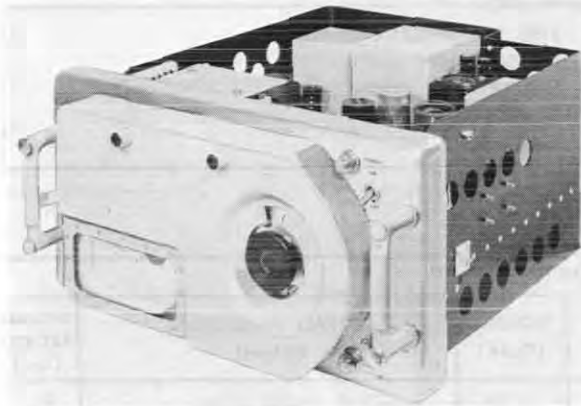


TELEGRAPH-CODE TAPE RECORDER



Telegraph-Code Tape Recorder RO-133/FRR

FUNCTIONAL DESCRIPTION

Telegraph-Code Tape Recorder RO-133/FRR provides a means of converting the on-off periods of six separate trains of dc pulses (five information pulses trains, one timing reference pulse train) to 10 kc envelope type pulses, and recording each on a separate track on a single, narrow, dry-type electro-sensitive paper tape. The equipment contains a tape drive mechanism for moving the tape, and electronic circuits to control tape motion and writing. Writing on the tape is accomplished by passing the tape under styli which are fixed in position. Accordingly, the information recorded is in the form of short dashes burned on the upper surface of the tape.

No field changes in effect at time of preparation (11 January 1960).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Multimeter AN/PSM-4, (1) Multimeter AN/USM-34.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

INPUT SIGNALS

FIVE INFORMATION INPUT CHANNEL SIGNALS

PULSE REPETITION RATE: 2 to 200 char-

acter code groups per sec.
RECTANGULAR WAVEFORM: 200 usec to 4.7 usec width, "off" voltage of 70 v dc, "on" voltage of 150 v dc.

FUNCTION: Provide signal to individual recording styli.

SOURCE IMPEDANCE: 33,000 ohms or less.

REMARKS: All information pulses will occur during the readout gate "on" time, and no more than one "bit" per channel per readout gate pulse.

POSITIVE SIGNAL GATE

DURATION: 0.5 sec.

RECTANGULAR WAVEFORM: "Off" voltage of 70 v dc, "on" voltage of 150 v dc.

FUNCTION: Control start time of recorder.

SOURCE IMPEDANCE: 33,000 ohms or less.

OUTPUT SIGNALS: Output level, each power amplifier develops 1200 v peak-to-peak across 20,000 ohm load; six marking signals recorded on a moving tape.

OPERATING LIMITATIONS

AMBIENT TEMPERATURE: 0 to 50° C (32° to 122° F).

RELATIVE HUMIDITY: 40 to 95%.

OPERATING POWER: 105, 115, or 125 v, 60 cy, single ph.

WARMUP TIME: Two minutes after main power is applied.

TAPE

SPEED: 100 in. \pm 1 in. per sec.

REMARKS: Speed is reached 5 milliseconds after the leading edge of each start pulse (positive signal gate) is received.

MANUFACTURER'S OR CONTRACTOR'S DATA

Sylvania Electronic Systems, Div of Sylvania Electric Products, Inc, Buffalo, New York.
Contract NObsr-75232.

TUBE AND/OR CRYSTAL COMPLEMENT

(2) 0A2WA (1) 5651WA (1) 5654/6AK5W
(1) 5670 (1) 6080WA (7) 5725/6AS6W

(8) 6L6WGB

Total Tubes: (21)

SEMI-CONDUCTORS

(8) 1N458

Total Semi-Conductors: (8)

No Crystals used.

Radio-Auxiliary

September 1960

RO-133/FRR**TELEGRAPH-CODE TAPE RECORDER****RELATION TO OTHER EQUIPMENT**

NAVSHIPS 93449: Technical Manual for TELE-
GRAPH-CODE TAPE RECORDER RO-133/FRR.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE USN, BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.
R.D.B. IDENT. NO.

SHIPPING DATA

NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Telegraph-Code Tape Recorder RO-133/FRR	2.39	8.625 X 19.00 X 24	90

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Telegraph-Code Tape Recorder RO-133/FRR		