

RCS-8V HF to VHF/UHF Remote Coax Switch



RCS-8V
\$149
 Suggested Retail

Ameritron's Remote Coax Switch lets you remotely switch up to five separate antennas using one inexpensive small control line (like standard telephone wire) -- **Eliminate** a tangle of troublesome coax and have a simple and neat installation -- with just a single coax feedline.

The RCS-8V consists of two units -- the weatherproof switching box that mounts on your tower or mast and the control unit that's placed at your operating station.

VSWR is less than 1.2 from DC to 250 MHz and less than 0.1 dB loss at 150 MHz -- if you operate HF/VHF/UHF, the RCS-8V is for you.

It handles over 5 kW below 30 MHz and 1 kW at 150 MHz. You can ground unused positions or leave them open.

The indoor control unit is all metal to prevent RFI and TVI. It also has LEDs to indicate the

antenna you've selected.

A Lexan scratch proof front panel has a markable surface for labeling your antennas.

RCS-8V operates from a 120 VAC power source or RCS-8VX for 220/240 VAC. Use any 6 conductor control line (not supplied) and allows safe operation with 14V control voltage.

RCS-8VN, \$159. Same as RCS-8V but has N-type connectors instead of SO-239.

SPECIFICATIONS:

Number of antenna positions: 5. **Loss at 150 MHz:** less than 0.1 dB. **VSWR:** under 1.2:1 from DC to 250 MHz. **Impedance:** 50 Ohms. **Power Capability:** >5 kW below 30 MHz, 1 kW at 150 MHz. **Power requirements:** 120 VAC, 50/60 Hz at five watts. **Connectors:** Teflon[®] SO-239 for RCS-8V; "N" for RCS-8VN. **Control Box:** 6Dx6¹/₈W x2¹/₄H inches. **Switch Box:** 5³/₈Dx7Wx3H inches.

AMERITRON RCS-4 160-6 Meters Remote Coax Switch

Now covers 6 Meters ... improved relays ... Greater Power Handling!



RCS-4
\$139
 Suggested Retail

Ameritron RCS-4 is a remote controlled coax switch that selects 1 of 4 outputs by supplying all control voltages through the coax. Elimination of control cables gives you a fast, neat and inexpensive installation -- *only 1 coax line for 4 antennas.*

You get two units -- the switching box (5³/₈Dx7Wx3H in.) that can be tower, mast or wall mounted and the control console (6¹/₈Dx5¹/₄Wx 3³/₈H in.) that is located at your operating station.

The attractive indoor console has bright LED antenna selector indicators. A steel enclosure provides 100% shielding to prevent RFI and TVI. Switching time is 50 milliseconds. Teflon[®] SO-239

connectors provide reliable connections.

The weatherproof switching box uses three heavy duty 16 ampere hermetically sealed relays on a rugged G-10 fiberglass circuit board.

Quality components are used throughout the entire unit to ensure maximum life for the sometimes difficult-to-reach switching box. RCS-4 operates 120 VAC. RCS-4X for 220/240 VAC. RCS-4 allows safe operation with 14 Volts control voltage.

Frequencies 1.5 - 100 MHz are covered by this excellent station accessory. Handles over 2.5 kW.

Specifications: 4 pos.; **Loss** at 30 MHz less than 0.1 dB; **VSWR** is under 1.25:1, 1.5-60 MHz; **Impedance:** 50 Ohms; **Power:** >2.5 kW average continuous.

New!



RCS-10
\$159
 Suggested Retail

Ameritron's RCS-10 remote coax switch selects one of eight antennas using an inexpensive three or four conductor control line (such as standard telephone wire).

Eliminate a tangle of troublesome coax and have a simple and neat installation -- with just a single coax feedline.

The RCS-10 consists of two units -- the weatherproof switching box that mounts on your tower or mast and the control unit that's placed at your operating station.

Outdoor Unit Features:

Inexpensive and simple wiring: selects up to eight antennas using one four conductor telephone type control line.

High Power Capability: The RCS-10 relay box will handle

AMERITRON RCS-10 Remote Coax Switch

over 5 kW into matched loads below 30 MHz.

Long Relay Life: UL/CSA/VDE approved sealed relays with 16 ampere switching current rating. Tested to withstand 1200V RMS.

Flexible Mounting: RCS-10 hardware accepts mast sizes from 1 inch to 2¹/₄ inches. **Reliable Connectors:** Teflon UHF-style SO-239 females, internal barrier strip for control lines. **Low Voltage:** Requires 10-15 Volts at less than 300 mA. **Number of Antenna Positions:** 8. **Frequency Coverage:** DC to 100 MHz. **VSWR:** Under 1.25:1 below 30 MHz; Under 1.3:1 below 60 MHz; Under 1.8:1 below 150 MHz. **Impedance:** 50 Ohms. **Power Capability:** >5 kW into 50 Ohms below 30 MHz. **Power Requirement:** RCS-10, 10-15 VDC or 120 VAC with AC adaptor supplied. RCS-10X, 10-15 VDC or 230 VAC with AC adaptor supplied. **Relay Switch Control Line:** 4 conductors telephone-type cable, not supplied. **Relay Control Line Voltage:** 10-15 VDC at less than 300 mA. **Flexible Control Box with External Interface:** Accepts and outputs one-of-eight and outputs three-line BCD data to remote relay unit. **Highly Weather Resistant:** Sealed relays, stainless hardware, and U-V resistant cover. **Easy-to-Read Antenna Indicators:** Eight wide-spaced LED's indicate the selected antenna. **Dimension:** Control Box: 6¹/₄Wx3¹/₄Hx4³/₈D inches.

AMERITRON EXTENDED WARRANTY PLAN

Ameritron's extended warranty is the same as the original warranty, just extended for the amount of months you choose to purchase extra.

The extended plan warrants to the purchaser that if the product should fail during the agreed term, Ameritron has the option to repair or replace part (s) except tube and output transistors) and provide necessary labor free of charge.

Warranty repair can only be done at Ameritron. Purchaser must return product to

Ameritron prepaid in original packing or equivalent. Ameritron is not responsible for any shipping loss or damage.

WHAT IS COVERED

Necessary labor done at the Ameritron facility to repair the product back to specifications. Electrolytic capacitor.

Modification to correct performance, chip capacitors, mica caps, ceramic caps, air tuning caps, transformers, coils, resistors, meters, switches, chokes, sockets, tube

caps, insulators, transistors (except final RF output transistors), diodes, IC, regulators rectifier, relays, fans, holders.

PC board (if not repairable), connectors, internal wiring, internal coax, return shipping and labor for replacing tubes or final RF output transistors.

Tube and RF output transistors are not covered. Return insured shipping (in United States), of Ameritron's choice is covered for services listed under "What is covered".

Call 1-800-713-3550 for prices.

AMERITRON True Legal Limit™ Tuner

Easily handles 1500 Watts continuous carrier even on 160 Meters . . . High-current edge-wound silver plated Roller Inductor . . . Two 500 pf high capacitance tuning capacitors with 6:1 vernier reduction drives . . . 3 core choke balun . . . Six position antenna switch . . . True peak reading Cross-Needle SWR/Wattmeter . . .



AMERITRON's ATR-30 True Legal Limit™ roller inductor antenna tuner is ham radio's toughest! It'll handle 1500 Watts continuous carrier output on all modes and all HF bands into most antennas -- even on 160 Meters where most antenna tuners fail.

It's perfect for Ameritron's most powerful amplifiers where the ATR-30 just loafs.

All band coverage lets you operate 1.8-30

ATR-30 MHz including all MARS and WARC bands.

\$599
Suggested Retail

Super High Current Roller Inductor

You'll see Ameritron's new super high current air core roller inductor. It's edge wound from a thick solid copper strip and silver plated. This produces a large surface area and a massive conductor. It can carry huge circulating RF currents and withstand tremendous heat that'll melt or burn ordinary roller inductors.

A gear driven turns counter and crank knob gives you precise inductance control.

Two 500 pf Tuning Capacitors

Two 500 pf -- the highest of any antenna tuner -- variable transmitting capacitors give you no-arc wide range impedance matching for true high power performance.

6:1 vernier reduction drives makes capacitor tuning smooth and easy.

Super Balun, 6 position Antenna Switch
Super heavy duty three core choke balun lets you match virtually any balanced feed-line antenna without core saturation.

A 6 position antenna switch lets you select your desired operating antenna.

Read true Peak Power

Ameritron's active electronic true peak reading meter accurately reads forward and reflected power and SWR simultaneously on a lighted Cross-Needle meter.

Roomy Cabinet maintains High-Q

Roomy extra-strong .080 inch thick aluminum cabinet gives highest efficiency and lowest loss. 13 1/4"Wx5 5/8"Hx17 1/2"D inches. Has Ameritron's superb one year limited warranty with legendary customer service.

ATR-20 Antenna Tuner . . . \$459



Handles 1500 Watts RF output. Slightly less on 160

Meters. 13 1/2"Wx5 1/2"Hx13 1/4"D". Bandswitched T-network, peak reading SWR/Wattmeter, covers 1.8-30 MHz, 6 position antenna switch, balun. Great for AL-80B.

ADL-1500 Dummy Load with oil . . . \$69⁹⁵

Oil cooled 50 Ohm dummy load handles 1500 Watts for 5 minutes. SWR under 1.2 up to 30 MHz. Low SWR to 400 MHz. Has high quality industrial grade transformer oil (no PCB) and heavy duty 50 Ohm resistor.



ADL-2500 Fan cooled 2500W dry dummy load . . . \$199⁹⁵

Whisper quiet fan. Handles any legal limit amplifier -- 2500 Watts average power for 1 minute on, ten off. 300 Watts continuous. SWR below 1.25 to 30 MHz and SWR below 1.4 to 60 MHz.



AWM-30 Precision SWR Wattmeter . . . \$149⁹⁵

Ameritron's precision SWR/Wattmeter is perfect for making accurate linear amplifier power measurements. Reads true peak/avg power on lighted cross-needle meter. 3000/300 Watt ranges, remote sensor.



AMERITRON Amplifier-to-Transceiver Interface

Protects expensive radio from damage by keying line transients and steady state current and voltages



ARB-704 INTERFACE BUFFER
\$49⁹⁵
ARB-70412 for IC-706 series radios

The ARB-704 will work with almost any transceiver without the need of the plug-and-play pre-wired cable.

The ARB-704 advanced interface is compatible with all common radios and amplifiers even though radios and amplifiers do not have standardized voltages, accessory plugs, or wiring. It's designed to work with any amplifier/radio combination.

The input is designed to be compatible with any transmitter or transceiver, and the output is compatible with AC control lines or DC positive or negative amplifier control lines having up to 200 Volts peak open circuit voltage and 300 mA of operating current.

Why you need the ARB-704

Amplifiers can damage radios if the amplifier has too much relay control voltage, voltage spikes, or excessive current on the relay control line. Such damage often appears as "stuck" or "sticky" transmit relays in exciters or shorted transistors on

transmit control lines. In most cases where the radio is damaged, the system transmits normally but the external amplifier stays locked in a "transmit" mode. This prevents receive signals from coming through the amplifier with normal levels whenever the amplifier is in the "ON" or "OPERATE" position.

The ARB-704 has many electrical advantages over conventional relay buffer systems. The ARB-704 has no moving parts, switches almost instantaneously. It is noiseless, has very long life, and will not develop dirty contacts. It operates with negative, AC, or positive amplifier relay control lines.

It works with any relay voltage (AC, positive, or negative) up to 200 peak volts and any relay current up to 300 mA. The ARB-704 is fully compatible with conventional amplifier relay systems. It is especially suited for buffering vacuum relay QSK amplifiers, since the ARB-704 does not affect attack or release times in a deleterious manner.

The ARB-704 operates with transmitters or transceivers that pull amplifier control lines to ground, or output a wide range of positive or negative control voltages. The transmitter only switches currents under 0.35 milliamperes and very low voltages when using the ARB-704. Measures a super compact 4 1/4"Wx1 3/4"Hx2 3/4"D inches.

PLUG-AND-PLAY CABLES

- PNP-8D For FT-1000, (MP), 900, 767GX, 920, 990, 747GX
- PNP-8M For FT-890, 840, 817
- PNP-35 For FT-100, (D)
- PNP-5M For FT-847
- PNP-7D For TS-440, 690, 450, 180, 140, 950, 130, 870, 2000, 50, 120, 530, 430
- PNP-13D For all models of the IC-706
- PNP-7DK For TS-930
- PNP-7DK2 For TS-820, 520
- PNP-5D For FT-980

Cables are \$15.95 each.

The ARB-704 is supplied with the following: 1. One power connector cord and plug with red wire (+12 Volts) and black wire (- and ground). 2. Three phono (RCA) cord with connectors on each end. These cables are for relay, ALC and amplifier control lines.

AMERITRON®

. . . the world's high power leader!

<http://www.ameritron.com>

116 Willow Road, Starkville, MS 39759 USA

TECH: (662) 323-8211 • FAX: (662) 323-6551

Free Catalog/Nearest Dealer . . . 800-713-3550

8 a.m. - 4:30 p.m. CST, Monday - Friday

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hy-gain. ROTATORS

... the first choice of hams around the world!



THE HAM-IV

HAM-IV is the most popular rotator in the world!

It is designed for medium communications arrays of up to 15 square feet wind load area. 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 readability. New indicator potentiometer, new ferrite beads reduce RF susceptibility, new cinch plug connector 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, maximum mast size of 2 1/16".

HAM IV Rotator Specifications

WindLoad capacity(inside tower)	15 square feet
Wind Load (w/ mast adapter)	7.5 square feet
Turning Power (in lbs.)	800
Brake Power (in lbs.)	5000
Brake Construction	Electric Wedge
Bearing Assembly	Dual race/96 ball bearings
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	8
Shipping Weight (lbs.)	24
Effective Moment (in tower)	2800 ft/lbs.

THE TAILTWISTER SERIES II



T-2X is designed for medium communications antenna arrays of up to 20 square feet wind load area. Available with DCU-1 Pathfinder digital control box (T2XD) or standard analog control box

T-2XD is designed for medium communications antenna arrays of up to 20 square feet wind load area. Available with DCU-1 Pathfinder digital control box (T2XD) or standard analog control box

(T2X). Low temperature grease, alloy ring gear, indicator potentiometer, ferrite beads on potentiometer wires, new weatherproof 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, max mast of 2 1/16".

TAILTWISTER Rotator Specifications

WindLoad capacity(inside tower)	20 square feet
Wind Load (w/ mast adapter)	10 square feet
Turning Power (in lbs.)	1000
Brake Power (in lbs.)	9000
Brake Construction	Electric Wedge
Bearing Assembly	Triple race/138 ball brngs
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	8
Shipping Weight (lbs.)	28
Effective Moment (in tower)	3400 ft/lbs.



THE HAM-V

HAM-V is the new millennium. It is designed for medium communications antenna arrays of up to 15 square feet wind load area.

It is designed for medium communications antenna arrays of up to 15 square feet wind load area.

Includes the innovative DCU-1 Pathfinder control unit. A new alloy ring gear with 100,000 PSI tensile strength and new indicator potentiometer have been added for improved reliability.

No more terminal strips! New Cinch connector plus 8-pin plug at control box - no screwdriver required.

New powder coated finish. Maximum mast size of 2 1/16 inches.

HAM V Rotator Specifications

WindLoad capacity(inside tower)	15 square feet
Wind Load (w/ mast adapter)	7.5 square feet
Turning Power (in lbs.)	800
Brake Power (in lbs.)	5000
Brake Construction	Electric Wedge
Bearing Assembly	Dual race/96 ball bearings
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	8
Shipping Weight (lbs.)	24
Effective Moment (in tower)	2800 foot/lbs.



THE HDR-300A

HDR-300A is 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 to reduce RF susceptibility, new longer output shaft keyway for added reliability. Heavy-duty self-centering steel mast clamp and hardware. Digital display accurate to 1 degree. Machined steel output.

HDR-300A Rotator Specifications

WindLoad capacity(inside tower)	25 square feet
Wind Load (w/ mast adapter)	-- square feet
Turning Power (in lbs.)	5000
Brake Power (in lbs.)	7500
Brake Construction	Solenoid operated locking
Bearing Assembly	bronze sleeve w/rollers
Mounting Hardware	stainless steel bolts
Control Cable Conductors	7
Shipping Weight (lbs.)	55
Effective Moment (in tower)	5000 ft/lbs.



THE AR-40

AR-40 is for large FM-TV and compact communication antenna arrays up to 3.0 square feet wind load area. Dual 12 ball bearing race is exclusive in its class. 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. Maximum mast size of 2 1/16 inches. Includes MSLED light duty lower mast support.

AR-40 Rotator Specifications

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



THE CD-45II

CD-45II handles 8.5 sq. feet mounted inside a tower, or 5 sq. ft. with mast adapter. Low temperature grease good to -30 F degrees. 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 masts to 2 1/16". MSLED light duty lower mast support.

Low temperature grease good to -30 F degrees. 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 masts to 2 1/16". MSLED light duty lower mast support.

CD-45II Rotator Specifications

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



DCU-1 PATHFINDER

DCU-1 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-second brake delay, 360 degree choice for center of rotation, more!

Innovative digital control unit for T2X, HAM IV and HAM V rotators. Ship wt: 8 lbs. Automatic operation



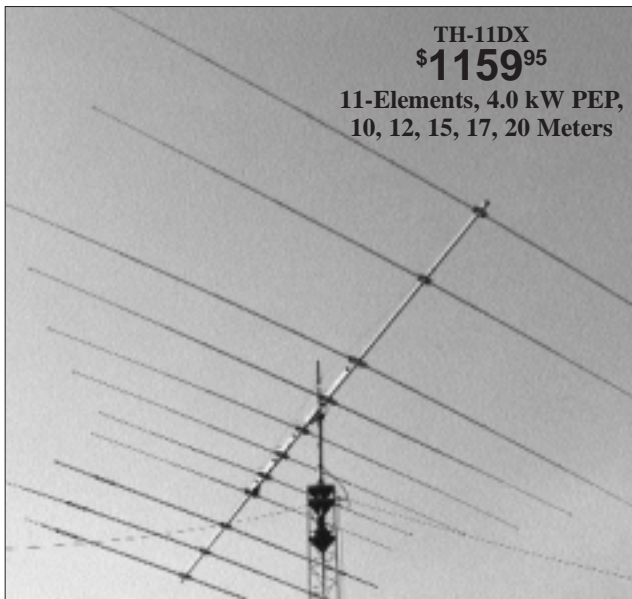
NEW! THE AR-35

AR-35 • For small UHF/VHF antennas, 6 Meter beams and loop antennas.

- Auto control unit (7Wx6D x2 1/2H in.).
- 110 VAC operation.
- Rotator is 4Wx9D x10 3/4H inches.
- Includes all mounting clamps and hardware. One year Warranty.

hy-gain. HF BEAMS...

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



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

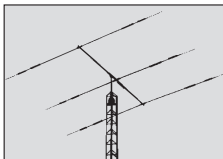
The choice of top DXers. With 11-elements, excellent gain and 5-bands, the super rugged TH-11DX is the "Big Daddy" of all HF beams!

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 logarithmic driven array on all bands with monoband reflectors, BN-4000 high power balun, corrosion resistant wire boom support, hot dipped galvanized 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



TH-3JRS, \$329.95. 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.

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

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.

Uniquely combining monoband

and trapped parasitic elements give you an excellent F/B ratio.

Includes Hy-Gain's diecast aluminum, rugged boom-to-mast clamp, heavy gauge element-to-boom brackets, BN-86 balun. For high power, upgrade to 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 maxi-

mum F/B ratio on each band.

Also standard is 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!

You get an impressive average gain and a whopping average front-to-back ratio. Handles a full 1500 Watts PEP. 95 MPH wind survival.

Fits on average size lot with

room to spare -- turning radius is just 15.3 feet. Four piece boom is ideal for DXpeditions. Rotates with CD-45II or HAM-IV rotator.

Features 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.

For just \$369.95 you can greatly increase your effective radiated power and hear far better!

EXP-14, \$599.95. 4-element, 1.5 kW PEP, 10,15,20 Meters

Revolutionary 4-element compact tri-bander lets you add 40 or 30 Meters! Has 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 Para Sleeve gives you

less than 2:1 VSWR. 1.5kW PEP.

BetaMATCH™ provides DC ground to eliminate static. Includes BN-86 balun. Easily assembled.

Truly competitive against giant tri-banders at half the cost!

QK-710, \$169.95. 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 maximum performance.

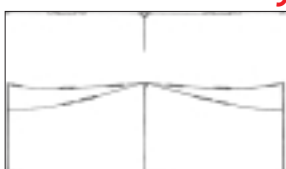
DB-1015 features a 14 foot

boom in 4 sections, packaged for DXpeditions. Handles full-legal power and has Hy-Gain's rugged boom-to-mast clamp.

DB-1217, \$449.95. Same as DB-1015, but is dual band coverage for 12 and 17 Meters.

Model No.	No. of elements	avg Gain dBi	avg F/B dB	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	\$369.95
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

HF Multiband Hy-Q trap DOUBLET



DP-2BDQ, 101 feet maximum length of dipole.

DP-5BDQ, 94 ft. max length.

DP-2BDQ and DP-5BDQ are designed for horizontal or inverted "V" rated at legal power.

Each are individually pretuned matched traps for each band.

50 Ohm feed, coaxial cable not included.

DP-2BDQ
\$139⁹⁵
Covers 80
and 40 Meters

DP-5BDQ
\$259⁹⁵
Covers 80
thru 10 Meters

ADJUSTABLE HF DIPOLE ANTENNA



1.8-30 MHz frequency range, 160-10 Meters. Perfect for field day or anytime you need to put up a dipole in a hurry. It uses braided nylon wire rope. Conductors are woven into the rope.

Uncoil the conductor using pre-marked frequencies for easy installation. 100 feet of support rope on each end and a SO-239 (UHF) connector is on center insulator.

DP-19PD
\$279⁹⁵
Covers 160
thru 10 Meters

hy-gain LONG JOHNS HF MONOBANDERS

MINIMAL WEIGHT - MAXIMUM STRENGTH

LJ-105CA, \$289.95. 10 Meters, Five Elements, Exclusive 50 Ohm *BetaMatch*TM. 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*TM. 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*TM. Excellent DC Ground. Stainless steel hardware and clamps. BN-4000 Balun recommended. manual has setting for both bands.

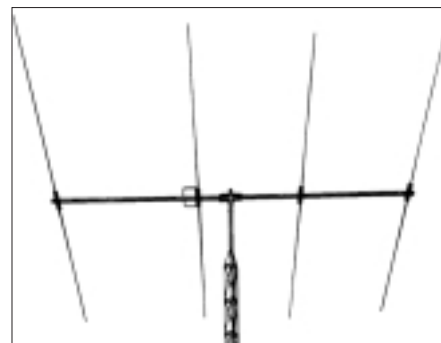
LJ-204BA, \$539.95. 20/17 Meters, Four Elements. Exclusive 50 Ohm *BetaMatch*TM. The LJ-204BA has a tiltable cast aluminum

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*TM. BN-86 balun recommended. Includes stainless steel hardware and clamps.

LJ-153BA, \$209.95. 15 Meters, Three Elements. Feeds with 50 Ohm coax, *BetaMatch*TM, 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, is factory pre-tuned



with Hy-Gain's exclusive *BetaMatch*TM. BN-4000 Balun is recommended. Stainless steel hardware and clamps. Tilttable, heavy-duty cast aluminum boom-to-mast bracket.

Model #	Gain (dBi)	F/B Max	Max Power	Boom length	Long elment	Turn Radius	Mast diam.	Surface area	Wind Surviv
LJ-105CA	10.8 dBi	36 dB	1500 W PEP	24 feet	18 feet	15 feet	1.9-2.5 in.OD	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.OD	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.OD	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.OD	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 in.	14 feet, 3 in.	1.9-2.5 in.OD	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.OD	5.4 sq. feet	80 m.p.h.

hy-gain Discoverer Series Antennas

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

This rotatable dipole of low weight and wind surface area so easily fits most existing beam installations. This antenna can be tuned to either 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. Has pre-formed mast clamp.

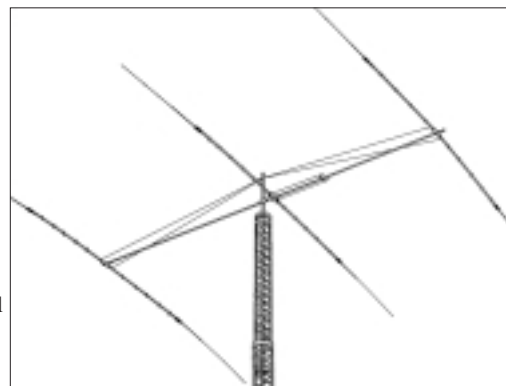
DISCOVERER 72, \$649.95. Covers 30/40 Meters.

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*TM. Tilttable 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 Director Kit covers 30/40 Meters.

Converts the Discoverer 72 into a three-element beam. Even more amazing, it's all on a 35 foot boom, outperforming the other brands that are much larger. The combination Discoverer 72 and Director Kit even fits on medium duty towers such as the HG-52SS, saving both cost and space. HyGain offers you several options with wide bandwidth and Hy-Q efficiency without coils. The antennas handle legal power limits.



Model #	Gain (dBi)	F/B Max	Max Power	Boom length	Long elment	Turn Radius	Mast diam.	Surface area	Wind Surviv
DIS-71	6.5 dBi	35 dB	1500 W PEP	2.7 feet	45 feet	22.5 feet	1.9-2.5 in.OD	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.OD	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.OD	9.0 sq. feet	80 m.p.h.

hy-gain HF LOG PERIODIC ANTENNAS

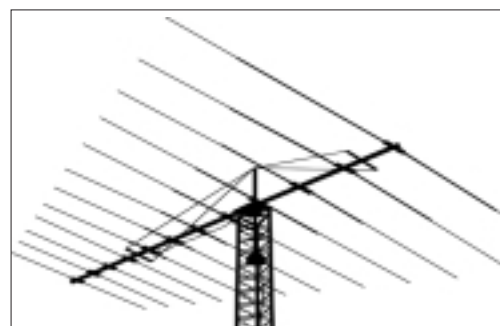
LP-1009A, \$1429.95. LP-1009A for UHF connector. LP-1009AN for "N" connector. Covers 13-30 MHz (10, 12, 15, 17, and 20 Meters)

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-110A 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.

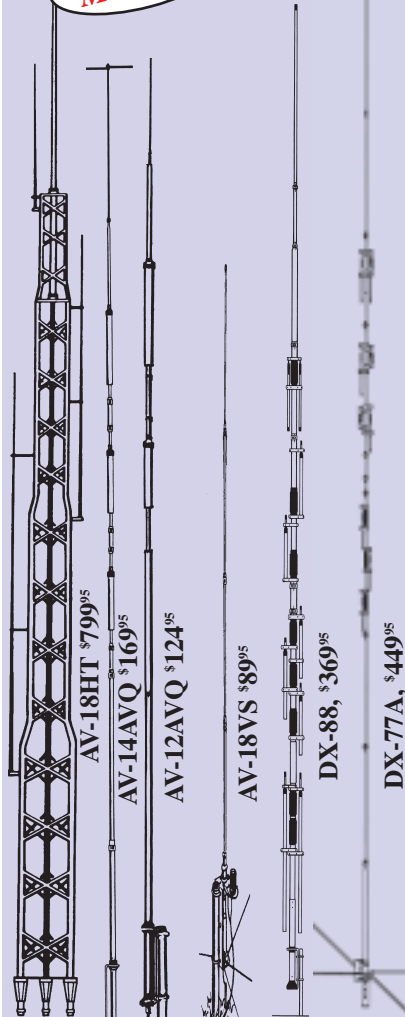


Model #	Gain (dBi)	F/B Max	Max Power	Boom length	Long elment	Turn Radius	Mast diam.	Surface area	Wind Surviv
LP-1009A/N	7.3 dBi	22 dB	1500 W PEP	27 feet	39 feet	22.5 feet	1.9-2.5 in.OD	12.5 sq. feet	103 m.p.h.
LP-1010A/N	7.0 dBi	22 dB	1500 W PEP	36 feet	48 feet	28.5	1.9-2.5 in.OD	16 sq. feet	93 m.p.h.

hy-gain. HF VERTICALS...

Self-supporting -- no guys required . . . Remarkable DX performance -- low angle radiation, omnidirectional . . . Handles 1500 Watts . . . Low SWR . . . Automatic band switching . . . Aircraft quality aluminum tubing . . . Stainless steel hardware . . . Recessed SO-239 connector . . . Two year limited Warranty . . .

Free Manuals!



AV-18HT, \$799.95.
(10, 12, 15, 20, 40, 80 Meters,
160 Meters optional)
53 feet., 114 lbs.

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, \$109.95), it also provides exceptional 160 Meter performance.

The 24 foot tower is all rugged, hot-dip galvanized steel and all hardware is iridized for corrosion resistance. Special tilt-over hinged base for easy raising and lowering.

AV-14AVQ, \$169.95.
(10,15,20,40 Meters)
18 feet., 9 lbs.

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.

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.

AV-12AVQ, \$124.95.
(10, 15, 20 Meters).
13 feet, 9 lbs.

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. Roof mount with AV-14RMQ kit, \$89.95.

AV-18VS, \$89.95.
(10,12,15,17,20,30,40,80 Meters).
18 feet, 4 lbs.

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.

DX-88, \$349.95.
(10, 12, 15,17, 20,30,40,80 160 Meters optional). 25 feet, 18 lbs.

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. DX-88 OPTIONS: 160 Meter add-on kit, KIT-160-88, \$189.95. Ground Radial System, GRK-88, \$99.95. Roof Radial System, RRR-88, \$99.95.

DX-77A, \$449.95.
(10, 12, 15, 17, 20, 30, 40).
29 feet, 25 lbs.

No ground radials required! Off-centered Windom has 55% greater bandwidth than competitive verticals. Heavy-duty tiltable base. Each band independently tunable.

Hy-gain^R Classic Vertical Antennas

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 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.

Model #	Price	Bands	Max Power	Height	Weight	Wind Surv.	Rec. Mast
AV-18HT	\$739.95	10,15,20,40,80	1500 W PEP	53 feet	114 pounds	75 MPH	-----
AV-14AVQ	\$159.95	10,15,20,40	1500 W PEP	18 feet	9 pounds	80 MPH	1.5-1.625"
AV-12AVQ	\$114.95	10/15/20 M	1500 W PEP	13 feet	9 pounds	80 MPH	1.5-1.625"
AV-18VS	\$74.95	10 - 80 M	1500 W PEP	18 feet	4 pounds	80 MPH	1.5-1.625"
DX-88	\$349.95	10 - 40 M	1500 W PEP	25 feet	18 pounds	75 mph no guy	1.5-1.625"
DX-77A	\$429.95	10 - 80 M	1500 W PEP	29 feet	25 pounds	60 mph no guy	1.5-1.625"

FAMOUS Heavy Duty HY-GAIN BALUNS



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

BN-4000B, \$109.95. This 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, \$99.95.** For dipoles. **BN-4000N, \$129.95.** "N" connector.



HY-GAIN INSULATORS FOR MULTIBAND DIPOLE ANTENNA



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. End Insulator for Multi-band doublet antenna. Set of 2.

CONTESTER HEADSET

CLOSEOUT SALE! HS-2400 \$119.95 Ship Code A





Eight band AV-640 vertical antenna covers 40, 30, 20, 17, 15, 12, 10 and 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.

The AV-620 covers all bands 6 through 20 Meters with no traps, no coils, no radials yielding an uncompromised signal across all bands.

The AV-640 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 lossy can 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

- High wind survival
- Matching unit made from all Teflon[®] insulated wire

hy-gain[®] warranty

- Two year limited warranty
- All replacement parts in stock



Antennas, Rotators & Towers
 308 Industrial Park Road, Starkville, MS 39759 USA
Toll-free Customer Sales Hotline: 800-973-6572
 • TECH: 662-323-9538 • FAX: 662-323-6551
<http://www.hy-gain.com>

Prices and specifications subject to change without notice or obligation. © Hy-Gain[®], 2002.



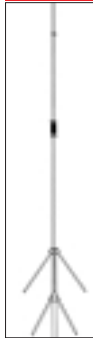
hy-gain[®] AV-640
 8 Bands: 40, 30, 20, 17, 15, 12, 10, 6 M
\$389⁹⁵
 Suggested Retail
Call your dealer for your best price!

hy-gain[®] AV-620
 6 bands: 20, 17, 15, 12, 10, 6 M
\$289⁹⁵
 Suggested Retail

Specifications	AV-620	AV-640
Bands covered (meters)	6,10,12, 15,17,20	6,10,12,15, 17,20,30,40
2:1 VSWR Bandwidth (KHz)		
40M	N/A	150
30M	N/A	175
20M	500	500
17M	500	500
15M	500	500
12M	500	500
10M	1500	1500
6M	2000	1500
VSWR at resonance (typical)	1.5:1	1.5:1
Power handling (watts output) key down 2 minutes	1500	1500
Vertical radiation angle (degrees)	17	17
Horizontal radiation angle (degrees)	360	360
Height (feet)	22.5	25.5
Weight (pounds)	10.5	17.5
Wind surface area (square feet)	2.4	2.5
Wind survival (mph)	80	80

hy-gain. VHF/UHF antennas

VHF VERTICAL ANTENNAS



V-2R 2 Meter
\$109⁹⁵
 vertical with 5.2
 Covers dBi gain
 138-175 MHz derived
 from the famous extended
 double zepp antenna
 design. Radiating elements
 are two collinear 5/8 waves
 fed in phase. 2 sets of 1/4
 wave radials properly
 decouple lower radiator
 from the mast. SO-239,
 handles 500 Watts. 9 ft.



V-42R V-42R is
\$169⁹⁵ independ-
 Covers 143- ently tun-
 153, and 436- able at 144
 455 MHz and 440
 MHz. Fed
 through one coax cable, it
 has sets of 1/4 wave radials
 which properly decouple
 3/8 wave radiators from
 the mast. Gives 5 dBd
 gain on UHF and 3 dBd
 gain on VHF. Type N,
 handles 200 Watts. 9 ft.



V-4R 70 cm vertical
\$109⁹⁵ with
 Covers 5.2 dBi
 400-475 MHz gain
 derived
 from double zepp antenna
 design. Type N, handles
 500 Watts, 4 foot.



V-6R V-6R
\$204⁹⁵ antenna is
 Covers 51-54 based on 2
 MHz collinear
 5/8 wave
 radiators. 500 Watt
 enclosed coil and 2 sets
 of 1/4 wave radials which
 provide complete mast
 decoupling and optimum
 pattern and gain. Rugged
 design withstands severe
 weather, also DC ground
 lightning protector. 25 ft.,
 3 inches, UHF female
 conn., handles 500 Watts.

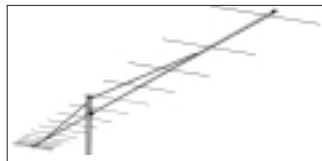
V-3R 1 1/4 Meter
\$119⁹⁵ vertical
 Covers with 5.2
 216-225 MHz dBi gain
 derived
 from double zepp design.
 SO-239, handles 500
 Watts. 6ft. 9 inches.

Model#	Frequency	Gain dBi	Pwr Input	Wind Surv	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	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 in.	25 ft. 3 in.	15 pounds

VHF/UHF DX BEAM ANTENNAS

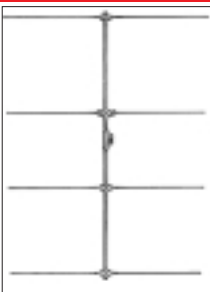


UB-7031DX Hy-Gain's DX-Series
\$219⁹⁵ VHF/UHF Beams are
 Covers based on the
 420-438 MHz DL6WU element
 length and spacing
 and were further refined on Hy-
 Gain's antenna test range and by
 computer modeling. Both beams feature encapsulated weatherproof

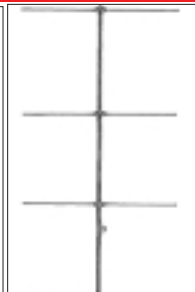


VB-215DX
\$229⁹⁵ feedpoints with type
 Covers N connectors for
 144-146 MHz excellent VSWR and
 power handling.
 High quality mechanical
 construction is
 assured by heavy wall booms and
 boom supports made of 6063-T832
 aluminum tubing, stainless steel hardware, UV stabilized thick-shoulder
 element insulators and PTFE coaxial baluns.

SIX METER DX BEAM ANTENNAS



VB-64DX
\$144⁹⁵
 Covers
 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#	Frequency	Gain dBi	Pwr Input	Wind Area	#Elements	Boom leng	Weight
UB-7031DX	420-438	19.8 dBi	2 kW PEP	1.9 sq. ft.	31	24.06 ft.	9.25 lbs.
VB-215DX	144.0-146.0	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
VB-66DX	50-54	12.5 dBi	1.5kWPEP	1.8 sq. ft.	6	24.575 ft.	17

VHF GROUND PLANE ANTENNA



GPG-2B The GPG-2B, a 5/8 Wavelength Ground Plane
\$49⁹⁵ for two meters is omni-directional and tunable
 Covers from 142-185 MHz. It delivers an omni-directional
 142-185 MHz 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.

GPG-1B The GPG-1B is a 1/4 Wavelength
\$39⁹⁵ ground plane similar to the GPG-2B.
 Covers It has unity gain, covers 144-148 MHz.

OSCAR LINK 435 MHz • 145.9 MHz



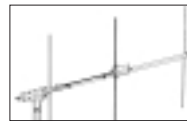
Hy-Gain's OSCAR antennas are complete with the necessary phasing lines, relays and hardware. It includes left and right circularity switching to reduce fading. True RF switching elements are rated at 200 Watts and improved VSWR for higher efficiency. Feed points are encapsulated and weather protected for long life. Made of fiberglass, the crossboom maintains the integrity of the circularity pattern.

VB-216SAT **\$229⁹⁵** **UB-7030SAT** **\$229⁹⁵**
 Covers Covers
 144-148 MHz 432-438 MHz
DB-218SAT, \$559.95, complete 2 Meter/
 440 MHz antenna system. **FB-217SAT, \$119.95**, Crossboom assembly.

Model#	F/B ratio	Gain dBi	Pwr Input	# Elements	Boom leng	Wind Area	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

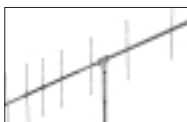
These 2 Meter FM beam antennas include Hy-Gain's exclusive *Beta Match*™ to provide exceptional Front-to-Back ratio and maximum obtainable gains. The VB-23FM (8.3 dBi gain), VB-25FM (11.2 dBi gain), VB-28FM (14 dBi gain), and the VB-214FM (15.2 dBi gain) gives you a wide choice of 2 Meter Beam performance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



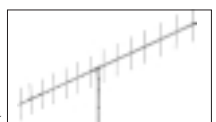
VB-23FM
\$49⁹⁵
 2 Meter FM
 Beam Antenna



VB-25FM
\$59⁹⁵
 2 Meter FM
 Beam Antenna



VB-28FM
\$79⁹⁵
 2 Meter FM
 Beam Antenna



VB-214FM
\$89⁹⁵
 2 Meter FM
 Beam Antenna

Model#	F/B(MAX)	Gain dBi	Pwr Input	Longest el	Boom leng	Mast dia.	Weight
VB-23FM	20 dB	8.3 dBi	500 Watts	40.25 in.	43.5 in.	2.0 in O.D.	2 pounds
VB-25FM	20 dB	11.2 dBi	500 Watts	39.625 in.	75 in.	2.0 in O.D.	3 pounds
VB-28FM	20 dB	14 dBi	500 Watts	40.25 in.	148.75 in.	2.0 in O.D.	4 pounds
VB-214FM	20 dB	15.2 dBi	500 Watts	39.5 in.	15 ft. 6 in.	2.0 in O.D.	6 pounds

MIRAGE . . . 160 Watts on 2 Meters!

Turn your mobile, base or handheld into 160 Watt powerhouses and talk further, longer, clearer . . . All modes: FM, SSB, CW . . . Superb GaAsFET preamp . . . Overdrive, high SWR, Over-temperature protection . . . Remote controllable . . .

MIRAGE's most popular amplifier gives you 160 Watts of output power for just 25 W in from your base/mobile rig!

B-2518-G
\$329
Suggested Retail

MIRAGE RUGGED!



The B-2518-G is ideal for your 20 to 60 Watt 2 Meter mobile or base station.

You'll talk further, longer, clearer on all modes -- FM, SSB, CW -- hear weak signals better than you've ever heard before!

You get a low noise 20 dB GaAsFET preamp with an excellent 0.6 dB noise figure for pulling out weak signals.

Mirage amps has legendary ruggedness. We know one that's been in use since 1979!

Your B-2518-G is fully protected with features found only in expensive commercial amplifiers.

High SWR or excessive input power can damage your amplifier. Protection circuits automatically bypass your amplifier to prevent damage and an LED lights to warn you.

Your expensive power transistors are protected from overheating by MIRAGE's exclusive Therm-O-Guard™. It automatically shuts down and bypasses your amplifier if needed.

The B-2518-G knows when you're transmitting and kicks in 160 Watts of power. Adjustable time delay gives you smooth transmit/receive switching. Remote external keying. You can remotely control

your B-2518-G and place it out of the way. An RC-2, \$45. Remote Control turns Power on/off, Preamp On/Off and select SSB/FM.

Extra heavy duty custom heatsink spans the entire length of cabinet.

Draws 17-22A from 13.8 VDC. Compact 12x3x5.5 inches.

More 160 Watt, 2 Meter Amps

B-5018-G, \$329. Same as B-2518-G, but for 10 to 50 Watt mobile or base stations. Gives you 160 Watts out for 50 W in.

B-1018-G, \$409. MIRAGE's most popular dual purpose HT or mobile/base 2 Meter amp gives you 160 Watts out for 10 Watts in. For 0.2 to 15 Watt rigs. Use RC-1, \$45, remote control.

Remote Control Head for Amps



RC-1/RC-2, \$45, remote controls most MIRAGE amps. Power On/Off, preamp On/Off, switch for SSB/FM. 18 foot cable (longer available with special order). Tiny 1 3/4 x 3 3/4 x 2 1/2 in. 5018/2518 use RC-2. Others, use RC-1. Call Mirage for positive compatibility.

Power Curve -- typical output power in Watts

	40	60	140	150	160	160	--	--	--	--
B-1018-G	40	60	140	150	160	160	--	--	--	--
B-2518-G	--	0.5	30	56	91	111	135	153	160	160+
B-5018-G	--	--	--	52	99	119	125	130	135	145
Watts In	0.25	0.5	3	5	8	10	15	20	25	35

Mirage 150 Watts 6 Meter Amplifier

FCC Type Accepted!

A-1015-G
\$389
Suggested Retail



The A-1015-G is the world's most popular all mode FM/SSB/CW 6 Meter amp! Bust through 6 Meters with 150 Watts of brute power and work exotic DX! Power Curve chart shows typical output power.

Power Curve -- typical A-1015-G output power in Watts										
Watts Out	6	22	42	63	84	98	122	142	150	
Watts In	.25	1	2	3	4	5	7	9	10	

The A-1015-G is ideal for your 1-15 Watt mobile or base station rig.

A built-in low noise GaAsFET receive preamp gives you 20 dB gain -- lets you dig out weak signals and score exotic DX on sporadic E!

You'll talk further, longer and clearer on all modes--FM, SSB, CW.

Hear weak signals better than you've ever heard before!

Extra heavy-duty heatsink spans entire length of cabinet. Draws 18-22 amps at 13.8 VDC. 5 lbs, 12Dx3Hx5 1/2 inches.

2-Meter 300 Watt Amplifiers

Mirage's B-5030-G gives you 300 Watts of brute power for 50 Watts input on all modes - FM, SSB, or CW! It's ideal for 20 to 60 Watt 2-Meter mobile or base rigs. Hear weak signals -- low noise GaAsFET preamp gives you excellent 0.6 dB noise figure. Select 15 or 20 dB gain. Heavy-duty heatsink spans entire length of cabinet -- prevents overheating. Power transistors are protected by Mirage's Therm-O-Guard™. Fully protected from high SWR and excessive input power. Has warning LED, smooth adjustable transmit/receive switching with remote external keying. Draws 48A@ 13.8 VDC. 12x12x5 in. RC-1, Remote Control Head, \$45.00.

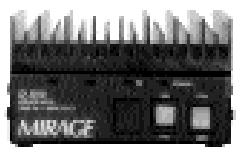


B-5030-G
\$739
Suggested Retail

Power Curve -- typical output power in Watts

	\$739	--	--	55	150	220	300
B-5030-G	\$739	--	--	55	150	220	300
B-2530-G	\$759	30	95	140	250	300	--
B-1030-G	\$739	80	225	270	300	--	--
Watts In	Price	1	3	5	10	25	50

223-225 MHz Amplifiers



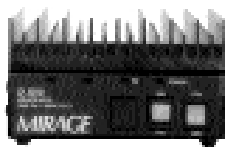
Choose from 10 different models -- 20 to 220 Watts out for 2 to 50 Watts in, \$129 to \$655. Extra heavy duty heatsink spans the entire length of cabinet.

Protection circuits automatically bypass your amplifier to prevent damage and an LED lights to warn you. Your expensive power transistors are protected from overheating by Mirage's exclusive Therm-O-Guard™. It automatically shuts down and bypasses your amplifier if needed. All Mirage C-Series Amps have a 20 dB GaAsFET preamp.

MIRAGE C-Series Specifications

Model#	Price	Input	Output	Current
C-22-G	\$169.00	.1-5 W	3-36 W	5 amps
C-211-G	\$369.00	.3-5 W	50-126 W	25 amps
C-106-G	\$269.00	.3-15 W	3-60 W	12 amps
C-1012-G	\$369.00	.3-15 W	6-120 W	20 amps
C-2512-G	\$345.00	.3-40 W	5-120 W	18 amps
C-5012-G	\$365.00	.35-55 W	3-120 W	18 amps
C-1022-G	\$759.00	.25-10 W	40-220 W	48 amps
C-2522-G	\$759.00	.25-30 W	1.5-220 W	48 amps
C-5022-G	\$739.00	.35-55 W	5-220 W	48 amps

420-450 MHz Amplifiers



All UHF models feature all modes: FM, SSB, CW, adjustable delay for SSB and remote control outlet. They also have a heavy duty heatsink that spans

entire length of cabinet, 50 Ohm impedance input and output, 13.8 VDC voltage. **D-3010-N** -- 100 W out/30 in. For 5 to 45 Watt mobile/base. **D-1010-N** -- 100 W out/10 in. For handhelds or mobile/base. **D-26-N** -- 60 W out/2 in. for hts.

Amateur TV Amps

Industry standard ATV amps available -- **D-1010-ATVN**, \$414, 82 Watts PEP out / 10 in. **D-100-ATVN**, \$414, 82 Watts PEP out/2 Watts in.

MIRAGE D-Series Specifications

Model#	Price	Input	Output	Current
D-15-N	\$189.00	.25-2 W	3-18 W	3 amps
D-26-N	\$289.00	.4-5 W	50-126 W	12 amps
D-100ATVN	\$419.00	0.5-5 W	15-52 W	20 amps
D-1010-N	\$395.00	.30-15 W	5-110 W	20 amps
D-1010ATVN	\$439.00	1-15 W	5-100 W	20 amps
D-3010-N	\$389.00	5-45 W	7-100 W	20 amps

Commercial Grade Amplifiers

PAC-30-130-B
\$299
Suggested Retail



Commercial Amplifiers are available for 150-174, 450-470 MHz and VHF marine bands, 70-130 Watts out. Most feature Over-temperature sensing that bypasses amplifier when safe operating temperatures are exceeded; heavy duty heatsinks finned on 3 sides; and wide input power range. These amps were designed for two-way radio signal commercial mobile or fixed location use. All commercial amps are FCC type accepted.

MIRAGE Commercial Amp Specifications

Model#	Price	Input	Output	Preamp	Frequency
B-34GC	\$159	.5-3 W	10-30 W	Yes	150-162
PAC-1070-B	\$299	10-30 W	5-70 W	No	150-174
PAC-1510C	\$429	5-25 W	5-100 W	No	450-475
PAC-30-130B	\$329	10-30 W	1-100 W	No	150-174
M-120-G	\$199	.1-3 W	10-25 W	Yes	156-158.5

MIRAGE 2 Meter/440 MHz Amps for HTs

35 Watts on 2-Meters



B-34-G
\$89⁹⁵

Suggested Retail

First-class strip-line techniques and

Add this MIRAGE amp to your 2 Meter handheld and get 35 Watts output . . . talk further, longer, clearer . . . incredibly low \$89⁹⁵!

Talk further . . . reach distant repeaters. Log onto far away packet bulletin boards. It's the best HT amplifier money can buy! Here's why:

modular construction gives superb RF performance and unsurpassed reliability.

Custom wrap around heatsink provides excellent heat distribution -- runs cool for extra long life.

Reverse polarity protection can save your amp and your pride if you connect power backward.

Automatic RF sense transmit/receive switch makes operation super easy.

Low input SWR keeps your handheld safe from overheating.

Individual pushbutton switches lets you select FM/SSB operation, receive pre-

amp on/off and power on/off.

LED indicators show On-Air, receive preamp on and power on.

Has super compact size, 5¹/₄x1³/₄x4³/₄ inches. Free mobile mounting bracket and hardware. Superb, full one year warranty.

B-34, \$69.95. Similar to B-34-G but FM only, less preamp, mobile bracket. Measures just 3¹/₈x1³/₄x4¹/₄ inches.

Power Curve -- typical B-34-G/B-34 power in Watts

Watts out	8	12	18	30	33	35
Watts in	.25	0.5	1	2	3	4

100 Watts on 2 Meters

Boost your 2 Meter handheld to 100 Watts! This ultra-compact all mode B-310-G amplifier is perfect for all handhelds up to 8 Watts. **Get 100 Watts out with just 4 Watts in!**



B-310-G
\$199

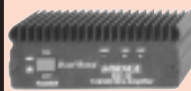
Suggested Retail

Works on all modes: FM, SSB, CW.

Superb features include: 15 dB low noise GaAsFET preamp, reverse polarity protection, SWR protection, overdrive protection, automatic transmit/receive switch. Includes free mobile bracket and handheld BNC to B-310-G patch cable.

Ultra compact size makes it great for base and mobile operation. 4³/₄x1³/₄x7³/₄ inches. Weighs 2¹/₂ pounds.

MIRAGE SUPER DUAL BAND AMPLIFIERS



BD-35
\$159⁹⁵

Suggested Retail

Add this **MIRAGE BD-35** dual band amp and boost your handheld to a much more powerful mobile or base -- Get 45 Watts on 2 Meters or 35 Watts on 440 MHz! Get 35 Watts out with just 4 Watts in!

MIRAGE's exclusive *FullDuplex Amp*TM lets you talk on a band and listen on another band at the same time -- just like a phone conversation (requires compatible HT).

Features auto band selection, reverse polarity protection, on-air leds, single connector for dual band radios/antennas, free mobile bracket and more!

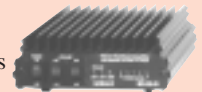
Works with all HTs to 7 Watts. Super compact 5Wx1¹/₂Hx5D inches.

The **MIRAGE B-38-G**

gives you 70 Watts of brutal power on 2 Meters and 60 Watts on 440 MHz! Use your low power handheld or mobile. It's two amplifiers in one. An auto switch select determines use of VHF/UHF. Input is 250 mW to 5 W.

MIRAGE's LED PowerGraphTM indicates output power and comes completely alive with 70/60 Watts. Low noise 15 dB GaAsFET preamp lets you dig out really weak stations. you get separate 144/440 MHz preamp LEDs. 6¹/₂Wx2¹/₂Hx9D in.

Hi-SWR. Over temp and reverse polarity protection. Free BNC to PL-259 patch. Draws just 13.8 VDC at 15 amps.



B-38-G
\$299⁹⁵

Suggested Retail

200 Watts on 2 Meters

Add this amp to your 2 Meter HT or mobile radio and get 200 Watts output. Talk further, longer, clearer . . .



B-320-G
\$449⁹⁵

Suggested Retail

Has 15 dB GaAsFET preamp, works all modes FM/SSB/CW, high SWR protection, mobile mounting bracket, input level switch for selecting proper input power from handheld or mobile radio.

Low power input for handheld radios, 250 mW to 10 Watts. High power input for mobile radios, 10 Watts to 50 Watts.

Custom wrap-around heatsink gives excellent heat dissipation as well as attractive appearance. 1 Year Mirage Warranty.

MIRAGE . . . Handheld Docking Boosters

Slide your handheld into a MIRAGE Docking Booster and your handheld instantly becomes a powerful mobile or base station! Only MIRAGE gives you selectable HT voltages that let you use most handhelds old or new. Requires 13.8 VDC.

B-24-G, \$114.95. 2 Meter Docking Booster gives 50 Watts output with just .5 to 8 Watts input. 18 dB GaAsFET preamp with on/off switch. Preamp on, On-Air and Transmit LEDs. Small 3¹/₄x3³/₄x4¹/₄ in.

BD-25, \$164.95. Dual Band Docking Booster gives 45 Watts on 2 Meters and 35 Watts on 440 MHz with .5 to 8 Watts input. MIRAGE *FullDuplex Amp*TM lets you talk on one band and listen on the other band at the same time. Requires compatible HT. Automatic band selection, Frequency Band and Power On LEDs. Reverse Polarity protection, on/off switch. 3¹/₄x3³/₄x5¹/₄ inches. Choose an adapter to fit your HT. See Adapter Chart, right, \$9.95 each.



B-24-G
\$114⁹⁵

Suggested Retail



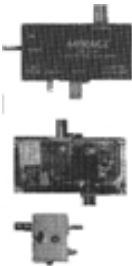
BD-25
\$164⁹⁵

Suggested Retail

Choose an adapter to fit your handheld

Adapter#	Manufacturer/Handheld Type
MI-1	ICOM 2N/02N/3N/12N/2G/3G/12G/23/2AT
MI-2	IC-2S/2SAI/2SR/3S/3SAI/3SR/24/W2/X2
MI-3	ICOM W21/X21/W21T/X21T, etc.
MI-4	ICOM T7/T22/T42/W32, etc.
MY-1	YAESU FT-23/204/73/704/104/728, etc.
MY-2	YAESU FT-24/74/205/705/305/805/729, etc.
MY-3	YAESU FT-11/S1, etc.
MY-4	YAESU FT-50/40/10, etc.
MK-1	TH-25/25G/45/45G/55/75/77, etc.
MK-2	TH-22A/22AT/42A/42AT/59/79/79E, etc.
MS-1	STANDARD C150/450/520/550/620, etc.

MIRAGE Low Noise GaAsFET preamps



High gain ultra low noise GaAsFET preamps for receiving weak signals. Selectable gain prevents receiver intermod. 15 to 22 dB gain. Less than 0.8 dB noise figure.

Automatic RF switching up to 160 Watts. Choose In-shack or Mast-Mount models (includes remote control) to reduce loss. Rugged die-cast enclosure.

Frequency (MHz)	In Shack \$139	Mast Mount \$195
28-30	KP-1/10M	KP-2/10M
50-54	KP-1/6M	KP-2/6M
144-148	KP-1/2M	KP-2/2M
220-225	KP-1/220	KP-2/220
430-450	KP-1/440	KP-2/440

MIRAGE Repeater Amplifiers



11 models to choose from -- continuous duty all mode FM/SSB/CW repeater amplifiers for 6, 2, 220 MHz, 450 MHz, and ATV service.

MIRAGE Repeater Amp Specifications

Model#	Price	Input	Max Out	MHz
A-1015-R	\$579.00	.25-5 W	98 W	50-52
B-1018-R	\$629.00	.25-3 W	130 W	145-148
B-2516-R	\$579.00	.5-10 W	111 W	145-148
C-211-R	\$659.00	.25-.5 W	80 W	223-225
C-1012-R	\$659.00	.25-.6 W	96 W	223-225
C-2512-R	\$625.00	.05-15 W	90 W	223-225
D-1010-NR	\$689.00	.25-4 W	80 W	440-450
D-3010-NR	\$659.00	1-15 W	75 W	440-450
D-100-ATVNR	\$689.00	.25-1 W	52 W	420-450
D-100-ATVNR	\$689.00	.25-4 W	80 W	420-450

Accurate SWR/Wattmeters



Read SWR directly and forward, Reverse, Peak/Average power. Remote coupler. 1.8-30, 50-200, 420-450, 1260-1300 MHz models.

One year MIRAGE Warranty

MODEL	PRICE	FREQ	SWR sens	PWR
MP-1	\$235.00	1.8-30 MHz	1-2 Watts	2000 W
MP-2	\$235.00	50-200MHz	1-2 Watts	1500W
MP-3	\$265.00	420-450MHz	5 Watts	150 W

Nearest Dealer/Free Catalog: 800-647-1800

Technical: 662-323-8287 Fax: 662-323-6551

MIRAGE COMMUNICATIONS

300 Industrial Park Road, Starkville, MS 39759

Prices and specifications subject to change. ©2002 Mirage Communications.

VECTRONICS® kits

High-performance electronic kits . . . fun to build and use!



Vectronics Comprehensive Soldering Course Kit is the best home study soldering course available! Includes theory, quizzes, PC board, tools, safety, techniques and materials. Get PRO soldering skills and fun LED project. Gets you ready for "through-hole" PC board assembly and repair. Get skills to tackle soldering jobs and projects on the repair bench. *Simple skill level.* Order **VEC-1500K, \$29.95.**



Aircraft Receiver Kit tunes entire voice aircraft band 118-136 MHz. Picks up air traffic 100 miles away. Track progress of incoming/outgoing traffic in your area, gain advanced weather information, and discover how the National Air Traffic System really works. Great way to learn about aviation. Use 9V battery. Drives external speaker/phones. $1\frac{1}{4} \times 4 \times 3\frac{1}{2}$ in. *Intermediate skill level.* Order **VEC-131K, \$29.95.**



20/30/40/80 Meter Receiver Kits give high performance! Covers entire band or tailor to cover desired portion. Copy CW/SSB/AM. NE602/612 mixer-oscillator, LM386 high gain audio amplifier. $1\frac{1}{4} \times 4 \times 5\frac{1}{4}$ in. *Moderate skill level.* Order **VEC-1120K** (20 Meters), **VEC-1130K** (30 Meters), **VEC-1140K** (40 Meters), **VEC-1180K** (80 Meters), **\$29.95 ea.**



20/30/40/80 Meter QRP CW transmitter Kits have variable crystal oscillator tuning, front panel switch selects 1 of 2 crystals. 1 crystal included. Transmit and Receive switch. Connect receiver. $1\frac{1}{4} \times 4 \times 3\frac{1}{2}$ in. *Intermediate skill level.* Order **VEC-1220K** (20 Meters), **VEC-1230K** (30 Meters), **VEC-1240K** (40 Meters), **VEC-1280K** (80 Meters), **\$29.95 ea.**



Tunable SSB/CW Audio Filter Kit has sharp four pole peak and notch filters. Zero in with frequency control & adjust bandwidth for best response. Tune frequency from 300-3000 Hz. Notch is an outstanding 50 dB. 1 Watt amplifier. Speaker/Phone jacks. 12 VDC at 300 mA. $1\frac{1}{4} \times 4 \times 5\frac{1}{4}$ in. *Intermediate skill level.* Order **VEC-841K, \$34.95.**



Super CW filter/amplifier Kit has powerful 1 watt audio amplifier to drive speaker. 8 poles active IC filtering uses cascaded low-Q stages. 3 bandwidths: 80, 110, 180 Hz. Center frequency: 750 Hz. Up to 15 dB. Use 9-18VDC, 300 mA max. $1\frac{1}{4} \times 4 \times 3\frac{1}{2}$ in. *Simple skill level.* Order **VEC-821K, \$29.95.**



Super SSB Audio Filter Kit improves readability with 8 poles, optimizes audio bandwidth, reduces SSB splatter, low, hi-pitched interference, hiss, static crashes, background noise. Use 9V battery. $1\frac{1}{4} \times 4 \times 3\frac{1}{2}$ in. *Simple skill level.* Order **VEC-830K, \$19.95.**



144/220/440 MHz Low-Noise Preamp Kits soup up your antenna system. Helps pull in weak signals. Works wonders for scanner or ham-band receiver. Gives great low-noise performance and immunity from damaging electrostatic discharge. $1 \times 1\frac{1}{2}$ in. *Simple skill level.* Order **VEC-1402K** (144 MHz), **VEC-1422K** (220 MHz), **VEC-1444K** (440 MHz), **\$17.95.**



High-performance 2 Meter Preamp Kit pulls weak signals out of noise. Solves three reception problems -- boosts signals using a 1-dB noise figure microwave transistor, provides razor-sharp bandpass filtering, eliminates unwanted electrical noises with built-in balun. Uses 9-14 volts DC. Tiny $1\frac{1}{2} \times 3 \times 1$ in. fits in any size box. *Intermediate skill level.* Order **VEC-1402DK, \$59.95.**



2/6/10 Meter FM Receiver Kits let you tune in the world of ham radio. Each cover the entire FM sub-band and runs off your 9V battery. Plug in speaker or headphones for clear reception. $1\frac{1}{4} \times 4 \times 3\frac{1}{2}$ in. *Intermediate skill level.* Order **VEC-1002K** (2 Meters), **VEC-1006K** (6Meters), **VEC-1010K** (10 Meters), **\$34.95 each.**



Full featured CW Keyer Kit is the best electronic keyer bargain in radio! Self-completing dot-dashes and dot-dash memory forgive timing errors. Front panel volume/speed (3-65 wpm) controls. Weight adjusts 25-75%. Sidetone (300 -1000Hz) has LM386 audio amp for external speaker/phones. Iambic A or B, fully automatic or semi-auto "bug" mode. RF proof. Sleep Mode battery saver. Use 9V battery. $1\frac{1}{4} \times 4 \times 3\frac{1}{2}$ in. *Simple skill level.* Order **VEC-201K, \$24.95.**



CW Memory Keyer Kit stores 512 characters in four 128 character non-volatile EEPROM message memories. Carry on entire QSOs by just pressing memory message buttons. True sinewave sidetone with soft rise and fall time eliminates harsh keyclicks. Has all features of VEC-201K CW Keyer Kit. $1\frac{1}{4} \times 6\frac{1}{4} \times 5\frac{1}{4}$ in. *Simple skill level.* Order **VEC-221K, \$69.95.**



2 Meter Monitor Kit receives 144-148 MHz. Low noise, high gain RF preamp gives you excellent 0.1 uV sensitivity. Air variable tuning capacitor has 8:1 reduction. Dual conversion superhet provides selectivity and stability. Automatically eliminates squelch tails. Built-in speaker, squelch, tone, volume controls. $19\frac{1}{4}$ " antenna. 9V battery. $2 \times 4\frac{1}{4} \times 4$ ". *Intermediate skill level.* Order **VEC-104K, \$79.95.**



5 Watt 2 Meter FM transmitter Kit lets you transmit voice and data -- AFSK data (up to 1200 baud) and FSK data (to 9600 baud). Jumper select reactance or direct FM modulators. Reliable Motorola NBFM Xmitter IC/PA transistor. Crystal controlled (x8 frequency multiplication). -60 dBc spurs, harmonics. 12-14 VDC, 1.5A. 5-pin DIN mic jack. $1\frac{1}{4} \times 4 \times 5\frac{1}{4}$ ". *Difficult skill level.* Order **VEC-1202K, \$99.95.**



Ni-Cad/Ni-MH Battery Charger Kit safely quick charges expensive batteries -- no overcharging -- many in less than an hour. HTs, cell phones, camcorders, lap top computers. Handles 1-12 cells. Charging status LEDs. Discharge before charge function reconditions batteries. Also removes memory effect. Runs on 12-15 VDC. $1\frac{1}{4} \times 4 \times 5\frac{1}{4}$ inches. *Moderate skill level.* Order **VEC-412K, \$49.95.**



Shortwave Converter Kit converts AM or AM/FM radios to shortwave receivers at a push of a button. Choose 2 1 MHz bands between 3 and 22 MHz. Popular 13,16,19, 25, 31, 41, 49 and 60 Meters international bands. On/off bypass, NE-602/612 mixer-oscillator IC and tuned input circuit. 9 V battery. $1\frac{1}{4} \times 4 \times 3\frac{1}{2}$ ". *Intermediate skill level.* Order **VEC-101K, \$27.95.**



Super CW Audio Filter Kit gives you three bandwidths: 80, 110, 180 Hz. Eight poles gives super steep skirts with no ringing. Pull CW QSOs out of terrible QRM! Plugs into phone jack to drive phones. QRM down 60 dB one octave from center frequency (750 Hz) for 80 Hz bandwidth. Improves S/N ratio 15 dB. Use 9V battery. $1\frac{1}{4} \times 4 \times 3\frac{1}{2}$ in. *Simple skill level.* Order **VEC-820K, \$19.95.**



AM Radio Transmitter Kit lets you set up your own AM station and broadcast crystal clear programming from your studio with you as the disc jockey or talk show host. Use CD player, tape deck, etc. Choose clear frequency from 530-1750 KHz. Standard line level or microphone input. Easy connection. Audio level adjustment. $1\frac{1}{4} \times 4 \times 3\frac{1}{2}$ inches. *Simple skill level.* Order **VEC-1290K, \$29.95.**



49 MHz Wireless Band Monitor Receiver kit lets you explore weak wireless signals from miles around. Baby monitors, cordless phones, walkie-talkies, wireless intercoms and more! Electronic tuning covers just the 49 MHz band. *Intermediate skill level.* Order **VEC-1016K, \$34.95.**



Crystal radio set Kit lets you relive the experience of early radio pioneers. This baby really works! Wind your own inductor, wire up the earliest radio circuit without soldering a thing and listen to the magic of radio that needs no power. Put up an antenna, connect a ground. Stations will come in amazingly loud and clear. $1\frac{1}{4} \times 5 \times 6\frac{1}{2}$ in. Includes antenna wire, sensitive earphone. *Simple skill level.* Order **VEC-121K, \$19.95.**



Shortwave Receiver Kit lets you listen to the world! Covers 75/80, 49, 40, 30, 31, 20, 25, 22, 19, 17, 16, 15 and 13 Meter bands. Explore AM, SSB, CW, WWV, RTTY and Packet signals. Vernier reduction drive, smooth regeneration control, RF stage. Includes all metal cabinet. 2 earphone jacks. Use 9V battery. $2\frac{1}{2} \times 7 \times 6$ in. *Intermediate skill level.* **VEC-102K, \$59.95.**



QRP Transceiver Kits for 80/40/30/20 Meters give you VFO frequency control, broadband transmitter circuitry, solid one Watt plus output, shaped keying, .3 uV sensitivity, direct conversion receiver. Includes crystal for popular QRP frequency. $1\frac{1}{4} \times 4 \times 5\frac{1}{4}$ ". *Intermediate skill level.* Order **VEC-1380K** (80 Meters), **VEC-1340K** (40 Meters), **VEC-1330K** (30 Meters), **VEC-1320K** (20 Meters), **\$59.95 each.**



Emergency and Business Band Receiver lets you gather news first hand -- tune in local fire, police, ambulance, public service, business, etc. Master 2-way radio lingo, operating procedures and police 10-codes as you ferret out the "real story" behind the news! Use 9V battery. *Intermediate skill level.* Order **VEC-1012K, \$34.95.**



Portable CD Amplifier Kit has 4 Watt per channel amplifier pumps out plenty of audio. Lets you plug in a portable CD player and a pair of 8 Ohm speakers. It'll fill your patio, backyard, or any room with your favorite music. Tone and volume controls. Use 12V battery or 12 VDC source. *Simple skill level.* Order **VEC-1604K, \$19.95.**



Vacuum-Tube Preamp Kit lets you enjoy the warm and gutsy vintage sound of a real life glow-in-the-dark vacuum tube preamp. The smooth sound of vacuum tubes comes from the tube's inherent non-linearity and high degree of even-harmonic distortion. Includes tube, 110 VAC power supply. *Moderate skill level.* Order **VEC-1680K, \$99.95.**



"BS" Meter (voice stress analyzer) Kit analyzes voice stress. Is the president telling the truth? An LED bargraph shows stress level when subject's voice pattern changes. Your subject can be live, radio, TV, etc. *Moderate skill level.* Order **VEC-8210K, \$39.95.**



Counter Surveillance Monitor Kit lets you search out and remove electronic bugs! Highly sensitive wideband receiver detector. Stop your wife from catching you in a bad position. The closer a bug is, the higher pitch of audio. Use 9 V battery. *Moderate skill level.* Order **VEC-8218K, \$39.95.**



Voice Activated Recorder Switch Kit can remotely and automatically record conversations, speeches and more. Don't waste tape by not recording silence. Plug into the remote jack of a recorder and it activates when it hears speech. Built-in microphone, on/off switch. Use 9V battery. *Simple skill level.* Order **VEC-483K, \$19.95.**



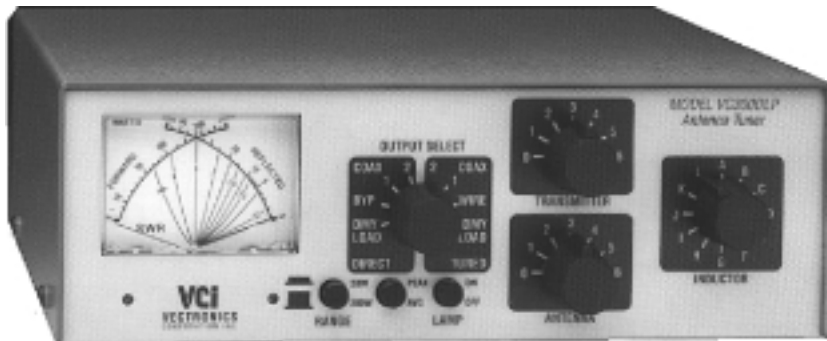
FM Stereo Transmitter Kit lets you connect your CD player, tape or other source and broadcast clear stereo programming on the FM band! Incredibly realistic grand movie theater sound! Use to assist hard-of-hearing. Frequency adjusts 88-108MHz. Use 9V battery or 5-15 VDC. *Moderate skill level.* Order **VEC-1292K, \$34.95.**

All metal cases for most kits, \$14.95.

<http://www.vectronics.com>

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THE VECTRONICS VC-300DLP . . . 300 WATT ANTENNA TUNER



The VECTRONICS VC-300DLP is the world's most versatile 300 Watt antenna tuner!

You'll get everything you've ever wanted . . . precise inductance control that rivals roller inductors . . . the ability to match any real antenna . . . full 1.8-30 MHz coverage . . . peak reading backlit Cross-Needle Meter . . . 8 position antenna switch . . . built-in 50 Ohm dummy load . . . finest components available and world class quality.

Precise Inductance Control

VECTRONICS' exclusive Multi48™ inductor gives you forty-eight inductance values -- you'll get precision tuning that rivals the most expensive roller inductors.

Tune any antenna 1.8-30 MHz

You can tune any real antenna from 1.8

to 30 MHz, including all MARS and WARC bands. Use verticals, dipoles, inverted vees, yagis, quads, long-wires, whips, G5RVs, etc.

Has 4:1 balun for balanced line antennas.

Handles up to 300 Watts SSB PEP, 200 Watts continuous (150 Watts on 1.8 MHz).

Peak Reading Cross-Needle Meter

The VC-300DLP backlit Cross-Needle Meter displays SWR, forward and reflected power simultaneously. Reads both peak and average power on 30/300 Watt scales. Meter lamp has front panel switch and uses 12 VDC or 110 VAC with AC-12 adaptor, \$12.95.

Versatile Antenna Switch

The VC-300DLP eight position antenna switch lets you select two coax fed antennas, random wire/balanced line or built-in dummy load for use through your tuner or direct to your transceiver. Bypass position

- Multi48™ Inductor
- Cross-Needle Meter
- 8 Position Antenna Switch
- Built-in Dummy Load
- 1.8 to 30 MHz Coverage

VC-300DLP
\$159⁹⁵

Ship Code B

bypasses your tuner but keeps your SWR Power meter in line.

Built-in Dummy Load

A built-in 50 Ohm dummy load makes tuning up your rig easy! Use it for testing and repairing your rig, setting power level, adjusting your mic gain and more.

World Class Quality

The finest components available and the highest quality construction gives you the best 300 Watt tuner that you can buy.

A chemically treated aluminum case with durable baked-on paint and scratch-proof multi-color Lexan front panel looks great for years of dependable service.

Try any product for 30 days

Call toll-free 800-363-2922 and order any product from VECTRONICS. Try it for 30 days. If you're not completely satisfied return it for a full refund, less shipping and handling -- no hassles. All VECTRONICS products come with a one year warranty.

2 kW Antenna Tuner

You can tune any real antenna from 1.8 to 30 MHz for absolute minimum SWR. The HFT-1500 is crafted



of the finest components available . . . two heavy duty 4.5 kV transmitting variable capacitors and a high current roller inductor with a precision 5-digit gear driven turns counter. Gives you arc-free operation up to 2 kW PEP SSB. Has backlit, peak-reading Cross-Needle SWR Power Meter, SSB*Analyzer Bargraph™, 6 position ceramic antenna switch, 4:1 Ruthroff balun for balanced line. Scratch proof Lexan front panel. 5.5x12.5x12 inches.

HFT-1500
\$459⁹⁵
Ship Code D

300 Watt Mobile3 Tuner

The VC-300M Mobile Antenna Tuner is compact, lightweight, easy-to-operate and is our most economical tuner. It's compatible with any mobile antenna and any mobile HF transceiver and is compact enough to fit the most compact car. It can also be used at home with dipoles, vees, verticals, beams or quads fed by coax. Backlit dual movement meter simultaneously monitors power and SWR. Covers 18 to 30 MHz. Handles 300 Watts SSB PEP, 200 Watts continuous, (150 Watts on 1.8 MHz). 7.25x8.75x3.6 inches. Weighs 3.4 pounds.



VC-300M
\$109⁹⁵
Ship Code A

VC-300D, \$199.95. Similar to VC-300DLP. Has 21 segment SSB bargraph.

Low Pass TVI Filter



LP-30, \$69.95.

Eliminates TVI by attenuating harmonics at the source. Plugs between transmitter and antenna or tuner. Features nine pole Chebyshev design. Insertion loss is only 0.25 dB at 30 MHz. 52 Ohm impedance. Handles 1500 Watts. LP-2500, \$139.95. Handles up to 2500 Watts key down. SO-239 connectors.

Deluxe bug-free CW Keyer



CK-200, \$79.95.

Speed, weight, tone, volume controls, tune, iambic A/B switch for 3 types of keying output, speed control 6-50 wpm, self-complete dots/dashes. Use 9V battery/110 VAC.

SWR/Power Meters

PM-30 \$79.95
PM-30UV \$89.95
Ship Code A Ship Code A



PM-30, \$79.95, for 1.8 to 60 MHz.

Displays forward and reflected power and SWR simultaneously on dual movement Cross-Needle Meter. True shielded directional coupler assures accuracy. Backlit meter displays peak or average power in 300/3000 Watt ranges. First-rate construction includes scratch-proof case/front panel. 5.3x5.75x3.5 inches. SO-239 connectors.

144/220/440 MHz, 30/300 Watt ranges.

PM-30UV, \$89.95, has SO-239 connectors. PM-30UVN, \$89.95, has N connectors. PM-30UVB, \$89.95, has BNC connectors.

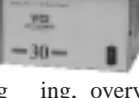
High Pass TVI Filter



HPF-2, \$29.95.

Installs between VCR and TV and cable TV or antenna lead-in cable. Eliminates or reduces interference caused by nearby HF transmitters. Unique common-mode rejection (RF current on shield of the coax cable) using toroid ferrite core. Uses "F" connectors. HPF-1, \$24.95. Low loss in TV passband 52 to 550 MHz.

DC Power Supplies



PS-50F, \$199.95.

35 Amps continuous. DC regulated, design features foldback current limiting, overvoltage protection, fixed voltage output, fan cooled, adjustable output, more. PS-30F, \$129.95. 25 Amps continuous.



1500 Watt dry Dummy Load

DL-650M, \$74.95. Handles 100 Watts continuous, 1500 Watts for 10 seconds to 650 MHz. Ceramic resistor. SWR < 1.3. SO-239.

DL-650MN, \$79.95 has N connector.

DL-300M, \$44.95. 300 Watt dry dummy load. DL-300MN, \$49.95 with N connector.

DL-2500, \$199.95. 2500 Watts dry dummy load is fan cooled. DC to 150 MHz.

DL-2500N, \$199.95 with N connector.

Tuned Active SWL Antenna

AT-100, \$79.95. Portable compact antenna is perfect for indoor use by itself or with an outside antenna. Tunes from 300 KHz to 30 MHz including VLF, AM broadcast, all shortwave and ham radio bands.

MFJ Sound Card-to-Rig Interface

Use sound card and rig for all digital modes!

NOW
includes power supply &
RS-232 cable!

Plug this new MFJ-1275 sound card interface between your transceiver and computer and enjoy operating all digital modes.

Everything you need is included -- software, audio cables and power supply.

MFJ-1275 provides fully automatic operation with audio and push-to-talk control. It matches sound card audio, eliminates ground loops and provides microphone override.

Works with all transceivers with 8-pin round or modular mic plugs, another model for four pin microphone connectors.

Operate PSK-31, packet, APRS, AMTOR, RTTY, SSTV, CW, high speed CW Meteor Scatter and many others. Also use as Contest Voice Keyer and CW Contest Memory Keyer.

Digital Modes or Normal Operation

Choose digital modes or normal transceiver/computer operation with the push of a switch.

Selecting the ON digital mode, all connections are made between your rig and computer for instant digital operation.

In the BYPASS normal mode, your transceiver and computer connections are restored for their normal operation.

Audio Isolation Transformers

Audio isolation transformers and relay eliminate ground loops, audio hum, noise and distortion.

RFI-Proof

Extensive RF suppression and line isolation eliminates RF feedback problems.

Automatic Microphone Override

You can override any digital mode and transmit microphone audio at any time by pressing mic PTT -- great for SSTV and Contest Voice Keyer operation.

More Impressive Features

Serial port -- lets computer control your radio to override and/or interrupt digital transmissions.

VOX Control -- lets you use automatic VOX control when not using computer serial port control.

Level Controls -- for transmitter drive and for receiver-to-sound card drive level. No need to adjust microphone gain or sound card level when you change modes.

Stereo or Mono Audio Input -- A front panel switch selects left, right, or both sound card audio output channels to accommodate various programs.

Off-the-air recording -- for replaying or for use with spectrum analyzer programs.

Monitor switch lets you hear receiver audio when you want it -- a MUST for SSTV and Voice Keyer operation.

Rugged Construction -- All aluminum cabinet and surface-mount construction gives you years of trouble-free service.

Use any Transceiver

Internal jumpers program microphone wiring for any brand or model radio -- no soldering required. Order MFJ-1275 for 8-pin round mic plug. Order MFJ-1275M for 8-pin

MFJ-1275
1275M/1275T
\$99⁹⁵

Ship Code A

modular mic (RJ45) plug.

NEW! Order MFJ-1275T, for 4-pin round microphone plug. For Ten-Tec and older 4-pin transceivers.

Everything you need is included

MFJ-1275/M includes RS-232 and audio cables, power supply and a CD with a collection of the most popular amateur radio shareware to operate PSK-31, RTTY, SSTV, PACKET, AMTOR, CW, HSCW Meteor Scatter, Contest Voice



Keying and other modes. Uses 12 VDC or 110 VAC. Order MFJ-1275X for 220 VAC. (ie: MFJ-1275MX, MFJ-1275TX).

New! The ULTIMATE Sound Card Interface

New features:

Direct Keying, Auxiliary Input, Headphone, and Footswitch jacks!



MFJ-1279
MFJ-1279M/1279T
\$129⁹⁵
Ship Code A

This is the **ULTIMATE** in sound card interfaces. It has all of the features of the MFJ-1275 plus . . .

- **Direct Keying Jack:** Allows direct keying of your radio in CW or FSK operation.
- **Auxiliary Input Jack:** Lets you connect an external device such as a tape player or audio from your camcorder or VCR through the MFJ-1279, so you have both peripherals in line. When MFJ-1279 is OFF, the external device is connected to the computer sound card. No more plugging and unplugging cables.
- **Headphone Jack:** Use your stereo headphones. External speaker is turned off when headphones are connected.
- **Footswitch:** A footswitch can be used for PTT when VOX is not used.

MFJ-1279 includes CD, RS-232 cable, AC

New! Digital Modes Sound Card Interface

MFJ-1273B
\$59⁹⁵

Ship Code A

MFJ-1273B,

\$59.95. This sound card interface is for those who operate mostly digital modes and do not need a microphone input. MFJ-1273B has sound card audio out, radio audio and RS-232. Everything is included: CD, RS-232 cable, audio cables and microphone cable. No external power is needed.

Order MFJ-1273B for 8 pin round mic plug, MFJ-1273BM for 8-pin modular (RJ-45) mic plug, and MFJ-1273BT for 4-pin round mic.

DSP Sound Card Programs

MFJ-1296, \$129.95. RadioCom4 features PSK31, SSTV, FAX/Sat FAX, RTTY, SITOR, DSP audio filters and radio control.

MFJ-1298, \$199.95. RadioCom5 -- all features of RadioCom4 plus DSP Audio Filter analyzer, Spectrum Analyzer, Dual Scope Display, Sound Recorder, Time and Frequency Management, Frequency Analyzer, 3D Scanner, Satellite tracking, Rig Control for over 80 radios, more!

MFJ RadioCom requires Pentium/Celeron processor with at least 200 MHz, 64 MB RAM with sound card. Use Win95/98/ME/2000/NT.

adaptor, & audio cables. Order MFJ-1279 for 8-pin round mic, MFJ-1279M for 8-pin mod, MFJ-1279T for 4-pin mic.

Add "X" suffix for 220VAC.



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MFJ Enterprises, Inc.

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