

Vertical Receiving Antenna, Model VRA-\*

The Models VRA are a series of VERTICAL RECEIVING ANTENNAS for use in installations where a convenient broadband device is needed to provide an antenna and match to a monitoring receiver operating in various frequency ranges. The Model VRA-1 is particularly useful in LF beacon monitoring installations, operating in the range of 200 to 800 Kc.

The Model VRA uses a vertical whip antenna which will extend to 18 feet in height. This whip is mounted on a cast aluminum, water-proof case which contains a broadband matching transformer. Connections are provided from the transformer to a weatherproof coaxial connection on the case. Standard units are equipped with a UG-58A/U receptacle and a UG-21B/U plug for connection to RG 8, 9, 10, 11, 12 or 13 /U Cable, together with a UG-27A/U angle adaptor for convenience. Other connectors can be provided on special order; lightning protection is provided by means of an adjustable spark gap, similar to that used in TMC RHOMBIC ANTENNA COUPLER, Model RAC.

A universal mounting kit (BM-255) is supplied to provide rugged, yet simple mounting on a wall, roof or pole.

The coupling transformer in the Model VRA-1 has a frequency response which is flat within plus or minus 1.5 db over the range 200 to 800 Kcs. However, it should be noted that impedance matching over such a wide frequency range as this using an 18 foot antenna must of necessity be a compromise. In this case optimum match is provided at 400 Kcs and operation either side of this range is degraded accordingly. Similar matching at an optimum point is provided in each of the other Models VRA.

The Models VRA are supplied complete with all of the necessary operating and installation hardware and therefore represents a complete "packaged" antenna system which needs only the coaxial cable and receiver to go into operation.

### TECHNICAL SPECIFICATIONS:

TRANSFORMER FREQUENCY RANGE:	200-800 Kc VRA-1 2-30 Mc VRA-2
FREQUENCY RESPONSE:	Flat within 3 db throughout the frequency range.
EQUIPMENT CASE:	Weather resistant, cast aluminum alloy.
ANTENNA:	Vertical, sectional, aluminum whip, which may be extended to 18 feet.
ANTENNA CONNECTION:	Simple & rugged clamp fastening to case.
OUTPUT IMPEDANCE:	70 ohms.
OUTPUT CONNECTION:	UG-58A/U receptacle, mounted on case.
ACCESSORY CONNECTORS:	UG-21B/U plug and UG-27A/U angle adaptor.
COMPONENTS CONSTRUCTION:	Equipment is manufactured in accordance with JAN/MIL specifications wherever practicable.

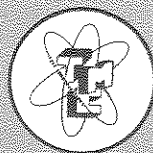
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