

# KENWOOD

## Empowering Communications

Boasting 5.5 watts of RF output, Kenwood's new TH-K20A 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 nighttime 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-K20A is fully equipped for clear communications – wherever and whenever needed.

### TH-K20A

144 MHz FM TRANSCEIVER



#### ► 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.

## 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 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 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 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.

## Specifications

		TH-K20A
<b>GENERAL</b>		
Frequency Range	TX RX	144 - 148 MHz 136 - 174 MHz
Mode		F3E, F2D
Antenna Impedance		50 Ω
Operation Temperature Range		-4 °F ~ +140 °F (-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)	with KNB-63L with BT-16	High / Mid / Low 6 / 8.5 / 10.5 Hours 6 / 8 / 10 Hours
Dimensions (W x H x D), Projections not included	Radio Only with KNB-63L	2.13 x 4.40 x 0.57 in (54 x 111.7 x 14.4 mm) 2.13 x 4.40 x 1.00 in (54 x 111.7 x 25.3 mm)
Weight	Radio Only with KNB-63L	approx. 4.86 oz (138 g) approx. 7.40 oz (210 g)
<b>TRANSMITTER</b>		
RF Power Output	High with BT-16 Mid Low	5.5 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)
<b>RECEIVER</b>		
Circuitry		Double super heterodyne
Intermediate Frequency		1st IF: 38.85 MHz / 2nd IF: 450 kHz
Sensitivity (12dB SINAD)		Less than 0.16 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.  
Measurements made per TIA/EIA 603 and 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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## Customer Support/Distribution

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## 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 can handle 42 CTCSS sub-tone frequencies plus 104 DCS codes. And one can set separate TX and RX signaling types so as to access a repeater that uses different encode/decode signaling.

## 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 Burst
- ▶ 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)
- **BT-16**  
Battery Case (6AAA)
- **KSC-35S**  
Rapid Charger (100 V - 240 V)
- **SMC-32**  
Speaker Microphone
- **SMC-33**  
Remote Control Speaker Microphone
- **SMC-34**  
Speaker Mic. w/ 3-Function Key & Vol Control
- **KHS-26**  
Clip Microphone with Earphone
- **KHS-22**  
Headset
- **PG-4Y**  
PC Interface Cable
- **MCP-5A**  
Memory Control Software (ver.1.00 or later)  
(available free for downloading from:  
[http://www.kenwood.com/it/products/info/amateur/software\\_download.html](http://www.kenwood.com/it/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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