

KENWOOD



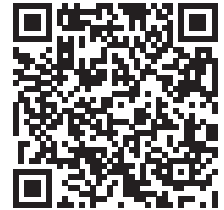


TH-F6A

144/220/440 MHz FM Tri-Bander

General Features:

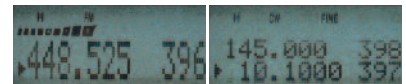
- Selectable squelch configuration
- Memory shift
- Key lock
- Built-in CTCSS (42 subtone frequencies), DCS (104 codes), 1750Hz tone burst
- Compatible with external 1200/9600bps TNC
- Large frequency display for single-band use
- Time-out timer & APO (OFF/30/60 min)
- Automatic simplex checker
- Wireless remote control function
- ATT (attenuator) on/off
- Internal VOX
- MCP Software (Free download from KENWOOD website)



Nestled in the palm of your hand, KENWOOD's TH-F6A is incredibly small — just 2-5/16 x 3-7/16 x 1-3/16 inches (WxHxD). This compact FM tri-bander (144/220/440MHz) has dual-channel RX capability, a 16-key pad, multi-scroll key, and no fewer than 435 memory channels. Other attractive features include a built-in ferrite bar antenna for AM broadcasts, LCD with backlight, and a lithium-ion battery. Small enough to slip into a pocket, the TH-F6A allows you to roam freely while enjoying the clear, reliable communications for which KENWOOD is renowned.

Priority on Operating Ease

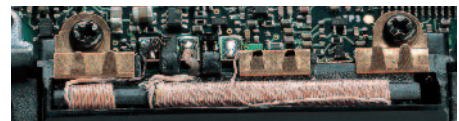
Simple operation is an essential component of this FM tri-bander, and KENWOOD engineers have ensured that it can be operated effortlessly with one hand. Your attention is drawn to the easy-to-read LCD — equipped with both contrast control and backlight— displaying essential frequency and memory information, intuitive menus, and multi-level battery status. In monoband mode, the size of the frequency display is doubled for even greater visibility.



Multi-Band Transceiver (Main band) + Wideband Receiver (Sub band)

As polished as the user interface may be, it's what is inside that counts. And the TH-F6A counts twice over: it's both a 3-band transceiver (Main A band) and a wideband 0.1~1300MHz receiver¹ (Sub B band). In addition to FM/FM-W/FM-N/AM and SSB/CW, the receiver section offers a special weather channel mode,² built-in ferrite bar antenna³ for receiving AM broadcasts, and Fine mode — with selectable increment (33/100/500/1000Hz⁴) — for extra-accurate SSB tuning. What's more, this handheld transceiver can receive 2 frequencies simultaneously, even on the same band. Versatility is first rate.

1. Not all frequencies are available.
2. 10 channels. NOAA Weather Radio is a nationwide network of radio stations broadcasting weather, warnings, forecasts and hazard information 24 hours a day.
3. Switchable with external antenna.
4. Increment figures are approximate.



Tough Construction

The smaller a transceiver, the farther it is likely to travel. Fortunately, the TH-F6A is built to take rough treatment in stride, satisfying the stringent MIL-STD 810 C/D/E standards for resistance to vibration, shock, humidity and light rain.





TH-D72A 144/440 MHz FM Dual-Bander

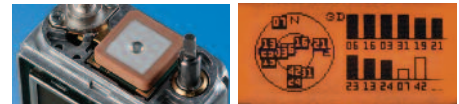
General Features:

- Built-in high-performance GPS receiver
- APRS® firmware equipped as standard
- USB (Mini-B) port (USB PC Programming cable included)
- KENWOOD MCP-4A PC Programming Software
- KENWOOD Sky Command System II
- Compatible with ARRL "Travel Plus" for Repeaters
- Simple node access with EchoLink® memory
- DX Cluster Tune (Packet Cluster)
- Built-in 1200/9600 bps TNC compliant with AX.25 protocol
- Long operating hours (high-capacity battery included)
- 1000 Memory Channels
- Stand-alone digipeater
- Enhanced operating ease and visibility
- MIL-STD810 & IP54 weatherproofing
- Weather Alert/RX (US only)
- Power-on message
- Cross-Tone



Featuring the SiRFstar III™ high-performance GPS receiver, KENWOOD's TH-D72A dual-band transceiver is compatible with APRS® data communications. Offering position and weather information, The TH-D72A opens up broad new vistas of outdoor enjoyment, especially for activities like trekking.

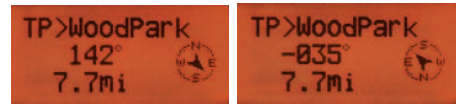
Built-In High Performance GPS Receiver



The SiRFstar III™ GPS receiver, widely recognized for its high accuracy, is built into the top of the transceiver.

Target Point Functions

You can store up to 5 target points and display, in real time, the direction and distance to each of these. You can also switch instantly between north-up and heading-up displays, whichever you find more convenient.



GPS Logger Functions

- Store up to 5,000 points of track data in internal memory.
- Choose from 3 different timing options for storing data – interval, travel distance, or beacon TX point (example: if set to a 10-second interval, logging is possible for up to about 14 hours).
- Convert GPS log data to the KML file format used by Google Earth™ using the MCP-4A memory control program.
- Extend operating hours (up to 35 hours per charge) by switching off transceiver functions and using just GPS



APRS® Firmware Equipped as Standard

KENWOOD engineers working closely with Bob Bruninga (WB4APR), who first developed APRS (Automatic Packet Reporting System), KENWOOD has developed system firmware for the TH-D72A that enables easy APRS operation without requiring a computer. The built-in GPS receiver provides positional information, while weather information can be acquired by connecting a meteorological device. All of this information can be exchanged with other stations, and it can also be output to a PC for map display using commercially available APRS application software.

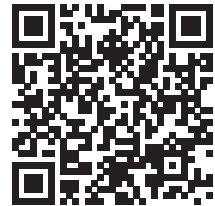


TH-K20A

144 MHz Single Band FM Transceiver

General Features:

- 5.5W RF Output for 144MHz
- Power-On Message
- Direct Function Key
- Direct Frequency Entry
- Auto Repeater Offset
- 1750 Hz Tone Burst
- Time-Out Timer
- Battery Select (Li-ion / AAA Battery)
- Beat Shift
- Frequency Shift
- VOX Circuit included (Operation with Optional headset)
- Battery Capacity Indicator
- Wide / Narrow Deviation Selection (Per Channel)
- Busy Channel Lock-Out
- Tone Alert (Bell)
- Cross Tone
- Weather CH Scan
- Firmware Upgradeable
- Key Lock Type Select



A powerful communications tool in every sense, KENWOOD's TH-K20A radio offers 5.5 watts of RF output to ensure reliable performance. Numerous features ensure superb operating ease, yet it is small enough to fit comfortably in the palm. Both display and keypad are backlit for night-time use, and for added convenience everyday functions are pre-programmed to 11 keys with an additional PF key that can be assigned a custom function. Plus, the construction is rugged enough to stand up to the worst weather. Inside and out, the TH-K20A is fully equipped for clear communications — wherever and whenever needed.

Conveniently Compact, Reliably Robust

This radio is remarkably light (just 7.4 oz or 210 g) and thin (2.13 inches or 54 mm). Yet there is no compromise on construction: it meets or exceeds the stringent IP54 dust and water intrusion standards as well as the MIL-STD 810 C, D, E, F & G environmental standards, making it rugged enough for demanding outdoor use in bad weather.



High Sound Pressure for Audio Clarity

Another feature that sets the TH-K20A apart is sound: it benefits from the audio expertise for which KENWOOD is renowned. High sound pressure – which is not the same as volume – delivers a clarity that is unmistakable. Just listen once and you will appreciate what a difference it makes.

200 Channels with 6-Digit Memory Name

The TH-K20A has 200 memory channels – with a 6-digit Memory Name function to enable clear identification – plus 6 program scan memories, 1 call channel and 1 priority channel.

Li-ion Battery & Cradle Charger

This radio is supplied with a rechargeable Lithium-ion battery plus a convenient cradle charger.

Weather Alert/RX/Channel Scan (US only)

In addition to reception of the NOAA Weather Radio (10ch), this transceiver can notify you of emergency transmissions such as storm warnings with an audible alert.



TM-V71A

144/440 MHz FM Dual-Bander

General Features:

- High RF Power Output (50W)
- Dual Receive on same Band (VxV, UxU)
- Compatible with ARRL TravelPlus*
- "Five-in-One" Programmable memory
- 1,000 Multifunctional Memory Channels
- Multiple Scan
- Invertible Front Panel
- Choice of 2 Backlight Colors
- 104-Code Digital Code Squelch
- Voice Guidance & Storage Option (VGS-1)
- Weather Alert/RX (US only)
- EchoLink® Sysop Mode for Node Terminal Operation
- EchoLink® Memory (Automatic Dialer)



Wherever you are headed, be sure to set off with KENWOOD's TM-V71A. Featuring 50W output, 1,000 memory channels, multiple scan options, and PC connectivity (to store and edit data), this advanced FM transceiver is fully equipped to take on the toughest challenges, day or night. Powerful performance is matched with intuitive operational ease: the large LCD panel – with a choice of either amber or green adjustable backlighting – PF keys, and EchoLink® compatibility all help to make this the ideal companion for dependable dual-band communications on the move.

High RF Power Output (50W)

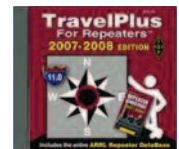
The TM-V71A provides an impressive 50 watts of RF power (VHF & UHF), with a choice of High/Mid/Low output.

Dual Receive on Same-Band (VxV,UxU)

In addition to simultaneous receive on both VHF and UHF bands, this radio can receive two frequencies on the very same band. This means, for example, that you can have both the call channel and local channel, or the repeater channel and local channel, on the same band.

Compatible with ARRL TravelPlus* (US only)

The MCP-2A programming software is compatible with ARRL TravelPlus For Repeaters; this allows data export to the radio, making trip planning easy. *TravelPlus is available from the ARRL at : www.arrl.org



Invertible Front Panel

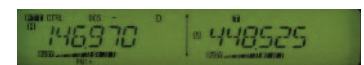
For greater installation convenience, the detachable front panel can be inverted so the transceiver can be mounted upside down, thus ensuring that the speaker is not obstructed.



Choice of 2 Backlight Colors

To maximize visibility, the backlight color for the large LCD panel can be switched between warm amber and cool green.

Green



Amber

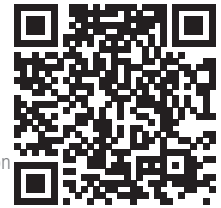


TM-D710GA Multi Communicator 144/440 MHz FM Dual-bander



General Features:

- Built-in 1200/9600BPS Terminal Node Controller (TNC) Compliant with AX.25 Protocol
- APRS® Ready (Automatic Packet/Position Reporting System)
- Separate Panel with Extra-Large 2-Color Switchable Backlight LCD & Multifunction Key Display
- High RF Power Output (50W)
- Dual Receive on Same Band (VxV, UxU)
- 1,000 Multifunction Memory Channels
- Compatible with ARRL TravelPlus* (US only)
- Multiple Scan & Visual Scan
- Weather Alert/RX (US only)
- Voice Guidance & Storage Option (VGS-1)
- KENWOOD Sky command System II+ (US only)
- EchoLink® Sysop Mode for Node Terminal Operation
- EchoLink® Memory (Automatic Dialer)



With KENWOOD's advanced TM-D710A you can harness today's most exciting developments in radio communications, including EchoLink®, AX.25, and the latest features of APRS®.

Built-in 1200/9600BPS Terminal Node Controller (TNC) Compliant with AX.25 Protocol

The built-in TNC is compatible with the AX.25 protocol, enabling easy access to APRS functions. For 1200/9600bps packet communications, simply hook up the TM-D710GA to your PC.

APRS Ready (Automatic Packer/Position Reporting System)

Cooperating with Bob Bruninga (WB4APR), who first developed APRS, KENWOOD has developed system firmware for the TM-D710GA that enables easy APRS operation without requiring a PC. When connected to a GPS receiver this radio will display positional information, including direction and distance, and when hooked up to a weather observation device it can display temperature and rainfall information. All of this data can be exchanged with other stations. The information can also be output to a PC for map display using commercially available APRS application software.



Separate Panel with Extra-Large 2-Color Switchable Backlight LCD

The TM-D710GA has a separate control panel with an extra-large display that clearly identifies the multifunction keys for easy operation. To maximize visibility, the backlight color can be switched between warm amber and cool green. And two different stands are supplied: one for on-dash installation, and the other for fixed stations.



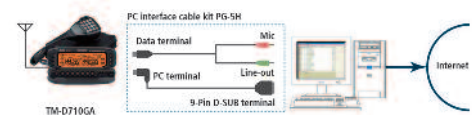
Amber



Green

EchoLink® Sysop Mode for Node Terminal Operation

When the TM-D710GA is connected to a PC (with the necessary Windows compatible software installed) using the PG-5H option, it can operate as a node terminal for EchoLink. EchoLink connects radio amateurs through the Internet using VoIP technology: any transceiver with access to a node can connect to any other in the world as long as it too has node access. It is also possible to access the EchoLink network directly from a PC. To register for EchoLink (using your call sign), access the official website at : www.echolink.org



TM-281A

144 MHz Single Band Mobile Transceiver

General Features:

- Frequency Range:
TX 144-148 MHz / RX 136-174 MHz
- High RF Power Output (65W)
- Alphanumeric LCD and Illuminated Keypad
- Large Oval Speaker (2.28 x 1.38 inches)
- Memory Name Function
- 200 Memory Channels Plus 1 Call-Channel
- Multiple Scan Functions
- CTCSS & DCS Encoder/Decoder
- Weather Alert/RX (US only)
- MIL-STD 810 C,D,E,F,& G



On or off the road, KENWOOD's TM-281A is a mobile radio you can always count on. As tough as nails, this MIL-STD-compliant transceiver delivers powerful performance, excellent audio clarity, and a host of advanced features. It offers superb operating ease day or night thanks to the large backlit LCD and illuminated keys. So the next time you take off, take the TM-281A.

High RF Power Output (65W)

Even with its compact size, the TM-281A delivers up to 65 watts – the sort of RF power you want in the wilderness – with a choice of High/Low output. A DTMF microphone is also supplied as standard.

Alphanumeric LCD and Illuminated Keypad

The vivid amber LCD display comes with a 32-step brightness control to suit any ambient light conditions. It displays up to 6 large alphanumeric characters. The front panel and microphone keypads are also illuminated for ease of use.



Memory Name

Menu Mode

Power-on Message

Memory Name Function

Up to 100 memory channels can be identified with a maximum of 6 alphanumeric characters each. (200 channels are available if the memory name function is not used.)

200 Memory Channels Plus 1 Call-Channel

Each of the memory channels can be used to store transmit and receive frequencies independently. Additionally, memory data can be edited and stored on a computer*.

*Requires USB Programming Cable KPG-46U, and Memory Control Software MCP-1A (Ver. 3.0 or later); consult your local dealer for details on purchasing these options.

Rugged, Compact Construction

The TM-281A is tough enough for off-road assignments: it meets the strict U.S. Department of Defense MIL-STD 810 C, D, E, F & G environmental standards for vibration and shock. Installation is easy due to its compact dimensions: 6.30 (W) x 1.69 (H) x 4.69 (D) inches (160 x 43 x 126 mm)*.



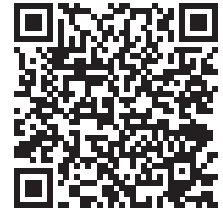
TS-480AT/HX

All-Mode Transceiver



General Features:

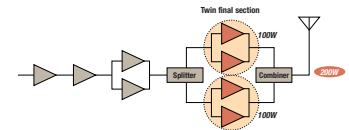
- 200W output (50MHz: 100W) DC 13.8V operation:
The TS-480HX is a highly versatile rig offering 200W output (50MHz: 100W) - making it ideal for both base station and DX'ing applications.
- 100W model:
The 100W TS-480SAT is additionally equipped with a built-in automatic antenna tuner.
- TX/RX AF DSP:
16-bit AF digital signal processing offers such powerful features as noise reduction, TX/RX equalizer, and AF filters.
- Separate LCD control panel with speaker:
Sporting a large amber LCD with backlit keys, the standalone control panel can be positioned anywhere up to 13 feet or 4 meters from the main unit.
- Continuous RX:500kHz (VFO: 30kHz) to 60MHz
- TX covers all Amateur bands 1.8MHz to 50MHz



Tailor-made for DX'ing, the new TS-480HX HF transceiver raises the bar on mobile performance. Despite its compact dimensions, it delivers an astonishing punch: 200W with a DC 13.8V supply. Yet its separate control panel is perfect for base station use. Sharing virtually all the same powerful features is the 100W TS-480SAT, except that it boasts a built-in antenna tuner. Whichever model you choose, you can be sure of enjoying the best of both worlds — first-rate communications at home and on the trail.

High RF Power Output (200W)

Equipped with a twin final section featuring splitter and combiner circuitry, the TS-480HX can provide up to 200 watts RF output (50MHz: 100W) with a DC 13.8V power supply. The TS-480SAT delivers up to 100 watts.



Separate Power Sources

The 200W TS-480HX features two power terminals (DC1, DC2) for separate supply to each half of the twin final section; voltage balance is optimized to ensure stable output. This arrangement allows for use of two PS-53 power supplies or a single 41A power source.

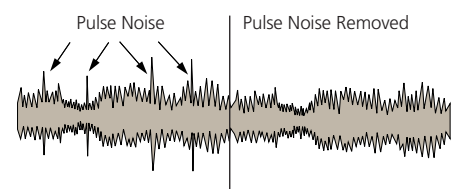
Twin Cooling Fans

When used for extended periods, the heat build-up inside a compact transceiver can be a serious concern, reducing its working life. But the components in the heavy-duty TS-480HX/SAT are designed to withstand heat. What is more, it is equipped with a die-cast aluminum chassis and twin fans for enhanced cooling efficiency. And since the control panel is separate from the main unit, the fans are able to generate a powerful airflow from front to back. As a result, you can rely on this transceiver to transmit continuously for 30 minutes* without having to power down. *This figure is supplied for reference purposes only and depends on there being an ambient temperature of 25. C, antenna SWR of 1.2 or less, and nothing to obstruct the air flow generated by the cooling fans.



Digital Noise Limiter (DNL)

With three level settings, the DNL is highly effective in removing even the pulse noise that cannot be eliminated with conventional analog circuitry and noise blankers. For extra clarity, however, it can be used in conjunction with a noise blanker, which removes pulse noise at the IF stage.



TS-590SG HF/50 MHz Transceiver



General Features:

- 500 Hz/2.7 kHz Roofing Filter
- Superior Adjacent C/N with DDS
- Advanced AGC Control
- Adjustable IF Filter Passband
- High Quality TX Signal
- Morse Code Decoder
- Heavy-Duty Design
- LED Backlight with Selectable Color Tone
- Built-in High Speed Automatic Antenna Tuner
- KENWOOD Sky Command System II
- Voice Guide, Recording Function
- Memory/Scan Functions

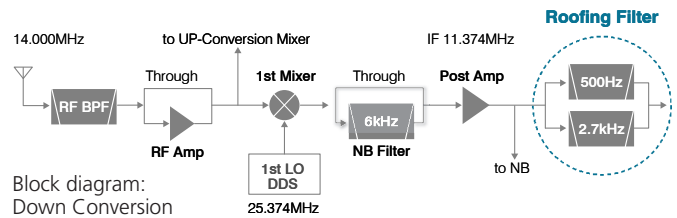


Be witness to the evolution of KENWOOD's pride and joy - the TS-590S HF transceiver - pushing performance and technology to its utmost limit, with the receiver configured to capitalize on roofing filter performance and IF AGC controlled through advanced DSP technology. Enter the TS-590SG. A new generation of high performance transceiver, with the type of high level response to meet DX'ers needs.

High-Performance Reception and Improved Adjacent Dynamic Range

Equipped with 500 Hz/2.7 kHz Roofing Filter as standard*

1st IF frequency (11.374 MHz) down conversion* is employed when receiving on 15, 20, 40, 80 or 160meter bands. Included as standard directly after the 1st Mixer and Post Amp that compensates for conversion loss is a BW 500 Hz and 2.7 kHz 6-pole MCF, which determines adjacent receptivity, realizing superb dynamic range performance that was not possible using up conversion. Even when an interfering signal approaches the reception frequency, a virtually flat dynamic range is maintained.



You can capture a clear signal even in reception conditions where strong adjacent interfering signals become problematic.

*Down conversion is selected automatically when receiving in CW/FSK/SSB modes if the final passband is 2.7 kHz or less.

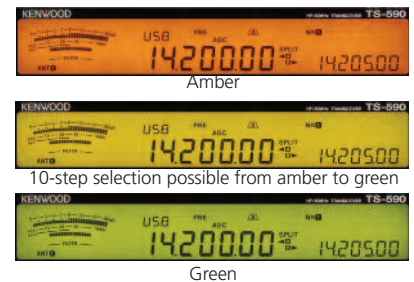
User Friendly Menus for Outstanding Operating Ease

The TS-590SG features 100 menu functions and intuitive operation with its combination of menu and arrow keys. The menu mode is shown in the 7-segment display unit, while relevant guidance information is scroll-displayed in the 13-segment display unit, making a variety of detailed operations possible.



LED Backlight with Selectable Color Tone

The large display ensures outstanding visibility under all conditions. In addition to conventional amber and green, you can now select intermediate colors and change from amber to green in 10 steps.



TS-990S HF/50 MHz Transceiver



General Features:

- 500 Hz/2.7 kHz Roofing Filter
- Supports Dual Reception
- Equipped with Dedicated DSP
- Advanced AGC Control
- Equipped with ± 0.1 ppm TCXO
- Fitted with dual TFT displays
- Touch-Sensitive Main Screen
- Up to 120 Memory Channels
- Built-in High Speed Automatic Antenna Tuner
- KENWOOD Sky Command System II
- Voice Guide, Recording Function



The TS-990S comes equipped with dual receivers for simultaneous reception on different bands, it also features narrow-band roofing filters on the main receiver in a full down-conversion configuration. The TS-990S achieves the highest basic reception performance of any radio in the TS series, through the careful selection of circuits, components and accelerating analysis using triple DSP configuration. Also, thanks to the dual TFT display and superior panel layout, it achieves both comfortable visibility and operability. Our top-of-the-line transceiver is for all radio operators who love HF.

Overwhelmingly the Highest Quality Receiver in the TS Series.

The dual receivers facilitate reception on different bands. The main receiver is the highest quality receiver among the TS-900 series, thanks to its down-conversion configuration, newly developed mixer, and five types of roofing filters. This highest quality transceiver will show its true mettle in contests, and fierce pile-ups even with high-intensity signals. The TS-990S will surely satisfy any real DX'er.

Sub-Receiver Supports Dual Reception

Operating ease is further enhanced with the multi-scroll key. Similar to the control found on some mobile phones, this can be rocked up & down, left & right with the thumb. Vertical operation controls frequency, while horizontal movement controls band selection. There is also a 16-key pad with keys that are ergonomically spaced and illuminated for night-time use.

Revolutionary KENWOOD Sound

Even after using narrow bandwidth filters for long periods of time, it is still easy to hear and less tiring to listen to. In addition to introducing AGC control using dedicated DSP, we have further refined the KENWOOD sound and reception sound quality transmitted by radio operators worldwide by innovating the analog AGC unit and installing numerous interference and noise elimination functions. Such innovations have given new life to KENWOOD's legendary sound.

Comfortable Operational Performance that you can Control at will

The panel layout, familiar to KENWOOD users, allows for intuitive operation. It's sure to win you over, increasing the accuracy of your operations and allowing you to develop greater familiarity with the equipment.



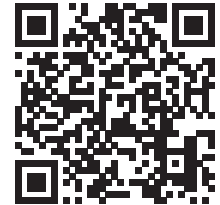
TS-2000

All-Mode Multi-bander HF/50/144/440/1200* MHz



General Features:

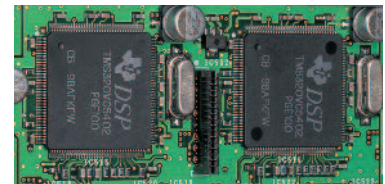
- All-Mode Multi-bander
- Dual-Channel Receivers
- IF Digital Signal Processing
- Satellite communications
- Automatic Antenna Tuner
- 300 Memory Channels
- Multiple Scan Functions
- KENWOOD Sky Command System II Plus
- High-Speed Processing
- High Frequency Stability



KENWOOD's TS-2000/2000X/B2000 all-mode multi-bander may be compact, but it's equipped with all the features you would expect to find in a top-of-the-line rig. A marvel of electronic engineering: This all-mode multi-bander is packed with top-end features yet compact enough to use at home, in your car, or on a DX'pedition. With its 3D front panel, featuring backlit keys and large amber display, its appearance is as distinctive as its performance.

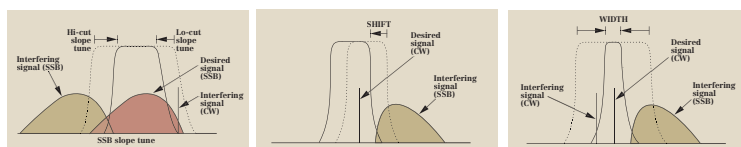
IF Digital Signal Processing

The TS-2000/B2000/2000XS/SX/2000X is serious about digital signal processing. KENWOOD's advanced digital technology converts analog waveforms into digital data in real-time, enabling such digital processing as IF filtering, slope tune, auto notch and AGC. IF-stage DSP on main-band transmit and receive - including V/UHF bands - allows the greatest range of control and unprecedented performance.



Digital Filtering

There is absolutely no need to purchase optional filters: digital IF filters are available for each mode (FM: digital AF filter), offering performance superior to anything possible with analog circuitry. When operating in SSB/FM/AM modes, this digital filtering enables both high-and low-cut frequency variance. Employing slope tune, you can thus cut out noise with minimal effect on sound quality. In AM mode, the high-cut frequency can reduce interference by controlling the IF pass bandwidth - useful for receiving shortwave broadcasts. In CW mode, the WIDTH function is supplemented by center frequency shift, allowing adjacent signal interference to be tuned out. The WIDTH



function also provides noise reduction capabilities in FSK with 4 steps available: 250,500,1000 and 1500Hz. And thanks to AF-stage DSP, independent control of high-cut and low-cut frequencies (12 steps each) provides slope tune capability in FM as well.

Menu System

All of the power and functions of the TS-2000/B2000/2000XS/SX/2000X can be accessed through the menu-driven display interface on the front panel. You may also activate the Quick Menu feature to access only your most commonly-used functions.



Specifications are subject to change without notice, due to advancements in technology.

KENWOOD

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