

## 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  $3\frac{1}{2}$  in./sec., or four hours at  $1\frac{1}{2}$  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  $3\frac{1}{2}$  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  $1\frac{1}{8}$  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  $1\frac{1}{8}$  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/ $\mu$ 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