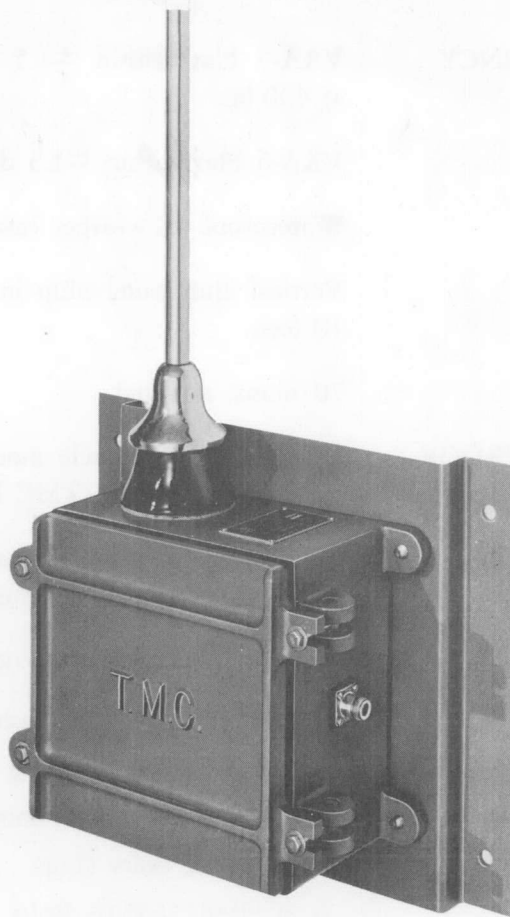




JUL 28 1962

TECHNICAL BULLETIN NUMBER 8004

Vertical Receiving Antennas
TMC Models VRA-5, VRA-6



TMC Models VRA-5 and VRA-6 are a series of Vertical Receiving Antennas for use in installations where a convenient broadband device is needed to provide an antenna and impedance match to a monitor receiver operating in various receiving ranges. Models VRA, whip antenna systems, contain 18 feet of telescopic antenna sections, a broadband 70 ohm impedance matching transformer for a frequency coverage of 200-800 kc (VRA-5) or 2-32 mc (VRA-6), and complete mounting hardware.

Model VRA-5 is particularly useful in LF beacon monitor installations, operating in the range of 200-800 kc. Enclosed in cast aluminum waterproof cases, these "package" antennas are provided with a universal mounting plate for mounting on a wall, roof, pole, or vehicle, and are ready to be directly connected to a receiver coaxial input.

The coupling transformer in the Model VRA-5 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 efficiency either side of this point is somewhat less. Similar matching at an optimum point is provided in Model VRA-6.

TMC Models VRA-5, VRA-6

TECHNICAL SPECIFICATIONS

TRANSFORMER FREQUENCY RANGE:	VRA-5 200-800 kc VRA-6 2-32 mc
TRANSFORMER FREQUENCY RESPONSE:	VRA-5 Flat within ± 1.5 db, optimum matching at 400 kc. VRA-6 Flat within ± 1.5 db from 2-32 mcs.
EQUIPMENT CASE:	Waterproof all weather cast aluminum alloy.
ANTENNA:	Vertical aluminum whip in sections that extend to 18 feet.
OUTPUT IMPEDANCE:	70 ohms, nominal.
STANDARD WEATHERPROOF CONNECTION PROVIDED:	UG-58A/U Receptacle mounted on case with mating cable connector, TMC Part No. AX-259-2.
SAFETY:	Receiver and personnel protected from lightning by means of an adjustable internal spark gap.
MOUNTING KIT:	Installation hardware provided: 4 LW537MSS Split Washers 1 MS543 Plate mounting unit 4 MS619 Brackets for mounting unit 16 SC-111-2 Bolts (lag) 4 SCHH37165516 Bolts (machine)
CONSTRUCTION:	Antenna base is screw fitted into a metal bell mounted on a porcelain insulator which is further supported on rubber bushings to withstand shock.
INSTALLED SIZE: (Less Antenna)	18½" × 16⅞" × 7".
INSTALLED WEIGHT:	27 lbs.
SHIPPING WEIGHT & CUBE:	50 lbs., 2.3 cu. ft.
COMPONENTS AND CONSTRUCTION:	Equipment is manufactured in accordance with JAN/MIL specifications wherever practicable.

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