



TH-K20A/K40A

144 /430 MHz FM Transceivers



A powerful communications tool in every sense, Kenwood's new TH-K20A/K40A 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/K40A is fully equipped for clear communications — wherever and whenever needed.

Usefully Compact, Reliably Robust

Users will appreciate just how light (just 210g) and thin (54mm) this radio is. Yet there is no compromise on construction: it meets or exceeds the stringent IP54 dust and water intrusion standards as well as the MILSTD 810 C, D, E, F & G environmental standards, making it rugged enough for demanding outdoor use in bad weather.

200 Channels with 6-Digit Memory Name

The TH-K20A/K40A 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.

High Sound Pressure for Audio Clarity

Another feature that sets the TH-K20A/K40A 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.

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-K20A/K40A 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-K20A/K40A 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-K20A/K40A 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.

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-K20A/K40A 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 • 1750 Hz Tone Access • Direct Keypad Frequency Entry • DTMF Autodial Memories (16ch, up to 16 digits) • Battery Capacity Indicator (on transmit) • Electronic Serial Number

Options

■ **KNB-63L**
Li-ion Battery
(1,130 mAh)



■ **KSC-35S**
Rapid Charger
(100 V-240 V)



■ **EMC-11**
Clip Microphone



■ **SMC-32**
Speaker
Microphone



■ **KNB-65L**
Li-ion Battery
(1,520 mAh)



■ **KVC-22**
DC Vehicular
Charger Adapter
(requires KSC-35S)



■ **HMC-3**
Headset



■ **KBH-18**
Belt Clip



■ **BT-16**
Battery Case
(6AAA)



■ **EMC-3**
Clip Microphone



■ **KHS-21**
Headset



■ **MCP-5A**
Memory Control Software
(ver.1.00 or later)

(available free for downloading from:
http://www.kenwood.com/products/info/amateur/software_download.html)

■ **EMC-7**
Clip Microphone



■ **KHS-29F**
Headset



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.

Specifications

		TH-K20A	TH-K40A
GENERAL			
Frequency Range			
	TX	136 - 174 MHz	400 - 470 MHz
	RX	136 - 174 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	
	with KNB-63L	6 / 8.5 / 10.5 Hours	
	with KNB-65L	8 / 11.5 / 14 Hours	
	with BT-16	6.5 / 8 / 10 Hours	
Dimensions (W x H x D), Projections not included	Radio Only	54 x 111.7 x 14.4 mm	
	with KNB-63L	54 x 111.7 x 25.3 mm	
Weight	Radio Only	approx. 138 g	
	with KNB-63L	approx. 210 g	

		TH-K20A	TH-K40A
TRANSMITTER			
RF Power Output			
	High	5.5 W	5 W
	with BT-16	approx. 3.5 W	
	Mid	2 W	
	Low	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	More than 10 kHz
		-50 dB	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

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures	MIL 810G Methods/Procedures
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II	500.5/Procedure I, II
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II	501.5/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II	502.5/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II	503.5/Procedure I
Solar Radiation	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I	505.5/Procedure I
Rain	506.1/Procedure II	506.2/Procedure II	506.3/Procedure II	506.4/Procedure III	506.5/Procedure III
Humidity	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4	507.5/Procedure II
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4	509.5
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III	510.5/Procedure I
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I	514.6/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV	516.6/Procedure I, IV

International Protection Standard

Dust & Water Protection IP54

The 2-pin connector cover has to be connected. (Except AAA battery case)

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