

**RL- DRAKE SSR-1 HF- Receiver Description:****INTRODUCTION**

The SSR-1 Receiver provides precision tuning over the short wave spectrum of 0.5 to 30 MHz with capability of reception of AM (amplitude modulated), C W (continuous wave) and SSB (Upper and lower single side band) signals.

A synthesized/drift canceling 1st mixer injection system giving 30 tunable ranges from 0.5 to 30 MHz is derived from a single 10 MHz crystal oscillator providing frequency stability necessary for SSB operation.

A stable low frequency VF0 tunes each of the 30 - one MHz ranges with a dial accuracy of better than 5 kHz which is sufficient to locate and identify a station whose frequency is known.

Separate detectors (product and diode) are used to provide for best performance whether listening to SSB or AM signals. Narrow band selectivity for SSB and wide band selectivity for AM reception is provided.

The SSR-1 has a built in telescopic antenna or may be connected to an external antenna for better results. The sensitivity of the receiver is such that it operates near the thermal limit and when using the telescopic antenna the performance reaches external noise limits.

A manual tuned preselector provides for maximum sensitivity and maximum interference rejection.

Solid state circuitry is utilized throughout the receiver design allowing efficient operation from the built in battery supply or from an external DC or AC power source.

The SSR-1 Will bring you many hours of enjoyment when you discover the quality, ease of operation and usage possible with your receiver. The more serious or international radio listener Will obtain maximum enjoyment from the SSR-1 with help from more detailed manuals such as the "World Radio TV Handbook" and "Short Wave Listener's Handbook".

**AVAILABLE ACCESSORIES**

1. Headphones
2. DC Power Cord
3. World Radio-TV Handbook
4. Short Wave Listener's Handbook

**SPECIFICATIONS**

Frequency Coverage: 0.5 to 30 MHz in 30 ranges each tunable over 1M Hz range with a dial having 10 kHz graduations.

Sensitivity: At least 10 dB S+N/N under the following conditions:

MODE	FREQ .	INPUT LEVEL*
SSB	0.5 -2MHz	1.0 uV
	2 -30MHz	0.3 uV
AM	0.5 -2MHz	3.0 uV
	2 -30MHz	1.0 uV

(AM: 1000 Hz @ 30% modulation .)

\*These voltages are 1/2 the open circuit signal generator voltage, i.e. ,the voltage read on the meter of a HP Model 606 Generator.Reception Modes: CW, USB, LSB, AM.

Output: Capable of 200 mw output on SSB at 2 MHz with input signal of 0.5 uV and 2 Watts output with 5 uV input.

**Audio Distortion: Less than 5% @ 2 Watts.**

**Calibration Accuracy: Within 5 kHz at all frequencies.**

**Selectivity:**

**Band Width**

**MODE -6dB**

**SSB 3 kHz +-25%**

**AM 5.5 kHz +-25%**

**Image Rejection: Greater than 50 dB**

**IF Rejection:**

**Greater than 50 dB**

**Greater than 50 dB @ fd below 20 MHz. Greater than 40 dB @ fd above 20 MHz.**

**Antenna: Self contained telescopic whip antenna. External connection to terminal strip. (75 ohm input impedance - unbalanced .) Internal 8 ohm speaker and phone jack on front panel that disables speaker when plugged in.**

**Muting Provisions: External mute jack (RCA type) that provides normal reception with closed circuit and mute with open circuit connections,**

**Power Supply: 8 type "D" (1.5 V) dry cell batteries. Tapped transformer to provide operation from 117 V +-15% or 240 V +-10%-20%, 50-60 Hz source with automatic switch over to batteries when AC line is disconnected**

**Current Consumption: Less than 100 ma quiescent at 12 V DC.**

**Dial Lights: Momentary push button to light when on battery operation. Always on for AC operation.**

**Clarifier : Tunes minimum of +-2 kHz and maximum of +-5 kHz.**

**Size: 13 in. (33 cm) wide, 11 in. (28 cm) deep, 5.5 in. (14 cm) high.**

**Weight: 14 lbs. (6.4 kg)**