BaseMaster

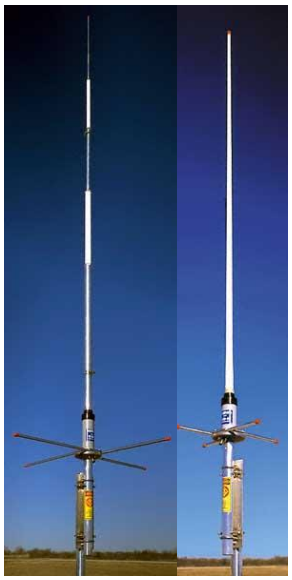
High gain base station antennas

from Falcon Direct, Inc.

Superior performance comparable to antennas costing hundreds of dollars more!

VHF, UHF, or VHF/UHF Dual Band Station Antennas

MADE IN THE USA



VHF BM1 UHF BM2

All models of the *BaseMaster series* antennas are rated for a minimum power rating of 200 watts with shunt fed direct ground lightning protection and a minimum wind survival of 90 mph. *BaseMaster* antennas and be mounted on up to a 2" pipe and have a VSWR of 1.5:1 at rated bandwidth. All our base stations antennas have a 5 year warranty.

The big names in the antenna industry also have big prices, big shipping, and big installation costs. Our fixed station *BaseMaster* antennas provide the power, performance, and reliability you need at the price you want to pay!

Three models are available – the BMI for VHF and the BM2 for UHF can quadruple performance over a standard quarter wave ground plane antenna. The BM3 can perform on either VHF or UHF (selectable) with a effective gain of more than ten times the performance of a ground plane antenna.

All *BaseMaster* antennas feature rugged and reliable fiberglass enclosed collinear radiators for maximum gain and performance.

Your choice – Just $289!

- VHF BM1 rated at 7 dBd omnidirectional gain – 3 MHz bandwidth Terminates into a Type N female connector. Length 15.4 feet - Shipping weight 10 lbs. UPS Shippable
- UHF BM2 rated at 6 dBd omnidirectional gain – 8 MHz bandwidth Terminates into a Type a Type N female connector. Length 7' 3" – Shipping weight 8 lbs. – UPS Shippable
- VHF/UHF BM3 dual band, rated at 8.3 dBd for VHF or 11.3 dBd for UHF. Assembly required. Terminates into a Type N female connector. Length 17 feet – Shipping weight 10 lbs. UPS shippable (Oversize rate).

Call us 24/7 at 800-489-2611

A brief history of fixed station antennas…….

Until the early 1960's there were few choices available for fixed station antennas. Most were rated at unity (zero) gain and basically involved nothing more than a quarter wave radiator with four matched radiators at the bottom. These antennas were, and are, known as *ground plane* antennas. Then along came a company ,then known as Communication Products, that offered a new antenna known by many as the *big green stick*. Technically, it was a phased stacked collinear radiator matched for 50 Ohms, fiberglass enclosed, with direct grounding. The Blue Stick by Sinclair is shown at the left.

In time, others introduced similar antennas including Andrews, Antenna Specialists, Decibel Products, and Sinclair. Most were white fiberglass, one was blue but they were, and are, essentially the same. The Decibel Products introduced the exposed dipole antenna, known as the DB224 (VHF) and DB228 (UHF series. This antenna, shown at the right offered the capability of shaping the pattern from omnidirectional to bi-directional or uni-directional by moving the radiators (those trombone looking things on the side of the support shaft. Otherwise, the enclosed collinear and the exposed dipole type antennas had many common characteristics. Both were, and are, expensive. Both were heavy (40 pounds typically), large (18 to 20' long) and hard to mount. This meant they were expensive to purchase, expensive to ship (normally shippable only by Motor Carrier – too large for Fed-X and UPS) and expensive to side mount on existing towers (expensive mounting brackets required) or at the top of new towers (expensive gin poles required) for mounting.

These antennas typically produced an omnidirectional gain of 5 to 6 dB for VHF and 8 to 10 dB in UHF**.** The cost of a station antenna is based on materials, construction, and gain. By the 1980's many mobile antenna manufacturers wanted a piece of the base station antenna business. The result was the development of a low cost half size enclosed collinear antenna rated at 3 dB in VHF or 6 dB in UHF. A 3 dB gain antenna has the ability to double transmit and receive efficiency. A 6 dB gain antenna quadruples efficiency, or as we call it in the communications industry – Effective Radiated Power or ERP). A 10 dB gain antenna increases efficiency by a factor of TEN times!

These half size antennas, initially offered by Antenex, Childs, and Maxrad, offered a compromise in price and performance but they never really hit the mark in providing real value for communications users wanting a reasonably priced antenna that was easy to mount, yet offered the performance and quality of the "big" antennas. Now that has all changed with the introduction of the 10 lb. or less *BaseMaster* antennas that equal the performance of the "big" antennas at the cost of the "half size antennas. The *BaseMaster* antennas are UPS shippable, easy to mount, and offer performance equal to, or better than, the "big" antennas.

One of our existing UHF customers installed a BM2 one hundred feet below a DB-228 feed by ultra low loss 7/8" cable. The BM2 uses ½" cable and performs as well as, if not better, than the far more expensive antenna. For additional information, give us a call at 800.489.2611.

The cost of mounting an antenna and the associated transmission line can easily match the cost of the antenna, so it is important to choose not only the best quality antenna, but cable as well. Good cable is very important in maximizing system performance. You want the best quality components (think copper!), and the largest affordable diameter (i.e. a ½ inch cable has less signal loss than a ¼ inch cable and a 7/8" inch cable has even less loss). If the cable part number starts with an RG prefix, it is cheap. A prefix of LMR is better, and a prefix of LDF is generally best. Email us at sales@falcondirect.com for additional information.

You're going to like the *BaseMaster* antenna – we guarantee it!

FALCONDIRECT
We keep you connected!