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Retyped by mtp 6/9	/65		

OPERATING SPECIFICATIONS

for

RARA-1 - TONE TO D-C CONVERTER

and

RASA-1 - D-C TO TONE CONVERTER

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#### I. OPERATING TOLERANCES

- A. Tracking D-C +5% tolerance:
  - 1. Stable
  - 2. Linear
- B. Tracking Tone Frequency +.1% tolerance:
  - 1. Stable (Short Term, 1 Day Maximum)
  - 2. Linear
- C. Operating Temperature:

 $0^{\circ}$  -  $50^{\circ}$ C, and 95% Humidity

D. Operating Frequency Spectrum:

425 cps to 3 K cps

E. Response Time:

.2 Seconds to .1 Seconds

F. Resolution:

Infinite

II. A. Input Required for RASA-1:

16 Channels, Continuously Variable D-c Signal, O to -10V d-c

B. Output Required for RASA-1:

16 Channels, Continuously Shifted Audio Tones

III. A. Input Required for RARA-1:

16 Channels, Continuously Shifted Audio Tones

B. Output Required for RARA-1:

16 Channels, Continuously Variable D-c Signal +5 to -5V d-c

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IV. Transmission Requirements:

Telephone and Microwave Circuits (Normal 3 KC Bandwidth).

- V. Spurious Modes of Operation:
  - A. HUM 60 DB below signal.
  - B. No lockouts or alarms.
- VI. Power Requirements for RARA-1 and RASA-1

115/230 a-c, 1-phase, 60 cycles, 50 watts.

VII. Physical Dimensions for RARA-1 and RASA-1

7" high, 17" deep and 19" wide

Power supply regulation +2% (127V a-c input/no load to 103V a-c input full load.)

Power supply output rippled: .7 to 1.5 mv rms @ 115V a-c to 103V a-c input.

VIII. Front Panel - 3/16" Aluminum:

## A. Finish

S404 - yellow iridite. )
S114 - Zinc chromate primer )---Front & Edges Only
S115 - TMC smooth grey enamel)

## B. Machining

- 1. Lateral bow of panel must be kept to .031 tol.
- 2. Mill all edges.
- 3. Panel must be free of all machining marks, gouges & scratches. If necessary, sand front of panel with No. 120 grit sandpaper.

# C. Lettering

1. Engraved per TMC Spec S-566

#### TELESIGNAL SUPPLYING:

- 1. Modules Digital and FS Tone Receivers.
- 2. Analog Adapters (TRANSMIT & RECEIVE), to plug in from front of unit.
- 3. D-c output from RARA: +5 to -5 volts.
- 4. Filter amplifier.
- 5. Test Points for testing Audio Out (RASA-1).

TMC FORM SPEC 1

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TELESIGNAL SUPPLYING - Cont'd from pg. 3:

- 6. Test Points for testing Audio Input (RARA-1).
- 7. Connectors for plug-in modules.
- 8. Material list.
- 9. Input Impedance (RASA-1) Greater than 15,000 ohms.
- 10. Information to support TMC in writing an Instruction Manual covering unit.
- 11. Meters (0 to -10V for RASA-1) (-5 to +5V [or 10 to +10], zero center for RARA-1)
- 12. 16 toggle switches for RASA-1 to place individual channels ON/OFF, and place test voltage to input.
- 13. 2 wafer switches (1 per unit) for testing individual channels.
- 14. Knobs TMC MP-123-5FB

TMC SUPPLYING:

1. Name plates - NP-766.

TMC FORM SPEC 1

REVIS	SION	SHEET		THE TECHNICAL MATERIEL CORP. MAMARONECK NEW YORK	S-931	
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