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# PRODUCT INFORMATION BULLETIN

## YAGI BASE ANTENNA 900MHz 9dB MODEL 49-3102

### DESCRIPTION

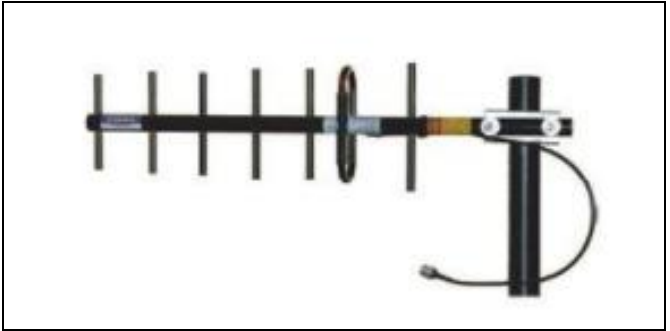
This directional base antenna is designed to concentrate an RF signal towards a specific location for increased signal strength. Used with our 900MHz Air-Eagle RF Systems, this antenna will ensure reliable communications in long range applications.

### WARNING

**THIS ANTENNA IS AN ELECTRICAL CONDUCTOR. CONTACT WITH POWER LINES CAN RESULT IN DEATH OR SERIOUS INJURY. DO NOT INSTALL THIS ANTENNA WHERE THERE IS ANY POSSIBILITY OF CONTACT WITH OR HIGH VOLTAGE ARC-OVER FROM POWER CABLES OR SERVICE DROPS TO BUILDINGS. THE ANTENNA, SUPPORTING MAST AND/OR TOWER MUST NOT BE CLOSE TO ANY POWER LINES DURING INSTALLATION, REMOVAL OR IN THE EVENT PART OF THE SYSTEM SHOULD ACCIDENTALLY FALL. FOLLOW THE GUIDELINES FOR ANTENNA INSTALLATION RECOMMENDED BY THE U.S. CONSUMER PRODUCT SAFETY COMMISSION AND LISTED IN THE ENCLOSED PAMPHLETS.**

### INSTALLATION

- Mount the antenna in a convenient location, **at least 3 feet from other antennas or physical obstructions.**  
**IMPORTANT** – The antenna mast used to mount the antenna **MUST** be *earth grounded* by a grounding rod kit or the antenna mast must be metal and set in the ground at least 18" inches – Failure to do so may result in static electricity build-up that will damage your receiver.
- Find the shortest, most direct route to run the coax cable from the antenna to the transmitter or receiver.
- Connect the N-male connector from the coax cable to the N-female connector on the base antenna.
- Connect the TNC-male connector on the coax cable to the TNC-female connector on the transmitter or receiver being installed.
- Wrap supplied vinyl mastic tape around all outdoor coax connections to prevent water entry. This step is extremely important to ensure reliable communications in all weather conditions.**



### SPECIFICATIONS

|                             |                    |
|-----------------------------|--------------------|
| Specific Frequency          | 896-960 MHz        |
| Gain dBd                    | 10 dBd             |
| Gain dBi                    | 12.1 dBi           |
| Horizontal Beamwidth        | 56 deg             |
| Vertical Beamwidth          | 46 deg             |
| Polarization                | Linear             |
| Maximum VSWR                | 1.7:1              |
| Maximum Power               | 200 W              |
| RF Connectors               | N Female           |
| Connector Placement         | Pigtail            |
| Type of Hardware Included   | 1.5'-2" Mast Mount |
| Maximum Rated Wind Velocity | 125 mile/h         |
| Item Length                 | 24 in              |
| Item Weight                 | 2 lb               |

### ORDERING INFORMATION

| Coaxial Cable  |             |
|--|-------------|
| <b>IMPORTANT</b> – When specifying coaxial cable lengths, predetermine the shortest possible distance from the antenna to the transmitter/receiver. This will provide maximum RF output from the TX/RX to the antenna, as well as keep antenna costs to a minimum. |             |
| 5' Flex 3/16" Coax w/connectors  | 49-4000-5   |
| 15' Flex 3/16" Coax w/connectors   | 49-4000-15  |
| 25' Flex 3/16" Coax w/connectors   | 49-4000-25  |
| 40' Flex 3/16" Coax w/connectors   | 49-4000-40  |
| 60' Flex 3/16" Coax w/connectors   | 49-4000-60  |
| 80' Flex 3/16" Coax w/connectors   | 49-4000-80  |
| 100' Flex 3/16" Coax w/connectors  | 49-4000-100 |
| Miscellaneous  |             |
| Vinyl Mastic Sealing Tape, 4" Pcs.   | 99-HDW-0061 |
| TNC "T" Adapter (For dual antenna applications)  | 49-5001     |