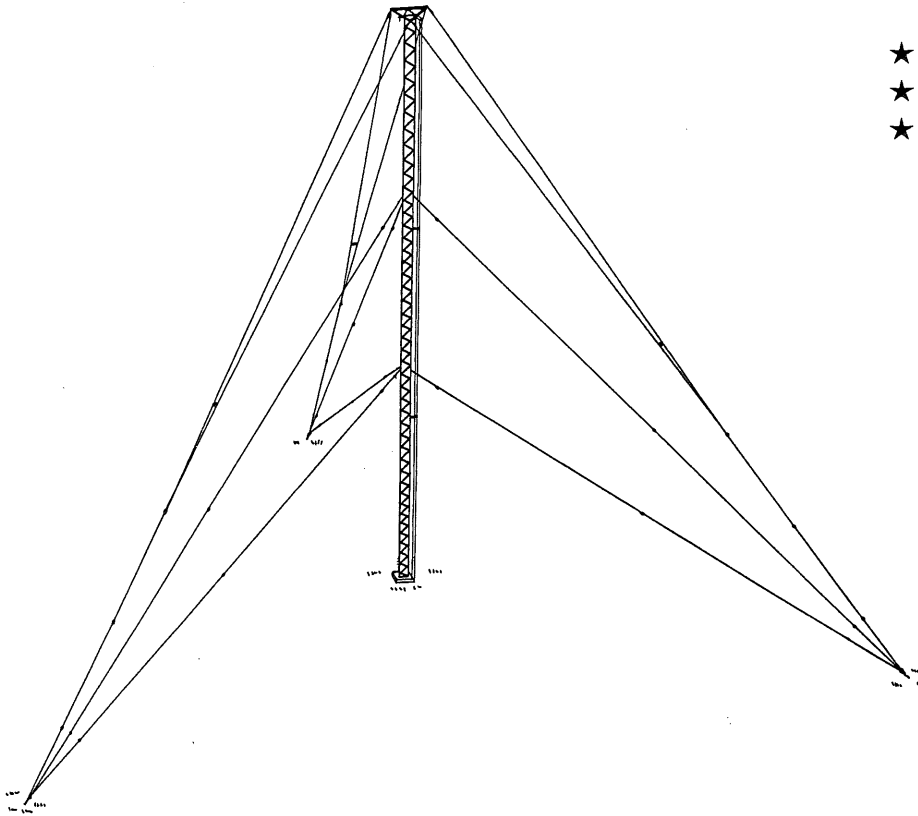




Umbrella-Loading Monopole Antenna

MF or NAVTEX Frequency

CV-050



- ★ High Efficiency
- ★ 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. 400~550 kHz or NAVTEX band. The antenna have a low-angle radiation pattern and provide both short and long range MF communications by ground wave and skywave 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 80m diameter land area standard.

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

SPECIFICATION

Polarization	Vertical
Frequency Range	MF Band
RF Power Capability, Max.	10 kW
Recommended Frequency	400 to 520 kHz
Resonance Frequency, Adjustable	530 kHz
Radiation Resistance	8 ohms/530 kHz
Antenna Height	45 m
Guy Radius	43 m
Ground Screen Radius	40 m
Wind Loading Capability	45 m/s
System Net Weight	1100 kg

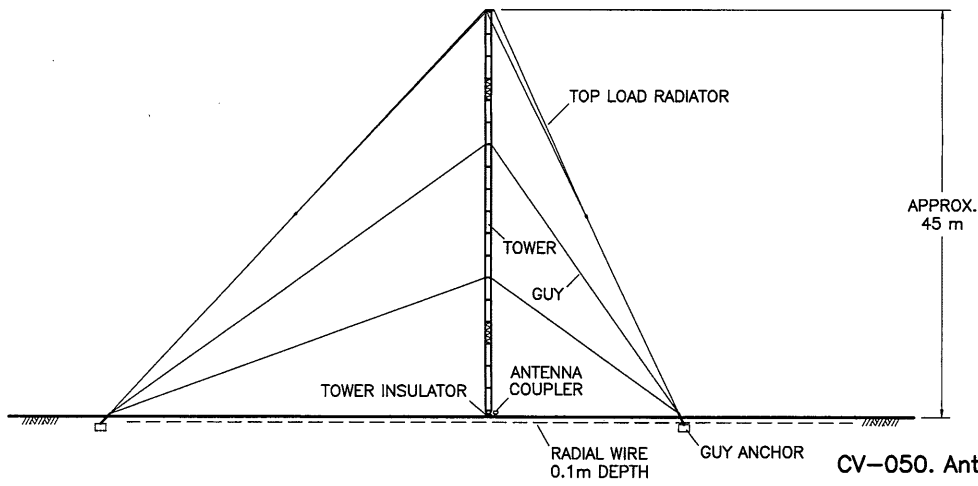
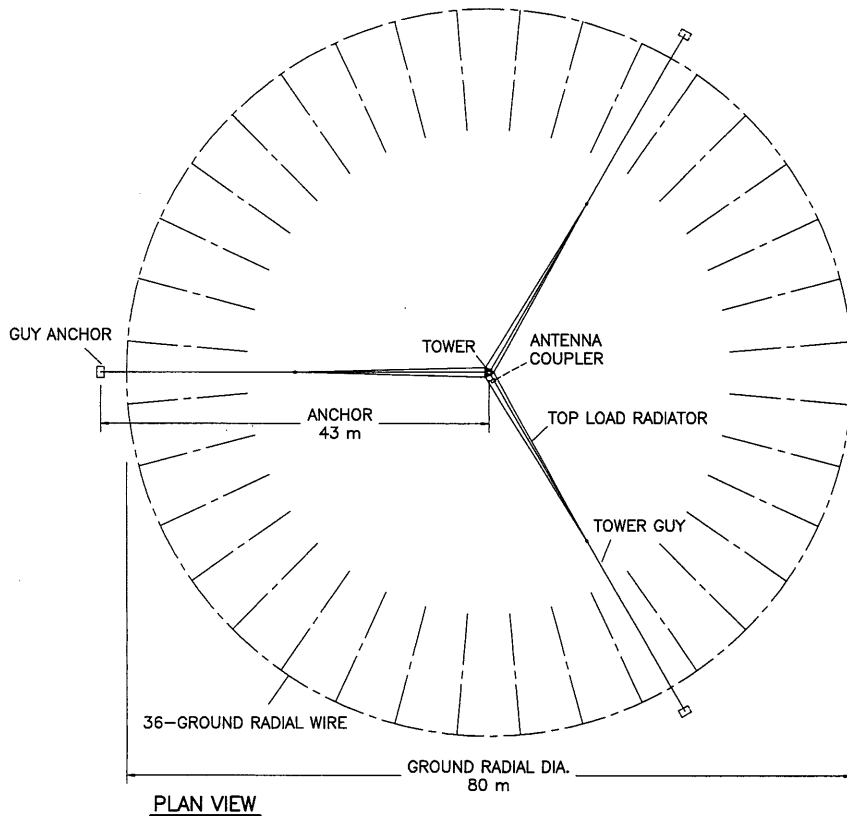
Optional Antenna Coupler Model CM-050-x for CV-050

Frequency Range 490~518kHz, Standard
Frequency Channels

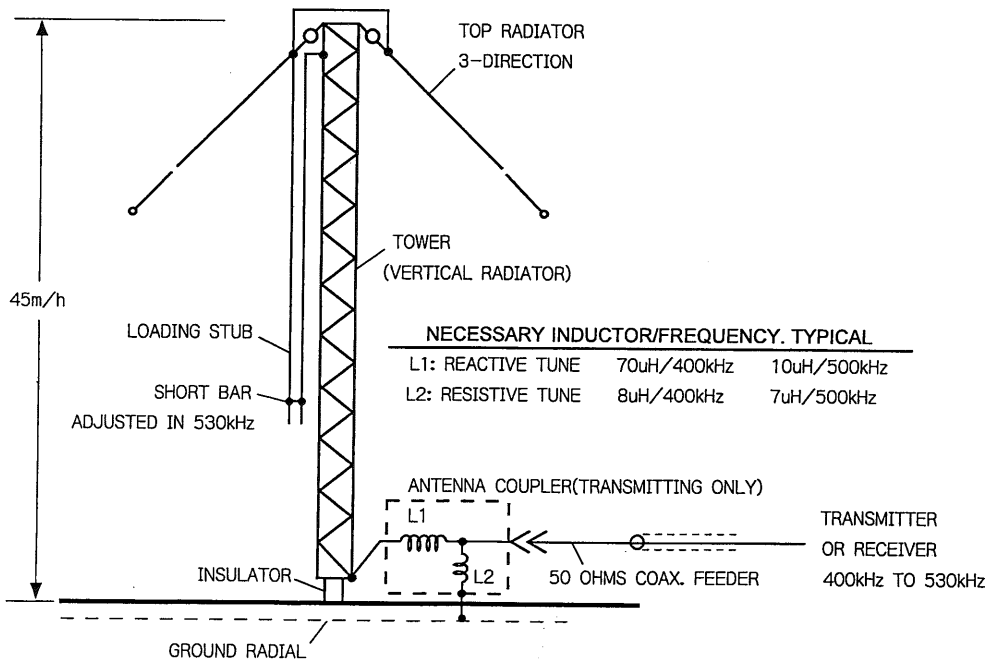
CM-050-x-1	1-Channel
CM-050-x-2	2-Channel
RF Power Capability	Average/PEP
CM-050-1-x	0.5kW/1kW
CM-050-2-x	1kW /2kW
CM-050-3-x	5kW/ 10kW

Requirements for 2-Channel Type

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



CV-050. Antenna Installation
DWGT.106



Antenna Simplified Circuits, CV-050.