

RDF PRODUCTS

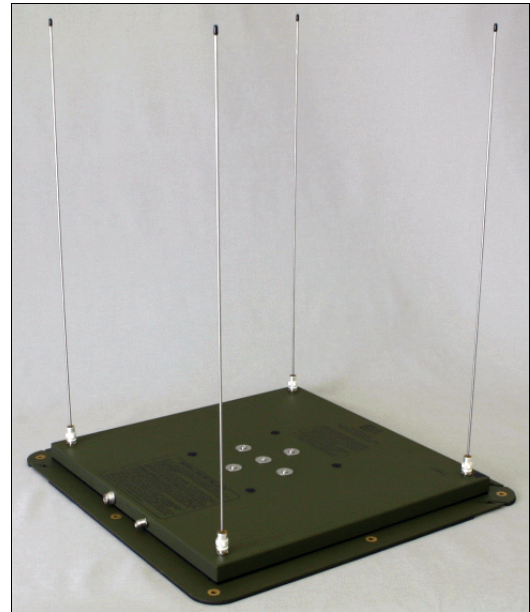
Vancouver, Washington, USA +1-360-253-2181



Product Data Sheet; Model DMA-1290B1 Wide-Coverage VHF Mobile Adcock Radio Direction Finding Antenna

FEATURES

- 65-200 MHz Continuous Frequency Coverage
- True Adcock Design - Does Not Use Inferior Loops
- Wide Aerial Spacing For Enhanced Low-VHF Performance
- 1.5 Degrees RMS Typical VHF/UHF Bearing Accuracy
- Ultra-High Signal Handling Capability
- Low-Profile Platform with Removable Aerials
- Vehicle Roof-Top Installation
- Built-In RS-232 Personality Module



DESCRIPTION

The RDF Products Model DMA-1290B1 is a 4-aerial VHF monopole Adcock single-channel radio direction finding antenna covering 65-200 MHz in a single band. This rugged, compact, light-weight, weather-sealed unit is specifically designed for mobile DF applications and is easily installed on cars, vans, or any platform having a sizeable metallic ground plane. The aerials do not need to be changed to cover the full specified frequency range, and are easily removed for convenience of shipping and storage.

Being of a true Adcock design, this model avoids the erratic performance associated with inferior loop DF antennas and provides sensitivity superior to that of comparable pseudo-Doppler DF units. This model has also been designed with ultra-high signal-handling capability for reliable performance in dense signal environments.

This model directly interfaces with all RDF Products DF bearing processors via a detachable 4.5-meter interface cable. A built-in personality modules automatically conveys the model and band information via RS-232 to RDF Products "B-series" DF processors.

SPECIFICATIONS

DF Technique:	Single-channel 2-phase Adcock (derived sense)
Frequency Coverage:	65-200 MHz (continuous)
Bearing Accuracy:	3° RMS (ideal siting conditions)
Polarization:	Vertical
Output Impedance:	50 ohms nominal
2nd Order Intercept (#):	+40 dBm typical (referenced to derived sense input)
3rd Order Intercept (#):	+25 dBm typical (referenced to derived sense input)
Power Requirements:	11-16 VDC @ 160 mA (negative ground)
Operating Temperature:	-40 to +60 degrees C
Storage Temperature:	-40 to +70 degrees C
Humidity:	0-100%
Dimensions:	26.5"x22.0"x22.0" (HxWxD; with baseplate less cables)
Weight:	13 lbs. (less cables)

Note: Specifications are subject to change without notice.
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APPLICATIONS INFORMATION

The RDF Products Model DMA-1290B1 has been designed as a general-purpose VHF mobile DF antenna. With its wide aerial spacing, it is particularly recommended for applications in the 88-108 MHz FM broadcast band and the 108-137 MHz VHF aircraft NAV/COM band.

For vehicle roof-top installations, nylon mounting straps and rain-gutter hooks are supplied for fast and convenient temporary mounting to cars, vans, mini-vans, and utility vehicles. These mounting straps loop into the slots milled into the 1/8" thick bottom-plate for this purpose.

A rubber protective mounting pad is adhesively attached to the bottom-plate to protect painted vehicle roof-tops. The unit can also be bulkhead mounted using the 8 quarter-inch holes drilled into the bottom-plate flange. For the convenience of users contemplating bulkhead

mounting, the protective adhesive-backed mounting pad can be supplied detached from the bottom-plate upon request.

The DMA-1290B1 includes a digital "personality module" that reports model number and frequency coverage information for this DF antenna. When connected to any one of the RDF Products "B"-series DF processors (e.g., the DFP-1000B, DFP-1010B, or DFR-1000B), the DMA-1290B1 automatically reports its model number and frequency coverage information. This information is then displayed so that the user can easily avoid out-of-band operation.

The DMA-1290B1 is intended for law-enforcement, surveillance, signal intelligence, frequency management, interference location, search-and-rescue, scientific, and other applications requiring professional-quality radio direction finding equipment.