5A-x	RC5B-3	RC5B-3	RC10S	RC5A-x	RC5A-x	RC5A-x

Model	CL17	CL15	CL15DX	CL15DXX	CL159
Frequency (MHz)	18	21 (24)	21 (24)	21 (24)	21 (24)
No. of Element	4	5	6	7	9
Forward Gain (dBi)	12.0	13.5	14.0	14.5	14.4 ~ 16.4
F / B Ratio (dB)	22	24	23	20	20
Power Capability (PEP/kW)	3	3	3	3	3
Boom Length (m)	7.3	9.8	12.4	14.5	19.0
Element Length (m)	8.7	7.3 (6.1)	7.3 (6.3)	7.4 (6.3)	7.4
Element Diameter (mm)	30	20	20	20	20
Rotational Radius (m)	5.4	6.5 (6.2)	7.4 (7.2)	8.3 (8.2)	10.2
Mast Diameter (mm)	48 ~ 61	48 ~ 61	48 ~ 61	48 ~ 61	48 ~ 61
Wind Surface Area (m ²)	1.0	0.7	1.0	1.2	1.6
Weight (kg)	19.0	17.0	25.0	30.0	58.0
Recommended Rotator	RC5A-x	RC5-x	RC5A-x	RC5A-x	RC5B-x

Model	CL10	CL10DX	CL10DXX	CL109
Frequency (MHz)	28	28	28	28
No. of Element	5	6	7	9
Forward Gain (dBi)	13.5	14.0	15.0	10.0 ~ 14.0
F / B Ratio (dB)	24	22	20	20
Power Capability (PEP/kW)	3	3	3	3
Boom Length (m)	7.2	9.1	13.1	16.8
Element Length (m)	5.5	5.4	5.5	5.4
Element Diameter (mm)	20	20	20	20
Rotational Radius (m)	4.4	5.5	7.5	10.0
Mast Diameter (mm)	48 ~ 61	48 ~ 61	48 ~ 61	48 ~ 61
Wind Surface Area (m ²)	0.6	0.7	1.0	*call
Weight (kg)	10.0	15.0	25.0	41.0
Recommended Rotator	RC5-x	RC5A-x	RC5A-x	RC5A-x

All the models include balun standard, and connector attached is type -M-.

Wind survival rating of all the modes is above 35m/s.

28MHz band of antennas are applicable to 29MHz operation (by adjusting element length).

HF CY Beams

Light Weight and Popular Size
Medium Element Spacing, 2kW Balun and Stub Feeder System



This series provides monoband Yagi beam antennas of popular type especially designed for compactness and light weight. The models in this series are modifications of the CD's long boom antennas through extensive use of our long accumulated technologies.

Any antennas of this series (except low band), rotatable by small rotor, can be mounted on a roof-top or a simple tower. The feeder composition is the same as that for the CD monoband series except for the power rating. High-class aluminum die cast components and high-quality aluminum alloys are used throughout.

Model	CY782	CY783	CY-303	CY-203	CY-173	CY-153	CY-154	CY-103	CY-104
Frequency (MHz)	3.5/3.8	3.5/3.8	10	14	18	21(24)	21 (24)	28	28
No. of Element	2	3	3	3	3	3	4	3	4
Forward Gain (dBi)	6.5 ~ 8.5	3.5/7 ~ 9 3.8/8 ~ 10	10.0	10.0	10.0	10.0	11.0	10.0	11.5
F / B Ratio (dB)	20	3.5/16 3.8/20	20	20	20	25	20	20	20
Power Capability (PEP/kW)	4	4	3	2	2	2	2	2	2
Boom Length (m)	9.2	16.4	7.9	6.1	4.9	4.0	5.6	4.0	5.6
Element Length (m)	26.0	29.2	16.0	11.2	8.8	7.4 (6.3)	7.4 (6.2)	5.6	5.6
Element Diameter (mm)	59	60	35	30	30	20	20	20	20
Rotational Radius (m)	13.8	17.0	9.0	6.4	5.0	4.2 (3.7)	4.6 (4.2)	3.4	3.9
Mast Diameter (mm)	60 ~ 77	60 ~ 77	48 ~ 61	48 ~ 61	48 ~ 61	48 ~ 61	48 ~ 61	48 ~ 61	48 ~ 61
Wind Surface Area (m ²)	2	3.5	1.4	0.7	0.7	0.38	0.5	0.3	0.4
Weight (kg)	80.0	160.0	31.0	14.9	14.0	7.0	9.5	6.0	8.5
Recommended Rotator	RC10S	RC10S	RC5A-x	RC5-x	RC5-x	RC5-x	RC5-x	RC5-x	RC5-x

All the models include balun standard, and connector attached is type -M-.

Wind survival rating of all the modes is above 35m/s.

28MHz band of antennas are applicable to 29MHz operation (by adjusting element length).