





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
- 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-D74A

144/220/430 MHz Tribander

General Features:

- Compatible with APRS® and D-Star communications protocols
- Station list, object compatibility
- Messaging functionality
- QSY Functionality
- KISS mode TNC
- Compatible with D-STAR as developed by JARL
- DV fast data mode
- Simple operation in DR (D-STAR repeater) mode
- Kenwood proprietary audio
- Wideband and multimode receiver
- Built-in IF receive filter
- High-performance DSP voice processing
- Tough weatherproofing meeting IEC 529 IP-54/ 55 standards
- Dual frequency reception (VxV, UxU, and VxU functions)
- Micro USB
- External Decode function



144/220/430 MHz TRIBANDER. The TH-D74A is packed with convenient features and the advantage of a digital transceiver with D-STAR, and APRS® support. Featuring a color transfective TFT display that offers excellent visibility during the day or at night. Built-in GPS and Bluetooth support, as well as Micro USB and microSD/ SDHC. This radio is ready to harness the exciting developments in radio communications.

Compatible with APRS®

Real-time two-way data transmission by using packet communications, this stand-alone device provides enjoyment of communications that makes use of a variety of features, including sharing of local and GPS positional information and message exchange.

Other stations positional information and weather station information

The new feature "relative display compass" enables real-time GPS information for your station 'at a glance,' information for your own station set in advance, or the distance/direction/heading/speed of other stations. It is now easier to confirm the relationship with your own station's position and heading. Weather station information can be displayed in color, such as rainfall, temperature, wind speed/direction, barometric pressure and humidity data.



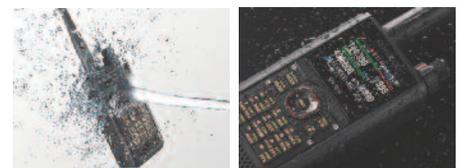
Compatible with D-STAR, as developed by JARL

The unit is compatible with the D-STAR amateur radio digital communication system developed by the Japan Amateur Radio League (JARL). Enjoy a variety of communication methods with the clear voice only digital can deliver.



Tough weatherproofing meeting IP54/ 55 standards

We increased dust and water resistance in anticipation of tough conditions, using heavy-duty specs so you never have to worry about the dusty outdoors or sudden showers.





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)
- Cross Band Repeat
- Dual Receive on same Band (VxV, UxU)
- "Five-in-One" Programmable memory
- Direct Frequency Entry from the Microphone
- 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)



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, 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.

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)
- Cross Band Repeat
- Dual Receive on Same Band (VxV, UxU)
- 1,000 Multifunction Memory Channels
- Direct Frequency Entry from the Microphone
- Multiple Scan & Visual Scan
- Weather Alert/RX (US only)
- Voice Guidance & Storage Option (VGS-1)



With Kenwood's advanced TM-D710GA 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

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
- Direct Frequency Entry from the Microphone
- Multiple Scam 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 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-480SAT/HX

All-Mode Transceiver



General Features:

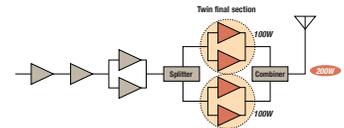
- 200W output (50MHz: 100W) DC 13.8V operation:
The TS-480HX is a highly versatile rig offering 200W output (50MHz: 100W) - making it ideal for both base station and DX'ing applications.
- 100W model:
The 100W TS-480SAT is additionally equipped with a built-in automatic antenna tuner.
- TX/RX AF DSP:
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 (50W)

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.

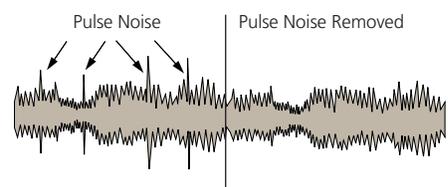
Twin Cooling Fans

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
- Voice Guide, Recording Function
- Memory/Scan Functions

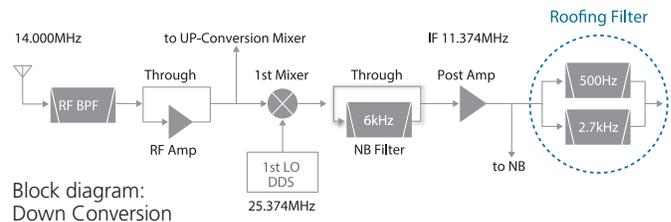


Be witness to the evolution of KENWOOD's pride and joy - the TS-590S HF transceiver - pushing performance and technology to its utmost limit, with the receiver configured to capitalize on roofing filter performance and IF AGC controlled through advanced DSP technology. Enter the TS-590SG. A new generation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

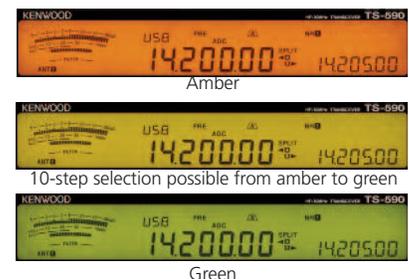
User Friendly Menus for Outstanding Operating Ease

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-890S HF/50 MHz Transceiver

General Features:

- Four supplied roofing filters include: 500Hz, 2.7kHz, 6kHz, 15kHz and as an option 270Hz
- 7 Inch TFT color display
- 110dB* 3rd Intermodulation Dynamic Range (3rd IMDR)
- 122dB* Reciprocal Mixing Dynamic Range (RMDR)
- 150dB* Blocking Dynamic Range (BDR)
- 100 Watt Heavy-duty transmitter able to withstand long hours of operation
- TCXO as standard
- Built-in automatic antenna tuner
- 120 memory channels
- Voice guidance function
- DVI-I External display connector
- Built-in CW, FSK and PSK functions



*"The Kenwood TS-890S has the highest RMDR of any radio I have ever measured."
- Rob Sherwood - NCOB - December 2018*

Operating from 160 to 6 meters, the TS-890S features a full down conversion receiver with an H-mode mixer for a High C/N 1st LO. It has four built in roofing filters: 500 Hz, 2.7 kHz, 6 kHz and 15 kHz (optional 270 Hz). The TS-890S has a 7 inch color TFT display with roofing frequency sampling band scope, auto scroll mode, USB audio, multi information screen, DVI-I. Remote control operation with direct IP connection (without computer) is supported. A 100 watt heavy duty built-in antenna tuner is standard.

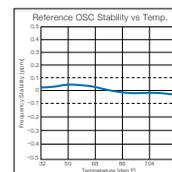
Receiver

110dB* 3rd intermodulation dynamic range (3rd IMDR) measured under punishing 2kHz spacing conditions. 114dB* reciprocal mixing dynamic range (RMDR). 150dB* Blocking dynamic range (BDR) All features deliver top-class receive performance. The high-performance DSP displays its prowess during interference-signal control.



TCXO as standard, high frequency stability at ± 0.1 ppm

Equipped with a TCXO (temperature compensated crystal oscillator) requiring no warm-up as standard, high stability of ± 0.1 ppm has been obtained in a wide temperature range covering from 0°C ~ +50°C. External standard signal (10MHz) input is also possible.



Control - Operability

A variety of features achieve speedy split operation even with a single receiver. Speedy split frequency settings, split status band switching via a band direct key, and support for external TF watch via an external receiver. A panel layout enabling intuitive handling makes for comfortable operation.



Strong split-operation handling through VFOA/B

In addition to conventional split frequency setting methods, the TS-990S's proven split setting functions have been included. For 2kHz UP, press '2' on the number pad after a long press of the SPLIT key and the settings are complete. Split frequencies can be set within the range of ± 9 kHz (1kHz steps).



*: 2 kHz spacing measurement standard - Receiver frequency 14.2 MHz, MODE CW, BW 500 Hz, PRE AMP OFF)

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
- 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.



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

KENWOOD

JVCKENWOOD USA Corporation

Communications Sector Headquarters

1440 Corporate Drive | Irving, TX 75038

Order Administration/Distribution

P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745

www.kenwood.com/usa

JVCKENWOOD Canada Inc.

Canadian Headquarters and Distribution

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

www.kenwood.com/ca



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JVCKENWOOD Corporation