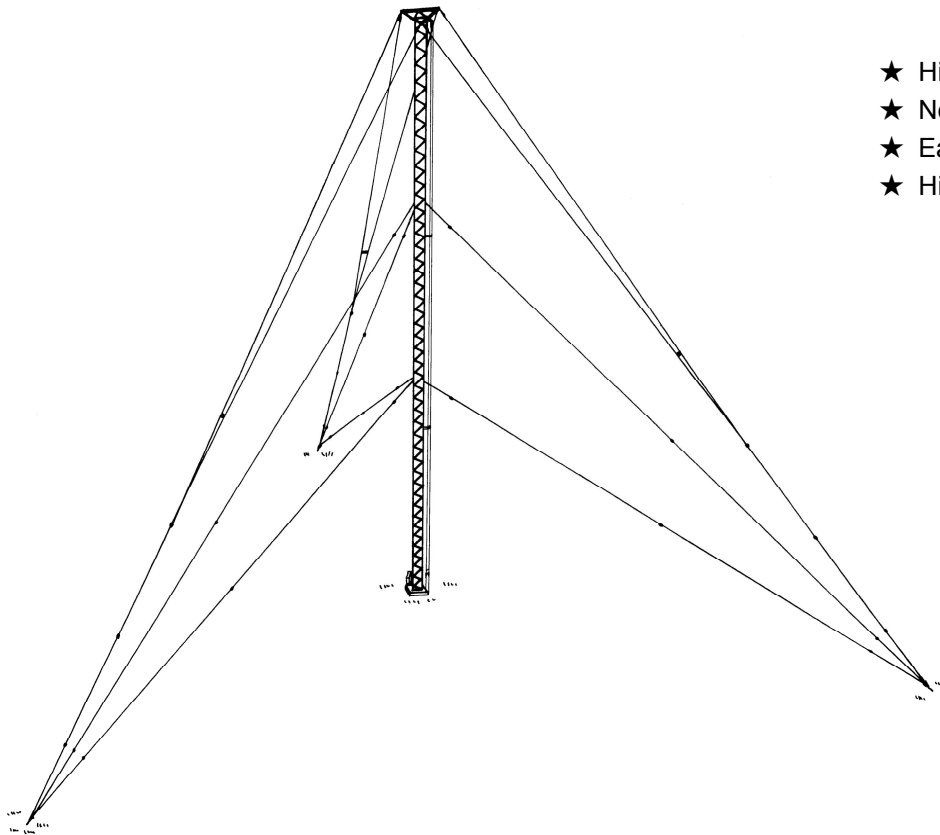




Umbrella-Loading Monopole Antenna

518kHz
NAVTEX Frequency

CV-050



- ★ High Efficiency
- ★ No Special Network needed
- ★ Easy to Install
- ★ High Power Capability

The CD model CV-050 is an omni-directional MF vertically polarized umbrella-loading antenna, designed to provide a high efficiency and high power radiation capability for fixed transmitting and receiving sites. An optimum frequency range of this antenna is approx. 480~518kHz NAVTEX band. The antenna have a low-angle radiation pattern and provide both short and long range MF communications by ground wave and sky wave respectively. The radiation pattern in the azimuth plane is essentially omni-directional, while the elevation pattern varies with frequency.

The CV-050 antenna is special type of vertical radiator in which the upper part of the aerial is bent over. This enables a reasonable length of wire to be used without the need for using high mast. The supporting mast is guyed at three places around mast. A ground radial requires 60m diameter land area standard.

15 man-days required for the installation of CV-050, excluding the time required for pouring and curing of concrete foundations and ground screen installation.

SPECIFICATIONS

PolarizationVertical
 Recommended Frequency 480 to 518 kHz
 Gain, Over Average Soil 1.5 dBi
 VSWR Less than 1.5 : 1
 RF Power Capability, Max. 10 kW

Antenna Height 45 m
 Guy Radius 43 m
 Ground Screen Radius 30 m
 Wind Loading Capability 45 m/s
 System Net Weight 1100 kg

Optional Antenna Coupler Model CM-050-x for CV-050

Frequency Range:	480~518kHz, Standard
Frequency Channels:	CM-050-x-1 1-Channel CM-050-x-2 2-Channel
RF Power Capability:	Average/PEP
	CM-050-1-x 0.5kW/1kW CM-050-2-x 1kW / 2kW CM-050-3-x 5kW/ 10kW

Requirements for 2-Channel Type

Power and Remote Control Cable:	4-Wire
Power Requirement:	
	PRI. 90~260VAC 50~60Hz, Single Phase 50VA.
Selecting:	20m/second
Input Impedance:	50 Ohms

