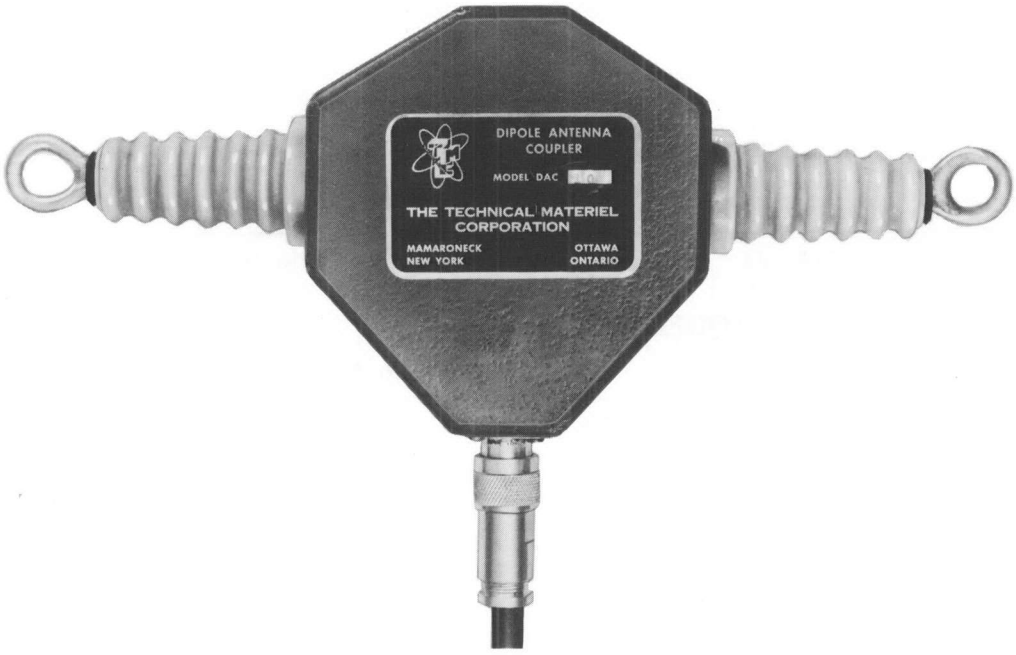
TECHNICAL BULLETIN NUMBER 8013

Dipole Antenna Coupler
TMC Models DAC



- 2 to 32 mcs
- Built-in lightning arrester
- Weather resistant
- Sealed fiberglass reinforced plastic case
- Stainless steel connector rings
- 2,000 pound tensile strength

The Technical Materiel Corporation's Dipole Antenna Couplers, Models DAC are impedance matching devices, each providing a balanced connection for the center of a receiving dipole to 50 and 70 ohm unbalanced connections for coaxial transmission lines. An included chart shows models to meet various transmission requirements. The transformers used in Models DAC provide flat response over a wide frequency range, obviously however dipole antennas are constructed for finite frequencies, therefore impedance match from the antenna to the coaxial transmission line is a function of the frequency for which the dipole is cut.

SUPERSEDES SSB-158A

ISSUED SEPT. 1964

Dipole Antenna Coupler

Stainless steel connector rings are provided for the antenna connector and for messenger tie points. The entire unit is contained within a sealed fiberglass reinforced plastic case, and additional strength and weather resistance is provided by "potting" the transformer and connectors in a plastic compound. A built-in lightning arrester prevents the accumulation of static charges which otherwise might injure associated equipment.

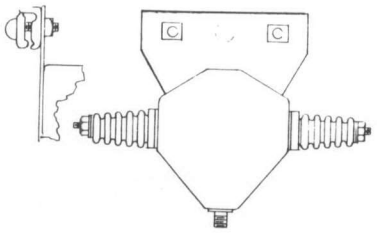
A tensile test of a sample DAC was conducted by a leading research laboratory to determine amount of applied tensile stress needed to damage sample. The sample successfully passed a tensile strain of 2,000 pounds between each of the antenna eye-bolts.

TECHNICAL SPECIFICATIONS, TMC MODELS DAC

TRANSFORMER FREQUENCY RESPONSE:	Flat within ± 1.5 db throughout the frequency range.
EQUIPMENT CASE:	Reinforced fiberglass pastic.
INPUT TERMINALS:	Standard ring type.
IMPEDANCE MATCH:	See chart.
DIMENSIONS:	Maximum over-all, including all terminals, 12½" wide x 7¾" long x 2¼" deep.
	Maximum case dimensions, less terminals, 4¾" wide x 5¼" long x 2¼" deep.
WEIGHT:	3 pounds.
SHIPPING WEIGHT:	5 pounds.
COMPONENTS AND CONSTRUCTION:	Equipment is manufactured in accordance with JAN/MIL specifications wherever practicable.

Model	Input Imp. Bal. (Nominal)	Output Imp. Unbal. (Nominal)	Frequency Range	Output Term.	Mating Plug*	Transformer
DAC-1	70 ohms	70 ohms	2 to 32 mcs	UG-58A/U	UG-21B/U Type N	TR-030
DAC-2	300 ohms	70 ohms	2 to 32 mcs	UG-58A/U	UG-21B/U Type N	TR-119
DAC-3	200 ohms	70 ohms	2 to 32 mcs	UG-58A/U	UG-260/U Type BNC	TR-039
DAC-4	200 ohms	70 ohms	2 to 32 mcs	UG-58A/U	UG-260/U Type BNC	TR-068
DAC-5	70 ohms	70 ohms	2 to 32 mcs	UG-103/U	UG-102/U Type UHF	TR-030
DAC-6	70 ohms	50 ohms	2 to 30 mcs	UG-58A/U	UG-21B/U Type N	TR-120
†DAC-8	70 ohms	50 ohms	2 to 30 mcs	UG-58A/U	UG-21B/U Type N	TR-120
DAC-9	475 ohms	50 ohms	2 to 30 mcs	UG-58A/U	UG-21B/U Type N	TR-010
DAC-10				UG-58A/U	UG-21B/U	Less Transformer
DAC-12				UG-58A/U	UG-21B/U	One insulator less transformer, for end-fed antenna TX and RX.
†DAC-13	200 ohms	50 ohms	2 to 32 mcs	UG-58A/U	UG-21B/U Type N	TR-039
DAC-14	200 ohms	50 ohms	2 to 30 mcs	Fitted with SO-239 & PL-259 coax connectors		TR-091
DAC-17	600 ohms	70 ohms	2 to 30 mcs	UG-58A/U	UG-21B/U Type N	TR-072

*Mating plugs furnished.
†With pole mounting plate and hardware in place of connector rings. (See drawing below).



Model DAC-8 and DAC-13

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