TMC SPECIFICATION

NO. S S 1133

REV: ø A B

COMPILED: RE | CHECKED: | APPD: | SHEET 1 OF 6

TITLE:

typed by vab 8/19/66

TEST PROCEDURE

FOR THE

MPA-1

A. TEST EQUIPMENT REQUIRED

1. Audio Signal Generator - Hewlett-Packard Model 200CD or equivalent.

2. Distortion Meter - Barker Williamson Model 410 or equivalent.

3. Deleted

4. One 600 ohm 1 watt 5% Resistor - Dummy Load.

5. Multimeter - Simpson Model 260 or equivalent.

B. PRELIMINARY

1. Inspect unit for obvious mechanical defects. Record on Test Data Sheet.

2. With POWER Switch in ON position, measure D.C. voltage at high side of R5023. It should read 12 volts. Record on Test Data Sheet.

C. PROCEDURE

1. Turn GAIN Control to fully counter clockwise position.

2. On TB5001, strap wire together terminals 2 and 5, and terminals 6 and 9.

3. On terminals 10 and 11 affix 600 ohm dummy load.

4. Connect AUDIO SIGNAL GENERATOR to pins 1 and 6 of J5003 and insert 20 MV of audio signal at 1000 CPS.

5. Connect Distortion Meter across 600 ohm dummy load.

6. Set DISTORTION METER controls as follows:

DISTORTION FREQUENCY	TO . VOLTS
RANGE	TO "3" VOLTS

7. Adjust GAIN Control on MPA-1 to show "0" VU on OUTPUT LEVEL METER. Distortion Meter should read 1.2v. Record on Test Sheet.

8. Turn DISTORTION FREQUENCY Switch to 200 to 2K position.

9. Turn Range Switch to -10 CAL. Adjust Calibrate control for full scale reading.

10. Turn RANGE SWITCH to 100%.

11. Adjust FREQUENCY and AMPLITUDE coarse controls for a dip.

12. Turn RANGE Switch to 30%.

13. Repeat Step 11 above.

14. Turn RANGE Switch to 10%.

15. Adjust FREQUENCY and AMPLITUDE FINE controls for a dip.

16. Turn RANGE Switch to 3%.

17. Deleted

18. Deleted

19. Deleted

20. Deleted

21. Adjust FREQUENCY and AMPLITUDE FINE controls again for a dip. Record distortion as indicated on meter on Test Data Sheet. Must be less than 2%.

22. Set Distortion Frequency to Volts, Range to 1 volt scale.

23. Deleted

24. Readjust OUTPUT LEVEL meter for -4 VU. Record output voltage on Test Data Sheet (.78v).

25. Slowly decrease frequency of audio generator until 6 DB point is reached as observed on DISTORTION Meter.

26. Record frequency at which lower 6 DB point has been reached on Test Data Sheet. (Must be less than 300 CPS.)

27. Increase frequency of AUDIO GENERATOR until upper 6 DB point has been reached. Record frequency on Test Data Sheet (Must exceed 3000 CPS).

28. Reset AUDIO SIGNAL GENERATOR to 1000 CPS and adjust OUTPUT LEVEL Meter on MPA-1 to -4 VU.

29. Remove AUDIO SIGNAL GENERATOR input. Observe HUM/NOISE LEVEL by turning RANGE knob on DISTORTION Meter to successively lower scale until a reading is observed. Must be at least -40 DB. Record on Test Data Sheet.

30. On TB5001 reconnect strap wires for LO-Z mike. Connect terminals 2 and 4 also terminals 6 and 8.

31. Insert 3 MV at 1000 CPS at J5003 and adjust GAIN on MPA-1 for "0" VU on OUTPUT LEVEL METER. Record on Test Data Sheet.

32. On TB5001 connect strap wires for CARBON mike. Connect terminals 2 and 3 also terminals 6 and 7.

33. Insert 3 MV at 1000 CPS at J5003 and adjust GAIN on MPA-1 for "0" VU on OUTPUT LEVEL METER. Record on Test Data Sheet.

34. Check MPA-1 with handset or microphone.

TEST DATA SHEET
FOR THE
MPA-1

MECHANICAL _____ OK

ELECTRICAL

DC VOLTAGE AT R5023 _____ VOLTS

HARMONIC DISTORTION _____ PERCENT

AUDIO BAND PASS _____ LOWER 6 DB POINT
(RECORD IN CPS) _____ UPPER 6 DB POINT

HUM + NOISE LEVEL _____ DB

LO-Z MIKE POSITION _____ OK

CARBON MIKE POSITION _____ OK

OUTPUT FOR O VU _____ VRMS

OUTPUT FOR -4VU _____ VRMS

TESTER: _____

DATE: _____

REVISION SHEET	THE TECHNICAL MATERIEL CORP. MAMARONECK NEW YORK	S 1133 LIST NO.

DATE	REV.	SHEET	EMN #	DESCRIPTION Sheet 6 of 6	APP.
8/22/66	Ø			ORIGINAL RELEASE FOR PRODUCTION	
4/10/67	A	2,3,4,5	18094	UPDATING & CLARIFICATION	
4-25-67	B	3	18146	Revised per EMN	ae