ALPHA DELTA

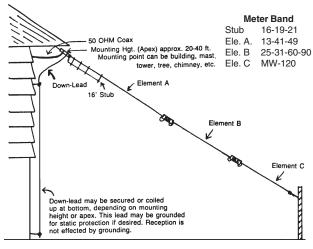
DX-SWL SLOPER

The **Alpha Delta DX-SWL** Sloper antenna offers exceptional features and performance! Hams have been using slopers for years because they offer some unique advantages not found in other antennas. Sloper (or slant) antennas require only one elevated support (25 feet or higher) while dipoles require two elevated supports. The DX-SWL Sloper offers coverage of the 90 and 120 meter bands, bands often "forgotten" by other antennas; plus medium wave too! The full-size DX-SWL covers:

Medium Wave .5-1.6 MHz.	120 Meters	90 Meters	60 Meters
	2.3-2.5 MHz.	3.2-3.5 MHz.	4.7-5.0 MHz.
49 Meters	41 Meters	31 Meters	25 Meters
5.9-6.2 MHz.	7.1-7.3 MHz.	9.5-9.9 MHz.	11.6-12 MHz.
21 Meters	19 Meters	16 Meters	13 Meters
13.6-13.8 MHz.	15.1-15.6 MHz.	17.5-17.9 MHz.	21.4-21.8 MHz.

The overall length of the slope wire is only 60 feet long. A single 50 ohm feed point (for PL259) at the apex of the antenna is provided for maximum DX reception. (User supplies their own 50 ohm coaxial lead-in). The DX-SWL is fully assembled for easy installation. It requires no adjustments or "trimming". This American made antenna has stainless steel hardware for long life and utilizes low-Q RF choke-resonators for efficient multiband frequency selection. For quality of construction, ease of erection and maximum performance, we think the Alpha-Delta DX-SWL is a great value. It is our best selling shortwave antenna.

Where less space is available, consider the **DX-SWL-S** shortened version - only 40 feet long covering the 90 through 13 meter bands.



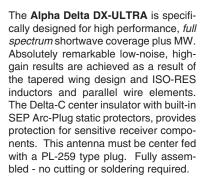
Alpha Delta DX-SWL (MW+120-13m) 60 ft. *Order #0799* \$129.95

Alpha Delta DX-SWL-S (90-13m) 40 ft.

Order #2533\$128.95

See page 46 for optional preassembled lead-in cables.

DX ULTRA



ALPHA DELTA



Alpha Delta DX-Ultra (0.5-30 MHz) 80 foot Order #3377 \$159.95

Support poles shown, not included. Please see page 46 for optional preassembled coax lead-in cables.

COAX-SEAL

SEALANT

Use Coax-Seal® to protect any outdoor connection or connector. Coax-Seal is su-



perior to electrical tape or vinyl sealant for moisture protection. The **104** consumer box features

one roll which is 60 inches long and $\frac{1}{2}$ inch wide. It will protect 9 connectors.

Coax-Seal 104 Order #1194 \$2.99

The **105** commercial box features four rolls, each of which is 12 feet long and ½ inch wide.

Coax-Seal 105 Order #4960 \$19.95

The 106 commercial box features four rolls, each of which is 12 feet long and 1 inch wide.

Coax-Seal 106 Order #4961 \$24.95

Princeton Sky Wire



The **Princeton SkyWire** is a 66 foot, off center fed SWL dipole with 22 feet on one side and 44 feet on the other. It provides excellent receive performance from the AM broadcast band to 30 MHz. While its rugged construction is well suited for the harshest environments, it is equally at home indoors in an attic. The wire may be bent, zig-zaged to accommodate limited space installations. Rope and coax cable are *not* included.

SkyWire

Order #5155

\$46.95

Sky Wave



The **Princeton SkyWave** is a 50 foot long, end-fed shortwave listener's antenna. It features dogbones insulators at both ends. It is fed with a 35 foot, 26 gauge plastic coated lead-in wire. It is designed to perform well on the AM band and shortwave from 3 to 30 MHz. Rope is not included.

SkyWave

Order #5148

\$34.95

HY POWER SWL-OCF



The Hy Power SWL-OCF "Off Center Fed" antenna covers 500 kHz to 60 MHz. It is made from 136 feet of 12 gauge insulated wire for strength and longevity. The feed network is placed 45 feet from one end of the antenna. The coaxial cable for this antenna (not supplied) is coupled through an inductive matching transformer which will place your coax at DC ground provided you make a good ground connection to the shield of your coaxial cable. For best performance you should mount this antenna at least 25 feet above ground. You can bend the antenna's legs to fit your property if needed. It can be sloped from a tree down to a fence post, hung flat between two high tie points or even as an inverted vee. This antenna requires the following items which are not included: rope, lightning arrestor and coaxial lead-in cable.

SWL-OCF

Order #1496

\$99.95



The **Bonito Boni-Whip** antenna receives from 20 kHz to 300 MHz with impressive performance, despite its diminutive size. Even on very low frequencies the Boni-Whip produces excellent reception results. It can be used beginning at 20 kHz and is a good choice for listeners who are interested in low frequencies. Bonito extended the range to 300 MHz for VHF enthusiasts. Because of its small size, the antenna can be erected inconspicuously. The antenna system is comprised of three elements (shown left to right):



- ✔ Coaxial Power Inserter. Has jacks for:
 - BNC Antenna (to Preamp Box)
 - BNC Receiver (to your receiver)
 - 12 VDC 200mA max (2.1/5.1 mm)
- ✔ Outdoor Preamp Box. Has jacks for:
 - BNC Input from Power Inserter
- Threaded stud for antenna element.
- ✓ Antenna Element (only 4 inches tall!)
- Threaded base

The user must supply the BNC to BNC 50 ohm coaxial cable to connect from the Coaxial Power Inserter to the receiver and the cable from the Power Inserter to the Outdoor Preamp box. The user must also supply the 12 VDC power cord which requires a 2.1/5.1 mm DC power plug (#0821 99¢). Requires 12-15 VDC 200 mA [+]. Made in Germany.

Order #2531

\$139.95

MAST BRKT

This bracket is made of V2A stainless steel, made in Germany and fits the Boni-Whip, GigActiv and the MegaLoop, MegActiv. Includes: mounting



plate, mini claw-clip (40mm), U-bolts M6 for 40mm (1.5 inch) mast, 2x M6 nut, 2x snap ring and 2x V2A screw.

MAST BRKT

Order #6505

\$19.95

COAX LEAD-IN CABLE

Most outdoor shortwave wire antennas have an SO-239 jack, as do most communications receivers. You will need a coax cable (RG-8X type most popular) with a PL-259 plug at each end. See page 46. If your receiver has another type of jack such as mini or BNC, please see *RF adapters* on page 45.



The NTi GA3005 is an extreme wideband active receive antenna that effectively covers 9 kHz to 3 GHz. The NTi CPI3000DP power inserter (shown at right) is included. This inserter accepts the DC power that will travel up the coax cable to power the active antenna element. This device features a BNC antenna jack for coax from the antenna element and a BNC jack output to the receiver. It features a USB-B jack for DC power input 5.5-15 VDC (max 120 mA). This antenna system is requires a USB-A to USB-B power cable if using from a PC USB power source. The user must provide: DC power source, BNC cable from receiver to power inserter and BNC cable from power inserter to the antenna. Made in Germany. NTi GA3005 Order #1343 \$399.95

MLFX

The NTi MLFX Mega-Loop Flex receives from 9 kHz to 180 MHz and has an integrated selectable FM band stop filter with three-step amplification for maximum of flexibility. This broadband magnetic loop antenna is especially suitable for places with difficult reception due to nearby electrical interference. You can put it up in the attic, at the window, on the balcony, in the carport fixed to the wall or perma-



nently attached to a mast. Based on the proven *MegaLoop* platform, an integrated low pass filter and a FM-band stop filter can be activated with a jumper. The FM band-stop filter can be activated to attenuate FM signals between 88 MHz and 108 MHz. The MegaLoop FX includes a loop of flexible PVC-coated, seawater-resistant (V4A) stainless steel wire suitable for indoor or outdoor use. It also comes with NTI CPI1000DP power inserter. This inserter accepts the 11-15 VDC power that will travel up the coax cable to power the antenna. The inserter features a BNC antenna jack for coax from the antenna element and a BNC jack output to the receiver. It features a jack for DC power input 11-15 VDC (max 120 mA).

NTI MLFX

Order #6837

\$399.95

MA305FT

The NTi MA305FT MegActiv covers 9 kHz to 300 MHz and features a switchable FM band-stop filter to minimize interference from the FM broadcast band. This inconspicuous. low noise active antenna has a radiating element of only 8.7 inches. The included NTi CPI1000DP Dual Power unit ac-



cepts 11-15 VDC through a 5.5/2.1mm jack or via a 5V USB B port. The power then travels up the coax cable to power the antenna. The inserter features a BNC antenna jack for coax from the antenna element and a BNC jack output to the receiver. This flexibility makes it well suited for portable use. Made in Germany.

NTi MA305FT Order #6086

\$219.95

Note on Bonito/NTi Active Antennas

The user must supply:

- DC power source (USB or 11-15 VDC).
- BNC cable from receiver to power inserter.
- BNC cable from power inserter to the antenna.

Please call if you have questions on these items.

MD300DX

The NTi MD300DX MegaDipol is a broadband, receive-only, active dipole covering 9 kHz to 300 MHz. The dipole reacts to the electrical component (E-Field) of the electromagnetic field and will deliver best results at locations with little or



no locally generated interference. In electrically quiet environments, it can really play to its strength in efficiently amplifying weak signals. In practical operations, a maximum signal-to-noise ratio of 110dB was achieved! The antenna may be installed in several orientations: horizontal, vertical, V-shaped or L-shaped. The system includes two flexible PVC-coated, seawater-resistant (V4A) stainless steel wires suitable for indoor or outdoor use. Two insulators are also supplied. It also comes with NTi CPI1000DP power inserter that has a green LED for power, and a red LED for short. This inserter accepts the 11-15 VDC power that will travel up the coax cable to power the antenna. The inserter features a BNC antenna jack for coax from the antenna element and a BNC jack output to the receiver. It features a jack for DC power input 11-15 VDC (max 120 mA) and a USB power input jack. Made in Germany.

\$399.95

LF ENGINEERING CO. H-900 HY POWER



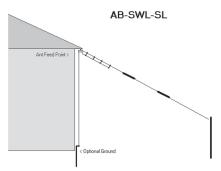
The **LF Engineering H-900** *Gain Probe* active receive antenna covers 10 kHz to 60 MHz. The active E-probe antenna consists of impedance matching electronics and amplifier with a maximum linear output of 16 dBm. The H-900 has high *E field* sensitivity for its compact size with the advantage of good BC and spurious intermodulation rejection. The antenna is compact, totally sealed and ESD suppression treated. The antenna is omni directional allowing for various installation configurations and for use as a portable antenna. The probe is waterproof and UV resistant. Requires 12 VDC at 70 mA. Output to the receiver is an RCA phono jack. An RCA to SO-239 adapter is available (#2118 \$1.99)

Your H-900 system consists of:

- ✓ Antenna probe element.
- ✓ 50 feet of RG-174 coax (attached to probe).
- ✓ AC adapter providing 12 VDC to 2.5mm plug.
- Adjustable mounting clamp.
- Directions.

This antenna is not for transmit. Made in U.S.A. **H-900** Order #4900 \$229.95

HY POWER AB-SWL-SL



The **Hy-Power AB-SWL-SL** shortwave sloper is a top quality receiving antenna for these shortwave broadcast bands: 160, 120, 90, 60, 49, 41, 31, 25, 19, 16, 13, and 11 meters plus the AM broadcast band. This antenna is 62 feet long and made with 12 gauge insulated wire using all stainless steel electrical hardware. The 12g wire adds strength to the antenna and the insulation gives the antenna UV protection for longevity. There is a 36 foot counterpoise drop wire. It features both an SO-239 jack to accept coaxial lead-in *or* dual spadelug terminals to accept twinlead. The AB-SWL-SL is fully assembled. Just add your lead-in cable and rope. The ground rod shown above is not included.

AB-SWL-SL

Order #5062

\$89.95

PRECISION ENDFEDZ

EF-SWL



The Par (LNR Precision) EF-SWL is an end-fed short wave antenna optimally designed for 1-30 MHz reception. The radiator is 45 feet of genuine #18 gauge black polyethylene coated Flex-Weave wire. This material is very strong yet can easily be coiled like a rope for portable work. The UV resistant matchbox houses a wideband 9:1 transformer wound on a binocular core. Unlike other transformers, external stainless studs on the matchbox allow the user to configure the primary and secondary grounds for best noise reduction at their particular location. Output is via a silver/ Teflon SO239 UHF connector. The radiator also attaches via a stainless stud allowing it to be removed, or replaced with a different length radiator for experimental purposes. The newly redesigned snag-proof insulators are very strong. The included manual shows typical radiation patterns for selected frequencies throughout the HF spectrum. For receive only.

Par EF-SWL (

Order #2205

\$74.99



CTC-50M

The Comet CTC-50M window/door feedthru jumper allows you to get the antenna coax into the radio room without drilling



holes in the wall or leaving a window/door open. Close the window and screen freely without damaging the coax! For use from 0-1300 MHz, with max power: HF 100W PEP, VHF: 60W FM, UHF: 40W FM, 900MHz-1.3GHz: 10W FM. Loss: DC-500MHz .5dB, 500-900MHz 1.3dB, 900-1300MHz 1.8dB. VSWR: <500MHz 1.3:1, >500MHz 1.5:1.50 Ohm. SO-239 connectors. 15.75".

CTC-50M

Order #2750

\$45.95

\$29.95

\$1.98

COMPACtenna SW

The COMPACtenna SW may be your answer if you are looking for a compact shortwave listening antenna in a size restricted environment. It meets the need for high performance in limited spaces. It utilizes a patented design which includes magnetic-field-enhancement. This allows the extremely short antenna to perform amazingly well for its height. Receive coverage includes 4750 to 30000 kHz. And unlike active (amplified) antennas. the passive SW is not overly susceptible to RFI interference. The SW antenna requires a 3/8"-24 mount (such as MFJ-335BT) not included. This antenna may be used

successfully with a very small ground plane. A simple 3/8x24 magnetic mount (such as MFJ-335BT) can be set on a 36 by 48 inch galvanized metal plate (available from Home Depot) or even a metal table! The result is a compact, yet effective, antenna for a variety of applications. This is a receive-only antenna.

SW

Order #4873

\$99.95



MFJ-16C

Single glazed antenna wire insulator, MFJ-16C Order #3250

\$1.39

ALPHA DELTA

DELTA-C



The **Alpha Delta Delta-C** antenna hardware kit consists of: 1 Delta-C Center Insulator, antenna connecting hardware, 1 SEP Arc-Plug[™] static protector (installed in Delta-C) and 2 Delta-CIN end insulators. This kit does *not* include the antenna wire or rope. The Delta-C components are molded of high impact UV and RF resistant materials called Deltalloy[™]. For proper operation of the SEP Arc-Plug it will be necessary to ground the coax shield at the entrance to the building. Your radio may already meet this requirement if your coax shield circuity is grounded to a ground bus, strap, or ground rod through the connector of your coax.

Delta-C Kit

Order #0297

The **Delta-CIN** end insulators are also sold individually.

Delta-CIN Orde

Order #2420

Universal Radio, Inc. 651-B Lakeview Plaza Blvd. Worthington, Ohio 43085



MFJ-1020C



The MFJ-1020C indoor active antenna offers good performance from a very compact package. This antenna system can be set directly on your desk and covers 300 kHz to 40 MHz in five bands. With built-in 20 inch (50 cm) telescopic antenna. An auxiliary antenna jack is provided. When it is used the MFJ-1020C functions as a preselector. Front controls include gain, band select, tune and On/Bypass. A red LED indicates power ON. The input jack and output jack are both SO-239 type (to accept PL259). Black metal case 6.4 x 2.5 x 3.3 inches. Requires a 9 volt battery or a 12 VDC power supply such as the MFJ-1312D.

MFJ-1020C MFJ-1312D Order #1413 Order #2433 \$109.95 \$19.95

Philmore 5031

The economical **Philmore 5031** FM dipole antenna is your answer to improved FM reception. It has plastic tabs for easy mount-

ing to the back of the set or to the wall. This antenna is designed for stereos, table radios and clock radios that have two screw terminals for FM antenna input.

5031

Order #3239

\$2.49



The **MFJ-335BT** is a medium duty, mobile magnetic antenna mount. It features a 3/8x24 stud mount. It has 17 feet of RG-58U coaxial cable which terminates to a PL-259 plug. The base weighs 2.5 pounds. This mount is perfect for holding the COMPACtenna SW on a galvanized metal plate or metal table.

MFJ-335BT

Order #2073

\$18.95

ANT SWL-23



The **Universal ANT SWL-23** an eternal wire antenna for shortwave portables such as the Eton Grundig Field. Terminates to an "F" plug.

ANT SWL-23 Order #3023

\$12.95

MFJ-1024



The MFJ-1024 is a sensitive outdoor active antenna covering 50 kHz to 30 MHz. The outdoor unit consists of a 54" telescopic whip & amplifier module (3 x 4 x 4 inches). It is connected to the indoor control unit (6 x 2 x 5 inches) by a supplied 50 foot RG-58 coaxial cable. The control unit features a 20 dB attenuator and a gain control to prevent receiver overload. A receiver switch selects between two receivers (A/B) and an antenna switch selects an auxiliary antenna. A red LED indicates power-on. The auxiliary input and output jacks are RCA phono type. Requires 12 VDC power supply such as the MFJ-1312D.

MFJ-1024 MFJ-1312D Order #1132 Order #2433 \$159.95 \$19.95



MFJ-1022

The compact MFJ-1022 wideband in-



door active antenna boasts coverage from 300 kHz to 200 MHz. It includes a detachable 20 inch antenna. The output jack is an SO-239. A red LED is on the front panel to remind you that the antenna is on. This device requires a 9 volt battery (not supplied) or a 9-18 VDC external power supply, such as the MFJ-1312D.

MFJ-1022 MFJ-1312D Order #3109 Order #2433 \$72.95 \$19.95

Lightning surge protectors are recommended for outdoor antennas. Please see page 39.

ApexRadio

The Apex Radio 303WA-2 is a quality passive receiving antenna providing coverage from 30 kHz to 30 MHz. The antenna is designed for areas where space is a problem or when an unobtrusive installation is essential. The small size and relatively lightweight design is ideal for installation in a confined space such as apartment balcony. Since the 303WA-2 is passive it provides superior low noise performance, free of cross and inter-modulations. The 303WA-2 has a "U" bolt metal fitting that will require a short stub mast (not supplied). The mast diameter can be 0.4 to 1.9 inches. The antenna has a total height of 6 feet. It comes with a preassembled 30 foot cable with a PL-259 plug to connect to the antenna base and a BNC plug for your radio.

Order #1026 \$129.95

is a anrom nna here n an eseladeal ned bal2 is low of ons. bolt re a eed). 0.4 has

SCREW-IN INSULATORS



There is no doubt stringing a wire antenna *outside* of the house is better than *inside*. But that is not always possible. Restrictions increasingly force us to string wires in attics, crawl spaces, under eaves or even in closets. These 3.5" screw-in insulators make the job easier. Sold in package of 4.

530 4-PAK Order #6834

\$4.95

Philmore



The **Philmore 15-9033** antenna wall mount is made of 12 gauge galvanized steel and accepts mast up to 1.25" (OD). Provides 3.75" clearance. Includes hardware shown. Made in the U.S.A. **15-9033** *Order #3162* \$19.95



The **Philmore 15-1228** chimney antenna mount is made of strong 12 gauge galvanized steel and includes two 18 foot galvanized straps. For masts up to 1.25" (OD). With hardware. Made in U.S.A. 15-1228 Order #6703 \$36.95

Shortwave Antennas



The C Crane TWIN Twin Coil Ferrite® AM antenna is ideal for improving AM radio reception. no matter what kind of radio you're using from portable radios without antenna connectors to home stereos with wire antenna terminals. The ferrite stick works on radios without any antenna connectors. The weather resistant antenna element is capable of picking up a clean signal some distance away from your radio and the antenna element has directional characteristics. By rotating the antenna element in a window or outside you can improve the signal strength. As with any AM Antenna, you will need to experiment to find the best location. Patch cords, antenna, tuner, ferrite stick, mounting hardware and AC Adapter (9 VDC) are included. Optional J50 50 foot extension (#6762 \$32.95) and JAC coupler (#1651 \$7.95) available. Runs on included AC adapter or 9V battery (not included). Tuner 3.25 x 4.3 x 1.4". Antenna element 8.6 x 2.5 x 1.5".

GRUNDIG AN200

Order #3175

Grundig AN200 is a passive. fully adjustable indoor antenna for the AM broadcast band. This inductive coupling makes it easy to use with most portables that have an AM Ferrite bar an-



tenna. Simply placing this antenna near the radio will improve reception! Just adjust the AN200 tuning knob for maximum gain. There is also an output jack for a wired connection to radios with AM antenna terminals. The supplied cable has a 3 conductor 3.5mm plug at one end and bare wires at the other end. [NOTE: This antenna does not pickup up shortwave frequencies].

AN200 Order #0912

·KAITO-ELECTRONICS T1

The Kaito T1 portable roll-up shortwave antenna will improve the reception of any portable worldband



ceiver. The antenna wire may be extended up to 23 feet. The T-1 terminates with a mini-plug (3.5 mm). If your receiver does not have a mini external antenna jack, an adapter plug is provided to clip the T1 to your radio's whip.

T-1 Order #2464 \$9.95



SA7000

The AOR SA7000 super wide range receiving antenna covers from 30 kHz to 2 GHz. This 6 foot (1.82 m) passive antenna has two vertical elements with built-in duplexer. It includes 50 feet of RG-58 coax lead-in to a BNC plug. The SA7000 is a strong choice for the AOR AR5001D, AR8200 or Order #3755 \$289.95



The AOR GT-1 may be connected between the receiver and the LA400 antenna. It will greatly reduce local noise by breaking the ground loop effect between antenna and the receiver, especially when the LA400-RCK separation cables are used. Please note that the supported frequency range for this device is 40 kHz to 30 MHz. The output to the receiver is BNC male. It may be directly connected to the receiver. The antenna input to the GT-1 is BNC female.

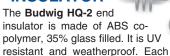
Order #4893 \$59.95

BUDWIC DIPOLE INSULATOR



Constructing a dipole is easy with the HQ-1 center insulator. Attach each "arm" of your dipole to this device and then screw your PL-259 into the center! You get easy assembly, the best connection, the strongest support and the most weatherproof fit. Budwig HQ-1 Order #1782

END INSULATOR



HQ-2 is approximately 2 inches long. The distance from center hole to center hole is 1.25 inches. Sold in a package of two (2). ½ oz each. Budwig HQ-2 Order #3412

ECONOMY INSULATOR



\$3.98

This economy wire insulator is 1.8 inches long black and has a wire snap on one side. 0.65 oz. C-150 Order #4818 \$.59

Buy the economy 10 pack and save! C-150 PAK10 Order #5392

END INSULATOR



These popular "dog-bone" end-insulators are made of a strong plastic with high dielectric qualities, for excellent strength and excellent weatherability. 3 inches 1 oz. Sold separately in 3 colors.

JTGDOG Gray JTBDOG Black Order #5268 Order #5267

\$.79 \$.79

JTWDOG White

Order #5269

\$.79

CENTER INSULATOR

SANGEAN **ANT-60**

with a wire that you can use to directly connect to

your radio's external jack (if it has one). The ring

Order #6238

is 9 inches in diameter. (Not for shortwave).

The Sangean ANT-60 portable roll-up shortwave antenna will improve the reception of any por-

AN200

\$29.95

TECSUN

The Tecsun AN200 is a

passive, fully adjustable

indoor antenna for the AM broadcast band

(520 to 1710 kHz. It is a

tunable antenna that

boosts your receiver's reception. In most

cases it works best by

simply being near your

radio, but it does come



\$24.95

AN200

table worldband receiver. The antenna wire may be extended up to 23 feet. The ANT-60 terminates to a mini-plug. If your receiver does not have a mini external antenna jack, an adapter plug is provided to clip the ANT-60 to your radio's whip. ANT-60 Order #3184 \$12.95

Constructing a dipole is easy with these center insulators. Attach each "arm" of your dipole to this device and then screw your PL-259 into the center! Power rating is 2000 watts RMS.

JTCE4B Black JTCE4G Gray

Order #2896 Order #4498

\$14.95 \$14.95

