

# INSTRUCTION MANUAL

## General Description

The ALP-600 is a broadband bi-directional log periodic antenna. It will receive any frequency from 520 to 760 MHz. The "gain" of this antenna enables it to receive signals from a greater distance than a typical "whip" type antenna.

## SPECIFICATIONS (average)

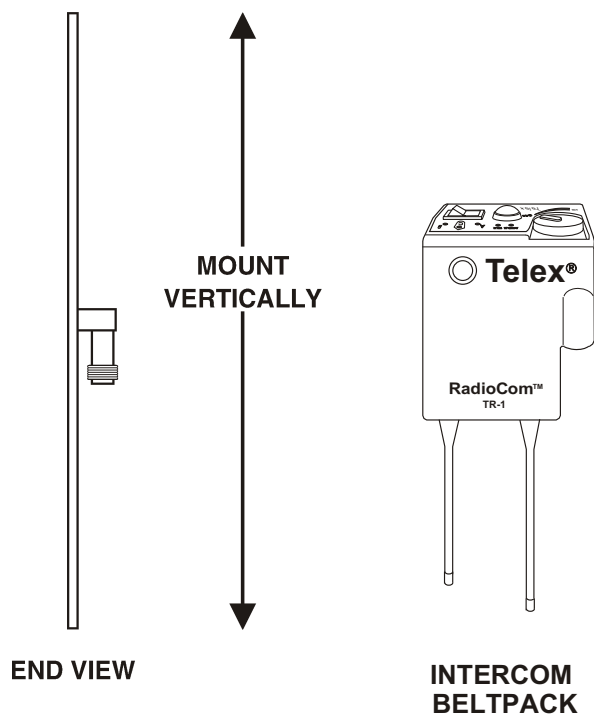
Gain .....	1.6 dBd
1/2 Power Beam Width .....	120°
Front-to-Back Ratio .....	19.4 dB
SWR.....	1.5:1
Input Impedance .....	50 ohm
Input Connector .....	TNC
Size.....	12" (304.8mm) x 17" (431.8mm)

## Antenna Placement

The ALP-600 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.

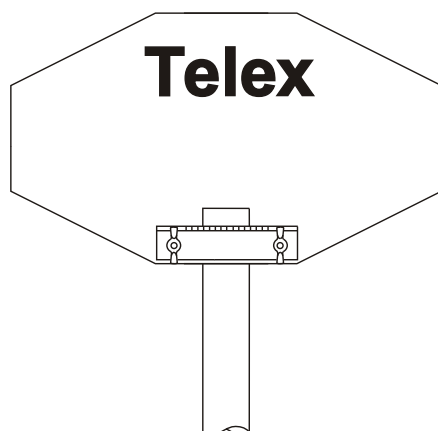
## Antenna Mounting

The ALP-600 is supplied with hardware for tubular clamping. It should always be mounted vertically with the ground and broadside to the transmitter(s). See Figures 1 and 3.

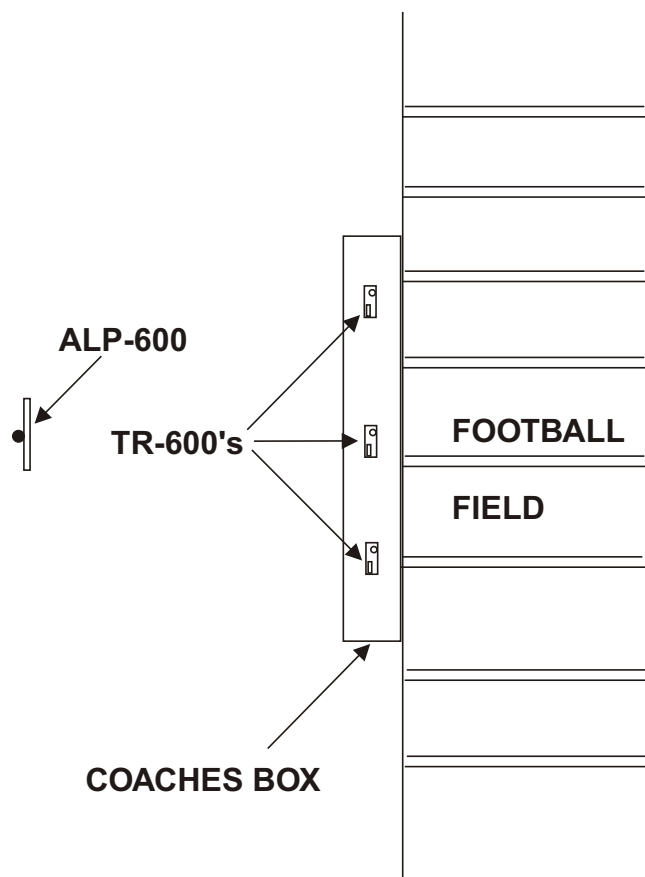


**Figure 1**

## Mounting Suggestions



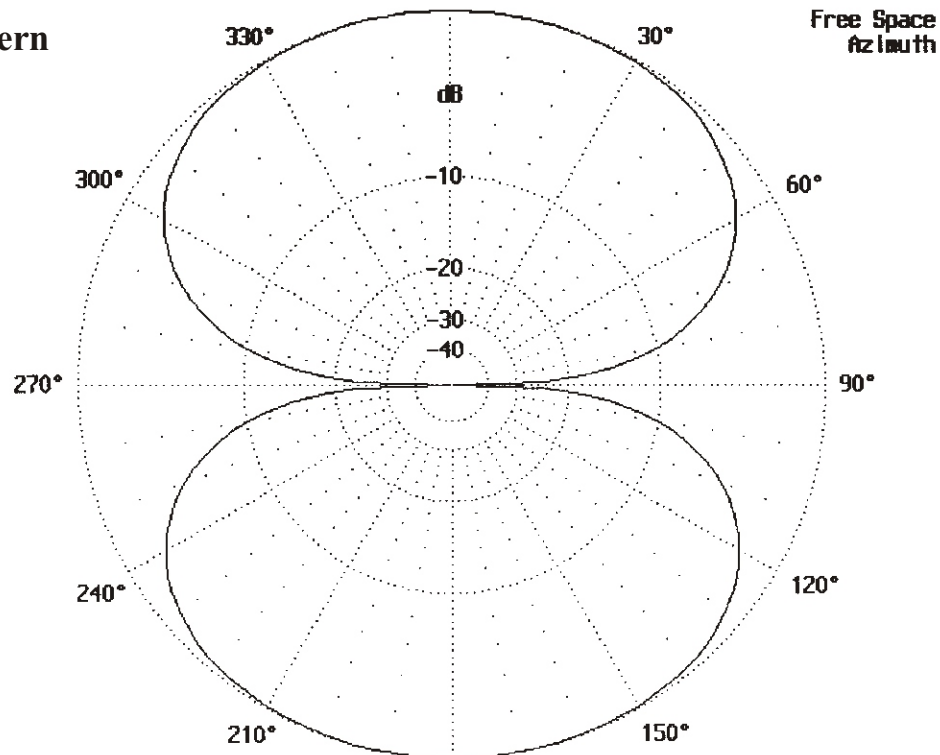
**Figure 2**  
**ALP-600 Mounted on Antenna Mast**



Refer to Figure 4 for typical antenna pattern.

**Figure 3**  
**Top View of Field**

## ALP-600 Antenna Pattern

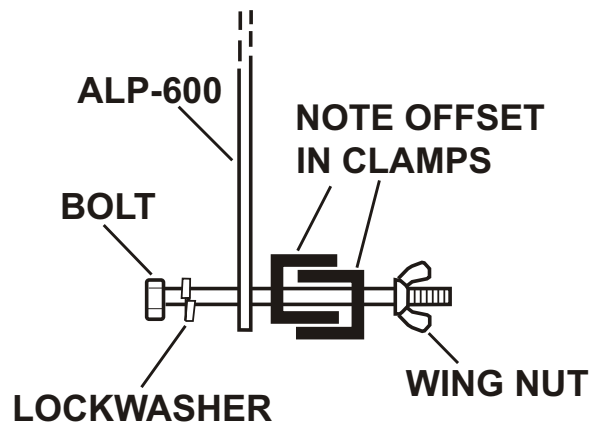


**Figure 4**  
**Typical ALP-600 UHF Bi-Directional Antenna Pattern**

## Clamps

Two types of clamps are provided for mounting the ALP-600 onto the antenna mast. Attach the clamps with the hardware supplied. See Figure 5 or 6.

Do not clamp the antenna to horizontal metal objects that extend past the clamp to the right or left. This will detune the antenna and cause loss of range and performance.

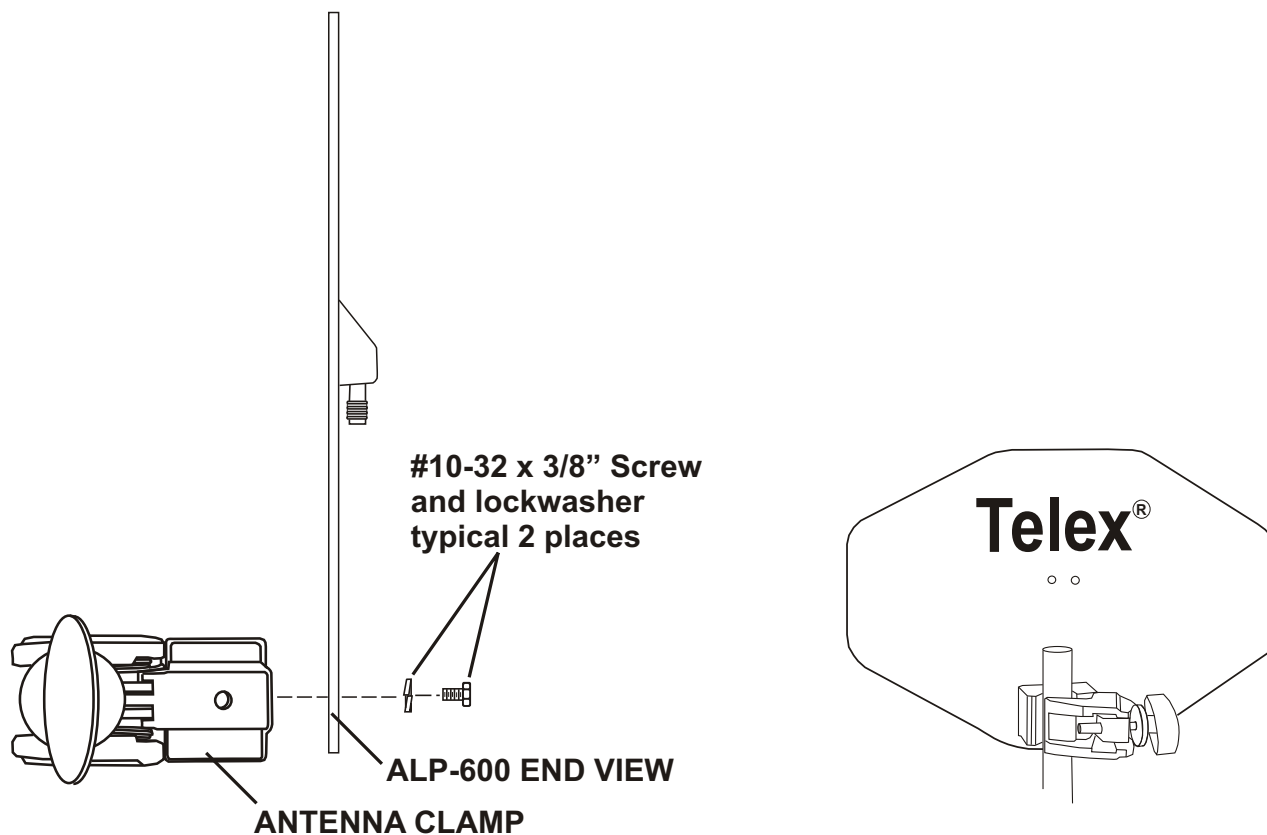


**Figure 5**  
**Serrated Clamps**

## 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%).

A 10 ft coax cable (PN F.01U.183.616) is included with the ALP-600. See accessories for longer cables if needed.

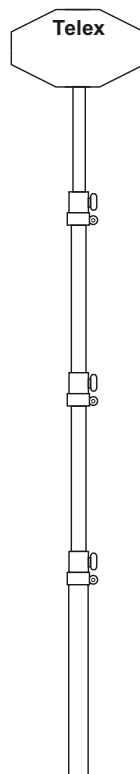


**Figure 6**  
**Adjustable Clamp**

## ACCESSORIES

### Special Low Loss Antenna Cables with TNC Connects

Length	Part No.
10 Ft. (3 meters)	F.01U.183.616
25 Ft. (7.6 meters)	F.01U.188.163
50 Ft. (15 meters)	F.01U.188.164
75 Ft. (23 meters)	F.01U.188.165
100 Ft. (30 meters)	F.01U.188.166



### Antenna Mast

Four sections, clear anodized aluminum mast with extended length of 86 7/8".

**Order No. F.01U.118.468**