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AUXILIARY POWER PANEL

APP-10

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NOTICE

THE CONTENTS AND INFORMATION CONTAINED IN THIS INSTRUCTION MANUAL IS PROPRIETARY TO THE TECHNICAL MATERIEL CORPORATION TO BE USED AS A GUIDE TO THE OPERATION AND MAINTENANCE OF THE EQUIPMENT FOR WHICH THE MANUAL IS ISSUED AND MAY NOT BE DUPLICATED EITHER IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER WITHOUT THE WRITTEN CONSENT OF THE TECHNICAL MATERIEL CORPORATION.



THE TECHNICAL MATERIEL CORPORATION

C O M M U N I C A T I O N S E N G I N E E R S

700 FENIMORE ROAD

MAMARONECK, N. Y.

W a r r a n t y

The Technical Materiel Corporation, hereinafter referred to as TMC, warrants the equipment (except electron tubes,*fuses, lamps, batteries and articles made of glass or other fragile or other expendable materials) purchased hereunder to be free from defect in materials and workmanship under normal use and service, when used for the purposes for which the same is designed, for a period of one year from the date of delivery F.O.B. factory. TMC further warrants that the equipment will perform in a manner equal to or better than published technical specifications as amended by any additions or corrections thereto accompanying the formal equipment offer.

TMC will replace or repair any such defective items, F.O.B. factory, which may fail within the stated warranty period, PROVIDED:

1. That any claim of defect under this warranty is made within sixty (60) days after discovery thereof and that inspection by TMC, if required, indicates the validity of such claim to TMC's satisfaction.
2. That the defect is not the result of damage incurred in shipment from or to the factory.
3. That the equipment has not been altered in any way either as to design or use whether by replacement parts not supplied or approved by TMC, or otherwise.
4. That any equipment or accessories furnished but not manufactured by TMC, or not of TMC design shall be subject only to such adjustments as TMC may obtain from the supplier thereof.

Electron tubes*furnished by TMC, but manufactured by others, bear only the warranty given by such other manufacturers. Electron tube warranty claims should be made directly to the manufacturer of such tubes.

TMC's obligation under this warranty is limited to the repair or replacement of defective parts with the exceptions noted above.

At TMC's option any defective part or equipment which fails within the warranty period shall be returned to TMC's factory for inspection, properly packed with shipping charges prepaid. No parts or equipment shall be returned to TMC, unless a return authorization is issued by TMC.

No warranties, express or implied, other than those specifically set forth herein shall be applicable to any equipment manufactured or furnished by TMC and the foregoing warranty shall constitute the Buyers sole right and remedy. In no event does TMC assume any liability for consequential damages, or for loss, damage or expense directly or indirectly arising from the use of TMC Products, or any inability to use them either separately or in combination with other equipment or materials or from any other cause.

*Electron tubes also include semi-conductor devices.

PROCEDURE FOR RETURN OF MATERIAL OR EQUIPMENT

Should it be necessary to return equipment or material for repair or replacement, whether within warranty or otherwise, a return authorization must be obtained from TMC prior to shipment. The request for return authorization should include the following information:

1. Model Number of Equipment.
2. Serial Number of Equipment.
3. TMC Part Number.
4. Nature of defect or cause of failure.
5. The contract or purchase order under which equipment was delivered.

PROCEDURE FOR ORDERING REPLACEMENT PARTS

When ordering replacement parts, the following information must be included in the order as applicable:

1. Quantity Required.
2. TMC Part Number.
3. Equipment in which used by TMC or Military Model Number.
4. Brief Description of the Item.
5. The *Crystal Frequency* if the order includes crystals.

PROCEDURE IN THE EVENT OF DAMAGE INCURRED IN SHIPMENT

TMC's Warranty specifically excludes damage incurred in shipment to or from the factory. In the event equipment is received in damaged condition, the carrier should be notified immediately. Claims for such damage should be filed with the carrier involved and not with TMC.

All correspondence pertaining to Warranty Claims, return, repair, or replacement and all material or equipment returned for repair or replacement, within Warranty or otherwise, should be addressed as follows:

THE TECHNICAL MATERIEL CORPORATION
Engineering Services Department
700 Fenimore Road
Mamaroneck, New York



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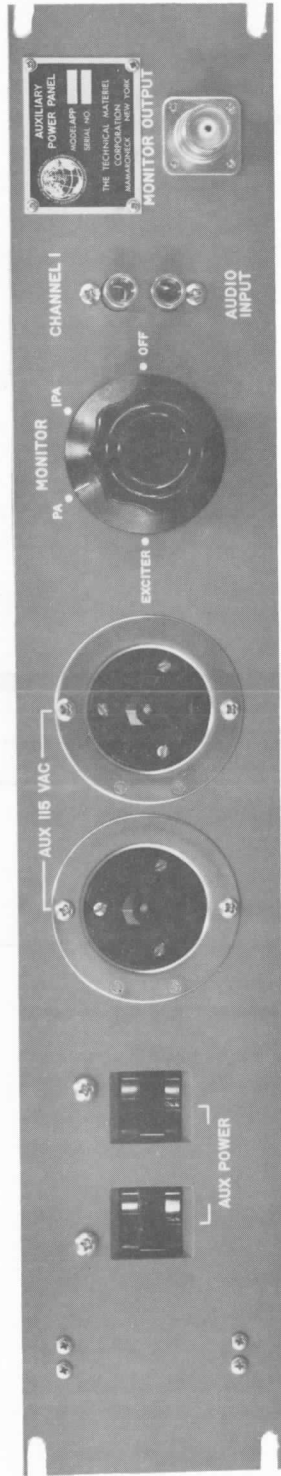


Figure 1. Auxiliary Power Panel, APP-10

1. DESCRIPTION.

Auxiliary Power Panel Model APP-10 (figure 1 and 2) provides two convenience 115-volt a-c outlets and a coaxial r-f outlet. The r-f outlet is associated with a selector switch that channels one of three selected r-f voltages developed in the associated transmitter to external test equipment. The APP-10 also provides front-panel jacks to facilitate the connection of audio input signals for test purposes.

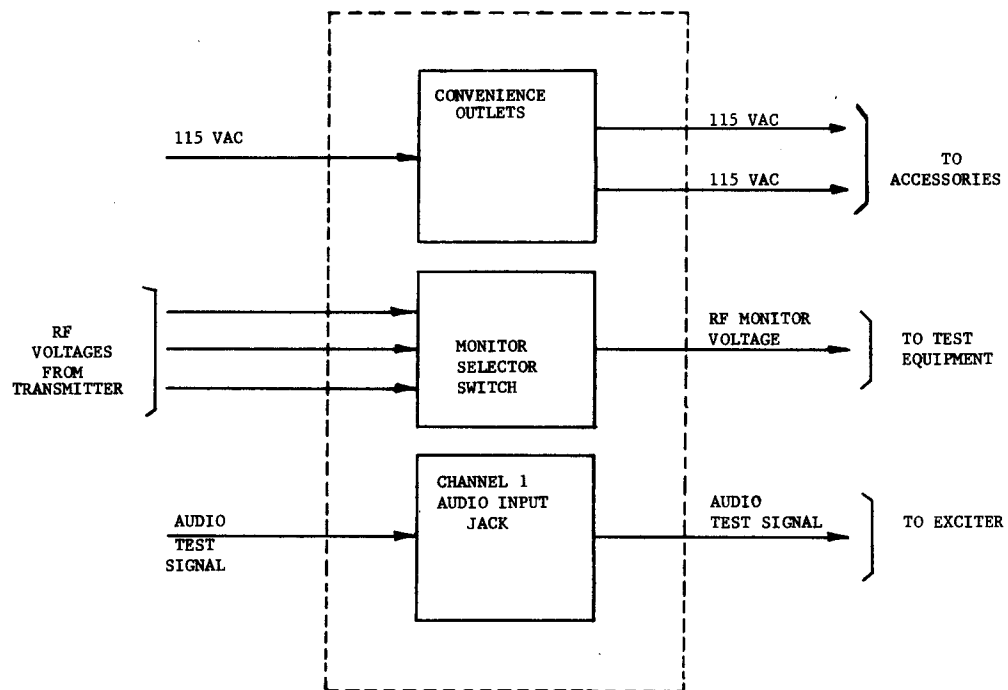


Figure 2. Functional Block Diagram, APP-10

2. UNPACKING AND INSTALLATION

When provided as part of a system, the APP is normally installed in a rack at the factory; the rack (with associated equipment) is then shipped to the operating site. Whether received in this form or as an individual unit, uncrate the equipment carefully and inspect for damage that may have occurred in transit. Inspect all packing material for parts that may have been shipped as loose items. With respect to damage to the equipment for which the carrier is liable, The Technical Materiel Corporation will assist in describing methods of repair and the furnishing of replacement parts.

Each APP is tested at the factory before shipment, and is therefore ready for installation and operation. Preliminary adjustments are not necessary. The APP is designed for installation in a 19-inch wide equipment rack. Installation consists of fastening the front panel of the APP to the rack with screws; the unit is 3-1/2 inches high and 3-1/4-inches deep.

Electrical connection at the rear panel is dependent upon the system in which the unit is used; refer to the applicable system cabling diagram and make the necessary connections.

Schematic diagram figure 3 should be used in conjunction with the schematic diagrams in the associated system and modular-unit manuals as an aid for tracing wiring.

3. OPERATING PROCEDURES

Operating procedures for the APP consist only of using the MONITOR switch (1, figure 3) to channel one of the transmitter r-f frequencies to an external piece of test equipment. The following two-tone test is a typical operating procedure for the APP.

- (1) Connect two-tone audio output of a two-tone generator to

CHANNEL 1 AUDIO INPUT jack (2, figure 3).

(2) Tune transmitter to carrier frequency.

(3) Set exciter controls as required for Channel 1 Audio Input.

(4) Set MONITOR switch of APP at PA, and connect r-f cable between MONITOR OUTPUT jack (3, figure 3) and spectrum analyzer or oscilloscope.

(5) Perform two-tone test as outlined in Supplementary Data section of appropriate operator's manual.

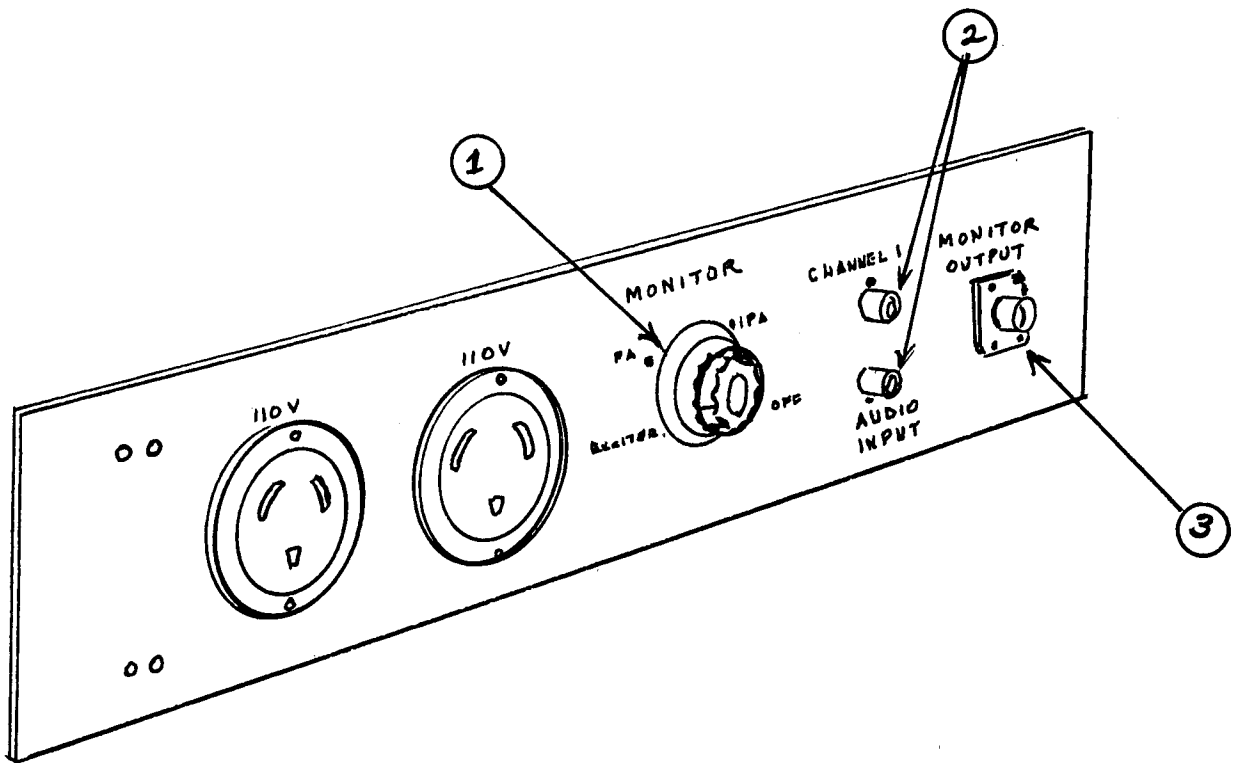


Figure 3. Power Panel Assembly, Model APP

4. MAINTENANCE

Maintenance of the APP comprises keeping the unit clean and periodically inspecting the unit to ensure that:

1. All electrical connection are secure.
2. AUX POWER circuit breakers and MONITOR switch are functioning properly.
3. All components and wiring are free of dust, grease, corrosion or other destructive elements.

5. PARTS LIST

The parts list presented in this section is a cross-reference list of parts identified by a reference designation and TMC part number. In most cases, parts appearing on schematic diagrams are assigned reference designations in accordance with MIL-STD-16. Wherever practicable, the reference designation is marked on the equipment, close to the part it identifies. In most cases, mechanical and electro-mechanical parts have TMC part numbers stamped on them.

To expedite delivery when ordering any part, specify the following:

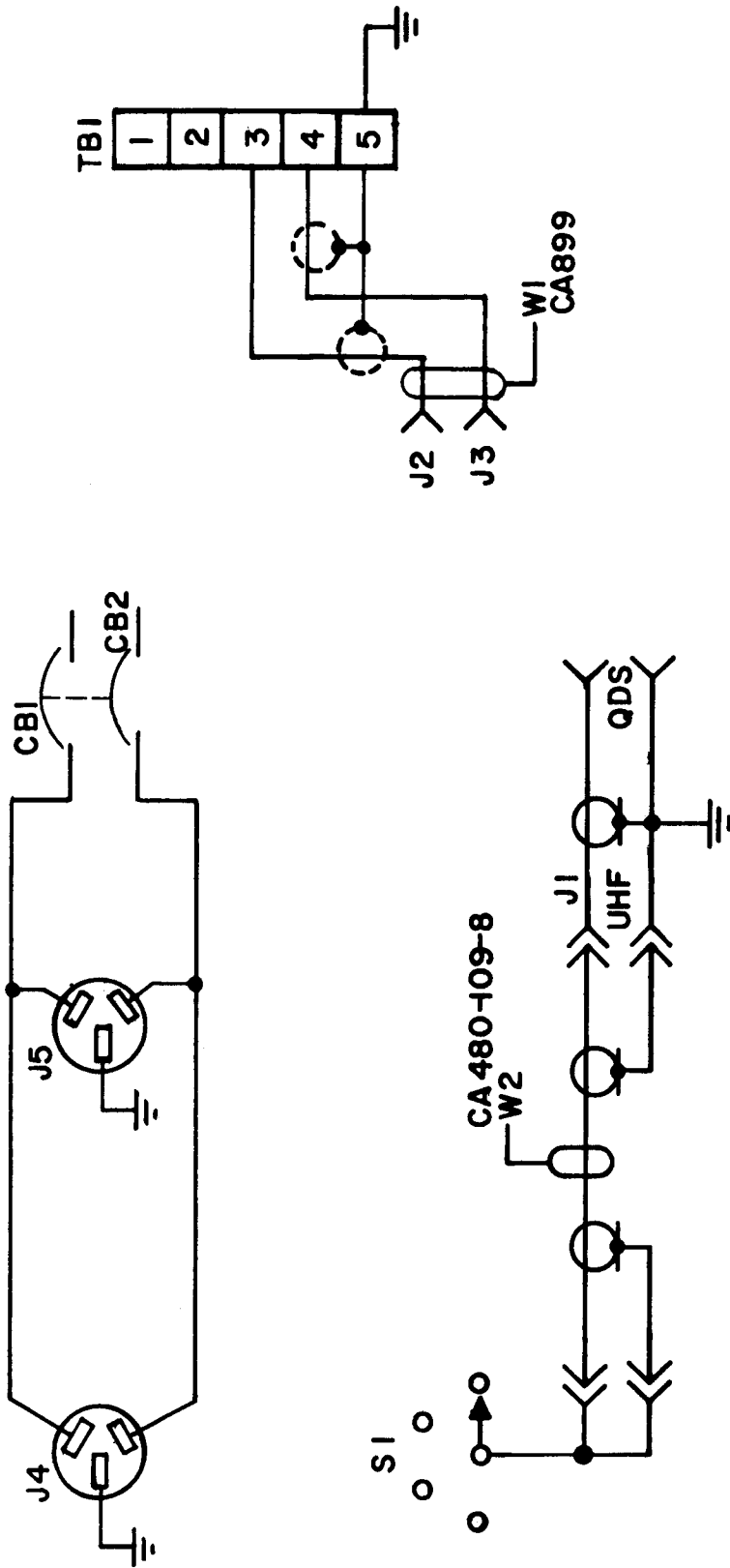
- a. Reference symbol.
- b. Description as indicated in parts list.
- c. TMC part number.
- d. Model and serial numbers of the equipment containing the part being replaced; this can be obtained from the equipment nameplate.

For replacement parts not covered by warranty (refer to warranty sheet in front of manual), address all purchase order to:

The Technical Materiel Corporation
Attention: Sales Department
700 Fenimore Road
Mamaroneck, New York

PARTS LIST
for
AUXILIARY POWER PANEL APP-10

REF SYMBOL	DESCRIPTION	TMC PART NUMBER
CB1	CIRCUIT BREAKER: DPST; 15 amps, 120/240 VAC; 1 pole.	SW381-2
CB2	Same as CB1.	
CP1	ADAPTER: cable to connector. Part of W2.	UG175*/U
E1	TERMINAL BOARD, BARRIER: 5 terminals; 5 number 6-32 thd x 1/4" long binder head machine screws.	TM102-5
J1	ADAPTER, CONNECTOR, RECEPTACLE: RF QDS to UHF.	JJ147
J2	JACK, TELEPHONE: silver alloy contacts.	JJ116-2
J3	Same as J2.	
J4	CONNECTOR, RECEPTACLE, ELECTRICAL: U-shape grounding type; 3 female contacts, straight type.	JJ173
J5	Same as J4.	
P1	CONNECTOR, PLUG, ELECTRICAL: female; quick disconnect type, for use with RG59/U cable. (Supplied as a Loose Item)	PL157
P2	CONNECTOR, PLUG, ELECTRICAL: AC; polarized; 3 prong plug with removable ground connection. (Supplied as a Loose Item)	PL218
P3	Same as P2. (Supplied as a Loose Item)	
P4	NOT USED	
P5	NOT USED	
P6	CONNECTOR, PLUG, ELECTRICAL: coaxial; UHF type; 1 contact, 500 VDC peak; mica insulation. Part of W2.	PL259A-TEF
P7	CONNECTOR, PLUG, ELECTRICAL: coaxial; male contact; BNC type. Part of W2.	UG88*/U
S1	SWITCH, ROTARY: RF; coaxial; BNC type; 5 connectors, 100 watts, non-shorting contacts.	SW239
W1	NOT USED	
W2	CABLE ASSEMBLY: RF; 50 ohms; RG58C/U type cable; consists of adapter CP1 and 2 connectors, P6, P7.	CA480-109-8



CK8920

Figure 4. Schematic Diagram, APP-10