

KENWOOD

TH-K20E/K40E

144/430 MHz FM TRANSCEIVERS

Empowering Communications

Boasting 5.5 watts of RF output, Kenwood's new TH-K20E/K40E radio is powerful. Despite being small enough to fit comfortably in the palm, it offers full-size performance and numerous features to ensure superb operating ease. 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 with a custom function. Plus, its construction is rugged enough to stand up to the worst weather. Inside and out, the TH-K20E/K40E is fully equipped for clear communications – wherever and whenever needed.



► Conveniently Compact, Reliably Robust

This radio is remarkably light (just 210 g) and thin (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-K20E/K40E 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-K20E/K40E 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.



Direct Function Keys

Everyday functions are pre-programmed to 11 of the 12 keys. The additional PF key can be assigned a custom function, making it possible to tailor the TH-K20E/K40E for optimum convenience. There is no need to use a menu: one key push provides direct access. And to prevent accidental operation, three types of key lock are provided.

Internal VOX

The TH-K20E/K40E offers convenient hands-free operation when using an optional headset. The internal VOX (voice-operated transmission) circuitry provides automatic PTT and a 10-level (Off/1-9) sensitivity adjustment to suit different ambient noise levels. VOX delay time is also adjustable.

PC Programmable with MCP-5A

By simply connecting the TH-K20E/K40E to a computer running Kenwood's free MCP-5A software with the optional PG-4Y cable, one can easily manage dozens of memory channels and memory names. This is also a convenient way to modify or copy settings.

Backlit LCD and Keypad

Backlighting for the large 13-segment LCD display is a welcome feature when picking memory names or changing settings. Similarly, keypad backlighting facilitates operation in low-light situations.

Specifications

		TH-K20E	TH-K40E
GENERAL			
Frequency Range	TX RX	144 - 146 MHz 136 - 174 MHz	430 - 440 MHz 400 - 470 MHz
Mode		F3E, F2D	
Antenna Impedance		50 Ω	
Operation Temperature Range		-20 °C ~ +60 °C	
Operating Voltage		DC 6.0 ~ 9.0 V (Standard Voltage DC 7.4 V)	
Frequency Stability		±2.5 ppm	
Microphone Impedance		2 kΩ	
Battery Life* (Figures approximate)		High / Mid / Low 6 / 8.5 / 10.5 Hours 8 / 11.5 / 14 Hours 6.5 / 8 / 10 Hours	
Dimensions (W x H x D), Projections not included	Radio Only with KNB-63L	54 x 111.7 x 14.4 mm 54 x 111.7 x 25.3 mm	
Weight	Radio Only with KNB-63L	approx. 138 g approx. 210 g	
TRANSMITTER			
RF Power Output	High with BT-16 Mid Low	5.5 W approx.3.5 W 2 W 1 W	5 W approx.3.5 W 2 W 1 W
Modulation		Reactance modulation	
Maximum Frequency Deviation		Within ±5 kHz	
Modulation Distortion		Less than 5 % (300 Hz ~ 3 kHz)	
RECEIVER			
Circuitry		Double super heterodyne	
Intermediate Frequency		1st IF: 38.85 MHz / 2nd IF: 450 kHz	
Sensitivity (12dB SINAD)		Less than 0.16 μV	Less than 0.18 μV
Squelch Sensitivity		Less than 0.13 μV	
Selectivity	-6 dB -50 dB	More than 10 kHz Less than 28 kHz	
Audio Output		More than 400 mW (8 Ω / 10 % distortion)	

* Assuming a duty cycle of 6-second transmit, 6-second receive, 48-second standby
Specifications are guaranteed for amateur radio bands only.
Specifications shown are typical.
Specifications are subject to change without notice, due to advancements in technology.

Applicable MIL-STD & IP Standards*

- MIL-STD810 C/D/E/F/G: Low Pressure, High Temperature, Low Temperature, Temperature Shock, Solar Radiation, Rain, Humidity, Salt Fog, Dust, Vibration, and Shock
- International Protection Standard: IP54

*To meet these standards, the 2-pin connector cover has to be connected; the AAA battery case does not meet the IP54 rating.

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CTCSS & DCS Encoder/Decoder + Cross Tone Capability

Thanks to the built-in CTCSS (Continuous Tone Coded Squelch System) and DCS (Digital Code Squelch) encoder/decoder, the TH-K20E/K40E can handle 42 CTCSS sub-tone frequencies plus 104 DCS codes. And one can set separate TX and RX signalling types so as to access a repeater that uses different encode/decode signalling.

Tone Alert (Bell)

When activated, this function will sound an audible alert and flash a bell symbol to indicate an incoming call. Both elapsed time and the number of missed calls are clearly displayed.

Other Features

- ▶ Power On Message ▶ Time-out Timer ▶ Priority Scan ▶ Band Scan, Program Scan, MR Scan, CALL Scan, CTCSS Scan / DCS Scan ▶ Wide/Narrow Channel Spacing
- ▶ Busy Channel Lockout ▶ Key Lock Type Select ▶ Battery Save
- ▶ SMA Antenna Connector ▶ Automatic Repeater Offset ▶ 1,750 Hz Tone Access
- ▶ Direct Keypad Frequency Entry ▶ DTMF Autodial Memories (16ch, up to 16 digits)
- ▶ Battery Capacity Indicator (on transmit) ▶ Electronic Serial Number

Optional Accessories

- KNB-63L Li-ion Battery (1,130 mAh)
- KNB-65L Li-ion Battery (1,520 mAh)
- BT-16 Battery Case (6AAA)
- KSC-35S Rapid Charger (100 V - 240 V)
- KVC-22 DC Vehicular Charger Adapter (KSC-35S required)
- EMC-3 Clip Microphone
- EMC-7 Clip Microphone
- EMC-11 Heavy-duty Clip Microphone
- HMC-3 Headset
- KHS-21 Headset
- KHS-29F Headset
- SMC-32 Speaker Microphone
- SMC-33 Remote Control Speaker Microphone
- SMC-34 Speaker Mic. w/3-Function Key & Vol Control
- KBH-18 Belt Clip
- PG-4Y PC Interface Cable
- KCT-53U USB Adapter
- MCP-5A Memory Control Software (ver.1.00 or later) (available free for downloading from: http://www.kenwood.com/j/products/info/amateur/software_download.html)

Not all accessories are available in all markets. For availability, contact your nearest dealer. Battery case transmission output will decrease as time progresses. We recommend using low power when using the battery case.



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Professional Systems Business Group
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