BI-MODE SSB AM HF RECEIVER

Model RBI



Features

- Automatic mode switching between SSB (A3J) and AM (A3) or CSSB (A3H)
- Remote control operation
- Completely transistorized
- Plug-in modular construction for ease of maintenance
- Range: 2 22 MHz
- Many options available including, true signal-to-noise squelch allowing full sensitivity false alarm free performance.

Description

This patented receiver has the ability to automatically receive different modes of HF signals, thus satisfying an important operational requirement with the least demand on personnel.

When an SSB suppressed carrier signal is received, product detection using a highly selective sideband filter is used. When AM or CSSB is received, the receiver automatically switches to envelope demodulation. Thus, the Bi-Mode receiver can be used in aircraft and marine service as well as other services where both SSB and AM signals must be received and when manual mode switching is impractical.

As an option a special squelch circuit can be supplied which is insensitive to noise and therefore allows the receiver to operate at maximum sensitivity.

Dual gate FET, integrated circuits and other modern semi-conductor devices are used. Modular plug-in boards loaded from the front panel greatly simplify maintenance. Remote control circuitry is provided.

Also available is a very high selectivity RF crystal filter which may be connected between the antenna connector and the first RF stage. With this filter installed, overload, cross-talk, and image characteristics are outstanding. Also available, is a built-in test generator for remotely testing receiver performance.



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Innovations in broadcasting and communications since 1952.

SPECIFICATIONS Model RBI

Modes of Operation . . Receives conventional AM (A3) AME (A3H) CSSB and suppressed carrier signals (A3J)* Bi-Mode Operation . Patented circuit automatically switches between AM and SSB reception. AM 3 µv for 10 db S+N/N SSB .7 µv for 10 db S+N/N Frequency Range Single channel reception 2 to 22 MHz. Output level varies less than 6 db for a variation of 5 to 100,000 μ v and no more than an additional 2 db for signal levels up to 1 volt. AF Output Level . . Total harmonic distortion less than 3%. RF Input Impedance . . 50 ohms unbalanced AF Output Impedance. 600 ohms balanced Patented Auto-Select signal-to-noise ratio squelch Squelch . . available. Remote control override incorporated. Test Signal . Built-in test signal generator which may be controlled locally or remotely is an option. Construction Modular and fully transistorized. Power Supply . 117V ±10% 50/60 cps Dimensions . . 8-3/4" High, 19" Wide, less than 13" Deep. Approximately 25 lbs.

Receiver is also available with crystal RF front end filter providing RF Bandwidth of 5 kHz for 3 db and 20 kHz for 40 db.

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Kahn Research Lahoratories Inc. reserves the right to make changes in specifications which result in product improvement.

^{*}For A3A operation write for details regarding another receiver model.