TM	NO. S 933		
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TEST PROCEDURE for BSP-1D, 2D & 3D

TMC SPECIFICATION								NO. S 933								
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TITLE:	TEST	PRO	CEDUR	E FC	R BSP	-1D,	2D,	and	3D		 	· · ·				

## A. TEST EQUIPMENT REQUIRED

- 1. Audio Signal Generator Hewlett-Packard Model 200CD or equivalent.
- 2. Distortion Meter Barker-Williamson Model 410 or equivalent.
- 3. Ballantine Model 314 A-C Voltmeter or equivalent.
- 4. One 47 ohm 1 watt 5% resistor (dummy load).
- 5. Multimeter Simpson or equivalent.

## B. PRELIMINARY

- 1. Inspect unit for obvious mechanical defects. Record on Test Data Sheet.
- 2. With power turned on each amplifier, measure D.C. voltage between pins 1 and 2 of J3 (DC Supply Voltage). Record on Test Data Sheet.
- 3. Measure D.C. voltage between pins 7 and 6 of J3 (Q5 voltage). This voltage should be 1/2 of D.C. Supply Voltage. If not, R9 should be changed to produce this condition. Record voltage on Test Data Sheet.

## C. PROCEDURE

- 1. Turn all gain controls fully counter-clockwise.
- 2. Disconnect speaker from equipment under test.
- 3. Connect Dummy Load across leads removed from speaker (BLACK and GREEN).
- 4. Connect Signal Generator to terminals 1 and 3 of terminal board TB1, (terminal 1 is ground, 3 is input).
- 5. Connect distortion meter to TB1, observing polarity as in 4, above.
- 6. Set distortion meter controls as follows:
  DISTORTION FREQUENCY to . VOLTS
  RANGE to 0 VOLT
- 7. Adjust Signal Generator for 1000 cps and a -6 dbm, or .4V indication on distortion meter.
- 8. Disconnect distortion meter from TB1 and connect to dummy load, insuring that "hi-side" is to GREEN lead and ground to BLACK lead.
- 9. Turn RANGE switch to 10 volts.
- 10. Adjust volume control of BSP for a 6.7 volt indication on distortion meter. Record on Test Data Sheet.
- 11. Turn DISTORTION FREQUENCY switch to 200 to 2K position.
- 12. Turn RANGE switch to 100%.

TMC FORM SPEC 1 1M-8.64-AINS

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- 13. Adjust FREQUENCY and AMPLITUDE COARSE controls for a dip.
- 14. Turn RANGE switch to 30%.
- 15. Repeat Step 13 above.
- 16. Turn RANGE switch to 10%.
- 17. Adjust FREQUENCY and AMPLITUDE fine controls for a dip.
- 18. Turn RANGE switch to 3%.
- 19. Repeat Step 17 above.
- 20. Turn RANGE switch to -10 CAL.
- 21. Adjust CALIBRATE control for 10V on 10V scale.
- 22. Return RANGE switch to 3%.
- 23. 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%.
  - 24. Return DISTORTION FREQUENCY switch to VOLTS position.
  - 25. Set RANGE switch on distortion meter to 10 volt position.
- 26. Set Signal Generator on 7000 cps. Output should not drop to 1 ss than 4.8 volts from the reading of 6.7 volts at 1000 cps. Record on Test Data Sheet.
- 27. Set Signal Generator at 200 cps. Output should be at least 4.8 volts. Record on Test Data Sheet.
- 28. Disconnect distortion meter leads from dummy load. Connect Ballantin Model 314 across dummy load.
- 29. Remove signal generator input. Observe hum level by turning range knob on Ballantine meter to successively lower scale until a reading is observed. Must be at least -40 db. Record on Test Data Sheet.

	TMC SPECIFICA	TION	NO. 5933					
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	THE TECHNICA	L MATERIEL COR	SERIAL NOP.					
		NIMORE RD. NECKM N.Y.	MFG. NO.					
	TEST D	ATA SHEET	AZ102 MFG.					
		for 2D and 3D	AZ102 MFG.					
B.1	MECHANICAL	1	2					
B.2	DC SUPPLY VOLTAGE	VOLTS	VOLTS					
B.3	Q5 VOLTAGE	VOLTS	VOLTS					
C.10	OUTPUT AT 1000 CPS AT LE 6.7 VOLTS (1 WATT)	CAST VOLTS	VOLTS					
C.23	DISTORTION AT 1000 CPS A 1 WATT OUTPUT (MUST BE 2 OR LESS).		8					
C.26	OUTPUT AT 7000 CPS (AT I 4.8 V)	LEAST VOLTS	VOLTS					
C.27	OUTPUT AT 200 CPS (AT LE 4.8 VOLTS)	EAST VOLTS	VOLTS					
C.29	HUM LEVEL AT 1 WATT OUTI (AT LEAST -40DB)	PUT db	db					
	FI	NAL TEST						
A)	CONNECT INPUT POWER (AC	) AT Jl (LS101	)					
B)	CONNECT AUDIO GENERATOR	AT TB101 ON (	LS101) TERMINALS 1 & 3					
	INSERT FROM THE AUDIO G ACTIVATE AC (INCR) KNOB	ENERATOR 1000H CLOCKWISE.	z -6dbm (.4V)					
	ADJUST KNOB (INCR), VAR FROM MINIMUM TO MAXIMUM		L VARIES					
DATE	•	_						
MEGE	ER:							

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