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UNCLASSIFIED

TECHNICAL INFORMATION

*for*

FILTER ASSEMBLY, LOW-PASS

MODEL AF-108



THE TECHNICAL MATERIEL CORPORATION  
MAMARONECK, N.Y.

OTTAWA, ONTARIO

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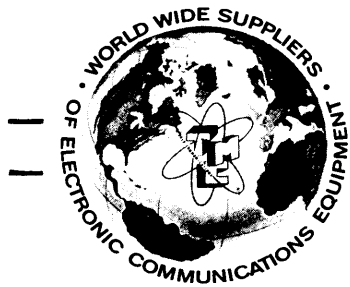
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## NOTICE

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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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## 1. FUNCTIONAL DESCRIPTION

Filter Assembly, Low-Pass, AF-108 (Figure 1) is an input filter and patching network.

The AF-108 provides low-pass filtering for four input channels to the associated transmitter. Unit terminal boards and connectors provide junction and patching capabilities for various transmitter input and output requirements.

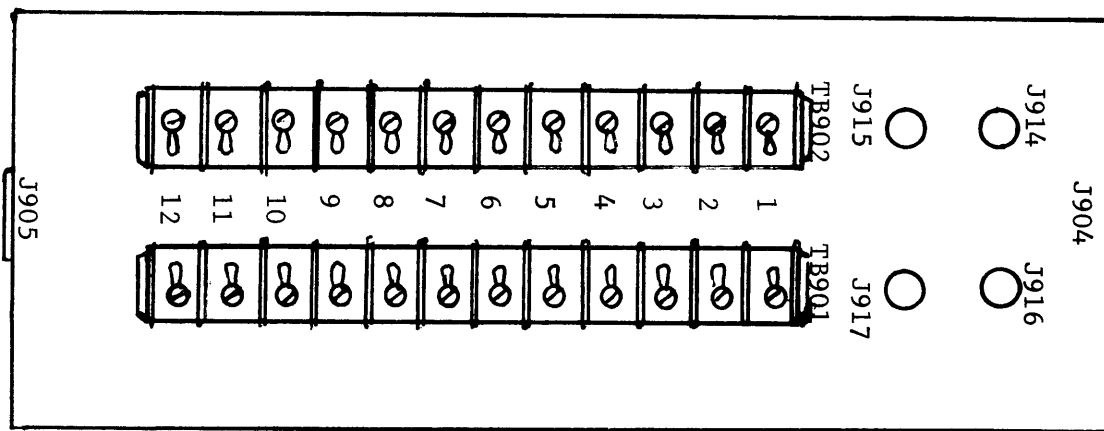


Figure 1. Filter Assembly, Low-Pass, AF-108,  
Front View.

## 2. PHYSICAL DESCRIPTION

The AF-108 measures 12-1/8 inches wide by 3-3/8 inches high. The unit displays two terminal boards and two connectors. The AF-108 also has provisions for mounting four additional connectors.



### 3. INSTALLATION

The AF-108 is normally mounted to the rear of the equipment rack frame, either at the side or across the back by means of a 19-inches wide bracket panel.

Electrical installation is accomplished by connecting the various transmitter system cables, wires and jumpers as described in the associated system manual. See figure 2 for AF-108 connection points.

### 4. OPERATION

The AF-108 has no operating controls, therefore requiring no operating instruction.

### 5. MAINTENANCE

Maintenance will consist of observing for unit cleanliness, secure and accurate interconnections and normal component checks and replacements.

See figure 3, schematic diagram for AF-108 circuitry and components.

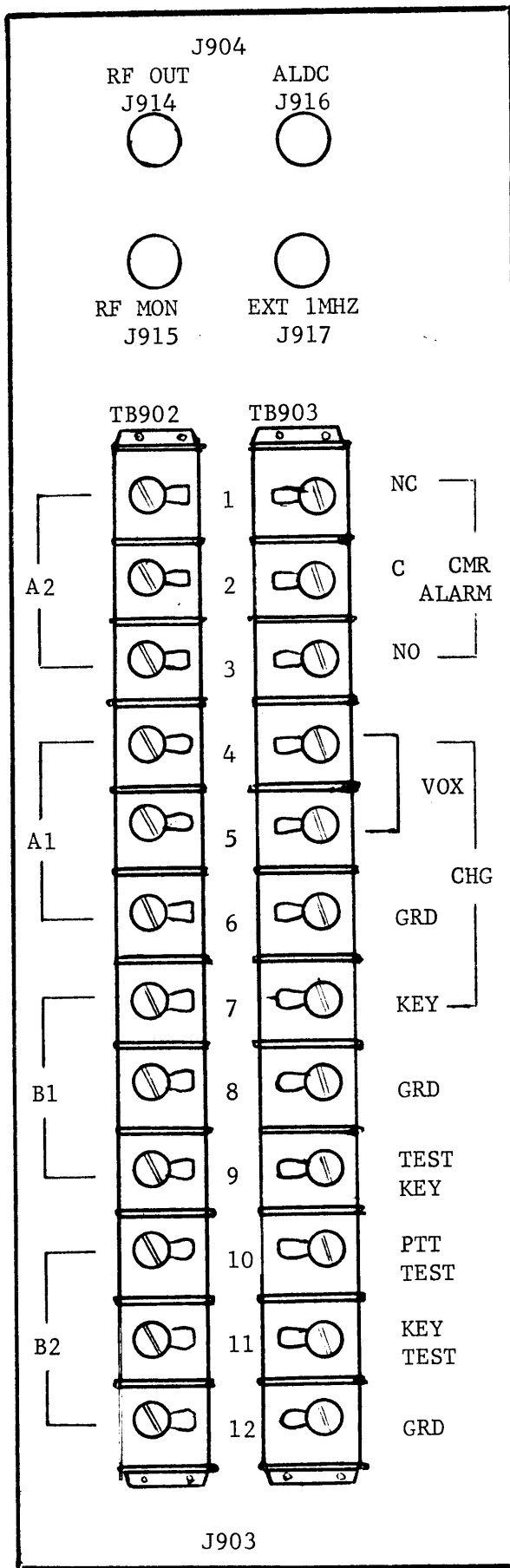


Figure 2. AF-108, Unit Components

PARTS LIST  
for  
FILTER ASSEMBLY, LOW PASS, MODEL AF108

REF SYMBOL	DESCRIPTION	TMC PART NUMBER
C8501	CAPACITOR, FIXED, MICA DIELECTRIC: 510 uuf, $\pm 5\%$ ; 500 WVDC. (Part of TB8503.)	CM15F511J03
C8502 thru C8508	Same as C8501.	
J901 thru J903	Part of AC Strip, AX660.	
J904	CONNECTOR, RECEPTACLE, ELECTRICAL: male	MS3102A20-27P
J905	CONNECTOR, RECEPTACLE, ELECTRICAL: male	MS3102A24-28P
L8501	COIL, RADIO FREQUENCY: fixed; 10 uh, $\pm 10\%$ ; molded case. (Part of TB8503.)	CL270-10
L8502 thru L8516	Same as L8501.	
TB901	NOT USED	
TB902	TERMINAL BOARD, BARRIER: twelve 6-32 thd. x 1/4" lg. binding head machine screws; black phenolic body.	TM102-12
TB903	Same as TB902.	
TB8501	NOT USED	
TB8502	NOT USED	
TB8503	TERMINAL BOARD ASSEMBLY: consists of 8 capacitors, symbols C8501 thru C8508, and 16 coils, symbols L8501 thru L8516.	A3416-4