

New Product Preliminary Information

KENWOOD

Kenwood Developing an All-Band All-Mode Transceiver

Kenwood is currently developing an all-band all-mode transceiver that features a smart metallic-gray design with large LCD and represents a breakthrough in HF performance. It creates an immediate impression of being sophisticated, solidly reliable, and superbly suited for the new millennium.

Overview

This one transceiver covers the HF/50MHz/144MHz/440MHz/1200MHz bands (SSB, CW, FSK, FM and AM modes), with output of up to 100 watts (440MHz: 50 watts; 1200MHz: 10 watts). Since it is equipped with independent 144/440MHz sub-band reception (AM/FM modes only), simultaneous reception on two bands is possible: HF by V/U, V by V, U by U, and V by U. A typical application might be to gather local information on 144/440MHz at the same time as using HF for long-range operations. A "black box" model (without control panel) is also planned: this can be used in a vehicle with a mobile head or controlled via a PC (software provided).

IF DSP

The transceiver is equipped with an IF DSP for main-band use (AF DSP for sub bands). TS-870 technology has thus been adopted for all-mode applications — VHF and UHF as well as HF. The combination of digital IF filters and IF DSP slope tuning results in enhanced versatility. With digital IF AGC (controlling IF gain via DSP), it is possible to set the time constant separately for each mode. Also, the IF auto-notch function makes it easy to remove interference while automatically tracking with DSP-based adaptive filtering. Additionally, the AF stage beat canceller is capable of eliminating multiple beats at the same time; manual operation (manual notch for dealing with a single wave) is also permitted, which is convenient for CW use. For noise reduction there is a choice of NR1 (line enhancer, ideal for SSB), and Kenwood's original NR2 (SPAC), which is popular among CW operators. As with the TS-570, the operator can make use of CW auto-tuning, while the availability of a DSP for SSB/CW/FSK/AM variable demodulation puts this transceiver a cut above analog equipment.

TNC

Kenwood's own 2-chip TNC (1200/9600bps) enables sophisticated data communications (excluding APRS). Packet cluster information, so vital for HF operations, can be displayed on the LCD. Moreover, this data can be used for automatic tuning, though it is not possible to connect with a node station using the internal modem. And as DX cluster information received on a sub band can be used instantly for the main band setting, the transceiver operator has an advantage when tracking sought-after stations. The Kenwood Sky Command System (KSS) II is even better. Whereas it had been necessary to have use 2 FM transceivers — the Commander and the Transporter — the latter is now effectively built into the transceiver. Thus, just one FM transceiver (TH-D7A or TM-700A) is needed to conduct HF operations by remote control.

Other features

- Built-in auto antenna tuning (HF/50MHz) with preset memory
- Auto-tracking satellite functions (cross-mode compatible) using IF DSP
- ±0.5ppm high-stability oscillator (-10°C - +35°C)
- Mobile head remote controller (option) for vehicle installation

Main specifications

All-Band All-Mode Transceiver		
Wide-band reception*	Main	30 kHz-60 MHz, 142-152 MHz, 420-450 MHz, 1240-1300 MHz
	Sub	118-174 MHz, 220-512 MHz (FM/AM modes only)
Output	HF/50/144 MHz	100 W
	440 MHz	50 W
	1200 MHz	10 W
Dimensions (W x H x D)	270 x 96 x 317 mm	

*For 500kHz-30MHz and Amateur bands only. Kenwood reserves the right to change specifications and features without prior notice.



This device has not been authorized as required by the rules of the FCC. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

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