

Spectone Tape Recorder Model 151B. Price 76 gus., including microphone.
Specto Ltd., Vale Road, Windsor, Berks.

Makers' Specification:

Mains Supply: 210-250 v. ; 50 c/s A.C. Power consumption: 140 watts.

Speeds: 15 i.p.s., 7J i.p.s., 31 i.p.s.

Spool size : Up to 7 in. diameter.

Frequency response: 15 i.p.s. 3 db, 30 c/s-16 Kc/s (to CCIR) 7J i.p.s. \pm 3 db,
30 c/s-12 Kc/s (to CCTR) 31 i.p.s. \pm 3 db, 40 c/s- 6 Ke/s

Hum and noise (unweiglited)

Better than 45 d below peak recording level. Wow and flutter: Better than
0.15%. Distortion: 2 % total harmonic distortion at peak recording level.

Bias and cross frequency: Approx. 60 kc/s. Inputs:

Mic Low—Low impedance microphone (moving coil).

Mic High—High impedance microphone (crystal)., (Radio, etc.) 025
megohm.

Outputs:

Extension speaker, 15 ohms, 3 watts. Line: Low impedance unbalanced
from cathode follower, 1 volt output from peak recorded tape.

Sensitivity for peak recording level:

Mic" Low" 02 m/volt.

Mic" High" 10 rn/volt. Line 80 rn/volt. Valves: 2xEF86 ; 2xECC40 ;
2xEL84; EF9I GZ3O.

Speaker: 6 in., 15 ohm P.M.

Independent push-button: Record/Replay/Fast. One set each for upper and
lower tracks. Fast wind in either direction: Bass cut: Continuously variable
from 0 to -10 db at 50 c/s for microphone recording. Monitor on/off: For
setting recording level before actually recording. Record gain: Volume:
Speaker on/off. Tone: Variable over the treble frequencies on the replay
amplifier only. Does not affect the low-impedance output.

Dimensions (Lid closed) 18k in. by 16 in. by 11 J in.

Weight: 50 lb.

This recorder uses the well-known Collaro tape transcripto r with three
speeds, two direct ionrecording and replay, and a digit counter. On a
sloping panel are the controls for the record and replay amplifiers together
with a recording level meter. The pre-monitor on-off switch enables the
recording level to be set correctly before starting the tape, and two panel
lights are used as " last track used" indicators. There is also a " bass cut"
control for use when voice recordings are being made in close proximity to
the microphone.

The figures obtained on test were as follows: Playback amplifier—TBT1 test

tape, speed 7J i.p.s.: c/s 40 60 100 ZOO 500

Upper Track -6 +1 0 +5 +1

Lower Track -4 +2 0 +15 +1 c/s 1k 2k 4k 6k 8k 10k

Upper Track 0 0 +5 +15 +35 +5

Lower Track 0 0 -15 -5 0 +1

Record replay frequency response. Speed 31 i.p.s.

c/s 40 60 110 to 2k 4k 6k db -4 -1 0 +5 +2 -5

Speed 7J i.p.s.

c/s 40 80 to 4k 6k Bk 10k 12k db -7 0 +2 15 +25 -4 +45

Speed 15 i.p.s.

c/s 40 60 to 10k 12k 14k 16k db +1 0 +1 +15 +2 +2

Construction of the amplifier is extremely good, in fact it is obvious on inspection that the makers have gone to a great deal of trouble to manufacture an instrument that will stand up to hard wear with the minimum amount of trouble. If service should be required, however, all component parts are easily accessible and ample room has been provided around valves and other heat-generating components to provide adequate ventilation. The instruction book supplied is particularly comprehensive and helpful, and we feel that the makers have provided a rugged and versatile instrument at a moderate price. P.G.T.