

SUMMARY OF DATA

PURPOSE

General purpose magnetic tape recording outfit for use in HM Ships and shore establishments.

BRIEF DESCRIPTION

Outfit REH(5) is a commercially produced tape recorder mounted in a portable case. Any recording may be played back immediately or stored for later use. A recording may be played many times or be erased and the tape used again. Three speeds are available, giving a choice between long playing time with limited frequency response, short playing time with good response, or a compromise. Two full length recordings can be accommodated on one reel or tape. The recording time per Pattern 943-6981 reel is one hour at $7\frac{1}{2}$ in./sec., two hours at $3\frac{3}{4}$ in./sec., or four hours at $1\frac{7}{8}$ in./sec. Provision is made for remote switching or voice operated control.

The instrument is intended for operating from and into 600 ohms lines, but a high gain input socket is provided to allow recording direct from a suitable microphone. With the microphone selector switch in the HIGH-IMP position, high impedance microphones may be used, while with the switch in the LOW-IMP position, a matching transformer is inserted which permits the use of 25 ohms microphones (Pattern 972-6181).

On the output side, provision is made for feeding 1 mw into 600 ohms lines and 2.5 watts into an external 600 ohms load or into the internal 15 ohms loudspeaker.

Record pre-emphasis and playback equalisation for each speed are selected by means of a switch on the front panel.



MAJOR UNITS

NSN	Description	NSN	Description
5835-99-580-1624	Recorder-Reproducer, Sound, includes: Power Supply-Oscillator Tape Deck Control Amplifier Microphone, dynamic	5835-99-943-6981	Tape, sound recording (1200 ft)
5835-99-580-7506		5835-99-972-0164	Tape, sound recording (1800 ft)
5835-99-580-7507		7740-99-943-6978	Record Tape
5835-99-580-7508		5950-99-972-9845	Demagnetiser
5835-99-972-6181		5995-99-580-8454	Cable Assembly, Power Electrical

PHYSICAL DIMENSIONS

Height $9\frac{1}{2}$ in.Width $16\frac{1}{2}$ in.Depth $18\frac{1}{2}$ in.

Weight 56 lb

FUNCTIONAL CHARACTERISTICS

Recording Medium: Standard Category 'A' tape on 7 in. reels of 1200 ft or $3\frac{3}{4}$ in. reels of 200 ft. Extended play on 7 in. reels of 1800 ft. $8\frac{1}{2}$ in. commercial reels can be accommodated. Tape width 0.25 in. Tape thickness 0.0024 in.

Track Width: 0.1 in. displaced to one edge.

Number of Tracks: Two consecutive recordings can be accommodated side by side.

Running Time:

32 minutes each track at $7\frac{1}{2}$ in./sec., ie 64 minutes per reel of Pattern 943-6981. Rewind-time less than 1 minute per full reel.
2 hours per track at $1\frac{7}{8}$ in./sec., ie 4 hours per reel.
1 hour per track at $3\frac{1}{4}$ in./sec., ie 2 hours per reel.

Frequency Response:

- (a) at $7\frac{1}{2}$ in./sec., 40-15 000 Hz \pm 3 dB
- (b) at $3\frac{1}{4}$ in./sec., 40-10 000 Hz \pm 3 dB
- (c) at $1\frac{7}{8}$ in./sec., 40-5000 Hz \pm 3 dB

Input Levels and Impedances:

- (a) Input, Line Level - Minimum signal 0.150 V r.m.s.
Input Impedance 600 ohms. P.O. Gauge 'A' 3 point jack.
- (b) Input, Mic, Level (selected by means of toggle switch).
 - (1) High Imp. - input impedance 4 Megohm - Minimum signal 0.003 V r.m.s.
P.O. Gauge 'A' 3 point jack.
 - (2) Low Imp. - Suitable for 25 ohms microphone.
Minimum signal 50/ μ V r.m.s.
P.O. Gauge 'A' 3 point jack.

Output Levels and Impedances:

- (a) 600 ohms Line Level - 1 mw into 600 ohms.
P.O. Gauge 'A' 3 point jack.
- (b) Internal Speaker - 2.5 W into 15 ohms.
- (c) 600 ohms L/S Level - 2.5 W into 600 ohms (as an alternative to (b)).
P.O. Gauge 'A' 3 point jack.

Signal to Noise Ratio:

Approx. 50 dB in the range 200-15 000 Hz at $7\frac{1}{2}$ in./sec.
Unweighted, including hum, approx. 45 dB.

POWER SUPPLY

100 to 120 V or 200 to 250 V, 50 Hz (with special pulley 60 Hz may be used).
Consumption approx. 100 W.

HANDBOOK

BR 2395

ESTABLISHMENT LIST

E1379

INSTALLATION SPECIFICATION

Not issued