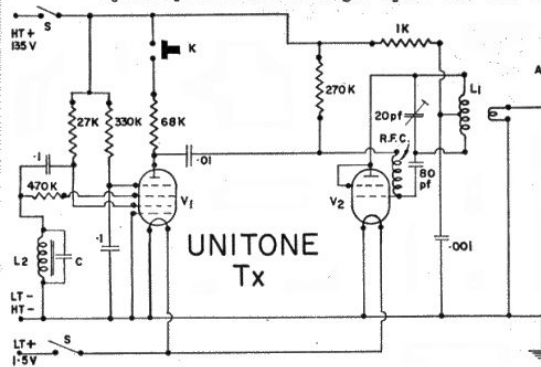
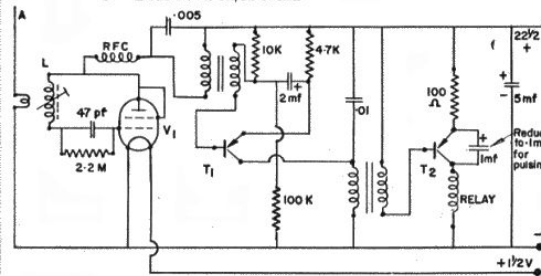


Unitone Transmitter a neat, hand-held unit, with telescopic aerial. Octone has several refinements including a neon flasher indicating battery state

RECEIVER is housed in a shockproof red plastic case and the wiring both neat and compact. Size is  $3\frac{1}{2}$  in. x  $1\frac{1}{2}$  in. x 1 in. and weight  $2\frac{1}{2}$  oz. The unit is



UNITONE Tx  
 V<sub>1</sub> = DK96 (or DK 92) V<sub>2</sub> = 3V4  
 L<sub>1</sub> = 10 turns  $\frac{1}{8}$ -in. dia.; Aerial coil  $1\frac{1}{2}$  turns  
 R.F.C. = RF Choke L<sub>2</sub> = 4H  
 C = To tune to 400 c, approx. .01  
 S = Double pole on/off switch  
 K = Operating switch



R.E.P. UNITONE  
 L =  $\frac{1}{2}$ -in. Aladdin 33 turns 28 s.w.g. Aerial 2 1/2 turns  
 V<sub>1</sub> = XFY34 T<sub>1</sub> = HIGH GAIN  
 T<sub>2</sub> = LOW OR MED. GAIN Relay = 5K  
 Relay current off signal, 0 M/A, on signal, 4 M/A

supplied with switch and plug ready wired and all that is necessary to operate is to connect the H.T. and L.T. batteries together with the actuator and battery. The size and weight make it suitable for any size model, the cross-section adapting itself to small fuselages.

Although small in size, however, nothing has been sacrificed and performance is excellent.

The circuit is a hybrid using a valve super-regenerative detector followed by two transformer-coupled transistor stages. The new R.E.P.  $\frac{1}{2}$ -oz. relay is in the final circuit and is set to make contact at 2.8 m/A.

This is a tone system, which means that the receiver will only respond to a carrier modulated by a tone. No sensitivity control is needed and tuning is very simple by means of a single control. Once tuned it should remain stable for long periods provided reasonable precautions are taken in wiring up the batteries, etc., and in maintenance. A measure of temperature stability is incorporated in the circuit and on test no trouble was detected at extremes of temperature.

A range test was made on a day when the temperature was at freezing point along a road lined with trees. Full current change was observed up to 500 yards, and beyond that the reduction was only .2 m/A. The equipment can, therefore, be recommended with every confidence. This distance being greater than normal flying range with good visibility.

Minor criticisms are as follows. The absence of transmitter switch markings which is being corrected by the inclusion of an engraved escutcheon. The flexible leads are not anchored at the point of connection. In the sample tested one had fractured. Relay adjustment is a little coarse and in view of the change of 3 m/A care in setting up is desirable, should this ever be considered necessary.

Those who intend to use Unitone for pulse systems are advised to specify the intention when placing their order so that the manufacturers can make special adjustments.

#### SPECIFICATION

**Transmitter.**  
 Single valve RF oscillator (3V4) modulated by a Dynatron L.F. oscillator (DK96)

H.T. Voltage 135 (2 Ever Ready B101 batteries).

LT. Voltage 1.5 (Ever Ready AD4).

Total L.T. Current 125 ma.

Total H.T. Current 10 ma.

Total H.T. current (no modulation) 12 ma.

Price £8/17/6.

**Receiver**  
 Valve super-regenerative detector followed by 2 transistor A.C. coupled amplifier.

H.T. voltage 22 1/2 (B122).

L.T. voltage 1.5 (pencil).

Total standing current (no signal) 1.2 ma.

(signal on) 4.2 ma.

Standing current

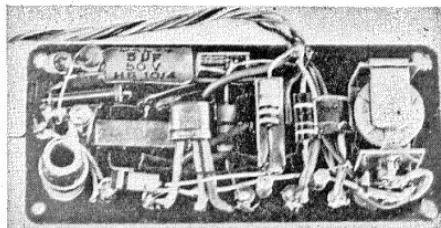
(final stage) (no signal) .3 ma.

(signal on) 3.4 ma.

Relay opens at 1.8 ma. closes at 2.8 ma.

Weight 2 1/2 oz. Battery weight 1 1/2 oz.

Price £7/2/-



Unitone Receiver tested is not far off actual size. Standard of soldering and assembly is high, and latest production units have newest type transistors