

# Forward Area Listening device

Country of origin: England

Larkspur era # 3

## Remarks

The Forward Area Listening Device was an experimental, lightweight, miniature audio amplifier designed to assist in detecting an approaching enemy through remote microphones.

The amplifier had four inputs connected by D10 field cable to four inconspicuously installed microphones in forward positions, spanning up to half a mile from the Listening Device. The sounds produced by speech, movements, vehicle engines, etc., were captured by the microphones and transmitted to the amplifier. The operator could determine the origin of the sound from one of the four positions using selective switching.

## DATA SUMMARY

**Organisation:** British Army.

**Developer:** SRDE.

**Year of first trials:** 1953.

**Purpose:** Forward area audio amplifier.

**Range:** ½ mile line, 50 yards pickup distance.

**Valves:** CV 784 2x.

**Power Supply:** Battery HT/LT Dry 90V/1½V, No. 2 as used with WS No. 88.

**Current consumption:** LT 100mA, HT 1mA. Expected life of Battery on continuous use approximately 10 days.

**Size (in):** Height 12½, length 5¾, width 3¼ (amplifier only).

**Weight:** 10lb. (Amplifier and battery)

Complete station excluding D10 cable approx. 11lb.

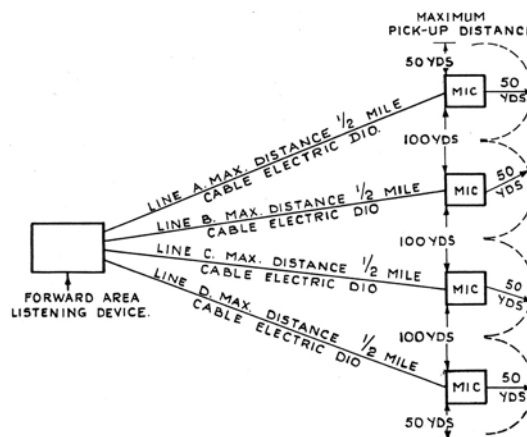
**Accessories:** Headphones, 8 microphones (4 spares), connectors to headgear and battery connector, stowed in Satchel Signals No. 1.

## References:

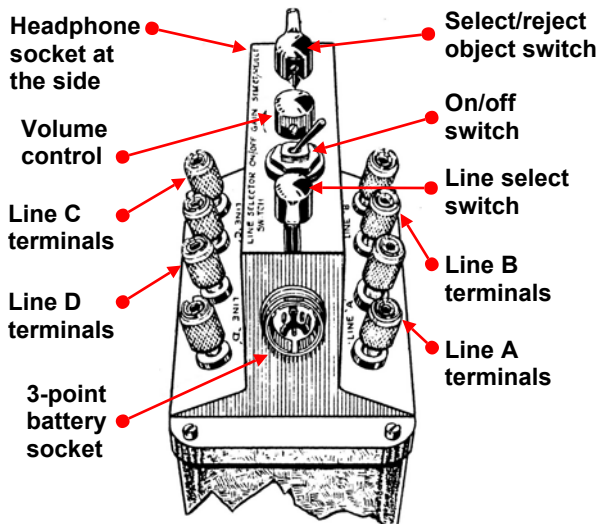
- User handbook (Trials Edition) for Forward Area Listening Device. SRDE Handbook No. 820A, June 1953.

## Acknowledgements:

- Permission for taking photocopies of the user handbook, courtesy Royal Signals Museum, Blandford Forum, Dorset.



**Operational layout for a 400 yard front coverage Forward Area Listening Device.**



**Functions of controls listening device.**

The operator could listen to all four circuits simultaneously or select/reject any single circuit through suitable switching. The listening device and battery, fully tropicalised, could be carried in two webbing pouches similar to standard Bren gun ammunition pouches, while the four microphones and headphones were carried in a Satchel Signal No. 1. The microphones were positioned near roads, tracks, or any other locations where the enemy was expected to pass. The useful range of a microphone was approximately a 50-yard radius for loud speech, with proportionately greater distances for motor vehicle engines, etc. The frequency response of the audio amplifier was approximately flat over the range of 300Hz to 10kHz, and the gain of the amplifier within this range was 70dB. Since the cut-off frequency of the microphone and headphones combined was lower than the upper frequency response of the amplifier, the effective response fell off above 3kHz. The two-valve amplifier was powered by a standard battery, HT/LT Dry 90-volt/1.5-volt No. 2 (e.g., also used with Wireless Set No. 88). The expected lifespan of a battery under continuous use was approximately 10 days. No further documents or reports could be traced on the Listening Device, and it is assumed that the project was abandoned.

