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UNCLASSIFIED.

TECHNICAL INFORMATION

for

CONTROL PANEL

MODEL AX560A



THE TECHNICAL MATERIEL CORPORATION
MAMARONECK, N.Y.

OTTAWA, ONTARIO

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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

Control Panel, AX560 A (figure 1) provides standby/operate power control and a test key function for an associated transmitter system.



Figure 1. Control Panel, AX560A, Front Panel View

2. PHYSICAL DESCRIPTION

The AX560A consists of a 19-inches wide by 1-3/4 inches high panel; the panel displays an OPERATE/STANDBY toggle switch and a TEST KEY toggle switch.

The rear panel contains two terminal boards for external interconnections.

3. INSTALLATION

The AX560A may be mounted into any standard width equipment cabinet, rack, or console. The front panel is to be mounted to the rack frame by means of four screws and washers.

Interconnections are made at the rear panel mounted terminal boards TB1 and TB2.

Refer to applicable system manual for interconnecting wiring details.

4. OPERATION

The AX560A contains two operating controls; an OPERATE/STANDBY power toggle switch and a TEST KEY toggle switch.

The OPERATE/STANDBY power toggle switch is used to energize and deenergize the power control relay in the transmitter system's power supply. When set at STANDBY, the associated transmitter system's power supply is at a standby configuration; the power control relay deenergized. When set at OPERATE, a ground return is applied to the solenoid of the power control relay energizing it. This OPERATE condition activates the time delay power application circuit in the transmitter system's power supply.

The TEST KEY toggle switch is used to test key the transmitter system. This toggle switch has three positions; center off, up lock and down momentary. When set at the center (NORMAL) position, the TEST KEY toggle switch is not operational. When set at the upper (ON) position, a steady keying is applied to the transmitter system. When held in the down or lower (MOMENTARY) position, a steady keying is applied as long as the TEST KEY is held down.

NOTE

The lower or down position of the TEST KEY toggle switch is a momentary-contact position, spring-returning to the center or NORMAL position. This momentary spring-return action enables an operator to hand key the transmitter using the center and down position.

See figure 2 for a functional block diagram of the AX560A in a typical transmitter system configuration.

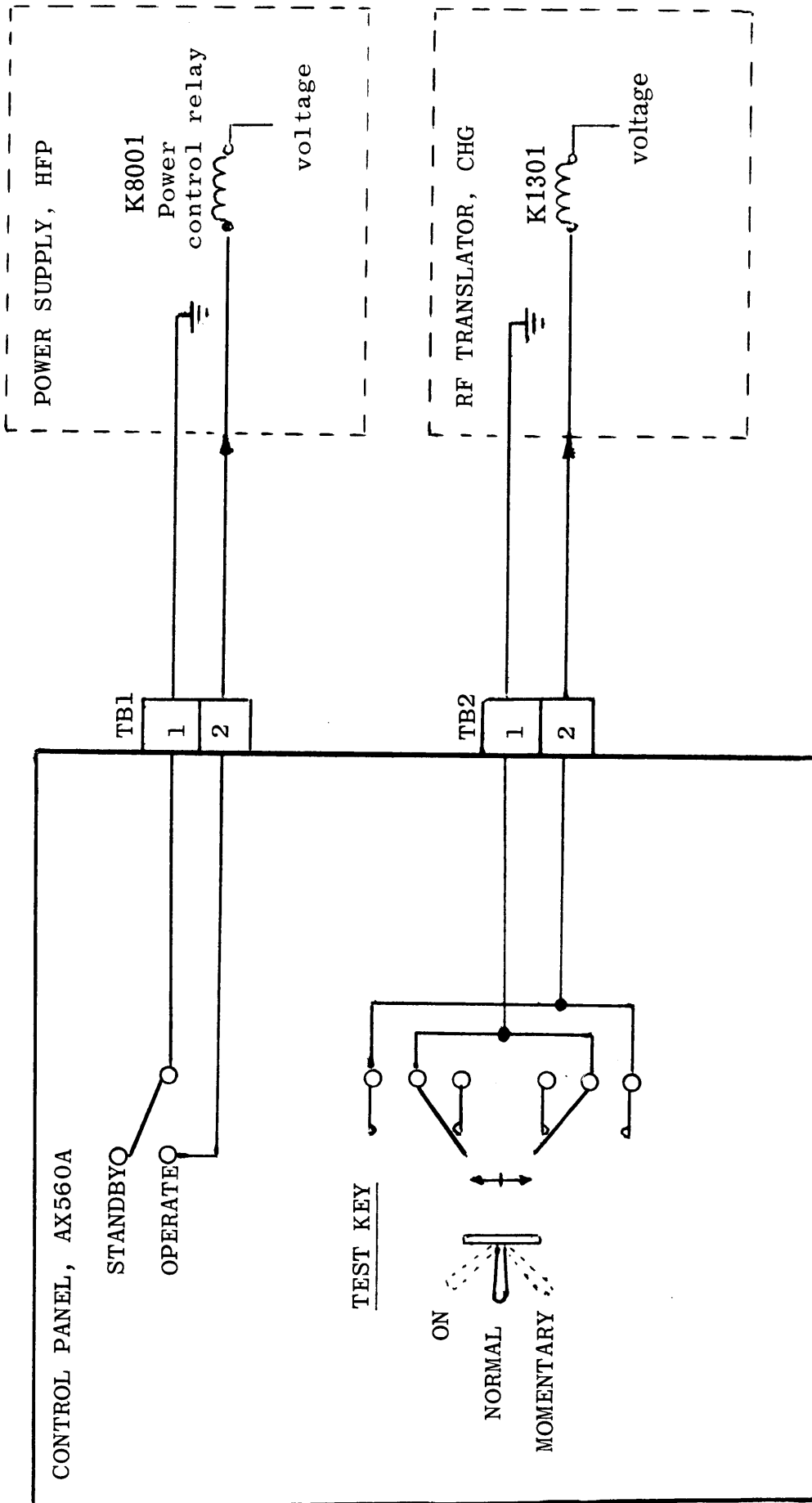
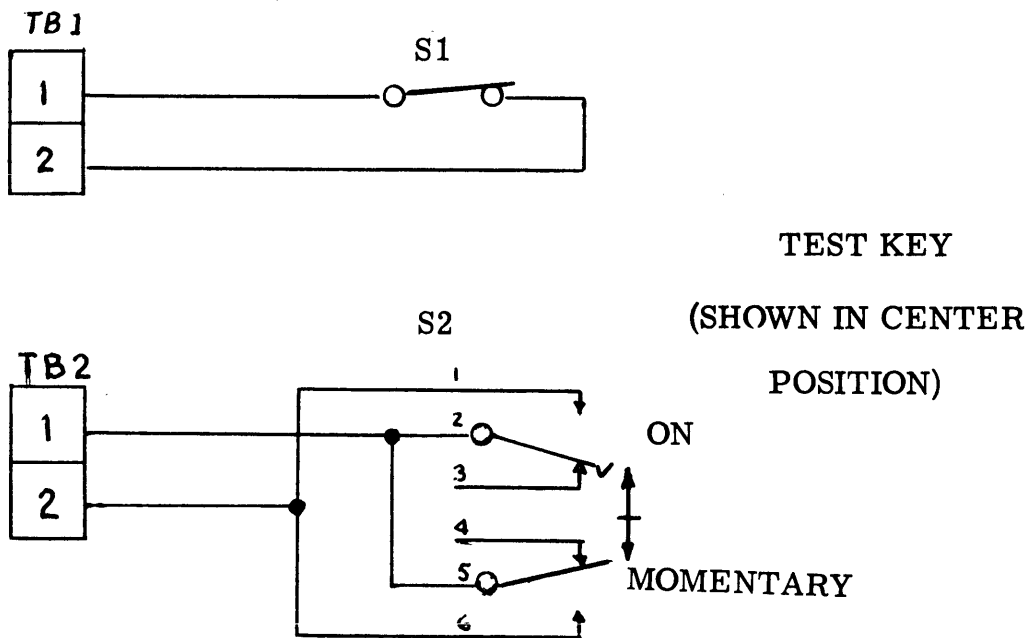


Figure 2. Functional Block Diagram

5. MAINTENANCE

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

See figure 3, schematic diagram for component circuitry and connection.



CK1298-Ø

Figure 3. Schematic Diagram

PARTS LIST

for

CONTROL PANEL, MODEL AX560A

REF SYMBOL	DESCRIPTION	TMC PART NUMBER
S1	SWITCH, TOGGLE: SPST; 28° angle of throw; bat type handle.	ST12A
S2	SWITCH, LEVER: 3 position, one side lock; contacts rated for 3 amps at 120 VAC non inductive load; black plastic molded knob; stud mounted.	SW186-3
TB1	TERMINAL BOARD, BARRIER: two 6-32 thd. x 1/4" long binder head machine screws; black phenolic body.	TM102-2
TB2	Same as TB1.	
W1	LEAD, ELECTRICAL: jumper.	CA409-22-9.00
W2	LEAD, ELECTRICAL: jumper.	CA409-63-9.00
W3	LEAD, ELECTRICAL: jumper.	CA409-22-7.00
W4	LEAD, ELECTRICAL: jumper.	CA409-63-7.00