



TELEX COMMUNICATIONS, INC.  
8601 East Cornhusker Highway, P.O. Box 5579, Lincoln NE 68505

## UHF Log Periodic Antenna

Order No. 71147000

PN802573

# INSTRUCTION MANUAL

## General Description

The ALP-450 is a broadband directional log periodic antenna. It will receive any frequency from 450 to 900 MHz. The “gain” of this antenna enables it to receive signals from a greater distance than a typical “whip” type antenna.

Log Periodic Antennas are also directional (like a TV antenna) and will have the best reception when pointed at the transmitter. This yields the benefit of less interference from unwanted signals coming from the back or side of the antenna.

## SPECIFICATIONS (average)

Gain .....	4.6 dBd
1/2 Power Beam Width .....	120°
Front-to-Back Ratio.....	19.4 dB
SWR.....	1.5:1
Input Impedance .....	50 ohm
Input Connector .....	TNC

## Antenna Placement

The ALP-450 should be placed in a position that has a clear view of the transmitter(s) for best results. Obstructions such as walls, ceilings, and metal objects will reduce range and performance.

## Antenna Mounting

The ALP-450 is supplied with a variety of mounting hardware. It should always be mounted vertically with the arrows pointing toward the transmitter(s). See Figure 1.

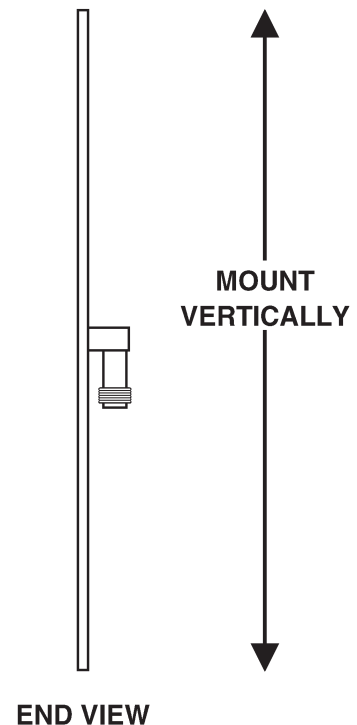


Figure 1  
Antenna Mounting

## Microphone Stand Adaptor

Attach the microphone stand adaptor using the screws and spacers supplied with it. See Figure 2.

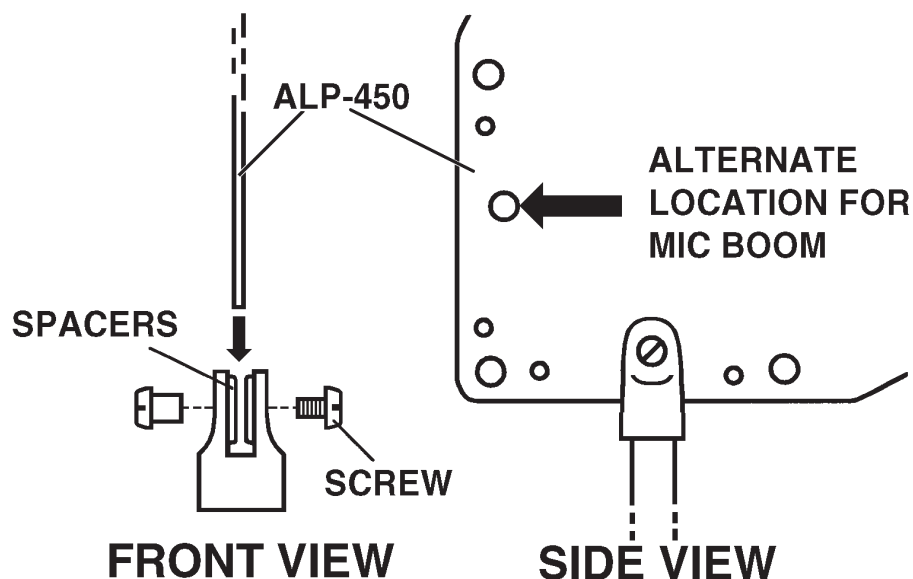


Figure 2  
Microphone Stand Adaptor

## Angle Bracket

Attach the angle bracket using the nuts, lockwashers, and screws supplied with it. Self tapping screws are supplied for securing the bracket to wood, metal, or other surfaces. See Figure 3.

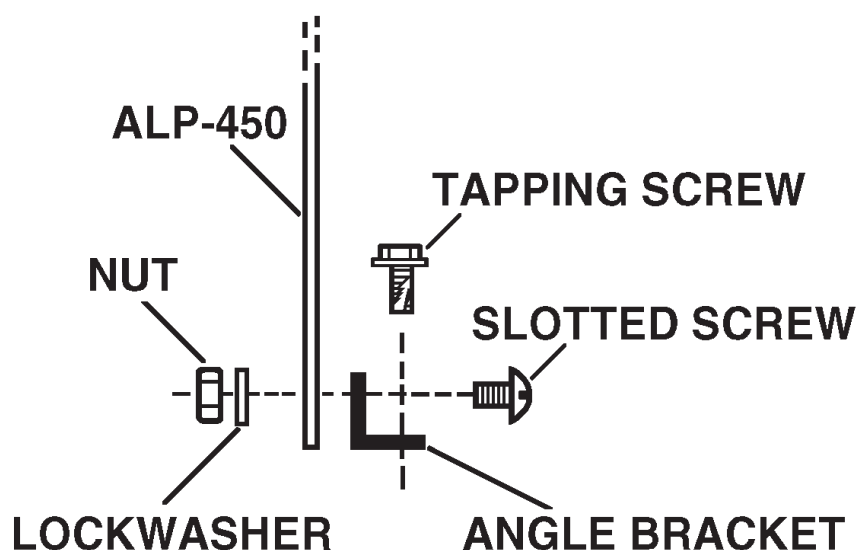


Figure 3  
Angle Bracket

## Clamps

Clamps are provided for mounting the ALP-450 on pipes, scaffolds, tree limbs, etc.. Attach the clamps with the hardware supplied. See Figure 4.

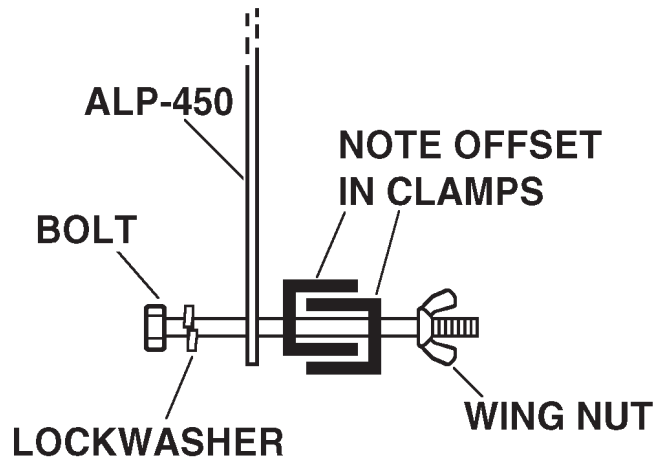


Figure 4  
Clamps

Do not clamp the antenna to horizontal metal objects that extend past the clamp. See Figure 5. This will detune the antenna and cause loss of range and performance.

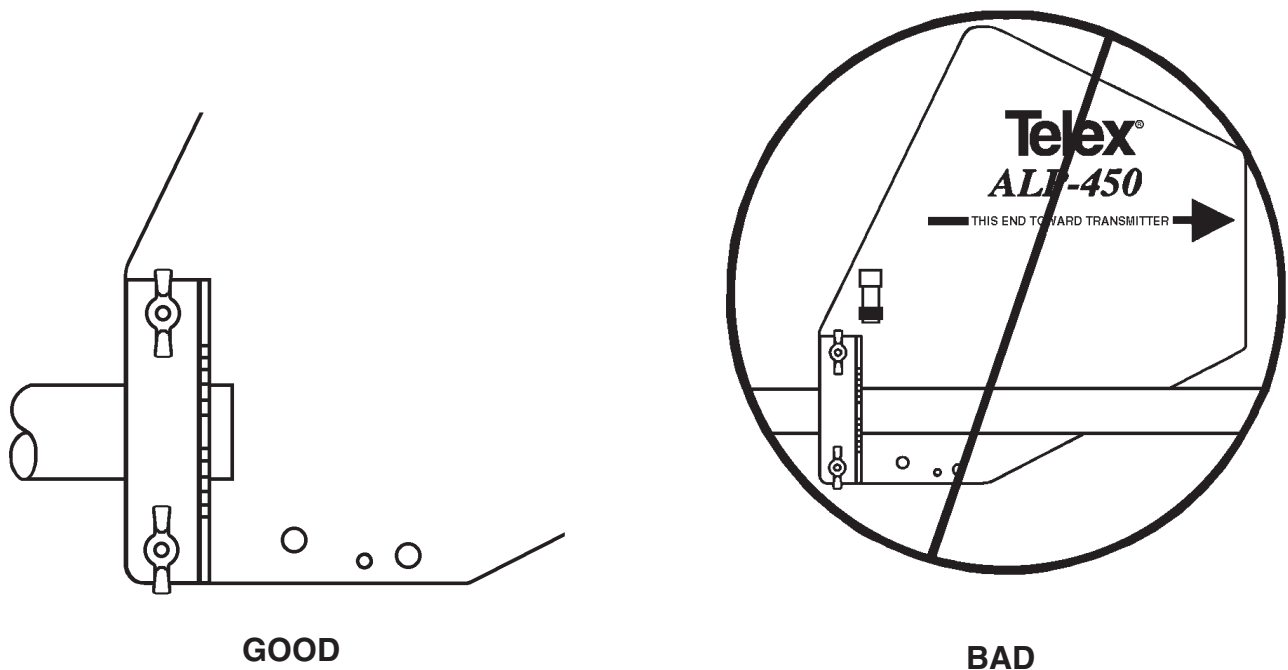


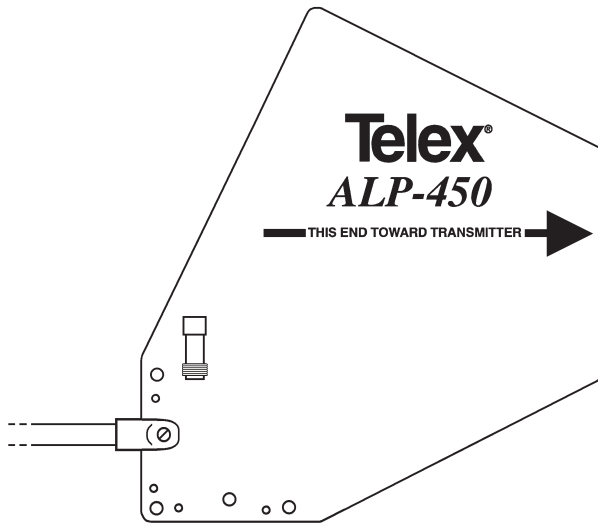
Figure 5  
Clamp Mounting

## Coax Cable

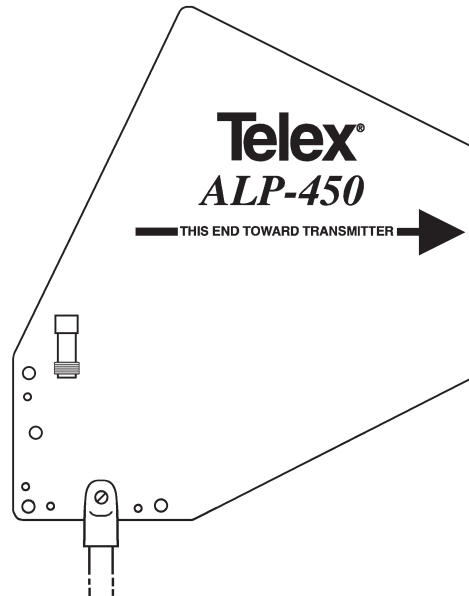
For best results, it is recommended that cable losses be kept under 4 dB. (Every 3 dB of signal loss results in a system operating distance reduction of 25%).

See the accessories section of this manual for special low loss cable assemblies.

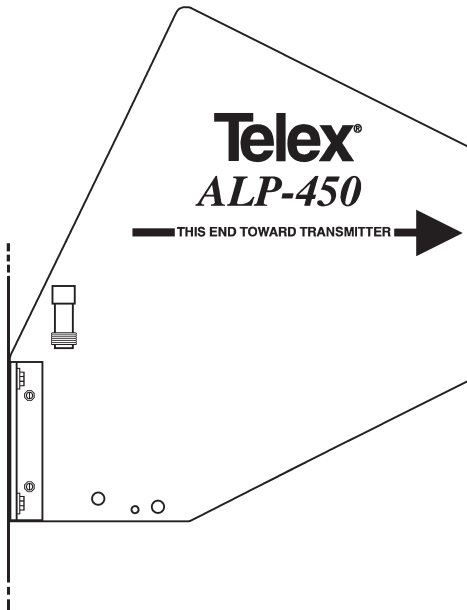
## MOUNTING SUGGESTIONS



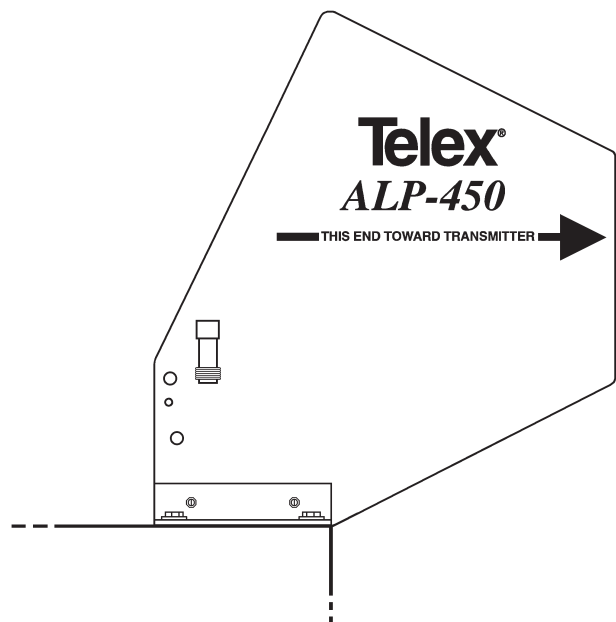
**Mic Boom**



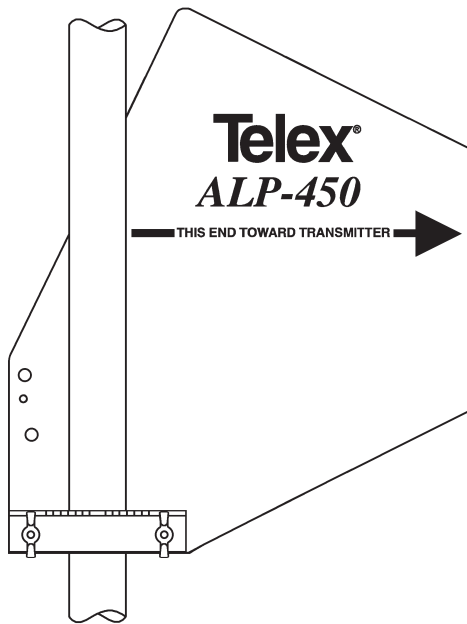
**Mic Stand**



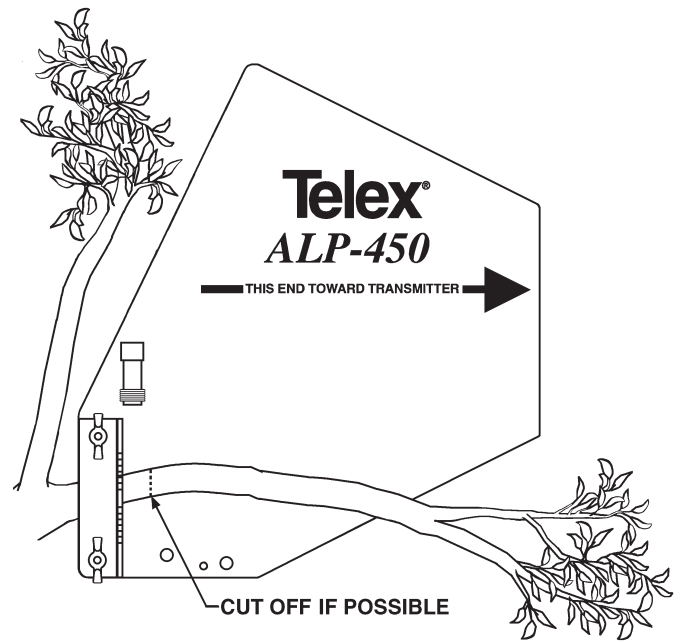
**Wall**



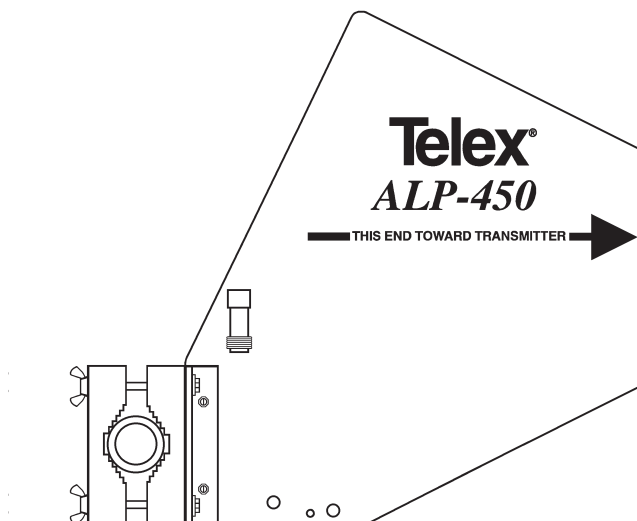
**Top Surface**



**Pipe or Scaffold**



**Tree Limb**



**Combination:  
Bracket with Clamps**

# ACCESSORIES

Special Low Loss Antenna Cables with  
TNC Connects

<b>Length</b>	<b>Part No.</b>
10 Ft. (3 meters)	690419
25 Ft. (7.6 meters)	71151-025
50 Ft. (15 meters)	71151-050
75 Ft. (23 meters)	71151-075
100 Ft. (30 meters)	71151-100