Product Overview

Wide-band 1.6-30 MHz base system for DX, NVIS, and EmComm.

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Make An Offer (Without Options)

Key Specifications

Specification	Details
Frequency	1.6-30 MHz
SWR	<2.9:1
Power	250W PEP SSB; 125W CW; 25W Digital
Height	24 ft
Footprint	60 x 60 ft (when deployed at 6 feet)
Weight	5 kg
RF connection	SO-239
Setup	<10 minutes, 1 person

Best For

- Broadband HF base/EmComm operation
- NVIS, DX, and ground-wave patterns
- Operators wanting tuner-free published broadband coverage

What's Included

- Heavy-duty mount + U-bolts
- Alpha Auto Match
- Telescopic vertical
- Four 35-ft NVIS wires + stakes
- 25-ft directional DX/NVIS wire + stake
- 8-ft grounded counterpoise + stake

Setup and Operation

Deploy the elements according to the selected omnidirectional or directional configuration and stabilize the vertical system. The page states one-person setup in less than 10 minutes.

Performance and Technical Data

Layout

Physical Measurements
Axial radius = 30 x 30 feet
Footprint = 60 feet x 60 feet
Height = 24 feet
Specifics
Z0 – Z1 = 18 feet
Z0 – Z2 = 6 feet
Z1 – Z2 = 24 feet
Z0 – X1 = 35 feet
Z0 – X2 = 35 feet
Z0 – Y1 = 35 feet
Z0 – Y2 = 35 Feet
Z2 – X0 = 30 feet
Z2 – Y0 = 30 feet

Analysis, Pattern, & Gain

Analysis

Pattern
The Z1 – Z0 Vertical element provides Groundwave coverage while it simultaneously maintains a null above the antenna. This enables the Z0, X1 & 2, and Y1 & 2 NVIS elements to enhance consistent NVIS and Sky-wave patterns, which is universally represented in the above ‘Elevation/Azimuth Pattern’ & ‘Modeled Pattern’. The Z0 – Z2 Grounded Counterpoise then completes the circuit, by providing a path to ground at the feed-point Z0.
1. FOR ENHANCED NVIS: Place on the bottom bolt under the Auto Match.
2. FOR ENHANCED DX: Place on the top bolt of the Auto Match below the Vertical Element.

Gain
The directivity of gain is realized by the placement of the Z1 – Z0 Vertical element above the Z0, X1 & 2, and Y1 & 2 NVIS elements. For the most part, however, this antenna is omnidirectional, which results in negative gain when compared to a dipole. Fortunately, gain does not only come from antenna design. There is also “ground gain”, which can add an approximate 6 dB of additional gain for:

2.0 MHz.
7.5 MHz.
15 MHz.
22.5 MHz.
30 MHz.

Options and Compatible Accessories

Optional tripod, coax, guying, field bag, and anti-oxidant are offered.

Support Resources

- User Manuals: Alpha Antenna User Manuals hub.
- Videos: Related videos.
- Guidance / FAQs: Available HERE.
- Customer Reviews: Scroll to bottom of this page.

We Listen

We are dedicated to improving all of our systems. Specifications and descriptions are subject to change without notice.

5.0

Based on 27 reviews

5★
100
100%

4★
0%

3★
0%

2★
0%

1★
0%

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1. J

Protected_User_110ead53
Reviewer
January 19, 2023

10-160M HF Base NVIS/DX Antenna, ProMaster Sr

When I ordered my Alpha ProMaster Antenna, my first thought was; ‘how can a 29 inch bag hold an antenna that operates on 6-160 meters?’. I didn’t realize till the antenna was fully setup that over 127 feet of radiating elements are deployed into the air from a height of 8.5 feet. That is what obviously makes this antenna work very well! The design behind this antenna is pretty ingenious; Mounted on top of the 8.5 foot tripod is a heavy duty vertical whip

and attached at the base of the whip are four sloper elements that double as guy wires. Their Alpha Match then gets installed under the mount, which is where I beleive a tuner should be installed. I've had great signal reports from Australia and Greenland. Plus I am now able to get into South America, which was something I was not able to consistently do with my buddipole or transworld antennas.

2. W

Protected_User_f9bec7e9
Reviewer
October 16, 2022

★★★★★
★★★★★

10-160M HF Base NVIS/DX Antenna, ProMaster Sr

I'd normally wait to use an antenna for a while before posting a review, but I knew right away that this was something that everyone should hear before making any other antenna purchase. The guys at Alpha Antenna hire veterans that are out of work! This is an American Company with values that show from the support they provide to the quality of their antenna system.I got the Alpha ProMaster Antenna about two weeks after placing my order, as everything is hand built to order. It was well worth the wait!The antenna setup in 5 minutes just like the YouTube video described, and I was on the air making QSO's. I was getting too old to keep getting up to change the clip on coils like my other antenna required, and the Alpha ProMaster Antenna really makes operating much easier because it does all of the tuning automatically.The first contact was over 5,600 miles away in Hungary on 10 Meters and my next contact was on 80 meters and in South Carolina, which is over 2300 miles. After making these two QSOs, I hooked up my LDG tuner and headed to 160 Meters, where I made 4 contacts as far away as Nebraska (1200 miles from my QTH).It is so easy to setup, that I plan on buying one of these antenna systems as a gift for a disabled ham. If you end up buying one too, you won't be disappointed in the product, performance, or company. Everything is great!

3. K

Protected_User_37f30cab
Reviewer
July 13, 2022

★★★★★
★★★★★

10-160M HF Base NVIS/DX Antenna, ProMaster Sr

Antenna arrived a little more than a week after I ordered it in a brand new box that only had a few scuffs from it being shipped. When I opened the box I noticed that the padded bag fit in it perfectly, so I’m keeping the box as an extra precaution to keep even the bag looking prestine. First impression? As you can tell, I’m a person who really scrutinizes appearance, as well as performance. The padded bag has enough padding to keep everyting from getting dents or nicks during just about any type of trek to a camping site or just from being in the trunk of a car. The double stitching and webbed handles and shoulder strap look like they’ll hold up for my lifetime of use. I would have liked that the clips that hold the shoulder strap on be made of metal instead of the nylon infused plastic clips that they appear to made out of. Though the extra padded pouch on the front of the bag is a neat added feature. Overall, the entire antenna system has good construction with an overall appearance that is as good as the best I’ve seen. The front facing pouch contained the manual and the transmatch, which is used to tune the antenna system. The lined inner pouch contained the tripod, the stainless steel whip, and ‘radiating elements’. At the end of each radiating element is a metal nail like spike that is fully insulated from the radiating elements. Once the spikes are in the ground, then the radiating elements form the guy wires that extend from the mount where they are affixed with o-rings and shrink tubing. Also at the mount is where you screw the stainless steel whip, which is very heavy duty, even at the base of the whip. Under the mount and at the antenna is where the Alpha Match transmatch/tuner is and should be mounted. The Alpha Match conveniently attaches with the adapters that are built into the match and mount. Once setup (about a 5 minute process), the whole antenna system extends 8.5 feet on an excellently designed aluminum tripod system.How does

it work compared to my other portable antenna systems? I'm not going to name the manufacturers of my other two portable antenna systems that I've used for 2 years in this review, but suffice to say that they are two of the most popular ones made for amateur radio. My first impression of the audio was that the noise floor of the QRM was lower than my other antennas. I tuned to a signal on 40 meters that was about an S6 and swapped the coax to my other antennas. The S6 dropped to an S5 on one of the antennas and stayed at about an S6 on the other one, however, the noise was up about 2 S units on the other antennas. After the QSO was over I was hearing I made a CQ and both of the operators came back to me. We talked for 30 minutes about signal strengths, antenna types, and such. The first operator was using a 40 meter horizontal loop at 30 feet in their trees and gave me an S7, which was the same I was reading them at nearly 900 miles away. The second gave me an S8, while they were also an S7, and were using a 43 foot S9 antenna. Now that I've owned the ProMaster for a several months now, I've generally found it to be my go to antenna. Since having it, I've had DX coming in strong from Europe and by simply chaning the placement of the radiating elements, I log plenty of Australian contacts. It's great to have an easy to use antenna that works as well as this one does. I also want to comment on how small the bag is that this antenna system fits into. I can take it anywhere!

4. A

Protected_User_8d21c6df
Reviewer
April 9, 2022

★★★★★
★★★★★

10-160M HF Base NVIS/DX Antenna, ProMaster Sr

Here is my story over the past year of my relationship with the Alpha ProMaster Antenna and the Alpha Antenna company. The antenna took about two weeks to arrive and was shipped professionally in a 20x6x6 200lb test cardboard box. The bag fit perfectly into the box and as I slid it out I could immediately tell this product presented itself well. The bag has a front pouch where the Alpha Match was stored separately. On the front pouch was high

end stitching. A detailed look at the bag showed me that the seams were well stitched and it was clear from the thickness of the padding between the outer and inner shells of the bag, it could easily be used in unforgiving environments. The first thing to come out of the bag was the four radiating elements that are attached by O-Rings to the mount that goes on top of the tripod. These radiating elements are constructed of what I have been told are outdoor rated 16 gauge wires. Upon close examination of these elements, I can see on one end are the O-Rings that have been crimped onto the wire, which has been tinned. Over the sheath of the O-Ring and overlapping the wire they have placed a 1 inch piece of black shrink tubing. On the other end is an 8-inch long steel spike where a plastic insulator is used to separate the wire from the metal spike. Here the wires are looped through the plastic insulator and affixed somehow under another piece of black shrink tubing. Back at the mount, the O-Rings are held in place permanently on the mount, as they are placed between the top female stud and the nylon washer. The next thing to come out of the bag was the tripod. It was immediately clear to me that this tripod was either custom built or at the very least had under gone modifications to enable the mount and elements to easily fit over the top section. It was an easy matter of just tightening four bolts and nuts to install the mount. I thought it was cool that the steel spikes and radiating element wires serve as the guying system for this antenna, and after a matter of about 2 minutes I had pressed the spikes by hand into the ground and extended the tripod, which is pretty high! Extending the tripod was a simple matter of just loosening a the couplers then extending the tripods legs and mast sections. The last pice to come out of the bag was heavy duty stainless steel telescopic whip, which I am very impressed with. I screwed the whip onto the mount after it was fully extended. At this point installed the Alpha Match and attached my coax. While I still was holding the Alpha Match, which is a plastic box about 6x6x4, I examined it closely. It appears as though it has been sealed, although if I were to leave it outdoors for an extended period of time or in the rain I would definitely enclose it in a Tupperware container or something similar. So, I preceded to run my 25 foot section of RG8x coax to my MFJ-259B antenna analyzer. I was so excited to see that I would not need a tuner for SWR or reactance on 10, 12, 15, 17, 20, or 80 meters!! I hooked the coax up to my rig and by the end of the first day; I had racked up 39 contacts from Germany, Japan, Costa Rica, and many state-side contacts. Over the past few months, I have logged hundreds of QSOs and have taken the antenna camping, to relatives’ houses, and even to a Christmas Party. I’ve learned that I can trust the service from Alpha Antenna

too, as when one of the radiating elements broke from when I stepped on it, I called them about repairing it and instead they sent me another one, no problem! 40 Meters has become a favorite band of mine now with this antenna it’s as easy as punching the button on the internal tuner on my rig and then transmitting. I’d definitely recommend this company and antenna to a friend!

5. K

Protected_User_723e03f2
Reviewer
January 4, 2022

★★★★★
★★★★★

10-160M HF Base NVIS/DX Antenna, ProMaster Sr

The Alpha ProMaster Sr Antenna 6-160 Meter system (portable) is an awesome product. As a new HAM (6 months) I was not sure what would be a good starter rig. After some extensive research I settled on the Kenwood TS-590s, Alinco DM-330MV, and the Alpha ProMaster Sr Antenna system. This antenna is amazing. The system is basically a vertical whip on top of a tripod with four 30ft radials as part of the antenna system. An Alpha Match (impedance matching unit) also is provided as a digital antenna tuner. The TS-590s has a good built-in antenna tuner, and when combined with the Alpha Match provides a good pairing. I have no problem reaching Europe, Central America, etc., and practically all parts of the US. My first contact was in Germany. Setting up the antenna system took about 15 minutes including the 30ft radials and Alpha Match. I have been using this antenna system for about 5 month and so far have pleased with the result.

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