

INSTRUCTION MANUAL

R-532

AIRBAND RECEIVER



- * FULLY SYNTHESIZED COVERAGE OF VHF AIRBAND
- * 100 MEMORY CHANNELS
- * 6 DIGIT FREQUENCY READOUT
- * HIGH PERFORMANCE RECEIVER

GENERAL INFORMATION

Signal Communication Corp. are acknowledged to be the leading company in the specialised design and manufacture of airband monitoring equipment, and the new R-532 represents a great step forward in their continuous development programme.

Unlike other synthesized receiver which only offer listening on a single channel, the R-532 has no fewer than 100 memories into which the user can enter any frequency in the VHF airband. The memories can then be scanned or manually selected, making the R-532 the ultimate in convenience for the airband monitoring station. No crystals are required, the entire airband frequency range being covered by use of a phase locked synthesizer, with accurate digital readout of frequency.

Features

- : Fully synthesized (no crystals) coverage of airband
- : 100 memory channels
- : 6 digit frequency readout
- : Automatic scanning, or manual selection
- : High performance receiver
- : Small size

Specifications

Semiconductors	24 IC, 2 MOSFET, 1 JFET 28 transistors, 26 diodes
Power required	11 to 14 volts DC, 300mA negative ground only
Memories	100, arranged in 10 banks of 10
Size	160 (w) × 46 (H) × 120 (D) mm
Frequency range	118.000 (110.000) to 139.975 MHz 25 KHz steps
Sensitivity	Better than 0.75 microvolt for 10 dB S + N/N
Squelch	Adjustable, threshold better than 0.3 microvolt
AGC	Less than 6 dB change in audio output for inputs from 0.75 to 10.000 microvolt

battery holder will be found on the rear panel. The battery is made up of two cells type UM-5 (N). We recommend that Duracell MN9100 cells are used so as to minimise the risk of electrolyte leakage. Do not leave backup batteries installed if the set is not used for a long period.

Do not install the R-532 in a position of direct sunlight or extreme heat, and when used in a car, keep the set away from heater outlet vents. Do not drop the R-532 on to any hard surface.

OPERATING PROCEDURE

Initial control settings (front panel)

Volume control fully anticlockwise (off)

Squelch control fully anticlockwise

Memory address switch "A"

AUTO/MAN/WRITE switch to "WRITE"

Rear panel

FREQ IND switch "ON"

ANT SEL switch "1"

Turn the volume control clockwise until a click is heard, and the frequency display is on. Carry on rotating the volume control for a comfortable listening level. The "Step Number" lamp should be at No. 1. Using the 10 MHz, 1 MHz, 100 KHz and 25 KHz buttons, select the frequency you wish to listen on, for example 131.050 MHz. The receiver will now be operational on this frequency. To store this frequency in memory A1, simply press the "WRITE" button. Now using the "STEP" button, advance the STEP NUMBER light to 2 i.e. A2. The frequency display will still read 131.050, but you can now enter a new frequency using the MHz and KHz buttons as before. When the correct frequency is shown on the display, press "WRITE", and it will be entered into memory A2. Carry on entering frequencies as described above, using the "STEP" button to advance through step numbers 1 to 10. When the first 10 memories are full, turn the memory address switch to B, and continue entering B1 to B10, then C1 to C10, etc.

Use as normal receiver

Set the AUTO/MAN/WRITE switch to MAN. The STEP button will now select any step number from 1 to 10 in sequence. The frequency display will show the frequency of each channel as it is selected. The memory address switch allows selection of each bank of 10 memories, thus the receiver can provide direct access to any channel in the 100 memories.

Use as scanning receiver

Rotate the SQUELCH control clockwise until the background noise disappears. Set the AUTO/MAN/WRITE switch to AUTO. The R-532 will then automatically scan the step numbers from 1 to 10 at high speed. If a signal appears on any channel, the scan will stop, the frequency display will show the frequency in use, and the signal will be heard. When the received transmission ends, the receiver will automatically carry on scanning until another signal is received.

NOTE

The R-532 is a very sensitive receiver, and will occasionally respond to interference, generated by ignition systems or even static discharges from distant thunderstorm activity. This will cause the receiver to stop briefly when scanning, but obviously, no signal will be heard. This is quite normal, and does not denote a faulty receiver. If you are interested in listening only to strong signals, advance the squelch control further clockwise, and the very weak distant stations will then not be heard.

SIGNAL COMMUNICATION CORP.