

ALYX ANTENNA GUIDE BROADBAND MONOPOLE ANTENNA FOR SHORTWAVE RADIO BROADCASTING

GENERAL DESCRIPTION

The broadband monopole antenna is vertically polarized, has a low angle radiation pattern and is used for short range circuits by ground wave and medium to long range circuits by sky wave.

The antenna is broadband, omnidirectional and conical.

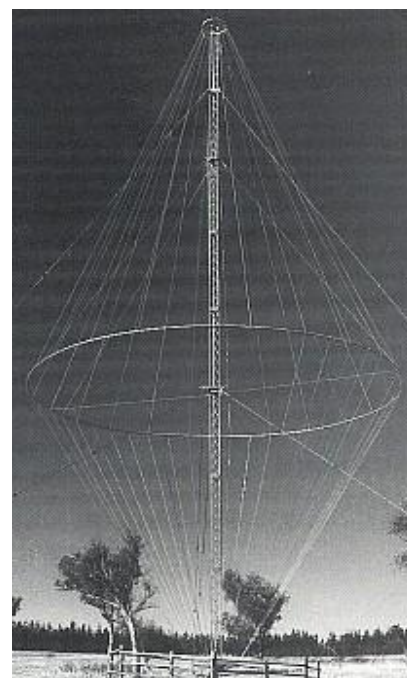
The broadband frequency capability does not require tuning.

The radiation pattern in the azimuth plane is essentially omnidirectional, while the elevation pattern varies with frequency.

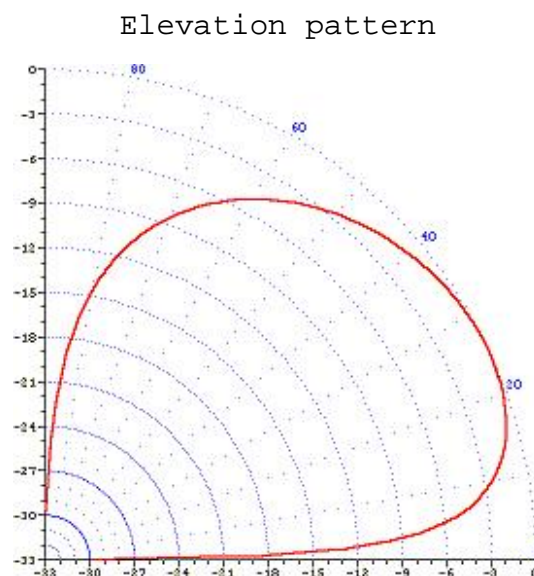
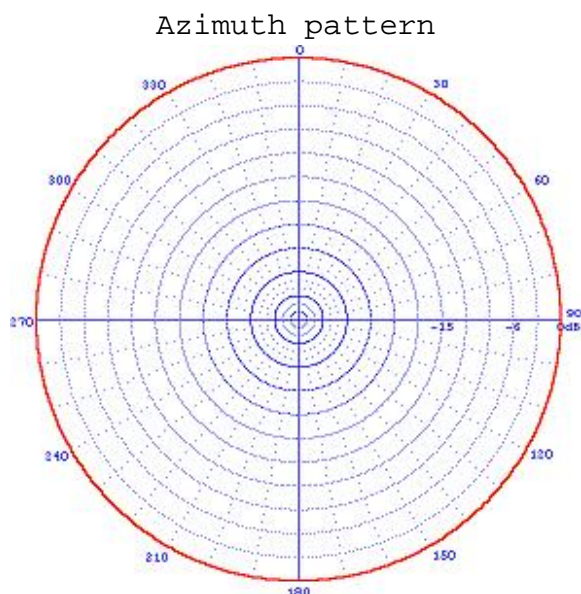
The support structure is a guyed mast supported on a base insulator.

The radiator comprises a biconical cage of wire.

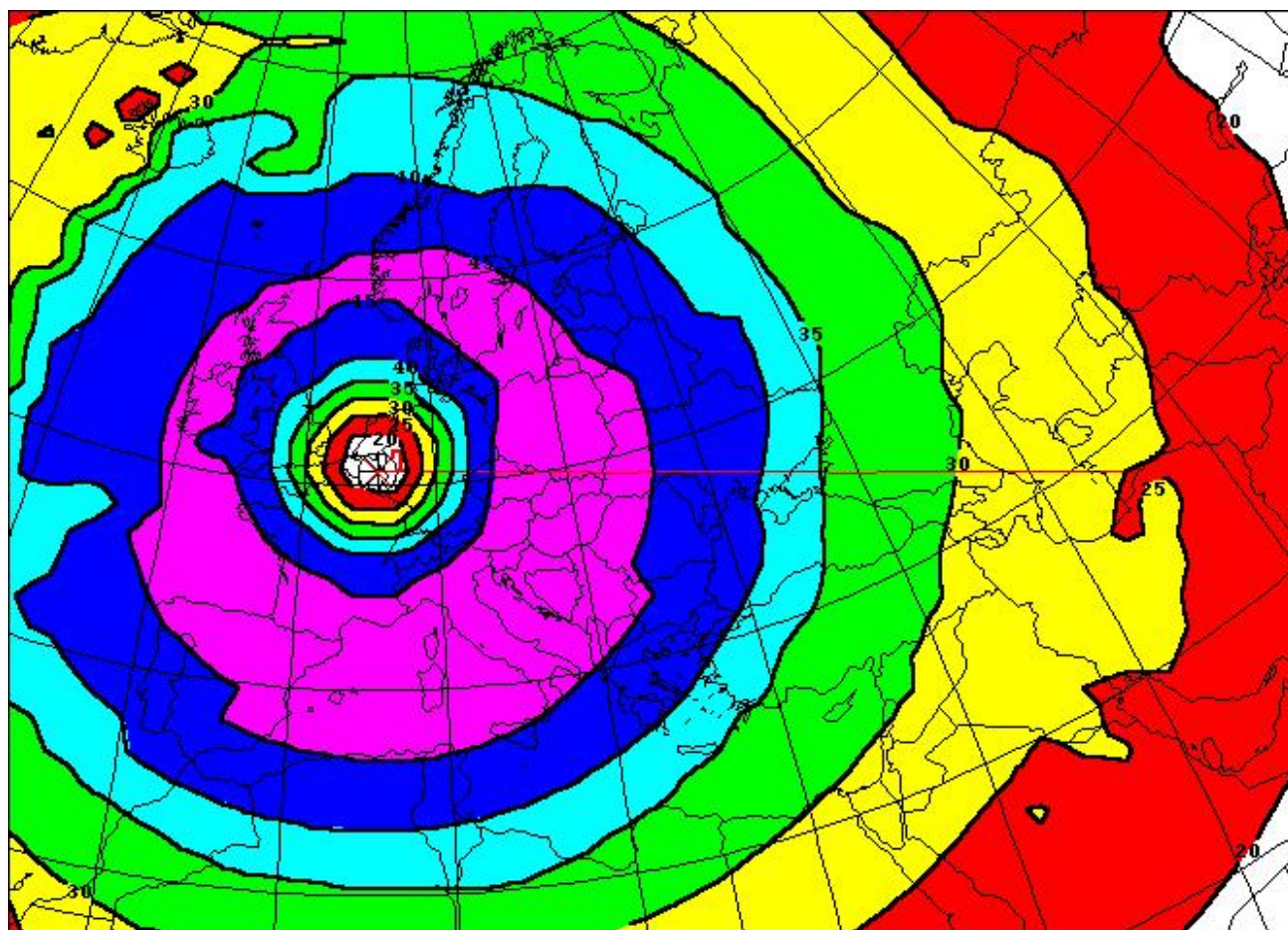
Monopole antennas require a radial ground screen for specified performance. The ground screen consists of wire conductors laid out radially from the tower base and terminated at the outer end.



TYPICAL RADIATION PATTERNS



TYPICAL COVERAGE MAP



TECHNICAL SPECIFICATIONS

ELECTRICAL

Azimuth pattern	omnidirectional
Frequency ranges	2-30 / 3-30 / 4-30 MHz
Gain	4-5 dBi
Input impedance	50 ohm unbalanced
Polarization	vertical
Power ratings	1 / 10 / 20 / 25 / 40 kW average
VSWR	2.5 : 1 or less

DIMENSIONS

Height	9-37 m (30-122 ft)
Guy radius	6-23 m (20-75 ft)
Ground screen radius	11-76 m (36-250 ft)

Specifications may change without notice

THIS TYPE OF ANTENNA IS AVAILABLE FROM

Manufacturer	Type number	Power Level		
Andrew Corporation	1794		M	
	2753	L	M	
Antenna Products Corporation	CMV-230/330/430	L	M	
	CMV-600	L	M	
<u>Kintronic Laboratories, Inc.</u>	HFM Series	L	M	H

RFS Radio Frequency Systems	WM & BC Series		M
TCI	Model 506	L	M
	Model 550		M
<u>Transradio SenderSysteme Berlin</u>	AVE 0640		H

ABBREVIATIONS

	Abbreviation		Explanation
	L	low	1-5 kW
Power Level	M	medium	10-50 kW
	H	high	100-500 kW