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You can read the recommendations in the user guide, the technical guide or the installation guide for ICOM IC-R9500. You'll find the answers to all your questions on the ICOM IC-R9500 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

> **User manual ICOM IC-R9500**
> **User guide ICOM IC-R9500**
> **Operating instructions ICOM IC-R9500**
> **Instructions for use ICOM IC-R9500**
> **Instruction manual ICOM IC-R9500**
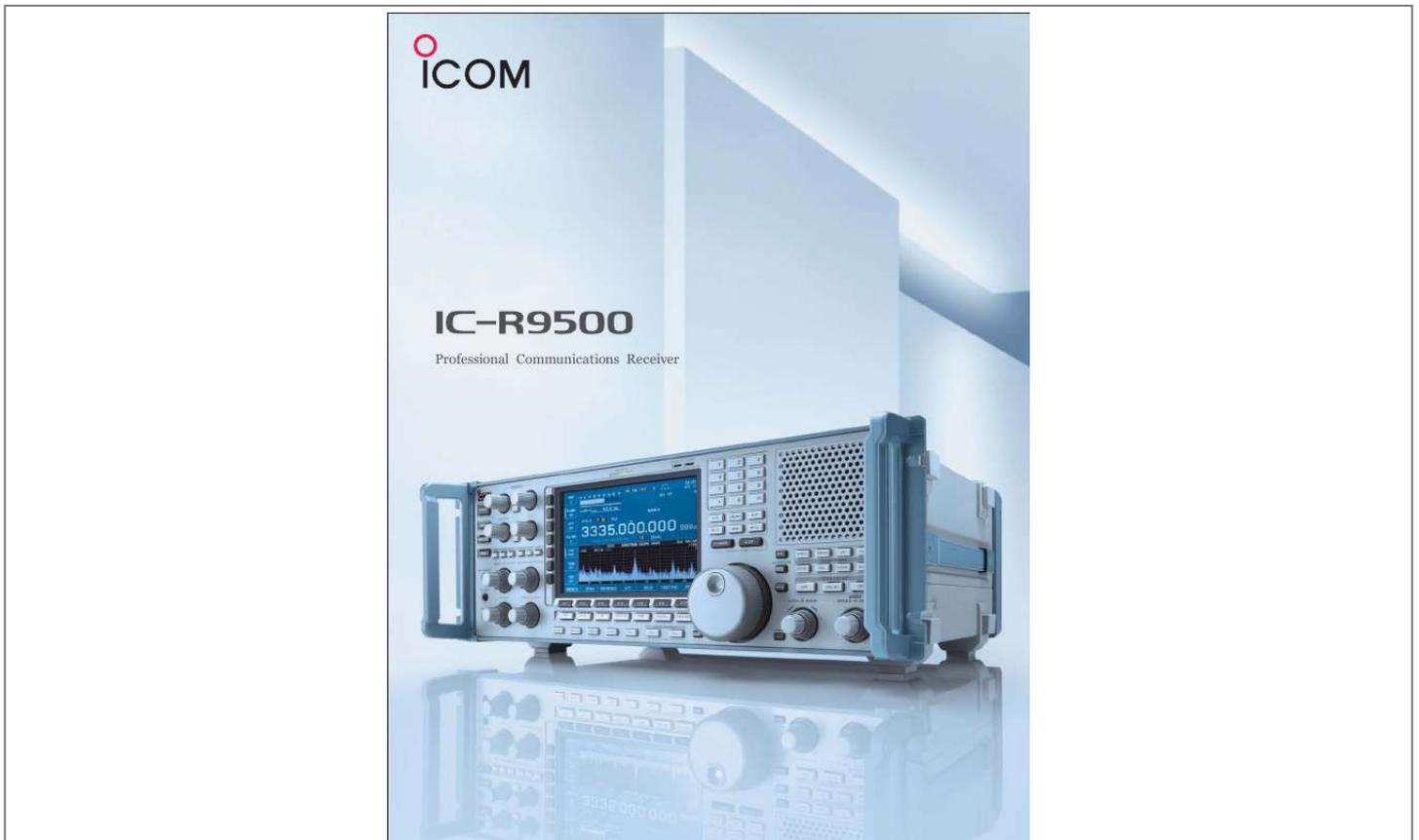
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Manual abstract:

@@The digital twin PBT narrows and shifts the IF passband to efficiently eliminate undesired signals. * For FM, WFM and P25 mode, the passband width is fixed. Superb receiver performance The IC-R9500 achieves amazing performance by using a D-MOS FET array in the 1st mixer (below 30MHz) and an excellent IMD roofing filter. The IC-R9500 has +40dBm IP3 and 109dB dynamic range at 14.1MHz. IP3 performance is +9.8dBm at 50MHz and +6.2dBm at 620MHz (+5dBm (typical) from 30MHz to 3335MHz). Digital twin PBT setting example Five roofing filters [dB] 20 0 20 40 60 80 100 120 140 SSB sharp filter characteristics Dual DSP The IC-R9500 incorporates two independent, 32-bit floating point DSP units, a dedicated DSP unit for receiver functions and another for the spectrum scope. By using the power of two independent DSP units, the radio can respond to operator changes in an instant.

Receiver output [dB] 170 150 130 110 90 70 50 30 10 0 10 15MHz Intercept Point +44.5 dBm 160 4000 3000 2000 1000 0 1000 2000 3000 4000 5000 6000 [Hz] Noise f loor level [dB] 0 FM filter characteristics Dynamic range 109.2 dB [dBm] Antenna input 20 40 Receiver output [dB] 170 150 130 110 90 70 50 30 10 0 10 50MHz Intercept Point +9.8 dBm 60 Dual DSP units 80 100 120 40 30 20 10 0 10 20 30 40 [kHz] ±0.05ppm high frequency stability Noise f loor level [dBm] Dynamic range 89.

7dB Antenna input Receiver output [dB] 170 150 130 110 90 70 50 30 10 0 10 620MHz The IC-R9500 uses an OCXO (Oven Control Cr ystal Oscillator) unit which provides ±0.05ppm frequency stability from 0°C to 50°C. The 10MHz reference frequency can either be supplied to or input from external equipment. [dB] 20 0 20 40 60 80 AM filter characteristics Intercept Point +6.2 dBm Noise f loor level 100 120 10 Dynamic range 89.

5dB [dBm] Antenna input OCXO unit 8 6 4 2 0 2 4 6 8 10 [kHz] performance and spectrum analysis SPECTRUM SCOPE Multi function spectrum scope Using a dedicated DSP unit improves the dynamic range of the spectrum scope. @@@@@@The spectrum scope can also be set to use specific scope edges or to center the span on the receiving frequency. @@@@@@· Center mode ... the scope screen shifts as the receiving frequency moves. The receiving frequency is always centered on the scope screen. · Wide band scope receives up to ±500MHz. @@The multi-function spectrum scope is displayed in vivid color. @@@@@@You can quickly change the operating bands with the 10-keypad.

@@Store frequencies, modes, filter width and tuning steps. Memory channels are grouped into 10 memor y bank s. @@@@This mode is useful when fading occurs or signal level is low. The IC-R9500 can recreate the carrier signal exactly by using the DSP. In addition, upper or lower sideband demodulation for S-AM is selectable for eliminating interference from adjacent strong signals. Memory setting example Digital voice recorder The IC-R9500 has two types of digital v oice r ecor der s. One is the r egular recorder, recording for long periods in "WAV " format into the built-in CF memory or an external USB memory. The sampling rate is variable from 8kHz (SQ1) to 48kHz (SHQ). @@@@@@You can use these to target the specific noise interference. FSK modulator & decoder The IC-R9500 has built-in FSK demodulator and decoder.

· Twin peak filter · Water-fall indicator · FSK-R mode · FSK tone and shift frequencies programmable Noise reduction The noise reduction function separates signal components from random noise through Digital Signal Processing (DSP) and enhanc es the signals bur ied in noise for improved signal readability. 10 VFOs The IC-R9500 has 10 VFO channels for tuning and storing operating frequencies, mode, filter width and other settings. For example, use VFO-1 for the 7MHz band, VFO-2 for the VHF marine band, Voice recorder setting example ations allowing efficient radio monitoring Multi-scan functions Numerous scanning functions to search for desired stations are a vailable to make operation easier. @@@@@@version. RECEIVER Intermediate frequencies HF VHF/UHF 0.

005 29.999999 50.200 51.200000 87.500 108.

000000 144.000 146.000000 430.000 440.000000 1240.000 1300.000000 58.7MHz (1st) /10.7MHz (2nd) /48kHz (3rd) 278.7MHz or 778.

7MHz (1st) / 58.7MHz (2nd) /10.7MHz (3rd)/ 48kHz (4th) SSB, CW, FSK Sensitivity 0.100 1.799MHz*1 1.800 29.999MHz*1 30.02499.999MHz*2 2500-2999.999MHz*2 30003335.

000MHz*2 0.5µV 0.2µV 0.32µV 0.32µV 1.

0µV AM 6.3µV 2.5µV 3.5µV 3.5µV 11µV FM 0.

5µV*3 0.5µV 0.5µV 1.6µV FM50k WFM   0.71µV*3 0.71µV 1.4µV 0.71µV 1.4µV 4.5µV 2.

2µV Mode Number of memory channels Antenna connectors USB, LSB, CW, FSK.