



SHENGDA COMMUNICATION

144/430MHz Dual band Omni Antenna

SDBF1.2E

Electrical specifications

| | |
|-------------------------|---------------|
| Frequency Range(MHz) | 144/430 |
| Bandwidth(MHz) | 10 |
| Polarization | Vertical |
| Impedance | 50 Ohm |
| Gain (dBi) | 3.0/6.0 |
| Radiation | Omni |
| Horizontal Beam Width | 360° |
| Vertical Beam Width | 57° |
| VSWR | ≤1.5 |
| Maximum input power (W) | 100 |
| Lighting Protection | Direct Ground |

Mechanical specifications

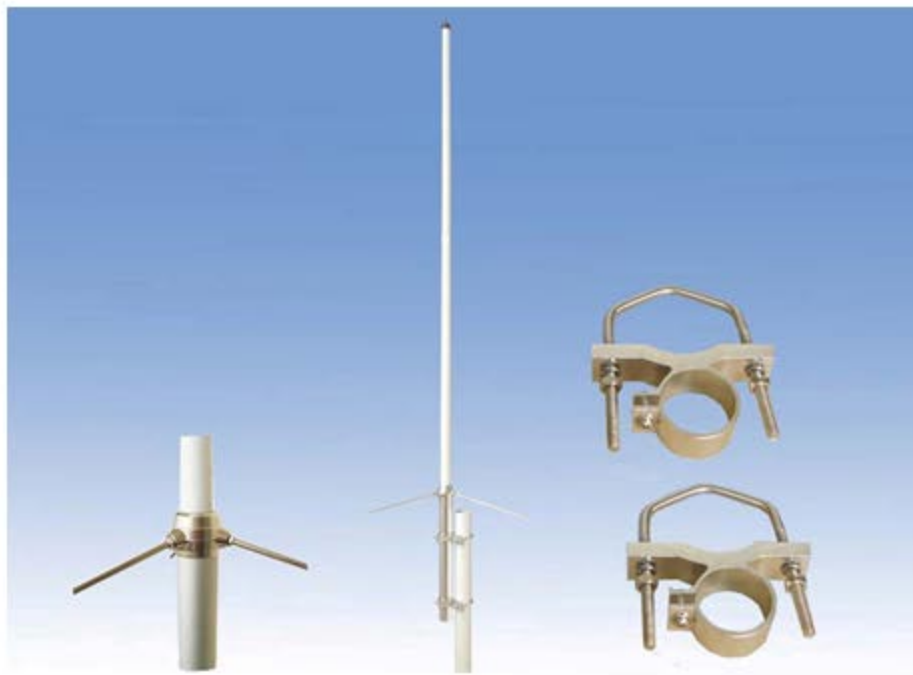
| | |
|-------------------------------|-------------------------|
| Connector | SO-239 or customization |
| Connector position | Bottom |
| Length | 1200 ± 20 mm |
| Packing weight (kg) | 1.2 |
| Radiating Material | Cu |
| Radome Material | Fiberglass |
| Color | White |
| Operating temperature (°C) | -50~70 |
| Material of Hardware-supplied | Metals |
| Mounting hardware (mm) | Ø31.5mm |



High Performance Omni Antenna

Model: X30

1. Frequency: 144/430 MHz
2. Gain (dBi) : 3.0/5.5 dBi
3. VSWR: less than 1.5
4. Polarization: Vertical
5. Maximum input power (W): 150
6. Lighting Protection Direct Ground
7. Type: 1/2wave(144MHz) 2x5/8wave(430MHz)
8. Length: 1.3m
10. Connector: MJ
11. Material : Copper, Fiberglass
12. Rated wind velocity: 60m/sec
13. Mast diameter accepted: $\text{Ø}30\sim\text{Ø}62$ mm



SHENGDA

'MERCURY MARK II' Mobile 6 to 80 meter HF Antenna

3.5-50MHz HF Antenna

Electrical specifications

Frequency Range(MHz) 3.5-50MHz

Impedance(ohm) 50

Gain (dBi) 3.5

Polarization Vertical

Radiation Omni

VSWR ≤ 1.5

Maximum input power (W) 150

Mechanical specifications

Connector UHF-Male(or according customer)

Height 1300mm

Material Copper, Stainless steel

Color Black

Weight 0.3Kg

Operating temperature (°C) -40~80

Includes triple Mobile Mag-moun



Nagoya Model No.:770R Mobile Dual Band Antenna

Frequency Range: 144MHz/430MHz

VSWR: less than 1.5

Gain: 3.5dBi(144MHz)/5.5dBi(430MHz)

Polarization: Vertical

Max. Power Input-watts: 50 W

Connector: UHF

Height: 980 mm

Weight:0.2KG



Nagoya Model No.:770S Dual Band Mobile Antenna

Frequency Range: 144MHz/430MHz

VSWR: less than 1.5

Gain: 2.5dBi(144MHz)/3.5dBi(430MHz)

Polarization: Vertical

Max. Power Input-watts: 50 W

Connector: UHF

Height: 500 mm

Weight:0.15KG





**Strong 15 cm Large Mobile Magnetic Mount with RG 58 and PL 259 connector.
For the Nagoya 770R and the Nagoya 770s Mobile antennas.**

**Mobile light weight dual Band VHF/UHF antenna whip
with own mag mount. 2 Meters /70 cms**





Dual Band Rubber Duck
Super Booster Antenna
for Hand-Held with SMA
fitting. For that extra
boosted signal.

SHENGDA

Model No: RH771

Frequency Range: 144/430MHz

Impedance: 50 Ohm

VSWR: Less than 1.5

Gain: 3.5 dBi

Polarization: Vertical

Radiation: Omni

Maximum Power Input-watts: 50 W

Connector: BNC/SMA-Male/SMA-Female/MX/TNC

Radome Material: TPEE

Radome Color: Black

Weight: 0.05KG



SDY145435 DUAL BAND VHF/UHF YAGI

| | |
|-----------------------------|----------------------------|
| DualBand: | 2m/70cm |
| Gain: | 2m 9.5dBi/70cm 11.15dBi |
| VSWR: | 1.5:1 or less |
| Max Power: | 100 watts FM |
| Boom Length: | 1130mm |
| Weight: | 1,2Kg |
| Connector: | N Female |
| Rated Wind Velocity: | 60 m/s |

80 Meter Rotatable Dipole



OVERVIEW

The WHF 80 is rated highly by users on eHam and Alpha Antenna endorses this compact antenna. We have built a DAIN (Dipole Arm Isolation Network) Heavy Duty Mount for base and portable/field operations.

The Heavy Duty DAIN (Dipole Arm with Isolation Network) Mount allows the antenna elements to virtually float in free space. Antennas can be mounted vertically or horizontally simply by repositioning the U-Bolts 90 degrees into pre-drilled holes. Tested with 320 KM/H winds. Constructed to the highest standards for the harshest conditions.

Rated for 250 Watts

Model: 80 Meter Rotatable Dipole

Shipping Weight: 5 KGS



Workman HF 80/75 Meter MobileAntenna



OVERVIEW

The Workman HF 80 is rated highly by users on eHam and Alpha Antenna endorses this antenna as the single highest performing antenna at a value second to none. This is an easily installed 75 and 80 Meter antenna that can be used mobile, We recommend the Alpha Mil-Spring and Alpha Jam Mount for mobile users.

Version for home or field dipole installations please see '80 Meter Rotatable Dipole.

Capable of handling 250 watts



Alpha B6160 ProMaster Sr

Base & Field Antenna System

6 to 160 Meters

No tuner required from 10 to 80 Meters

FULL USA LEGAL LIMIT ANTENNA

RATED 1500 WATTS PEP



eham reviews Average rating: 5/5

The B6160 Sr ProMaster Base antenna brings you multi-band base system performance into a small footprint of less than 4.572 x 4.572 Meters that is approximately tall. Wires are invisible in photos so we have supplied this artists rendition of the antenna's layout.

What it is - The design is a vertical antenna system around the concept of a fan dipole, where each band uses the vertical element and matching active element to achieve resonance for any specific frequency in use $\{f=106/(2p\sqrt{LC})\}$. From this design, real world tests enabled us to balance the reactance between capacitance and inductance $\{XL=XC\}$ with the Alpha Match on the B6160Sr ProMaster Base antenna. The resulting SWR on 10 through 80 meters requires no tuner and 6 & 160 meters are easily tuned by any antenna tuner. Again, the design technique for the antenna system mimics that of a fan dipole, where the center feed point above the Alpha Match has specially calculated wire lengths that match any specific band in use. By simultaneously coupling the appropriate active wire element (using the path of least resistance of Ohms Law) with the 5.4864 Meter vertical element, the highest possible Q is achieved $\{Q=(2p f L)/R\}$.

Details:

SWR Readings (Full SWR charts for all bands in user manual)

6 - 20 Meters with coax fed straight to the Alpha Match

6 Meters - 3.8:1

10 Meters - 2.3:1

12 Meters - 2.0:1

15 Meters - 1.7:1

17 Meters - 1.6:1

20 Meters - 1.12

30 - 160 meters with 8 inch wide coil of coax wrapped 8 times at antenna

30 Meters - 1.09:1

40 Meters - 1.9:1

80 Meters - 1.9:1

160 Meters - 4.8:1

User Manual

http://alphaantenna.com/pdf/Alpha_ProMaster_Antenna_User_Guide.pdf

5.8 meters tall, including custom mounting hardware

Counterpoise/radial serves as the tuning stub and is included

Frequency Coverage - 1.8 to 54 MHz

Power - 1.5KW PEP

Weight - 5.5 KG

19 feet tall, including custom mounting hardware

Counterpoise/radial serves as the tuning stub and is included

Frequency Coverage - 1.8 to 54 MHz

Power - 1.5KW PEP

Weight - 5.5 KG

α ANTENNA

Alpha Antenna



BASE ANTENNA Alpha "Sky Base" for Satellite & Line of Sight

Description:

This is the Alpha Sky Antenna made specifically for base and mobile rigs such as the Kenwood TM-D710A, any HT, or any other radio with a single VHF/UHF connection (with the optional mobile add on Kit for mobile operation). It is for 2 Meter XCV Repeater, Satellite, Line of Sight communications & 440 RCV for Satellite communications. The Alpha Sky Antenna system is an omni-directional Satellite, Repeater, Line of Sight antenna including the Sky Counterpoise Kit for base or field operations (Mobile Edition also is available). When used in any mode, the Alpha Sky Antenna system maintains an SWR of less than 1.9:1 on 2 Meters. While used specifically for satellite operations, the Alpha Sky Sphere and Sky Counterpoise Kit still maintain a SWR of less than 1.9:1 on 2 Meters; as this is the band that transmission to satellite occurs. SWR is a little higher on 440MHz and this antenna should not be used to transmit on this band. As you can see in the videos, this antenna does not require a preamp to work the satellites.

Included in this package are the:

- Alpha Sky Sphere
- Alpha Sky Counterpoise Kit
- Mounting Bracket

Not included but available as an accessory is the "Sky Mobile Mount Kit" that includes all components to make the Base Edition for the mobile edition of the Alpha Sky.

Antenna Analyzer Feature Tech AW07A

HF - VHF - 6 Meters and UHF

Description: The AW07A SWR analyzer is a compact battery powered RF impedance analyzer.

This unit combines six basic circuits: a variable oscillator, frequency counter, Independent Oscillator, 50 ohm RF bridge, a 8-bit A-D converter, and microcontroller.

This unit performs a wide variety of useful antenna and RF impedance measurements, including Capacitance and Inductance.

Specially designed for analyzing 50ohm antennas.

The AW07A also measure RF impedance's between a few ohms and several hundred ohms.

An easily accessed user controlled Z setting in the ADVANCED function menus allows changing SWR to any normalized impedance value between 10 and 500 ohms.

The operating frequency range of this unit extends from 1.5 to 71 MHz in six overlapping bands, and includes SWR measurements on 85-185MHz, 300-490 MHz.

Coax adaptors available



TG-007

Quansheng TG-007 2m/70cm handheld amateur Dual-Band transceiver

Quansheng is one of China's leading handheld transceiver manufacturers - their TG-UV2 dual bander was the first Chinese handheld of its kind to achieve CE certification back in 2008.

Following in the footsteps of the legendary TG-UV2 is the new TG-007, boasting build quality and performance that's a cut above most of its competitors at a price that won't break the bank.

The TG-007 is CE- and FCC-approved and ROHS compliant. Key features include a robust, stylish yellow & black housing, an excellent dual band antenna measuring approximately 195 mm in length, and a lithium-ion battery with a genuine 2500 mAh rating.

Our TG-007's are supplied with all the UK 2m & 70cm repeater frequencies & offsets pre-programmed into the memory along with the eight European PMR 446 frequencies (for monitoring purposes only as the radio is not approved for transmission in the PMR 446 band).

TG-007 KEY FEATURES:

Frequency Range: 136-174 & 400-480.9975 MHz

Dual-Band

Dual Frequency Display

Dual Watch Facility

Digital Signal Processing System

High/Low Output Power (5/1 Watts)

Numeric Keypad for direct frequency input

Switchable Voice Prompt

128 Easily Programmable Memory Channels

50 CTCSS and 105 DCS Programmable Tones

VOX Function

1750 Hz Burst Tone for Repeater Activation

FM Radio Function (65.0 MHz-108.0 MHz)

Removable 195 mm Dualband Antenna (SMA Female type)

Built In LED Flashlight

Large Two Line Alphanumeric LCD Display with tri-colour backlight (red/green/yellow)

Alarm Function

Low Battery Alert

Battery Saver Feature

Transmission Timeout Timer

Keypad Lock

Selectable Channel Steps: 2.5/5/6.25/10/12.5/25 kHz

DTMF Tone Generator

Windows PC programmable via optional USB/Serial Cable

TG-007 TECHNICAL SPECIFICATIONS:

General

Frequency Coverage (RX/TX) VHF 136-174 MHz/UHF 400-480.9975 MHz

Memory Channels 128

Antenna Connector SMA Male

Frequency Step (selectable) 2.5/5/6.25/10/12.5/25 kHz

Battery Voltage 7.2 V

Battery Capacity 2500 mAh

Frequency Stability (-20° to +50° C) 2.5 ppm

Operating Temperature -20° to +50° C

Antenna Impedance 50 ohms

Dimensions (W x H x D) 62.5 x 110 x 34 mm

Weight (with battery & antenna) 270 g

Transmitter

RF Power Output (maximum) 5 Watts

Modulation Type F3E

Spurious Radiation <7.5µW

Adjacent Channel Selectivity (W/N) ≤-65 dB/≤-60 dB

CTCSS/DCS Frequency Deviation(W/N) 0.7 kHz ±0.1 kHz/0.4 kHz ±0.1 kHz

Modulation Sensitivity 8 - 12 mV

Signal-to-Noise Ratio(W/N) ≥-45 dB/≥-40 dB

Receiver

Sensitivity (12 dB SINAD)

Spurious Response Rejection ≥65dB

Audio Output Power (8 ohms) 1 Watt

Audio Distortion <10%

Receive Current ≤380mA

Intermodulation (W/N) ≥65dB/≥60dB

Adjacent channel selectivity (W/N) ≥65dB/≥60dB

Package Contents

1 x Quansheng TG-K007 Dualband Transceiver

1 x 2500 mAh Lithium-ion Battery

1 x 195 mm Dualband (2m/70cm) Antenna

1 x Belt Clip

1 x English Instruction Manual on disc

1 x Drop-in Charger

1 x Charger PSU with UK 3-pin mains plug





A Model - DESKTOP

bhi Desktop 10 watt DSP Noise Cancellation base station speaker

Get Rid of that noise once and for all with these unrivaled products !!!!

bhi – Ltd DSP Noise Canceling Products

Quiet Please! - Hear the Voice, not the Noise!!

Get rid of QRM, QRN, white Noise, hiss, hash, Plasma TV noise etc with our bhi Noise Canceling Products Works all Amateur & Commercial bands! Now you can make HF SSB a pleasure to listen to. We have had rave reviews on these products, one ham reported that it makes HF SSB sound like FM. No need for built in filters

Product Information:

The DESKTOP will work with most radios, transceivers, receivers, and SDR radios, giving a new listening experience.

The DESKTOP speaker comprises a 4" bass driver and a 1" tweeter unit with an amplified bhi DSP noise cancelling unit capable of producing up to 10 Watts audio (peak), and the rotary controls on the side of the speaker make it very easy to use and set up to your own operating conditions.

The DESKTOP speaker can be connected to a stereo line level audio input signal, or to a standard speaker level audio signal from an extension speaker socket. There is a 3.5mm headphone socket below the controls that can accept either a 3.5mm mono or stereo plug.

The DESKTOP speaker is supplied with a quality 1.2 meter audio cable with a moulded 3.5mm jack plug for the speaker audio input, as well as a 2.1mm fused DC power lead and user manual.

The new bhi DESKTOP 10 Watt DSP noise cancelling base station speaker will improve your listening experience by removing QRM, QRN, hiss, hash, noise interference to leave clear speech. The DESKTOP will work with most radios, transceivers, and SDR radios, giving a new listening experience.

Get Rid of that noise once and for all with these unrivaled products !!!!

bhi – Ltd DSP Noise Canceling Products



Quiet Please! - Hear the Voice, not the Noise!!

NEIM1031MKII

Noise Eliminating In-line Module uses Digital Signal Processing (DSP) technology to remove unwanted background noise and interference to leave clear speech.

Simply connect to suitable power supply and fit inline with your radio to remove all that unwanted noise and interference

Features:

- Fully Adaptive noise cancelling 9 - 35dB
- 8 user selectable noise cancelling levels
- Audio input power 5W rms max
- Audio output power 3W rms max
- Line level input and output phono sockets
- Line level sensitivity 300Mv – 2V rms
- Line level impedance 10K
- New improved filter level control knob
- 3.5mm audio input/output sockets
- 3.5mm Headphone socket (mono or stereo headphones)
- Separate output volume control
- Noise Cancellation on / off switch
- 12 – 24Vdc operation 500mA
- Input level control with overload warning LED

The NEIM1031MKII will greatly improve the clarity and intelligibility of speech in a variety of audio and radio communication applications. It is suitable for use with amateur radio & commercial HF radio equipment, scanning receivers, CB radio, two-way radio, headsets, marine communications, taxi base stations, processing of noisy audio signals and recordings, pre-processing for voice control applications.



Model DDX-858 - Delta DX Long Wire Snr Antenna

Low Loss & Low SWR across all HF Bands from 160 to 6 Meters
Revolutionary - No Traps - No Coils - No plugs to change - QRP to 1KW !!!



| | | | |
|--------------------|---------------------------------|----------------|------------------------|
| Frequency Band(s): | HF and 6 Meters | Brand: | Delta DX |
| Directivity: | Omni-Directional/Bi-Directional | Model Name: | DELTA DX LONG WIRE SNR |
| | | Model Number:: | DDX-858 |

THE ALL NEW:- Model DDX-858 - 'Delta DX Long Wire SNR' Antenna System

Portable & Base Antenna for Amateur and Commercial Radio Operation

Low Loss – TX and RX on all HF Bands & 6 Meters - from 1.8 to 54 MHz

Stealth and No inconvenient coils, jumpers or plugs to change

Handles QRP to 1 KW

60 Foot Long Wire with built-in matching system - Simple to install and Deploys in 5 Minutes

This antenna system offers a low SWR across all Bands without an antenna tuner, or with an antenna tuner, an even lower SWR across the bands.

It delivers efficiency, does not utilize a lossy 9:1 Balun/Unun system and offers Low Loss across all bands, when deployed correctly and as described in the user guide supplied. The system has it's own built in matching system and no sensitive moving parts.

Can be used as a Sloping Wire with the long wire sloping upwards from the matching unit, making it Bi-Directional or as an inverted L, using the long wire, which makes it omni-directional. For the more adventurous, enjoy experimenting with other configurations.

A simple to install, high quality, antenna, made of the highest quality materials, all hardware fittings made of Marine Grade Stainless Steel.

Long Wire Element is highly durable and UV Resistant, with a porcelain end connector (*Porcelain connector shapes may differ from picture*).

Offers the best Value for money.

When considering the price of this, please keep in mind what this antenna is capable of i.e:-

Handles up to 1 Kilowatt - Low Loss and Low SWR from 160 thru 6 meters - 5 Minute deployment - base and portable.

No coils, jumpers or plugs to change, no sensitive moving parts - Stealth !!!

Includes:

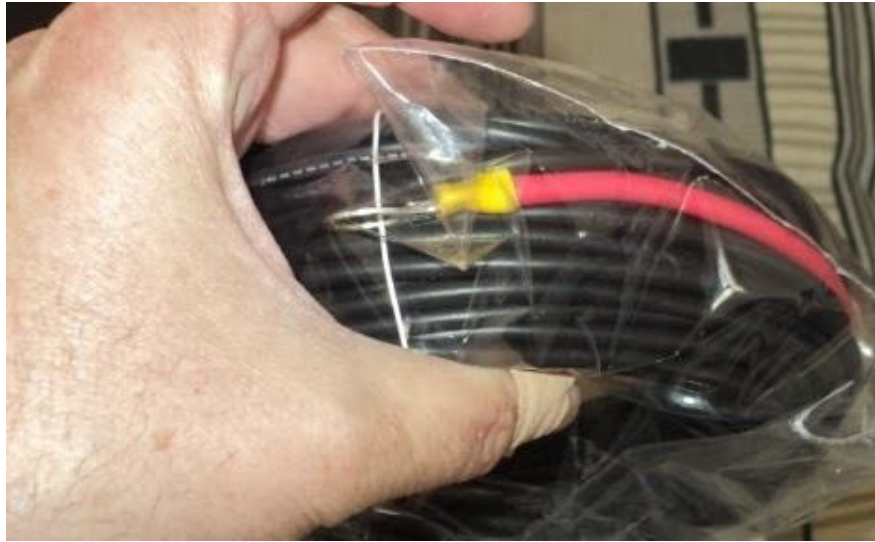
1 X Delta DX Matching Unit

1 X 60 FT Wire Element

Marine Grade Stainless Steel Hardware











The 'Delta DX Vertical Gold' 80 to 6 meter Multi-Band HF Vertical Antenna system

And the 'Delta DX Rotatable Dipole Gold' 40 to 6 Meter Multiband HF Rotatable dipole System.

No lossy traps nor coils and QRP to 1KW !!!

Comes with the latest matching unit technology, Vertical Mil Whip or Dipole Mil Whips, aluminum mounting bracket, Solid two Meter High Tripod and Superior Quality Carry bag. Hardware of marine grade stainless steel and high quality chrome plated brass



Two Great options

The 'Delta DX Vertical Gold' 80 to 6 meter Multi-Band HF Vertical Antenna system

And the 'Delta DX Rotatable Dipole Gold' 40 to 6 Meter Multiband HF Rotatable dipole System.

Base & Portable Antenna

QRP to 1KW !!!

Low Loss, High performance !!!

Marine Grade Stainless Steel Hardware !

Stealth - Simple to install and Deploys in 15 Minutes

A simple to install, high quality, antenna, made of the highest quality materials, all hardware fittings made of Marine Grade Stainless Steel.

Includes standard:

1 X Delta DX Matching Unit

1 X Vertical Mil Whip (or 2 X Rotatable Dipole Mil Whips)

1 X Mounting Bracket (Single type for Vertical or double type for rotatable dipole)

Marine Grade Stainless Steel and Chrome plated Brass Hardware

1 X High quality, strong, two Meter High Tripod

1 X Superior Quality Carry bag to carry entire antenna system

User Manual

Model DDX-858 - Delta DX Long Wire SNR Antenna

Low Loss – All Band HF & 6 Meters - No Coils 1KW !!!



Frequency Band(s): HF and 6 Meters

Brand: Delta DX

Directivity: Omni-Directional/Bi- Directional

Model Name: DELTA DX LONG WIRE SNR

Model Number:: DDX-858

**FULL HF MULTI-BAND – VERSATILE – DEPENDABLE – STEALTH – BUILT TO LAST – LOW LOSS
FAST DEPLOYMENT – HIGH POWER CAPABILITY – LOW VSWR ACROSS THE SPECTRUM
STAINLESS STEEL HARDWARE – WATER PROOF – LONG WIRE**

CAUTION

FIRST AND FOREMOST NEVER TAKE CHANCES – SAFETY ALWAYS FIRST

Always install antennas securely so that there will be no risk of the antenna, mast or hardware, falling and hurting someone on the ground... or worse.

Antennas and Power Line Safety!

Extract form an article Ref Chuck Kraly, KOXM



Power line Safety label.

You may have seen this label on a commercial antenna or other products.

**If you did not take a moment to read it carefully,
Notice the word "near".**

**Is your antenna "near" those power lines or could it be when
unforeseen things happen?**

How close is "too close"? How close is "near"?

In this article, *Chuck Kraly, K0XM* attempts to inform you of the **EXTREME DANGER** posed by installing an antenna, any antenna, too close to power lines. Now don't make the mistake and say that cannot happen with your antenna, it is made from fiberglass or other material which is an insulator!....you may be "dead" wrong!

Read on.....

Most new hams are excited when they get their license and they want to get on the air as soon as possible. Many of them have not given a thought to the actual installation of an outside ham antenna and the dangers involved other than getting it up as high as they can and having it fall on them.

If you don't read any more of this article, then remember just this very simple statement when putting up any ham antenna,

"If there is a power line, including the drop line going to your house, over, under or within a thousand feet of the antenna, IT could FALL AND hit your antenna and YOU while you are installing it!.

Although the thousand feet is bit of an exaggeration, PLEASE ,PLEASE follow the warnings. ANYWHERE close is too close.

The most important thing you can do FIRST, when installing an antenna, is to LOOK before any part of that antenna, tower, mast or antenna support or any part of that antenna "system" ever gets off the ground. This includes the guy wires...what if suddenly one breaks and flies into a power line. You or someone else is in contact with the mast, or tries to stop the guy wire.. **bang, your dead!**

The principle is very easy. Go outside and consider every possible location for your antenna. Then look at each possible location with the DANGER aspect added to it. Where are the nearest power lines? Are you in the open, or are there trees in the area?

Look behind the trees or inside the foliage where they might be lurking, just like a rattle snake hiding there waiting to "strike".

Many times it's the power lines out in plain site that will get you or one of your helpers or all within its reach!

Then, the **SECOND** thing you need to do is to get another pair of eyes from a helper to do the same thing...**LOOK** again at **ALL** possible hiding places for the danger of power lines and remember, it is the power line that you don't see or the one that you are not too concerned about that will **terminate** your fun.

ASSUME THE WORST WILL HAPPEN!

Now consider that most guyed antennas like verticals are supported on "something". It may be a metal mast on the ground, a short metal "tower" with legs on the roof, or a wooden pole or other supposed "non-conductive material. Is it conductive to high voltage?

Would you bet your life or your help on not knowing for sure?

Assume that everything the antenna is mounted on **AND EVERY THING** it is connected to is conductive. Don't gamble your life on the words, "I think it is non-conductive"!!!

Assume that the guy wires are conductive. If one breaks and snaps back or "accidentally" slips out of yours or a helpers hand, which direction will it likely go...toward the power line? If it is under much tension at all, it will act like a whip...Here comes Murphy's Law....

IT WILL go toward the direction of the power line!

Now, assume a domino effect. If your vertical falls toward a small tree that can't take it's weight, the tree will fall, **INTO A POWER LINE....**the power line connects to the tree, the tree is connected to the antenna or a portion of it, and it is connected to you....that domino effect just bit you like that rattle snake with a **LETHAL BITE!**

In short, assume that the antenna or any portion of it including it's guy wires, feed lines, support, etc. **WILL** fall or break while you are putting it up "near" power lines. If any power lines are within "striking" distance of **ANY** portion of the antenna or it guys, support ropes, etc.....you may wish...for a split second, that you had planned your life much better rather than being in a hurry and court disaster.

So far, we have talked about vertical type antennas. You should apply the above tips to **ANY** ham radio antenna, or antenna installation no matter how it is designed, how small or what it is made of. Your antenna is your "friend" but it or any part of it could be your enemy!

Plan far ahead with these tips:

Let others know what you will be doing and not just the person or persons helping you. All of you may need emergency care and no one may be able to call for it.

If you are not sure what you are doing, get expert help!

Plan your steps as if your life and those around you depend on it.

Notify a family member or neighbor that you will be putting up the antenna. Ask them to keep an eye AND an ear out for you...

HAVE EVERYTHING WELL PLANNED.

NO ALCOHOL OR DRUGS! WHILE INSTALLING ANTENNAS.

Get a good night's rest before the big day.

Have a clear mind when you are installing antennas.

Have more than enough help.

Make sure all those involved with the installation know exactly what will be done and in the proper steps. Make a plan and let your helpers know ALL of the details...

Make sure all concerned know what to do if the antenna or any part of it starts to fall toward a power line.....simple....**let go**....get as far away as possible from ANY part of the antenna.....**let it fall**...DO NOT TRY TO KEEP IT FROM FALLING INTO THE POWER LINE.....YOUR EFFORTS COULD BE LETHAL.

Do not try to install the antenna in bad weather with wet ground, snow, ice, etc. There is an old ham saying, "*Bad weather is the best weather to put up an antenna*". Don't believe it. Mother nature loves to disrupt antenna installations and get you hurt orworse.

NEVER, NEVER, NEVER put up or even think about putting up any kind of antenna when you can hear thunder. If you can hear thunder in the distance, lightning can strike you!

some or all of the material above will help at least one of you save your life or others. Pass this information along and get the word out...be safe...
and enjoy ham radio.

Introduction

Thank you for purchasing and using the Model DDX-858 - Delta DX Long Wire Snr HF antenna system.

The system comprises of the following:

60 feet of wire

Delta Match

Isolation loop

Stainless steel attachment hardware

Porcelain Insulator

The Insulator is permanently attached to one end of the Model DDX-858 Antenna Wire Connector Antenna Connection

The Antenna Connection is located on the top of the Matcher. It is a 3/8" x 24 (fine thread) female fitting.

Counterpoise Connection

The Counterpoise Connection is located on the bottom of the Model DDX-858 Matching unit It is a 3/8" x 24 (fine thread) male fitting, with two nuts. Optional counterpoise cables may be fitted and tighten between the two stainless steel nuts.

Antenna Shackle

The Antenna Shackle assembly, consists of a shackle, bolt, and nut. It is attached to the top of the matching unit.

Carabiner

The Carabiner is a removable pear-shaped stainless steel hooks with a spring-loaded gate.

Antenna Configurations

Using the supplied components, the Model DDX-858 can be deployed in various configurations. These are just some of the configurations that this versatile antenna system can be utilized for, more options on request.

- A. Sloping Wire with the long wire sloping upwards from the matching unit.**
- B. As an inverted L using the Long Wire.**
- C. As a dipole in the field or base, using an optional extra Long Wire**

Sloping Wire Configuration

The Sloping Long Wire configuration, is a broadband short to long range HF antenna. It is designed to provide acceptable ground wave and sky wave propagation. This configuration is predominately omnidirectional, becoming slightly bidirectional towards both ends of the antenna wire as the frequency increases. The Sloping Wire requires one support and should be mounted at a height of 25 to 40 feet for best performance. A counterpoise wire, with a length of 20 to 40 feet, is recommended. If a counterpoise is not used, the coaxial cable must be 25 to 100 feet in length, as the shield of the coaxial cable provides the counterpoise.

Site Selection and Preparation.

1. Select a site to deploy the Model DDX-858 Sloping Wire configuration. The site must have a support that will position the end of the Antenna Wire at a height of 25 to 40 feet. If the right support is unavailable, any convenient object, such as a fence post or the top of a vehicle, may be used as a field expedient support with reduced performance, But always follow the safety precautions above.

2. If not already attached, connect a Carabiner to the Wire Connector end of the Antenna Wire.

Connect the Matcher. Refer to steps (3) – (7) below.

3. Temporarily remove the Antenna Shackle from the Antenna Connection.

4. Place the Wire Connector from the Antenna Wire over the Antenna Connection and replace the Antenna Shackle. Tighten the nut snugly.

5. Connect the Carabiner from the Antenna Wire to the Antenna Shackle.

6. If using a counterpoise wire, connect it to the Counterpoise Connection . Tighten the nut snugly.

7. Connect coaxial cable the UHF Socket on the matcher.

Raise the Antenna.

8. Using a Bowline or similar knot, tie the end of a short length (around 4 feet) of Paracord to the Carabiner from step (5).

9. Drive a Stake into the ground near the location closest to the radio set and tie the Paracord from the Hybrid Base to the Stake using two Half Hitches, or similar knot.

10. Using a Bowline, or similar knot, tie a long length (50 feet or more) of Paracord to the Insulator or Isolation Loop at the end of the Antenna Wire.

11. Using a throw weight or some other method, loop the Paracord over the support.

12. Raise the end of the Antenna Wire to the desired height, such that the Antenna Wire is not quite taut, and secure it to the support using a Round Turn and two Half Hitches, or similar knot.

Extend the Counterpoise.

13. If using a counterpoise wire, extend it along the ground in any convenient direction.

14. Perform operational test.

15. This completes deployment of the Sloping Wire configuration.

Inverted "L" Configuration

The Inverted "L" configuration is a broadband short to long range HF antenna. This configuration tends to be unidirectional, favoring the horizontal end of the antenna. It is also provides effective ground waves communication during the day time on frequencies between 1.8 – 4.0 MHz without using sky wave propagation. The Inverted "L" requires two supports and should be mounted at a height of 25 feet for best performance. Though, it will provide good performance at a height of 10 to 20 feet, and is usable when mounted as low as three feet. One counterpoise

wire, with a length of 20 to 40 feet, is recommended. If a counterpoise is not used, the coaxial cable must be 25 to 100 feet in length, as the shield of the coaxial cable provides the counterpoise.

Site Selection and Preparation.

1. Select a site to deploy the Inverted "L" configuration. The site must have two supports that will position the corner of the "L" and the end of the Antenna Wire at a height of 25 feet. If the right supports are unavailable, any convenient objects, such as fence posts or the tops of vehicles, may be used as a field expedient supports with reduced performance.

2. If not already attached, connect a Carabiner to the Wire Connector end of the Antenna Wire.

Connect the Matcher. Refer to steps (3) – (7) below.

3. Temporarily remove the Antenna Shackle from the Antenna Connection .

4. Place the Wire Connector from the Antenna Wire over the Antenna Connection and replace the Antenna Shackle. Tighten the nut snugly.

5. Connect the Carabiner from the Antenna Wire to the Antenna Shackle.

6. If using a counterpoise wire, connect it to the Counterpoise Connection. Tighten the nut snugly.

7. Connect the coaxial cable or to the UHF Socket on the Matcher.

Raise the Antenna.

8. Using a Bowline or similar knot, tie the end of a short length (around 4 feet) of Paracord to the Carabiner from step (5).

9. Drive a Stake into the ground near the location closest to the radio set and tie the Paracord from the Hybrid Base to the Stake using two Half Hitches, or similar knot.

10. Using a Bowline or similar knot, tie a long length (50 feet or more) of Paracord to the Insulator or Isolation Loop at the end of the Antenna Wire.

11. Using a throw weight or some other method, loop the Paracord over the support closest to the radio set.

12. Pull the Paracord and end of the Antenna Wire over the support.

13. Using a throw weight or some other method, loop the Paracord over the other support.

14. Pull the Paracord, such that the Antenna Wire is not quite taut, and secure it to the support using a Round Turn and two Half Hitches, or similar knot.

15. If using a counterpoise wire, extend it along the ground under the antenna.

16. Perform operational test.

17. This completes deployment of the Inverted "L" configuration.

Troubleshooting

1. If using the Antenna Wire , ensure Wire Connector is securely connected.
2. Inspect Antenna Wire for breakage or signs of strain.
3. Ensure UHF Plugs are securely tightened.
4. Inspect Coaxial Cable assembly for cuts in insulation or exposed shielding. Replace if damaged.
5. If still not operational, connect a Standing Wave Ratio (SWR) Power Meter and check SWR.
6. If SWR is excessively high, check antenna tuner or coupler using the technical manual or manufacturer's procedure. Be sure to check the Coaxial Patch Cable that connects the radio set to the antenna tuner or coupler.
7. If still not operational, replace Coaxial Cable assembly. Most problems with antenna systems are caused by the coaxial cables and connectors.
8. Connect a Multi-Meter to the Antenna Wire to check continuity. Replace assemblies that do not pass a continuity check.
9. If still not operational, contact your dealer, who will be able to assist further and quickly get you back on the air.

Specifications

Frequency:

1.8 – 54 MHz

Power:

Model DDX-858 - Delta DX Long Wire SNR Antenna: 1000 Watts PEP SSB

RF Connection: UHF Plug (PL-259)

SWR: Subject to frequency and configuration.

Personnel Requirements and Setup Time: Less than 10 minutes.

Optional Accessories

Counterpoise Kit. The Counterpoise Kit is ideal for portable antenna deployment. The system will create the ground-plane needed to any vertical antennas and will also play the role of guy wires. It contains four wire radials secured around plastic wire winders and four steel tent stakes.

Recommended non-supplied accessories

The following hardware is needed to attach the counterpoise wires to the matcher base.

Wide range antenna tuner required on certain bands.

Flashlight.

Multi-tool.

Throwing weight and string.

Mallet.

SWR Power Meter.

Multi-Meter.

50' Paracord and Line Winder.

Counterpoise Wire/s