

hy-gain Ham Radio Catalog

Hy-Gain Rotators/Antennas: the first choice of hams worldwide!

HAM-IV

The most popular rotator in the world! **\$649⁹⁵**
 For medium communications arrays up to 15 square feet wind load area. *New* 5-second brake delay! *New* Test/Calibrate function. *New* low temperature grease permits normal operation down to -30 degrees F. *New* alloy ring gear gives extra strength up to 100,000 PSI for maximum reliability. *New* indicator potentiometer. *New* ferrite beads reduce RF susceptibility. *New* Cinch plug plus 8-pin plug at control box. Dual 98 ball bearing race for load bearing strength and electric locking steel wedge brake prevents wind induced antenna movement. North or South center of rotation scale on meter, low voltage control, max mast size of 2 1/16 inches.



HAM IV and HAM V Rotator Specifications	
Wind Load capacity (inside tower)	15 square feet
Wind Load (w/mast adapter)	7.5 square feet
Turning Power	800 in.-lbs.
Brake Power	5000 in.-lbs.
Brake Construction	Electric Wedge
Bearing Assembly	dual race/98 ball bearings
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	8
Shipping Weight	26 lbs.
Effective Moment (in tower)	2800 ft.-lbs.

HAM-V

For medium antenna arrays up to 15 sq. ft wind load area. Similar to the HAM-IV, but includes DCU-1 Pathfinder digital control unit with gas plasma display. Provides automatic operation of brake and rotor, compatible with many logging/contest programs, 6 presets for beam headings, 1 degree accuracy, auto 8-second brake delay, 360 degree choice for center location, more! **\$1099⁹⁵**
 with DCU-1



ROTATOR OPTIONS

MSHD, \$109.95. Heavy duty mast support for T2X, HAM-IV and HAM-V.
MSLD, \$49.95. Light duty mast support for CD-45II and AR-40.
TSP-1, \$39.95. Lower spacer plate for HAM-IV and HAM-V.

ROTATOR CABLE

878-1608, \$1.10 per foot. 8 conductors PVC cable, 6-18 AWG + 2 -16 AWG, 200V for Hy-Gain[®] rotators.

ROTATOR POTENTIOMETER

RPM-1, \$39.95. Rotator replacement pot for HAM II, III, IV, V, T2X. 500 Ohm. Same as p/n 5023100.

Rotator Auto Brake Delay

RBD-5, \$29.95, allows a automatic 5 second brake delay for your Hy-Gain rotator. This delay insures that the rotator is fully stopped before the brake is engaged. No more accidentally engaging brake while the rotator is in movement. Use with HAM II, III, IV, V, T2Xs. Easy-to-install. Includes pre-assembled PCB and hardware.



TAILTWISTER SERIES II

For large medium antenna arrays up to 20 sq. ft. wind load. Available with *DCU-1 Pathfinder* digital control (T2XD) or standard analog control box (T2X) with *new* 5-second brake delay and *new* Test/Calibrate function. Low temperature grease, alloy ring gear, indicator potentiometer, ferrite beads on potentiometer wires, *new* weather-proof AMP connectors plus 8-pin plug at control box, triple bearing race with 138 ball bearings for large load bearing strength, electric locking steel wedge brake, North or South center of rotation scale on meter, low voltage control, 2 1/16 inch max. mast. **\$799⁹⁵**
 T-2X
\$1229⁹⁵
 T-2XD
 with DCU-1



TAILTWISTER Rotator Specifications	
Wind load capacity (inside tower)	20 square feet
Wind Load (w/ mast adapter)	10 square feet
Turning Power	1000 in.-lbs.
Brake Power	9000 in.-lbs.
Brake Construction	Electric Wedge
Bearing Assembly	Triple race/138 ball brngs
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	8
Shipping Weight	31 lbs.
Effective Moment (in tower)	3400 ft.-lbs.

AR-40

For compact antenna arrays and large FM/TV up to 3.0 square feet wind load area. Dual 12 ball bearing race. Automatic position sensor never needs resetting. Fully automatic control -- just dial and touch for any desired location. Solid state, low voltage control, safe and silent operation. 2 1/16 inch max mast size. MSLD light duty lower mast support included. **\$349⁹⁵**
 AR-40



AR-40 Rotator Specifications	
Wind load capacity (inside tower)	3.0 square feet
Wind Load (w/ mast adapter)	1.5 square feet
Turning Power	350 in.-lbs.
Brake Power	450 in.-lbs.
Brake Construction	Disc Brake
Bearing Assembly	Dual race/12 ball bearings
Mounting Hardware	Clamp plate/steel bolts
Control Cable Conductors	5
Shipping Weight	14 lbs.
Effective Moment (in tower)	300 ft.-lbs.

Digital Automatic Controller



\$749⁹⁵
 DCU-1

Controls
 T2X, HAM IV
 and HAM V.
 Auto operation

of brake/ rotor, computer control with RS232 pass-through, compatible with many logging/contest programs, 6 presets for favorite beam headings, 1 degree heading accuracy, Auto 8-sec. brake delay, 360 degree choice for center of rotation!

CD-45II

For antenna arrays up to 8.5 sq. feet mounted inside tower or 5 sq. ft. with mast adapter. Low temperature grease good to -30 F degrees. *New* Test/Calibrate function. Bell rotator design gives total weather protection, dual 58 ball bearing race gives proven support. Die-cast ring gear, stamped steel gear drive, heavy duty, trouble free gear train, North center scale, lighted directional indicator, 8-pin plug/socket on control unit, snap-action control switches, low voltage control, safe operation, takes maximum mast size to 2 1/16 inches. MSLD light duty lower mast support included. **\$449⁹⁵**
 CD-45II



CD-45II Rotator Specifications	
Wind load capacity (inside tower)	8.5 square feet
Wind Load (w/ mast adapter)	5.0 square feet
Turning Power	600 in.-lbs.
Brake Power	800 in.-lbs.
Brake Construction	Disc Brake
Bearing Assembly	Dual race/48 ball brngs
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	8
Shipping Weight	22 lbs.
Effective Moment (in tower)	1200 ft.-lbs.

HDR-300A

For king-sized antenna arrays up to 25 sq.ft. wind load area. Control cable connector, new hardened stainless steel output shaft, new North or South centered calibration, new ferrite beads on potentiometer wires reduce RF susceptibility, new longer output shaft keyway adds reliability. Self-centering steel clamp/hardware. Display accurate to 1°. Machined steel output. **\$1499⁹⁵**
 HDR-300A



HDR-300A Rotator Specifications	
Wind load capacity (inside tower)	25 square feet
Wind Load (w/ mast adapter)	not applicable
Turning Power	5000 in.-lbs.
Brake Power	7500 in.-lbs.
Brake Construction	solenoid operated locking
Bearing Assembly	bronze sleeve w/rollers
Mounting Hardware	stainless steel bolts
Control Cable Conductors	7
Shipping Weight	61 lbs.
Effective Moment (in tower)	5000 ft.-lbs.

UHF/VHF/6M Rotator/Controller

Designed for the use of small UHF, VHF, 6-Meter, TV and FM antennas. Has automatic controller, rotator, mount clamps and hardware. Use 110 VAC. *Specify "X" for 220V.* **AR-500, like AR-35, but has programmable antenna controller with remote control. 12 memories, digital displays for location chosen and relative position.** **\$89⁹⁵**
 AR-35/X
 AR-500/X



AR-35 Controller AR-500/X Controller

Hy-Gain . . . Antennas, Towers and Rotators

hy-gain AlfaSpid heavy-duty Azimuth & Elevation Rotators

These new Hy-Gain Rotators feature . . . Super strong Double Worm Gear Drive, Self-Braking design, Extremely Quiet Motors, One Degree Position Resolution, Automatic Digital Controller . . .

The RAK Rotators are designed with a simple double worm gear drive that results in a super-strong and yet simple and ultra-reliable rotator system.

It can handle 550 pounds of vertical load. Turning is smooth, precise and extremely quiet. RAK Rotators come complete with an automatic digital controller.

The RAK-1C controller has one degree resolution and a large easy-to-read digital readout. A computer serial RS-232 interface is available. Works with many computer programs. See more information below.

RAK Rotators are designed for simple mounting. Pipe mast mount on both ends (which allows coax cable to pass through the center of the rotator) prevents cable tangling and damage. An optional adaptor is available for plate mounting. See accessories section below.

RAK-1 (RAK)
\$999⁹⁵
with controller
UPS Shippable



Plate adaptor and mouse are not included.

RAK Rotators operate from a voltage range of 12 Volts to 24 Volts AC or DC. The higher the voltage the higher your torque and the higher your turning speed will be -- a unique RAK feature.

Low-voltage, high torque DC gear motor has a rotating speed of 60 seconds (360 degrees) with 24 Volts on the motor.

It's quiet and powerful with self-braking action and double worm gear drive.

RAK and Big RAK heavy-duty Azimuth Rotators are constructed with 3/16 thick wall steel pipe and real steel housing.

RAK rotators use a sealed reed switch sensor technology for reliable all-weather operation. Gives you super tight tolerances with minimal play.

RAK-2 (BIG RAK)
\$1499⁹⁵
with controller
UPS Shippable



Plate adaptor and mouse are not included

Specs for RAK-1	RAK-1 @ 12 V	RAK-1 @ 18 V	RAK-1 @ 24 V
Wind Load Area	Approx. 30 sq. ft.	Approx. 30 sq. ft.	Approx. 30 sq. ft.
Turning Torque, in-lbs	1400 in-lbs.	1800 in-lbs.	3240 in-lbs.
Brake Torque, in-lbs.	14,000 in-lbs.	14,000 in-lbs.	14,000 in-lbs.
Brake Construction	Double Worm Gears	Double Worm Gears	Double Worm Gears
Vertical Load	550 lbs.	550 lbs.	550 lbs.
Rotation Speed (360 degrees)	120 seconds	90 seconds	60 seconds
Precision	1 degree	1 degree	1 degree
Rotation Range	720 degrees	720 degrees	720 degrees
Rotator Weight	16 lbs.	16 lbs.	16 lbs.
Position Sensor	Reed Switch	Reed Switch	Reed Switch
Mast size	2.0/2.6 in. Top/Bot.	2.0/2.6 in. Top/Bot.	2.0/2.6 in. Top/Bot.

Specs for RAK-2	RAK-2 @ 12 V	RAK-2 @ 18 V	RAK-2 @ 24 V
Wind Load Area	Approx. 38 sq. ft.	Approx. 38 sq. ft.	Approx. 38 sq. ft.
Turning Torque, in-lbs	>5000 in-lbs.	>8000 in-lbs.	Contact Hy-Gain ^(K)
Brake Torque, in-lbs.	24,000 in-lbs.	24,000 in-lbs.	24,000 in-lbs.
Brake Construction	Double Worm Gears	Double Worm Gears	Double Worm Gears
Vertical Load	>700 lbs.	>700 lbs.	>700 lbs.
Rotation Speed (360 degrees)	120 seconds	90 seconds	60 seconds
Precision	1 / 0.5 degree	1 / 0.5 degree	1 / 0.5 degree
Rotation Range	720 degrees	720 degrees	720 degrees
Rotator Weight	24 lbs.	24 lbs.	24 lbs.
Position Sensor	Reed Switch	Reed Switch	Reed Switch
Mast size	2.6/2.6 in. Top/Bot.	2.6/2.6 in. Top/Bot.	2.6/2.6 in. Top/Bot.

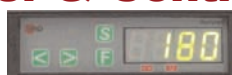
Digital Automatic Rotator Controller & Controller Mouse

RAK and Big RAK Rotator Systems are supplied with the RAK-1C Automatic Controller. This multi-function controller has manual, semi-automatic and automatic modes. Left and Right Arrow moves the rotator clockwise or counter-clockwise.

Semi-automatic mode allows pre-set of desired beam locations. Pre-set feature requires optional mouse to function. In automatic mode the controller is controlled by an external computer attached to the controller. Use optional AZ-1M, \$39.95 control mouse.

RAK-1C controller can be zeroed at any position to allow for installation inaccuracy or antenna mount slippage.

RAK-1C
\$479⁹⁵



The reed switch position sensor requires standard four conductor cable. Has four LCD indicators. Slim, compact size is just 5Wx1 1/2"Hx8 3/4"D inches.

Optional Mouse, AZ-1M, \$39.95, allows six user programmable present buttons. Mouse rotates rotator left, right and stop.



Ras Azimuth-Elevation Rotator



RAS-1 (RAS)
\$1599⁹⁵

RAS-2 (BIG RAS)
\$2299⁹⁵

With Controller and Mouse
UPS Shippable

Plate adaptor not included

Plate adaptor not included

Hy-gain offers two models of the Azimuth-Elevation Rotators, RAS-1 and RAS-2. Each is supplied with the RAS-2C Automatic Digital Controller and mouse. These rotators employ the same design as the RAK system above. See specifications for RAS-1 below.

Specs for RAS-1	RAS-1 @ 12 V	RAS-1 @ 18 V	RAS-1 @ 24 V
Wind Load Area	Approx. 30	Approx. 30	Approx. 30
Turning Torque in-lbs	1400 in-lbs.	1800 in-lbs.	3240 in-lbs.
Brake Torque, in-lbs.	14,000 in-lbs.	14,000 in-lbs.	14,000 in-lbs.
Brake Construction	Double Worm Gears	Double Worm Gears	Double Worm Gears
Vertical Load	550 lbs.	550 lbs.	550 lbs.
Rotation Speed (360 degrees)	120 seconds	90 seconds	60 seconds
Precision	1 degree	1 degree	1 degree
Rotation Range	360/180 degrees	360/180 degrees	360/180 degrees
Rotator Weight	29 lbs.	29 lbs.	29 lbs.
Position Sensor	Reed Switch	Reed Switch	Reed Switch
Mast size Bottom	2.6 inches Bottom	2.6 inches Bottom	2.6 inches Bottom
Mast Size Elevation	2.0 inches Elevation	2.0 inches Elevation	2.0 inches Elevation

RAS-2 has 5,000 in-lbs. torque@12V; 8000 in-lbs. torque@18V turning power and 24,000 in-lbs. of brake torque at all voltages. Its vertical load is greater than 700 lbs. RAS-2 weighs 44 lbs.

Real Standard Elevation Rotator

The REAL Standard Elevation Rotator has all of the mechanical features and specifications of the RAK rotator series, but is an elevation rotator. It's supplied with the RAK-1C digital rotator controller.

REAL-1
\$1069⁹⁵
with controller
UPS Shippable



RAK/RAS/REAL Rotator Accessories



PTP-18
\$79.95

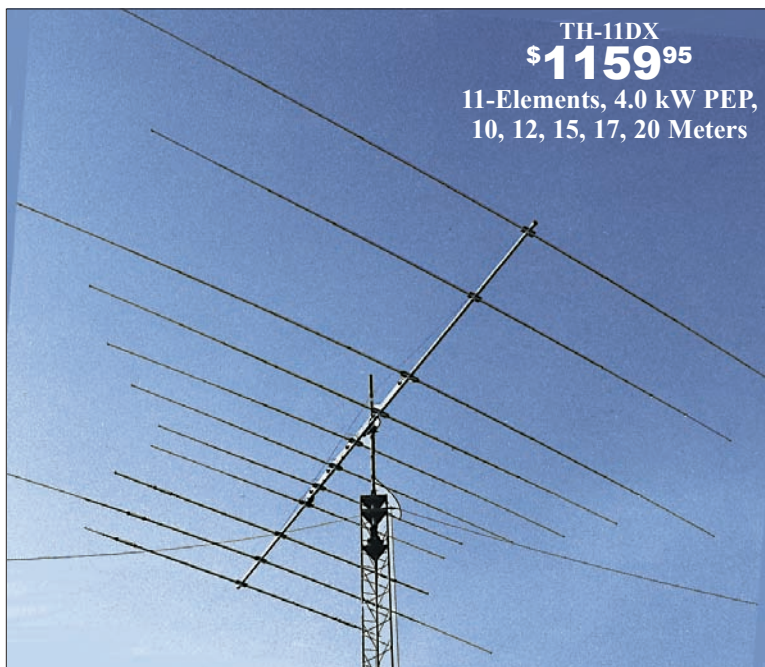
FPA-8
\$49.95

FPA-4
\$39.95

Model#	Cost	Description
AZ-1M	\$39.95	Rotator Controller Mouse
RAK-1R	\$599.95	RAK Rotator Only
RAK-2R	\$1199.95	BIG RAK Rotator only
RAK-1C	\$479.95	RAK Automatic Controller only
RAS-1R	\$1099.95	RAS Rotator only
RAS-2R	\$1199.95	BIG RAS Rotator only
RAS-2C	\$599.95	RAS Automatic Controller only
REAL-1R	\$599.95	REAL Rotator only
FPA-4	\$39.95	4" Pipe to Flat Plate Adaptor
FPA-8	\$49.95	8" Pipe to Flat Plate Adaptor
PTP-18	\$79.95	18" Pipe to Pipe Adaptor

hy-gain. HF BEAMS...

... are stronger, lighter, have less wind surface and last years



TH-11DX
\$1159⁹⁵

11-Elements, 4.0 kW PEP,
10, 12, 15, 17, 20 Meters

TH-11DX, \$1159.95. 11-element, 4.0 kW PEP, 10,12,15,17,20M

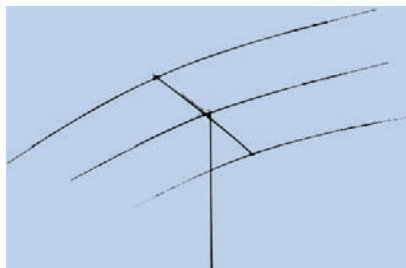
The choice of top DXers. With 11-elements, excellent gain and 5-bands, the super rugged TH-11DX is the "Big Daddy" of all HF beams! Handles 2000 Watts continuous, 4000 Watts PEP.

Every part is selected for durability and ruggedness for years of trouble-free service. Features a low loss log-periodic driven array on all bands with monoband reflectors, BN-4000 high power balun, corrosion resistant wire boom support, hot dipped gal-vanized and stainless steel parts.

Stainless steel hardware and clamps are used on all electrical connections.

Compact 3-element 10, 15, 20 Meter Tri-Bander

For limited space ... Installs anywhere ... 14.75 ft turning radius ... weighs 21 lbs ... Rotate with CD-45II, HAM-IV



Fits on light tower; suitable guyed TV pole, or roof tri-pod.

TH-3JRS, \$359.95.

Hy-Gain's most popular 3-element 10, 15, 20 Meter tri-bander fits on most lots!

Same top performance as the full power TH3MK4 in a compact 600 watt PEP design.

Excellent gain and F/B ratio let you compete with the "big guns".

Tooled manufacturing gives you Hy-Gain durability with 80 MPH wind survival.

TH-7DX, \$869.95.

7-element, 1.5 kW PEP, 10,15,20 Meters

7-Elements gives you the *highest average gain* of any Hy-Gain tri-bander! Dual driven for broadband operation without compromising gain. SWR less than 2:1 on *all* bands. Combined monoband and trapped parasitic elements give you an excellent F/B ratio. Hy-Gain's diecast aluminum, rugged boom-to-mast clamp, heavy gauge element-to-boom brackets, BN-86 balun. For high power, use BN-4000.

TH-5MK2, \$759.95.

5-element, 1.5 kW PEP, 10,15,20 Meters

The broadband *five element* TH5-MK2 gives you outstanding gain. Separate air dielectric Hy-Q traps let you adjust for maximum F/B ratio on each band. Has Hy-Gain's exclusive *BetaMATCH™*, stainless steel hardware and compression clamps and BN-86 balun.

TH-3MK4, \$469.95.

3-element, 1.5 kW PEP, 10,15,20 Meters

The super popular TH-3MK4 gives you the *most gain for your money* in a full-power, full-size durable Hy-Gain tri-bander! Impressive average gain and whopping average front-to-back ratio. Handles 1.5 kW PEP. 95 MPH wind survival. Fits on average lot -- turning radius is just 15.3 feet. 4-piece boom is ideal for DXpeditions. Choose CD-45II or HAM-IV rotator. Hy-Gain *BetaMatch™* for DC ground, full power Hy-Q™ traps, rugged boom-to-mast bracket and mounts on standard 2" O.D. mast. Stainless steel hardware. BN-86 balun recommended.

TH-2MK3, \$369.95.

2-element, 1.5 kW PEP, 10,15,20 Meters

The 2-element TH-2MK3 is Hy-Gain's *most economical* full power (1.5kW PEP) full size tri-bander. Increase your effective radiated power and hear far better! Ruggedly constructed, top-performing, compact 6 foot boom, tight 14.3 foot turning radius. Installs almost anywhere. Rotate with CD-45II or HAM-IV. Use BN-86 balun.

EXP-14, \$599.95.

4-element, 1.5 kW PEP, 10,15,20 Meters

Revolutionary 4-element compact tri-bander can add 40 or 30 Meters! 14 foot boom and tight 17.25 feet turning radius. Fits on roof tri-pod, mast or medium duty tower. Hy-Gain's patented broadbanding *ParaSleeve* gives you less than 2:1 VSWR. 1.5kW PEP. *BetaMATCH™* provides DC ground to eliminate static. Has BN-86 balun.

QK-710, \$179.95. 30/40 Meter option kit for EXP-14.

DB-1015, \$449.95.

7-element, 1.5 kW PEP, 10 & 15 Meters

This dual band beam for 10 and 15 Meters incorporates Hy-Gain's superior mechanical design and has been computer optimized and range-tested for max performance. **DB-1015** features a 14 foot boom in 4 sections. Handles full legal power and has Hy-Gain's rugged boom-to-mast clamp. **DB-1217, \$449.95.** Similar to DB-1015, but is dual band coverage for 12 and 17 Meters.

Model No.	No. of elements	avg gain dBi	avg F/B gain	MaxPwr watts PEP	Bands Covered	Wind sq.ft. area	Wind (mph) Survival	Boom (feet)	Longest Elem. (ft)	Turning radius(ft)	Weight (lbs.)	Mast dia O.D.(in.)	Recom. Rotator	Retail Price
TH-11DX	11	8.4	22	4000	10,12,15,17,20	12.5	100	24	37	22	88	1.9-2.5	T2X	\$1159.95
TH-7DX	7	8.77	21	1500	10, 15, 20	9.4	100	24	31	20	75	1.5-2.5	HAM-IV	\$869.95
TH-5MK2	5	8.3	20	1500	10, 15, 20	7.4	100	19	31.5	18.42	57	1.5-2.5	HAM-IV	\$759.95
TH-3MK4	3	8.0	25	1500	10, 15, 20	4.6	95	14	27.42	15.33	35	1.9-2.5	CD-45II	\$469.95
TH-3JRS	3	8.0	25	600	10, 15, 20	3.35	80	12	27.25	14.75	21	1.25-2.0	CD-45II	\$359.95
TH-2MK3	2	5.6	15-20	1500	10, 15, 20	3.25	80	6	27.3	14.25	20	1.9-2.5	CD-45II	\$359.95
EXP-14	4	8.1	25	1500	10,15,20 ^{30/40}	7.5	100	14	31.5	17.25	45	1.9-2.5	HAM IV	\$599.95
DB-1015	7	9.8	22	1500	10, 15	6.7	115	14	29.5	16.3	40	1.5-2.5	HAM IV	\$449.95
DB-1217	7	9.8	22	1500	12, 17	6.7	115	14	29.5	16.3	40	1.5-2.5	HAM IV	\$449.95

Hy-Gain Long Johns HF Monobanders

LJ-105CA, \$289.95. 10 Meters, 5 elements, Exclusive 50 Ohm *BetaMatch*™. Excellent DC Ground. Stainless steel hardware and clamps. BN-4000 Balun recommended.

LJ-155CA, \$429.95. 15/12 Meters, Five Elements, Exclusive 50 Ohm *BetaMatch*™. Excellent DC Ground. Stainless steel hardware and clamps. Includes 12 Meter setting. BN-4000 Balun recommended.

LJ-205CA, \$769.95. 20/17 Meters, Five Elements. Exclusive 50 Ohm *BetaMatch*™. Excellent DC Ground. Stainless steel hardware and clamps. Manual has setting for both bands.

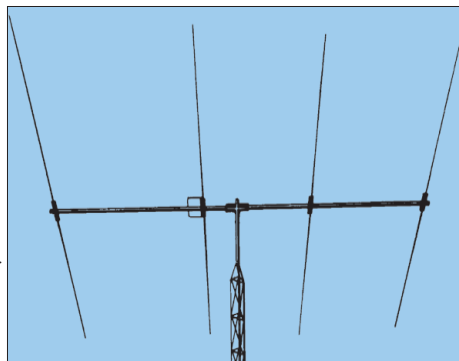
LJ-204BA, \$539.95. 20/17 Meters, Four Elements. Exclusive 50 Ohm *BetaMatch*™. The LJ-204BA has a tiltable cast aluminum boom-to-mast clamp, heavy gauge

machine-formed element-to-boom brackets and stainless steel hardware and clamps. BN-4000 Balun is recommended. Manual has setting for both bands.

LJ-103BA, \$159.95. 10 Meters, Three Elements. Feeds with 50 Ohm coax, comes factory pre-tuned with Hy-Gain's exclusive *BetaMatch*™. BN-86 balun recommended. Includes stainless steel hardware and clamps.

LJ-153BA, \$209.95. 15 Meters, 3 elements. Feeds with 50 Ohm coax, *BetaMatch*™, 5.7 dBd gain. BN-4000 Balun recommended. Stainless steel hardware and clamps.

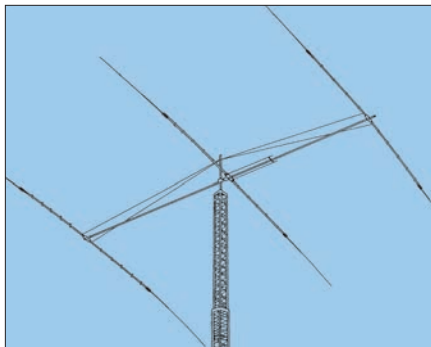
LJ-203BA, \$329.95. 20 Meters, Three elements on a 16 foot boom. The LJ-203BA feeds with 50 Ohm coax, factory pre-tuned with Hy-Gain's exclusive *BetaMatch*™.



BN-4000 Balun is recommended. Stainless steel hardware and clamps. Tiltable, cast aluminum boom-to-mast bracket.

Model #	Gain (dBi)	F/B Max	Max Power	Boom Size	element size	turn Radius	Mast diam.	Surface	Wind
LJ-105CA	10.8 dBi	36 dB	1500 W PEP	24 feet	18 feet	15 feet	1.9-2.5 in.	3.9 sq. feet	100 m.p.h.
LJ-155CA	9.8 dBi	25 dB	1500 W PEP	26 feet	25 feet	17 feet, 6 in.	1.9-2.5 in.	5.2 sq. feet	88 m.p.h.
LJ-205CA	8.7 dBi	30 dB	1500 W PEP	34 feet	36 feet	25 feet	1.9-2.5 in.	9.0 sq. feet	99 m.p.h.
LJ-204BA	8.2 dBi	28 dB	1500 W PEP	26 feet	36 feet, 6 in.	22 feet, 6 in.	1.9-2.5 in.	7.3 sq. feet	100 m.p.h.
LJ-103BA	7.9 dBi	24 dB	1500 W PEP	8 feet	18 feet, 7 in.	10 feet, 2 in.	1.625-2.0 in.	2 sq. feet	107 m.p.h.
LJ-153BA	7.9 dBi	25 dB	1500 W PEP	12 feet	24 feet, 11"	14 feet, 3 in.	1.9-2.5 in.	3 sq. feet	80 m.p.h.
LJ-203BA	7.3 dBi	23 dB	1500 W PEP	16 feet, 6 in.	37 feet	20 feet	1.9-2.5 in.	5.4 sq. feet	80 m.p.h.

Hy-Gain Discoverer Series Antennas



DISCOVERER 71, \$289.95.
Covers 40/30 Meters.

This rotatable dipole of low weight and wind surface area so easily fits most existing beam installations. Tuned to 30 or 40 Meters with a front-to-side ratio of 30 dB for a fast, expansion of band capability. Feeds with 50 Ohm coax. Pre-formed mast clamp.

DISCOVERER 72, \$649.95.
Covers 40 Meters.

This two-element 40 Meter beam has a unique hairpin loading system. It delivers superior performance. Feeds with 50 Ohm coax and comes factory pre-tuned with Hy-

Gain's exclusive *BetaMatch*™. Tiltable boom-to-mast bracket and stainless steel hardware is included. Hy-Gain high power BN-4000 balun is recommended.

DIR-73K, \$409.95.

Add-On 30/40 Meter Director Kit

Converts the Discoverer 72 into a three-element beam. Amazingly, it's all on a 35 foot boom, outperforming the other brands that are much larger. Discoverer 72 with director Kit fits on medium duty towers such as HG-52SS, saving both cost and space. HyGain offers wide bandwidth and Hy-Q efficiency without coils. Handle legal power limits.

Model #	Gain (dBi)	F/B Max	Max Power	Boom size	element size	turn Radius	Mast diam.	Surface	Wind
DIS-71	6.5 dBi	35 dB	1500 W PEP	2.7 feet	45 feet	22.5 feet	1.9-2.5 in.	2.7 sq. feet	100 m.p.h.
DIS-72	6.5 dBi	15 dB	1500 W PEP	22.6 feet	44.8 feet	25 feet	1.9-2.5 in.	6.0 sq. feet	80 m.p.h.
DIR-73K	7.5 dBi	26 dB	1500 W PEP	35 feet	45.7 feet	28.9 feet	1.9-2.5 in.	9.0 sq. feet	80 m.p.h.

Hy-Gain HF Log Periodic Antennas

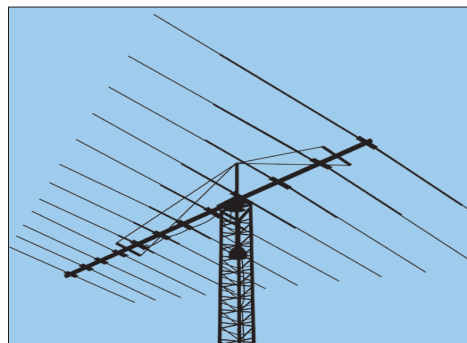
LP-1009A, \$1429.95. LP-1009A for UHF connector. LP-1009AN for "N" connector. *Covers 10/12/15/17/20 Meters*

Covers the complete 13-30 MHz HF spectrum under a 2:1 VSWR. Built to commercial specifications, it is used by MARS, monitoring stations, marine and government radio stations around the world and now it's available to Hy-Gain amateur customers. The discerning ham operator will appreciate its performance and ease of use. Just imagine all that spectrum coverage and only one feedline. Exclusive 2KW BN-4000 current type

balun included. Use T2X Tailtwister or HDR-300A rotators.

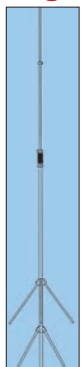
LP-1010A, \$1799.95. LP-1010A for UHF connector. LP-1010AN for "N" connector. *Covers 10-30 MHz (10, 12, 15, 17, 20, and 30 Meters)*

There are only a few antennas that offer as much HF frequency coverage as the LP-1010A. Like the LP-1009A, this antenna is built to commercial standards using stainless steel hardware and having a wind survivability of 93 mph. Rotatable with use of T2X or HDR-300A rotators.



Model #	Gain (dBi)	F/B Max	Max Power	Boom size	element	turn Radius	Mast diam.	Surface	Wind
LP-1009A/N	7.3 dBi	22 dB	1500 W PEP	27 feet	39 feet	22.5 feet	1.9-2.5 in.	12.5 sq. feet	103 m.p.h.
LP-1010A/N	7.0 dBi	22 dB	1500 W PEP	36 feet	48 feet	28.5	1.9-2.5 in.	16 sq. feet	93 m.p.h.

Hy-Gain VHF Vertical Antennas



V-2R 2 Meter vertical with 5.2 dBi gain derived from the famous extended double zepp antenna design. Radiating elements are two collinear $\frac{5}{8}$ waves fed in phase. 2 sets of $\frac{1}{4}$ wave radials properly decouple lower radiator from the mast. SO-239, handles 500 Watts. 9 ft.

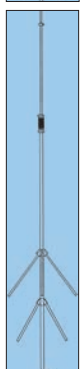
\$109⁹⁵



V-4R UHF vertical with 5.2 dBi gain derived from double zepp antenna design. Type N, handles 500 Watts, 4 foot. 1 1/4 Meter vertical w/5.2 dBi gain, double zepp design. SO-239, handles 500 Watts. 6ft., 9 in.

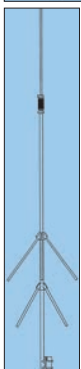
\$109⁹⁵

V-3R 216-225 MHz



V-42R V-42R is independently tunable at 143-153, and 436-455 MHz. Fed through one coax cable, it has sets of $\frac{1}{4}$ wave radials which properly decouple $\frac{5}{8}$ wave radiators from the mast. Gives 5 dBd gain UHF and 3 dBd gain on VHF. Type N, handles 200 Watts. 9 ft.

\$169⁹⁵



V-6R V-6R antenna is based on 2 collinear $\frac{5}{8}$ wave radiators. 500 Watt enclosed coil and 2 sets of $\frac{1}{4}$ wave radials provide complete mast decoupling and optimum pattern and gain. Rugged design for severe weather, also DC ground lightning protector. 25 ft., 3 in., UHF female connect, handles 500 Watts.

\$204⁹⁵

Model#	Frequenc	Gain dBi	Pwr Input	Wind	Max Mast	Height	Weight
V-2R	138-175	5.2 dBi	500 Watts	105 mph	2 in. OD	9 foot	6 pounds
V-42R	143-153, 436-455	7.2 UHF 5.2 VHF	200 Watts continuous	100 mph	2 in. OD	9 foot	6 pounds
V-4R	400-475	5.2 dBi	500 Watts	230 mph	2 in. OD	4 foot	4 pounds
V-3R	216-225	5.2 dBi	500 Watts	100 mph	2 in. OD	6 ft. 9 in.	5 pounds
V-6R	51-54	5.2 dBi	500 Watts	80 mph	1.5-2.25	25 ft. 3 in.	15 pounds

Hy-Gain VHF Ground Planes



GPG-2B GPG-2B is a $\frac{5}{8}$ Wavelength Ground Plane for two meters is omni-directional and tunable from 142-185 MHz. It delivers an omni-directional gain of 3.2 dBi. Handles 100 Watts. Measures 4 feet, max mast mount accepted is 1.625 in O.D. Wind area is .30 sq. ft.

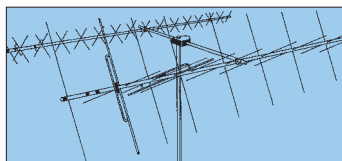
\$49⁹⁵

GPG-1B GPG-1B is a $\frac{1}{4}$ Wavelength ground plane similar to the GPG-2B. It has unity gain, covers 144-148 MHz.

\$39⁹⁵

GPG-1, \$39.95, is similar to GPG-1B, but covers 162-174 MHz.

Oscar Link 435 MHz • 145.9 MHz



VB-216SAT **\$229⁹⁵** Covers 144-148 MHz

UB-7030SAT **\$229⁹⁵** Covers 432-438 MHz

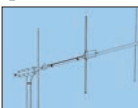
FB-217SAT **\$119⁹⁵** Crossboom Assembly only

Hy-Gain's *Oscar Link* antennas are complete with the necessary phasing lines, relays and hardware. Left and right circularity switching reduces fading. True RF switching elements are rated at 200 Watts and improved VSWR for higher efficiency. Feed points are encapsulated, weather protected for long life. The fiberglass crossboom maintains the integrity of the circularity pattern. **DB-218SAT**, \$559.95. The complete 2 Meter/ 440 MHz *Oscar Link* antenna system with crossboom assembly with necessary phasing lines, relays and hardware.

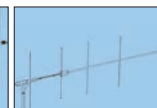
Model#	F/B ratio	Gain dBi	Pwr Input	# Element	Boom	Wind	Weight
VB-216SAT	25 dB	13.7 dBi	200 W PEP	16	168.75 in.	1.1 sq. ft.	7 lbs.
VB-7030SAT	25 dB	16.2 dBi	200 W PEP	30	134 inches	.7 sq. ft.	4 lbs.

VHF-FM Beam Antennas

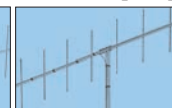
These 2 Meter FM beam antennas include Hy-Gain's exclusive *Beta Match*™ to provide exceptional Front-to-Back ratio and maximum obtainable gains. The VB-23FM (8.3 dBi gain), VB-25FM (11.2 dBi gain), VB-28FM (14 dBi gain), and the VB-214FM (15.2 dBi gain) gives you a wide choice of 2 Meter Beam performance from which to choose. Accepts up to 2 inch mast.



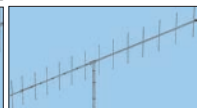
VB-23FM **\$49⁹⁵** 2 Meter FM Beam



VB-25FM **\$59⁹⁵** 2 Meter FM Beam



VB-28FM **\$79⁹⁵** 2 Meter FM Beam



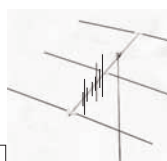
VB-214FM **\$89⁹⁵** 2 Meter FM Beam

Dual Band Yagi Antenna



DB-2345 **\$89⁹⁵** 2 Meter/440 MHz. Has 3-elements on two meters and 5-elements on 440 MHz. Requires only one feedline for true *dual band* performance. Point in direction of your QSO for more direction of output power. This reduces interference and increases signal strength.

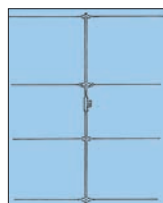
New! TriBand 2M/440MHz/6M



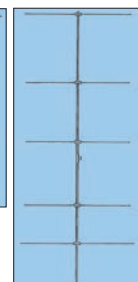
VHB-246 **\$259⁹⁵** VHB-246 Tri-beam has 3 elements on 6M/2M and 5 elements on 440 MHz. 2 Meter/440/6M 144/440 MHz are mounted at right Tri-Band Yagi angles to the 6M beam -- lets antenna be oriented for optimum 6M SSB/CW and 2M/440 MHz. Coax feed points for 6M and 2M/440 MHz.

Model#	F/B MAX	Gain dBi	Pwr Input	Long el	Boom	Mast dia.	Weight
VB-23FM	20 dB	8.3 dBi	500 Watts	40.25 in.	43.5 in.	2.0 in.	2 pounds
VB-25FM	20 dB	11.2 dBi	500 Watts	39.625 in.	75 in.	2.0 in.	3 pounds
VB-28FM	20 dB	14 dBi	500 Watts	40.25 in.	148.75 in.	2.0 in.	4 pounds
VB-214FM	20 dB	15.2 dBi	500 Watts	39.5 in.	15 ft. 6 in.	2.0 in.	6 pounds
DB-2345 - 2M	17 dB	8 dBi	500 Watts	40.5 in.	45 in.	1.5 in.	2 pounds
VHB-246 - 2M	17 dB	8 dBi	500 Watts	40.5 in.	45 in.	1.5 in.	2 pounds
DB-2345 - 440	10 dB	6 dBi	500 Watts	40.5 in.	45 in.	1.5 in.	2 pounds
VHB-246 - 440	10 dB	6 dBi	500 Watts	40.5 in.	45 in.	1.5 in.	2 pounds
VHB-246-6M	20 dB	8 dBi	500 Watts	119 in.	144 in.	2.0 in.	28 pounds

6-Meter DX Beam Antennas



VB-64DX **\$144⁹⁵** 50-54 MHz

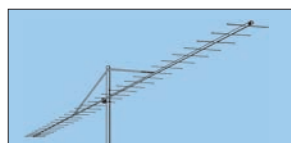


VB-66DX **\$264⁹⁵** Covers 50-54 MHz

The VB-64DX and VB-66DX feature a concept in beam construction that provides actual delivered performance equalling maximum theoretical gain. The 4-element VB-64DX generates an impressive 10.4 dBi gain and the 6-element VB-66DX increases the gain to an unprecedented 12.5 dBi.

Model#	Frequenc	Gain dBi	Pwr Input	wind area	#Element	Boom	Weight
UB-7031DX	420-438	19.8 dBi	2 kW PEP	1.9 sq. ft.	31	24.06 ft.	9.25 lbs.
VB-215DX	144-146	16.4 dBi	2 kW PEP	2.75 sq. ft.	15	27.88 ft.	13.56 lbs.
VB-64DX	50-54	10.4 dBi	500 Watts	1.1 sq. ft.	4	12 ft.	10 lbs.
VB-66DX	50-54	12.5 dBi	1.5kWPEP	1.8 sq. ft.	6	24.575 ft.	17 lbs.

VHF/UHF DX Beam Antennas

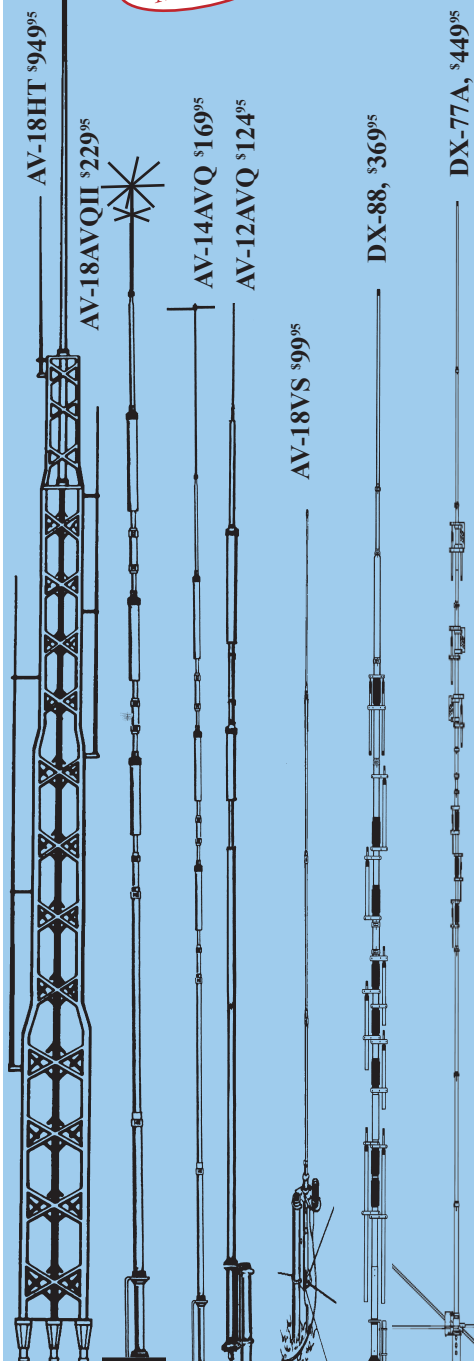


VB-215DX **\$229⁹⁵** Hy-Gain's DX-Series VHF/UHF Beams are based on the DL6WU element length and spacing and were further refined on Hy-Gain's antenna test range and by computer modeling. Both beams feature encapsulated weatherproof feedpoints with type N connectors for excellent VSWR and power handling. High quality mechanical construction is assured by heavy wall booms and boom supports made of 6063-T832 aluminum tubing, stainless steel hardware, UV stabilized thick-shoulder element insulators and PTFE coaxial baluns.

hy-gain HF VERTICALS

Self-supporting -- no guys required . . . remarkable DX performance -- low angle radiation, omnidirectional . . . 1500 Watts . . . Low SWR . . . 2 year limited warranty

Free Manuals!



All hy-gain multi-band vertical antennas are entirely self supporting -- no guys required. They offer remarkable DX performance with their extremely low angle of radiation and omnidirectional pattern.

All hy-gain vertical antennas handle 1500 Watts PEP SSB, have low SWR, automatic band-switching (except AV-18VS) and include a 12-inch heavy duty mast support bracket (except AV-18HT). Heavy duty, slotted, tapered swaged, aircraft quality aluminum tubing with full circumference compression clamps is used for radiators. Includes all stainless steel hardware. Recessed SO-239 prevents moisture damage.

Hy-gain verticals go up easily with just hand tools and their cost is surprisingly low. All hy-gain Verticals feature a two year limited warranty.

AV-18HT, \$949.95.

10/12/15/20/40/80 M

17 & 160 Meters optional

Standing 53 feet tall, the famous Hy-Gain HyTower is the world's best performing vertical! The AV-18HT features automatic band selection achieved through a unique stub-decoupling system which effectively isolates various sections of the antenna so that an electrical 1/4 wavelength (or odd multiple of a 1/4 wavelength) exists on all bands.

Approximately 250 kHz bandwidth at 2:1 VSWR on 80 Meters. With the addition of a base loading coil LC-160Q or MK-160A, it also provides exceptional 160 Meter performance. The 24 foot tower is all rugged, hot-dip galvanized steel and all hardware is iridited for corrosion resistance. Special tilt-over hinged base for easy raising and lowering. 53 feet, 114 lbs. MK-17, \$89.95. 17M add-on kit. LC-160Q, \$109.95. 160 M loading coil. MK-160A, \$119.95. 160M 1500W kit.

DX-88, \$369.95.

10/12/15/17/20/30/40/80M

160 Meters optional.

All bands are easily tuned with the DX-88's exclusive adjustable capacitors. 80 and 40 Meters can even be tuned from the ground without having to lower the antenna. Super heavy-duty construction. 25 feet, 18 pounds. DX-88 OPTIONS: KIT-160-88, \$199.95. 160 M add-on kit. GRK-88, \$99.95. Ground Radial System. RRR-88, \$99.95. Roof Radial System.

DX-77A, \$449.95.

10/12/15/17/20/30/40 M

No ground radials required! Off-center-fed Windom has 55% greater bandwidth than competitive verticals. Heavy-duty tiltable base. Each band independently tunable. 29 feet, 25 pounds.

AV-18AVQII, \$229.95.

10/15/20/40/80 Meters

New! The classic is back with improved design including three separate air dielectric Hy-Q™ traps for 10 through 80 Meters --1.5 kW PEP. A loading coil and an effective radiator is used for 80 Meters --1kW PEP.

AV-14AVQ, \$169.95.

10/15/20/40 Meters

The Hy-Gain AV-14AVQ uses the same trap design as the famous Hy-Gain Thunderbird beams. Three separate air dielectric Hy-Q traps with oversize coils give superb stability and 1/4 wave resonance on all bands. 18 feet, 9 pounds.

New! MK-80, \$79.95. 80 Meter add-on kit for AV-14AVQ. Easy to install. Includes pre-wound loading coil, hardware.

AV-18VS, \$99.95.

10/12/15/17/20/30/40/80 M

High quality construction and low cost make the AV-18VS an exceptional value. Easily tuned to any band by adjusting feed point at the base loading coil. Roof mount with Hy-Gain AV-14RMQ kit, \$89.95. 18 feet, 4 pounds.

AV-12AVQ, \$124.95.

10, 15, 20 Meters

The AV-12AVQ also uses Thunderbird beam design air dielectric traps for extremely Hy-Q performance. This is the way to go for inexpensive tri-band performance in limited space. 13 ft., 9 lbs. Roof mount with AV-14RMQ kit, \$89.95.

AV-14RMQ, \$89.95

Roof Mounting Kit

The AV-14RMQ roof mounting kit provides rugged support for Hy-gain models AV-18VS, AV-14AVQ and AV-12AVQ. Kit includes base plate, mast, radial/guy wires and mounting hardware.

Hy-Gain[®] Guy-Wire Gripper

Hy-gain's Guy-Wire Gripper turns the horrendous job of tightening guy wires into a easy one man operation. This wonder tool works together with a "come-a-long" cable puller to hold/stretch guy wire or cable. Spring loaded for easy operation. Use for guy wire or cable up to 1/4" diameter.



GWH-1
\$24⁹⁵

Model #	Price	Bands	Max Power	Height	Weight	Wind Surv.	Rec. Mast
AV-18HT	\$949.95	10,15,20,40,80	1500 W PEP	53 feet	114 pounds	75 MPH	-----
AV-14AVQ	\$169.95	10,15,20,40	1500 W PEP	18 feet	9 pounds	80 MPH	1.5-1.625"
AV-12AVQ	\$124.95	10/15/20 M	1500 W PEP	13 feet	9 pounds	80 MPH	1.5-1.625"
AV-18VS	\$99.95	10 - 80 M	1500 W PEP	18 feet	4 pounds	80 MPH	1.5-1.625"
DX-88	\$369.95	10 - 80 M	1500 W PEP	25 feet	18 pounds	75 mph no guy	1.5-1.625"
DX-77A	\$449.95	10 - 40 M	1500 W PEP	29 feet	25 pounds	60 mph no guy	1.5-1.625"
AV-18AVQII	\$229.95	10,15,20,40,80	1500WPEP	18 feet	12 pounds	70 mph guy	1.5-1.625"

Hy-Gain . . . Antennas, Rotators and Towers!

Hy-Gain^(R) Multi-Band PATRIOT Vertical Antennas

8-band vertical covers 40/30/20/17/15/12/10/6 Meters

• No radials • No traps • No ground • No tuning • Handles 1500 Watts

hy-gain's new PATRIOT HF verticals are the best built, best performing and best priced multiband verticals available today.

Make full use of your sunspot cycle with the PATRIOT's low angle signal.

AV-640, \$399.95, uses quarter wave stubs on 6, 10, 12 and 17 meters and efficient end loading coil and capacity hats on 15, 20, 30 and 40 meters.

Instead of typical traps, the AV-640 resonators are placed in parallel not in series.

End loading of the lower HF bands allows efficient operation with a manageable antenna height.

No ground or radials needed -- Effective counterpoise replaces radials, end fed with broadband matching unit.

Automatic bandswitching -- Single coax cable feed, each band is individually tunable, wide VSWR bandwidth.

Sleek and low-profile -- Low wind surface area, small area required for mounting, mounts easily on decks, roofs and patios.

Built-to-last -- Hy-gain's Patriot series antennas boast a high wind survival due to its sleek, but sturdy frame. The matching unit is made from all Teflon[®] insulated wire.

Hy-gain[®] warranty -- Two year limited warranty, all replacement parts in stock.

AV-620, \$299.95. Covers all bands 6 through 20 Meters with no traps, no coils, no radials yielding an uncompromised signal across all bands.

hy-gain[®] AV-640
8 Bands: 40, 30, 20, 17, 15, 12, 10, 6 M
\$399⁹⁵
Suggested Retail
Call your dealer for your best price!

Model #	Bands	Max Pwr	Height	Weight	wind surv
AV-620	6B, 6-20	1500W	22.5 feet	10.5 lbs.	80 MPH
AV-640	8B, 6-40	1500W	25.5 feet	17.5 lbs.	80 MPH

FAMOUS Heavy Duty HY-GAIN BALUNS



1500W BN-86, \$79.95. Broadband 50 Ohm ferrite balun. Useable from 3-30 MHz. Rated at 1500 W. Recommended for all HF Yagi antennas. It provides improved front-to-back ratio. Comes w/clamp to bolt to boom, SO-239 connector.



4000W BN-4000B, \$109.95. Broadband 50 Ohm Beam current balun is potted to seal out moisture. Rated at 4000 Watts for increased power handling capabilities. Range is 1 MHz to 54 MHz. SO-239 connector. **BN-4000D, \$109.95.** dipoles. **BN-4000N, \$119.95.** "N" connector.

Hy-gain Antenna Feedpoint Pig Tail Cable



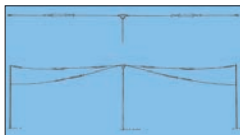
APT-2, \$12.95.

Hy-gain's Antenna Feedpoint Pig Tail cable has 2-foot length for connecting between antenna and your coaxial feedline.

Has SO-239 connector on one end and 2 (#10) ring terminals on the other end. Provides an easy and reliable connection for your feedline with PL-259 connector to your antenna feed point.

Use this for Hy-gain VB series beams and other antennas without an SO-239 connector feed point.

HF Multiband Hy-Q trap DOUBLET



DP-2BDQ, \$139.95. 40/80 Meters, 101 feet maximum length of dipole.

DP-5BDQ, \$259.95. 10-80 Meters, 94 ft. max length. DP-2BDQ and DP-5BDQ are designed for horizontal or inverted "V" rated at legal power. Each individually pretuned matched traps for each band. 50-Ohm feed, cable not incl.

ADJUSTABLE HF DIPOLE ANTENNA



DP-19PD, \$279.95. 1.8-30 MHz, 160-10 Meters. Great for field day, camping or anytime. Braided nylon wire rope with conductors woven in. Pre-marked frequencies for easy installation. Includes 100 foot support rope on each end and SO-239 (UHF) connector is on center insulator.



AV-620/640
Matching
Network

hy-gain[®] AV-620
6 bands: 20, 17, 15, 12, 10, 6 M
\$299⁹⁵
Suggested Retail

HY-GAIN INSULATORS FOR MULTIBAND DIPOLE ANTEN-



C-1, \$29.95. Center Insulator for multiband dipole antenna.



C-1C, \$29.95. Similar to C-1, but has SO-239 antenna connector.

E-1, \$6.95.

7-inch End Insulator for Multiband doublet antenna. Set of 2.



4 Foot Ground Rod

GR-1 Durable \$8⁹⁵ four foot cop-Ship per bonded Code B steel earth ground rod is a tough 3/8 in. diameter. Sharp point makes it easy to insert ground. Helps bleed off static, RFI and prevent RF hot spots. Use several to form a good RF ground for long wires.

Hy-Gain Glazed Ceramic Insulator

E-2 \$79⁹⁵ each Ship Code A
E-26 \$4⁵⁶ 6-Pack Ship Code A



Extra-strong -- will not break, arc over or melt even under full legal power. Molded ridges give extra-long path to prevent high-voltage breakdown.

Hy-Gain^(R) 160-6 Meters Self-Supporting Vertical Antenna Full 1500 Watts, 43 feet, includes base mount, great for stealth

• Includes legal limit balun and Base Mount Assembly

AV-6160
\$399⁹⁵
Ship Code E

New!

Operate all bands 160-6 Meters at full 1500 Watt with this self-supporting, 43 feet high performance vertical! It assembles in less than an hour and its low profile blends in with the sky and trees -- you can barely see it...

Exceptional Performance

The entire length

AV-6160 includes this base mount and legal limit balun!!!

radiates to provide exceptional low angle radiation 160-20 Meters and very good performance on 17-6 Meters.

You can shorten it by telescoping it down for more effective low angle radiation on higher bands.



Just talk with automatic tuner!

A wide-range automatic or manual antenna tuner at your rig easily matches this antenna for all bands 160-6 Meters.

There's no physical tuning adjustments on the antenna -- you simply put it up!

An optimized balun design allows direct coax feed with negligible coax loss (typically less than 1/2 dB 60-6 Meters and less than 1 dB 160-80 Meters with good quality, low-loss coax).

Extremely low wind loading

With just 2 square feet wind load, the AV-6160 has the lowest wind-loading and lowest visibility of any vertical antenna!

The key is a six foot section of tapering diameter stainless steel whip that flexes in strong wind instead of stressing the bottom sections.

Its 2-inch O.D. and .120 inch thick walled tubing bottom section makes it incredibly strong.

Just 20 lbs., uses super-strong 6063 aircraft aluminum tubing. Stainless steel hardware.

Assembles in an hour

Ground mounting lets you hide antenna base in shrubbery. Requires ground system -- at least one radial. More extensive ground work better.

Stealth Operation

Low profile. Hide behind trees, fences, buildings, bushes. Use it as a flagpole. It easily telescopes down during the day.

64', 11-Sect. Telescopic Aluminum Mast

Includes one size of each slitted tube listed above and ten hose clamps. ATM-65 is 64 feet fully extended and 6 feet collapsed without clamps. Guying is required if mast is extended beyond 30 feet. Top section is .625" OD. Bottom section is 2 inches OD x .120 wall.

ATM-65
\$199⁹⁵
Ship Code D

Base Mount for Fiberglass and Aluminum Masts

ATB-65, \$69.95. Complete base assembly kit with mounting plate, insulators, hardware, SO-239, etc. for fiberglass and aluminum masts. Fits up to 2.0" OD masts. This is a super-strong heavy duty telescoping MAST, not a flimsy pole! These super-strong masts are made of .125 inch thick wall fiberglass tubing.



80/160 Meter high-efficiency Matching Network

Hygain's AV-6110 can improve efficiency on 160 and 80 Meters for the popular new 43-foot all band vertical antennas by eliminating SWR-related coax and unun mismatch losses. When fed with a 1:4 unun, the 43' antenna has a reasonable compromise SWR on 60-10 Meters. However, at 160/80M it is virtually impossible to match this antenna from your shack because of the low radiation resistance. If you are using low loss coax, you will lose much power in the coax and unun due to bad antenna mismatches. Installed at the base of the 43' vertical, AV-6110 will significantly eliminate these losses and put 160 and 80 Meter bands back within the tuning range of the tuner inside the shack.

Includes remote power injector. Switch for 160, 80 Meters and off positions. Handles 1500 Watts. Measures 3Wx11Hx3D inches.

New!

AV-6110
\$249⁹⁵
Ship Code B



MFJ All-band Ground Radials

RRK-6160
\$44⁹⁵
UPS Shippable

This all-band ground radial system is

designed for the AV-6160 and other vertical antennas when a radial system is required. It is a convenient and effective radial system that provides the necessary return path for ground currents to reduce ground losses. It consists of 2 sets of 4 radial wire assemblies giving a total of eight 14' radial wires. Each set has a 1/4" ring lug for attaching to the antenna ground point. Each end of the radial wire has a solder lug for staking the wire end.



Hy-Gain 20/15/10/6 Meter Rotatable Dipole

TH-1 is a full-size high-efficiency 26', 20-15-10-6 Meter full legal limit rotatable dipole that is super low-profile -- almost invisible from across the street! With a 13-foot turning radius and tiny 9 lb. weight, it fits on small roofs, apartments and condos -- easily turned by a lightweight TV rotator like Hy-Gain^(R) AR-35. Mount in the attic for antenna restricted neighborhoods. But it is no wimp! Its bidirectional pattern can help reduce QRM and/or noise while maximizing your signal in the directions that you want -- so you can work some real DX. Handles up to a full 1500 Watts SSB/CW on all HF bands and Six Meters.



TH-1
\$299⁹⁵
UPS Shippable

Hy-gain 6M Add-On Dipole Kit

Adds 6-Meter capability to most HF yagis or rotatable dipoles. Mounted to driven element of most HF rotatable dipoles or HF single-band/multi-band beams without affecting antenna's performance. Handles 1.5 kW. Adds less than 1 lb. weight and essentially no increase in wind-loading to the existing antenna. HF beam must be direct-fed with coax, or a 1:1 balun that handles 1.5 kW. Power may be limited by the power handling of the installed balun on HF beam.



MK-6
\$39⁹⁵
UPS Shippable

Hy-Gain HyTower-Jr™

Stands 39 feet tall . . . Full 1/4 Wave on 40, 20, 15, 10 Meters . . . Cage loading on 80 Meters . . . World's Second Best Vertical Antenna . . .

Standing a tall 39 feet with full-size elements and rated at 5 KW, the AV-18JR Hy-gain HyTower-Jr™ is the world's *second best** performing vertical!

AV-18HTJR.
\$349⁹⁵
UPS Shippable

Stub-decoupling is used to give full-size quarter wave radiators on 40, 20, 15, 10 Meters with super efficient cage loading on

80 Meters.

The HyTower-Jr™ has almost no losses -- your ground system determines your efficiency.

It is automatic bandswitching, fed with 50 Ohm coax and has low SWR over an exceptionally wide bandwidth with SWR less than 1.2 at resonance.

The main radiator is aircraft high-strength, heavily walled, 2-inch aluminum tubing swaged at the top. Self-supporting in winds up to 40 MPH.

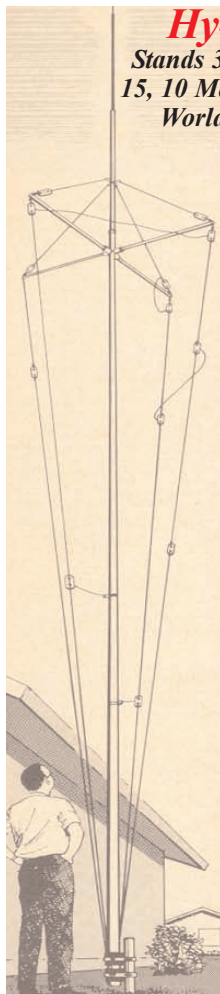
Mounts on 1 1/4 inch plumber's pipe. Heavy duty components will give you years of trouble-free operating pleasure.

Requires good ground system for optimum performance. UPS Shippable.

*The famous 53 foot Hy-gain HyTower™ is legendary. It's the premier, best performing vertical in the world -- bar none!

At less than half the price with nearly the same performance and based on the same principles, the HyTower-Jr™ is the poor man's version of its father HyTower.

Of course, Junior™ doesn't have its father's rugged hot-dipped galvanized steel tower and construction!



Hy-gain Aluminum Tubing

6063 T832 round, drawn aluminum tubing sold in 2 styles: standard or slitted one end, (.083" gaps, 1-2" slit lengths). Available in 3 foot or 6 foot lengths. Tubings are sized to allow telescoping into one another from .625 OD to 2" OD. Select slitted for telescoping. Use Hy-gain hose clamps to secure.

6" Lg OD x Wall x ID	P/N No slit, Price/ea	P/N Slitted Price/ea.	\$/Ad ft.
.625"x.035"x.555"	810-0625C-6U, \$5.79	810-0625C-6S, \$6.29	\$1.04
.750"x.058"x.634"	810-0750E-6U, \$6.99	810-0750E-6S, \$7.49	\$1.25
.875"x.058"x.759"	810-0875E-6U, \$7.49	810-0875E-6S, \$7.99	\$1.33
1.000"x.058"x.884"	810-1000E-6U, \$8.09	810-1000E-6S, \$8.59	\$1.43
1.125"x.058"x1.009"	810-1125E-6U, \$8.99	810-1125E-6S, \$9.49	\$1.58
1.250"x.058"x1.134"	810-1250E-6U, \$10.09	810-1250E-6S, \$10.59	\$1.77
1.375"x.058"x1.259"	810-1375E-6U, \$11.19	810-1375E-6S, \$11.69	\$1.95
1.500"x.058"x1.384"	810-1500E-6U, \$12.49	810-1500E-6S, \$12.99	\$2.17
1.625"x.058"x1.509"	810-1625E-6U, \$13.99	810-1625E-6S, \$14.99	\$2.50
1.750"x.058"x1.634"	810-1750G-6U, \$14.89	810-1750G-6S, \$15.89	\$2.65
2.000"x.120"x1.760"	810-2000L-6U, \$27.49	810-2000L-6S, \$28.60	\$4.78

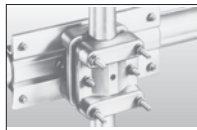
810-2000L-6W, \$33.60 each. Unique tubing has one end slitted and one end swaged to make it stackable. Join one end to other to make a longer pole. Secure with standard host clamp. Strong, 2"OD x .120" wall. Good for base sections of vertical antennas. Standard 6-ft. length, longer sections, to 20 ft. available. Add \$4.78 each add'l foot. 6 ft. lengths ship by UPS, longer units must ship UPS *oversize*/truck.

Hy-gain Stainless Steel Hose Clamps

Part No.	Price	Description
745-3106S	\$1.00	#6 Clamp for .75" OD to .875" OD tubing
745-3110S	\$1.00	#10 Clamp for 1" OD to 1.125" OD tubing
745-3116S	\$1.25	#16 Clamp for 1.25" OD to 1.50" OD tubing
745-3128S	\$2.84	#28 Clamp for 1.75" OD to 2" OD tubing



Hy-gain Custom Made Precision Antenna Hardware



BMC-249, \$79.95. Boom to Mast Clamp

Heavy duty 1 1/4" OD thick aluminum die casted boom to mast clamp designed specifically for securing heavy antennas. It is capable of supporting 2" boom antennas, such as the TH-11DX, Long John Monobanders and other beams with a 2" boom. The BMC-249 allows mast to extend past the top of the clamp. This feature allows

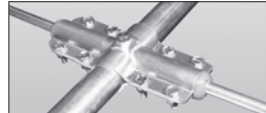
stacking of several antennas on one mast. Clamp is adjustable for mast sizes from 1 1/4" to 2 3/4" OD. The tilt-over feature permits easy assembly of the elements and simplifies maintenance of the antenna. 4Wx4Hx1 1/4" thick. Kit comes complete with stainless steel hardware.

Element Insulators These element insulators are made to fit the element bracket (right). Precision injection molded with black UV resisted ABS plastic.

Part No.	Price	Fits these Element sizes	Insulator Size	Fits Element to boom clamp
465216	\$3.42	7/16" OD	1/8" OD x 2 1/4"	163409
461057	\$4.40	5/8" OD	1 1/4" OD x 3"	165919
463767	\$4.40	7/8" OD	1 1/2" OD x 3"	165919
465833	\$4.80	1 1/4" OD	1 1/2" OD x 4"	165920

Hy-gain TH-series HF Beam Trap Caps

A. 464723, \$7.75 ea. Trap caps, for large Hy-gain TH-series traps. B. 466221, \$1.59 ea. Trap caps for Hy-gain TH-3Jr. traps.



Element to Boom Clamps

Made from high tensile strength aluminum alloy. Custom die is used to stamp these clamps. No miss-drilled holes. They fit perfect everytime. Required 2 clamps per element. Element Insulators available (left).



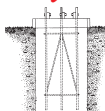
Part#	Price	Boom OD"	Element OD w/o insulator	Element OD w/insulator	Description	Insulator
161409	\$2.71	2"	5/8"	---	2 1/2"x7"x.08 Thick, #12	None
163764	\$3.80	2"	7/8"	7/16"	2 1/2"x7 1/8"x.08 Thick, #4	465216
165919	\$5.32	2"	1 1/4"	5/8", 7/8"	3 1/2"x7 1/8"x.125 Thick, #13	463767, 461057
165920	\$6.28	2"	1 1/2"	1 1/4"	3 1/2"x9 1/2"x.125 Thick, #14	465833
160055	\$1.22	1 1/4"	7/16"	---	1 1/2"x5"x.063 Thick, #0	None
161422	\$3.63	1 1/4"	7/8"	---	2 1/2"x6 1/2"x.08 Thick, #11	None
165141	\$3.76	1 1/4"	7/8"	7/16"	2 1/2"x6 1/2"x.08 Thick, #12	465216
165138	\$5.20	1 1/4"	1 1/4"	5/8", 7/8"	2 1/2"x6 1/2"x.08 Thick, #1	463767, 461057
872223	\$6.60				Stainless steel screws, nuts and washers for 1 set of element-to-boom clamp	

Hy-gain Vertical Antenna Mounting Hardware



A. 463011, \$14.00, Base tube insulator, fits 1 1/4" OD tube. Six 5/16" mounting holes. Super strong, made of fiberglass filled ABS. Used in Hy-tower to isolate tower legs from ground. Tube not included.
B. 877130, \$28.64, Vertical antenna bracket assembly. Includes bracket (C), base cover insulator (D), support insulator (E) and SO-239. Tube not included. Fits 1 1/4" tubing.
C. 160043-1, \$11.84, Base mount bracket. Custom-tooled 1/8" thick x 12 inch length aluminum bracket with vertical ridges for super strength. Pre-punched holes for SO-239 or N-connector.
D. 863427, \$6.90, Base cover insulator. Allows attachment of base tube. Has hollow center for antenna connector. Mold-in pin connects base tubing to connector.
E. 463056, \$3.12, Base antenna support insulator. Made to fit top support of antenna bracket (C). Hole fits 1 1/4" OD tubing.
F. 460316, \$12.96, Tubing coupler/insulator. Used to couple/insulate 1" tube to 7/8" tubing. Made of fiberglass filled ABS, 5" long.

Hy-Gain Tower Bases



Specially designed for Hy-gain crank-up towers. Complete with base hinge and foundation welded steel-cage. Specify tower model. *Must be shipped by truck, call for quote.

Model#	Tower	Price	Weight
TB-37	HG-37SS	\$299.95	50 lbs.*
TB-52	HG-52SS	\$299.95	80 lbs.*
TB-54	HG-54HD	\$299.95	90 lbs.*
TB-70	HG-70HD	\$349.95	102 lbs.*

Arrowpoint Anchor

APA-3, \$14.95. Hy-gain's Arrow Point Anchor is made of high quality 13 gauge steel. This 3" Arrow Point anchor has 36" integral swiveling 1/8" steel cable. Superior pullout resistance, up to 2000 lbs. Use this ArrowPoint anchor to secure antennas, towers, tarps, trees, carports, flagpoles and much more. Easy to install with optional drive rod, DR-3, \$29.95.



APA-3
\$14⁹⁵
UPS Shippable