

PTX Offset Antenna
.60/.76/.90/1.1m

**INSTALLATION &
ASSEMBLY INSTRUCTIONS**

PATRIOT

LIMITED TWELVE (12) MONTH WARRANTY

This PATRIOT ANTENNA equipment is warranted to be free from defects in material and workmanship under normal use and service. PATRIOT ANTENNA shall repair or replace defective equipment, at no charge, or at its option, refund the purchase price, if the equipment is returned to PATRIOT ANTENNA not more than twelve (12) months after shipment. Removal or reinstallation of equipment and its transportation shall not be at cost of PATRIOT ANTENNA except PATRIOT ANTENNA shall return repaired or replaced equipment freight prepaid.

This Warranty shall not apply to equipment which has been repaired or altered in any way so as to affect its stability or durability, or which has been subject to misuse, negligence or accident. This Warranty does not cover equipment which has been impaired by severe weather conditions such as excessive wind, ice, storms, lightning, or other natural occurrences over which PATRIOT ANTENNA has no control, and this Warranty shall not apply to equipment which has been operated or installed other than in accordance with the instructions furnished by PATRIOT ANTENNA.

Claimants under this Warranty shall present their claims along with the defective equipment to PATRIOT ANTENNA immediately upon failure. Non-compliance with any part of this claim procedure may invalidate this warranty in whole or in part.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER AGREEMENTS AND WARRANTIES, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY. PATRIOT ANTENNA DOES NOT AUTHORIZE ANY PERSON TO ASSUME FOR IT THE OBLIGATIONS CONTAINED IN THIS WARRANTY AND PATRIOT ANTENNA NEITHER ASSUMES NOR AUTHORIZES ANY REPRESENTATIVE OR OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE EQUIPMENT DELIVERED OR PROVIDED.

IN NO EVENT SHALL PATRIOT ANTENNA BE LIABLE FOR ANY LOSS OF PROFITS, LOSS OF USE, INTERRUPTION OF BUSINESS, OR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND.

In no event shall PATRIOT ANTENNA be liable for damages in an amount greater than the purchase price of the equipment.

Some states do not allow limitations on how long an implied warranty lasts, or allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

PATRIOT ANTENNA has the right to void the warranty when the antenna is installed by someone other than a certified installer.

Product Serial Number- _____

Date Purchased- _____

Patriot Antenna Systems

704 North Clark Street

Albion, MI 49224 USA

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Fax: (517)629-6690

E-mail: info@sepatriot.com

Thank you for purchasing your Patriot Commercial Antenna. We trust that you will find this to be a well designed product that will provide many years of reliable service. This manual will help you to know the tools and proper installation of the product. Please check, read and understand the content of this manual before beginning your antenna installation.

Identify and verify that all parts have been received by comparing packaged contents with the Hardware List below.

Record the serial number of the unit on page 2 for future reference and read the warranty information. The serial number can be found on the antenna back structure.

Hardware Table

| No. | Description | Qty | No. | Description | Qty |
|-----|--|-----|-----|------------------------|-----|
| 1 | Reflector/Back Support /Feed Support assy | 1 | 6 | Plasitc Parts | |
| | | | 6-1 | Clamp halves | 2 |
| 2 | Az-El Bracket | 1 | 6-2 | Feed support insert | 1 |
| 3 | Mast pipe | 1 | 6-3 | 40 to 25mm insert | 1 |
| 4 | Mast base bracket | 1 | 7 | Hardware packs | |
| 5 | Mast support struts (on 60mm mast only) | 2 | 7-1 | Tube Support kit | 1 |
| | | | 7-2 | Plasitc Feed Clamp hdw | 1 |
| | | | 7-3 | 752268 (pipe/feed) | 1 |
| | | | 7-4 | 752201 (reflector) | 1 |

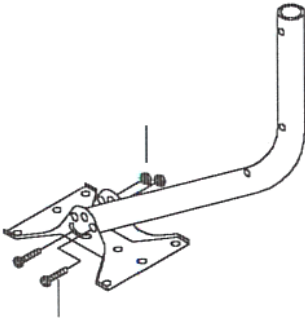
Tools Required

- 1- Metric Combination Wrench and socket set (through 14mm)
- 1- phillips screwdriver
- 1- slotted screwdriver

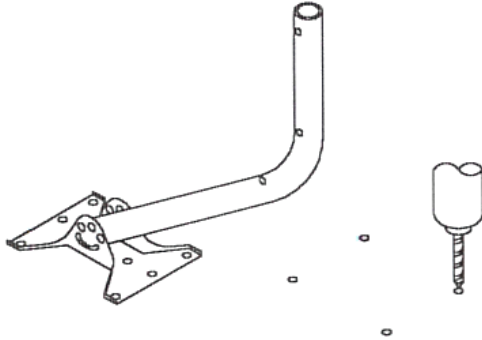
Mast Assembly (for 60cm, 75cm antennas)

Follow the diagram for assembly and mounting of the Mast assembly.

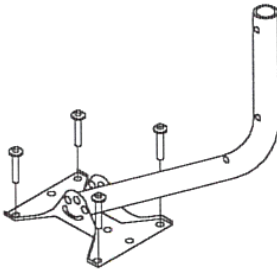
1. Assemble and
mark location



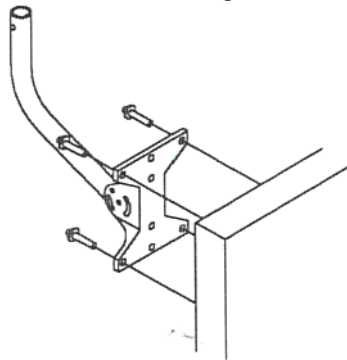
2. Drill Anchor
hardware holes



3. Anchor with proper
hardware (not supplied).
Then **level mast pipe.**



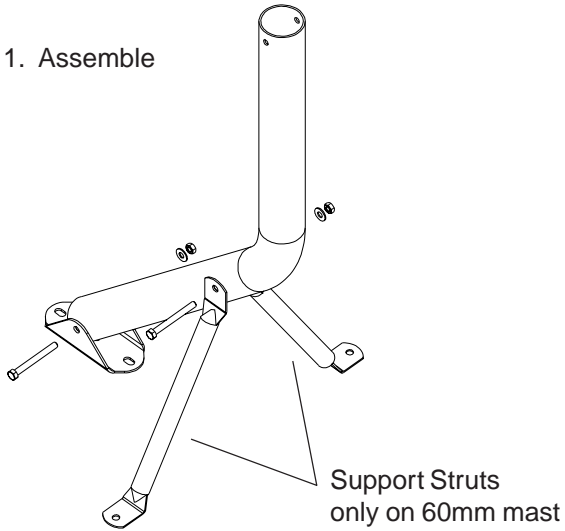
Wall mount
diagram



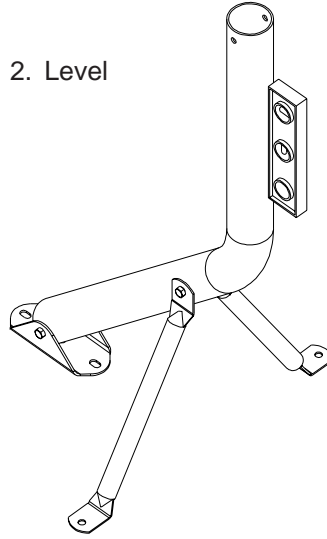
Mast Assembly (for 90cm, 110cm antennas)

Follow the diagram for assembly and mounting of the Mast assembly.

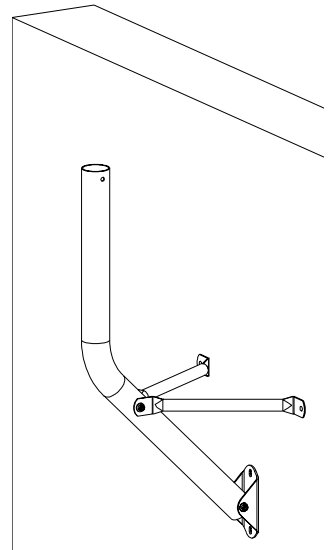
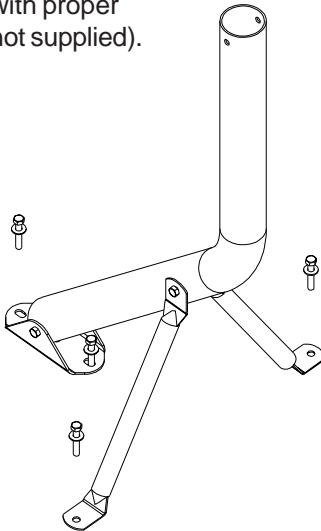
1. Assemble



2. Level



3. Anchor with proper hardware (not supplied).



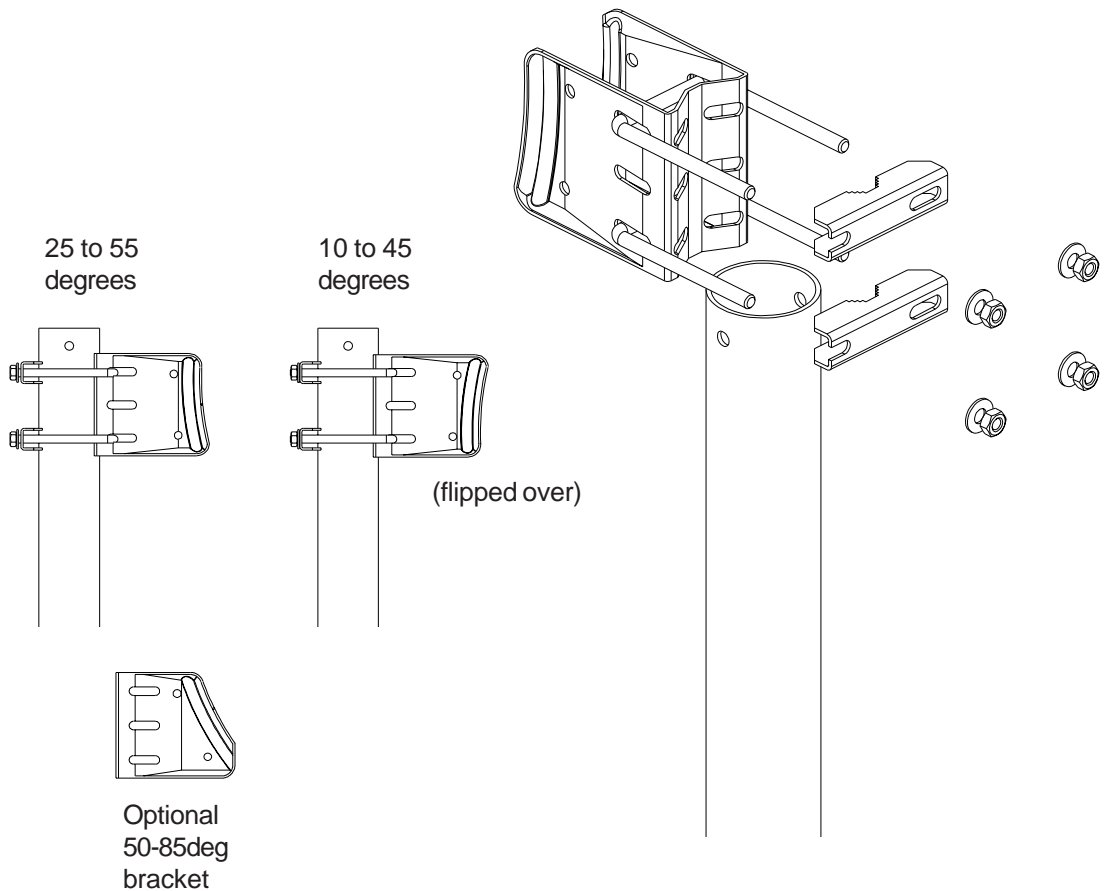
Mount Assembly

1. Determine the desired elevation angle required for the satellite of choice. The standard Az-el bracket is capable of two ranges of adjustment- **25 to 55 degrees** and **10 to 45 degrees**.

NOTE: The resulting location of the reference notch will read the appropriate scale.

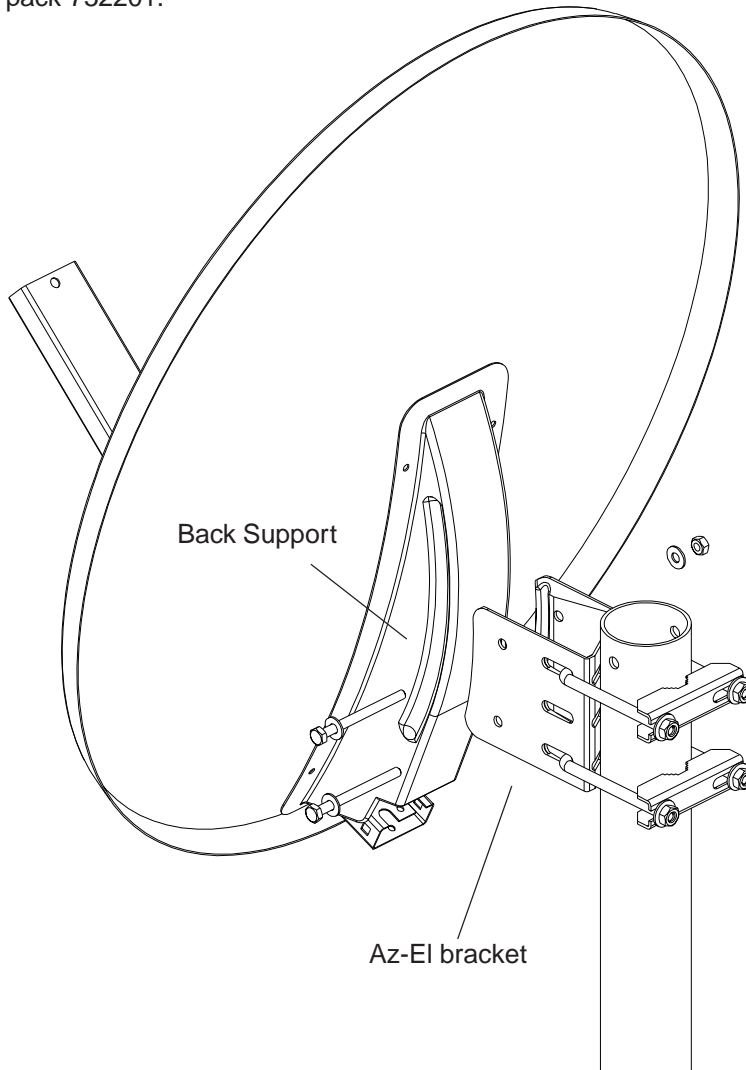
NOTE: If the desired elevation is between 50 to 85 degrees an optional Az-El bracket must be used. Call Patriot Antenna Systems if this was not previously determined upon ordering.

Assemble the Az-El bracket in the proper orientation to the mast pipe using the u-bolts, clamp brackets and hardware shown.



Reflector Assembly

1. Place Back Frame assembly into the Az-EI bracket as shown using the hardware provided to clamp the back support into its' rough elevation setting.
2. Assemble the reflector to the Back Frame using hardware from pack-752201.

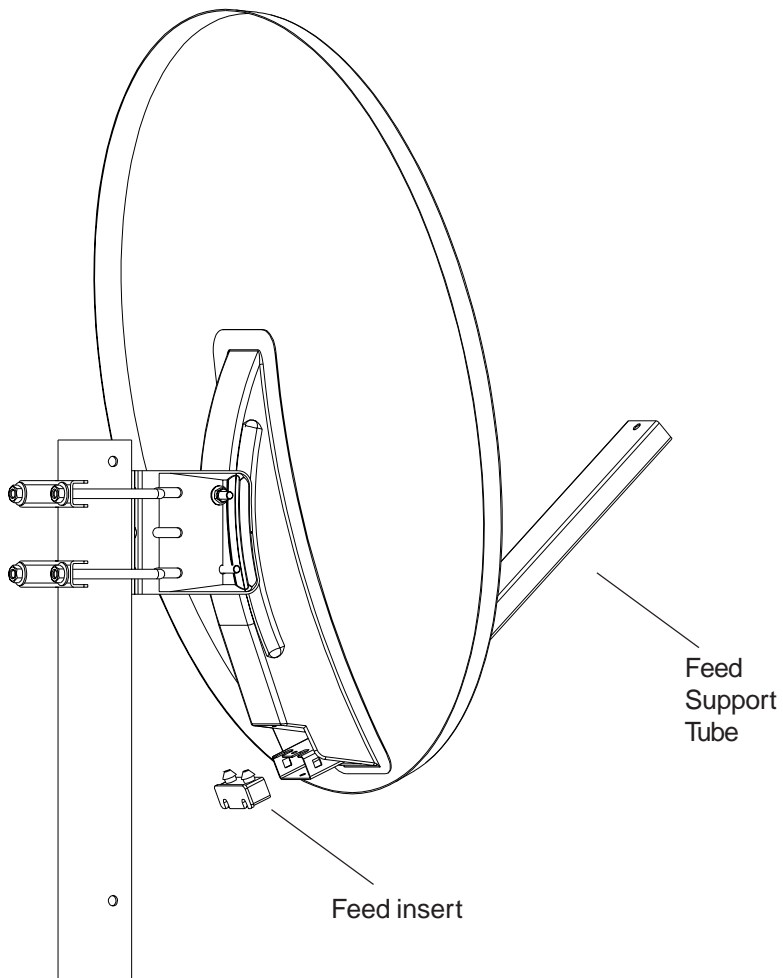


Reflector Assembly (continued)

1. From the molded plastic part assembly selection separate the Feed insert part shown and insert it into the lower end of the feed support tube.

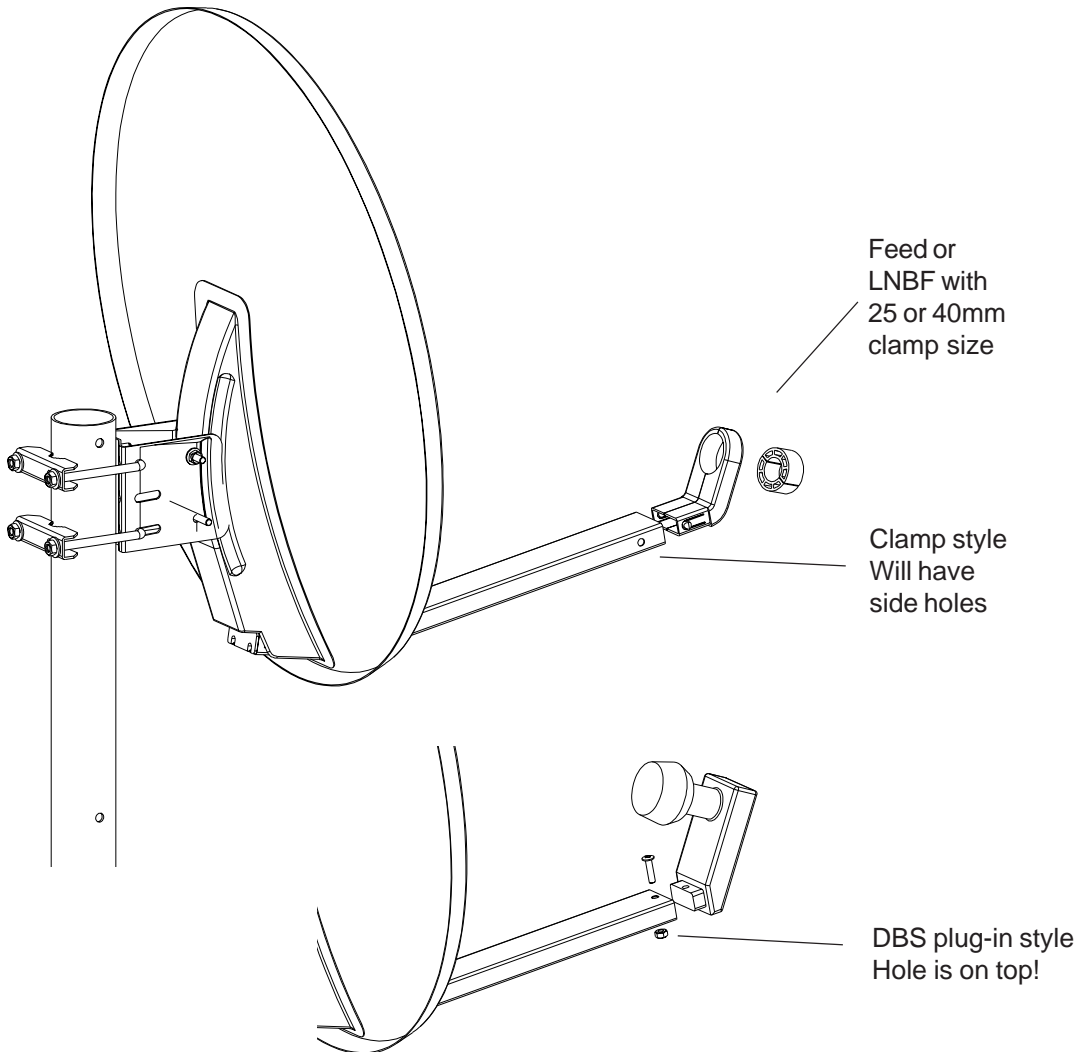
NOTE: It is important to insert the cable through the tube at this time!

2. Pull down on the feed support tube until the arm is locked in place with the plastic insert properly snapped into its' matching hole on the back support.



Feed Assembly

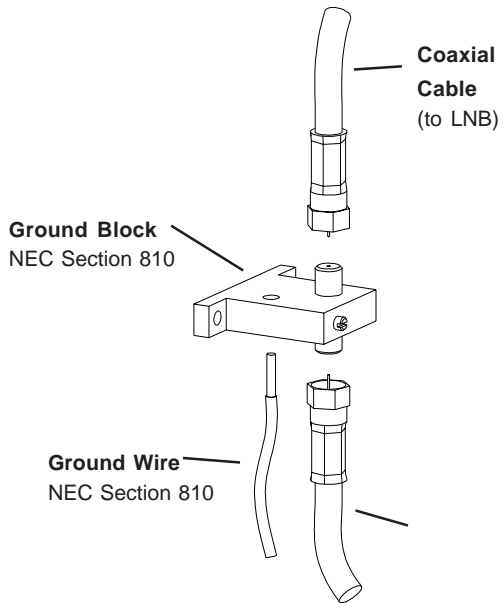
1. Determine which style feed support arm the dish came with and install per the diagrams shown below.



Grounding

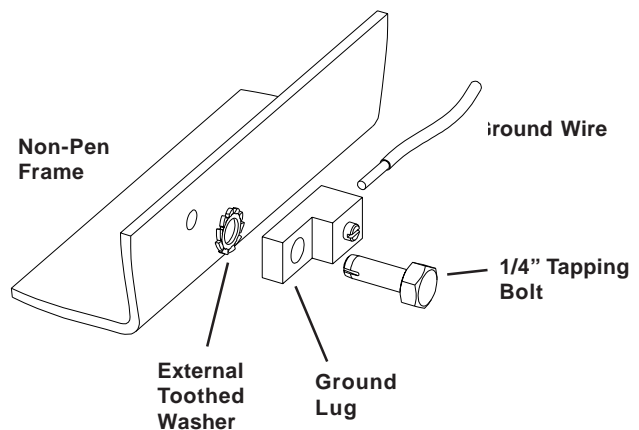
Grounding Antenna Feed Cables

1. Ground antenna feed cables in accordance with current National Electric code and local electric codes. The illustration shows a typical grounding method. Clamps that provide a solid connection between ground wire and a ground source should be used.



Grounding Non-Penetrating Mount Frame (if applicable)

1. Ground the Non-Penetrating mount frame. The illustration shows a typical grounding method. Refer to the NEC Section 810 and local electric codes for specific instructions on grounding the remaining end of the ground wire.





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Specifications

| Electrical | .60 | .76 | .90 | 1.1m |
|-----------------------------|-----------------------|------------|------------|-------------|
| Gain - Ku 11.7Ghz dBi | 35.8 | 37.1 | 38.8 | 40.2 |
| 3dB Beamwidth degrees | 3.1 | 2.6 | 2.0 | 1.8 |
| Cross Polarization- dB | >27 | >27 | >27 | >27 |
| Operational Freq. range | 10.7 to 12.75 typical | | | |

| Mechanical | 60cm | 76cm | 90cm | 110cm |
|-------------------|--------------|-------------|-------------|--------------|
| Antenna Size | 60cm | 76cm | 90cm | 110cm |
| Offset Angle | 26 degrees | | | |
| F/D | .6 | | | |
| Operational Wind | 45mph | | | |
| Survival Wind | 125mph | | | |
| Operational Temp | -40 to 140 F | | | |
| Pole Size | 42mm | 42mm | 60mm | 60mm |



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